

**DORADO OAKS TENTATIVE SUBDIVISION MAP  
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)  
(STATE CLEARINGHOUSE #2019071041)**

**APPENDIX A  
NOP AND COMMENTS**



# PLANNING AND BUILDING DEPARTMENT

## PLANNING SERVICES DIVISION

<http://www.edcgov.us/government/Planning>

---

**PLACERVILLE OFFICE:**

2850 Fairlane Court, Placerville, CA 95667

**BUILDING**

(530) 621-5315 / (530) 622-1708 Fax

[bdgdept@edcgov.us](mailto:bdgdept@edcgov.us)

**PLANNING**

(530) 621-5355 / (530) 642-0508 Fax

[planning@edcgov.us](mailto:planning@edcgov.us)

**LAKE TAHOE OFFICE:**

924 B Emerald Bay Rd.

South Lake Tahoe, CA 96150

(530) 573-3330

(530) 542-9082 Fax

TO: Interested Parties

FROM: Tom Purciel, Associate Planner, County of El Dorado

DATE: July 29, 2019

**RE: Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) and Notice of Public Scoping Meeting for the Dorado Oaks Tentative Subdivision Map**

---

Notice is hereby given that the County of El Dorado, Lead Agency, will prepare an Environmental Impact Report (EIR) for the **Dorado Oaks Tentative Subdivision Map** (“project”) and will hold a public scoping meeting to receive comments on the scope of the EIR, as detailed below. The County has determined that an EIR must be prepared for the project prior to making any final decision regarding whether to approve the project, in accordance with the California Environmental Quality Act (CEQA). The County has issued this NOP to members of the public, Responsible Agencies, Trustee Agencies, federal agencies, transportation planning agencies, interested parties and other agencies with facilities that may be affected by the project. In accordance with CEQA, Responsible Agencies are those public agencies, other than the County, that have a role in approving or carrying out the project.

As detailed further below, a portion of the project would include improvements within the right-of-way (ROW) and adjoining areas of State Route 49/Pleasant Valley Road. These improvements are required to provide ingress and egress to and from the proposed Subdivision site. The California Department of Transportation (Caltrans) has delegated lead agency status for the portion of the project in their right-of-way. Accordingly, Caltrans will act as a Responsible Agency for the project. As such, both the proposed Dorado Oaks Tentative Subdivision Map and the proposed SR-49 Intersection improvements will be considered as a single project in the EIR. However, for purposes of clarity and to facilitate subsequent Caltrans review of project components under their jurisdiction, the Dorado Oaks Subdivision project component and the SR-49 intersection project component are described separately. The location, project description, project entitlement requests and potential environmental effects of the proposed project are summarized below.

---

**PROJECT TITLE:**  
Dorado Oaks Tentative Subdivision Map

**PROJECT LOCATION:**  
Approximately 142.3 acres of land in the unincorporated community of Diamond Springs in El Dorado County, California, roughly centered at 38°41'02.5"N, 120°49'08.9"W

---

**LEAD AGENCY:**  
County of El Dorado  
Planning and Building Department,  
Planning Services Division  
2850 Fairlane Court  
Placerville, CA 95667

**LEAD AGENCY CONTACT:**  
Tom Purciel, Associate Planner  
2850 Fairlane Court  
Placerville, CA 95667  
Telephone: (530) 621-5355  
[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)

---

**PROJECT SPONSOR/DEVELOPER:**  
Stonehenge Springs LLC  
2700 South Azusa Avenue  
West Covina, CA 91792

**DATE OF THIS NOTICE:**  
July 29, 2019

---

## Public Review and Scoping

Comments and suggestions are requested during the 30-day public comment period for the NOP regarding the environmental issues that will be analyzed in the EIR. Because of time limits mandated by State law, written comments should be provided no later than **5:00 PM on August 28, 2019**. Please consider that there will be another opportunity to submit detailed comments when the Draft EIR is released for public review.

Comments on the proposed scope and content of the EIR may be submitted in writing to the attention of Tom Purciel, County of El Dorado, at the address indicated above for Lead Agency Contact. Comments may also be emailed to the project-specific email address shown above. The County requests the name, address, telephone number and email address of all agencies or individuals submitting comments.

The County will hold a public scoping meeting to provide additional information about the project, receive written comments and help the County refine the scope and content of the EIR.

**Date:** August 20, 2019

**Time:** 6:00 PM to 8:00 PM

**Location:** Firefighter's Memorial Hall  
3734 China Garden Road  
Diamond Springs, California 95619

The scoping meeting format will consist of a brief overview of the project, followed by an open house; interested parties may arrive at any time during the open house portion of the meeting to receive information on the Project or provide comments.

# NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)

## DORADO OAKS TENTATIVE SUBDIVISION MAP

### Project Location

The project site is located in the unincorporated Diamond Springs Community Region in El Dorado County, California, about three miles south of Placerville and 40 miles east of downtown Sacramento. The site's regional location is presented in **Figure 1**. Regional access to the area is generally provided by U.S. Highway 50 (US-50), which is a major national highway corridor that begins in Sacramento and crosses the Sierra Nevada Mountains to south Lake Tahoe and continues on to points east. SR-49 provides access to the area from the north and the south along the western front of the Sierra Nevada Mountains and its foothills.

### Project Site Overview

The project consists of both on-site improvements (“Dorado Oaks Tentative Subdivision Map Site”) and off-site improvements (“State Route 49 Intersection Site”) related to a proposed 381-lot residential subdivision. For purposes of environmental review, the on-site improvements are described separately as the Dorado Oaks Tentative Subdivision Map Site and the associated off-site improvements are referred to as the State Route 49 Intersection Site. Proposed work at both locations is collectively referred to as the “project”.

### Dorado Oaks Tentative Subdivision Map Site

The Dorado Oaks Tentative Subdivision Map site is located immediately south of SR-49, extending southwards from the intersection of SR-49 and Faith Lane (see **Figure 2**). The site is bounded to the west by open space areas and a residential subdivision comprised of single family homes. South of the site lies undeveloped open space and scattered rural homes. To the east, the site is generally bounded by low density residential areas. To the north lies the SR-49 commercial corridor, with the most intensive commercial uses in the Diamond Springs area beginning about one-quarter-mile to the east. US-50 lies about three miles to the north, and is most directly reached via SR-49 or Missouri Flat Road. The US-50 corridor contains regional-serving commercial facilities, as well as the historic core of the City of Placerville.

The project site is approximately 142.3 acres, and consists entirely of undeveloped open space. Faith Lane extends into the project site southwards from SR-49. The roadway is paved for about the first 600 feet, and then encounters a locked gate, after which it becomes dirt. A number of dirt tracks run within the project site, none of which are public roadways. Portions of the site were cleared and graded as part of previous development proposals, but none of the previous development efforts were carried through to completion. The site is generally covered with oak woodlands, consistent with other undeveloped areas in the vicinity. A small El Dorado Irrigation District (EID) sewer lift station lies within a fenced enclosure in the northeastern portion of the site, and serves an existing sewer line within an easement that runs through a portion of the site. Other than this facility, there are no other structures on the site.

## State Route 49 Intersection Site

The SR-49 intersection site is shown in greater detail in **Figure 3**. It should be noted that the area shown on the figure incorporates all of the areas associated with the four intersection options that are currently under consideration, as described below. This combined area also incorporates a buffer area for purposes of the environmental analysis. Assuming that only one of the options would ultimately be constructed, the actual intersection area would be substantially smaller than that shown in the figure, and encroachment into the larger illustrated buffer areas would be limited. The EIR, however, will analyze the entire area.

The SR-49 intersection site is currently comprised of roadways adjoining roadside and commercial areas. SR-49 along this segment is configured as an undivided two-lane roadway with a 25 mph speed limit, and is largely fronted with commercial properties. It is classified as a Major 2-Lane Road in the County's General Plan. Traffic counts taken in 2018 at the intersection of SR-49 and Faith Lane found that the roadway along this segment carried approximately 1,240 vehicles per hour during the AM peak period, and 1,579 vehicles per hour during the PM peak period.

Businesses within and adjacent to the project area are generally small in nature. The southwest corner of SR-49 and Silver Drive contains a small shopping center (Diamond Springs Plaza) with a printing shop, a hair salon, and similarly-sized businesses. Slightly further east, Deb's Frosty is located on the southwest corner of SR-49 and Faith Lane. The strip mall at the southeast corner of SR-49 and Faith Lane contains a bicycle shop, a pet store, gift shops, and similar businesses. Also on this corner are two older brick buildings that appear to be vacant. The Gust Brothers Building lies on the northeast corner of SR-49 and China Garden Road, and contains a number of small businesses, including a dental office and a hair salon.

## Existing Land Use and Zoning

### Dorado Oaks Tentative Subdivision Map Site

#### *Existing General Plan Land Use Designations*

The Dorado Oaks Tentative Subdivision site is currently comprised of two designated land use areas, as designated and defined in the County's General Plan. **Figure 4** shows the existing General Plan land use designations for the project site and surrounding areas.

**High Density Residential (HDR):** This land use designation identifies those areas suitable for intensive single-family residential development at densities from one to five dwelling units per acre. Allowable residential structure types include single-family attached (i.e., air-space condominiums, townhouses) and detached dwellings and manufactured homes. Except as provided in General Plan Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers.

**Multi-Family Residential (MFR):** This land use designation identifies those areas suitable for high-density, single family and multifamily design concepts such as apartments, single-family attached dwelling units (i.e., air-space condominiums, townhouses and multiplexes), and small-lot single-family detached dwellings subject to the standards set for in the Zoning Ordinance and which meet the minimum allowable density. Mobile home parks, as well as existing and proposed manufactured home parks, are also permitted under this designation. Lands identified as MFR shall be in locations with the highest degree of access to transportation facilities, shopping and services, employment, recreation, and other public facilities. Mixed use development within Community Regions and Rural Centers which combine commercial and residential uses are permitted.

Except as provided in General Plan Objective 2.2.6 (Site Specific Policy), the minimum allowable density for MFR is five dwelling units per acre, with a maximum density of 24 dwelling units per acre. Except as provided in General Plan Policy 2.2.2.3, this designation is considered appropriate only within Community Regions and Rural Centers.

### ***Existing Zoning Designations***

The Dorado Oaks Tentative Subdivision Map site is comprised of two zoning areas. **Figure 5** shows the existing zoning designations for the project site and surrounding areas. The zoning designations for the site are listed below, with zoning descriptions from the County's Zoning Code (El Dorado County, 2015):

**Single-Unit Residential (R1):** The Single-unit Residential Zone is used to promote and regulate the development of higher density, single-unit dwellings, and accessory structures and uses. Minimum lot size designations of R1 are applied to this zone based on surrounding use compatibility, and physical and infrastructural constraints. The designation represents the minimum lot size of 6,000 square feet. This zone is applicable to lands designated as High Density Residential (HDR) in the General Plan.

**Multi-Unit Residential (RM):** The RM, Multi-unit Residential Zone identifies those lands which are most capable of supporting the highest density of development within the County, based on topography, infrastructure, and circulation availabilities and constraints, as well as proximity to employment centers, public facilities, recreation, and shopping. It is applied to regulate and promote the development of multi-unit dwellings, including apartments, condominiums, and townhouses, while ensuring compatibility with surrounding lower density residential neighborhoods. Detached or attached residential dwellings are allowed in accordance with the standards set forth in the zoning ordinance, providing the minimum density of at least 5 dwelling units per acre is met. This zone is utilized in Community Regions and Rural Centers to meet affordable housing goals identified in the Housing Element of the General Plan. Mobile home and manufactured home land lease development are also allowed within this zone. This zone is applicable to lands designated as Multi-Family Residential (MFR) in the General Plan.

## **Project Overview**

### **Dorado Oaks Tentative Subdivision Map Site**

The Dorado Oaks Subdivision consists of the following entitlement requests:

1. A Rezone of an 8.94-acre portion of the 142.3-acre project site from Residential, Multi-Unit (RM) to Residential, Multi-Unit - Planned Development (RM-PD);
2. A Phased Tentative Subdivision Map, consisting of 14 Large Lots, to subdivide the 142-acre property into 156 single-family lots ranging in size from 6,000 square feet to approximately 24,000 square feet, 225 multi-family lots ranging in size from approximately 2,800 square feet to 8,800 square feet and 20 open space/landscape lots; and
3. A Planned Development Permit to establish an official Development Plan for Dorado Oaks Subdivision that includes modification to specific development standards in the RM zone district for 91 of the proposed multi-family lots on an 8.94-acre portion of the project site.

This component of the project would provide for development of residential uses on a series of parcels that cover a combined area of approximately 142.3 acres. **Figure 6** shows the proposed subdivision map. In addition to the proposed residential and open space lots, other components of the project include:

- On-site roadway improvements to facilitate circulation within the development (18.51 total acres).
- Provision of a 3.13-acre public park site, to include a soccer field and other amenities.
- On-site infrastructure improvements relating to potable water delivery, wastewater conveyance, and storm drainage.
- Provision of four public vehicular access points and one emergency vehicle access point to and from the project site to existing adjoining roadways:
  - 1) Faith Lane, connecting to SR-49/Pleasant Valley Road and providing primary access at the north end of the project site.
  - 2) Faith Lane, connecting to Argonaut Drive on the west side of the project.
  - 3) “D” Street, connecting to Crystal Drive/Tullis Mine Road on the northwest side of the project site.
  - 4) “C” Street, connecting to Fowler Lane on the northeast side of the project site.
  - 5) “H” Court, providing emergency vehicle access to Fowler Lane on the southeast side of the project site. Minor widening may be necessary along the southerly portions of Fowler Lane to meet County Fire Department requirements.

### **State Route 49 Intersection Site**

This component of the project would provide access to the Dorado Oaks Subdivision site from State Route (SR) 49, which is also known in this vicinity as Pleasant Valley Road. **Figure 7** shows the four intersection options that are currently under consideration, which include the following:

- Option A: a four-way roundabout at the intersection of China Garden Road/SR-49, east of Faith Lane.
- Option B: a three-way roundabout between Silver Drive and Faith Lane at SR-49.
- Option C: a signalized T-shaped intersection at Faith Lane/SR-49.
- Option D: a signalized T-shaped intersection at Silver Drive/SR-49.

## **Environmental Effects and Project Alternatives**

### **Environmental Topics to be Evaluated in the Draft EIR**

The EIR will review all resource topics listed in Appendix G of the CEQA Guidelines in effect at the time the County deemed the project application complete on October 22, 2018. The list of environmental topics that will be evaluated include: Aesthetics, Agriculture and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, and Utilities and Service Systems.

In addition to the above areas, the Draft EIR will also evaluate the potential cumulative and growth inducing effects of the project, as required by CEQA. Reasonably foreseeable future projects in the project vicinity will be considered in this analysis.

Comments and suggestions are requested during the 30-day public comment period for the NOP regarding the environmental issues that will be analyzed in the EIR.

### **Potential Alternatives to be Evaluated in the EIR:**

In accordance with section 15126.6 of the CEQA Guidelines, an EIR must “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” As required by CEQA, the EIR will evaluate a No Project Alternative. Aside from the No Project Alternative, the County has not yet determined what additional alternatives to the project will be evaluated in the EIR. These will be identified during the environmental review process. Once selected, the alternatives will be analyzed at a qualitative level of detail in the Draft EIR for comparison against the impacts identified for the proposed project, consistent with the requirements of CEQA.

## **Intended Uses of the EIR**

The EIR will fully evaluate the environmental effects associated with the implementation of the Dorado Oaks Tentative Subdivision Map project. The EIR is intended for use for a number of approvals and entitlements from the County and other agencies. It is expected that these approvals could include the following:

### **County of El Dorado**

- Certification of the Dorado Oaks Tentative Subdivision Map project EIR pursuant to CEQA;
- Tentative Subdivision Map;
- Adoption of a Planned Development overlay zone for the subdivision project area;
- Development Agreement;
- Public Facilities and Financing Plan (PFFP);
- Design Review Permits for the design of structures, common areas, and roadways; and

Other local approvals that may be required, such as:

- Grading permits;
- Demolition permits;
- Construction Waste Management Plan (for construction waste);
- Encroachment permits;
- Building permits; and
- Other County approvals as necessary to develop the project.



The project would require review and recommendation by the Planning Commission to the County Board of Supervisors, followed by consideration and action by the Board of Supervisors. The EIR would provide the CEQA-required environmental documentation for use in considering County approvals required to implement the project.

## Other Governmental Agencies

As the Lead Agency and as appropriate under CEQA, the County also intends the EIR to serve as the CEQA-required environmental documentation for consideration of this project by other

Responsible Agencies and Trustee Agencies which may have limited discretionary authority over development proposals associated with the project. Under the CEQA *Guidelines*, the term “Responsible Agency” includes all public agencies, other than the Lead Agency, which have discretionary approval power over aspects of the project for which the Lead Agency has prepared an EIR (CEQA Guidelines Section 15381); and the term “Trustee Agency” means a state agency having jurisdiction by law over natural resources affected by the project which are held in trust by the people of California (Section 15386). Responsible Agencies and Trustee Agency approvals for the project may include, but are not limited to, the following:

- **Caltrans District 3**
  - Issuance of an encroachment permit for construction of the selected SR-49 intersection option;
  - Review and approval of the design and construction of the intersection project.
- **El Dorado County Transportation Commission (EDCTC)**
  - Review of the project in relation to the Regional Transportation Plan, the Diamond Springs and El Dorado Area Mobility and Livable Community Plan and Improvement Program.
- **El Dorado County Air Quality Management District (AQMD)**
  - Review of project plans may be required.
- **El Dorado County Fire District**
  - Review of project with consideration for impacts to firefighting and emergency services.
- **El Dorado Irrigation District (EID)**
  - Review of project with consideration for impacts to EID facilities.
- **Other utilities and community service providers**
  - Review of project with consideration for impacts to facilities and services.
- **Central Valley Regional Water Quality Control Board (RWQCB)**
  - National Pollution Discharge Elimination System (NPDES) General Permit for storm water discharges associated with construction activity;
  - Clean Water Act Section 401 Water Quality Certification and Notice of Intent for construction activities; and
  - Storm Water Pollution Prevention Plan (SWPPP) for on-site storm water management and pollution prevention.

- **California Department of Fish and Wildlife (CDFW)**
  - Section 1602 Streambed Alteration Agreement; and
  - CDFW would also review and comment on specific sensitive species aspects of the project if potential effects are found.
- **U.S. Army Corps of Engineers (USACE)**
  - Approval of Section 404 Permit under the Federal Clean Water Act for project impacts to jurisdictional waters of the United States.

## Requests for Additional Information

If you have any questions, please contact Tom Purciel at the County of El Dorado, Planning and Building Department-Planning Services Division, 2850 Fairlane Court, Building C, Placerville, CA 95667, by telephone at (530) 621-5355, or by email to [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us).

### Attachments:

Figure 1 – Regional Location

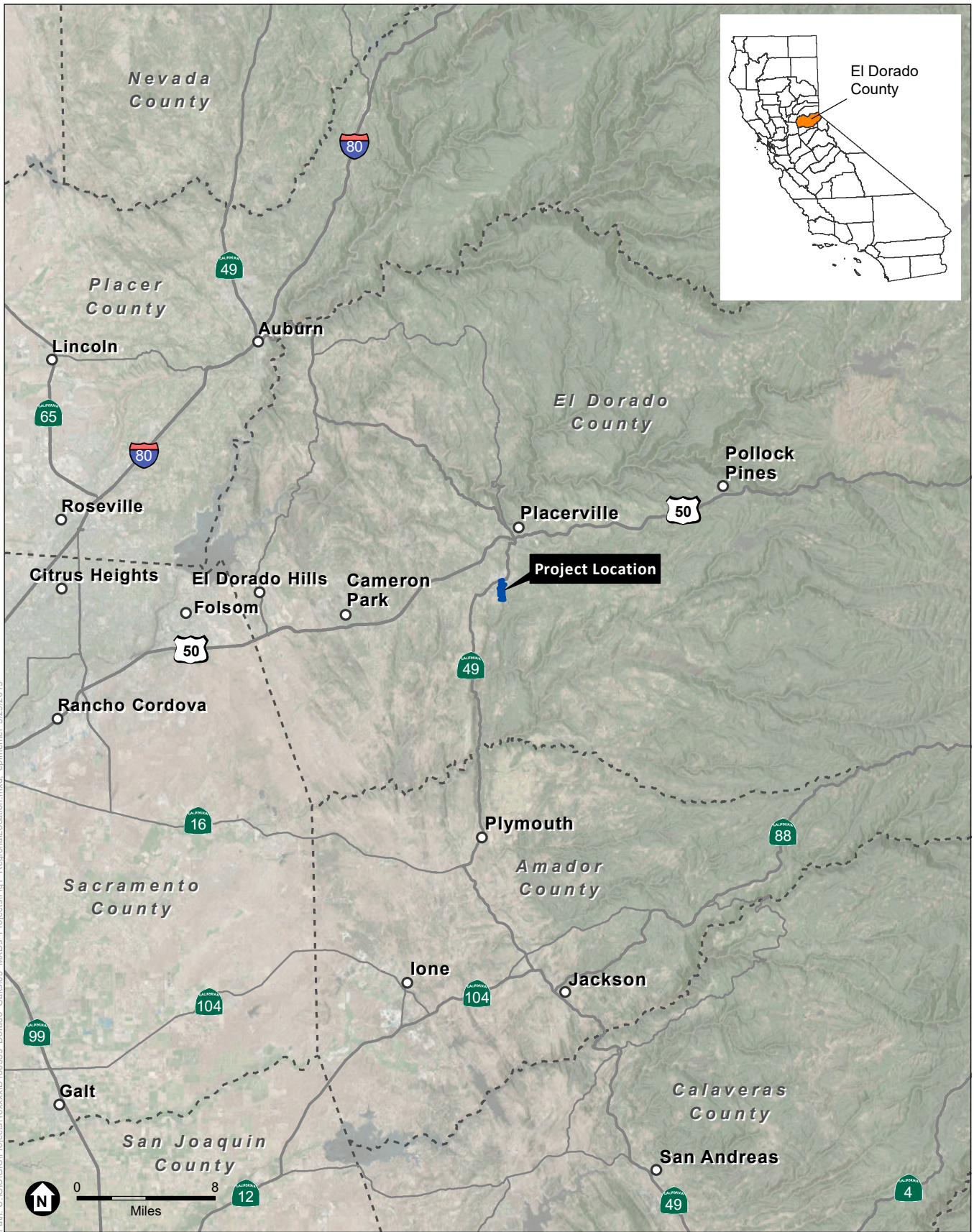
Figure 2 – Project Overview

Figure 3 – State Route 49 Intersection Site Exhibit 4 – Existing General Plan Land Use Designations

Figure 5 – Existing Zoning Designations

Figure 6 – Dorado Oaks Tentative Subdivision Map

Figure 7 – State Route 49 Intersection Options

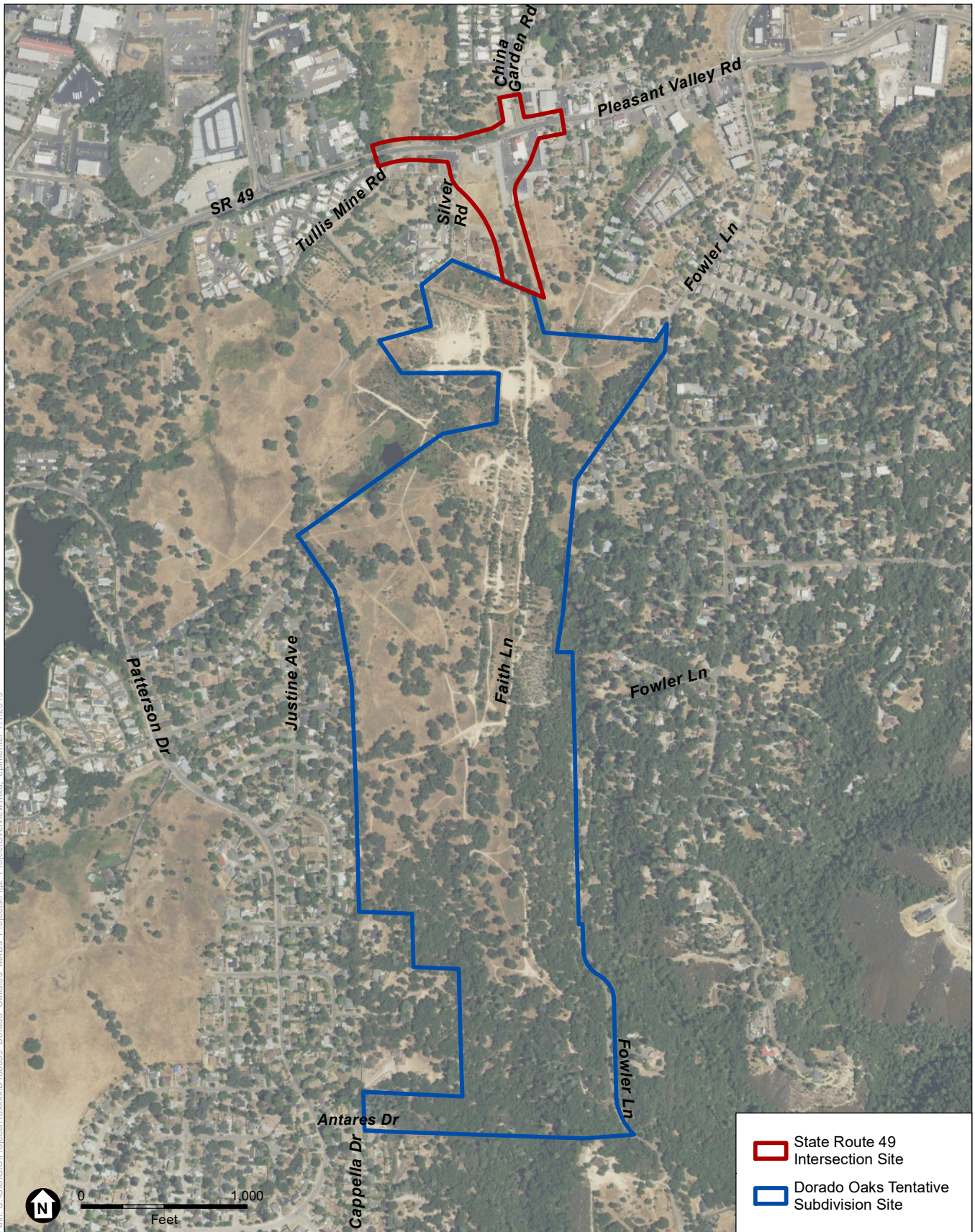


SOURCE: Esri, 2018; ESA, 2019

Dorado Oaks Tentative Subdivision Map Project

**Figure 1**  
Regional Location





SOURCE: USDA, 2016; ESA, 2019

Dorado Oaks Tentative Subdivision Map Project

**Figure 2**  
Project Overview



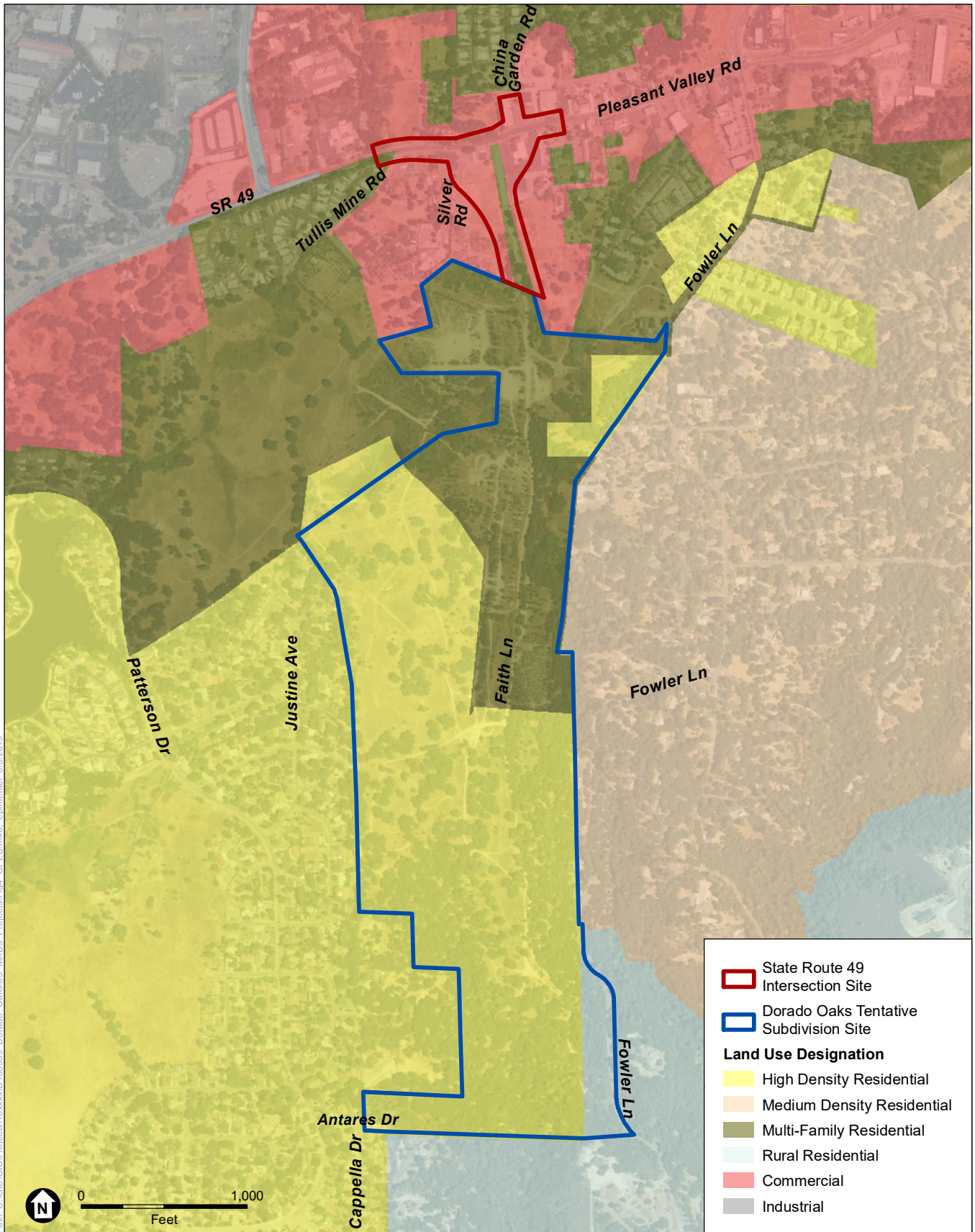


SOURCE: USDA, 2016; ESA, 2019

Dorado Oaks Tentative Subdivision Map Project

**Figure 3**  
State Route 49 Intersection Site Detail

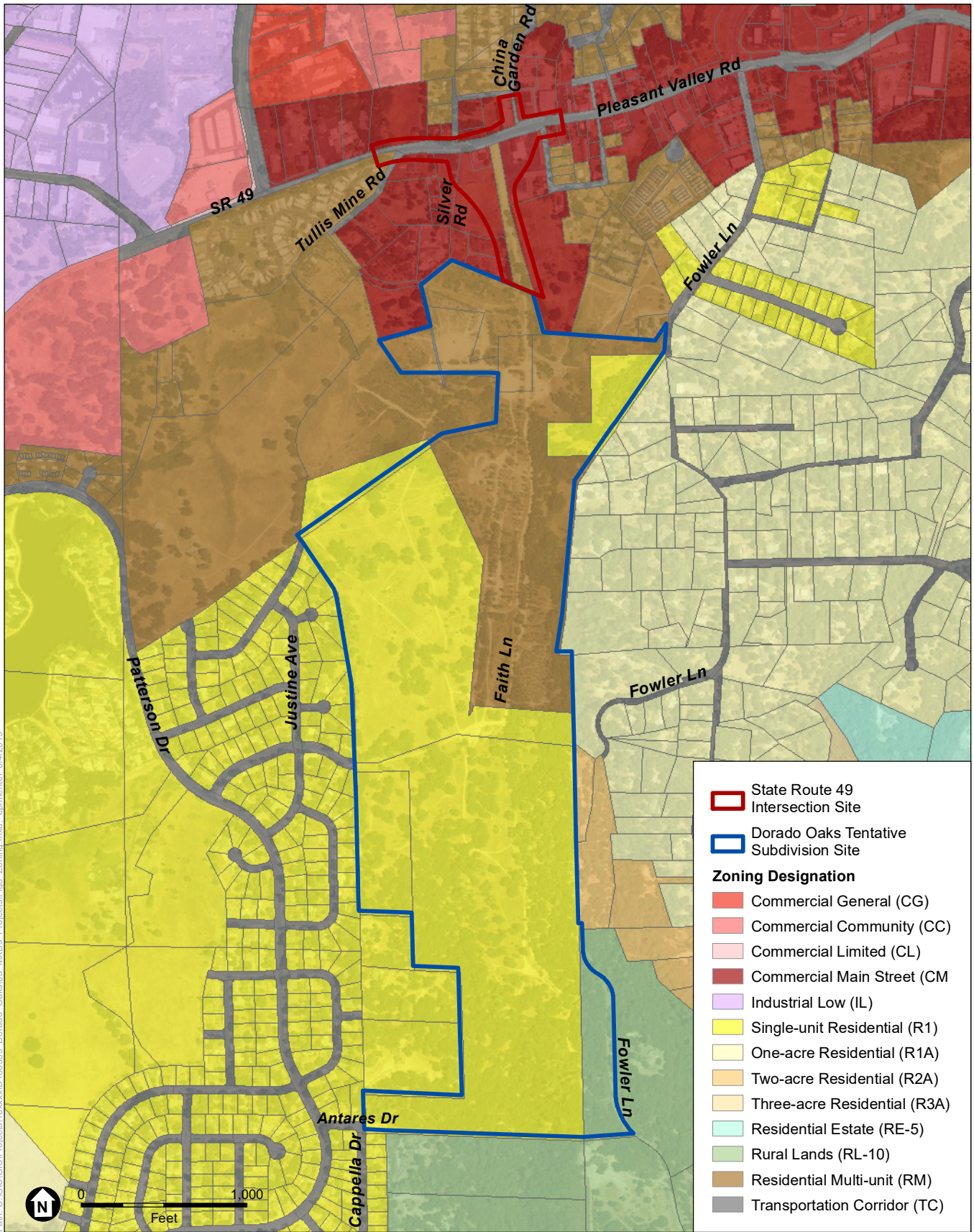




SOURCE: USDA, 2016; El Dorado County, 2018; ESA, 2019

Dorado Oaks Tentative Subdivision Map Project

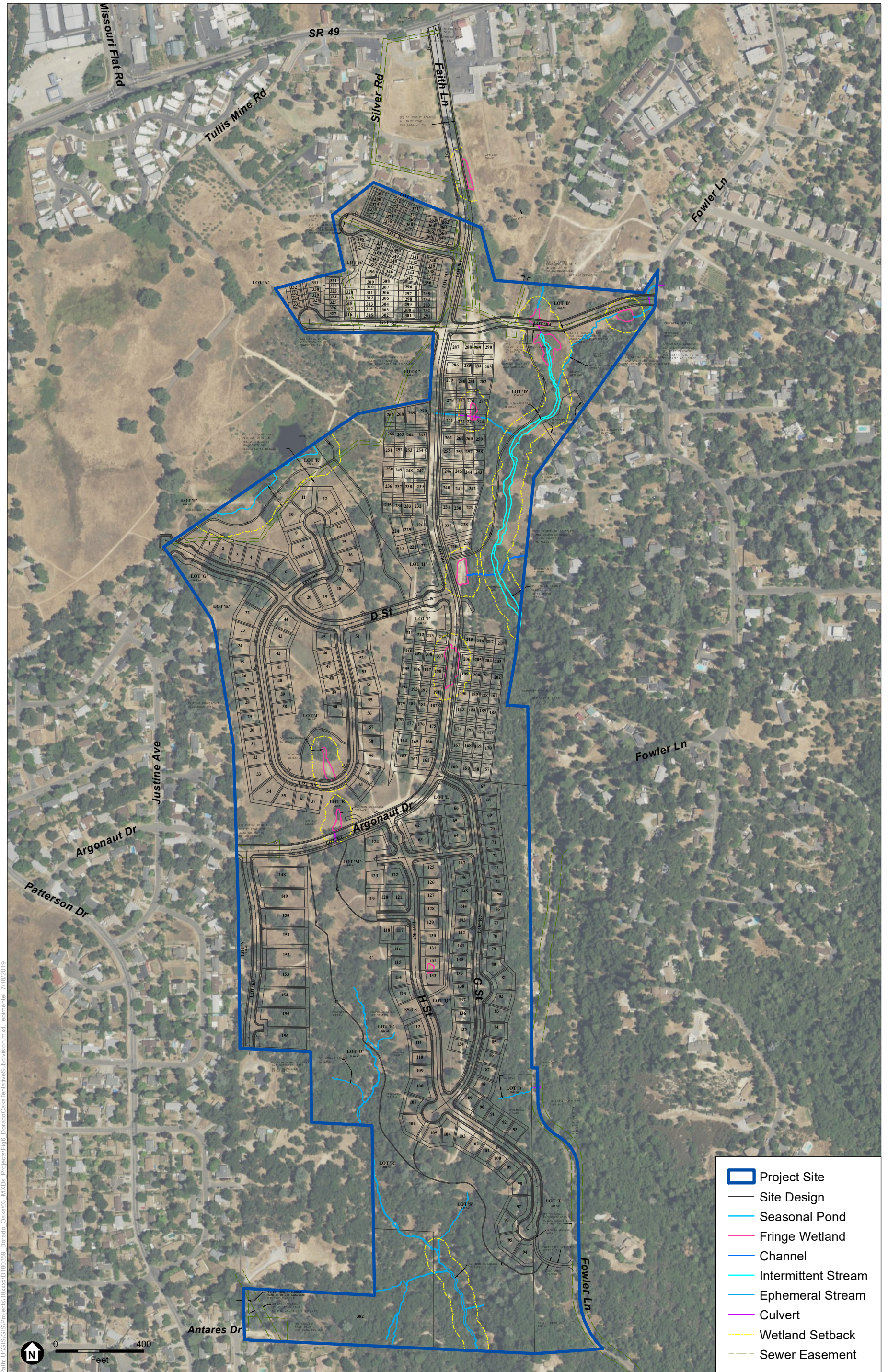
**Figure 4**  
Existing General Plan Land Use Designations



SOURCE: USDA, 2016; El Dorado County, 2019; ESA, 2019

Dorado Oaks Tentative Subdivision Map Project

**Figure 5**  
Existing Zoning Designations



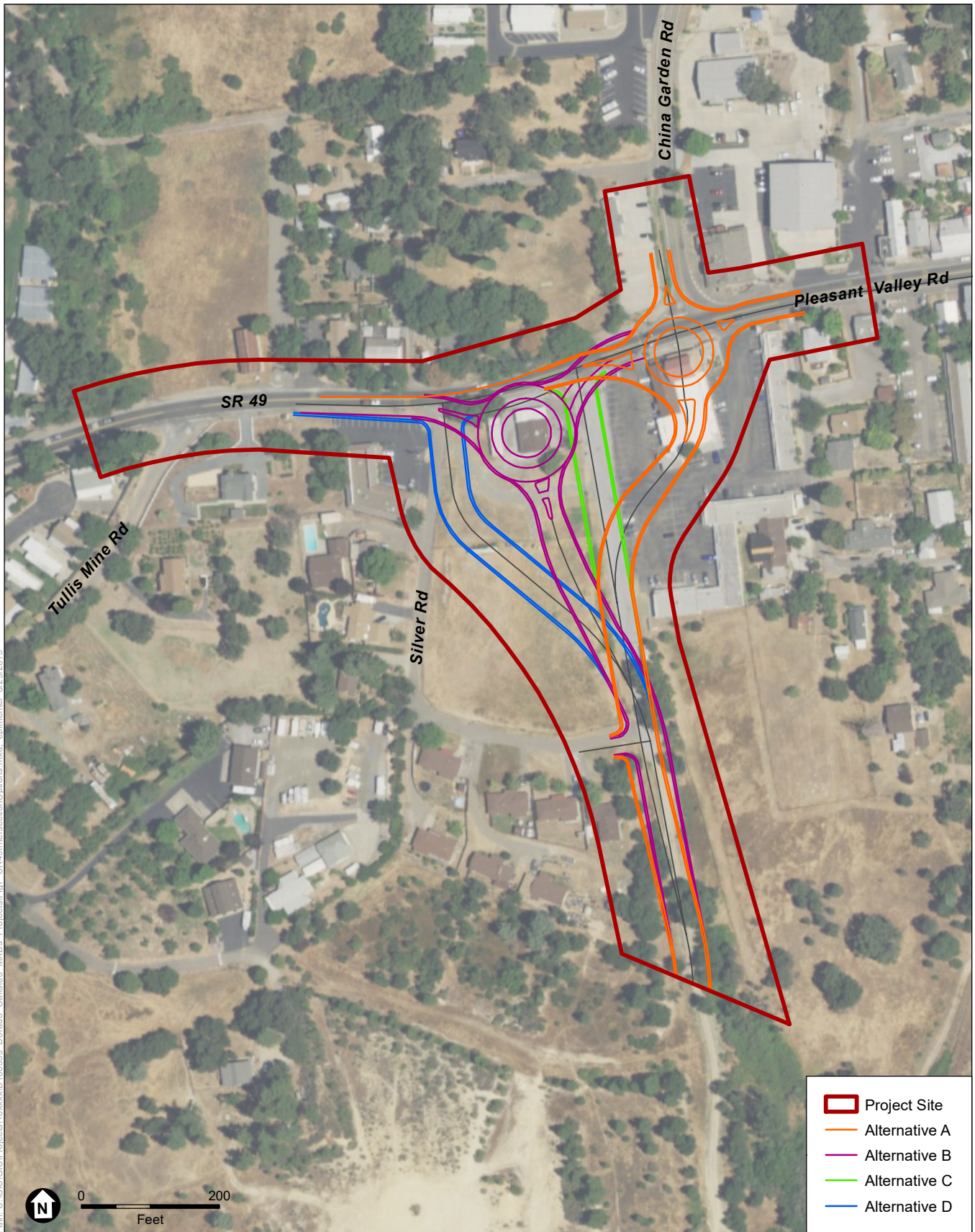
Path: U:\GIS\GIS\Projects\18\000\DT\0329 Dorado Oaks\18\0329 Dorado Oaks Tentative Subdivision.mxd; epimintel; 7/18/2019

SOURCE: USDA, 2016; CTA, 2019; ESA, 2019

Dorado Oaks Tentative Subdivision Map Project

**Figure 6**  
Dorado Oaks Tentative Subdivision





SOURCE: USDA, 2016; ESA, 2019

Dorado Oaks Tentative Subdivision Map Project

**Figure 7**  
State Route 49 Intersection Options



**DEPARTMENT OF TRANSPORTATION**

DISTRICT 3  
703 B STREET  
MARYSVILLE, CA 95901  
PHONE (530) 741-4233  
FAX (530) 741-4245  
TTY 711  
www.dot.ca.gov/dist3



*Making Conservation  
a California Way of Life.*

August 26, 2019

GTS# 03-ED-2016-00149  
03-ED-50 PM 11.512  
SCH# 2019071041

Efren Sanchez, Associate Planner  
El Dorado County  
2850 Fairlane Court, Building C  
Placerville, CA 95667

**Dorado Oaks (Stonehenge Springs)**

Dear Mr. Efren Sanchez:

Thank you for including the California Department of Transportation (Caltrans) in the Notice of Preparation of a Draft Environmental Impact Report review process for the project referenced above. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development - Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

The Dorado Oaks project is located southeast of the intersection of Missouri Flat Road and Pleasant Valley Road at the southern terminus of Faith Lane in the Community Region of Diamond Springs. The project proposes approximately 361 single family detached lots. 51 lettered lots (landscape, open space, recreation facilities and clubhouse).

The following comments are based upon the Notice of Preparation of a Draft Environmental Impact Report documents received.

***Traffic Operations – Highway***

The below comments are made on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) and Notice of Public (NOP) Scoping Meeting for the Dorado Oaks Tentative Subdivision Map, dated July 29, 2019.

- Caltrans previously reviewed and commented on the Transportation Impact Study (TIS) – Draft Report for Dorado Oaks, in El Dorado County, CA, dated July 2, 2018, by Prism Engineering prepared for the proposed Project.

- Caltrans also concurred with all the comments documented in the Memorandum to Katie Jackson, PE, TE, and Natalie Porter, PE, TE entitled Peer Review of the Dorado Oaks Transportation Impact Study, dated July 19, 2018, by DKS Associates.
- Caltrans would like an updated TIS as part of the DEIR that addresses all comments made by the County of El Dorado, DKS, and Caltrans.
- The NOP project land use is different than the TIS project land use, dated July 2, 2018. NOP land use and TIS land use should be consistent.
- The DEIR proposes SR 49 (Pleasant Valley Road) at Silver Road/Faith Lane/China Garden Road intersection improvements. Please include an Intersection Control Evaluation, based on Caltrans Policy Directive 13-02 for these intersection improvements.
- Any work within Caltrans right of way may require an encroachment permit.

### ***Model & Forecasting***

Model & Forecasting agrees with comments provided by Traffic Operations - Highway. An updated TIS should be completed in which no build volume on project opening day and no build + project volume on opening day should be added. My comments from the draft TIS review stage should also be included.

### ***Traffic Operations - Encroachment Permits***

The project limit is outside the State highway system right of way. However, If other Caltrans functional units request mitigation measures, then an encroachment permit will be required.

### ***Highway Maintenance***

Work (including sidewalks and roundabouts) will require a Maintenance Agreement, and all work must be maintained by the agency. Construction work must meet Caltrans Standard Plans and Specifications within the State Route 49.

### ***Hydraulics***

This project will potentially result in an increase in peak surface water runoff due to construction of buildings and parking, roads etc. and an increase in impermeable surface area. Peak runoff discharge for the 10 and 100-year storm events to the State's highway right of way and to Caltrans' highway drainage facilities must be reduced to at or below the pre-construction levels. This may be accomplished through the implementation of storm water management Best Management Practices (i.e., detention/retention ponds or basins, sub-surface galleries, on-site storage and/or infiltration ditches, etc.). Once installed, the property owner must properly maintain these systems. The proponent/developer may be held liable for future damages due to

Mr. Efren Sanchez  
August 26, 2019  
Page 3

impacts for which adequate mitigation was not undertaken or sustained. In addition, runoff from the proposed project that will enter the State's highway right of way and/or Caltrans drainage facilities must meet all regional water quality control board water quality standards prior to entering the State's highway right of way or Caltrans drainage facilities. Appropriate storm water quality Best Management Practices may be applied to ensure that runoff from the site meets these standards (i.e., is free of oils, greases, metals, sands, sediment, etc.). Once installed, the property owner must properly maintain these systems in perpetuity.

All work proposed and performed within the State's highway right of way must be in accordance with Caltrans' standards and require a Caltrans Encroachment Permit prior to commencing construction. For the encroachment permit application, provide drainage plans and calculations for the pre and post 10 and 100 peak run-off (quantities and velocities) and water quality treatment for all discharge to the State's highway right of way and to Caltrans' highway drainage facilities.

If you have any question regarding these comments or require additional information, please contact Amber Moran, Intergovernmental Review Coordinator for El Dorado County, by phone (530) 634-7624 or via email to [Amber.Moran@dot.ca.gov](mailto:Amber.Moran@dot.ca.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Yount", written in a cursive style.

KEVIN YOUNT, Branch Chief  
Office of Transportation Planning  
Regional Planning Branch—East

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

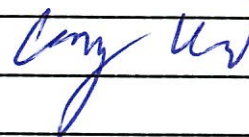
Name: Corey Ward  
Email: wardjeep52@hotmail.com

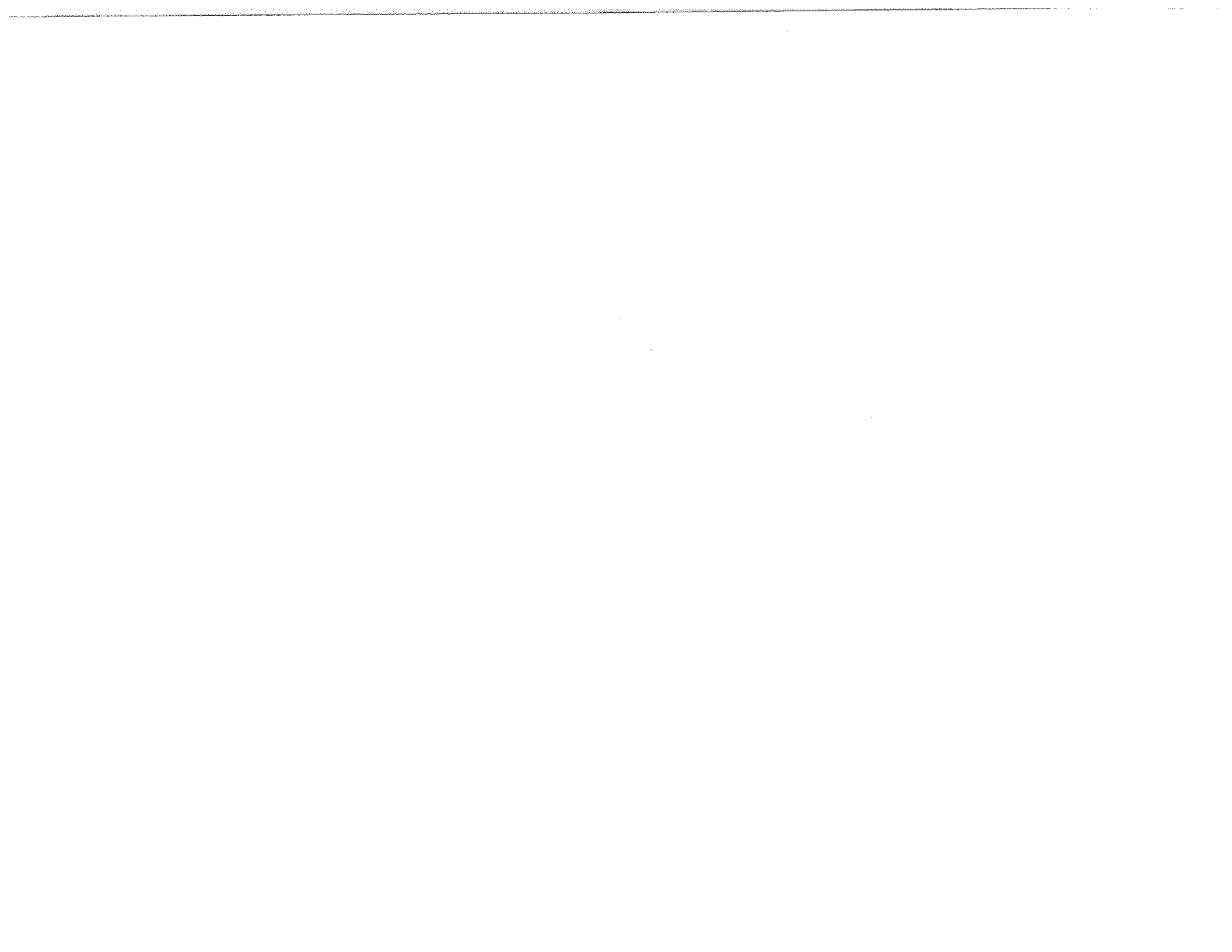
Address: 2129 Sunrise Dr  
D.S., CA 95619

I STRONGLY OBJECT TO THIS proposed project.  
AS a 4<sup>th</sup> GENERATION DIAMOND SPRINGS citizen, THIS  
PROJECT IS NOT IN THE BEST INTERESTS OF THIS TOWN.  
TRAFFIC IN THIS TOWN IS ALREADY TERRIBLE & THIS WOULD  
ONLY INCREASE TEN FOLD. IF THIS GOES THROUGH, WHAT  
IS THE POINT OF THE CURRENT DIAMOND SPRINGS  
BYPASS PROJECT THAT IS CURRENTLY IN PHASE ①.  
THIS SUBDIVISION WILL PUT TRAFFIC BACK ONTO MISSOURI  
FLAT RD. & IN TURN BACK ON P.V. ROAD. DOES NOT  
MAKE ANY SENSE.

Respectfully

Corey Ward





**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: LOUISE LOCKEN

Address: 5593 Crossbill Ln, El Dorado

Email: llocken3491@comcast.net

I travel through Diamond Springs frequently & the traffic is my #1 problem with this project. Our roads are not designed to handle the existing traffic let alone the traffic that will be added with this project. Could there be other roads built off site or along side of project that could connect with Hwy 50 or Missouri Flat ???

I realize housing is needed but let's use common sense & grow with ease.

Thank you  
Louise Locken

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Teresa Berkery

Address:

Email: terryis2003@yahoo.com

Push Mission 14 through - Problem solved.

We keep our way of life and the new homes travel less miles.

Buy out the mobile home park. Move it over. Buy those people new mobile homes. Still cheaper.

What else are tax payers going to pay for.

You're breaking our backs!

We simply cannot pay for everything!

Where is the water coming from. Extra pollution.

Where is the wildlife supposed to go?

Seppis. Money great again



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Ariel Schostag  
Email: Angela Geller

Address: 4426 Cash Bay Road

GO FOR IT!!! WE ARE SUPPORTIVE.

Thanks Kevin

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Robert King + Judy Cooper

Email: Raking86@yahoo.com

Address: 4294 Toyon DR.  
Diamond Springs,

We feel it would way overcrowd our neighborhood.  
We live off Fowler. The Road would be ~~part~~ packed all the time.  
We vote NO.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Gertie Beller

Address: 4426 Cash boy Road

Email:

We are supportive. There is a lack of housing in El Dorado County. might help the homeless

**Dorado Oaks NOP Scoping Meeting Comment Card**

**Date:** August 20, 2019

**Name:**

**Address:**

**Email:**

Jim Ahrens PO Box 3190 Diamond Springs Against No  
Tracie Ahrens PO Box 1052 Diamond Springs No

No  
low income  
trash  
stump

**Dorado Oaks NOP Scoping Meeting Comment Card**

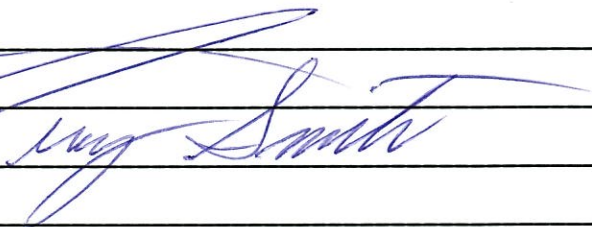
Date: August 20, 2019

Name: TERRY SMITH

Address: 5324 SHARON LN

Email: rascalone@sbcglobal.net

How dare you people destroy Diamond Springs!  
The road is already overcrowded causing traffic  
problems. What are you people thinking?  
We the people like Diamond Springs the way  
it is.



Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Greg Alterton

Email: gregalterton@gmail.com

Address: 6500 Oak Dell Road  
El Dorado 95623

- ① One of my concerns with the proposal is the likely impact on traffic on Pleasant Valley Road, which during early morning, late afternoon, and on weekends, seems close to maximum capacity now. The 'line kiln' bypass has been mentioned as a mitigation, but how likely is it that commuters from up in Pleasant Valley will take the bypass when 49-to-Missouri Flat is a direct route? I take <sup>the</sup> off of 49 near Koki Lane and the back-up ~~to~~ from Koki to the high school is grid-locked almost to Missouri Flat in early morning. This project can only exacerbate that gridlock.
- ② Concerned about loss of open space and the loss of existing rural character of this area.
- ③ Concerned about loss of habitat for wildlife.
- ④ Concern about high density apartments. Aside from environmental impacts, will the impact on crime and safety of high density apartments be considered?

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Kim F. Smith  
+ Denise A. Dellagatta  
Email: deniseann528@yahoo.com

Address: 193 ARGONAUT DRIVE

Request:

Argonaut drive speed bumps AND CAUTION CHILDREN SIGNS  
OR FIRE LANE ONLY WITH GATE.

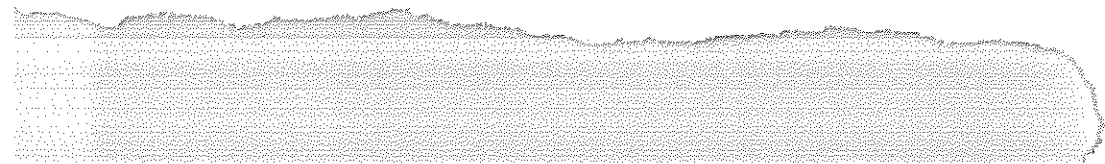
We BOUGHT HOUSE IN COUNTRY FOR PEACE & QUIET  
We DO NOT WANT TO LIVE ON A MAJOR STREET  
THIS WILL DEPRECIATE OUR PROPERTY VALUE A LOT.  
We NEED TO BE COMPENSATED FOR THE FINANCIAL  
LOSS THIS IS CAUSING FOR US.

Kim F. Smith - Homeowner

Also Request Low density single-family homes Not multi-family  
Also some

Open space areas with Big Oak trees

Denise Dellagatta  
Homeowner





**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: LEON CASTIAUX

Address: 353 GRUFFITH Rd.  
Diamond Springs

Email: lmcastiaux@comcast.net

~~I'm concerned~~

In the development of the project a sports field and playground for both residences & neighboring (Deer Park). The closest one is now several miles away.

Evacuation Routes are of a very high concern. This includes the width of main streets to allow vehicle evacuation and allow emergency vehicle ingress. This must include multiple exits to include adjoining area like Deer Park & Fowler Lane.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Adeline Penn

Address: 4461 Lewis Rd D.S. 95619

Email: adeline@enmagine.com

Water

Sewer

Roads

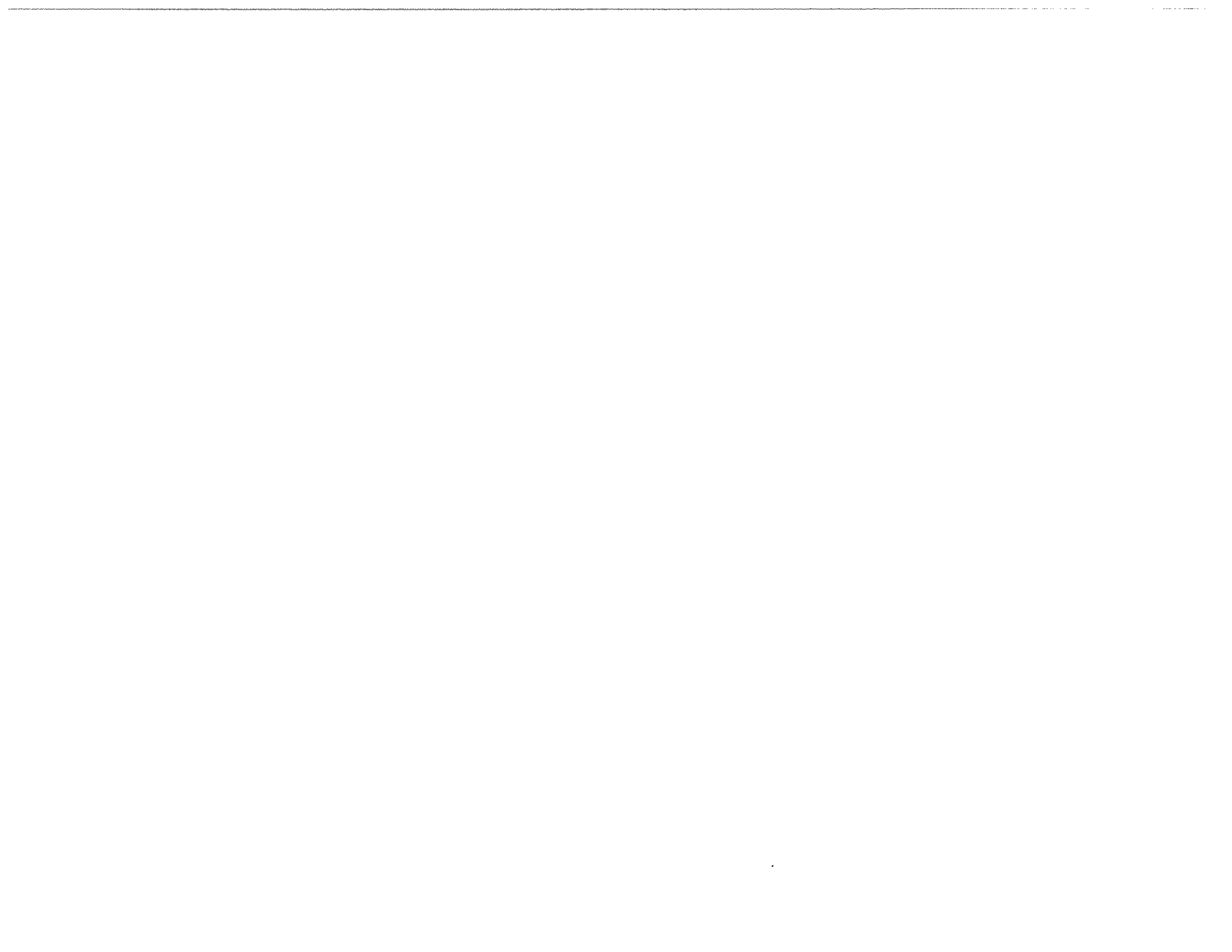
Infrastructure

Schools

are the resources there? if not, how do you plan to provide this

Fire = evacuation routes that are already a possible Paradise waiting to happen  
are there plans for this

Further development plans/changes = please put me on the contact list to receive notices !!!



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Mary McCombs

Address: 3550 Chmn Garden Rd  
P-Ville

Email:

I am against this development. I am for retaining undeveloped areas of this county. This development will cost Diamond Springs the treasured small town feeling that we love. Will individual developers or corporation even think of the land and those who have lived here and value this area as it is, ever overcome their greed?

Why not reverse the general plan?

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Pat Brown

Address: 1320 Sherwood Ln D.S.

Email: pand@cal.net

- Chairs needed for elderly
- Microphone was needed to hear Q & A's
- Generally a poor meeting - unable to access tables & hear comments.

\* The density of this project ~~is~~ would destroy our historic small town. Scale it down by 1/2!

- Parkland is inadequately planned.
- No Roundabouts!

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Susan Sinetos

Email: ssinetos@siglobal.net

4000 Wim Belden D.S.

Address: 3040 Granada Ct # 20 C.A

We have a HUGE shortage of homes in our County.

our children + grandchildren need homes.

we need the infrastructure + the homes.

Build it!

**Dorado Oaks NOP Scoping Meeting Comment Card**

**Date:** August 20, 2019

**Name:** LINDA RUSE

**Address:** 4261 LIME KILN RD

**Email:**

lrusk@gmair.com

totally against the development of all  
the stores & traffic

Dorado Oaks NOP Scoping Meeting Comment Card

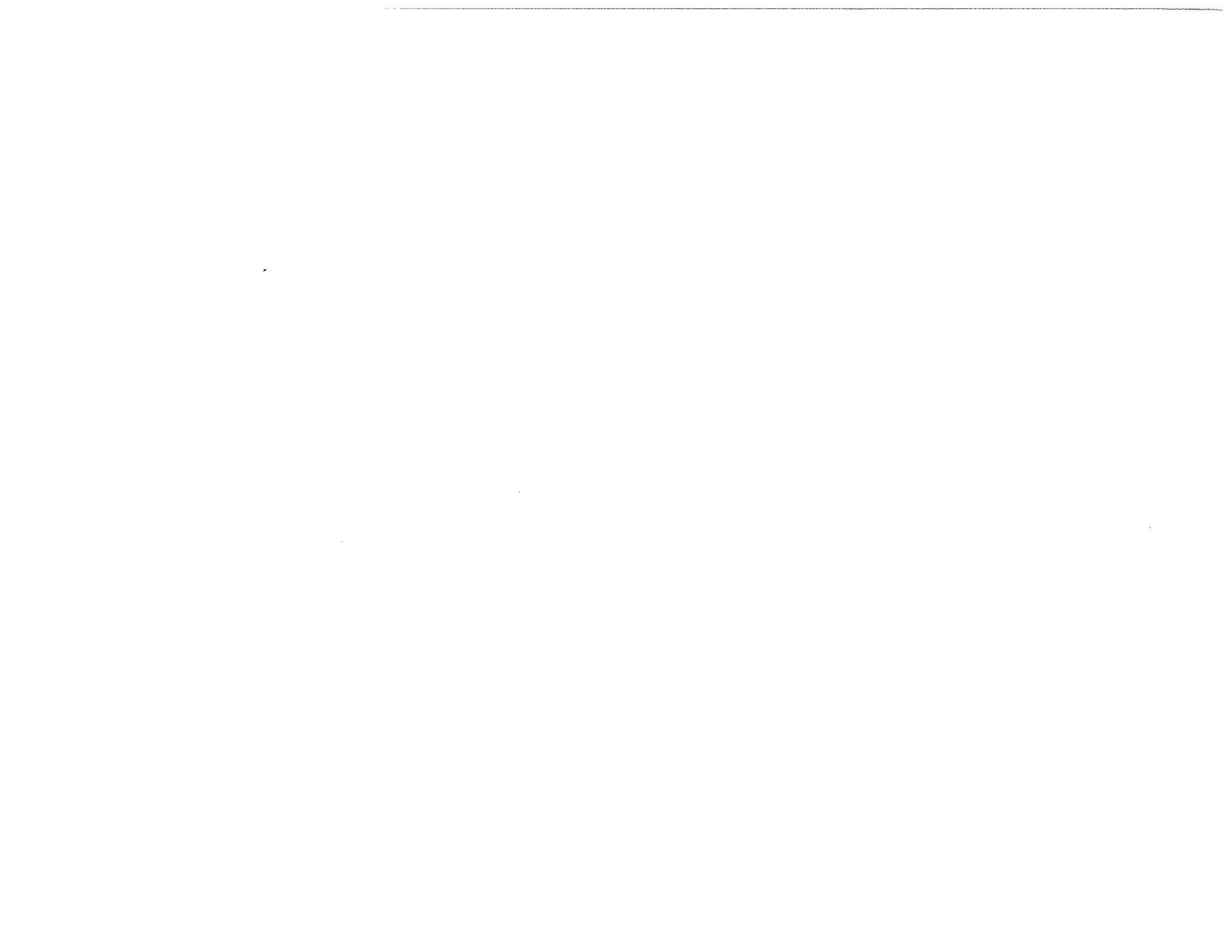
Date: August 20, 2019

Name: DAN & LAURA MURPHY Address: 551 SHADY OAK LANE  
D.S., 95619  
Email: dlhamurphy@comcast.net

THERE GOES OUR  
QUALITY OF LIFE !!

STOP THE DEVELOPMENT !!





**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: DAVID TUCKER

Address: 154 ARGONAUT DR.

Email: didtucker953@gmail.com

ARE THESE THE ONLY 4 OPTIONS CONNECTING TO PLEASANT VALLEY RD.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Romaine Daher

Address: 11601 Heartland Rd  
Placerville CA 95667

Email: rdelriodaher@yahoo.com

- Traffic - It's already backed up to Zandonella from D. Springs  
It's already a big problem.
- Fire - Those of us up the hill from downtown D.S. are concerned about fire evacuation. This development would add to the problem.
- Fire - The D.S. fire dept is already stretched thin. Reopen the Oak Hill Fire Dept
- low income housing is needed but should be off Hwy 50 not impacting small communities
- We go to Europe alot and roundabouts are not sufficient for the proposed added density
- Fire - Behind this proposed development is a canyon with a PGE designation of 2+3.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Sherry & Steven Morris

Address: 4261 & 4263 Fowler Ln.

Email: sherryandstevenmorris@gmail.com

- This project is way too high density for our community. We already have 60 homes going in across from Lime Kiln Rd. So that is more than enough
- This project shows homes covering some natural springs, you know that relates to the city name they should not be covered up.
- Traffic will not be helped by a round about if cars are very close to each other it prevents movement. Also #1 would take away the flea market #2 would take away Debs Fosty.
- Fowler has already lots of traffic and most of it is speeding
- Fire Danger and people already can't get insurance all the homes that are for sale are backing out due to insurance costs.
- Soccer field would bring in more outside people, and hopefully no lighting for night play.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Peter Martínez

Address: 647 N Circle PA  
Diamond Springs

Email: p@p@const@hotmaill@com

Traffic and over crowding the area  
your plan is to dense for such a  
small area there is wild life and  
population to consider.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Judith Bell

Address: 635 Crestview Dr.  
Diamond Springs

Email: ~~judithbell@att.net~~

This project will effect traffic, water, wild life and fire evacuation routes. I am adamantly against destroying the rural community and displacing wild life and destroying oaks, pines.

Follow the money

Read the Planning Commission's Mission Statement

1874  
1875  
1876

1877  
1878  
1879

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: John and Maria Wetterstrom

Address: 582 Cappella Dr.  
Diamond Springs.

Email: mary.w.7@hotmail.com

I do not oppose this project. I believe that our county is in great need for more housing. We live in Deer Park and my main concern is for the impact this new development is going to have on the local schools. Our home school is Indian Creek El. and we chose to have our 8 yr. old in the Charter Hybrid Homeschool program @ Charles Brown because the local school has a really big student population. Will Charles Brown have to reopen? and if so what does that mean for the Charter currently using that site.

Thank you.

Side note, the set this evening was less than ideal. I hope the next meeting will have more structure and organization.



Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Lowell S Smith 409-5854 Address: 1480 Canyon Falls Road  
Placerville CA  
Email: lowell@designsmithteam.com

As a business owner I am opposed to the density of this project, Traffic concerns are paramount -

I suggest a disinterested non affiliated professional firm's conduct a thorough Traffic impact study - then have that study presented to the public - in the newspaper and on line and at a public meeting

The density of this project is fundamentally contrary to the majority of property owners who have come here to escape this very type of development.

Lowell S Smith

This project will not be allowed per (Measure E)  
(A law suit may be necessary)

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: William Smith

Address: 4930 JACK RABBIT DR PLACERVILLE

Email: William@designsmithnteam.com

I have a serious concern about the density of the project  
& the added stress ~~to~~ ~~the~~ & volume of traffic to an  
already poorly developed roadway. IF anyone is  
conscious of safety & a quality of life that is important  
to all that live here, ~~to~~ those proposing this project  
should listen to those that oppose this project &  
Let us enjoy the lives we signed up for  
without your short sided development that is  
very apparent that you don't plan on living

Near! our opinion  
Should matter to you!

For questions, please contact: michelle@mmsstrategies.com

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Jane Krowder

Address: 745 Crestview Dr  
Diamond Sp 95619

Email: Teamjane@comcast.net

Where are all the people that buy here work? Why do people want to live here? When the Edson Housing Project is going in how is there really that much work for people: Are they all going to commute. Cause there's no place here for people to work.

What are the price of the homes - condos ---?

Roads are a real issue.

Water where is it coming from?  
Sewer - ?

Please Do Not Bring this to this area there is NO Room! We do not want this. Go Away.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Alida Martinez

Address: 647 10. Circle Dr.

Email: amartinez.realestate@gmail.com

I am very concerned that this project would diminish the quality of life <sup>we</sup> enjoy in Diamond Springs.

We already have traffic backups on Pleasant Valley and cannot fathom how all these extra homes will make things better.

Diamond Springs does not want to become an urban center - that's what the big cities are.

It is disappointing to have the government force their plan on the community.

I am Against the density of this project. ~~to~~ too many houses in one area.

I moved from Sacramento 4 years ago to get away from this high density. Make one acre parcels like the rest of the area. Don't kill our way of life for the benefit of Southern California Developers.

BAD BAD BAD BAD Ideal

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: JULIE ANN & IAN KEIR

Address: 4301 FOWLER LANE, D.S.

Email: KEIRCLAN4@YAHOO.COM

- size & scope of development project [# of homes, apts, etc. being built in a very small unincorporated area of D.S.]
- increased traffic - very concerned
- Water - EID - where is it coming from?
- We have very little infrastructure in D.S. How will the County cope w/ 1,000+ people & cars moving to D.S.?
- Fire, police, emergency - we have little to no on police & our fire dept has only 2 engines
- Schools? is this being discussed now?
- Will Fowler lane be widened?
- Personally, I feel the project is too large for our area.
- How will people get insurance. National insurance companies are not renewing policies, what will the new residents do?
- Concerned about increase in General Plan density ratio per acre for R1 & RM.
- Possible endangered species in area of development  
"the red legged frog"

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: ~~Deanne~~  
Eric Johnson

Email: Johnse@SBCglobal.net

Address: 1010 Wrangler Rd  
Diamond Springs, Ca  
95619

We need a city park instead of a giant housing project.

Between the Figures 7A-C for realigning the road, we much prefer 7A

H&G St need a way to get from fire.

High density at begining of fourth lane will congest entire project.

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: DIANE PRIMICERIO

Address: 4561 VINTAGE LANE  
PLACERVILLE, CALIFORNIA

Email: diprimo@pacbell.net

WE THE TAXPAYERS OF EL DORADO COUNTY DO NOT AGREE WITH THIS PROJECT! WE ARE NOT AGAINST GROWTH, BUT THIS PLAN MAKES NO SENSE AT ALL. OUR MAIN CONCERN IS TRAFFIC. WE ALREADY HAVE MAJOR TRAFFIC ISSUES AND THE POSSIBILITY OF OVER 1000+ CARS IS NOT ACCEPTABLE!

THIS PROJECT INTRUDES ON MANY WHO RESIDE HERE, BUT ALSO ON ANYONE WHO TRAVELS DOWN THE HILL FROM GRIZZLY FLAT, SOMERSET AND OTHER AREAS. THERE ARE ALTERNATIVE OPTIONS THAT CAN BE DESIGNED THAT WOULD NOT TEAR THE SMALL COMMUNITY OF DIAMOND SPRINGS APART.

A TRAFFIC LIGHT WOULD BE RIDICULOUS - ROUNDABOUTS MAY WORK IN SOME PLACES BUT DON'T SEE IT WORKING HERE.

WHAT HAPPENED TO THE MISSION OF THE PLANNING DEPARTMENT BEING CONSISTENT WITH THE GENERAL PLAN? HOW WILL THIS MAINTAIN OUR UNIQUE QUALITY OF LIFE? AND WHAT ABOUT PUBLIC SAFETY? WHAT ABOUT MEASURE E?

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Bobby Rotkanski

Address:

Email: Bobbyrot1972@gmail.com

TRAFFIC + EMERGENCY EVACUATION IS A CONCERN.

PUBLIC NEEDS TO SEE TRAFFIC IMPACT STUDY

SMALL TOWN OF DIAMOND SPRINGS DESERVES TO BE MAINTAINED

I AM STRONGLY AGAINST THIS DEVELOPMENT



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Tom D'Amico

Address: 1161 HEATLAND RD.  
PEACERVILLE

Email: GLIDBSTER05@GMAIL.COM

MEETING WAS ONLY HELD TO SATISFY REQUIREMENTS FOR EIR. NOBODY HAS ANY INFORMATION PERTAINING TO THE ACTUAL PROJECT. WASTE OF TIME

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: RUSK

Address: 4261 LIME KILN

Email: [lrusk@gmjain.com](mailto:lrusk@gmjain.com)

WATER

TRAFFIC

Take away our history

FIRE INS

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Marsha Freese

Address: 4460 Canyon Valley Rd.

Email: Linktree1@gmail.com

Dir. S.

I am concerned after fires in this area  
and Paradise, we need to revise the Co. GP

Poor old ED co. can not ~~handle~~ handle  
all this development.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name:

Address:

Email:

Big waste of my time!  
OGP Not Valid -  
I do not recognize it.

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: D. STOVALL

Address: 194 ARGONAUT DR

Email: ZOOKEEPURR@COMCAST.NET

WHY CANT YOU DEVELOP YOUR OWN INFRASTRUCTURE ALONG THRU TULLIS  
MINE RD STOPPING AT JUSTINE - VEIR LEFT AND PUT YOUR OWN RD BEHIND ALL  
HOUSES ON JUSTINE THRU ARGONAUT BY PASSING OUR STREETS!! ITS DOABLE BUT  
I SUPPOSE YOU ALREADY KNOW THIS, ITS MAY COST YOU MORE BUT IT IS YOUR  
DEVELOPMENT USE YOUR OWN INFRASTRUCTURE NOT OURS!!

WE DONT WANT YOUR TRAFFIC, SMOG AND DANGER TO OUR NEIGHBORHOOD  
WE ARE A QUIET COMMUNITY AND THATS WHY WE PURCHASED OUR HOME  
HERE.

ALL YOU CARE ABOUT IS YOUR BOTTOM LINE \$\$ . SPEND A LIFE  
AND GET LESS ANIMOSITY FOR YOU AND THE PEOPLE WHO UNKNOWINGLY  
BY YOUR DISASTER TO AN ANGRY NEIGHBORHOOD. OUR SAFETY AND HEALTH  
ARE IN JSOPARDY BECAUSE OF YOUR GREED!! BY GOD DO WHAT'S RIGHT  
NOT FOR MONEY BUT FOR ~~us~~ HUMANITY AND WILDLIFE.

P.S. WHO IN THE PLANNING COMMISSION DID YOU PAYOFF  
TO APPROVE THIS USE OF OUR STREETS

C.C. SELF, DEER PARK ADVOCATES

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Karen Heil

Address: 441 Cappella Dr. D.S. 95619

Email: kheil@comcast.net

I moved up to this area 31 years ago only because of its history, rural living, and quaint ways. I totally oppose this building in my area! You people have no concern or care for the residents of this County - only what will fill your pockets. If you want to do all this building including stupid roundabouts - go out of our County. I work in Folsom and that roundabout in Plympton is a nightmare on weekends! It will totally take away from our historic look that draws so many people here. I used to love being here and inviting people to come and visit! Now, you want to turn Diamond Springs into Folsom. No!! The traffic on Missouri Flat is a nightmare now and will only get worse. If you don't like our county the way it is -

Leave

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Adriana DePersia  
Justin Mulican

Address: 4533 Crown Point Dr. Diamond Springs.

Email: andepersia@gmail.com

Don't do it. \* This would displace wildlife. Deer are seen in this area on a regular basis. They're already wandering the neighborhoods searching for food. Just a few days ago there was 2 bucks in my front yard & another walking down the road. We bought our home a year ago and one of the biggest draws was the open space behind the property. This development will increase the population density in our resource limited county. It will also increase traffic. Having this development behind our home will push us out of the county. I'm a Public Health Nurse for El Dorado Community Hubs. It is next to impossible to recruit/retain Public Health Nurses in our county. I don't want to be forced to leave. The land owner Kevin Sweeney does not even live in Eldorado County. As a life long resident of Eldorado county it is very upsetting to see big land developers come in and destroy this beautiful county. If this development plan was brought out to the whole community of Eldorado county (not just town limits) you would have an outpour of the county community NOT wanting this development built. Eldorado county has been known for real living and we want to keep it that way. This is nothing more than a money maker for the land owner and a burden to local residents to deal with.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Sally Bishop

Address:

Email: sa\_bishop@yahoo.com

This meeting was a joke and waste of time  
Divide and Conquer!



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: CAROLYN ANDREWS

Address: 2047 NO NAME LANE  
DIAMOND SPRINGS

Email:

TRAFFIC HAS INCREASED TREMENDOUSLY OVER THE PAST 10 YEARS  
I LIVE 2 MILES UP PLEASANT VALLEY ROAD FOR 14 YEARS. IF THIS IS  
PROGRESS I DON'T WANT IT THERE IS LOTS OF VACANT LAND  
~~THAT~~ THAT COULD BE UTILIZED WITHOUT IMPACTING DIAMOND SPRINGS

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: *Marsha Feaso*

Address: *4460 Canyon Valley Rd.*

Email: *Linkotree1@gmail.com* *Dir. S.*

*Please address how many mature oak trees will be removed, what is the mitigation? How will it conflict with the new fire safe setback requirements?*

**Dorado Oaks NOP Scoping Meeting Comment Card**

**Date:** August 20, 2019

**Name:** Uresenia Sequeira

**Address:**

**Email:**

I vote for Alternative C - We don't want Deb's Frosty  
to be destroyed.  
I've been working there for years.

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: MARLENE GRATICER

Address: 4441 FOWLER LANE DS

Email: MARLENE1042@YAHOO.COM

\* THIS IS A BAD IDEA.

\* IT IMPACTS WATER

\* THE ROADS ARE ALREADY TOO BUSY NEW ROADS WON'T HELP THE TRAFFIC DELAYS

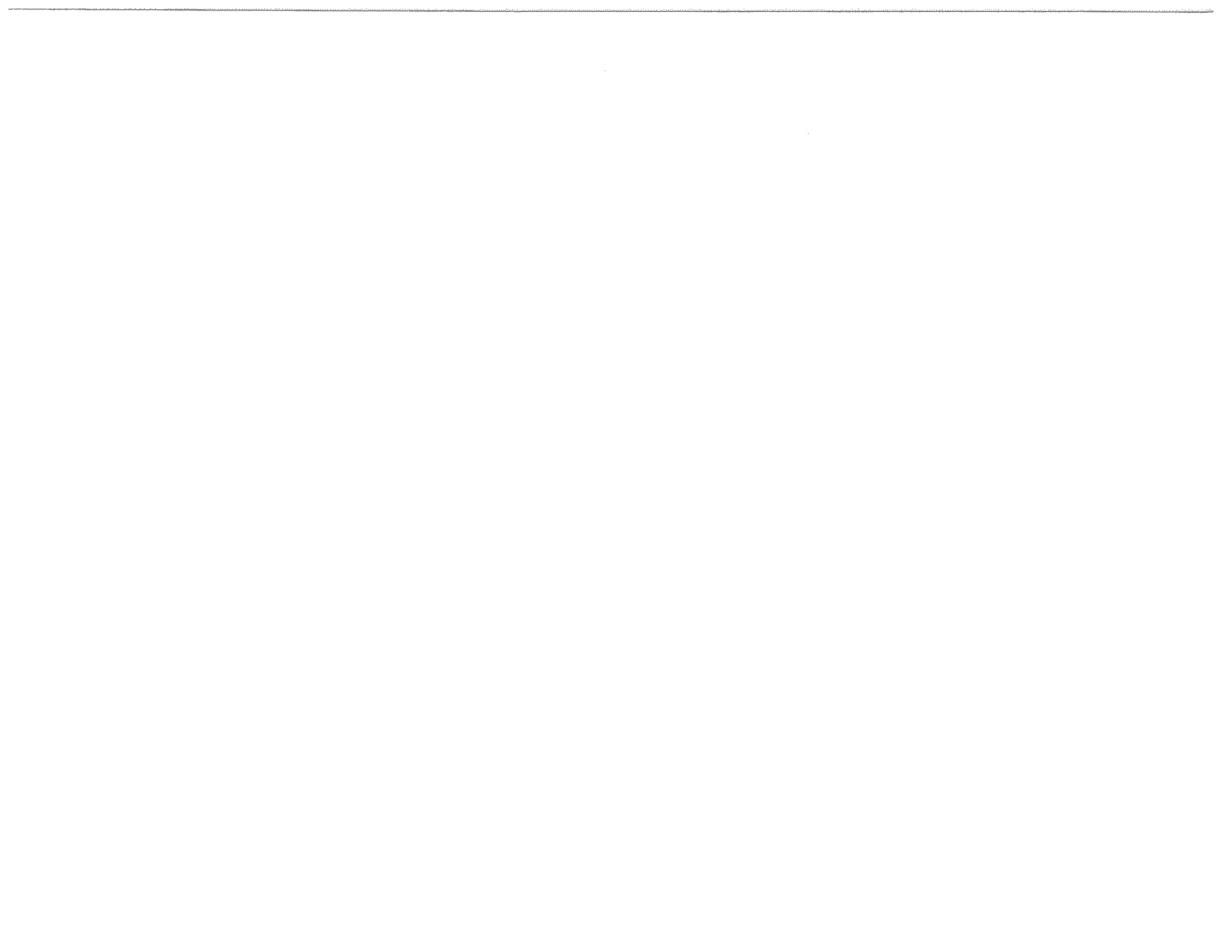
\* IT WILL BRING CRIME WHICH IS ALREADY OUT OF CONTROL

\* IT WILL IMPACT OUR PRIVACY

\* THE ANIMALS WILL BE DISPLACED

\* IT WILL IMPACT THE SCHOOLS

\* IT WILL MEAN HIGHER TAXES TO RETIREES TO PAY FOR BONDS FOR SCHOOLS



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Barbara Luthke

Address:

Email:

beluthke@comcast.net 3558 China Garden Rd Co O'Fallon

My concerns are traffic, water, where are they going  
work. What about kids schools.

Even though I won't be around in 5 years it will  
affect the value of my mobile home.

How are you going to get Bonds to build more  
schools

People are tired of being taxed to death.

you should at least have chairs for people  
you have many Senior citizens here. This is very  
in consider,

**Dorado Oaks NOP Scoping Meeting Comment Card**

**Date:** August 20, 2019

**Name:** Patti Woodridge

**Address:** Lake Oaks mobile home park  
Impaction!

**Email:**

What a waste of time this meeting was! It's obviously all "cut and dried", and nothing anyone says will change anyone's mind about more development in this county - regardless of the impact on water available, and regardless of impact on traffic on roads? NUTS!

Thank God I'm too old to see this come to pass!

91 year old Patti Woodridge

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Kathy Warden

Address: 501 Newman, Diamond Springs, CA 95619

Email: kathy@cpville.com

Weff) live at the intersection of Fowler Ln and Newman Street, approximately 1/10 mile from Pleasant Valley Road. The road is narrow and people already drive too fast. Traffic is moderate right now but it cannot support more traffic. I walk on Fowler and it is already dangerous. I am totally against traffic on Fowler into the subdivision.



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

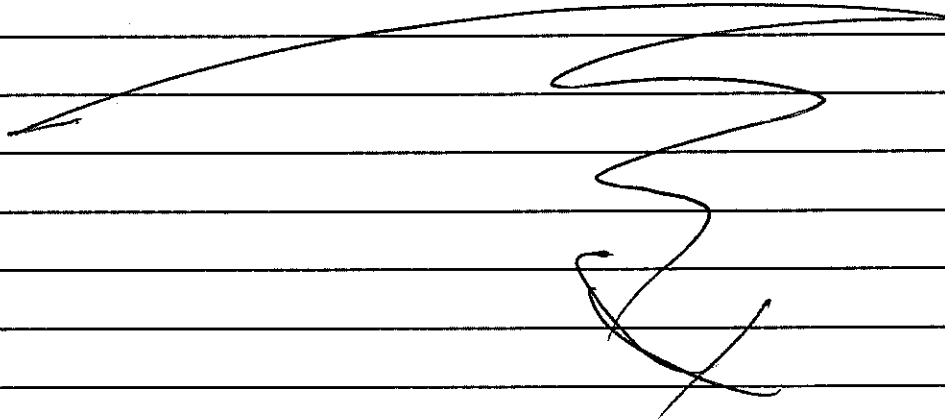
Name:

Address:

Email:

I've lived here for 53 years & take pride in our small town. This is not a good idea!

Stop this Development



Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Linda Azevedo

Address: 2540 Los Cerros Dr,  
Placerville

Email: lindawazevedo@gmail.com

I respect that this was planned for in the GP however my concern is for fire protection. Much has changed since the GP. Mineral Springs, the Oak Hill area... perhaps the whole county already has inadequate fire protection. Chiefs aren't able to drive their streets and DOT isn't able to clear evac. routes. We need many more evac routes in this county before higher density.

Thank you for listening - Linda

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name:

Eustolia Gonzalez  
Salvador Gonzalez

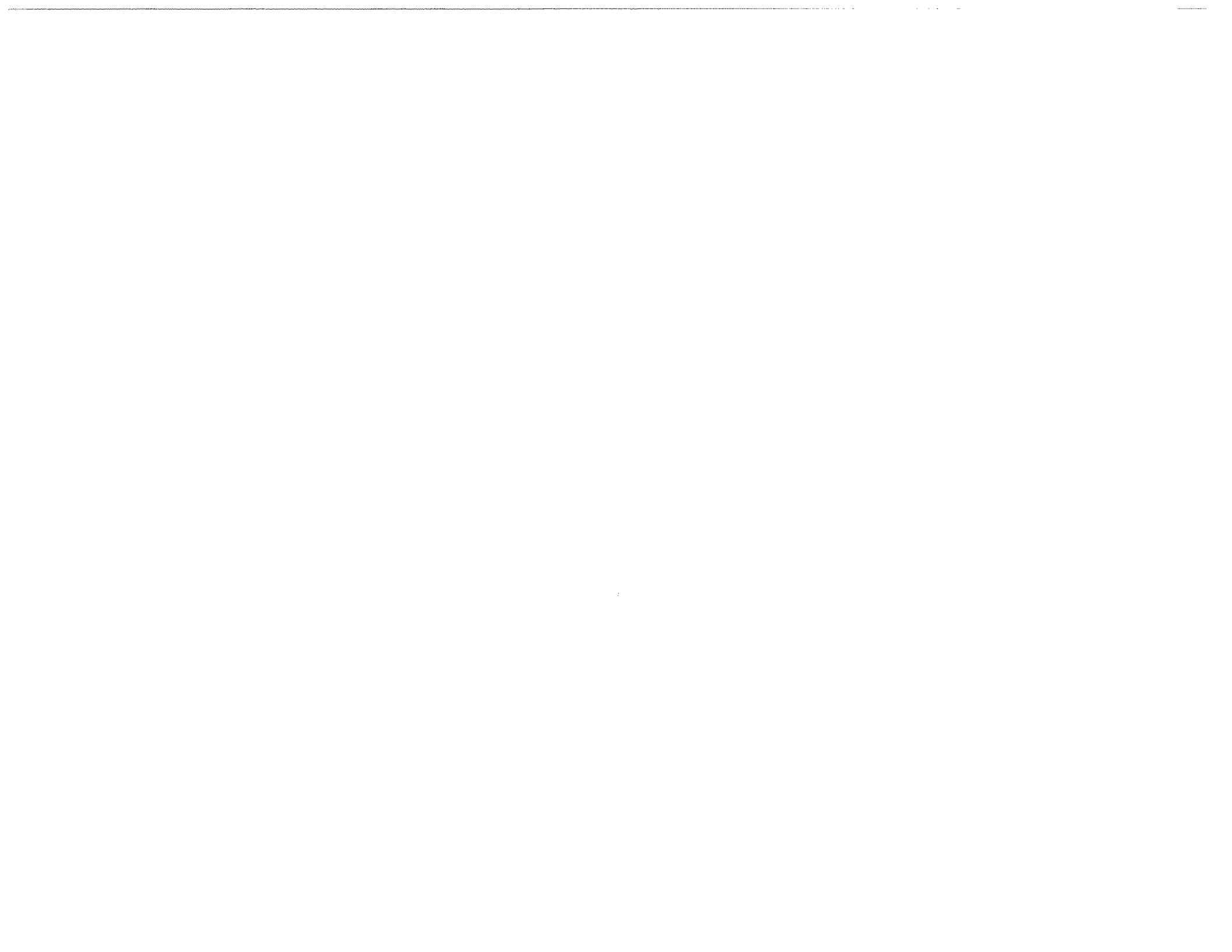
Address:

Debs Frosty  
460 pleasant valley Rd

Email:

Alternative C - Im the Boss at Debs Frosty  
and it would be a shame to see it destroy!

Its been 15 years working and its our only business.  
We have children in school and in college.



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: *Tim Ahrens*

Address: *PO Box 3170  
Diamond Springs, CA 95619*

Email:

*Keep D.O. a small village*

*Please*

*do not ruin it*

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: *Tracie A.*

Address: *PO Box 1052  
Diamond Springs A 95619*

Email:

*No on Project  
go away*

*Thank You*

**Dorado Oaks NOP Scoping Meeting Comment Card**

**Date:** August 20, 2019

**Name:** *Marsha Freese*

**Address:**

**Email:** *Linktree1@gmail.com*

*I am concerned about traffic congestion  
on MFR going to HWY 50*

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Hilary Krogh

Address: P.O. Box 3117, Diamond Springs, CA  
95619

Email: hilaryd73@gmail.com

Safety / traffic

C Street should NOT connect to Fowler Lane on the northeast side of the project.

- Currently, South Point Rd (as well as homes on other streets off of South Point) only have one egress (Fowler) out to SR 49 / Pleasant Valley Rd. Many safety, traffic & air quality issues.
  - Fire hazard for all residents to evacuate in the event of a fire ~~on~~ the South (as the ~~current~~ <sup>recent</sup> August fire near us) \* \*
  - ~~Current~~ <sup>Current</sup> residents would experience a LOS lower due to high density traffic access to Fowler Lane. Safety issue for children/families.
- Connect D Street with SR 49 as a 3rd way out for New housing
- Alternative route for Dorado Oaks (See suggestions by Hoot Owl Properties, Pleasant Valley Property Investments, Michael A Goodis, DDS.) This is only a Suggested Alternative.

\* See August 15/16 Fire location which was only a few miles from South Point Rd. (NOT a through street). ~~Traffic~~ access out is South Point to Fowler Lane. South Point ~~and~~ Rd ~~should not be blocked by traffic~~ should NOT be blocked by Traffic For questions, please contact: michelle@mmsstrategies.com from high density residential.



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: *Marsha Finess* Address: *4460 Canyon Valley Rd.*  
Email: *Linktree 1@gmail.com* *Dir. 5.*

Traffic report should address the problem of the proposed roundabouts being too close to the "T" intersection of HWY 49 and MFR.

Please consider updating the current GP and zoning. El Dorado Co. can not handle all the proposals. Recent issues are fire safety environmental/climate change issues, which were not issues at the time the GP was created.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Dana Merritt

Address: 550 Cappella Drive  
DS

Email: Mom4Cods@yahoo.com

I want my voice heard about being against this project.

I move here from Silicon Valley a few years ago to find a nice quiet community. I do not want my grandkids to grow up in a congested community. I understand your transportation ideas, but the amount of people with the apartments and homes means more cars, etc. Restaurants will be crowded, roads, schools, hospitals, etc. will all be negatively affected. I moved to San Jose in the 60's and I watched how overcrowding destroyed the community.

I do not want our small town overcrowded.

## Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: CASS ; STEPHEN, JAMES, KATHLEEN Address: 169 ARGONAUT DR.

Email: bmsmcus@comcast.net

IF YOU THINK THAT WE ARE JUST GOING TO TAKE THE TRAFFIC FROM YOUR SLUM, YOU HAVE ANOTHER THING COMING.

IF YOU WANT ANY START OF NEGOTIATION INSTEAD OF PROTEST, FIRE GATES WILL SEPERATE YOUR SLUM ROADS FROM OUR COMMUNITY! ARGONAUT WILL NOT BE A MAIN ACCESS THAN ROAD. KIDS PLAY ON OUR STREETS! PETS ROAM OUR STREETS. PEOPLE WALK AND ENJOY NATURE ON OUR STREETS! WE DO NOT HAVE ISSUES WITH LOTS OF PEOPLE ENDANGERING US ALL DAY OR KEEPING US UP AT NIGHT WITH CONSTANT TRAFFIC FLOW! EVERYONE KNOWS YOUR BYPASS WILL FAIL TO DO WHAT U HOPE AND THE PEOPLE WHO FALL INTO YOUR SLUM WILL WANT TO USE OUR STREET ALL THE TIME IF NOT STOPPED! THATS JUST THE PRACTICAL.

ON THE PERSONAL, WE LOVE OUR NATURE! WE LIVE IN DEER PARK! CAN YOU PROMISE THAT BY DESTROYING THEIR HABITATE, THAT OUR NAME DEER PARK, WON'T BE SYNICAL IRONY? AND WHAT ABOUT THE INCREASE IN CRIME? THAT MANY APPARTMENTS WILL BRING IN MORE CRIME THAN LAW ABIDING CITIZENS.

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Susan Keale

Address: 4544 Foundus Ln,  
Placerville, CA 95667

Email: sbk317@yahoo.com

① Traffic is already impacted during commuter times. What mitigation will be provided to make sure that traffic doesn't get worse?

⑤ Water: Has water been allocated for this project?

② Fire Safety: How will you ensure that densely populated area will have adequate evacuation routes?

⑥ Indigenous Cultural Heritage: How will the burial grounds & other cultural sites be preserved?

③ Historical Character: How will maintain the historical character with a project more suited for the suburbs?

⑦ Roundabout: Are incompatible for pedestrians & are inappropriate in a gold town setting.

④ Alternative Uses for Property: El Dorado County lacks regional parks & recreation areas near population centers. Perhaps the County would be better served by a regional park. Where are the parks?

⑧ Crime: Are taxpayers expected to foot the bill for the extra deputies that will come with the additional crime generated by the additional population?

⑨ Meeting ~~at~~ Board of Supervisor -

For questions, please contact: michelle@mmsstrategies.com

a lot of confusion and lack of explanation at meeting

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Susan Keale

Address: 4544 Founders Ln  
Placerville, CA 95667

Email: sbk317@yahoo.com

(10) Planners: My understanding was that this meeting was to solicit comments for the BTR

(11) Wild Life Migration: Have migratory patterns been sufficiently studied?

(12) Alternate exit route on other side of mobil home park on other side of Missouri Flat.

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name:

J. Hickman

Address:

4544 Founders Ln.  
Glacerville,

Email:

VFR 95 VFR

- ① How will traffic flow not worsen with this project?
- ② What will keep this area from becoming a fire trap during a fire?
- ③ How will the historical character of Diamond Springs be preserved?
- ④ Why are no parks included with this project?
- ⑤ El Dorado County needs regional parks. Has this area been considered ~~for~~ for a park?
- ⑥ Water is in short supply ~~in~~ in EDC. Has water been allocated? for a park?
- ⑦ Have the indigenous burial grounds and villages been ~~been~~ mapped?
- ⑧ Roundabouts are not in character in gold ~~country~~ towns.   
 they are dangerous for pedestrians due to increased speed of ~~traffic~~ traffic.  
 How will pedestrians safely cross Pleasant Valley?
- ⑨ How much more crime will be generated by the additional population?
- ⑩ Have wildlife migration patterns been studied / documented?
- ⑪ This meeting was very confusing and poorly run. The stated purpose was to collect public comments for the EIR. The EIR was never explained during the meeting. How can the public make relevant comments if they do not fully understand why the comments are being requested?
- ⑫ Have other connector roads to Pleasant Valley been considered? Having the main exit in downtown Diamond Springs is wrong.

For questions, please contact: michelle@mmsstrategies.com

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Terry Tawney

Address: 4880 Tullis Mine Rd, Diamond Springs

Email: tawney@innocite.com

- 1) A full (real) county standard Road from the east end of Antares Dr Through to Fowler Ln. For everyday Traffic flow and Fire in/out. not "pretend" one lane gravel "emergency only" gated Road.
- 2) SR49 intersection: Alternative 'c' with signals on China Garden, Pleasant Valley and Faith Lane. The signals can function as if China Garden and Faith Lane Act as a single cross street with Pleasant Valley Rd.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Paytin Thrift

Address: 523 Fowler Lane

Email: paytinthrift@comcast.net

I'm not against developing, but I'm very much against these plans. How on earth do you expect little town Diamond Springs to accommodate such high density housing? First off, where will all these people work? Kids go to school? Outlets for kids to have fun or get in trouble? It already took me 30 min in normal commute traffic to get home from Saleway. Then lets be real- apartments + no jobs = welfare. This many people will only increase our crime rate / risk. And if a fire came through the canyon? Our roads cannot accommodate the congestion a panic would cause; they're too narrow with limited exits. Being at the bottom of Fowler, I really worry about having to evacuate with horses on an already risky road with limited arteries. Plus, that could easily be that many more people displaced.

I honestly believe these plans would only change D-S. for the worst and drive many residents out.

So- picture this: 5 acres / lots, nice family homes, rural lifestyle, higher property values (higher property taxes). Much like Cameron Estates. Or even just larger lots / family properties like Fowler lane already is- nothing fancy. Now THAT is something I could get behind. Or better yet, turning it into a working multi purpose ranch. That has always been my ultimate dream for the property if I could get the backing + support.

Thank you for reading + I hope this brings some perspective.

For questions, please contact: michelle@mmsstrategies.com

5



If you add parks- ~~to~~ I have a lot of ideas

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Ashley Thwait

Address: 523 Fowler Lane

Email: ashlynthwait@comcast.net

If you're planning on developing the field, why would you fill it with low-income apartments instead of a place more like Cameron Estates? How do you expect for this town to accommodate this many people? Our schools will be overloaded and we'll lose funding for absolutely everything we want have. Why not make this a place where this situation can have few? Have you thought about what this will do to the town's growth? Everyone will see that it's okay to move into welfare filled houses. Have you thought about everything that will happen to the residents that live here? If you take the crown down as then my, and a lot of other people's memories will be wished away. Do you really think that there's enough jobs for everyone around here? If you provide this housing then they'll never want to work because they think it'll be okay. My entire family has lived here for over 50 years, and they've never seen anything so ridiculous as this. Anyways, how was this allowed legally? In conclusion, if this happens, my entire memory of Diamond Springs will be tainted. Congratulations.

For questions, please contact: michelle@mmsstrategies.com

15th Amendment?



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Morales

Address: 209 Justice Court

Email: green\_cogit@yahoo.com

Where was the Initial Study on Flowchart for Residents to Review?  
We want to come in to talk about Draft of EIR  
Dmg water supply & congestion, will be major impact

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Michelle Hansen

Address: 540 Gladys Oak Lane  
Diamond Springs, Ca - 95619

Email: MichelleH2294(a)Yahoo.com

This massive proposal has not taken the established neighborhoods into consideration at all.

This is complete Encroachment and Invasion into our town.

This project doesn't benefit anybody who lives here.

" There Goes Our "

Quality of Life

Stop The Development !!!

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Michelle Hansen

Address: 540 Shady Oak Lane

Email: MichelleH2294@yahoo.com

Diamond Springs, OR 95619

This project is on land that has Miwok Indian Burial grounds, Grinding Stones, Wetlands, a pond and alot of Wildlife.

All this high density building will completely destroy our small, rural, historical town of Diamond Springs.

None of the residents in Diamond Springs want this project. Take it somewhere else!!!

This project will Destroy Our Quality Of Life!!!

This project will add at least 1200 more cars, this creates traffic chaos. It's also a Major Fire Hazard.

The people that live here enjoy what we have. Don't Destroy It

The infrastructure cannot handle all this massive building.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Sue Taylor

Address:

Email: Sue-taylor@comcast.net

All CEQA Elements need to ~~analyzed~~ analyzed being this is such a large impact to Diamond Springs - Transportation, Aesthetics, Air Quality, Hydrology, etc.

All elements of traffic capacity need to be analyzed. Missouri Flat Interchange is already over capacity. How is mitigation being prepared for that? How much of Pleasant Valley Road will be impacted? Is the developer going to be required to address the impact to Pleasant Valley and the interchange?

Having the public comment on the NOP causes confusion when it is time to comment on CEQA studies. ~~###~~ I expect the County to make it clear the importance of every comment period.

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Jeanne Cardwell

Address: 103 Lone Star Ct

Email: jrcardwell1011@yahoo.com

Diamond Springs, CA 95619

This project will lessen the quality of life in this area of El Dorado. Several reasons why:

1. This is no longer a rural community, it is akin to suburbia & all of their problems,
2. Will the county allow EDSO to hire more deputies to service the project, you know (statistically & logically) the crime rate will increase. One reason there is nothing for teenagers to do.
3. Property values will decrease. We are thinking of selling our home in a couple of years, now we must consider expediting the sale before this housing project commences
4. Schools - any thought to purchase of land to build new school K-12? Take schools decommissioned & upgrade (@ great cost)
5. Fire events, thousands of folks in a ~~paradise~~ take fire event are directly affects all residents of D.S.
6. Roundabouts - you know Caltrans has say, but they are UNACCEPTABLE for many reasons. Adds insult to injury
7. I will email you later with more detail

Please email & postal ~~mail~~ notify us w/next meeting

For questions, please contact: michelle@mmsstrategies.com

## Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Sara Morgan

Address: 4404 Cast Bay Rd.  
D.S.

Email: sarabutterfly999@yahoo.com

I'm very disappointed that there was no presentation followed w/ Q+A!  
No "initial study"! Where are we getting all the H<sub>2</sub>O for these homes?  
Where is all the wildlife going? (into our yards - esp. rodents!) This is going to ruin the quaint flavor of our community. Don't do it! If anything, make it a park +/- golf course... We already curtail our water usage to the max. We ~~can't~~ use less. It also looks like another "Paradise Fire" waiting to happen. Leave our community alone! Or at least be more responsible, conservative & follow protocols! There will be lawsuits if you don't.

By the way, please consider all the toxins in the soil & groundwater from all the <sup>illegal</sup> dumping the idiots have done over the years. It's not fit for children & pets without major clean-up.

Do NOT remove the historic landmarks & Deb's Frosty!



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Rosemarie Taylor

Address: 461 Pleasant Valley Rd 

Email: jr1aa@directcon.net

I would like to be in the loop of this project - the Red line on the North side of Pleasant Valley Rd goes right thru my property & house.

It will be 100 yrs old in 5 years & was built by the Davenport family who owned the sawmill in Pleasant Valley

There are 4 bodies buried in my yard 3 of the Carpenter family with a grave stone & one without a marker.

I have lived there for 31 years - my kids grew up there - we moved there when we were 139 and are now 73. -

my number is 530-417-1546

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Wendy Vick

Address: 1071 Calico Mine Rd  
Diamond Springs CA 95619

Email: SWranch@sbcglobal.net

\* Traffic and Safety - Fire Escape plans

Making Argonaut through - what is the impact on Patterson Drive.

\* Fate of iconic Deb's Frosty and Old Brick Building

\* Price of all housing plans - a lot of talk about "affordable housing"  
but will it really be??

\* What types of "multi-family" units are planned

types of apartments -

duplex/4plex

townhouses/rondos

How much Section 8

\* True # of people expected

\* Please provide a better visual of proposed structures

\* Availability of water to accommodate

\* Impact on Schools

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: DR. RICHARD BOYLAN

Address: 6731 JUNIPER LANE  
PLACERVILLE 95667 (Diamond Springs)

Email: DR.BOYLAN @ OUTLOOK.COM

This project is inappropriately, vastly oversized. We in Diamond Springs do not want to become a junior El Dorado Hills. The project is too large, too dense, badly designed, lacks necessary circulation or road and traffic capacity. It would devastate the existing oak woodlands, and damage the Martinez Creek Watershed it encroaches on. I know that the Martinez Creek canyon is identified by Diamond Fire District as one of the principal corridors that a wild fire would come up from the Cosumnes River through this area and into Diamond Springs. We've already had a significant fire in this area and the next one could become much larger. The project will create a traffic bottleneck at Faith Lane - Pleasant Valley Road intersection. We were promised a park at this location and there is none shown on the map. There are wetlands and ponds here which would get slowed over and disappear and harm Martinez Creek's water supply. The people of Diamond Springs rejected an equivalent proposal 10 years ago, and here it is back again.

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: Tiffany Bishop

Address: 4257 Howard Circle Diamond Springs

Email: tiffseibold@outlook.com

-I oppose this project completely! 1<sup>st</sup> Diamond Springs is a small rural community and doesn't need more people! I thought the parkway was being built to eliviate the traffic through D.S. main st. How can we know the environmental impact if we haven't even seen what the outcome of the parkway will be. I can't rember the website but there is a site somewhere that states all the old mines of El Dorado County, and from that I believe there has been at least 1 mine (I believe I have seen what looks to be a collapsed mine shaft) - Also I thought the original reason the development was shut down - was because of an endangered species of a frog or bird (some that was spotted) I can't remember. - Also the parking lot that starts Faith Ln. - is where the swap meet happens every Sunday for past 15yrs. One of my favorite things living in D.S!

I think the way this meeting was conducted was a joke. -

a good way to make sure no one knows whats going on!

**if** the project is going to happen go with the plan proposed by Dr. Goodi's. - I agree with the alternative route that he suggests. ~~which~~ which would bypass the heart of D.S.

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Dawn Hilton

Address: PO Box 1921

Email: hiltonestes@sbcglobal.net

Diamond Springs, CA 95619

It's bullshit. No tables to write and no pens!

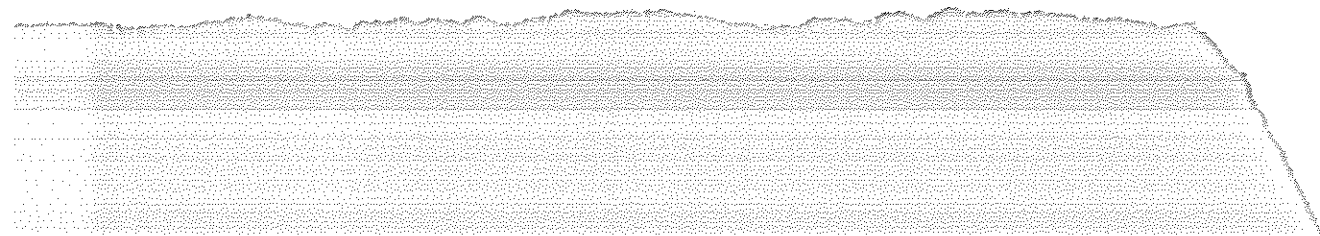
Do you really want to hear from us ???

2 mins of an intro and no time for us to share.

I am very disappointed. Please let me know when you have a real meeting!

I absolutely abhor this idea. Please do not destroy our quaint town.

Go spend your money somewhere else!



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Nancy Ehrlich

Address: 4450 Ruffey Ln  
El Dorado, Ca 95623

Email: nan3jake@internet49.com

I own 540 Main and have trouble now getting Tenants out of Back Parking Lot. With more Traffic I will lose Tenants and That stops My Income

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: BOB & CAROL SEVERIN  
Email: bobseverin@gmail.com

Address: 3415 SUNCREST DR PLACERVILLE  
CA 95667

WE JUST MOVED TO PLACERVILLE FROM SAN JOSE

THIS DEVELOPMENT MAY MAKE THE TRAFFIC GET AS BAD AS IT IS THERE!

WE MET NEW FRIENDS @ DEB'S DRIVEWAY, WHO MAYBE FORCED OUT OF BUSINESS.

THE EXTREME EMPHASIS ON "HIGH DENSITY" WOULD CREATE AN AREA WE WOULD NOT BE INTERESTED IN LIVING IN OR NEAR.

WHERE ELSE IN THE COUNTY IS SUCH A HIGH DENSITY DEVELOPMENT <sup>BEING</sup> PLANNED?



**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name:

Address:

Email:

Mitch Goodis      MGoodisDDS@gmail.com

From: Hoot Owl Properties, Pleasant Valley Property Investment, Mitchell A. Goodis, DDS, Inc, & Diamond Springs Dental

To: Tom Purciel, Associate Planner, El Dorado Co. Board of Supervisors

Re: Dorado Oaks Subdivision

18 August 2019

I have thoroughly reviewed the subdivision Map for the Dorado Oaks Project

Here are my comments, first on **current road conditions**:

- Traffic through Diamond Springs in the AM and PM from 7 till 9 and 4 – 6 is extremely congested. The rest of the time, it is horribly congested until evening hours.
- Diamond Springs hosts a small, poorly maintained two lane road, receiving traffic from Placerville area, as well as Pleasant Valley, Somerset, Grizzly Flat, Leoni Meadows, Fairplay, and surrounding areas.
- Most of the traffic feeds to Missouri Flat road if the drivers are headed to route 50 and West. Missouri Flat road is essentially a two lane road with a Suicide lane (turn lane) dividing the North and Southbound lanes. It, too, is jammed with traffic from approximately 7 am until 6 pm. The conditions worsen when schools are in session.
- Pleasant Valley Road heading West continues as a small, two lane road all the way to Route 50 in Shingle Springs. Traffic is severely congested and bottlenecked from Missouri Flat Road to Koki Lane during pre and post school hours due to Union Mine High School student traffic.



A monumental traffic jam: Entering Diamond Springs, Heading West on Pleasant Valley Road 7 am



The Daily Backup: East of Diamond Springs, Heading West on Pleasant Valley Road 7 am

**The plan** is to construct 156 single family units and 225 multi-family units.

I figure that will add 2 cars per family with an average of two working adults per family, most of whom will leave for work between 6 and 8 am and return between 4 and 6 pm. (not counting trips to Walmart and the nearby grocery stores) That puts approximately 1000+ cars on the road during those hours.

Additionally, there is another planned development on State Highway 49 across from the WMI Transfer station that will do the same thing. Most of those folks will not want to go down that curvy road to Placerville and will take the bypass (under construction) to Missouri Flat Road, which is already severely congested. And remember, there is another proposed development in the teeny town of El Dorado (off Koki Lane) that will, again, multiply the number of cars on Pleasant Valley Road.

Here are my comments on **Planned road conditions:**

- The plan to widen the road to two lanes each way for a very short distance is shortsighted and will create a bottleneck of biblical proportions for those folks from the Pleasant Valley area headed through Diamond Springs to reach Rt 50. Already there is severe congestion reaching back almost ½ mile each morning at the intersection of Pleasant Valley Road and Rt 49. Traffic comes to a standstill and moves forward at a snail's pace.
- Then, the bottleneck will worsen at the 'roundabout' as cars slow to allow 1200 folks from Dorado Oaks to enter Pleasant Valley Road. Almost all of them will be headed West.
- As they turn onto Missouri Flat Road, again, there will be a bottleneck as the two lane expansion now squeezes into one lane heading North to Rt 50.
- Additionally there is a High School almost directly across from the traffic circle, creating an additional bottleneck.
- Losing half of Diamond Center and Deb's Frosty (a town icon) to a traffic circle and an exit for this development will cut the heart out Diamond Springs. I eat lunch there!

**Conclusion:** The idea of allowing a development of this scope which will place over a thousand more vehicles onto small, unimproved country back roads without changing the Diamond Springs stretch of Rt 49 as well as the entire length of Missouri Flat Road into 2 lanes each way is shortsighted at best and a traffic congestion nightmare in the making at worst!

In the rush by the State of California to rezone and then fill every vacant lot with homes and families (as stated by the Governor), we are not considering the obvious: That the Planning Commission should first insist on proper infrastructure improvements. Or, at the least, connect the roads in a manner that there exists the basic four F's of Construction: FIT, FORM, FLOW, and FUNCTION!

**A simple traffic circle and limited road widening is NOT THE ANSWER.**

Not properly improving Missouri Flat Road from Rt 50 to Pleasant Valley Road and again from Koki Lane to Fowler Lane by making them all two lanes each way **PRIOR** to allowing this project to proceed is a big mistake that any and all of us commuters can clearly see.

## **THERE IS A BETTER SOLUTION:**

**A GOOD workable solution is to acquire a right-of-way from the planned D Street or Planned Development Lot B-3 Road, put in a two lane road across or bordering the undeveloped land that is zoned as HIGH DENSITY RESIDENTIAL West of Dorado Oaks and join Pleasant Valley Road (State Route 49) directly West of the Mobile Home Park, merging with Missouri Flat Road at or West of the traffic light. At that point, SR 49 is already widened to accommodate additional traffic.**

**More than likely, there is a development plan already in the works for the vacant land and a road exiting onto Pleasant Valley Road West that could be integrated into that project. (I realize its inevitability and we should take advantage of that! This is the time to be proactive!**

**Accordingly, the BETTER flow of traffic from Dorado Oaks would be to connect D street or from the planned development Lot B-3 Road to the existing road through the center of the mobile home park and exit directly at the traffic light on Missouri Flat Road. The flow of traffic would be smooth, controlled by the existing**

traffic light. This would greatly benefit the residents of the Mobile Home Park having to make right or left turns, eliminating their need to merge onto Missouri Flat Road, cutting across 3 lanes of traffic to go West, and providing a traffic signal light to safely meter their exit.

Putting in a two lane access road across vacant land would be significantly less expensive than acquiring and demolishing buildings, building a large disruptive traffic circle and then putting in a road.

**THE BEST alternative**, especially during the construction phase, is to exit the traffic directly from Dorado Oaks onto Argonaut Drive and from there to Patterson Drive. This would be *the most cost effective alternative*, connecting to existing roads and metering the traffic onto Pleasant Valley Road via an existing traffic light. There would be no destruction of existing edifices, minimal impact on traffic in Diamond Springs, efficient use of existing roads, and a smooth flow of vehicles.

Following completion of the Dorado Oaks Project construction, any of the other three alternatives could be implemented and integrated into the development of the High Density area behind the Mobile Home Park. Any of these alternatives would be significantly better then cutting directly through Diamond Springs.

Please review the following Dorado Oaks Subdivision MAPS showing the planned development and FOUR alternatives to direct traffic with **NO IMPACT** on the current traffic flow through Diamond Springs.

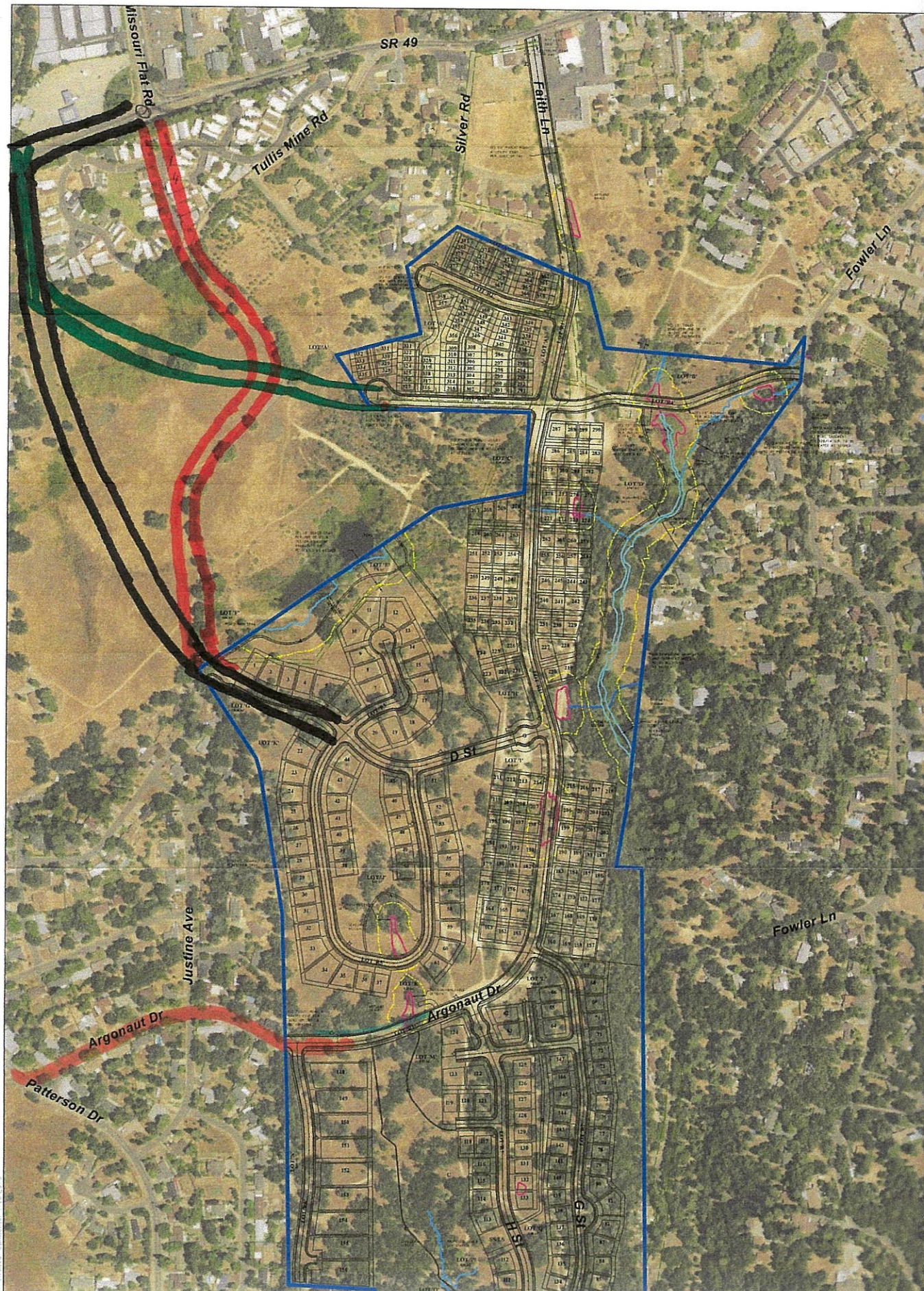
**See Attachment: Dorado Oaks Tentative Subdivision Map**

I strongly encourage the planning commission and the Board of Supervisors to take action and develop an appropriate exit strategy for the planned residents of Dorado Oaks and future developments prior to construction being approved.



Mitchell A. Goodis, DDS

Lt Col, USAF, DC (ret)



## Fw: Dorado Oaks Project

From: Bette Lasher (blasher1@sbcglobal.net)  
To: dorado\_oaks@edcgov.us  
Cc: bosthree@edcgov.us  
Date: Thursday, August 15, 2019, 12:11 PM PDT

**Subject:** Dorado Oaks Project

I have lived on the corner of Georges Alley and SR49 since 1977 and have seen the increase in traffic over the years so was delighted to see the much touted Parkway start as it has been talked about for decades.

However, was appalled at the enormity of the Dorado Oaks project unit wise. There is kill and over kill and this is over kill by a huge amount.

The speed in Diamond Springs on SR49 is posted at 25, for all the good that does as the average speed is 45 and from around 10 pm to 2 am at night it is a speedway from Missouri Flat to Fowler lane, now you propose more traffic. As to your proposed ingress/egress route on Faith Lane, a round about would be a disaster. A four way traffic signal with China Garden Road would be the best for traffic flow.

We already have several low income housing units in our little area, plus four mobile home parks, all but one is a senior park. Along with a quiet senior development on Panther Lane. Isn't this enough? 381 low income units is about 300 to many. The impact on the Union Mine High School area will be dramatic as traffic on Koki Lane is already horrid, plus there is project planned for there also.

The roads in these areas are not designed to accommodate heavy traffic. The commute times in Diamond Springs/El Dorado are already congested.

I am not sure if Diamond Spring/El Dorado has been designated as the area to dump all the low income housing mandated by Sacramento or not but his is totally unfair to the citizens of both areas. You are already proposing to re-zone 8 plus acres for this project, why not re-zone other lands around the county?

Where is the water coming from? We have been told to cut back to a bare minimum and now this. Who is paying for the highway part of the project? It seems like there is a movement to totally destroy the rural structure of Diamond Springs.

Yes, I will be at the meeting on the 20th.

Bette Lasher (Elizabeth)  
3760 Georges Alley  
Diamond Srings, CA 95619  
530-622-9192  
blasher1@sbcglobal.net

cc: District Three Supervisor



**DIAMOND SPRINGS AND EL DORADO  
COMMUNITY  
ADVISORY COMMITTEE**

Tom Purciel, Associate Planner  
El Dorado Planning Services  
2850 Fair Lane Ct  
Placerville, CA 95667

Re: TM18-1538 – Dorado Oaks

Aug. 16, 2019

Dear Mr. Purciel

At our meeting of August 15, 2019, our committee considered the subject development project for the purpose of providing comments regarding the scope of the EIR for the project, and received input from community members in attendance. Outlined below are the areas of concern that were identified during that discussion, and are items that we feel must be included for analysis within the scope of the environmental impact report:

- Of primary concern is the project's road circulation system, and whether or not it is consistent with the "Diamond Springs and El Dorado Area Mobility and Livable Community Plan". This study was produced in 2014 by the El Dorado County Transportation Commission, and among other things, concerns the traffic circulation system within the Diamond Springs and El Dorado Communities. A critical component of which is the Union Mine Road Connector, which is intended to provide parallel capacity to Pleasant Valley Road between Fowler Lane in Diamond Springs, and ultimately connect all the way to Hwy 49 south of the town of El Dorado. It is imperative that this project be consistent with that plan, and that its street system connect from Fowler Lane all the way to Patterson Drive via Argonaut Way in Deer Park, and that the streets be designed and constructed as relatively continuous collector streets. Because of the anticipated change in character of Argonaut Way from local street to minor collector, we feel that the traffic analysis should include the mitigation measure of incorporating concrete sidewalks on one/or both sides of Argonaut Way to facilitate pedestrian circulation.



- The recreation component of the EIR should analyze the feasibility of incorporating a continuous network of class 1 bike and pedestrian trails should be incorporated into open space areas of the project.
- Pleasant Valley Rd through downtown Diamond Springs is heavily congested, and at times it can be almost impossible to make a left turn onto that road from a side street or driveway encroachment. We think the traffic analysis must clearly address the reality of the congestion in Diamond Springs that the residents have to live with every day. The development of this project as proposed will make Pleasant Valley Road intolerable for existing residents, as well as the future residents of the project. The Committee members were generally supportive of the development of a roundabout at the intersection of Faith Lane and Pleasant Valley Road; however, we do recognize the need to align Faith Lane with China Garden Rd, and the potential that that creates to adversely impact an existing historical brick building. The analysis should investigate the possibility of creating a roundabout, or perhaps an “oval-about” that can help to alleviate traffic congestion without impacting historic buildings.
- The proposed multi-family units of the project are very dense, and it is not clear how adequate access to the units will be provided, both for normal ingress and egress, as well as access by emergency service providers. We request that the traffic analysis look at the project’s internal street system and show how circulation will be provided to these units. The number of units should be reduced if necessary so that adequate access can be provided.
- The EIR should analyze the impact of this project on local recreation facilities. A project of this size must have an active recreation public park on the project, for the use of all local residents in order to mitigate it’s impacts on existing recreation facilities.
- Wild fire safety is extremely important, and recent fires in the State and our community demonstrate just how vulnerable we all are. Projects such as Dorado Oaks throughout this county have been typically designed as “silos” that have limited connections to surrounding street systems to minimize objections from surrounding residents, and thereby increase the project’s chances of approval. The problem with this strategy is that it creates extremely hazardous choke-points when evacuations become necessary in the event of a wildfire. We feel that the project as designed creates a hazardous situation during a wildfire, and that the EIR should analyze the internal street system, and determine the possibility of providing additional street connections to both Fowler lane, and the streets within the Deer Park Subdivision. These connections should be full, open, street intersections, and not gated emergency vehicle access points. Multiple avenues of escape from a wild fire have been proven to be critically important, and multiple road connections would enhance safety for all residents. This project should also have a comprehensive fire safe plan that includes vegetation thinning around the project perimeter.
- Many years ago, the Motherlode School District closed down Charles Brown Elementary School due to inadequate student load to justify its continued operation. The development of this project, together with other proposed residential projects within the Diamond Springs area could adversely impact the School District, and require the re-opening of Charles Brown School. This potential impact should be incorporated into the scope of the EIR. We would support the re-opening of the Charles Brown School because we feel that it is important for the children in the Diamond Springs/ El Dorado communities to have a school within their community that they can attend.

Thank you for the opportunity to provide input on the scope of the EIR for this project. We hereby request to receive a copy of the draft EIR, and written notification of any future meetings, or hearings, related to this project.

Sincerely,

A handwritten signature in black ink that reads "Randy Pesses". The signature is written in a cursive, flowing style.

Randy Pesses, Chairman

cc: Brian Veerkamp, District III Supervisor

To Whom it May Concern,

As contributing citizens to this community and it's economy, we have many concerns regarding the Dorado Oaks Development Project.

While we recognize and appreciate that growth is to be expected within any community, we strongly feel that it should be slow and steady, keeping pace with the infrastructure which that growth is so dependent on. At present, many of our roads are already over encumbered, our children's class sizes are at capacity and our law enforcement and emergency services are understaffed.

What impact will such a sudden population influx have on our water and electric resources? Do we have the necessary resources and infrastructure to accommodate the needs of such rapid expansion? How will these changes affect the quality of life for those who are already deeply ingrained within this community?

Those are the questions and concerns that we have concerning this project. We love this community and while we DO support healthy, measured growth, we also want to preserve the quality of life for those already living within it. Thank you.

Sincerely,

Stephanie Lee

530-344-6822

[misszoey22@hotmail.com](mailto:misszoey22@hotmail.com)

## Potential Law Enforcement and Academic Impact of Dorado Oaks Project:

### Law Enforcement Staffing:

At the end of 2003, the El Dorado Sheriff's Office had 374 Full time employees with a population of 167,000. By the end of 2017, the population of El Dorado County had increased to 185,000 (18,000 more people) but staff levels stayed the same. Does our local economy allow for the hiring of more officers to accommodate the 1000 plus new citizens that this project will bring to our community?

Source:

<https://www.mtdemocrat.com/news/local-crime-not-bad-but-more-staff-better-legislation-needed-sheriff-warns/>

\*\*\*\*\*

### Population average for Dorado Oaks Project:

156 Single Family Lots × Average family size of 3= 468 people

225 multi-family lots × Average family size of 3= 675

Total: 1,143 new residents (average)

If 1/3 of those are children, that's approximately 380 new children in our classrooms.

\*\*\*\*\*

### Academic Impact:

Schools impacted by Dorado Oaks Project:

Indian Creek Elementary: Aprox. 600 students with a 22/1 student teacher ratio.

Herbert Green: Aprox 470 students with a 21/1 student teacher ratio.

Union Mine: 1000 students with a  
23/1 student teacher ratio

The national student teacher ratio is 16:1, placing our state/county at an already higher than average student teacher ratio.

According to Child Educational Services.net:

Studies have shown that K-3rd grade elementary students are proven to find the greatest amount of academic success with no more than an 18:1 student teacher ratio and the more years a student spends in reduced class sizes, the longer the benefits last.

Dumping approximately 400 new students into our local education system, which is already over encumbered, would almost certainly impact student's academic success and teacher's ability to provide adequate instruction unless more teaching staff is hired.

Sources:

<https://www.niche.com/k12/search/best-public-elementary-schools/c/el-dorado-county-ca/>

<https://www.publicschoolreview.com/average-student-teacher-ratio-stats/national-data>

<https://www.ces-schools.net/important-student-teacher-ratio-students/>

**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Bruce Turner

Address: 4399 Wild Dew Court  
Diamond Springs Ca 95619

Email: turner2000@yaho.com

Two pages

To Tom Purciel Associate Planner, County of El Dorado

From: Bruce Turner homeowner, Diamond Springs.

Subject: Dorado Oak Subdivision NOP Scoping Meeting Comment Card

1. *El Dorado County has enough trouble maintaining roads in our county. Adding more traffic will only make the situation worse and increase deferred road maintenance.*
2. This development will add more than 10% to population of Diamond Springs putting pressure on water resources, waste disposal, and sewage.
3. This development will increase congestion on HWY 49 causing backups on Fowler Lane, Pleasant Valley Road, Missouri Flat Road, and Patterson Drive.
4. All road outlets from this development empty out onto Hwy. 49
5. The planned park in this development is too small. Minimal size should be 8 to 14 acres which should include a dog park, public pool, picnic tables, water park for kids, playground, soccer field, bathrooms and Soft Ball Field.
6. This development will also add to noise and air pollution.
7. And most importantly the lot sizes are too small. Each lot should be no less than one quarter to one half acre. That should be the minimal size of each house lot.
8. This development does not adhere to the Mission Statement of our

Planning Department which is:

## Planning Services

### Mission Statement

The mission of the Planning Department is to: Guide land use and development consistent with the General Plan, Building Codes and related regulations, by providing accurate, timely and courteous professional and technical services to our customers, **to maintain the County's unique quality of life, protect public safety and the environment** and to promote economic vitality for current and future generations.

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

MEL / TOM  
LAND USE & ZONING

Name: THERESA M. PUTHUFF

Address: 154 ARGOWAUT DR

Email: the\_mom530@yahoo.com

2019 AUG 29 AM 8:41  
RECEIVED  
PLANNING DEPARTMENT



## LAND USE & ZONING

THE EXISTING GENERAL PLAN STATES THAT THERE WOULD BE ONE-TO-FIVE DWELLINGS PER ACRE. ALL OF US OUT HERE IN T.V. LAND DON'T REALLY UNDERSTAND THE DYNAMICS OF WORDS LIKE:

DENSITY, AIR-SPACE, MULTIPLEXES, ETC. WE DO KNOW, HOWEVER, THAT IT SOUNDS AS THOUGH THE POPULATION INCREASE, NOT ONLY FOR OUR ROAD, WHICH IS ALREADY A BAD SITUATION, BUT FOR EXAMPLE, OUR EDUCATION SYSTEMS (SCHOOLS) WHICH ARE ALREADY OVERCROWDED AS IT IS.

SOMEONE (RESIDENTIAL OWNER) HAS ALREADY CALCULATED THAT THERE WOULD, MORE THAN LIKELY, BE OVER 1000 MORE PEOPLE IF THE EXISTING "DORADO OAKS" PROJECT GOES THROUGH. HOW MANY RESIDENCES DO WE HAVE ALREADY? HOW MANY MORE CHILDREN WILL BE ATTENDING OUR SCHOOLS? PLUS WILL OUR PUBLIC SAFETY BE COMPROMISED. OUR LAW ENFORCEMENT HAVE TO BE TAKEN INTO CONSIDERATION ALSO. MOST OF ELDORADO CITY ARE PEOPLE

WHO CAME FROM THE BAY AREA,  
L.A. OR SACTO. WE ARE AWARE OF  
OVER-CROWDED COMMUNITIES.

IS THE WATER FOR OUR AREA  
BEING CONSIDERED? SOME OF OUR  
WATER BILLS ARE \$200<sup>00</sup> EVERY TWO  
MONTHS, WILL THAT INCREASE TO  
SUPPLY MORE HOUSING? IT JUST  
SEEMS THAT DIAMOND SPRINGS IS  
THE WRONG AREA TO DEVELOPE SUCH  
A MAJOR PROJECT. SO FEW PEOPLE  
ARE "FOR" THIS SUBDIVISION, SOME  
ARE SO AGAINST IT THAT THEY ARE  
CONSIDERING LOOKING TO ENDANGERED  
SPIECES.

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

BRIAN / MIKE

TRANSPORTATION & TRAFFIC

Name: TERESA M. PUTHUFF

Address: 154 ARGONAUT DR

Email: the\_mom530@yahoo.com

2019 AUG 29 AM 8:41  
RECEIVED  
PLANNING DEPARTMENT

## TRANSPORTATION / TRAFFIC

THIS BEING ONE OF OUR BIGGEST CONCERNS DUE TO THE ENTERANCE + EXIT OF DEER PARK. THE ONLY SAFE WAY INTO AND OUT OF OUR AREA IS, OF COURSE, PATTERSON DR. THE OTHER MEANS IN + OUT IS ONLY TULLIS MINE WHICH IS NOT EXCESSABLE, ESPECIALLY DURING WINTER MONTHS, UNLES WITH 4WHEELDRIVE,

IF ARGONAUT DR IS GOING TO BE A MAIN THROUGHFARE FOR DORADO OAKS TO PATTERSON THE SAME ISSUES STILL REMAIN. IT IS .7 MILES FROM ARGONAUT TO PLEASANT VALLEY. IN 2013 THE FIRE DEPT CLOSED PATTERSON DUE TO A VERY LARGE FIRE. WE WERE EXACUATED + SENT DOWN TULLIS MINE WHICH WAS A TRAFFIC JAM AND ALMOST IMPASSABLE ON THE NARROW ROAD. AT A SNAILS PACE WE GOT OUT.

I'M WONDERING NOW, IF THIS GOES THROUGH, IF ARGONAUT WILL BE RESTORED TO A TWO LANE ROAD OR PERHAPS OTHER CHANGES TO DEAL WITH THE OBVIOUS ON COMING + OUT GOING TRAFFIC -

THE OTHER TRANSPORTATION + TRAFFIC

ISSUE WE HAVE ARE THE "ROUND-ABOUT" LOCATION. BOTH OF THE OPTIONS ARE SO UNREASONABLE. DEB'S FROSTY IS NOT A HISTORICAL LANDMARK, AS IS THE OTHER LOCATION OFF CHINA GARDEN, BUT IT MINE AS WELL BE. IT SEEMS THOUGH, THAT NEITHER OPTION WOULD MAKE THE INCREASE IN TRAFFIC FLOW ANY EASIER. ALREADY PLEASANT VALLEY HAS SUCH A STREAM OF TRAFFIC COMING DOWN THE HILL THAT MOST PEOPLE HAVE TO TAKE SOME TIME JUST TO GET OUT OF THEIR DRIVE WAY. WE ARE TOTALLY AGAINST THE "ROUND ABOUT" AS A TRAFFIC SOLUTION.

Dorado Oaks NOP Scoping Meeting Comment Card

Date: August 20, 2019

Name: THERESA PUTHUFF

CRAIG / KEVIN  
PROJECT OVERVIEW

Address: 154 ARGONAUT DR

Email: the\_mom530@yahoo.com

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

2019 AUG 29 AM 8:41  
RECEIVED  
PLANNING DEPARTMENT

For questions, please contact: michelle@mmsstrategies.com

## PROJECT OVERVIEW

ALL OF US, OR MOST OF US, ARE AWARE THAT ALL OF YOU IN CHARGE OF THE PROJECT ARE REQUIRED <sup>BY LAW</sup> TO HAVE A "SCOPING MEETING". AT THAT TIME WE (THE PUBLIC) CAN SUBMIT COMMENTS, CONCERNS, + SUGGESTIONS. IT WAS ASSUMED THAT WE WOULD BE ABLE TO SIT DOWN IN A GROUP AND DISCUSS THE PROJECT WITH THE LEADERS. ALL THE INFORMATION AT THE SCOPING MEETING WE ALL RECEIVED IN THE MAIL. WE WERE TOLD THERE WILL BE ANOTHER MEETING SOON OR IN THE FALL.

OF COURSE WE ALL ALL CONCERNED ABOUT PROPERTY VALUE. WILL THIS DRIVE PRICE OF OUR HOMES LOWER OR HIGHER? THE PARK AND PLAYGROUND IDEA IS GOOD BUT DOESNT COUNTY PLANNING ALREADY HAVE A PLAN IN PROCESS BEHIND CHARLES BROWN. WE HAVE PAPERWORK THAT GOES BACK TO NOV. 2007 - ON SO MANY PROJECTS: PARKWAY ALIGNMENT, STONEHENGE LLC, TRAIL CROSS OVER, HWY 49 TO HWY 50, PATERSON RANCH FIRE SAFETY, ELDO TRAIL BRIDGE, SHERIFF DEPT DEVELOPMENT, REPLACE 9 LIGHT POOLS ON PATERSON DR, CREEKSIDE PLAZA PROJECT etc etc etc. IT'S JUST OVERWELMING HOW MANY PLANS

AND PROJECTS THIS AREA HAS GONE THROUGH. PEOPLE SAY "YOU CANT STOP PROGRESS" WHAT A SHAME! WE ALL MOVED HERE TO KEEP IT COUNTRY. WE LIKE IT THAT WAY. I'M JUST A HOMEOWNER, ARRIVED IN 1976. WE WERE CONSIDERED FLATLANDER. THE PEOPLE THAT LIVED HERE THEN DIDNT WANT US TO MOVE HERE EITHER. SO I GUESS YOU CANT STOP PROGRESS. WHAT A SHAME!





**Dorado Oaks NOP Scoping Meeting Comment Card**

Date: August 20, 2019

Name: Nancy Franzi

Address: 2001 Great View Lane  
Diamond Springs

Email: fancynanc58@sbcglobal.net

I am "not" in favor of the new subdivision planned in Diamond Springs. Pleasant Valley Rd is a traffic jam at all times of the day. If you patron the businesses on the south side you will never be able to make a left hand turn to exit. Therefore these businesses are suffering already. Many times I will not stop at any of them unless I can exit to the right.

We do not need anymore TRAFFIC! We moved here from Sacramento to get away from the city traffic & crime.

Leave Diamond Springs ALONE!

If we need to evacuate for any reason, hundreds of extra cars are going to possible injure or kill homeowners.

Do you want that on your con conscious!!!



**Subject:** Fwd: [dorado\_oaks] Old Stonehenge New Dorado Oaks feedback  
**Date:** Friday, August 16, 2019 at 12:22:11 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

From: **Brad Gardner** <[brad7145@gmail.com](mailto:brad7145@gmail.com)>  
Date: Tue, Jul 30, 2019 at 11:44 AM  
Subject: [dorado\_oaks] Old Stonehenge New Dorado Oaks feedback  
To: <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

Tom, as

you no doubt are aware, there is major concern about emergency exit options all along those depending on exit options out of Patterson Dr from the south going north. One aspect of this subject I'd like to put on the table here is an emergency exit option that should be addressed at the Aug 20 meeting which i will not be able to attend. Off of Griffith, there is an existing in-use easement (Rodriquez parcel) that could connect to the old Tullis Mine Rd. and allow emergency access past Lot 156 through 148. These lots are also stranded (single threaded) in the event of a fire to their north, and could use an emergency gate to exit south onto Griffith via this existing easement. Justification for these types of circulation discussions can site Cal Fire Title 14 which now prohibits lot splits without a "non-parallel" alternative when there is a dead end road of more than 500 ft. I am a former commissioner for the City of Folsom, and may be able to assist in some aspects of project feedback to the County.

(FYI only, this project

wraps around my property via Lot 382 that at one time was to be donated to the Conservancy. CTA engineering did Stonehenge and my Res building project on Antares Dr)

Brad Gardner  
533 Antares Dr  
Diamond Spgs  
530-409-6380

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

**Subject:** Fwd: [dorado\_oaks] Objection to zone change  
**Date:** Friday, August 16, 2019 at 12:22:36 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

From: 'Deborah Carter' via PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
Date: Fri, Aug 2, 2019 at 12:59 PM  
Subject: [dorado\_oaks] Objection to zone change  
To: <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

My name is Dr Deborah Carter and I own the land directly to the north of the high density apartments proposed on the Dorado project. Two main objections it is a wetland and second it may contain a protected species of animal. When I bought the land it was zoned for small houses. It is in appropriate to build on wetlands and this project has 143 acres to chose from that would better serve that part of the project. Specially by Fowler Lane. I plan to launch an investigation as to whether it is legal to build on that land and gain community support to have that planning change back to its old design. Thank you. Deborah Carter. 2220 Sunrise Drive Diamond Springs Ca. Can you give me the number of who inspects that area for designated as a wetland. Thank you. 916 296 3068. Thank you  
Sent from my iPhone

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: [dorado\_oaks] Dorado Oaks: Where is the "Initial Study" used to determine the need for an EIR?  
**Date:** Friday, August 16, 2019 at 12:23:15 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

**From:** Ken Greenwood <[krq@d-web.com](mailto:krq@d-web.com)>  
**Date:** Fri, Aug 2, 2019 at 2:40 PM  
**Subject:** [dorado\_oaks] Dorado Oaks: Where is the "Initial Study" used to determine the need for an EIR?  
**To:** <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
**Cc:** <[Rommel.Pabalinas@edcgov.us](mailto:Rommel.Pabalinas@edcgov.us)>

Dear Mr. Purciel (and Pabalinas),

I am in receipt of the Notice of Preparation for the Dorado Oaks Subdivision via e-mail notice of July 29, 2019.

After review of the Document and attachments, I am wondering where the "Initial Study" (IS) for the Project is? CEQA Process suggests this IS be attached to the NOP so that the public, Responsible and Effected Agencies would have documentation of the potentially significant Environmental Impacts of the Project identified by the Lead Agency triggering the need for the EIR. There is a Scoping Meeting on August 20 that will be facilitated greatly by the provision of this IS to me and the Public in general.

Please recirculate your notice and include the IS so the Public and Agencies may be better informed and involved in the Planning Process as described in CEQA and the CA Government Code.

Thank you for your immediate response to this request.

Sincerely,

Ken R. Greenwood  
 Straight Shot Consulting  
 530-306-6390 (C) [krq@d-web.com](mailto:krq@d-web.com)

--  
**Tom Purciel**  
 Associate Planner

**County of El Dorado**  
 Department of Planning and Building  
 2850 Fairlane Court  
 Placerville, CA 95667  
 (530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

**Subject:** Fwd: [dorado\_oaks] Re: Dorado Oaks NOP has no Initial Study Attached or Population/Dwelling Unit estimates included  
**Date:** Friday, August 16, 2019 at 12:23:33 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

From: **Rommel Pabalinas** <[rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)>  
Date: Tue, Aug 6, 2019 at 9:28 AM  
Subject: [dorado\_oaks] Re: Dorado Oaks NOP has no Initial Study Attached or Population/Dwelling Unit estimates included  
To: Ken Greenwood <[krig@d-web.com](mailto:krig@d-web.com)>  
Cc: Dave Purciel <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>, BOS Clerk Jim Mitrisin <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>

I am responding to your inquiry below which was also sent via a separate email.

Regarding the absence of the Initial Study, per CEQA Guidelines 15063(a): Following preliminary review, the Lead Agency shall conduct an Initial Study to determine if the project may have a significant effect on the environment. If the Lead Agency can determine that an EIR will clearly be required for the project, an Initial Study is not required.

The Planning Department has determined that the project would require an Environmental Impact Report (EIR). Similarly, the previous version of the project (Stonehenge Springs Tentative Subdivision Map), which was withdrawn and replaced with this project, was also determined to have an EIR.

Your comments on the project regarding the units, staff will accept these comments and will be analyzed as part of the EIR. Should you have any additional comments, please send to the designated email for the project.

Lastly, a minor correction, the assigned planner is Tom Purciel not Dave Purciel.

On Mon, Aug 5, 2019 at 4:32 PM Ken Greenwood <[krig@d-web.com](mailto:krig@d-web.com)> wrote:

Dear Planning,

I am in receipt of the Notice of Preparation for the Dorado Oaks Subdivision via e-mail notice of [July 29, 2019](#).

After review of the Document and attachments, I notice the following:

> The Project Description has no hard information on the potential number of "Dwelling Units" the Project may encompass.

- Yes, there are 156 Single Family and 225 Multi-Family Lots proposed. However, it is unclear how many "Dwelling Units" (and therefore population/trips per day generation, etc.) there will be in the Project.
- You have not done any math on the # of units possible on the 225 "Multi-Family" lots. Therefore the Public cannot possibly understand, analyze nor quantify the Impacts of

the Project. What are these numbers?

**ADDITIONALLY (and subject of my August 2, 2019 E-mail request):**

> I am wondering where the "Initial Study" (IS) for the Project is located? CEQA Process suggests the IS be attached to the NOP so that the public, Responsible and Effected Agencies would have documentation of the potentially significant Environmental Impacts of the Project identified by the Lead Agency triggering the need for the EIR. There is a Scoping Meeting on August 20 that will be facilitated greatly by the provision of this IS to me and the Public in general.

Without this document being available, the Public is effectively left out of the Planing Process as the rational for the EIR is triggered by the Initial Study that was prepared some time ago for the "Early Consultation" by Agencies.

> Where is the Initial Study for this Project?

Therefore: Please recirculate your notice and include the Initial Study and Dwelling Unit/Population estimations so the Public and Agencies may be better informed and involved in the Planning Process as described in CEQA and the CA Government Code.

> An extension of the Comment Period is appropriate given this SEVEN DAY delay in providing this vital information to the Public.

Thank you for your immediate response to this request.

Sincerely,

Ken R. Greenwood

Straight Shot Consulting  
530-306-6390 (C) [krig@d-web.com](mailto:krig@d-web.com)

CC: Clerk of the Board of Supervisors

-----  
*Rommel (Mel) Pabalinas, Principal Planner  
El Dorado County Community Development Services  
Planning and Building Department  
Planning Division  
2850 Fairlane Court  
Placerville, CA 95667  
Main Line 530-621-5355  
Direct line 530-621-5363  
Fax 530-642-0508*



**Subject:** Fwd: [dorado\_oaks] dorado oaks proposal  
**Date:** Friday, August 16, 2019 at 12:23:47 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

From: 'michelle hansen' via PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
Date: Tue, Aug 6, 2019 at 1:28 PM  
Subject: [dorado\_oaks] dorado oaks proposal  
To: [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us) <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

This is a sample of what i have sent out to my fellow neighbors in Diamond Springs. I have so many concerns about this proposal. I live on a quiet little dead end road. This massive subdivision will completely encroach on my property and completely change my quality of life as well as my direct neighbors...It will also completely change the whole feel of our little , historical town. I am so opposed to this. And i will fight this till the end.

For those of you that live in Pleasant Valley, Somerset, Fairplay and Grizzly Flat, I wanted to be sure you were aware of what they are trying to do in Diamond Springs,,Even if you don't live in DS this will affect you,, There is a proposal for about 600 apt units and multi family homes to be built behind Deb's Frosty on Pleasant Valley Rd, This will create even more of a traffic and safety NIGHTMARE for those of you that use PV to commute back and forth to work,,I'm upset about it because i live in DS on a nice quiet little street and where they want to build will be 800 ft from my house,,This project was stoooped years ago and it's time to stop it again, there is a meeting August 20, at the Firemans hall here in DS at 6pm, then you can and need to write letters to the county supervisors and everyone on the committee by August 28,,Please help to keep Diamond Springs the small, quiet historical town that it is, I have to tell you also that part of the are they want to build on is a Miwok burial site with historical grinding rocks, it also will back up to a wetland /wildlife are, please let your voice be heard and let's try to STOP the ENCROACHMENT / INVASION in Diamond Springs

Sincerely, Michelle Hansen

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.



**Subject:** Fwd: [dorado\_oaks] Fw: dorado oaks proposal  
**Date:** Friday, August 16, 2019 at 12:24:07 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

**From:** 'michelle hansen' via PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
**Date:** Tue, Aug 6, 2019 at 1:30 PM  
**Subject:** [dorado\_oaks] Fw: dorado oaks proposal  
**To:** [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us) <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

----- Forwarded Message -----

**From:** michelle hansen <[michelleh2294@yahoo.com](mailto:michelleh2294@yahoo.com)>  
**To:** [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us) <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
**Sent:** Tuesday, August 6, 2019, 1:09:41 PM PDT  
**Subject:** dorado oaks proposal

[31 at 11:32 PM](#)



**Michelle Hansen**

I'm writing this post to all my neighbors an all who live in Diamond Springs,,,,I know most of you must love i...

I'm writing this post to all my neighbors an all who live in Diamond Springs,,,,I know most of you must love it here as much as i do,,,so i want to be sure all of you are aware of what could possibly happen to our cute, little quiet town,,,There is a proposal for a subdivision of new homes and up to 600 new apartment units to be built right behind Deb's Frosty.....it is to be called Dorado Oaks,,,I feel very emotional and upset about all of this,,,,,,If we let this happen it will change the quality of our lives here,,,,,It will have a huge impact on our environment, on us, on all our nature an wildlife in the are,,,,,There will be more people, more cars and alot more noise.....It will completely destroy our small town feel.....Can you even wrap your heads around 600 new apartment units,,,that means average of 1200 more people and at least 600 more cars around and about Pleasant Valley Rd, and Missouri Flat ....They are allowing this to happen in Folsom....where the population and the traffic will be a total nightmare.....They tried to put this proposal through here about 10 years ago,,,and people were very upset and totally against it.....Let's all stand together on this and not let them ruin our little , sleepy town of Diamond

Springs.....I own my home here and fear greatly that with high density apartments and houses going in it will take it's toll on my home and property value,,,Why? Because no one will want to live here anymore , it will become just like all he other overcrowded cities,,,,,,,,,,,,,,,,,,,,and our Quality of Life here that we all treasure will be destroyed and ruined forever,,,,,So I ask you please do what you can to voice your concerns and opposition to this proposal,,,,,you can write letters , make phone calls and their is a meeting on Tuesday , August 20, at 6pm in the Fireman's Hall here in town,,,Please let's don't let them take so much away from all of us who enjoy our lives here



Sincerely, Michelle Hansen

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: Dorado Oaks Tentative Subdivision  
**Date:** Friday, August 16, 2019 at 12:25:11 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks  
**Attachments:** top-shadow\_0b897832-fd88-4832-a843-c9d22532cc56.gif, ssbmi-logo-signature-sm\_b52da26e-65c9-4e13-aec9-43d90d7e6300.jpg, bottom-shadow\_9be901c6-21ec-48cc-acc3-ac5d15072117.gif

----- Forwarded message -----

From: **Kara Perry** <[KPerry@ssband.org](mailto:KPerry@ssband.org)>  
Date: Tue, Aug 13, 2019 at 2:15 PM  
Subject: Dorado Oaks Tentative Subdivision  
To: [tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us) <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
Cc: Rommel Pabalinas <[rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)>

Good Afternoon Mr. Purciel,

My name is Kara Perry and I work in the Cultural Resources Department for the Shingle Springs Band Of Miwok Indians. I have received a few call regarding this project and would like to have a chance to meet with you and discuss. I am aware that you are out of the office until the 14<sup>th</sup>, so when you have a chance please let me know your availability.

Thank you

Kara



**Kara Perry**

Cultural Outreach Coordinator  
Cultural Resources Department

Phone: (530) 488-4049  
Mobile: (530) 363-5123  
Fax: (530) 558-2034  
Email: [KPerry@ssband.org](mailto:KPerry@ssband.org)

Shingle Springs Band of Miwok Indians | P.O. Box 1340, Shingle Springs, CA 95682

---

SSBMI Disclaimer: This email (Dorado Oaks Tentative Subdivision) is from Shingle Springs Band of Miwok Indians: Cultural Resources Department and is intended for [tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us). Any attachments thereto may contain private, confidential, and privileged material. Any review, copying, or distribution of this email (or any attachments thereto) by parties other than the Shingle Springs Band of Miwok Indians (and its affiliated departments or programs) or the intended recipient(s) is strictly prohibited. If you properly received this e-mail as an employee of the Shingle Springs Band of Miwok Indians, outside legal counsel or retained expert, you should maintain its contents in confidence in order to preserve the attorney-client or work product privilege that may be available to protect confidentiality.

If you are not the intended recipient, please notify the sender immediately and permanently delete the email and any attachments thereto. Do not forward, copy, disclose, or otherwise reproduce its contents to anyone.

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd:  
**Date:** Friday, August 16, 2019 at 12:25:42 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

**From:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Date:** Wed, Aug 14, 2019 at 8:50 AM  
**Subject:** Fwd:  
**To:** PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

----- Forwarded message -----

**From:** Planning Department <[planning@edcgov.us](mailto:planning@edcgov.us)>  
**Date:** Mon, Aug 12, 2019 at 8:25 AM  
**Subject:** Fwd:  
**To:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>

----- Forwarded message -----

**From:** michelle hansen <[michelleh2294@yahoo.com](mailto:michelleh2294@yahoo.com)>  
**Date:** Sat, Aug 10, 2019 at 12:34 PM  
**Subject:**  
**To:** [planning@edcgov.us](mailto:planning@edcgov.us) <[planning@edcgov.us](mailto:planning@edcgov.us)>

----- Forwarded Message -----

**From:** michelle hansen <[michelleh2294@yahoo.com](mailto:michelleh2294@yahoo.com)>  
**To:** [bldgdept@edcgov.us](mailto:bldgdept@edcgov.us) <[bldgdept@edcgov.us](mailto:bldgdept@edcgov.us)>  
**Sent:** Saturday, August 10, 2019, 12:32:20 PM PDT  
**Subject:**

----- Forwarded Message -----

**From:** michelle hansen <[michelleh2294@yahoo.com](mailto:michelleh2294@yahoo.com)>  
**To:** [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us) <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
**Sent:** Saturday, August 10, 2019, 12:26:43 PM PDT  
**Subject:**

Dear Sirs:

I'm writing this letter to you because I'm very concerned about the encroachment and invasion into Diamond Springs. This massive development of Dorado Oaks will infringe and have a huge negative impact on the already existing neighborhoods around Fowler Rd, and all the small roads in between.

This high density development needs to be somewhere else where there is open land and no residents that live there and would have to suffer the impact.

This plan violates many ordinances and policies (LAWS) that have been implemented over the last 30 years meant to protect our rural community.

We should have and did not receive an EIR report along with the the project proposal. This land has many things on it that should be protected for the well being o the environment. Wetlands, a creek, an Indian burial site and grinding rocks,,along with all the wildlife that call it home.

The already existing neighborhoods will be forced to endure extreme levels of noise and light pollution, along with traffic and dirt for years.

This project will also affect all of our property values that live in these neighborhoods, it will make our homes worth less because of the high density building.

The statement in a general plan is Protection of living conditions in adjacent neighborhoods, preserving privacy and character of adjacent residents, so that they are not significantly impacted.

I ask you to please consider an alternative place for these apartments and houses to be built.

Sincerely, Michelle Hansen

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.



**Subject:** Fwd: [dorado\_oaks] Fwd:  
**Date:** Friday, August 16, 2019 at 12:26:13 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

**From:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Date:** Wed, Aug 14, 2019 at 8:51 AM  
**Subject:** [dorado\_oaks] Fwd:  
**To:** PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

----- Forwarded message -----

**From:** Planning Department <[planning@edcgov.us](mailto:planning@edcgov.us)>  
**Date:** Mon, Aug 12, 2019 at 8:25 AM  
**Subject:** Fwd:  
**To:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>

----- Forwarded message -----

**From:** michelle hansen <[michelleh2294@yahoo.com](mailto:michelleh2294@yahoo.com)>  
**Date:** Sat, Aug 10, 2019 at 12:34 PM  
**Subject:**  
**To:** [planning@edcgov.us](mailto:planning@edcgov.us) <[planning@edcgov.us](mailto:planning@edcgov.us)>

----- Forwarded Message -----

**From:** michelle hansen <[michelleh2294@yahoo.com](mailto:michelleh2294@yahoo.com)>  
**To:** [bidgdept@edcgov.us](mailto:bidgdept@edcgov.us) <[bidgdept@edcgov.us](mailto:bidgdept@edcgov.us)>  
**Sent:** Saturday, August 10, 2019, 12:32:20 PM PDT  
**Subject:**

----- Forwarded Message -----

**From:** michelle hansen <[michelleh2294@yahoo.com](mailto:michelleh2294@yahoo.com)>  
**To:** [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us) <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
**Sent:** Saturday, August 10, 2019, 12:26:43 PM PDT  
**Subject:**

Dear Sirs:

I'm writing this letter to you because I'm very concerned about the encroachment and invasion into Diamond Springs. This massive development of Dorado Oaks will infringe and have a huge negative impact on the already existing neighborhoods around Fowler Rd, and all the small roads in between.

This high density development needs to be somewhere else where there is open land and no residents that live there and would have to suffer the impact.

This plan violates many ordinances and policies (LAWS) that have been implemented over the last 30 years meant to protect our rural community.

We should have and did not receive an EIR report along with the the project proposal. This land has many things on it that should be protected for the well being o the environment. Wetlands, a creek, an Indian burial site and grinding rocks,,along with all the wildlife that call it home.

The already existing neighborhoods will be forced to endure extreme levels of noise and light pollution, along with traffic and dirt for years.

This project will also affect all of our property values that live in these neighborhoods, it will make our homes worth less because of the high density building.

The statement in a general plan is Protection of living conditions in adjacent neighborhoods, preserving privacy and character of adjacent residents, so that they are not significantly impacted.

I ask you to please consider an alternative place for these apartments and houses to be built.

Sincerely, Michelle Hansen

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: Tom Purciel is out of the office. Re: Dr. Carter @ 2220 Sunrise Road (Resident adjacent to Dorado Oaks)

**Date:** Friday, August 16, 2019 at 12:24:53 PM Pacific Daylight Time

**From:** Tom Purciel

**To:** Michelle Smira Brattmiller

**Category:** Dorado Oaks

----- Forwarded message -----

**From:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>

**Date:** Tue, Aug 13, 2019 at 9:49 AM

**Subject:** Tom Purciel is out of the office. Re: Dr. Carter @ 2220 Sunrise Road (Resident adjacent to Dorado Oaks)

**To:** <[rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)>

I will be out of the office From Monday July 22, 2019 until Wednesday August 14, 2019. I will respond to your message when I return. If you need immediate assistance, you may contact my supervisor, Mel Pabalinas at: (530) 621-5363. Thank you!

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: [dorado\_oaks] Dorado Oaks Tentative Subdivision  
**Date:** Friday, August 16, 2019 at 12:27:17 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

From: 'Jane Oates' via PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
Date: Wed, Aug 14, 2019 at 12:04 PM  
Subject: [dorado\_oaks] Dorado Oaks Tentative Subdivision  
To: <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

Hello Mr. Purciel

After reviewing the proposal I have a question or suggestion. If Argonaut Drive is to be an access point (thru traffic from Dorado Oaks) to Patterson Drive then a study should be done for traffic impacts for Patterson Drive and the intersection of Patterson Drive and Hwy 49 (Pleasant Valley Road). It appears as if the southern section of Dorado Oaks would find easier access to Hwy 49, El Dorado, and even Missouri Flat Road if access was via Patterson Drive rather than Faith Lane.

Thank you for your consideration  
Jane Oates.

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.



**Subject:** Fwd: Stop a large (143 acres) high-density subdivision proposed for quiet rural Diamond Springs village!  
**Date:** Friday, August 16, 2019 at 12:27:53 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks  
**Attachments:** Dorado Oaks proposed subdivision at Diamond Springs.pdf

----- Forwarded message -----

From: **Tom Purciel** <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
Date: Wed, Aug 14, 2019 at 1:56 PM  
Subject: Fwd: Stop a large (143 acres) high-density subdivision proposed for quiet rural Diamond Springs village!  
To: PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

----- Forwarded message -----

From: **Richard Boylan PhD** <[drboylan@outlook.com](mailto:drboylan@outlook.com)>  
Date: Sun, Aug 4, 2019 at 5:39 PM  
Subject: Stop a large (143 acres) high-density subdivision proposed for quiet rural Diamond Springs village!  
To:

Friends,

The County Planning Commission is providing news of a new project that would jam 126 High-Density Residential and 225 Multi-Family Housing units (total: 351 units!) into 143 acres of oak woodlands, creeks, trails and ponds, currently open space, right south of **Diamond Springs'** main street (Pleasant Valley Road).

The project would turn Diamond Springs from a quiet rural township into a quasi-urban center, and would *render meaningless* the Diamond Springs Historic District designation which includes portions of this proposed project.

(Details are in the attachment. Scroll down to the maps, especially Figure 2, 'Project Overview'.)

This urban sprawl must not happen. It would spell the end of the rural village character of our town.

*But* the 143 acres would and *should* make an excellent Regional Park, which this central-south part of the county sorely lacks. The County should reject the subdivision, and instead listen to the people and designate these 143 acres as a wonderful park for all El Doradans to enjoy.

We can make this happen if we demand that the County create a *long-overdue* Regional Park in the heart of the long-neglected central-south part of our county. The heart of that area is Diamond Springs.

*You can help.* Attend the county Presentation and Comments Session on **Tues., August 20, 6:00 PM**, at Firefighter's Memorial Hall, 3734 China Garden Rd. at Pleasant Valley Rd., (behind the Diamond Springs Firehouse). Submit your comments. Save our village.

Thank you.

Richard Boylan

## Diamond Springs

---



Virus-free. [www.avg.com](http://www.avg.com)

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: [dorado\_oaks] Fw: Dorado Oaks Project  
**Date:** Friday, August 16, 2019 at 12:28:12 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

**From:** Bette Lasher <[blasher1@sbcglobal.net](mailto:blasher1@sbcglobal.net)>  
**Date:** Thu, Aug 15, 2019 at 12:11 PM  
**Subject:** [dorado\_oaks] Fw: Dorado Oaks Project  
**To:** [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us) <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
**Cc:** [bosthree@edcgov.us](mailto:bosthree@edcgov.us) <[bosthree@edcgov.us](mailto:bosthree@edcgov.us)>

**Subject:** Dorado Oaks Project

I have lived on the corner of Georges Alley and SR49 since 1977 and have seen the increase in traffic over the years so was delighted to see the much touted Parkway start as it has been talked about for decades.

However, was appalled at the enormity of the Dorado Oaks project unit wise. There is kill and over kill and this is over kill by a huge amount.

The speed in Diamond Springs on SR49 is posted at 25, for all the good that does as the average speed is 45 and from around 10 pm to 2 am at night it is a speedway from Missouri Flat to Fowler lane, now you propose more traffic. As to your proposed ingress/egress route on Faith Lane, a round about would be a disaster. A four way traffic signal with China Garden Road would be the best for traffic flow.

We already have several low income housing units in our little area, plus four mobile home parks, all but one is a senior park. Along with a quiet senior development on Panther Lane. Isn't this enough? 381 low income units is about 300 to many. The impact on the Union Mine High School area will be dramatic as traffic on Koki Lane is already horrid, plus there is project planned for there also. The roads in these areas are not designed to accommodate heavy traffic. The commute times in Diamond Springs/El Dorado are already congested.

I am not sure if Diamond Spring/El Dorado has been designated as the area to dump all the low income housing mandated by Sacramento or not but his is totally unfair to the citizens of both areas. You are already proposing to re-zone 8 plus acres for this project, why not re-zone other lands around the county?

Where is the water coming from? We have been told to cut back to a bare minimum and now this. Who is paying for the highway part of the project? It seems like there is a movement to totally destroy the rural structure of Diamond Springs.

Yes, I will be at the meeting on the 20th.

Bette Lasher (Elizabeth)



3760 Georges Alley  
Diamond Srings, CA 95619  
530-622-9192  
[blasher1@sbcglobal.net](mailto:blasher1@sbcglobal.net)

cc: District Three Supervisor

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: [dorado\_oaks] Scoping Meeting Report Diamond Springs. Dated July 29, 2019  
**Date:** Friday, August 16, 2019 at 12:28:38 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

**From:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Date:** Fri, Aug 16, 2019 at 11:36 AM  
**Subject:** Re: [dorado\_oaks] Scoping Meeting Report Diamond Springs. Dated July 29, 2019  
**To:** Bruce Turner <[turner2000@yahoo.com](mailto:turner2000@yahoo.com)>

Hi Bruce,

Below is the entire paragraph from the document containing the text you were unable to view. Note: If you would like to submit comments regarding this project or item(s) that you feel should be addressed in the project's Environmental Impact Report (EIR), please submit written comments on or before the due date shown on the Scoping Meeting notice. Comments should be sent to the project email address: [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us).

Regards,

Tom Purciel - Project Planner

**Project Overview - Dorado Oaks Tentative Subdivision Map Site**

The Dorado Oaks Subdivision consists of the following entitlement requests:

1. A Rezone of an 8.94-acre portion of the 142.3-acre project site from Residential, Multi-Unit (RM) to Residential, Multi-Unit - Planned Development (RM-PD);
2. A Phased Tentative Subdivision Map, consisting of 14 Large Lots, to subdivide the 142-acre property into 156 single-family lots ranging in size from 6,000 square feet to approximately 24,000 square feet, 225 multi-family lots ranging in size from approximately 2,800 square feet to 8,800 square feet and 20 open space/landscape lots; and
3. A Planned Development Permit to establish an official Development Plan for Dorado Oaks Subdivision that includes modification to specific development standards in the RM zone district for 91 of the proposed multi-family lots on an 8.94-acre portion of the project site.

On Thu, Aug 15, 2019 at 11:29 AM 'Bruce Turner' via PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)> wrote:

I have been reading the the information sent to me by your office and I see on page 5 under Project Overview item 2 end of paragraph a missing sentence after the word "and" would you please email me the competed sentence . Thank you Bruce Turner 530 626 0940

--

**Tom Purciel**  
 Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: ATT: TOM PURCIEL, BRIAN VEERKAMP  
**Date:** Monday, August 19, 2019 at 8:35:57 AM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller

----- Forwarded message -----

**From:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Date:** Mon, Aug 19, 2019 at 8:30 AM  
**Subject:** Fwd: ATT: TOM PURCIEL, BRIAN VEERKAMP  
**To:** PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

----- Forwarded message -----

**From:** Planning Department <[planning@edcgov.us](mailto:planning@edcgov.us)>  
**Date:** Mon, Aug 19, 2019 at 8:20 AM  
**Subject:** Fwd: ATT: TOM PURCIEL, BRIAN VEERKAMP  
**To:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>

----- Forwarded message -----

**From:** Cindy Long <[chstaffs@gmail.com](mailto:chstaffs@gmail.com)>  
**Date:** Sun, Aug 18, 2019 at 12:10 AM  
**Subject:** ATT: TOM PURCIEL, BRIAN VEERKAMP  
**To:** <[planning@edcgov.us](mailto:planning@edcgov.us)>  
**Cc:** <[bosthree@edcgov.us](mailto:bosthree@edcgov.us)>

RE: NOP of a Draft Environmental Impact Report for the Dorado Oaks Subdivision.

I am in receipt of said notice and have multiple concerns regarding the project.

My concerns are about the scope of this project; how many dwellings exactly. Single family dwellings, multi family dwellings- Condominiums, Duplexes, Apartments?

Square footage of the dwellings? Size of the residential lots?

Where is the complete Public Disclosure regarding this information?

How will this impact traffic? To be able to understand the need for upgraded roads, traffic circles (taking out existing businesses is not always the better solution.) vs stoplights; to make an informed decision the pertinent information needed to be provided up front.

What about Storm/water drainage? The area along Pleasant Valley Road has already had flooding problems. Fire protection?

Based on the information / lack of information provided, I am in opposition to the Dorado Oaks Project at this time.

I respectfully request to be put on a mailing list to be notified of any additional reports filed, a copy of the DEIR when completed and any additional notices and meeting dates.

I am sincerely hoping to gain additional insight regarding Dorado Oaks Project at the August 20th meeting.

C. Long

350 Pleasant Valley Rd #71  
Diamond Springs, CA  
95619

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: [dorado\_oaks] Dorado Oaks thoughts and such  
**Date:** Monday, August 19, 2019 at 3:30:07 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller

----- Forwarded message -----

From: **Ken Greenwood** <[krig@d-web.com](mailto:krig@d-web.com)>  
Date: Mon, Aug 19, 2019 at 2:01 PM  
Subject: [dorado\_oaks] Dorado Oaks thoughts and such  
To: Tom Purciel <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
Cc: edc cob <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>

Tom,

Just left you a message regarding the Dorado Oaks project and the meeting tomorrow night.

I received a response to my inquiry about the need (or not) for an "Initial Study" for this project at this time. OK, the Guidelines say you don't have to, but perhaps it would have helped identify the Potentially Significant (or not) Impacts of the Project, both to Responsible Agencies and particularly to the Public who at this time are suffering from a lack of objective and accurate information regarding this Project. Gauging from a THOUSAND comments on 4 or 5 Social Media Posts, there is no shortage of interest in this Project, and no shortage of a lack of answers to questions regarding the potential impacts (Sounds like the definition of the "Purpose" of CEQA? Yes!).

Straight Shot Consulting  
530-306-6390 (C) [krig@d-web.com](mailto:krig@d-web.com)

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.



**Subject:** Fwd: [dorado\_oaks] Dorado Oaks thoughts and such (resend!) IMPORTANT considerations for tomorrow's meeting.

**Date:** Tuesday, August 20, 2019 at 8:13:22 AM Pacific Daylight Time

**From:** Tom Purciel

**To:** Michelle Smira Brattmiller

----- Forwarded message -----

From: **Ken Greenwood** <[krge@d-web.com](mailto:krge@d-web.com)>

Date: Mon, Aug 19, 2019 at 4:47 PM

Subject: [dorado\_oaks] Dorado Oaks thoughts and such (resend!) IMPORTANT considerations for tomorrow's meeting.

To: Tom Purciel <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

Cc: edc cob <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>, Rommel Pabalinas <[Rommel.Pabalinas@edcgov.us](mailto:Rommel.Pabalinas@edcgov.us)>

Tom,

Just left you a message regarding the Dorado Oaks project and the meeting tomorrow night.

I received a response to my inquiry about the need (or not) for an "Initial Study" for this project at this time. OK, the Guidelines say you don't have to, but perhaps it would have helped identify the Potentially Significant (or not) Impacts of the Project, both to Responsible Agencies and particularly to the Public who at this time are suffering from a lack of objective and accurate information regarding this Project. Gauging from a THOUSAND comments on 4 or 5 Social Media Posts, there is no shortage of interest in this Project, and no shortage of a lack of answers to questions regarding the potential impacts (Sounds like the definition of the "Purpose" of CEQA? Yes!).

**>> No intention to "send" the info above at this point! Sorry. There's more!**

Had this "Baseline" information (usually generated by the Initial Study process) been sent out with the NOP, people would have more information and therefore a higher percentage of substantive comments tomorrow night (and beyond). (You ARE going to be dealing a potentially and justifiably ANGRY crowd!) This would lead to a savings of everybody's time and effort, and especially their emotions which are running very high at this point. Yes, these projects always generate lots of emotions and that is to be expected AND managed along with the Project. How? By providing MORE information up front you can reduce the emotional responses and just plain ignorance to the project and the "Impacts" associated with it and have a better informed "Public Participation" component. As of now, that's going to be difficult as the Genie is out of the bottle and it is MAD and less informed.

Additionally, there is an opportunity to save some of this ignorance by having your bags fully packed tomorrow night with an updated handout describing the Project. I might suggest info and exhibits as follows:

- A CLEAR explanation of how many "Dwelling Units" and # of people might be expected at full build-out.
  - This information is missing, if not difficult to find in the NOP document.



- WHY should I or anyone else have to search this out?
  - We see there are 156 Single Family Lots and 225 Multifamily lots. But only with a "Density Calculator App" (that doesn't exist) could we possibly know these numbers.
    - WHY should I or anyone else have to search this out in the Traffic Study (or anywhere else!)?
- Put the "Project Overview" (currently on PAGE 5 of the NOP) right up front and on a Power Point Slide and a 1 page handout.
  - Why should anyone have to dig so deeply to discover this information?
  - (And as above, why doesn't it include a CLEAR number (or range) of DU's and potential population?)
    - People can better understand this if presented clearly and early.
- A large overview map that combines the EXISTING and PROPOSED 'Parcelization' as shown on Figures 5 & 6 so people can clearly identify:
  - Where do I live in relation to the project?
    - (OR, "show me where the Developer touched you?")
    - This allows people to clearly see all kinds of BASELINE information you won't have to explain to them (because you already did)!
  - How far is the Project (and at what potential density) **from me** (or anyone else).
    - **People are usually ONLY interested in themselves, SO MAKE IT EASIER for them to see, touch and understand this relationship.**
- What are the immediate and long term nature of the "Alternative Access Points" shown connecting to Argonaut (west side) and two connections to Fowler Road to the northeast and southeast and "Tullis Mine Road" shown on Figure 6 and (and not clearly) described on Page 6 of the NOP?
  - Perhaps a RED ARROW showing the 4 proposed "General Circulation" access points and a small RED ARROW for SE Fowler "Emergency" access on Figure 6.
  - Also a long red arrow on South Fowler to show where the "Minor widening" would take place (IE: Anywhere <18' wide per Fire Regs).
    - These people should know this information and some may welcome better access to their property, and/or realize there are a few places where this will require some major construction at stream crossings.
- Maybe just maybe a completed "**Initial Study**" for all the reasons stated above and to validate the decision to do an EIR and supplement the information. This is NOT a new request as I suggested it last week in my e-mail to the above addressees. Sadly, your Supervisor used and the Board of Supervisors appears to support the "Guidelines don't require it" excuse to make your job harder and the Public a little less informed, therefore ignorant and angrier due to a lack of information.
  - Not what the process should generate!
- Do an audio if not a video recording of this meeting as it will give you an accurate record of the proceedings and an opportunity to correctly document concerns if notes miss them.
  - Don't trust electronics and take notes also!
    - All about CYA. (Can You Articulate!)

CEQA is pretty clear in the intent to provide a full public disclosure of "Potentially Significant Environmental Impacts" through the review process. Yes, the EIR process **should** do that,

but by providing MORE information up front, I guarantee the "Process" will go much better with fewer surprises by sticking to the ***intent*** and rising above the ***minimum*** requirements of the Law and Guidelines. So far, this process has been "informationally deficient" and is off to a shaky start.

Good luck and see you tomorrow.

Sincerely,

Ken Greenwood  
Straight Shot Consulting  
530-306-6390 (C) [krq@d-web.com](mailto:krq@d-web.com)

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

RECEIVED

AUG 19 2019

NATIVE AMERICAN HERITAGE COMMISSION  
Cultural and Environmental Department

1550 Harbor Blvd., Suite 100

West Sacramento, CA 95691 Phone (916) 373-3710

Email: [nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)Website: <http://www.nahc.ca.gov>

Twitter: @CA\_NAHC

EL DORADO COUNTY  
PLANNING AND BUILDING DEPARTMENT

August 13, 2019

Tom Purciel  
El Dorado County  
2850 Fairlane Court  
Placerville, CA 95667

RE: SCH# 2019071041 Dorado Oaks Tentative Subdivision Map (County File No. Z19-0005/TM18-1538/PD19-0005), El Dorado County

Dear Mr. Purciel:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subs. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
  - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
  
8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
  
9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
  
10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
  - a. Avoidance and preservation of the resources in place, including, but not limited to:
    - i. Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i. Protecting the cultural character and integrity of the resource.
    - ii. Protecting the traditional use of the resource.
    - iii. Protecting the confidentiality of the resource.
  - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
  - e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
  - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
  
11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
  - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
  - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf)

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

### NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
  - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email  
address: [Nancy.Gonzalez-Lopez@nahc.ca.gov](mailto:Nancy.Gonzalez-Lopez@nahc.ca.gov).



Nancy Gonzalez-Lopez  
Staff Services Analyst

cc: State Clearinghouse



GAVIN NEWSOM  
GOVERNOR



JARED BLUMENFELD  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

2019 AUG 16 PM 3:41

**Central Valley Regional Water Quality Control Board**

RECEIVED  
PLANNING DEPARTMENT

14 August 2019

Tom Purciel  
El Dorado County  
2850 Fairlane Court  
Placerville, CA 95667

**CERTIFIED MAIL**  
7014 2120 0001 4292 4379

**COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, DORADO OAKS TENTATIVE SUBDIVISION MAP (COUNTY FILE NO. Z19-0005/TM18-1538/PD19-0005) PROJECT, SCH#2019071041, EL DORADO COUNTY**

Pursuant to the State Clearinghouse's 29 July 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Dorado Oaks Tentative Subdivision Map (County File No. Z19-0005/TM18-1538/PD19-0005) Project, located in El Dorado County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

**I. Regulatory Setting**

**Basin Plan**

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER



approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/](http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/)

### **Antidegradation Considerations**

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:

[https://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/sacsjr\\_201805.pdf](https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf)

In part it states:

*Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*

*This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

## **II. Permitting Requirements**

### **Construction Storm Water General Permit**

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State

Water Resources Control Board website at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml)

### **Phase I and II Municipal Separate Storm Sewer System (MS4) Permits<sup>1</sup>**

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/storm\\_water/municipal\\_permits/](http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/)

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/phase\\_ii\\_municipal.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml)

### **Industrial Storm Water General Permit**

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/storm\\_water/industrial\\_general\\_permits/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml)

### **Clean Water Act Section 404 Permit**

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on

---

<sup>1</sup> Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

**Clean Water Act Section 401 Permit – Water Quality Certification**

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at:

[https://www.waterboards.ca.gov/centralvalley/water\\_issues/water\\_quality\\_certification/](https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/)

**Waste Discharge Requirements – Discharges to Waters of the State**

If USACE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at: [https://www.waterboards.ca.gov/centralvalley/water\\_issues/waste\\_to\\_surface\\_water/](https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/)

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at:

[https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2004/wqo/wqo2004-0004.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf)

**Dewatering Permit**

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board’s Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from

excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0003.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf)

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/waivers/r5-2013-0145\\_res.pdf](http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf)

### **Regulatory Compliance for Commercially Irrigated Agriculture**

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program.

There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at:  
[https://www.waterboards.ca.gov/centralvalley/water\\_issues/irrigated\\_lands/regulatory\\_information/for\\_growers/coalition\\_groups/](https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/) or contact water board staff at (916) 464-4611 or via email at [IrrLands@waterboards.ca.gov](mailto:IrrLands@waterboards.ca.gov).
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently \$1,277 + \$8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at [IrrLands@waterboards.ca.gov](mailto:IrrLands@waterboards.ca.gov).

**Limited Threat General NPDES Permit**

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:

[https://www.waterboards.ca.gov/centralvalley/board decisions/adopted orders/general orders/r5-2016-0076-01.pdf](https://www.waterboards.ca.gov/centralvalley/board%20decisions/adopted%20orders/general%20orders/r5-2016-0076-01.pdf)

**NPDES Permit**

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:

<https://www.waterboards.ca.gov/centralvalley/help/permit/>

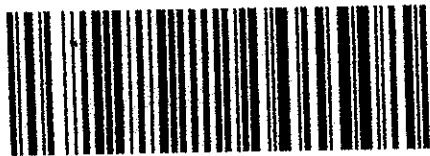
If you have questions regarding these comments, please contact me at (916) 464-4812 or [Jordan.Hensley@waterboards.ca.gov](mailto:Jordan.Hensley@waterboards.ca.gov).



Jordan Hensley  
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research,  
Sacramento

**CERTIFIED MAIL**



7014 2120 0001 4292 4379

SWRCB  
11020 Sun Center Drive Suite 200  
Rancho Cordova, CA 95670



U.S. POSTAGE >> PITNEY BOWES

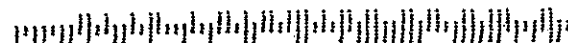


ZIP 95814 \$ 006.95<sup>0</sup>  
02 1W  
0001390308 AUG 14 2019

Tom Purciel  
El Dorado County  
2850 Fairlane Court  
Placerville, CA 95667

**RECEIVED**  
AUG 16 2019  
EL DORADO COUNTY  
PLANNING AND BUILDING DEPARTMENT

9566784100 C005



Tom Purciel

Aug. 10, 2019

Planning Services Division  
2850 Fairlane Ct.  
Placerville, CA 95667

**Dorado Oaks**    Fire Evacuation Routes    Comment

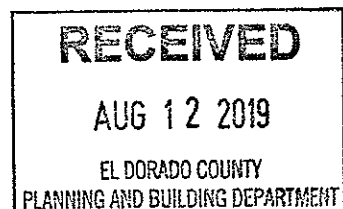
A large part of the county can be expected to use westbound Pleasant Valley Rd. in the case of a wildfire. Dorado Oaks will compound the congestion. Further, evacuees from Dorado Oaks would have to turn left, west, into a panicked stream of traffic. Under the best of circumstances it is difficult to turn left onto that road from the south side of Diamond Springs. Just try it. In an emergency it will cause a potentially fatal traffic jam. Traffic circles or traffic lights will not mitigate this obvious hazard. Nor will the proposed cut-off between Missouri Flat and Highway 49. The EIR should incorporate solutions for lessons learned from the deadly Camp Fire evacuation.

Dorado Oaks must create a secondary evacuation route from its southern end to connect to Highway 49, perhaps via Union Mine Rd., to avoid Diamond Springs altogether.

Thank you,



Harry Mercado  
4280 Patterson Dr., #54  
Diamond Springs, CA 95619



# Craig Silva

---

Diamond Springs, CA

**8-1-19**

El Dorado County Planning Department  
El Dorado County Board of Supervisors  
Stonehenge Springs LLC

**Dorado Oaks:** As planned, is not what the area needs for new housing at all. The proposed high-density development will cause major significant problems. Most notably the following items:

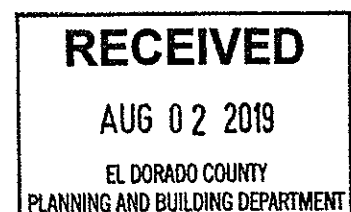
- **Fire Danger:** Recent California wildfires have demonstrated that dense housing clusters in this type of area are very susceptible to mass damage as there is not enough separation between buildings to create defensible spaces.
- **Urban Sprawl:** This type of high-density development is exactly what people in the area have come here to escape from.
- **Traffic Congestion:** There would be way too much traffic from this many residences entering onto an already over-crowded two lane road.

However, if this housing development proposal were to be modified to a minimum residential lot size of 1 acre, it should be welcomed with red-carpet treatment.

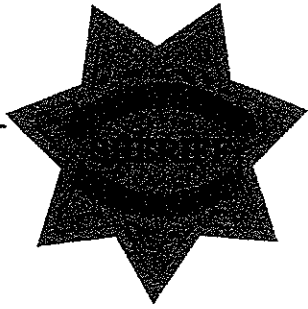
Sincerely,



Craig Silva







JOHN D'AGOSTINI

SHERIFF - CORONER - PUBLIC ADMINISTRATOR  
COUNTY OF EL DORADO  
STATE OF CALIFORNIA

REPLY TO:

HEADQUARTERS  
300 FAIR LAKE  
PLACERVILLE  
CA 956  
530 621-56  
FAX 626-80

JAIL DIVISION  
300 FORTY ROAD  
PLACERVILLE  
CA 956  
530 621-60  
FAX 626-94

TAHOE PATROL  
1360 JOHNSON BLVD., SUITE 1  
SOUTH LAKE TAHOE  
CA 961  
530 573-30  
FAX 544-68

TAHOE JAIL  
1051 AL TAHOE BLVD.  
SOUTH LAKE TAHOE  
CA 961  
530-573-30  
FAX 541-67

August 19, 2019

El Dorado County Planning Department  
C/O Associate Planner, Tom Purciel  
2850 Fairlane Court  
Placerville, CA  
(530) 621-5355

Mr. Purciel,

This last week I was provided a notice from the Planning Department that an Environmental Impact Report (EIR) is going to be prepared for the Dorado Oakes Tentative Subdivision. The notice was addressed to, "Interested Parties." My Office did not initially receive the notification until we were made aware of the project through an outside party and conducted research on the matter.

The Dorado Oakes Subdivision will add 381 lots to the Diamond Springs area. Based on Point 2 Homes, a web site that calculates demographics for various counties, El Dorado County has a population of 185,826 people with 68,424 households. There is an average of three people per household in the county.

In an attempt to calculate the amount of additional law enforcement officers needed in our Operations Division to accommodate such a population increase, various web sites were researched which included references from the FBI, the International City/County Management Association, and the International Chiefs of Police Association. Using the per capita model, it was discovered agencies typically use between 1.8 to 2.6 officers per 1000 residents; however, there is no national standard.

Page 2 of 2  
August 19<sup>th</sup>, 2019

According to EDSO's 2018 Patrol Allocation Study, the per capita staffing model, "typically recommends 1.0 – 1.5 officers per thousand capita."

It should be noted that the per-capita model is not considered as reliable as other models such as crime trend reports, minimum-manning levels, authorized/budgeted levels, and workload-based models to make staffing decisions; however, the per capita model is commonly used by agencies due to the ease in making calculations. For the purposes of this initial report, the per capita model was used, however, a more reliable study may be required should this proposed project be undertaken. In addition, this report only addresses the increase of law enforcement officers needed for such an increase in population and not the supporting staffing requirements.

Based on the above, with the addition of 381 new residences that are proposed by the Dorado Oaks Tentative Subdivision, at an average of 3 people per household, the subdivision would increase our population by 1,143 people. Using the per capita model from 1.0 to 2.6 officers per 1000 residents, the Dorado Oaks Tentative Subdivision would require anywhere from 1.14 to 2.97 additional deputies with a rough average of 2.6 deputies.

I request that my Office be included and be given the opportunity to provide input in future discussions involving this project.

Respectfully,



JOHN D'AGOSTINI  
Sheriff ~ Coroner  
Public Administrator

**Subject:** Re: Scoping meeting comment card Dorado Oaks  
**Date:** Tuesday, August 20, 2019 at 11:13:30 PM Pacific Daylight Time  
**From:** Michelle Smira Brattmiller <michelle@mmsstrategies.com>  
**To:** Wesley Fagundes <Wesley@mmsstrategies.com>

Please print

Sincerely,

Michelle Smira  
President, MMS Strategies  
520 Capitol Mall, Suite 280  
Sacramento, CA 95814  
916.479.3687 C

On Aug 20, 2019, at 8:00 PM, DANIEL ENZLER <[danielenzler@comcast.net](mailto:danielenzler@comcast.net)> wrote:

----- Original Message -----

From: DANIEL ENZLER <[danielenzler@comcast.net](mailto:danielenzler@comcast.net)>  
To: [planning@edcgov.us](mailto:planning@edcgov.us)  
Date: August 20, 2019 at 7:58 PM  
Subject: Scoping meeting comment card Dorado Oaks

After attending tonight's meeting, I have two areas of concern regarding Dorado Oaks.

First, the increased traffic that will undoubtedly impact Pleasant Valley Road, Fowler Lane, and Patterson Drive is worrisome. Pleasant Valley is already at a standstill during commute times as is Missouri Flat Road. The developer's rep estimated about 1,200 people will occupy the development at buildout. so, how much more congestion is the County willing to allow? Is there a limit?

Second, how will Diamond Springs look once this project is completed? The developer's rep was not aware or did not seem concerned about demolishing the old brick home that sits at the end of China Garden Road. It is the only building in that shopping center that has any historic value. While it may be currently sitting empty, it could be restored and add to look and feel of Main Street. The little frosty was also dismissed by the rep as being of little value. While that may be true, it appears like the developer, with the County's blessing, is cramming a cookie-cutter tract in to a place that offers little if any benefit to those already living there, while at the same time paving over the very thing that make our county unique and special.

Thank you for your time. Sincerely, Daniel Enzler



**Subject:** Fwd: [dorado\_oaks] Diamond Springs project  
**Date:** Monday, August 26, 2019 at 8:24:03 AM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller

----- Forwarded message -----

From: **Bette Lasher** <[blasher1@sbcglobal.net](mailto:blasher1@sbcglobal.net)>  
Date: Sun, Aug 25, 2019 at 3:22 PM  
Subject: [dorado\_oaks] Diamond Springs project  
To: [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us) <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

After being at the meeting August 20,2019, am still extremely concerned about the volume of housing units proposed. The impact on a small historical community will destroy it completely.

Traffic is already terrible and further studies should be done regarding adding the proposed amount to highway 49 and Fowler Lane, current residents will be he dramatically affected by this. What about traffic on Missouri Flat Road from Highway 49 to Walmart, it is two lane and a mess now. There was no mention of how ou were going to address the streets on the north side of highway 49, Geroges Alley will be affected as will Center Lane.

Also, the impact on the water shed to Martinez Creek will further destroy wild lands. If a fire starts in that area and heads north, this could be a disaster. Has anyone investigated the crime level in the area and what that might bring?

Since there wasn't any notice prior the the July 29,10`9 package sent out, hope that the county will provide current information to the citizens as you proceed. We do need to know and not have it dropped on us suddenly. I truly hope that you will keep the residents informed as hate to see this county look like San Jose and the Bay area. It is bad enough in Folsom seeing the hills destroyed.

Bette Lasher (Elizabeth)  
3760 Georges Alley  
Diamond Springs, CA 95619  
[blasher1@sbcglobal.net](mailto:blasher1@sbcglobal.net)

cc: District Three Supervisor

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: [dorado\_oaks] Re: Dorado Oaks NOP has no Initial Study Attached or Population/Dwelling Unit estimates included  
**Date:** Monday, August 26, 2019 at 8:24:16 AM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller

----- Forwarded message -----

From: **Ken Greenwood** <[krge@d-web.com](mailto:krge@d-web.com)>  
Date: Sun, Aug 25, 2019 at 7:06 PM  
Subject: [dorado\_oaks] Re: Dorado Oaks NOP has no Initial Study Attached or Population/Dwelling Unit estimates included  
To: Rommel Pabalinas <[rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)>  
Cc: Tom Purciel <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>, edc cob <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>

RE: Response to your e-mail of August 6, 2019

Dear Rommel,

I have serious issues with your response regarding the need for an Initial study and failure to provide an estimate in the number of, or at least the RANGE of "Dwelling Units" that may be associated with the Project. Please be advised I will be requesting the Board direct Planning to keep the "Comment Period" open and that Planning make some demonstrable effort to educate the public via the provision of an "Initial Study" and clearer "Project Description" be provided for Public Review and participation in the Scoping Process.

**Initial Study:** Thank you for your interpretation of Section 15063(a) that an Initial Study is not REQUIRED. OK, fine. Strict reading is what it is. But isn't is the overall goal of CEQA and good planning procedure to do an initial analysis of the project so that Agencies and especially the PUBLIC have adequate information to help guide the SCOPING of said EIR as well as general information. You have done an extreme disservice to the Public in this case. The time and \$\$ possibly saved by this approach really paid off thus far and especially at the Scoping "Meeting" on August 20, which was an abysmal failure that technically met the "word" of the law, but clearly failed in the intent.

**Estimated Dwelling Units:** Without an estimated RANGE of potential number or at least a range of potential Dwelling Units gives no real meaningful baseline to analyze the Project? This number/range should have been calculated and included in the Project Description in the NOP. It was not and you are still resisting disclosure of this Number/Range. Why are you withholding this information? The only clear appearance of this resistance that I and members of the public can conclude, is you don't want people to understand the scope of and Potentially Significant Environmental Impacts associated with this project. Please don't suggest that I calculate it as that is not my job, it is the Planning Department's task.

Really we have the same answer to both questions; it appears that Planning is deliberately withholding information from the Public who are ultimately paying the bill for this project. (Please spare me the "Fees Offset the Staff Time" argument as we know they don't pay the true costs such as Sick pay, Health Coverage, PERS etc). Additionally there is the intent of

CEQA to encourage public participation found in and around CEQA Section 21,000-21,006 and Guidelines 15,001-15,006. So far a really good case could be made that Planning Staff is not meeting the intent, and perhaps Statutory Requirements of the cited Sections. Regardless, it appear disingenuous at best. Why? Why not provide this information so Agencies and the Public can participate in this process with needed information.

I anxiously await your answer to these two questions. Better yet, provide an Initial Study and Dwelling Unit Range and we can get on with the openness we deserve. We have wasted 2 weeks with this resistance to a logical and needed provision of information to the Public Review Process.

Thank you,

Ken Greenwood  
Straight Shot Consulting  
530-306-6390 (C) [krq@d-web.com](mailto:krq@d-web.com)

---

**From:** "Rommel Pabalinas" <[rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)>  
**To:** "Ken Greenwood" <[krq@d-web.com](mailto:krq@d-web.com)>  
**Cc:** "Tom Purciel" <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>, "edc cob" <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>  
**Sent:** Tuesday, August 6, 2019 9:27:48 AM  
**Subject:** Re: Dorado Oaks NOP has no Initial Study Attached or Population/Dwelling Unit estimates included

I am responding to your inquiry below which was also sent via a separate email.

Regarding the absence of the Initial Study, per CEQA Guidelines 15063(a): Following preliminary review, the Lead Agency shall conduct an Initial Study to determine if the project may have a significant effect on the environment. If the Lead Agency can determine that an EIR will clearly be required for the project, an Initial Study is not required.

The Planning Department has determined that the project would require an Environmental Impact Report (EIR). Similarly, the previous version of the project (Stonehenge Springs Tentative Subdivision Map), which was withdrawn and replaced with this project, was also determined to have an EIR.

Your comments on the project regarding the units, staff will accept these comments and will be analyzed as part of the EIR. Should you have any additional comments, please send to the designated email for the project.

Lastly, a minor correction, the assigned planner is Tom Purciel not Dave Purciel.

On Mon, Aug 5, 2019 at 4:32 PM Ken Greenwood <[krq@d-web.com](mailto:krq@d-web.com)> wrote:

Dear Planning,

I am in receipt of the Notice of Preparation for the Dorado Oaks Subdivision via e-mail notice of July 29, 2019.

After review of the Document and attachments, I notice the following:

> The Project Description has no hard information on the potential number of "Dwelling



Units" the Project may encompass.

- Yes, there are 156 Single Family and 225 Multi-Family Lots proposed. However, it is unclear how many "Dwelling Units" (and therefore population/trips per day generation, etc.) there will be in the Project.
- You have not done any math on the # of units possible on the 225 "Multi-Family" lots. Therefore the Public cannot possibly understand, analyze nor quantify the Impacts of the Project. **What are these numbers?**

**ADDITIONALLY (and subject of my August 2, 2019 E-mail request):**

> I am wondering where the "Initial Study" (IS) for the Project is located? CEQA Process suggests the IS be attached to the NOP so that the public, Responsible and Effected Agencies would have documentation of the potentially significant Environmental Impacts of the Project identified by the Lead Agency triggering the need for the EIR. There is a Scoping Meeting on **August 20** that will be facilitated greatly by the provision of this IS to me and the Public in general.

Without this document being available, the Public is effectively left out of the Planing Process as the rational for the EIR is triggered by the Initial Study that was prepared some time ago for the "Early Consultation" by Agencies.

> **Where is the Initial Study for this Project?**

Therefore: **Please recirculate your notice** and include the Initial Study and Dwelling Unit/Population estimations so the Public and Agencies may be better informed and involved in the Planning Process as described in CEQA and the CA Government Code.

> **An extension of the Comment Period is appropriate given this SEVEN DAY delay in providing this vital information to the Public.**

Thank you for your immediate response to this request.

Sincerely,

Ken R. Greenwood

Straight Shot Consulting  
530-306-6390 (C) [krq@d-web.com](mailto:krq@d-web.com)

CC: Clerk of the Board of Supervisors

--

=====  
**Rommel (Mel) Pabalinas, Principal Planner**

**El Dorado County Community Development Services  
Planning and Building Department  
Planning Division  
2850 Fairlane Court  
Placerville, CA 95667  
Main Line 530-621-5355  
Direct line 530-621-5363  
Fax 530-642-0508**

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

--  
**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: [dorado\_oaks] Dorado Oaks Comment Period Extension due to poor handling of "Public Information/Scoping Meeting"

**Date:** Monday, August 26, 2019 at 8:24:47 AM Pacific Daylight Time

**From:** Tom Purciel

**To:** Michelle Smira Brattmiller

----- Forwarded message -----

From: **Ken Greenwood** <[krge@d-web.com](mailto:krge@d-web.com)>

Date: Mon, Aug 26, 2019 at 1:52 AM

Subject: [dorado\_oaks] Dorado Oaks Comment Period Extension due to poor handling of "Public Information/Scoping Meeting"

To: edc cob <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>

Cc: Tom Purciel <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>, Rommel Pabalinas <[Rommel.Pabalinas@edcgov.us](mailto:Rommel.Pabalinas@edcgov.us)>

Dear Board of Supervisors,

The Dorado Oaks Subdivision and Rezone application was the subject of a "Public Information/Scoping Meeting" last Tuesday August 20 at the Fireman's Memorial Hall in Diamond Springs. The 'meeting' was incredibly non-informative and an abuse of process according to many who attended and published substantive comments on Social Media. Additionally, I am told that Planning Staff decided to start the meeting at approximately 5:30 because so many people showed up... Really? Who does that for a meeting widely advertised as beginning at 6:00 PM?

For this and other reasons detailed below, I and others request the "Comment Period" for the EIR/NOP Scoping process be extended. It would also behoove the Planning Department to hold another meeting ASAP to facilitate this process. The Public has been dis-served by the current process. It turned into the "Cluster" I warned you about two weeks ago.

I have already been told there will be "plenty of opportunities to comment in the future" on the adequacy of the Environmental Documentation and such. Indeed there will be opportunities to comment on the Draft EIR, the Final EIR and of course the Planning Commission and Board Public Hearings during consideration of the Project itself. The HUGE problem here as those events are 1, 2 or more years from now and that time factor allows a lot to be "etched in stone" from so many perspectives. "Projects" tend to create and attain a life of their own and "Public Comment" at later points in time is purely REACTIONARY to some fairly obvious mistakes in analysis of "Environmental Impacts" that could be avoided by EARLY INVOLVEMENT by the public and agencies that may be driven by their management or Governing Boards based on Public concern from their constituents.

My whole point is that in the Planning Process required by State Law works better with MORE information and public involvement vs less! You have seen "angry mobs with torches and pitchforks" show up for Hearings and you know that most of their concerns "shoulda and coulda" been dealt with MUCH earlier in the Process had they been informed and involved in the project vs response and REACTION at the hearing or elsewhere LATER in the process. That is what the CEQA Process is supposed to do and when done correctly and with honest attempts to foster public involvement, Projects go through the process smoother and some

really good ideas can be included BEFORE momentum is attained.

Additionally there is the intent of CEQA to encourage public participation found in and around CEQA Section 21,000-21,006 and Guidelines 15,001-15,006. So far a really good case could be made that Planning Staff is not meeting the intent, and perhaps Statutory Requirements of the cited Sections. Regardless, it appear disingenuous at best and there are several comments in Social Media that the Planning Department was just going through the motions. I would have to agree and add that they hardly attained the minimal motions. Is there any wonder El Dorado County Land Use Decisions are the subject of so many SUCCESSFUL lawsuits? It's quite clear to me (and obviously the Courts!).

Here is the NOP/Info Meeting as "Advertised" by EDCo Planning:

[https://edcgov.us/Government/planning/public%20notices/Documents/2019/20190729\\_Dorad oOaks\\_NOP.pdf](https://edcgov.us/Government/planning/public%20notices/Documents/2019/20190729_Dorad oOaks_NOP.pdf)

Some specific issues:

- The Meeting was advertised to be from 6-8 PM. As above and below, people were very confused as there was no PA system to allow anyone to EFFECTIVELY communicate as the room was extremely noisy and there was little or no assistance from either Planning Staff or the Project Applicants to guide people to the various "Break Out Tables" for more specific information.
- The meeting actually was started at approximately 5:30 "because so many had already showed-up" as justification. That is simply unfathomable and a disservice to all in attendance. At 5:55 I arrived and there were 20+ people in line at the sign in table and more coming in.
- The Planning Department did not take my heartfelt and professional advice to video or audio record the meeting, provide a Power Point presentation or paper maps showing the project and adjacent parcelization so people could ask and see "How close am I to the Project." "Where are the access points?" "How many Dwelling Units? (To gauge the traffic impacts and such.) NONE of that was provided in any effective way. The people at the "Land Use" table were unable to answer that question.
  - When I asked that SAME QUESTION in an e-mail August 5, I received a response as follows: **"Your comments on the project regarding the units, staff will accept these comments and will be analyzed as part of the EIR."** Seriously? That is information that should be in the "Project Description" that should have been defined once the Application was considered "Complete" by Planning Staff back in November 2018!
- The "Break Out Tables" had no indication above eye level describing what was going on at that table. The tables each had an 8 1/2 X 11 paper with maybe 40 point type taped to the edge of the table. As it was a "Standing Room Seating" no one could actually see these signs and therefore most had no idea of where to go for information. The "Signs" should have been MUCH BIGGER and attached to the wall above the tables.
- Why was Craig Sandberg (the applicant's Attorney) giving the "Project Overview" (that really wasn't a "Project Overview") and more of a "General Plan Designation and Zoning are in place, the project has been considered previously" and inferred that it is essentially a done deal at this point... Again I can only say, **SERIOUSLY?** Who does

that? I was appalled as were a number of people in the room.

Ah!

- There was one bright spot and that was the "CEQA Flowchart" (that I just can't seem to find anywhere else) showing the various CEQA steps AND the "Local Agency" hearings included. As there was no staff at the graphic, so I stood near it and provided clarification as to "We are here in the process at this time." People really appreciated that they were getting some "hard facts" they said were not being provided elsewhere in the room.

Some comments from Facebook (El Dorado County Chat) after the meeting: (One of the Posts have 450 Comments, several have 100+ and many of them are actually cogent and thoughtful. Some are people who sadly learned little or nothing at the meeting regarding process, which SHOULD have been explained at the beginning of the meeting.)

> "That meeting was not really helpful, and so difficult to even hear anyone. It's too bad a lot of people attended and would have been nice had it been better organized."

> "Yeah it wasn't great. However I do think it was more about fielding complaints and getting back with answers. So responsible just poorly planned especially for a planning committee"

> "Nobody gets to vote on it, and that's part of the problem. They seek public input, but the impression left at Tuesday's meeting was that it doesn't matter what the public thinks, even if 90% of the residents of the area oppose this development, it's going to happen. Too much money to be made by the developer and the county in terms of new tax revenues, the public's opinion means nothing."

> "We wrote Comment cards but we heard that no one's going to pay attention to them. So who do we send our email or letter to that we know would count? I was also told that if you signed a petition it counts as one comment. This whole thing was maddening. There was no questions and answers. I never got any answers about my house with the red line going through it."

> There's a Board of Supervisors meeting on Tuesday at nine sharp. I am definitely going to go there because I went to the meeting at the fire department and I got absolutely no answers no help. I am very distraught right now. I moved in this house when I was 39 and now I'm 73 and I'm thinking where am I going to go??

These don't sound like people who got the message at the Scoping Meeting... Why? BECAUSE THEY DIDN'T get the message as it was poorly presented, if at all.

As a former Planner who conducted my share of such meetings, it was really hard to watch it so poorly done. I even gave Staff some pre-meeting advice and ideas that would have REALLY made a difference. Sadly it was not to be.

Thank you for consideration of my request to extend the comment period. Somebody needs to do something about the management of this project.

Sincerely,

Ken Greenwood  
Straight Shot Consulting  
530-306-6390 (C) [krq@d-web.com](mailto:krq@d-web.com)

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: Fw: Dorado Oaks Proposal  
**Date:** Monday, August 26, 2019 at 8:49:02 AM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller

----- Forwarded message -----

**From:** Planning Department <[planning@edcgov.us](mailto:planning@edcgov.us)>  
**Date:** Mon, Aug 26, 2019 at 8:40 AM  
**Subject:** Fwd: Fw: Dorado Oaks Proposal  
**To:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Cc:** Rommel Pabalinas <[rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)>

----- Forwarded message -----

**From:** michelle hansen <[michelleh2294@yahoo.com](mailto:michelleh2294@yahoo.com)>  
**Date:** Sun, Aug 25, 2019 at 11:30 PM  
**Subject:** Fw: Dorado Oaks Proposal  
**To:** [planning@edcgov.us](mailto:planning@edcgov.us) <[planning@edcgov.us](mailto:planning@edcgov.us)>  
**Cc:** [bldgdept@edcgov.us](mailto:bldgdept@edcgov.us) <[bldgdept@edcgov.us](mailto:bldgdept@edcgov.us)>

----- Forwarded Message -----

**From:** michelle hansen <[michelleh2294@yahoo.com](mailto:michelleh2294@yahoo.com)>  
**To:** [bosthree@edcgov.us](mailto:bosthree@edcgov.us) <[bosthree@edcgov.us](mailto:bosthree@edcgov.us)>  
**Cc:** [bosfour@edcgov.us](mailto:bosfour@edcgov.us) <[bosfour@edcgov.us](mailto:bosfour@edcgov.us)>; [bosfive@edcgov.us](mailto:bosfive@edcgov.us) <[bosfive@edcgov.us](mailto:bosfive@edcgov.us)>  
**Sent:** Sunday, August 25, 2019, 10:35:08 AM PDT  
**Subject:** Fw: Dorado Oaks Proposal

----- Forwarded Message -----

**From:** michelle hansen <[michelleh2294@yahoo.com](mailto:michelleh2294@yahoo.com)>  
**To:** [bosone@edcgov.us](mailto:bosone@edcgov.us) <[bosone@edcgov.us](mailto:bosone@edcgov.us)>  
**Cc:** [bostwo@edcgov.us](mailto:bostwo@edcgov.us) <[bostwo@edcgov.us](mailto:bostwo@edcgov.us)>  
**Sent:** Sunday, August 25, 2019, 10:32:42 AM PDT  
**Subject:** Dorado Oaks Proposal

Dear Sirs:

First I would like to say that myself and many who attended the meeting on August 20th, were very disappointed and alot of us were mad. This meeting was run so poorly, it was completely insufficient, We were not given a chance to speak and then we heard that the comment sheets we filled out would not be considered,,,so that's why I am writing this letter.

It is my understanding that some of the reports that need to be done , have not been done..EIR mainly.

No one has considered the residents of Diamond Springs that already live in the adjacent neighborhoods, and the huge impact it will have on our homes, and our quality of life..

The infrastructure on Pleasant Valley is not set up for this massive, high density project...It will create huge traffic jams, and not only a fire danger to all that live around here, but a Fire Trap.

Those of us that live in Diamond Springs enjoy and appreciate our small, rural historical town, this project would completely destroy all of that.

This type of invasion of homes, people , and cars and the overcrowding it will cause needs to go somewhere else, where the impact will be less.

Please Don't Let This Happen

Thank you for your time on this matter,

Sincerely,

Michelle Hansen

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.



**Subject:** Dorado Oaks Planned Development  
**Date:** Wednesday, August 21, 2019 at 7:12:12 AM Pacific Daylight Time  
**From:** Mitchell A. Goodis, DDS  
**To:** LudkyFCar@gamil.com, Rascalone@sbcglobal.net, Tiffany@subseasystems.com, SBK@yahoo.com, Michelle Smira Brattmiller, Resposito@mtdemocrat.net, Sue-Taylor@comcast.net, Dave@mtpass.net, Audrey Goodis, Bob and Diana Steele, Phil Hartvig, philip hartvig, bldgdept@edcgov.us, planning@edcgov.us  
**Category:** Dorado Oaks  
**Attachments:** Planning Commission Letter re Dorado Oaks.docx, Dorado Oaks Traffic Management Map.jpg

This note involves an analysis of the planned development known as Dorado Oaks. Please see the attached letter and map detailing my suggestions to the developers, the Planning Commission, and the El Dorado County Board of Supervisors.

As you know, the developers met with members of the community at the Diamond Springs Fire Hall last night. The developer and owner of the land was greeted with shouts of "GO HOME" and "WE DON'T WANT YOU HERE". It went downhill from there.

Relying on maps and 'plans' developed by a group from Chula Vista, the developers, none of whom live anywhere near Diamond Springs (more or less in El Dorado County), propose to rip out the heart of this small town by destroying Deb's Frosty and Diamond Center as well as the homes on the North side of Rt 49 to place a traffic circle in the center of town.

As we all well know, the road through Diamond Springs was not and never can be made to accept the 1000+ cars that will be exiting Dorado Oaks during the morning, afternoon and then evening rush hours! .  
If you made that road two lanes each way, people would be driving on the sidewalks!  
And:  
Missouri Flat Road is already at capacity.

**The issue being that the exit strategy for Dorado Oaks is ill conceived and not functional**

The only acceptable exit proposal would be to exit from the West Side of the Development through planned roads (D STREET) and cut across the undeveloped land (that is zoned HIGH DENSITY RESIDENTIAL) and exit onto State Highway 49 just WEST of the existing Mobile Home Park. The land there is mostly vacant and a traffic circle could easily be built at that location.

Discussions with persons in the know state that the owner of that vacant lot does not want to 'give' permission to build a road through or around his property! .  
Apparently this 'exit strategy' was the original plan from the Dorado Oaks developers. Being turned down by the vacant lot owner, they hired an engineering firm to plan an exit through Diamond Springs, a plan that will create a traffic jam of biblical proportions.

HOWEVER, there is already a High Density Residential development planned for that now vacant lot.

The owners of those two lots need to get together and build a road off of the planned D STREET that would benefit both developers, meld with the TWO PLANNED DEVELOPMENTS and have an acceptable traffic flow through the area. They could meet at Deb's Frosty and discuss what should be done. This could be a Win-Win-Win situation for the two developers and for the town of Diamond Springs.

As I see it, it comes down to a matter of how much who wants to pay whom for rights to have SENSIBLE roads placed for traffic exiting Dorado Oaks.

AGAIN: Destroying Deb's Frosty, Diamond Center, and putting in so much traffic on the road in front of Independence High School is NOT IN THE BEST INTEREST OF THE COMMUNITY AND ITS RESIDENTS.

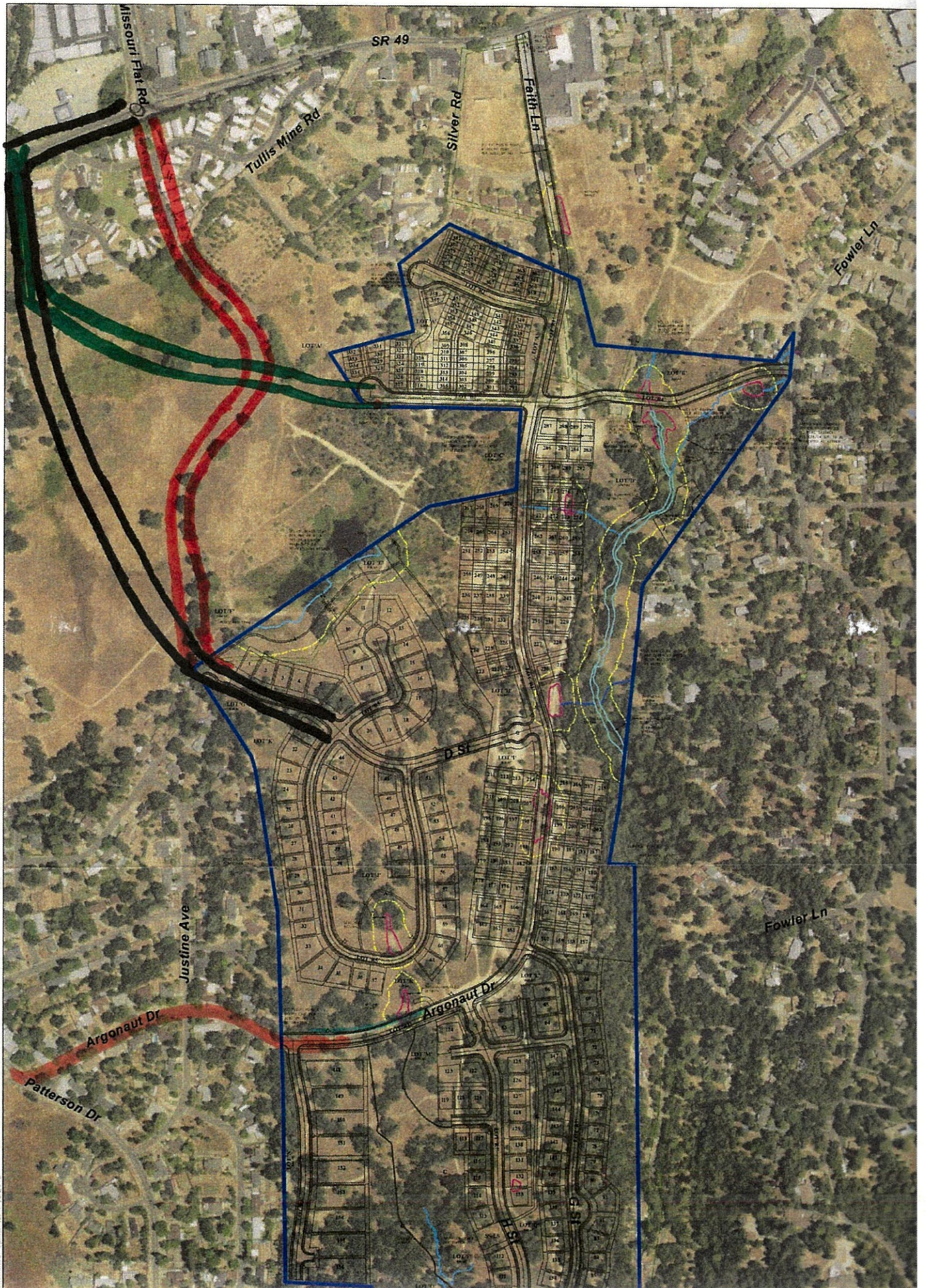
Please realize here that we are talking about not one, but FOUR planned developments. (Two in the heart of Diamond Springs, one across from Diamond Parkway that is under construction and one in El Dorado that will also contribute to the traffic problems) This adds approximately 3,000 cars/day to our local roads. These developers come to town from Marin and Chula Vista and El Cerritos one at a time and propose to clog up our roads, insisting that the traffic flow is manageable. It is not! They higher 'analysts' and pay to conduct 'surveys' that do not take into consideration future planned developments that have not yet been presented to the Planning Commission. They present a very narrow view of the overall situation.

Remember this: Good planning takes everything into consideration and proceeds without destroying towns along the way!

Mitchell A. Goodis, DDS, Lt Col, USAF, DC, (ret)  
Don't forget to brush and floss!  
(530) 647-2368 h  
(530) 306-9340 c



Virus-free. [www.avast.com](http://www.avast.com)



**Subject:** Fwd: [dorado\_oaks] Scoping Meeting Report Diamond Springs. Dated July 29, 2019  
**Date:** Wednesday, August 21, 2019 at 8:49:34 AM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

**From:** Bruce Turner <[turner2000@yahoo.com](mailto:turner2000@yahoo.com)>  
**Date:** Tue, Aug 20, 2019 at 4:30 PM  
**Subject:** Re: [dorado\_oaks] Scoping Meeting Report Diamond Springs. Dated July 29, 2019  
**To:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>

Tom, this does not address my question..

"I have been reading the the information sent to me by your office and I see on page 5 under Project Overview item 2 end of paragraph a missing sentence after the word "and"" would you please email me the competed sentence . Thank you  
Bruce Turner 530 626 0940

- o
- 
- 
- 

On Friday, August 16, 2019, 11:36:41 AM PDT, Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)> wrote:

Hi Bruce,

Below is the entire paragraph from the document containing the text you were unable to view. Note: If you would like to submit comments regarding this project or item(s) that you feel should be addressed in the project's Environmental Impact Report (EIR), please submit written comments on or before the due date shown on the Scoping Meeting notice. Comments should be sent to the project email address: [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us).

Regards,

Tom Purciel - Project Planner

### **Project Overview - Dorado Oaks Tentative Subdivision Map Site**

The Dorado Oaks Subdivision consists of the following entitlement requests:

1. A Rezone of an 8.94-acre portion of the 142.3-acre project site from Residential, Multi-Unit (RM) to Residential, Multi-Unit - Planned Development (RM-PD);
2. A Phased Tentative Subdivision Map, consisting of 14 Large Lots, to subdivide the 142-acre property into 156 single-family lots ranging in size from 6,000 square feet to approximately 24,000 square feet, 225 multi-family lots ranging in size from approximately 2,800 square feet to 8,800 square feet and 20 open space/landscape lots; and
3. A Planned Development Permit to establish an official Development Plan for Dorado Oaks Subdivision that includes modification to specific development standards in the RM zone district for 91 of the proposed multi-family lots on an 8.94-acre portion of the project site.

On Thu, Aug 15, 2019 at 11:29 AM 'Bruce Turner' via PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)> wrote:  
I have been reading the the information sent to me by your office and I see on page 5 under Project Overview item 2 end of paragraph a missing sentence after the word "and" would you please email me the competed sentence . Thank you Bruce Turner 530 626 0940

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: [dorado\_oaks] Traffic Study - Dorado Oaks  
**Date:** Wednesday, August 21, 2019 at 8:58:03 AM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

From: **Ren Strong** <[alewench@gmail.com](mailto:alewench@gmail.com)>  
Date: Tue, Aug 20, 2019 at 8:13 PM  
Subject: [dorado\_oaks] Traffic Study - Dorado Oaks  
To: <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

Hi there -

At the scoping meeting on August 20, one of the gentlemen I spoke with referenced an updated traffic study that was done within the last year. I couldn't find this document on the County's website. Can you please email me a link to the report?

Thanks,  
Ren

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: Scoping meeting comment card Dorado Oaks  
**Date:** Wednesday, August 21, 2019 at 8:58:18 AM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

----- Forwarded message -----

From: **Planning Department** <[planning@edcgov.us](mailto:planning@edcgov.us)>  
Date: Wed, Aug 21, 2019 at 8:03 AM  
Subject: Fwd: Scoping meeting comment card Dorado Oaks  
To: Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>, Rommel Pabalinas <[rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)>

----- Forwarded message -----

From: **DANIEL ENZLER** <[danielenzler@comcast.net](mailto:danielenzler@comcast.net)>  
Date: Tue, Aug 20, 2019 at 7:58 PM  
Subject: Scoping meeting comment card Dorado Oaks  
To: <[planning@edcgov.us](mailto:planning@edcgov.us)>

After attending tonight's meeting, I have two areas of concern regarding Dorado Oaks.

First, the increased traffic that will undoubtedly impact Pleasant Valley Road, Fowler Lane, and Patterson Drive is worrisome. Pleasant Valley is already at a standstill during commute times as is Missouri Flat Road. The developer's rep estimated about 1,200 people will occupy the development at buildout. so, how much more congestion is the County willing to allow? Is there a limit?

Second, how will Diamond Springs look once this project is completed? The developer's rep was not aware or did not seem concerned about demolishing the old brick home that sits at the end of China Garden Road. It is the only building in that shopping center that has any historic value. While it may be currently sitting empty, it could be restored and add to look and feel of Main Street. The little frosty was also dismissed by the rep as being of little value. While that may be true, it appears like the developer, with the County's blessing, is cramming a cookie-cutter tract in to a place that offers little if any benefit to those already living there, while at the same time paving over the very thing that make our county unique and special.

Thank you for your time. Sincerely, Daniel Enzler

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667

(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.





**DIAMOND SPRINGS AND EL DORADO  
COMMUNITY  
ADVISORY COMMITTEE**

Tom Purciel, Associate Planner  
El Dorado Planning Services  
2850 Fair Lane Ct  
Placerville, CA 95667

Re: TM18-1538 – Dorado Oaks

Aug. 16, 2019

Dear Mr. Purciel

At our meeting of August 15, 2019, our committee considered the subject development project for the purpose of providing comments regarding the scope of the EIR for the project, and received input from community members in attendance. Outlined below are the areas of concern that were identified during that discussion, and are items that we feel must be included for analysis within the scope of the environmental impact report:

- Of primary concern is the projects road circulation system, and whether or not it is consistent with the "Diamond Springs and El Dorado Area Mobility and Livable Community Plan". This study was produced in 2014 by the El Dorado County Transportation Commission, and among other things, concerns the traffic circulation system within the Diamond Springs and El Dorado Communities. A critical component of which is the Union Mine Road Connector, which is intended to provide parallel capacity to Pleasant Valley Road between Fowler Lane in Diamond Springs, and ultimately connect all the way to Hwy 49 south of the town of El Dorado. It is imperative that this project be consistent with that plan, and that its street system connect from Fowler Lane all the way to Patterson Drive via Argonaut Way in Deer Park, and that the streets be designed and constructed as relatively continuous collector streets. Because of the anticipated change in character of Argonaut Way from local street to minor collector, we feel that the traffic analysis should include the mitigation measure of incorporating concrete sidewalks on one/or both sides of Argonaut Way to facilitate pedestrian circulation.

- The recreation component of the EIR should analyze the feasibility of incorporating a continuous network of class 1 bike and pedestrian trails should be incorporated into open space areas of the project.
- Pleasant Valley Rd through downtown Diamond Springs is heavily congested, and at times it can be almost impossible to make a left turn onto that road from a side street or driveway encroachment. We think the traffic analysis must clearly address the reality of the congestion in Diamond Springs that the residents have to live with every day. The development of this project as proposed will make Pleasant Valley Road intolerable for existing residents, as well as the future residents of the project. The Committee members were generally supportive of the development of a roundabout at the intersection of Faith Lane and Pleasant Valley Road; however, we do recognize the need to align Faith Lane with China Garden Rd, and the potential that that creates to adversely impact an existing historical brick building. The analysis should investigate the possibility of creating a roundabout, or perhaps an "oval-about" that can help to alleviate traffic congestion without impacting historic buildings.
- The proposed multi-family units of the project are very dense, and it is not clear how adequate access to the units will be provided, both for normal ingress and egress, as well as access by emergency service providers. We request that the traffic analysis look at the project's internal street system and show how circulation will be provided to these units. The number of units should be reduced if necessary so that adequate access can be provided.
- The EIR should analyze the impact of this project on local recreation facilities. A project of this size must have an active recreation public park on the project, for the use of all local residents in order to mitigate its impacts on existing recreation facilities.
- Wild fire safety is extremely important, and recent fires in the State and our community demonstrate just how vulnerable we all are. Projects such as Dorado Oaks throughout this county have been typically designed as "silos" that have limited connections to surrounding street systems to minimize objections from surrounding residents, and thereby increase the project's chances of approval. The problem with this strategy is that it creates extremely hazardous choke-points when evacuations become necessary in the event of a wildfire. We feel that the project as designed creates a hazardous situation during a wildfire, and that the EIR should analyze the internal street system, and determine the possibility of providing additional street connections to both Fowler lane, and the streets within the Deer Park Subdivision. These connections should be full, open, street intersections, and not gated emergency vehicle access points. Multiple avenues of escape from a wild fire have been proven to be critically important, and multiple road connections would enhance safety for all residents. This project should also have a comprehensive fire safe plan that includes vegetation thinning around the project perimeter.
- Many years ago, the Motherlode School District closed down Charles Brown Elementary School due to inadequate student load to justify its continued operation. The development of this project, together with other proposed residential projects within the Diamond Springs area could adversely impact the School District, and require the re-opening of Charles Brown School. This potential impact should be incorporated into the scope of the EIR. We would support the re-opening of the Charles Brown School because we feel that it is important for the children in the Diamond Springs/ El Dorado communities to have a school within their community that they can attend.

Thank you for the opportunity to provide input on the scope of the EIR for this project. We hereby request to receive a copy of the draft EIR, and written notification of any future meetings, or hearings, related to this project.

Sincerely,

Randy Pesses, Chairman

cc: Brian Veerkamp, District III Supervisor

**Subject:** RE: Dorado Oaks EIR  
**Date:** Thursday, August 22, 2019 at 9:41:28 AM Pacific Daylight Time  
**From:** Luke Evans  
**To:** gloriahb@comcast.net  
**CC:** Tom Purciel (tom.purciel@edcgov.us), Michelle Smira Brattmiller  
**Category:** Dorado Oaks

Gloria,

It was good talking with you the other night. I'm also cc'ing Tom Purciel with the County and Michelle Brattmiller with the applicant team to make sure your contact info is in the database for future notices, etc. We are at least several months out from release of the Draft EIR, but if you're in the database, you'll receive notice when it is released.

As for the likelihood of subsurface deposits in the vicinity of the SR-49 intersection site, we would characterize that area as highly sensitive for subsurface cultural resources. Besides the brick building, there is also the cemetery immediately adjacent to the roadway and several other historic structures in the vicinity. The area has clearly been in use for a very long time. Since that aspect of the project would fall under the auspices of Caltrans (work on a State Highway), I would expect that there will be a requirement for a monitoring plan during demolition and excavation. We have yet to fully engage with Caltrans, but I work with them regularly and am familiar with their requirements, and I would expect a rigorous review from them, along with specific requirements for mitigation. Thanks for your interest in the project, and your thoughtful comments.

\*Note the revised phone numbers below\*

Luke Evans  
Senior Managing Associate  
ESA | Environmental Science Associates  
909.809.0508 mobile  
520.789.7301 direct land line

-----Original Message-----

From: Gloria Brown [<mailto:gloriahb@comcast.net>]  
Sent: Thursday, August 22, 2019 4:49 AM  
To: Luke Evans <[LEvans@esassoc.com](mailto:LEvans@esassoc.com)>  
Subject: Dorado Oaks EIR

Hello Mr. Evans,

I'm getting ready to leave town for a couple of days, and I want to make sure to request the EIR for the proposed Dorado Oaks development before I leave. I'm looking forward to reading through it.

I spoke with a co-worker who helped excavate a brewery site in Placerville a few years ago.

He says that they found quite a bit of it in intact buried deposits, even though there were no visible signs on the surface. He expects that if the historic brick buildings are demolished and the road/roundabout are put through there, you should expect to encounter buried deposits in their vicinity, including privies. I hope your team has looked at them from an archaeological perspective as well as an architectural one. Additionally, as I pointed out at the meeting, looking at Diamond Springs as a whole, perhaps as a historic district, the fact that they are the only remaining brick buildings increases their historic significance.

Thank you for sending me the EIR, and thanks for your time listening to my concerns and responding in a thoughtful way.

Sincerely,

Gloria Howat Brown



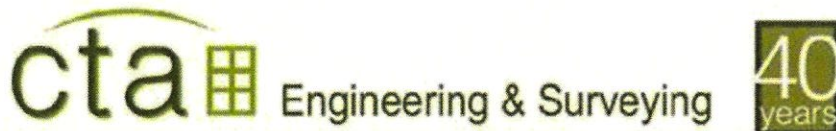
**Subject:** Contacts from Meeting  
**Date:** Thursday, August 22, 2019 at 5:54:32 PM Pacific Daylight Time  
**From:** ballen@ctaes.net  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks  
**Attachments:** image003.jpg

Michelle,

I had a couple of notes from the NOP about people that I wanted to pass along:

- 1) Rose Taylor gave me her contact info at the NOP for Dorado Oaks. She is particularly concerned and affected by the Pleasant Valley Road work that could occur in front of her home. She lives in an old house on the cemetery parcel North of Pleasant Valley Road. The APE (red line as she calls it) goes right through her house. She assumed that meant we might have to take her house or property. I explained that was just the study area and assured her there was very little chance that the project would become a significant issue for her. But I told her we would keep in touch and meet with her to explain things in more detail as we move along so she would not be so fearful of what is happening. We should check in with her from time to time.....I think she has been active on social media if I remember right. She was actually very nice and I think is just very scared. Her phone number is 530-417-1546.
- 2) Terry Tawney suggested we connect a road from our project to Antares Drive. A unique comment that I'm sure he submitted. He seemed like a reasonable guy with some ideas.
- 3) Gloria (no last name) was suggesting an alternate intersection on a skewed angle between Faith Lane and China Garden. She was submitting comments. As I spoke to her further with Luke, it became clear she was very educated. She claims to be a botanist and archaeologist so she was asking a lot of specific questions. Obviously she knows very well what she is looking at and how to critique the project. I didn't sense any animosity, but be aware she is very capable and knowledgeable it appears.

Brian M. Allen, P.E.



Civil Engineering ■ Land Surveying ■ Land Planning

3233 Monier Circle, Rancho Cordova, CA 95742  
P (916) 638-0919 | F (916) 638-2479 | [www.ctaes.net](http://www.ctaes.net)

**Subject:** Fwd: [dorado\_oaks] \*REVISED RECIPIENT\* - Dorado Oaks - SCH# 2019071041  
**Date:** Monday, August 26, 2019 at 12:05:53 PM Pacific Daylight Time  
**From:** Michelle Smira Brattmiller <michelle@mmsstrategies.com>  
**To:** Wesley Fagundes <Wesley@mmsstrategies.com>  
**Attachments:** image002.jpg, ATT00001.htm, Dorado Oaks Comments 8-26-19 - Signed.pdf, ATT00002.htm

Please print

Sincerely,

Michelle Smira  
President, MMS Strategies  
520 Capitol Mall, Suite 280  
Sacramento, CA 95814  
916.479.3687 C

Begin forwarded message:

**From:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Date:** August 26, 2019 at 11:35:01 AM PDT  
**To:** Michelle Smira Brattmiller <[michelle@mmsstrategies.com](mailto:michelle@mmsstrategies.com)>  
**Subject:** Fwd: [dorado\_oaks] \*REVISED RECIPIENT\* - Dorado Oaks - SCH# 2019071041

Note revised recipient for your records.

----- Forwarded message -----

**From:** Moran, Amber@DOT <[Amber.Moran@dot.ca.gov](mailto:Amber.Moran@dot.ca.gov)>  
**Date:** Mon, Aug 26, 2019 at 11:34 AM  
**Subject:** [dorado\_oaks] \*REVISED RECIPIENT\* - Dorado Oaks - SCH# 2019071041  
**To:** [dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us) <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
**Cc:** [State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov) <[State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov)>, [Natalie.Porter@edcgov.us](mailto:Natalie.Porter@edcgov.us) <[Natalie.Porter@edcgov.us](mailto:Natalie.Porter@edcgov.us)>

Mr. Tom Purciel,

Thank you for including the California Department of Transportation (Caltrans) in the Notice of Preparation of a Draft Environmental Impact Report review process for the project referenced above. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

The attached comments are based on the Notice of Preparation of a Draft Environmental Impact Report documents received.

Please provide our office with copies of any further actions regarding this project or future development of the property. We would appreciate the opportunity to review and comment on any changes related to this development.

If you have any question regarding these comments or require additional information, please contact me.

Thank you,

Amber Moran

District 3 - Transportation Planner

Regional Liaison - East

703 B Street

Marysville, CA. 95901

530-634-7624



**DEPARTMENT OF TRANSPORTATION**

DISTRICT 3  
703 B STREET  
MARYSVILLE, CA 95901  
PHONE (530) 741-4233  
FAX (530) 741-4245  
TTY 711  
www.dot.ca.gov/dist3



*Making Conservation  
a California Way of Life.*

August 26, 2019

GTS# 03-ED-2016-00149  
03-ED-50 PM 11.512  
SCH# 2019071041

Tom Purciel, Associate Planner  
El Dorado County  
2850 Fairlane Court, Building C  
Placerville, CA 95667

**Dorado Oaks (Stonehenge Springs)**

Dear Mr. Tom Purciel:

Thank you for including the California Department of Transportation (Caltrans) in the Notice of Preparation of a Draft Environmental Impact Report review process for the project referenced above. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development - Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

The Dorado Oaks project is located southeast of the intersection of Missouri Flat Road and Pleasant Valley Road at the southern terminus of Faith Lane in the Community Region of Diamond Springs. The project proposes approximately 361 single family detached lots. 51 lettered lots (landscape, open space, recreation facilities and clubhouse).

The following comments are based upon the Notice of Preparation of a Draft Environmental Impact Report documents received.

***Traffic Operations – Highway***

The below comments are made on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) and Notice of Public (NOP) Scoping Meeting for the Dorado Oaks Tentative Subdivision Map, dated July 29, 2019.

- Caltrans previously reviewed and commented on the Transportation Impact Study (TIS) – Draft Report for Dorado Oaks, in El Dorado County, CA, dated July 2, 2018, by Prism Engineering prepared for the proposed Project.

- Caltrans also concurred with all the comments documented in the Memorandum to Katie Jackson, PE, TE, and Natalie Porter, PE, TE entitled Peer Review of the Dorado Oaks Transportation Impact Study, dated July 19, 2018, by DKS Associates.
- Caltrans would like an updated TIS as part of the DEIR that addresses all comments made by the County of El Dorado, DKS, and Caltrans.
- The NOP project land use is different than the TIS project land use, dated July 2, 2018. NOP land use and TIS land use should be consistent.
- The DEIR proposes SR 49 (Pleasant Valley Road) at Silver Road/Faith Lane/China Garden Road intersection improvements. Please include an Intersection Control Evaluation, based on Caltrans Policy Directive 13-02 for these intersection improvements.
- Any work within Caltrans right of way may require an encroachment permit.

### ***Model & Forecasting***

Model & Forecasting agrees with comments provided by Traffic Operations - Highway. An updated TIS should be completed in which no build volume on project opening day and no build + project volume on opening day should be added. My comments from the draft TIS review stage should also be included.

### ***Traffic Operations - Encroachment Permits***

The project limit is outside the State highway system right of way. However, If other Caltrans functional units request mitigation measures, then an encroachment permit will be required.

### ***Highway Maintenance***

Work (including sidewalks and roundabouts) will require a Maintenance Agreement, and all work must be maintained by the agency. Construction work must meet Caltrans Standard Plans and Specifications within the State Route 49.

### ***Hydraulics***

This project will potentially result in an increase in peak surface water runoff due to construction of buildings and parking, roads etc. and an increase in impermeable surface area. Peak runoff discharge for the 10 and 100-year storm events to the State's highway right of way and to Caltrans' highway drainage facilities must be reduced to at or below the pre-construction levels. This may be accomplished through the implementation of storm water management Best Management Practices (i.e., detention/retention ponds or basins, sub-surface galleries, on-site storage and/or infiltration ditches, etc.). Once installed, the property owner must properly maintain these systems. The proponent/developer may be held liable for future damages due to

ERROR: undefined  
OFFENDING COMMAND: New

STACK:

/AAAAAC+\*Times  
/FontName

**Subject:** Fwd: Dorado Oaks - SCH# 2019071041  
**Date:** Monday, August 26, 2019 at 12:07:38 PM Pacific Daylight Time  
**From:** Michelle Smira Brattmiller <michelle@mmsstrategies.com>  
**To:** Wesley Fagundes <Wesley@mmsstrategies.com>  
**Attachments:** image002.jpg, ATT00001.htm, Dorado Oaks Comments 8-26-19 - Signed.pdf, ATT00002.htm

Please print

Sincerely,

Michelle Smira  
President, MMS Strategies  
520 Capitol Mall, Suite 280  
Sacramento, CA 95814  
916.479.3687 C

Begin forwarded message:

**From:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Date:** August 26, 2019 at 11:13:17 AM PDT  
**To:** Michelle Smira Brattmiller <[michelle@mmsstrategies.com](mailto:michelle@mmsstrategies.com)>  
**Subject:** Fwd: Dorado Oaks - SCH# 2019071041

For your records. Note: Although Caltrans' comment letter was addressed to Efren in my office, I spoke with Ms. Moran at Caltrans and she assured me future Caltrans correspondence will be sent to my attention per information on the NOP.

----- Forwarded message -----

From: **Efren Sanchez** <[efren.sanchez@edcgov.us](mailto:efren.sanchez@edcgov.us)>  
Date: Mon, Aug 26, 2019 at 11:00 AM  
Subject: Fwd: Dorado Oaks - SCH# 2019071041  
To: Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>

Hello Tom,

I am forwarding you this email from Caltrans.

Thank you,

----- Forwarded message -----

From: **Moran, Amber@DOT** <[Amber.Moran@dot.ca.gov](mailto:Amber.Moran@dot.ca.gov)>  
Date: Mon, Aug 26, 2019 at 10:28 AM  
Subject: Dorado Oaks - SCH# 2019071041  
To: [efren.sanchez@edcgov.us](mailto:efren.sanchez@edcgov.us) <[efren.sanchez@edcgov.us](mailto:efren.sanchez@edcgov.us)>  
Cc: [State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov) <[State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov)>, [Natalie.Porter@edcgov.us](mailto:Natalie.Porter@edcgov.us) <[Natalie.Porter@edcgov.us](mailto:Natalie.Porter@edcgov.us)>

Mr. Efren Sanchez,

Thank you for including the California Department of Transportation (Caltrans) in the Notice of Preparation of a Draft Environmental Impact Report review process for the project referenced above. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

The attached comments are based on the Notice of Preparation of a Draft Environmental Impact Report documents received.

Please provide our office with copies of any further actions regarding this project or future development of the property. We would appreciate the opportunity to review and comment on any changes related to this development.

If you have any question regarding these comments or require additional information, please contact me.

Thank you,

Amber Moran

District 3 - Transportation Planner

Regional Liaison - East

703 B Street

Marysville, CA. 95901

530-634-7624

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 3  
703 B STREET  
MARYSVILLE, CA 95901  
PHONE (530) 741-4233  
FAX (530) 741-4245  
TTY 711  
www.dot.ca.gov/dist3



*Making Conservation  
a California Way of Life.*

August 26, 2019

GTS# 03-ED-2016-00149  
03-ED-50 PM 11.512  
SCH# 2019071041

Efren Sanchez, Associate Planner  
El Dorado County  
2850 Fairlane Court, Building C  
Placerville, CA 95667

**Dorado Oaks (Stonehenge Springs)**

Dear Mr. Efren Sanchez:

Thank you for including the California Department of Transportation (Caltrans) in the Notice of Preparation of a Draft Environmental Impact Report review process for the project referenced above. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development - Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

The Dorado Oaks project is located southeast of the intersection of Missouri Flat Road and Pleasant Valley Road at the southern terminus of Faith Lane in the Community Region of Diamond Springs. The project proposes approximately 361 single family detached lots. 51 lettered lots (landscape, open space, recreation facilities and clubhouse).

The following comments are based upon the Notice of Preparation of a Draft Environmental Impact Report documents received.

***Traffic Operations – Highway***

The below comments are made on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) and Notice of Public (NOP) Scoping Meeting for the Dorado Oaks Tentative Subdivision Map, dated July 29, 2019.

- Caltrans previously reviewed and commented on the Transportation Impact Study (TIS) – Draft Report for Dorado Oaks, in El Dorado County, CA, dated July 2, 2018, by Prism Engineering prepared for the proposed Project.

- Caltrans also concurred with all the comments documented in the Memorandum to Katie Jackson, PE, TE, and Natalie Porter, PE, TE entitled Peer Review of the Dorado Oaks Transportation Impact Study, dated July 19, 2018, by DKS Associates.
- Caltrans would like an updated TIS as part of the DEIR that addresses all comments made by the County of El Dorado, DKS, and Caltrans.
- The NOP project land use is different than the TIS project land use, dated July 2, 2018. NOP land use and TIS land use should be consistent.
- The DEIR proposes SR 49 (Pleasant Valley Road) at Silver Road/Faith Lane/China Garden Road intersection improvements. Please include an Intersection Control Evaluation, based on Caltrans Policy Directive 13-02 for these intersection improvements.
- Any work within Caltrans right of way may require an encroachment permit.

### ***Model & Forecasting***

Model & Forecasting agrees with comments provided by Traffic Operations - Highway. An updated TIS should be completed in which no build volume on project opening day and no build + project volume on opening day should be added. My comments from the draft TIS review stage should also be included.

### ***Traffic Operations - Encroachment Permits***

The project limit is outside the State highway system right of way. However, If other Caltrans functional units request mitigation measures, then an encroachment permit will be required.

### ***Highway Maintenance***

Work (including sidewalks and roundabouts) will require a Maintenance Agreement, and all work must be maintained by the agency. Construction work must meet Caltrans Standard Plans and Specifications within the State Route 49.

### ***Hydraulics***

This project will potentially result in an increase in peak surface water runoff due to construction of buildings and parking, roads etc. and an increase in impermeable surface area. Peak runoff discharge for the 10 and 100-year storm events to the State's highway right of way and to Caltrans' highway drainage facilities must be reduced to at or below the pre-construction levels. This may be accomplished through the implementation of storm water management Best Management Practices (i.e., detention/retention ponds or basins, sub-surface galleries, on-site storage and/or infiltration ditches, etc.). Once installed, the property owner must properly maintain these systems. The proponent/developer may be held liable for future damages due to

Mr. Efren Sanchez  
August 26, 2019  
Page 3

impacts for which adequate mitigation was not undertaken or sustained. In addition, runoff from the proposed project that will enter the State's highway right of way and/or Caltrans drainage facilities must meet all regional water quality control board water quality standards prior to entering the State's highway right of way or Caltrans drainage facilities. Appropriate storm water quality Best Management Practices may be applied to ensure that runoff from the site meets these standards (i.e., is free of oils, greases, metals, sands, sediment, etc.). Once installed, the property owner must properly maintain these systems in perpetuity.

All work proposed and performed within the State's highway right of way must be in accordance with Caltrans' standards and require a Caltrans Encroachment Permit prior to commencing construction. For the encroachment permit application, provide drainage plans and calculations for the pre and post 10 and 100 peak run-off (quantities and velocities) and water quality treatment for all discharge to the State's highway right of way and to Caltrans' highway drainage facilities.

If you have any question regarding these comments or require additional information, please contact Amber Moran, Intergovernmental Review Coordinator for El Dorado County, by phone (530) 634-7624 or via email to [Amber.Moran@dot.ca.gov](mailto:Amber.Moran@dot.ca.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Yount", written in a cursive style.

KEVIN YOUNT, Branch Chief  
Office of Transportation Planning  
Regional Planning Branch—East



**Subject:** Fwd: Request to extend the Dorado Oaks Comment Period and government to government discussion

**Date:** Monday, August 26, 2019 at 2:28:21 PM Pacific Daylight Time

**From:** Tom Purciel

**To:** Michelle Smira Brattmiller

----- Forwarded message -----

From: **Char Tim** <[charlene.tim@edcgov.us](mailto:charlene.tim@edcgov.us)>

Date: Mon, Aug 26, 2019 at 2:26 PM

Subject: Fwd: Request to extend the Dorado Oaks Comment Period and government to government discussion

To: Rommel Pabalinas <[rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)>, Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>

Cc: Tiffany Schmid <[tiffany.schmid@edcgov.us](mailto:tiffany.schmid@edcgov.us)>, Anne Novotny <[anne.novotny@edcgov.us](mailto:anne.novotny@edcgov.us)>

Please see email below that was sent to the BOS.

**Char Tim**

Clerk of the Planning Commission

**County of El Dorado**

Planning and Building Department

2850 Fairlane Court

Placerville, CA 95667

(530) 621-5351 / FAX (530) 642-0508

[charlene.tim@edcgov.us](mailto:charlene.tim@edcgov.us)

----- Forwarded message -----

From: **EDC COB** <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>

Date: Mon, Aug 26, 2019 at 1:59 PM

Subject: Fwd: Request to extend the Dorado Oaks Comment Period and government to government discussion

To: Char Tim <[charlene.tim@edcgov.us](mailto:charlene.tim@edcgov.us)>

FYI

Thank you

Office of the Clerk of the Board

El Dorado County

330 Fair Lane, Placerville, CA 95667

530-621-5390

CONFIDENTIALITY NOTICE: This electronic communication with its contents may contain confidential and/or privileged information. It is solely for the use of the intended recipient(s), except as otherwise permitted. Unauthorized interception, review, use, or disclosure is prohibited and may violate applicable laws including the Electronic Communications Privacy Act. If you are not the intended recipient, or authorized to receive for the intended recipient, please contact the sender and destroy all copies of the communication. Thank you for your

consideration.

----- Forwarded message -----

From: **Wopumnes Tribe** <[tribalcouncil@eldoradonisenanmewuk.com](mailto:tribalcouncil@eldoradonisenanmewuk.com)>

Date: Mon, Aug 26, 2019 at 1:30 PM

Subject: Request to extend the Dorado Oaks Comment Period and government to government discussion

To: The BOSONE <[bosone@edcgov.us](mailto:bosone@edcgov.us)>, The BOSTWO <[bostwo@edcgov.us](mailto:bostwo@edcgov.us)>, The BOSTHREE <[bosthree@edcgov.us](mailto:bosthree@edcgov.us)>, The BOSFOUR <[bosfour@edcgov.us](mailto:bosfour@edcgov.us)>, The BOSFIVE <[bosfive@edcgov.us](mailto:bosfive@edcgov.us)>, <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>

Cc: Fran DeChamp <[francescaduchamp@att.net](mailto:francescaduchamp@att.net)>, Sue Taylor <[Sue-Taylor@comcast.net](mailto:Sue-Taylor@comcast.net)>, Erin Young <[elyoung79@gmail.com](mailto:elyoung79@gmail.com)>, Andrew Mitchell <[530racing@gmail.com](mailto:530racing@gmail.com)>, Nisenan Mewuk <[tribalcouncil@eldoradonisenanmewuk.com](mailto:tribalcouncil@eldoradonisenanmewuk.com)>

District 1 - Supervisor John Hidahl

phone: (530) 621-5650

email:

[bosone@edcgov.us](mailto:bosone@edcgov.us)

District 2 - Supervisor Shiva Frentzen

phone: (530) 621-5651

email:

[bostwo@edcgov.us](mailto:bostwo@edcgov.us)

District 3 - Brian K. Veerkamp

phone: (530) 621-5652

email:

[bosthree@edcgov.us](mailto:bosthree@edcgov.us)

District 4 - Supervisor Lori Parlin

phone: (530) 621-6513

email:

[bosfour@edcgov.us](mailto:bosfour@edcgov.us)

District 5 - Supervisor Sue Novasel

phone: (530) 621-6577

email:

[bosfive@edcgov.us](mailto:bosfive@edcgov.us)

1. The Wopumnes Tribe is the indigenous of El Dorado County Gold Rush and has, traceable sacred sites throughout the area of the proposed development in Diamond Springs.
2. The Wopumnes Tribe requests a government to government discussion regarding this project.
3. Further the Tribe requests that the public be given the proper opportunity to bring their knowledge to the table in an open comment period since there are significant CEQA impacts to this project area.

We are available through this email address to set up a time.

Thank you,

--

Tribal Council,  
Wopumnes Nisenan-Mewuk Tribe of El Dorado County  
[www.RealMiwokTribe.com](http://www.RealMiwokTribe.com)  
PO Box 1712  
Shingle Springs, CA 95682  
530-350-5075

--

CONFIDENTIALITY NOTICE: If you've received this email by mistake please let the sender know and delete it. This communication with its contents may contain confidential and/or legally privileged information. It is solely for the use of the intended recipient(s). Unauthorized interception, review, use or disclosure is prohibited and may violate applicable laws including the Electronic Communications Privacy Act.

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Re: Dorado Oaks EIR  
**Date:** Tuesday, August 27, 2019 at 7:25:17 AM Pacific Daylight Time  
**From:** Gloria Brown  
**To:** Luke Evans, Tom Purciel (tom.purciel@edcgov.us), Michelle Smira Brattmiller  
**Category:** Dorado Oaks

Good morning, Mr. Evans.

Thank you for your prompt response to my concerns about subsurface deposits associated with placing the SR-49 intersection where the brick buildings are. I'm pleased to see that you would characterize this area as highly sensitive.

Another one of my concerns is for the fauna and flora that will be affected by the development. You indicated that there is only one species of concern, a manzanita that you couldn't remember the name of. I contacted a friend who is a retired botanist to see if she knew what it would be. She thinks it would be *Arctostaphylos nissenana*, which has a California Rare Plant Rank of 1B.2 (see link below). You indicated that the species on the property was not listed and is only a "species of concern." Could you please clarify which species is on the property, how many specimens were observed, when the botany survey was done, and the botanist who performed the survey?

Thanks again for your help in my assessment of the significance of the possible impacts this project would generate.

Sincerely,  
Gloria

Link to Eldorado manzanita:  
[https://www.calflora.org/cgi-bin/species\\_query.cgi?where-calrecnum=587](https://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=587)

Gloria,

It was good talking with you the other night. I'm also cc'ing Tom Purciel with the County and Michelle Brattmiller with the applicant team to make sure your contact info is in the database for future notices, etc. We are at least several months out from release of the Draft EIR, but if you're in the database, you'll receive notice when it is released.

As for the likelihood of subsurface deposits in the vicinity of the SR-49 intersection site, we would characterize that area as highly sensitive for subsurface cultural resources. Besides the brick building, there is also the cemetery immediately adjacent to the roadway and several other historic structures in the vicinity. The area has clearly been in use for a very long time. Since that aspect of the project would fall under the auspices of Caltrans (work on a State Highway), I would expect that there will be a requirement for a monitoring plan during demolition and excavation. We have yet to fully engage with Caltrans, but I work with them regularly and am familiar with their requirements, and I would expect a rigorous review from them, along with specific requirements for mitigation. Thanks for your interest in the project, and your thoughtful comments.

\*Note the revised phone numbers below\*

Luke Evans  
Senior Managing Associate  
ESA | Environmental Science Associates  
909.809.0508 mobile  
520.789.7301 direct land line

-----Original Message-----

From: Gloria Brown [mailto:gloriahb@comcast.net]  
Sent: Thursday, August 22, 2019 4:49 AM

To: Luke Evans <LEvans@esassoc.com>  
Subject: Dorado Oaks EIR

Hello Mr. Evans,

I'm getting ready to leave town for a couple of days, and I want to make sure to request the EIR for the proposed Dorado Oaks development before I leave. I'm looking forward to reading through it.

I spoke with a co-worker who helped excavate a brewery site in Placerville a few years ago.

He says that they found quite a bit of it in intact buried deposits, even though there were no visible signs on the surface. He expects that if the historic brick buildings are demolished and the road/roundabout are put through there, you should expect to encounter buried deposits in their vicinity, including privies. I hope your team has looked at them from an archaeological perspective as well as an architectural one. Additionally, as I pointed out at the meeting, looking at Diamond Springs as a whole, perhaps as a historic district, the fact that they are the only remaining brick buildings increases their historic significance.

Thank you for sending me the EIR, and thanks for your time listening to my concerns and responding in a thoughtful way.

Sincerely,

Gloria Howat Brown

**Subject:** RE: Dorado Oaks EIR  
**Date:** Tuesday, August 27, 2019 at 11:45:31 AM Pacific Daylight Time  
**From:** Luke Evans  
**To:** gloriahb@comcast.net, Tom Purciel (tom.purciel@edcgov.us), Michelle Smira Brattmiller  
**CC:** Chuck Hughes  
**Category:** Dorado Oaks  
**Attachments:** 17047 Stonehenge Springs BRE.pdf

Gloria,

I'm forwarding along the Biological Resources Evaluation that was prepared for the subdivision site. The site has been surveyed a number of times over the years. The biologist who prepared this latest document is also cc'd here (Chuck Hughes). At the time of the report's preparation he worked for a different firm, but he now works for us. If you have any specific questions concerning bio issues, please ask him and also cc me if you can so that I can remain in the loop. You are correct that the species in question is Nissenan manzanita, and I apologize that my recollection was not precise. It's been about a year since I last read the report. We have yet to formalize mitigation for the species, though the report recommended seedling propagation, which sounds as if it would be the most efficacious technique for this particular species.

There are a number of other bio studies that have been prepared for the project, and all will be available for public review. Note that this particular study was for the subdivision site only, and did not include the SR-49 project area. A separate memo report will be prepared for that area at a later time. Naturally, we're not expecting much in the way of sensitive bio resources up there.

**\*Note the revised phone numbers below\***

**Luke Evans**

Senior Managing Associate

ESA | Environmental Science Associates

909.809.0508 mobile

520.789.7301 direct land line

---

**From:** Gloria Brown <gloriahb@comcast.net>

**Sent:** Tuesday, August 27, 2019 7:25 AM

**To:** Luke Evans <LEvans@esassoc.com>; Tom Purciel (tom.purciel@edcgov.us) <tom.purciel@edcgov.us>; Michelle Smira Brattmiller <michelle@mmsstrategies.com>

**Subject:** Re: Dorado Oaks EIR

Good morning, Mr. Evans.

Thank you for your prompt response to my concerns about subsurface deposits associated with placing the SR-49 intersection where the brick buildings are. I'm pleased to see that you would characterize this area as highly sensitive.

Another one of my concerns is for the fauna and flora that will be affected by the development. You indicated that there is only one species of concern, a manzanita that you couldn't remember the name of. I contacted a friend who is a retired botanist to see if she knew what it would be. She thinks it would be *Arctostaphylos nissenana*, which has a California Rare Plant Rank of 1B.2 (see link below). You indicated that the species on the property was not listed and is only a "species of concern." Could you please clarify which species is on the property, how many specimens were observed, when the botany survey was done, and the botanist who performed the survey?

Thanks again for your help in my assessment of the significance of the possible impacts this project would generate.

Sincerely,  
Gloria

Link to Eldorado manzanita:

[https://www.calflora.org/cgi-bin/species\\_query.cgi?where-calrecnum=587](https://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=587)

Gloria,

It was good talking with you the other night. I'm also cc'ing Tom Purciel with the County and Michelle Brattmillar with the applicant team to make sure your contact info is in the database for future notices, etc. We are at least several months out from release of the Draft EIR, but if you're in the database, you'll receive notice when it is released.

As for the likelihood of subsurface deposits in the vicinity of the SR-49 intersection site, we would characterize that area as highly sensitive for subsurface cultural resources. Besides the brick building, there is also the cemetery immediately adjacent to the roadway and several other historic structures in the vicinity. The area has clearly been in use for a very long time. Since that aspect of the project would fall under the auspices of Caltrans (work on a State Highway), I would expect that there will be a requirement for a monitoring plan during demolition and excavation. We have yet to fully engage with Caltrans, but I work with them regularly and am familiar with their requirements, and I would expect a rigorous review from them, along with specific requirements for mitigation. Thanks for your interest in the project, and your thoughtful comments.

\*Note the revised phone numbers below\*

Luke Evans  
Senior Managing Associate  
ESA | Environmental Science Associates  
909.809.0508 mobile  
520.789.7301 direct land line

-----Original Message-----

From: Gloria Brown [<mailto:gloriahb@comcast.net>]

Sent: Thursday, August 22, 2019 4:49 AM

To: Luke Evans <[LEvans@esassoc.com](mailto:LEvans@esassoc.com)>

Subject: Dorado Oaks EIR

Hello Mr. Evans,

I'm getting ready to leave town for a couple of days, and I want to make sure to request the EIR for the proposed Dorado Oaks development before I leave. I'm looking forward to reading through it.

I spoke with a co-worker who helped excavate a brewery site in Placerville a few years ago.

He says that they found quite a bit of it in intact buried deposits, even though there were no visible signs on the surface. He expects that if the historic brick buildings are demolished and the road/roundabout are put through there, you should expect to encounter buried deposits in their vicinity, including privies. I hope your team has looked at them from an archaeological perspective as well as an architectural one. Additionally, as I pointed out at the meeting, looking at Diamond Springs as a whole, perhaps as a historic district, the fact that they are the only remaining brick buildings increases their historic significance.

Thank you for sending me the EIR, and thanks for your time listening to my concerns and responding in a thoughtful way.

Sincerely,  
Gloria Howat Brown

**Subject:** Dorado Oaks comments  
**Date:** Tuesday, August 27, 2019 at 8:14:05 PM Pacific Daylight Time  
**From:** Gloria Brown  
**To:** Tom Purciel (tom.purciel@edcgov.us)  
**CC:** Luke Evans, Michelle Smira Brattmiller  
**Category:** Dorado Oaks  
**Attachments:** Comments on Dorado Oaks Tentative Subdivision Plan.docx

Dear Sir,

I have attached my comments on the proposed Dorado Oaks subdivision. I'm looking forward to your response as the county addresses the issues associated with this project.

Best wishes,

Gloria Howat Brown



## Comments on Dorado Oaks Tentative Subdivision Plan

Attention: Tom Purciel, Associate Planner

August 27, 2019

There are many aspects of the Dorado Oaks Subdivision Plan which appear to be well-thought and beneficial, such as the public park and paths. While the integrity of the property proposed for the Dorado Oaks Subdivision Plan has been seriously compromised by previous attempts to develop it, I still have some concerns about impacts this development will have on natural and cultural resources, as well as quality of life. If these concerns can be adequately addressed, the project would address housing needs for possibly a thousand residents, and such “affordable” housing is sorely needed in our area.

The following are my comments on the proposed Dorado Oaks Subdivision Plan.

Natural resources:

1. Loss of natural resources such as oak trees, wetlands, and listed species should be circumvented by planning to avoid these resources as much as possible. Mitigation for loss of resources such as oak trees removed and loss of wetlands should be addressed on site if at all possible.
2. I spoke with Luke Evans, who prepared the EIR, at the informational meeting August 20<sup>th</sup>. He stated that there were no species that were listed, although there is a manzanita species of concern on the property (he couldn't remember which one at the time). Neither Mr. Evans nor the developer's engineer Brian Allen thought that this species would be protected during development of the property. I would like to see the developer make an effort to protect as many of these plants as possible to be incorporated into the landscaping and wild spaces.
3. Likewise, as the name of the development includes the word “oak” I would hope that as many of these trees as possible would be protected during construction. Those that must be removed could be replaced during the landscaping phase, instead of mitigation taking place in an entirely different habitat in a far corner of the state.
4. In addition to these two native taxa, I would like to see an effort to incorporate native plants in the landscaping in this development. Studies have shown that approximately a third of landscaping needs to be native plants to support native fauna such as birds. If local, drought resistant plants are used, local water supplies will also be less impacted.
5. As this plan has gotten this far, I assume that EID has assured the county that their water supplies are adequate for an additional 381 residential units. However, I remember trees dying on the library's lawn in past droughts. Can our water supply sustain this much growth through droughts, which will most likely increase as climate change increases?

Cultural resources:

1. It would be terribly short-sighted to demolish the two brick buildings to construct a roundabout at the intersection of SR 49 and China Garden. Although these buildings have been deemed ineligible for listing as historic properties due to loss of integrity, they are the only brick buildings left in Diamond Springs. Very few historic buildings are left in town. While the buildings may be in poor condition, their presence is an important part of the historic nature of this town. When viewed as part of Diamond Springs as an unofficial

historic district, their significance is obvious. Additionally, if evaluated from an archeological perspective and not just an architectural one, their cultural significance is more apparent. Privies and other buried archaeological deposits are most likely associated with these buildings. Not only are these resources irreplaceable, they are expensive to mitigate. Therefore, I would not consider Alternative A an acceptable option. Instead I recommend Alternative D, perhaps with a two-way left turn lane between Silver Road and China Garden Road. Another alternative is proposed here, sort of a hybrid between Alternatives A and C (see attached sketch). Alternative A+ would connect Faith Lane and China Garden by realigning them through the parking lots of the brick buildings and the fire station property across SR 49 (480 Locust Road) with a signal instead of a roundabout, as signals use less space. This might allow for the preservation of all buildings and the cemetery.

2. Mr. Evans indicated that the only other known cultural resources in the APE are bedrock mortars at the south end of the property. His company was unable to relocate them, and they assume they are obscured by blackberries. He stated that they would not be disturbed by development. Therefore, he concludes that monitoring by a cultural resource specialist is not necessary. While I agree that the north end of the property has already been disturbed by previous developers and intact deposits are unlikely, both historic and prehistoric resources are fairly likely to be encountered in the undisturbed areas to the south. Archaeologists should be required to monitor during ground disturbance on portions of the property that have not been previously graded.
3. There is a grove of Tree of Heaven (*Ailanthus altissima*) to the southeast of the previously graded section. This invasive species was introduced to this area by Chinese miners and may be indicative of a Chinese camp or cemetery. This is an example of historic resources that may be hiding under the vegetation and soils, and another reason that an archaeologist should be present to monitor during ground disturbing activities.

#### Quality of life impacts:

1. I applaud the plan to include a park. However, I request that no lighting for the soccer or other playing fields be allowed.
2. The inclusion of trails/walking paths will be a benefit to the entire community. In addition, bike paths along all roads should be included. Mr. Evans and Mr. Allen indicated that the county has plans to eventually connect this development to Union Mine High School via Argonaut Drive. By insisting that bike paths are included on all roads constructed in this development now, future high school students will have safer alternatives for biking to and from school. At present, students are riding bikes, scooters, and skateboards on Pleasant Valley Road at great peril. Please ensure that bike paths are part of every road in the APE.
3. Can existing roads really accommodate the increased traffic this project will generate? I request a copy of the traffic report when it is done so that I can attempt to evaluate this information myself. At the very least, no units should be occupied until the Diamond Springs Parkway is operational.
4. Considering larger impacts to our community and beyond, I request that these units be built with fire safety in mind. Please require the use of the most fire safe building materials, require power lines to be under ground, and whatever other measures will help protect life and property from another Paradise. The inclusion of four access roads plus an emergency access road is a good step in the right direction. Residents on Fowler Lane

and Argonaut Drive may object now, but they may need these roads to evacuate in the event of a fire blocking other alternatives.

5. And on an even larger scale, I request that these units be constructed with an eye to the carbon footprint they will leave. Requiring solar panels on the rooftops of the multiplex buildings or any parking lots would be a step in the right direction.

Thank you for doing what you can to help balance the need to protect our resources and quality of life with the need for affordable housing and the rights of developers to do as they see fit within legal parameters.

Sincerely,  
Gloria Howat Brown  
4235 Lime Kiln Road  
Diamond Springs, CA  
[gloriahb@comcast.net](mailto:gloriahb@comcast.net)  
530-626-3241



Alternative A+ for signaled intersection with SR-49 and China Garden Road.

**Subject:** Fwd: Dorado Oaks 8/20/19 NOP Scoping Mtg Public Comment from Ken Greenwood 8/26/19  
**Date:** Tuesday, August 27, 2019 at 12:05:47 PM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira Brattmiller  
**Category:** Dorado Oaks

In the event you did not receive this specific comment/response from this commenter.

----- Forwarded message -----

From: **Anne Novotny** <[anne.novotny@edcgov.us](mailto:anne.novotny@edcgov.us)>  
Date: Mon, Aug 26, 2019 at 9:55 PM  
Subject: Fwd: Dorado Oaks 8/20/19 NOP Scoping Mtg Public Comment from Ken Greenwood 8/26/19  
To: Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
Cc: Rommel Pabalinas <[rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)>

----- Forwarded message -----

From: **Tiffany Schmid** <[tiffany.schmid@edcgov.us](mailto:tiffany.schmid@edcgov.us)>  
Date: Mon, Aug 26, 2019 at 10:27 AM  
Subject: Fwd: Dorado Oaks Comment Period Extension due to poor handling of "Public Information/Scoping Meeting"  
To: Anne Novotny <[anne.novotny@edcgov.us](mailto:anne.novotny@edcgov.us)>

----- Forwarded message -----

From: **The BOSTHREE** <[bosthree@edcgov.us](mailto:bosthree@edcgov.us)>  
Date: Mon, Aug 26, 2019 at 9:13 AM  
Subject: Fwd: Dorado Oaks Comment Period Extension due to poor handling of "Public Information/Scoping Meeting"  
To: Tiffany Schmid <[tiffany.schmid@edcgov.us](mailto:tiffany.schmid@edcgov.us)>, Rommel Pabalinas <[rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)>  
Cc: Brian Veerkamp <[brian.veerkamp@edcgov.us](mailto:brian.veerkamp@edcgov.us)>

### **Kathy Witherow**

Assistant to Supervisor Brian K. Veerkamp  
District Three - El Dorado County  
530.621.5652

----- Forwarded message -----

From: **EDC COB** <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>  
Date: Mon, Aug 26, 2019 at 9:10 AM  
Subject: Fwd: Dorado Oaks Comment Period Extension due to poor handling of "Public Information/Scoping Meeting"  
To: The BOSONE <[bosone@edcgov.us](mailto:bosone@edcgov.us)>, The BOSTWO <[bostwo@edcgov.us](mailto:bostwo@edcgov.us)>, The BOSTHREE <[bosthree@edcgov.us](mailto:bosthree@edcgov.us)>, The BOSFOUR <[bosfour@edcgov.us](mailto:bosfour@edcgov.us)>, The BOSFIVE <[bosfive@edcgov.us](mailto:bosfive@edcgov.us)>

FYI.

Thank you,

Office of the Clerk of the Board  
El Dorado County  
330 Fair Lane, Placerville, CA 95667  
530-621-5390

CONFIDENTIALITY NOTICE: This electronic communication with its contents may contain confidential and/or privileged information. It is solely for the use of the intended recipient(s), except as otherwise permitted. Unauthorized interception, review, use, or disclosure is prohibited and may violate applicable laws including the

Electronic Communications Privacy Act. If you are not the intended recipient, or authorized to receive for the intended recipient, please contact the sender and destroy all copies of the communication. Thank you for your consideration.

----- Forwarded message -----

From: Ken Greenwood <[krig@d-web.com](mailto:krig@d-web.com)>

Date: Mon, Aug 26, 2019 at 1:52 AM

Subject: Dorado Oaks Comment Period Extension due to poor handling of "Public Information/Scoping Meeting"

To: edc cob <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>

Cc: Tom Purciel <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>, Rommel Pabalinas <[Rommel.Pabalinas@edcgov.us](mailto:Rommel.Pabalinas@edcgov.us)>

Dear Board of Supervisors,

The Dorado Oaks Subdivision and Rezone application was the subject of a "Public Information/Scoping Meeting" last Tuesday August 20 at the Fireman's Memorial Hall in Diamond Springs. The 'meeting' was incredibly non-informative and an abuse of process according to many who attended and published substantive comments on Social Media. Additionally, I am told that Planning Staff decided to start the meeting at approximately 5:30 because so many people showed up... Really? Who does that for a meeting widely advertised as beginning at 6:00 PM?

For this and other reasons detailed below, I and others request the "Comment Period" for the EIR/NOP Scoping process be extended. It would also behoove the Planning Department to hold another meeting ASAP to facilitate this process. The Public has been dis-served by the current process. It turned into the "Cluster" I warned you about two weeks ago.

I have already been told there will be "plenty of opportunities to comment in the future" on the adequacy of the Environmental Documentation and such. Indeed there will be opportunities to comment on the Draft EIR, the Final EIR and of course the Planning Commission and Board Public Hearings during consideration of the Project itself. The HUGE problem here as those events are 1, 2 or more years from now and that time factor allows a lot to be "etched in stone" from so many perspectives. "Projects" tend to create and attain a life of their own and "Public Comment" at later points in time is purely REACTIONARY to some fairly obvious mistakes in analysis of "Environmental Impacts" that could be avoided by EARLY INVOLVEMENT by the public and agencies that may be driven by their management or Governing Boards based on Public concern from their constituents.

My whole point is that in the Planning Process required by State Law works better with MORE information and public involvement vs less! You have seen "angry mobs with torches and pitchforks" show up for Hearings and you know that most of their concerns "shoulda and coulda" been dealt with MUCH earlier in the Process had they been informed and involved in the project vs response and REACTION at the hearing or elsewhere LATER in the process. That is what the CEQA Process is supposed to do and when done correctly and with honest attempts to foster public involvement, Projects go through the process smoother and some really good ideas can be included BEFORE momentum is attained.

Additionally there is the intent of CEQA to encourage public participation found in and around CEQA Section 21,000-21,006 and Guidelines 15,001-15,006. So far a really good case could be made that Planning Staff is not meeting the intent, and perhaps Statutory Requirements of the cited Sections. Regardless, it appear disingenuous at best and there are several comments in Social Media that the Planning Department was just going through the motions.

I would have to agree and add that they hardly attained the minimal motions. Is there any wonder El Dorado County Land Use Decisions are the subject of so many SUCCESSFUL lawsuits? It's quite clear to me (and obviously the Courts!).

Here is the NOP/Info Meeting as "Advertised" by EDCo Planning:

[https://edcgov.us/Government/planning/public%20notices/Documents/2019/20190729\\_DoradoOaks\\_NOP.pdf](https://edcgov.us/Government/planning/public%20notices/Documents/2019/20190729_DoradoOaks_NOP.pdf)

Some specific issues:

- The Meeting was advertised to be from 6-8 PM. As above and below, people were very confused as there was no PA system to allow anyone to EFFECTIVELY communicate as the room was extremely noisy and there was little or no assistance from either Planning Staff or the Project Applicants to guide people to the various "Break Out Tables" for more specific information.
- The meeting actually was started at approximately 5:30 "because so many had already showed-up" as justification. That is simply unfathomable and a disservice to all in attendance. At 5:55 I arrived and there were 20+ people in line at the sign in table and more coming in.
- The Planning Department did not take my heartfelt and professional advice to video or audio record the meeting, provide a Power Point presentation or paper maps showing the project and adjacent parcelization so people could ask and see "How close am I to the Project." "Where are the access points?" "How many Dwelling Units? (To gauge the traffic impacts and such.) NONE of that was provided in any effective way. The people at the "Land Use" table were unable to answer that question.
  - When I asked that SAME QUESTION in an e-mail August 5, I received a response as follows: **"Your comments on the project regarding the units, staff will accept these comments and will be analyzed as part of the EIR."** Seriously? That is information that should be in the "Project Description" that should have been defined once the Application was considered "Complete" by Planning Staff back in November 2018!
- The "Break Out Tables" had no indication above eye level describing what was going on at that table. The tables each had an 8 1/2 X 11 paper with maybe 40 point type taped to the edge of the table. As it was a "Standing Room Seating" no one could actually see these signs and therefore most had no idea of where to go for information. The "Signs" should have been MUCH BIGGER and attached to the wall above the tables.
- Why was Craig Sandberg (the applicant's Attorney) giving the "Project Overview" (that really wasn't a "Project Overview") and more of a "General Plan Designation and Zoning are in place, the project has been considered previously" and inferred that it is essentially a done deal at this point... Again I can only say, **SERIOUSLY?** Who does that? I was appalled as were a number of people in the room.

Ah!

- There was one bright spot and that was the "CEQA Flowchart" (that I just can't seem to find anywhere else) showing the various CEQA steps AND the "Local Agency" hearings included. As there was no staff at the graphic, so I stood near it and provided clarification as to "We are here in the process at this time." People really appreciated

that they were getting some "hard facts" they said were not being provided elsewhere in the room.

Some comments from Facebook (El Dorado County Chat) after the meeting: (One of the Posts have 450 Comments, several have 100+ and many of them are actually cogent and thoughtful. Some are people who sadly learned little or nothing at the meeting regarding process, which SHOULD have been explained at the beginning of the meeting.)

> "That meeting was not really helpful, and so difficult to even hear anyone. It's too bad a lot of people attended and would have been nice had it been better organized."

> "Yeah it wasn't great. However I do think it was more about fielding complaints and getting back with answers. So responsible just poorly planned especially for a planning committee"

> "Nobody gets to vote on it, and that's part of the problem. They seek public input, but the impression left at Tuesday's meeting was that it doesn't matter what the public thinks, even if 90% of the residents of the area oppose this development, it's going to happen. Too much money to be made by the developer and the county in terms of new tax revenues, the public's opinion means nothing."

> "We wrote Comment cards but we heard that no one's going to pay attention to them. So who do we send our email or letter to that we know would count? I was also told that if you signed a petition it counts as one comment. This whole thing was maddening. There was no questions and answers. I never got any answers about my house with the red line going through it."

> There's a Board of Supervisors meeting on Tuesday at nine sharp. I am definitely going to go there because I went to the meeting at the fire department and I got absolutely no answers no help. I am very distraught right now. I moved in this house when I was 39 and now I'm 73 and I'm thinking where am I going to go??

These don't sound like people who got the message at the Scoping Meeting... Why? BECAUSE THEY DIDN'T get the message as it was poorly presented, if at all.

As a former Planner who conducted my share of such meetings, it was really hard to watch it so poorly done. I even gave Staff some pre-meeting advice and ideas that would have REALLY made a difference. Sadly it was not to be.

Thank you for consideration of my request to extend the comment period. Somebody needs to do something about the management of this project.

Sincerely,

Ken Greenwood  
Straight Shot Consulting  
530-306-6390 (C) [krq@d-web.com](mailto:krq@d-web.com)

**Subject:** Re: Dorado Oaks EIR  
**Date:** Wednesday, August 28, 2019 at 7:53:02 AM Pacific Daylight Time  
**From:** Gloria Brown  
**To:** Tom Purciel (tom.purciel@edcgov.us)  
**CC:** Michelle Smira Brattmiller, Luke Evans, gloriahb@comcast.net  
**Category:** Dorado Oaks

Good morning Mr. Purciel,  
I just received information from Mr. Evans about the manzanita species of concern. Unfortunately, I'm leaving for work now and won't have time to read the recommendations before the comment period ends. However, as there are less than 100 reported occurrences of this species, mostly in El Dorado County, we need to take its preservation very seriously.  
Sincerely,  
Gloria Howat Brown  
4235 Lime Kiln Road  
Diamond Springs, CA  
530-626-3241  
[gloriahb@comcast.net](mailto:gloriahb@comcast.net)

Gloria,  
I'm forwarding along the Biological Resources Evaluation that was prepared for the subdivision site. The site has been surveyed a number of times over the years. The biologist who prepared this latest document is also cc'd here (Chuck Hughes). At the time of the report's preparation he worked for a different firm, but he now works for us. If you have any specific questions concerning bio issues, please ask him and also cc me if you can so that I can remain in the loop. You are correct that the species in question is Nissenan manzanita, and I apologize that my recollection was not precise. It's been about a year since I last read the report. We have yet to formalize mitigation for the species, though the report recommended seedling propagation, which sounds as if it would be the most efficacious technique for this particular species.

There are a number of other bio studies that have been prepared for the project, and all will be available for public review. Note that this particular study was for the subdivision site only, and did not include the SR-49 project area. A separate memo report will be prepared for that area at a later time. Naturally, we're not expecting much in the way of sensitive bio resources up there.

\*Note the revised phone numbers below\*

Luke Evans  
Senior Managing Associate  
ESA | Environmental Science Associates  
909.809.0508 mobile  
520.789.7301 direct land line

From: Gloria Brown <[gloriahb@comcast.net](mailto:gloriahb@comcast.net)>  
Sent: Tuesday, August 27, 2019 7:25 AM  
To: Luke Evans <[LEvans@esassoc.com](mailto:LEvans@esassoc.com)>; Tom Purciel ([tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us))



<[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>; Michelle Smira Brattmiller  
<[michelle@mmsstrategies.com](mailto:michelle@mmsstrategies.com)>  
Subject: Re: Dorado Oaks EIR

Good morning, Mr. Evans.

Thank you for your prompt response to my concerns about subsurface deposits associated with placing the SR-49 intersection where the brick buildings are. I'm pleased to see that you would characterize this area as highly sensitive.

Another one of my concerns is for the fauna and flora that will be affected by the development. You indicated that there is only one species of concern, a manzanita that you couldn't remember the name of. I contacted a friend who is a retired botanist to see if she knew what it would be. She thinks it would be *Arctostaphylos nissenana*, which has a California Rare Plant Rank of 1B.2 (see link below). You indicated that the species on the property was not listed and is only a "species of concern." Could you please clarify which species is on the property, how many specimens were observed, when the botany survey was done, and the botanist who performed the survey?

Thanks again for your help in my assessment of the significance of the possible impacts this project would generate.

Sincerely,  
Gloria

Link to Eldorado manzanita:  
[https://www.calflora.org/cgi-bin/species\\_query.cgi?where-calrecnum=587](https://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=587)

Gloria,  
It was good talking with you the other night. I'm also cc'ing Tom Purciel with the County and Michelle Brattmillar with the applicant team to make sure your contact info is in the database for future notices, etc. We are at least several months out from release of the Draft EIR, but if you're in the database, you'll receive notice when it is released.

As for the likelihood of subsurface deposits in the vicinity of the SR-49 intersection site, we would characterize that area as highly sensitive for subsurface cultural resources. Besides the brick building, there is also the cemetery immediately adjacent to the roadway and several other historic structures in the vicinity. The area has clearly been in use for a very long time. Since that aspect of the project would fall under the auspices of Caltrans (work on a State Highway), I would expect that there will be a requirement for a monitoring plan during demolition and excavation. We have yet to fully engage with Caltrans, but I work with them regularly and am familiar with their requirements, and I would expect a rigorous review from them, along with specific requirements for mitigation. Thanks for your interest in the project, and your thoughtful comments.

\*Note the revised phone numbers below\*

Luke Evans  
Senior Managing Associate  
ESA | Environmental Science Associates

909.809.0508 mobile  
520.789.7301 direct land line

-----Original Message-----

From: Gloria Brown [<mailto:gloriahb@comcast.net> ]

Sent: Thursday, August 22, 2019 4:49 AM

To: Luke Evans <[LEvans@esassoc.com](mailto:LEvans@esassoc.com) >

Subject: Dorado Oaks EIR

Hello Mr. Evans,

I'm getting ready to leave town for a couple of days, and I want to make sure to request the EIR for the proposed Dorado Oaks development before I leave. I'm looking forward to reading through it.

I spoke with a co-worker who helped excavate a brewery site in Placerville a few years ago. He says that they found quite a bit of it in intact buried deposits, even though there were no visible signs on the surface. He expects that if the historic brick buildings are demolished and the road/roundabout are put through there, you should expect to encounter buried deposits in their vicinity, including privies. I hope your team has looked at them from an archaeological perspective as well as an architectural one. Additionally, as I pointed out at the meeting, looking at Diamond Springs as a whole, perhaps as a historic district, the fact that they are the only remaining brick buildings increases their historic significance.

Thank you for sending me the EIR, and thanks for your time listening to my concerns and responding in a thoughtful way.

Sincerely,

Gloria Howat Brown

**Subject:** New housing development  
**Date:** Wednesday, August 28, 2019 at 5:18:53 PM Pacific Daylight Time  
**From:** Nicholas Bowers  
**To:** Michelle Smira  
**Category:** Dorado Oaks  
**Attachments:** image001.jpg

Hi Michelle,

My name is Nick Bowers and I'm writing you this email to explain why I oppose the new proposed housing development that is planned for Diamond Springs. For starters, I have lived on Argonaut Drive for 10 years now and its been my experience that we already have a traffic problem within our community as it is and with the wildfire danger that we have in the foothills it will make it that much harder to escape in an emergency situation with an extra 400-600 families to compete with. Also, I oppose it because I don't want my road to be the main entrance to this new proposed development (again, we already have a traffic problem).

Thank you for taking the time to read this.

Thank you,  
Nicholas Bowers  
Operations Manager  
p. 530.295.8200 | f. 530.295.8222  
[nicholasb@wsdwheel.com](mailto:nicholasb@wsdwheel.com) | [www.wsdwheel.com](http://www.wsdwheel.com)



*Tires & Wheels – Our Quality, Your Performance*

**Subject:** Dorado Oaks Comment Card  
**Date:** Wednesday, August 28, 2019 at 5:27:21 PM Pacific Daylight Time  
**From:** Bethany Bowers  
**To:** Michelle Smira  
**CC:** planning@edcgov.us, dorado\_oaks@edcgov.us  
**Category:** Dorado Oaks

Dear Michelle with MMS Strategies and whomever else it may concern:

CC: Tom Purciel with the El Dorado Planning Department

I have many concerns regarding the proposed Dorado Oak Subdivision that I would like to share with you.

1.  
I currently own a home on Argonaut Drive in Diamond Springs. It is my understanding that this road will be the main access point into this subdivision. Argonaut is not an appropriate road for that such traffic. To be honest I was very surprised that your company is even considering it an option. Argonaut is a small street that does **not** have room for the amount of two way traffic that your subdivision will come with. It is already a dangerous road for both pets and children. With added traffic it will become incredibly dangerous for anyone to travel via foot or bike. Backing in and out of our steep driveways is another serious concern that I have. As motorists already drive too quickly for this road, I guarantee the added traffic will result in many more vehicle accidents. Argonaut needs to be looked at more closely by your company because I do not understand how a planning company believes it to be a road that is equipped for the amount of traffic your subdivision will bring.
2.  
Not only is this project going to greatly impact the traffic flow on Argonaut Drive, it will affect Patterson and Tullis Mine Roads. In the case of a fire, I fear that evacuation will be impossible. We had a fire on Patterson Road a few years back. Patterson was closed to any traffic while the firefighters worked. Due to this, Tullis Mine was the only Road that could be used to get in and out. It was jammed packed. Vehicles were bumper to bumper and we were going at an incredibly slow rate of speed. With such a large subdivision going in, even if Patterson remained open, evacuation would be a nightmare.  
**The safety of this community should come before all else.**
3.  
In addition to Argonaut, Tullis Mine, and Patterson this proposed development will increase the overall congestion of Diamond Springs. It will result in backups on Fowler, Pleasant Valley Road, and Missouri Flat. Our small town is not equipped to handle this congestion.
- 4.

In reviewing your plans, I noticed that the proposed lot sizes are incredibly small. Lots should be no less than one quarter of an acre. The proposed park is also too small. A park resulting in such a large subdivision should be at least 10 acres in size.

5. In addition to the stress that this development will put on our roads. The development will add approximately 10% to our current population in Diamond Springs. This will put pressure on our water resources, waste disposal, and sewage.
6. Air pollution and the noise level will greatly increase due to this project.
7. It is my understanding that this development does not follow our planning department's Mission Statement.  
My hope is that our county will read their statement closely before agreeing on such a project.
8. It is no secret that El Dorado County has a difficult time in maintaining our roads. Dorado Oaks will only increase this existing problem.

I would greatly appreciate it if my concerns and the concerns of **many**

others are addressed before our county planning department and MMS Strategies proceed any further with this project.

While I agree that more housing in our county is needed, the proposed location is not an appropriate site.

Thank you for your time,  
Bethany Bowers  
Homeowner,  
**Argonaut Drive**

**Subject:** Fwd: [dorado\_oaks] Concerns about Dorado Oaks Development  
**Date:** Thursday, August 29, 2019 at 8:26:35 AM Pacific Daylight Time  
**From:** Tom Purciel  
**To:** Michelle Smira  
**Category:** Dorado Oaks

----- Forwarded message -----

From: **Maureen Perry** <[dionperry@att.net](mailto:dionperry@att.net)>  
Date: Wed, Aug 28, 2019 at 6:23 PM  
Subject: [dorado\_oaks] Concerns about Dorado Oaks Development  
To: <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

I am very concerned about the density of this development - It is not at all in keeping with the area.

I shop and dine in Diamond Springs and this development looks like it belongs in a suburban/urban area.

I would hope that it would be scaled back considerably with more open space around.

In addition, there should be a provision for 20% "affordable housing" as part of any development here in EDC.

Thank you

Maureen Dion-Perry  
Resident of El Dorado County

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: [dorado\_oaks] We need homes

**Date:** Friday, August 30, 2019 at 8:19:24 AM Pacific Daylight Time

**From:** Tom Purciel

**To:** Michelle Smira

----- Forwarded message -----

From: 'Susan Sinetos' via PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

Date: Fri, Aug 30, 2019 at 7:03 AM

Subject: [dorado\_oaks] We need homes

To: <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

I'm supporting the project as we need homes in our community. We have a housing shortage and it's time to build more homes.

I hope it's a mixture of apartments, single family both large and small so different income levels can afford. Build the infrastructure to accommodate the traffic. Be smart, be productive, and it will work.

Thank you  
Susan Sinetos

Sent from my iPhone

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: [dorado\_oaks] Dorado Oaks project comment

**Date:** Thursday, August 29, 2019 at 3:24:34 PM Pacific Daylight Time

**From:** Tom Purciel

**To:** Michelle Smira

----- Forwarded message -----

From: 'M Ramos' via PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

Date: Thu, Aug 29, 2019 at 3:22 PM

Subject: [dorado\_oaks] Dorado Oaks project comment

To: <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>

Hello,

Here is a copy of a letter that I sent to the Governor.

This is regarding a proposed project adjacent to State Route 49 in Diamond Springs, CA. Here is a link to the "Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) and Notice of Public Scoping Meeting for the Dorado Oaks Tentative Subdivision Map."

[https://edcgov.us/Government/planning/public%20notices/Documents/2019/20190729\\_DoradoOaks\\_NOP.pdf?fbclid=IwAR1Enx5CN0ksjRRXc2kje71OKa9QkUYvanv3frG5wE9FiocJEe33QV2moeY](https://edcgov.us/Government/planning/public%20notices/Documents/2019/20190729_DoradoOaks_NOP.pdf?fbclid=IwAR1Enx5CN0ksjRRXc2kje71OKa9QkUYvanv3frG5wE9FiocJEe33QV2moeY)

This is a high density residential project along a roadway that has crawling bumper to bumper traffic at certain times of the day during normal conditions. Even before the project was announced, I was afraid of being able to evacuate during a fire or some other disaster. Normal workday traffic backs up into a heavily wooded area where thousands of people will burn to death in their cars. The increased strain on this roadway of this project will be devastating. I'd like to see the State get involved in this because I have heard people say that the developer thinks this is a done deal regardless of the outcome of yet to be done environmental studies and regardless of public input. No one at the Public Scoping Meeting felt that anyone there was listening to them. There was a traffic engineer who seemed to be truly shocked and said that he was not aware that there is a traffic problem through Diamond Springs. Head toward Diamond Springs from the East on Pleasant Valley Rd at about 7:30 am on a weekday. There is bumper to bumper traffic for miles. If there is an accident, you could be stuck for hours. Can you imagine this road during an evacuation scenario? Please check into this before it's pushed through without the proper consideration. Thank you.

I wrote about the traffic problem because 49 is a state road. However, there is a whole lot more wrong with the project than traffic.

Thank you,

Marie Ramos

Mailing address: 705 Pleasant Valley Rd, #55, Diamond Springs, CA 95619

--

**Tom Purciel**

Associate Planner

**County of El Dorado**

Department of Planning and Building

2850 Fairlane Court

Placerville, CA 95667

(530) 621-5903

[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)

<https://www.edcgov.us/government/Planning>



WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** FW: Dorado Oaks Subdivision

**Date:** Thursday, August 29, 2019 at 1:07:15 PM Pacific Daylight Time

**From:** Nancy Franzi

**To:** dorado\_oaks@edcgov.us, Michelle Smira

---

**From:** Guy Franzi [mailto:bomaybe@sbcglobal.net]

**Sent:** Thursday, August 29, 2019 12:41 PM

**To:** Nancy Franzi

**Subject:** Diamond Oaks

The following is a statement from the attorney (Craig Sandberg) for the developers of Dorado Oaks.

“The Dorado Oaks project has been in the works since 2007. Changes to the county’s general plan and traffic impact studies have pushed the project back. I stress that the project, while a big change for the Diamond Springs community, is in line with the county’s general plan.

This property and the property adjacent to it is designated for development, high-density development, the general plan requires this density.”

This statement should be enough to tell you that neither attorney or the developers have any interest in what is good for the folks of Diamond Springs.

Currently mornings through Diamond Springs see almost 1000 cars hour and in the evenings 1500 plus an hour, with this project we will be adding 300 plus homes to our town and their occupants to these numbers. But the general plan says its OK, its required? These folks don’t live in Diamond Springs, and certainly aren’t going to move here should the project be completed.

Please take into consideration the opinions of the folks of Diamond Springs before those who have only money ties to this community.

Thank You,  
Guy Franzi

2001 Great View Lane  
Diamond Springs, Ca 95619

530-919-3511

Sent from my iPad

**Subject:** Fwd: CDFW's comments on the NOP for the Dorado Oaks Project (SCH 2019071041)  
**Date:** Friday, September 13, 2019 at 9:51:46 AM Pacific Daylight Time  
**From:** Michelle Smira <michelle@mmsstrategies.com>  
**To:** Wesley Fagundes <Wesley@mmsstrategies.com>

Can you please print and add to the group.

Also, can you make a copy of all the comments? I am bringing them to Trish this weekend for her to start inputting all the comments.

Sincerely,

Michelle Smira  
President, MMS Strategies  
520 Capitol Mall, Suite 280  
Sacramento, CA 95814  
916.479.3687 C

Begin forwarded message:

**From:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Date:** September 13, 2019 at 8:24:54 AM PDT  
**To:** PL-dorado\_oaks-m <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>, Michelle Smira Brattmiller <[michelle@mmsstrategies.com](mailto:michelle@mmsstrategies.com)>  
**Subject:** Fwd: CDFW's comments on the NOP for the Dorado Oaks Project (SCH 2019071041)

----- Forwarded message -----

**From:** Quillman, Gabriele@Wildlife <[Gabriele.Quillman@wildlife.ca.gov](mailto:Gabriele.Quillman@wildlife.ca.gov)>  
**Date:** Thu, Sep 12, 2019 at 5:11 PM  
**Subject:** CDFW's comments on the NOP for the Dorado Oaks Project (SCH 2019071041)  
**To:** [tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us) <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Cc:** Wildlife R2 CEQA <[R2CEQA@wildlife.ca.gov](mailto:R2CEQA@wildlife.ca.gov)>, [state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov) <[state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov)>

Dear Mr. Purciel,

The California Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the Notice of Preparation (NOP) for the Dorado Oaks Project (project)[SCH 2019071041]. The Department is responding to the NOP as a Trustee Agency for fish and wildlife resources (California Fish and Game Code Sections 711.7 and 1802, and the California Environmental Quality Act [CEQA] Guidelines Section 15386), and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines Section 15381), such as the issuance of a Lake or Streambed Alteration Agreement (California Fish and Game Code Sections 1600 *et seq.*) and/or a California Endangered Species Act (CESA) Permit for Incidental Take of Endangered, Threatened, and/or Candidate species (California Fish and Game Code Sections 2080 and 2080.1).

The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (i.e., biological resources); and administers the Natural Community Conservation Planning Program (NCCP Program). The Department offers the comments and recommendations presented below to assist the El Dorado County Planning Department (County; the CEQA lead agency) in adequately identifying and/or mitigating the project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable the Department to adequately review and comment on the proposed project with respect to impacts on biological resources. The Department recommends that the forthcoming CEQA document address the following:

### **Assessment of Biological Resources**

Knowledge of the regional setting of a project is critical to the assessment of environmental impacts and special emphasis should be placed on environmental resources that are rare or unique to the region. To enable Department staff to adequately review and comment on the project, the CEQA document should include a complete assessment of the flora and fauna within and adjacent to the project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. The Department recommends that the CEQA document specifically include:

1. An assessment of the various habitat types located within the project footprint, and a map that identifies the location of each habitat type. The Department recommends that floristic, alliance- and/or association based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.
2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project. The Department's California Natural Diversity Database (CNDDDB) in Sacramento may be contacted at (916) 322-2493 or [bdb@wildlife.ca.gov](mailto:bdb@wildlife.ca.gov) to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed project. The Department recommends that CNDDDB Field Survey Forms be completed and submitted to CNDDDB to document survey results. Online forms can be obtained and submitted at: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>.

Please note that the Department's CNDDDB is not exhaustive in terms of the data it houses, nor is it an absence database. The Department recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the project site.

3. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (CSSC) and California Fully Protected Species

(Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the project area and should not be limited to resident species. The CEQA document should include the results of focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service, where necessary. Some aspects of the proposed project may warrant periodic updated surveys for certain sensitive taxa, particularly if the project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

4. A thorough, recent, floristic-based assessment of special status plants and natural communities, following the Department's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see <https://www.wildlife.ca.gov/Conservation/Plants>).
5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).

#### **Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources**

The CEQA document should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the project. To ensure that project impacts to biological resources are fully analyzed, the following information should be included in the CEQA document:

1. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by zoning of development projects or other project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address project-related changes on drainage patterns and water quality within, upstream, and downstream of the project site, including: volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site.
2. A discussion of potential indirect project impacts on biological resources, including resources in areas adjacent to the project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).

The Department encourages project design that avoids and preserves onsite features that

contribute to habitat connectivity. The CEQA document should include a discussion of both direct and indirect impacts to wildlife movement and connectivity, including maintenance of wildlife corridor/movement areas to adjacent undisturbed habitats.

3. A cumulative effects analysis developed as described under CEQA Guidelines § 15130 (if an Environmental Impact Report is required). Please include all potential direct and indirect project related impacts to riparian areas, wetlands, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

### **Mitigation Measures for Project Impacts to Biological Resources**

The CEQA document should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the project. When proposing measures to avoid, minimize, or mitigate impacts, the Department recommends consideration of the following:

4. *Fully Protected Species*: Several Fully Protected Species (Fish and Game Code § 3511) have the potential to occur within or adjacent to the project area, including, but not limited to: white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*). Fully protected species may not be taken or possessed at any time. Project activities described in the CEQA document should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the project area. The Department also recommends that the CEQA document fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. The Department recommends that the Lead Agency include in the analysis how appropriate avoidance, minimization and mitigation measures will reduce indirect impacts to fully protected species.

5. *Sensitive Plant Communities*: The Department considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). The CEQA document should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts.

6. *Mitigation*: The Department considers adverse project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the CEQA document should include mitigation measures for adverse project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

The CEQA document should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

7. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in California Sierra foothills ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

The Department recommends that local onsite propagules from the project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in the near future in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various project components as appropriate.

Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

8. *Nesting Birds and Migratory Bird Treaty Act*: Please note that it is the project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) also afford protective measures as follows: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders *Falconiformes* or *Strigiformes* (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and



regulations adopted by the Secretary of the Interior under provisions of the MBTA.

The Department recommends that the CEQA document include specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: project phasing and timing, monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate. The CEQA document should also include specific avoidance and minimization measures that will be implemented should a nest be located within the project site. The Department recommends that pre-construction nesting bird surveys be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

9. *Moving out of Harm's Way:* The proposed project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, a qualified biologist may be retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife of low or limited mobility that would otherwise be injured or killed from project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety (i.e., the Department does not recommend relocation to other areas). Please note that the temporary relocation of onsite wildlife does not constitute effective mitigation for project impacts associated with habitat loss. The Department generally does not support the use of relocation, salvage, and/or transplantation as the sole form of mitigation for impacts to rare, threatened, or endangered species as these efforts are often experimental in nature and largely unsuccessful.

### **California Endangered Species Act**

The Department is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the California Endangered Species Act (CESA). The Department recommends that a CESA Incidental Take Permit (ITP) be obtained if the project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the project. CESA ITPs are issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats. The Department encourages early consultation, as significant modification to the proposed project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP.

### **Lake and Streambed Alteration Program**

-

Fish and Game Code section 1602 requires an entity to notify the Department prior to commencing any activity that may do one or more of the following: Substantially divert or obstruct the natural flow of any river, stream or lake; Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or Deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or

lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year round). This includes ephemeral and seasonal streams. It may also apply to work undertaken within the flood plain of a body of water.

Upon receipt of a complete notification, the Department determines if the proposed project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake or Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify the project that would eliminate or reduce harmful impacts to fish and wildlife resources.

The Department's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the CEQA document should fully identify the potential impacts to the lake, stream, and/or riparian vegetation, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. The Department recommends that the CEQA document include a delineation of onsite lakes and streams, associated riparian and/or wetland vegetation communities, and areas of impact. Early consultation with the Department is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to <https://www.wildlife.ca.gov/Conservation/LSA/Forms>.

#### **Further Coordination**

The Department appreciates the opportunity to comment on the NOP for the Dorado Oaks Project (SCH 2019071041) and recommends that the County address the Department's comments and concerns in the forthcoming CEQA document. The Department is available to meet with the County early in the planning process, and attend a site visit for this project.

If you have any questions regarding this letter or wish to schedule a meeting and/or site visit, please contact me at (916) 358-2955 or at [gabriele.quillman@wildlife.ca.gov](mailto:gabriele.quillman@wildlife.ca.gov).

Sincerely,

Gabriele (Gabe) Quillman

California Department of Fish and Wildlife – North Central Region

1701 Nimbus Road, Suite A

Rancho Cordova, CA 95816

(916) 358-2955

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**Subject:** Fwd: Dorado Oaks EIR  
**Date:** Friday, September 13, 2019 at 9:52:38 AM Pacific Daylight Time  
**From:** Michelle Smira <michelle@mmsstrategies.com>  
**To:** Wesley Fagundes <Wesley@mmsstrategies.com>  
**Attachments:** Additional Comments on Dorado Oaks Tentative Subdivision Plan.docx, ATT00001.htm

Sincerely,

Michelle Smira  
President, MMS Strategies  
520 Capitol Mall, Suite 280  
Sacramento, CA 95814  
916.479.3687 C

Begin forwarded message:

**From:** "Gloria Brown" <[gloriahb@comcast.net](mailto:gloriahb@comcast.net)>  
**Date:** September 12, 2019 at 9:06:05 AM PDT  
**To:** Michelle Smira Brattmiller <[michelle@mmsstrategies.com](mailto:michelle@mmsstrategies.com)>, Luke Evans <[LEvans@esassoc.com](mailto:LEvans@esassoc.com)>, "[gloriahb@comcast.net](mailto:gloriahb@comcast.net)" <[gloriahb@comcast.net](mailto:gloriahb@comcast.net)>, "Tom Purciel ([tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us))" <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Subject:** Re: Dorado Oaks EIR  
**Reply-To:** [gloriahb@comcast.net](mailto:gloriahb@comcast.net)

Good morning all,

Thank you so much for extending the comment period on the Dorado Oaks development plan. I have attached additional comments on the plan.

Sincerely,  
Gloria

Good Morning Gloria,

We have extended the public comment period until September 12. Hopefully that gives you a bit more time to provide comments on the project.

Thank you,  
Michelle

Michelle Smira  
President | MMS STRATEGIES  
520 Capitol Mall, Suite 280  
Sacramento, CA 95814  
916.479.3687 C

On 8/28/19, 7:53 AM, "Gloria Brown" <[gloriahb@comcast.net](mailto:gloriahb@comcast.net)> wrote:

Good morning Mr. Purciel,  
I just received information from Mr. Evans about the manzanita species of concern. Unfortunately, I'm leaving for work now and won't have time to read the recommendations before the comment period ends. However, as there are less than 100 reported occurrences of this species, mostly in El Dorado County, we need to take its preservation very seriously.

Sincerely,  
Gloria Howat Brown  
4235 Lime Kiln Road  
Diamond Springs, CA  
530-626-3241  
[gloriahb@comcast.net](mailto:gloriahb@comcast.net)

Gloria,  
I'm forwarding along the Biological Resources Evaluation that was prepared for the subdivision site. The site has been surveyed a number of times over the years. The biologist who prepared this latest document is also cc'd here (Chuck Hughes). At the time of the report's preparation he worked for a different firm, but he now works for us. If you have any specific questions concerning bio issues, please ask him and also cc me if you can so that I can remain in the loop. You are correct that the species in question is Nissenan manzanita, and I apologize that my recollection was not precise. It's been about a year since I last read the report. We have yet to formalize mitigation for the species, though the report recommended seedling propagation, which sounds as if it would be the most efficacious technique for this particular species.

There are a number of other bio studies that have been prepared for the project, and all will be available for public review. Note that this particular study was for the subdivision site only, and did not include the SR-49 project area. A separate memo report will be prepared for that area at a later time. Naturally, we're not expecting much in the way of sensitive bio resources up there.

\*Note the revised phone numbers below\*

Luke Evans  
Senior Managing Associate  
ESA | Environmental Science Associates  
909.809.0508 mobile  
520.789.7301 direct land line

From: Gloria Brown <[gloriahb@comcast.net](mailto:gloriahb@comcast.net)>  
Sent: Tuesday, August 27, 2019 7:25 AM  
To: Luke Evans <[LEvans@esassoc.com](mailto:LEvans@esassoc.com)>; Tom Purciel ([tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us))  
<[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>; Michelle Smira Brattmiller  
<[michelle@mmsstrategies.com](mailto:michelle@mmsstrategies.com)>  
Subject: Re: Dorado Oaks EIR

Good morning, Mr. Evans.

Thank you for your prompt response to my concerns about subsurface deposits associated with placing the SR-49 intersection where the brick buildings are. I'm pleased to see that you would characterize this area as highly sensitive.

Another one of my concerns is for the fauna and flora that will be affected by the development. You indicated that there is only one species of concern, a manzanita that you couldn't remember the name of. I contacted a friend who is a retired botanist to see if she knew what it would be. She thinks it would be *Arctostaphylos nissenana*, which has a California Rare Plant Rank of 1B.2 (see link below). You indicated that the species on the property was not listed and is only a "species of concern." Could you please clarify which species is on the property, how many specimens were observed, when the botany survey was done, and the botanist who performed the survey?

Thanks again for your help in my assessment of the significance of the possible impacts this project would generate.

Sincerely,  
Gloria

Link to Eldorado manzanita:  
[https://www.calflora.org/cgi-bin/species\\_query.cgi?where-calrecnum=587](https://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=587)

Gloria,  
It was good talking with you the other night. I'm also cc'ing Tom Purciel with the County and Michelle Brattmillar with the applicant team to make sure your contact info is in the database for future notices, etc. We are at least several months out from release of the Draft EIR, but if you're in the database, you'll receive notice when it is released.

As for the likelihood of subsurface deposits in the vicinity of the SR-49 intersection site, we would characterize that area as highly sensitive for subsurface cultural resources. Besides the brick building, there is also the cemetery immediately adjacent to the roadway and several other historic structures in the vicinity. The area has clearly been in use for a very long time. Since that aspect of the project would fall under the auspices of Caltrans (work on a State Highway), I would expect that there will be a requirement for a monitoring plan

during

demolition and excavation. We have yet to fully engage with Caltrans, but I work with them regularly and am familiar with their requirements, and I would expect a rigorous review from them, along with specific requirements for mitigation. Thanks for your interest in the project, and your thoughtful comments.

\*Note the revised phone numbers below\*

Luke Evans  
Senior Managing Associate  
ESA | Environmental Science Associates  
909.809.0508 mobile  
520.789.7301 direct land line

-----Original Message-----

From: Gloria Brown [<mailto:gloriahb@comcast.net> ]  
Sent: Thursday, August 22, 2019 4:49 AM  
To: Luke Evans <[LEvans@esassoc.com](mailto:LEvans@esassoc.com) >  
Subject: Dorado Oaks EIR

Hello Mr. Evans,  
I'm getting ready to leave town for a couple of days, and I want to make sure to request the EIR for the proposed Dorado Oaks development before I leave. I'm looking forward to reading through it.  
I spoke with a co-worker who helped excavate a brewery site in Placerville a few years ago. He says that they found quite a bit of it in intact buried deposits, even though there were no visible signs on the surface. He expects that if the historic brick buildings are demolished and the road/roundabout are put through there, you should expect to encounter buried deposits in their vicinity, including privies. I hope your team has looked at them from an archaeological perspective as well as an architectural one. Additionally, as I pointed out at the meeting, looking at Diamond Springs as a whole, perhaps as a historic district, the fact that they are the only remaining brick buildings increases their historic significance.  
Thank you for sending me the EIR, and thanks for your time listening to my concerns and responding in a thoughtful way.  
Sincerely,  
Gloria Howat Brown

## Additional Comments on Dorado Oaks Tentative Subdivision Plan

Attention: Tom Purciel, Associate Planner

September 10, 2019

After reading the “Biological Resources Evaluation and Botanical Survey for the Stonehenge Springs Project El Dorado County, CA” (Hughes 2018) and further consideration, I submit the following comments on the Dorado Oaks Subdivision Plan, in addition to those I submitted on August 27, 2019 and in subsequent emails. The two main concerns expressed here concern the presence of a plant with a Rare Plant Rank of 1B.2 (*Arctostaphylos nissenana*) and possible historic resources within the APE.

1. *Arctostaphylos nissenana* (Nissenan manzanita) has approximately 15 known occurrences, all in the foothills of the Sierra Nevada Range in California, earning it a Rare Plant Rank of 1B.2 (Hughes 2018). This development is planned for one of these locations. Comparing the map of housing units to the Nissenan Manzanita (*Arctostaphylos nissenana*) Shrub Location Map (Hughes 2018), none of the 88 plants located in Hughes’ 2017 survey will survive the construction of this development as planned. Hughes’ recommendation is to propagate these plants from seed to mitigate their loss. I have several concerns with this option.
  - a. Has propagation of this plant been done successfully in the past? Has it been unsuccessfully attempted? This information will help evaluate the likelihood of the success of this mitigation plan.
  - b. A recent visit to the site found no berries on the *A. nissenana* plants, even though the other manzanita on site, *A. viscida* ssp. *viscida*, had berries present on many plants. The first step in evaluating this mitigation proposal is to find out if seeds can be collected. This work should begin next spring/summer, as soon as the berries start to ripen.
  - c. If berries can be collected, propagation should begin immediately to ensure that they respond to cultivation.
  - d. This plant grows on very rocky, acidic soils. According to Hughes (2018), “*A. nissenana* at this site appears to prefer the areas that were graded down to near bedrock. Areas with deeper soil, or natural slopes, have few *A. nissenana* plants.” This makes it appear likely that even if new plants are propagated from seed, they will not thrive in other areas on the property. If there are only 15 known occurrences of this plant, and one is eliminated, the likelihood of the species’ survival decreases dramatically.
  - e. This begs the question of where will mitigation occur? If mitigation occurs at one of the other locations where this plant has been documented, and a fire wipes out the plants in this location, the likelihood for the species’ survival plummets.
  - f. It will only take a few developments and wildfires wiping out occurrences of this plant to doom it to extinction. Therefore, I recommend preservation of at least one of the two large populations of this plant on this property. As the more northern population has been more recently disturbed (see 2.a. below), and the developer is



planning on the densest housing in this area, the more southern population would be a better fit to preserve.

2. Not yet having access to the EIR, it is hard for me to evaluate if cultural resources have been evaluated with due diligence. At the informational meeting, Mr. Evans stated that there were bedrock mortars on the site that they were unable to relocate. No other cultural resources were mentioned. However, even though I have not seen artifacts on the surface of the property, there are several indications that cultural resources are present and need to be at least thoroughly recorded, if not protected.
  - a. The part of the parcel with the most Nissenan manzanita on it has been disturbed, which as mentioned above, seems to make it more attractive to the plant. However, I suspect that the disturbance at the more southern population predates the more recent attempts to develop the property. Although I have seen nothing quite like it before, it looks as if a market farmer were growing rows of rocks (see Google Maps image below). Judging from the ubiquitous presence of lichen and moss on these rows of rocks, they might have been a systematic attempt to “placer” mine. There are also piles of rocks among the rows. Sometimes piles of rocks indicate historic burials, although these piles appear too small to indicate human burials. Still, monitoring needs to be diligent in this area.
  - b. Have ditches and historic roads on the property been recorded? While they might not be of sufficient importance to restrict development, they should be thoroughly recorded, using a metal detector to help find artifacts covered with duff, before plans to develop proceed.
  - c. The plant list for the property (Hughes 2018) mentions two introduced plant species that can be indicators of historic sites. *Ailanthus altissima* (Tree of heaven) was introduced by Chinese miners. Special care should be taken near this noxious plant due to the possibility of a Chinese camp or cemetery in the proximity. Similarly, *Vinca major* (Greater periwinkle) was planted by homesteaders and could be an indicator of a historic building and associated artifacts in the vicinity, even if none are visible on the surface. Areas with these plants need to be surveyed carefully and monitored by an archeologist during construction.

Thank you for your patient consideration of my comments.

Sincerely,  
Gloria Howat Brown  
4235 Lime Kiln Road  
Diamond Springs, CA  
[gloriahb@comcast.net](mailto:gloriahb@comcast.net)  
530-626-3241



Map of anthropogenic landform, possibly dating to the gold mining era.

**Subject:** Fwd: [dorado\_oaks] Dorado Oaks NOP Comments  
**Date:** Friday, September 13, 2019 at 9:52:44 AM Pacific Daylight Time  
**From:** Michelle Smira <michelle@mmsstrategies.com>  
**To:** Wesley Fagundes <Wesley@mmsstrategies.com>

Sincerely,

Michelle Smira  
President, MMS Strategies  
520 Capitol Mall, Suite 280  
Sacramento, CA 95814  
916.479.3687 C

Begin forwarded message:

**From:** Tom Purciel <[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)>  
**Date:** September 12, 2019 at 8:21:22 AM PDT  
**To:** Michelle Smira Brattmiller <[michelle@mmsstrategies.com](mailto:michelle@mmsstrategies.com)>  
**Subject:** Fwd: [dorado\_oaks] Dorado Oaks NOP Comments

----- Forwarded message -----

**From:** Ken Greenwood <[kg@d-web.com](mailto:kg@d-web.com)>  
**Date:** Thu, Sep 12, 2019 at 2:15 AM  
**Subject:** [dorado\_oaks] Dorado Oaks NOP Comments  
**To:** Tom Purciel <[dorado\\_oaks@edcgov.us](mailto:dorado_oaks@edcgov.us)>  
**Cc:** Rommel Pabalinas <[Rommel.Pabalinas@edcgov.us](mailto:Rommel.Pabalinas@edcgov.us)>, edc cob <[edc.cob@edcgov.us](mailto:edc.cob@edcgov.us)>, Planning EDCo <[planning@edcgov.us](mailto:planning@edcgov.us)>

Dear EDCo Planning,

I was pleased to see the comment period was extended for this project. It is sad the August 20, 2019 "Public Information Meeting" was derailed as it was an awesome opportunity (LOST) to educate the concerned public to the Process involved, where they fit into it and how they can participate with knowledge so they can make intelligent comments that will make for a better end product. I trust any further "Workshops" will be better organized and the information be more 'digestible' for the public. Right now, they have a little gastric distress.

I hope that the names and e-mail addresses collected will be used extensively and effectively to disperse any further updates to the Project, any deadlines and upcoming public meetings or workshops. You have an awesome opportunity here to make good and regain the trust of the public.

My previous e-mails dated August 2 (to you), August 19 (to you) and August 26 (to BOS, CC you)

As there is no "Initial Study" to work from, it makes it hard to make good comments on the project as there is nothing but an incoherent "Project Description" that STILL fails to give the average person a firm range of the number of dwelling units the Project may involve. It appears you are trying to be evasive at best, and just plain misleading at worst. Again, this is no way to treat the Public. Please see the "Initial Study" slide from a Power Point presentation linked below:

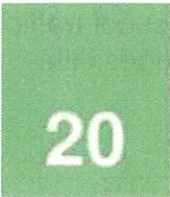
The form can found at: [http://resources.ca.gov/ceqa/guidelines/Appendix\\_G.html](http://resources.ca.gov/ceqa/guidelines/Appendix_G.html) and can be very useful. See what they say in the following Power Point Presentation: "The I.S. is the BACKBONE of the Environmental evaluation under CEQA."

<https://www.slideserve.com/oral/ceqa-and-ceqa-plus-powerpoint-ppt-presentation>

## **CEQA Process – Initial**

The Initial Study is the backbone of the environmental evaluation under CEQA.

Most Agencies use the checklist in the CEQA Guidelines.



These comments will be brief as you have suggested they are due at 5 PM Thursday September 12, 2019 (instead of Midnight). I seriously doubt you will be staying late to be looking at or logging-in the comments. Just another barrier for people to submit comments.

\*\*\*\*\*

#### Project Description:

- What is the RANGE of the proposed and allowable "DWELLING UNIT" count of this project? I have requested this more than once and still have no idea what that range might be. Without the RANGE of DU's for the purposes of establishing traffic impacts, there can be no specific numbers attain via analysis. This also applies to many of the OTHER impact analyses (schools, parks, etc) and is just plain courtesy to the Public and Reviewing Agencies.
- I am still amazed that this relatively simple calculation (for you and/or the applicant) hasn't been done. You have failed to adequately describe the Project from the ground up.
  - And PLEASE do not suggest I or anyone else calculate these numbers that seem the complexity of Linear Algebra in 2 variables.
- What is the PHASING of the Project? It clearly will not come on-line all at once, so what time frame can we expect for the implementation of this project?
- These are things that are part of a COMPLETE Project Description.

#### Noticing:

- It appears the Project has suffered from a lack of "Notice" in general. Has every parcel fronting on the alternative General Circulation accesses to Argonaut and Fowler been noticed? (All the way to Pleasant Valley Drive?) Same for South end " Emergency Access" along lower Fowler?
- I do not see a "noticing exhibit" in any of the documentation. Why was this NOT included in the NOP info? (Or at least referenced in the file/NOP?)

#### Transportation/Traffic:

- How will this Project impact Peak hour traffic at the US 50 and Missouri Flat intersection?
  - Along Pleasant Valley Road, how will it effect all intersections from the Project site east and west, including Patterson drive and Fowler Drive.
  - How will intersection impacts compare to the Requirements of Measure E?
- Why isn't there an East to West connector from Union Mine High School

through Deer Park to Fowler Drive to alleviate some of the High School traffic on Pleasant Valley Road? The current connection with Argonaut does little to mitigate traffic impacts on Pleasant Valley Road.

#### Emergency Access:

- The proposed Emergency Access at the south end of the Project area onto "Lower Fowler" road will be problematic for a number of reasons:
  - The Road is not nearly 18 foot wide 2-way Traveled Way. There will need to be extensive widening and involve relocation of fencing and stream side grading.
  - Do the Project applicants have deeded access to use the road for this purpose?
  - Have ALL parcels along this proposed route been NOTICED of this component of the Project Proposal? (In the past? Will they be Noticed in the near future? Will they ever be noticed?) I sure hope they are Noticed in the next 2 months so that their input can be in the mix.

#### Water Quality:

- Due to a significant increase in on-site impervious surfaces, there will be significant increase of runoff from the project area and the increased runoff will require significant upgrades to downstream drainage facilities, particularly to the Southeast along Fowler Road. How will this be accomplished without increased stream bank erosion and damage to the aquatic environment.
  - Same considerations for all streams flowing off-site.

#### Wetlands/Wildlife Habitat:

- There are some low-grade wetland areas on the northern portion of the property, but more viable riparian areas towards the south. How will these areas be protected from the effects of increased runoff and all the other impacts of watershed conversion to Residential use?

#### Archaeological Resources:

- There are 2 identified grinding rock areas on the site. However, there is no discussion of habitation or ceremonial or burial sites on the property. It has been suggested that such sites/uses are on the Project area. Please conduct another survey, but do include the local Native American community beyond those at the Rancheria for consultation.
- The Historical influences are pretty strong on the property with numerous areas of mining activity. How will these be preserved and/or be relocated to the included Parks for interpretive purposes?

#### Public Services:

- How will this Project be serviced by the El Dorado Sheriff's Office? I recall years ago the EDSO used to send comments saying the usual "Residential Project" will generate the need for X number of Deputies per 1000 population at a "cost per Deputy" (and their car, gun and such). Can't remember what

the \$\$\$/ Dwelling Unit was (oh wait, we have no idea of how many DU's there are...), but this is a cost that SHOULD NOT be borne by the General Fund for new development such as this. >Therefore, there is a real suggestion and a NEED for an "Sheriff's Impact Fee per DU" that should be assessed and that fee should be established and then charged for every Dwelling Unit at the Ministerial Building Permit Stage just as most other "Impact Fees" are paid.

- o I'll try to find my file on that one as it was all listed-out pretty completely. When I asked the Sheriff at the time (Neves I believe) he said "it wouldn't be taken well." I'm thinking it's time to seriously consider such a fee to adequately serve this and other new development in El Dorado County.

Thanks for your attention to these comments and those previously from my August 2, 19 and 26 e-mails.

Sincerely,

Ken Greenwood

Straight Shot Consulting  
530-306-6390 (C) [krq@d-web.com](mailto:krq@d-web.com)

--

**Tom Purciel**  
Associate Planner

**County of El Dorado**  
Department of Planning and Building  
2850 Fairlane Court  
Placerville, CA 95667  
(530) 621-5903  
[tom.purciel@edcgov.us](mailto:tom.purciel@edcgov.us)  
<https://www.edcgov.us/government/Planning>

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

**DORADO OAKS TENTATIVE SUBDIVISION MAP  
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)  
(STATE CLEARINGHOUSE #2019071041)**

**APPENDIX B**

**AIR QUALITY AND GREENHOUSE GAS  
EMISSIONS**



# Project: Dorado Oaks

## Summary of CO<sub>2</sub> Emissions from Project Construction

| MT of CO <sub>2</sub> from CalEEMod/RCEM outputs |                       |
|--|-----------------------|
| 2022   | Site Prep             |
| On-site equipment                                | 139                   |
| Hauling  | 13                    |
| Vendor   | 2                     |
| Worker   | 2                     |
| 2022   | Grading               |
| On-site equipment                                | 409.0002              |
| Hauling  | 64.6239               |
| Vendor   | 4.2669                |
| Worker   | 11.1656               |
| 2022   | Building Construction |
| On-site equipment                                | 53.2968               |
| Hauling  | 0                     |
| Vendor   | 23.6685               |
| Worker   | 33.083                |
| 2023   | Building Construction |
| On-site equipment                                | 301.3462              |
| Hauling  | 0.00                  |
| Vendor   | 130.90                |
| Worker   | 180.06                |
| 2024   | Building Construction |
| On-site equipment                                | 303.7223              |
| Hauling  | 0                     |
| Vendor   | 131.2645              |
| Worker   | 174.5015              |
| 2025   | Building Construction |
| On-site equipment                                | 302.6549              |
| Hauling  | 0                     |
| Vendor   | 130.1674              |
| Worker   | 166.9912              |
| 2026   | Building Construction |
| On-site equipment                                | 11.596                |
| Hauling  | 0                     |
| Vendor   | 4.9668                |
| Worker   | 6.1645                |
| 2026   | Paving                |
| On-site equipment                                | 62.7486               |
| Hauling  | 90.0245               |
| Vendor   | 3.0043                |
| Worker   | 3.4904                |
| 2026   | Architectural         |
| On-site equipment                                | 7.9151                |

|              |      |  |
|--------------|------|--|
| Hauling      |      | 0  |
| Vendor       |      | 0  |
| Worker       |      | 7.6789   |
|              | 2022 | Proposed Emergency Vehicle Access <sup>1</sup> |
| Construction |      | 52.24  |
|              | 2022 | SR 49 Intersection <sup>1</sup>                |
| Construction |      | 187.3  |
| Demolition   |      | 37.3893  |
| Hauling      |      | 2.2808   |
| Vendor       |      | 0  |
| Worker       |      | 1.0837   |

|                    | <b>MT of CO2e</b> |
|--------------------|-------------------|
| Total Diesel use   | 2467.8            |
| Total Gasoline Use | 586.5             |
|                    |                   |
| Onsite diesel      | 1868.0            |
| Onroad diesel      | 599.8             |

# Project: Dorado Oaks

## Diesel and Gasoline Use Calculations

| Diesel Sources - Construction                            |               |   |       |
|--|---------------|---|-------|
| Diesel Offroad   | 1868.013      | MT of CO <sub>2</sub>                   |       |
| Convert to kilograms                                     | 1.87E+06      | kg of CO <sub>2</sub>                   |       |
| CO <sub>2</sub> from diesel fuel combustion <sup>a</sup> | 10.21         | kg of CO <sub>2</sub> /gallon of diesel |       |
| <b>Diesel Use over construction period =</b>             | <b>182959</b> | <b>gallons of diesel</b>                | 45740 |
|  |               |   |       |
| Diesel Onroad  | 599.8         | MT of CO <sub>2</sub>                   |       |
| Convert to kilograms                                     | 6.00E+05      | kg of CO <sub>2</sub>                   |       |
| CO <sub>2</sub> from diesel fuel combustion <sup>a</sup> | 10.21         | kg of CO <sub>2</sub> /gallon of diesel |       |
| <b>Diesel Use over construction period =</b>             | <b>58746</b>  | <b>gallons of diesel</b>                | 14687 |

| Gasoline Sources - Construction                            |              |   |       |
|--|--------------|---|-------|
| Construction workers                                       | 586.5        | MT of CO <sub>2</sub>                     |       |
| Convert to kilograms                                       | 5.86E+05     | kg of CO <sub>2</sub>                     |       |
| CO <sub>2</sub> from gasoline fuel combustion <sup>a</sup> | 8.78         | kg of CO <sub>2</sub> /gallon of gasoline |       |
| <b>Gasoline Use over construction period =</b>             | <b>66794</b> | <b>gallons of gasoline</b>                | 16699 |

Notes:

<sup>a</sup> Emissions factors per The Climate Registry 2019 Default Emission Factors (Table 2.1 - US Default Factors for Calculating CO<sub>2</sub> Emissions from Combustion of Transport Fuels)

|            |        |         |
|------------|--------|---------|
| Conversion | 1 MT = | 1000 kg |
|------------|--------|---------|

### Operational Transportation Use

Based on EMFAC2017 data for El Dorado County for 2027, for aggregated model years and speed and all vehicle

| Fuel | VMT (miles/day) | Fuel Use (gallons/day) | miles/gallon            |
|------|-----------------|------------------------|-------------------------|
| DSL  | 304999.0505     | 22843.89344            | 13.35144779             |
| GAS  | 4528208.042     | 156292.4118            | 28.97266726             |
| Fuel | VMT (miles/day) | Fuel Use (gallons/day) | Fuel Use (kWh/100miles) |
| ELEC | 131032.4958     | 0                      | 26                      |
| NG   | 91.78611068     | 24.30597381            | 3.776277857             |

categories

| <b>Project VMT<br/>(miles/year)</b> | <b>Project Fuel Use<br/>(gallons/year)</b>        |
|-------------------------------------|---|
| 438926.643                          | 32875   |
| 7310844.682                         | 252336  |
| <b>Project VMT<br/>(miles/year)</b> | <b>Project<br/>Electricity Use<br/>(kWh/year)</b> |
| 220179.5649                         | 57247   |
| 107.0941314                         | 28  |

7970065.955 (annual Project VMT from CalEEMod)

## Project: Dorado Oaks

### Energy for Water Use during Operation

|  |           |           |
|--|-----------|-----------|
| Outdoor Water Use from CalEEMod output | 97.54559  | Mgal/year |
| Indoor Water Use from CalEEMod output  | 19.91105  | Mgal/year |
| Total                                  | 117.45664 | Mgal/year |

From CalEEMod Users Guide, for El Dorado county,

|  |      |           |
|--|------|-----------|
| Electricity Intensity Factor to supply water     | 2117 | kWhr/Mgal |
| Electricity Intensity Factor to treat water      | 111  | kWhr/Mgal |
| Electricity Intensity Factor to distribute water | 1272 | kWhr/Mgal |
| Total Electricity Intensity Factor for Water     | 3500 | kWhr/Mgal |

|  |                  |                  |
|--|------------------|------------------|
| <b>Total annual energy use for water</b> | <b>411098.24</b> | <b>kWhr/year</b> |
|--|------------------|------------------|

## Project: Dorado Oaks

### Summary of Construction Energy Use - Project

| Fuel     | Source                 | Amount | Unit                |
|----------|------------------------|--------|---------------------|
| Diesel   | Construction - Offroad | 182959 | Gallons of diesel   |
|          | Construction - Onroad  | 58746  | Gallons of diesel   |
|          | Construction - Total   | 241705 | Gallons of diesel   |
| Gasoline | Construction - Onroad  | 66794  | Gallons of gasoline |

### Summary of Total Annual Operational Energy Use - Project

| Fuel        | Source         | Amount  | Unit                       |
|-------------|----------------|---------|----------------------------|
| Electricity | Buildings      | 3,620   | megaWatt-hour/Year         |
| Natural Gas | Buildings      | 0       | MMBtu/Year                 |
| Gasoline    | Motor Vehicles | 252,336 | Gallons of gasoline per    |
| Diesel      | Motor Vehicles | 32,875  | Gallons of diesel per year |
| Electricity | Motor Vehicles | 57      | megaWatt-hour/Year         |
| Electricity | Water Use      | 411     | megaWatt-hour/Year         |

### Construction

|          |                  |              |              |
|----------|------------------|--------------|--------------|
| Gasoline |                  | Gallons/year | Project % of |
|          | California       | 15400000000  | 0.000        |
|          | El Dorado County | 76000000     | 0.022        |
|          | Project          | 16,699       |              |
| Diesel   |                  | Gallons/year | Project % of |
|          | California       | 3100000000   | 0.002        |
|          | El Dorado County | 18750000     | 0.322        |
|          | Project          | 60,426       |              |

### Operation

|             |                  |              |              |
|-------------|------------------|--------------|--------------|
| Electricity |                  | kWh/yr       | Project % of |
|             | California       | 2.85E+11     | 0.001        |
|             | El Dorado County | 1.22E+09     | 0.336        |
|             | Project          | 4.09E+06     |              |
| Gasoline    |                  | Gallons/year | Project % of |
|             | California       | 15400000000  | 0.002        |
|             | El Dorado County | 76000000     | 0.332        |
|             | Project          | 252,336      |              |
| Diesel      |                  | Gallons/year | Project % of |
|             | California       | 3100000000   | 0.001        |
|             | El Dorado County | 18750000     | 0.175        |
|             | Project          | 32,875       |              |

| Annual Use over 4 years |
|-------------------------|
| 60426                   |
| 16699                   |



**Conversion of natural gas intensity to Electrical intensity demand**

To account for no natural gas service in the project area

**CalEEMod Energy use default values**

|                       | T24 Electricity<br>(Kwh/size/yr) | Non- T24<br>Electricity<br>(Kwh/size/yr) | Lighting |
|-----------------------|----------------------------------|--|----------|
| Apartments Low Rise   | 775.93                           | 3,172.76                                 | 810.36   |
| Single Family Housing | 912.41                           | 6155.97                                  | 1608.84  |

Conversion Factor = 1

**Adjusted values to account for no natural gas**

|                       | T24 Electricity<br>(Kwh/size/yr) | Non- T24<br>Electricity<br>(Kwh/size/yr) | Lighting |
|-----------------------|----------------------------------|--|----------|
| Apartments Low Rise   | 3472.466                         | 3641.400                                 | 810.36   |
| Single Family Housing | 3994.913                         | 6624.610                                 | 1608.84  |

**2019 Title 24 Adjustment**

California Energy Commission, Impact Analysis, 2019 Update to the California Energy Efficiency Standards for Residential), Table 19 (Multi-Family without PV), June 10, 2015. Available: [https://ww2.energy.ca.gov/title24/2019standards/post\\_adoption/documents/2019\\_Impact\\_Analysis\\_Final\\_I](https://ww2.energy.ca.gov/title24/2019standards/post_adoption/documents/2019_Impact_Analysis_Final_I)

**Non-Residential**

% savings over Title 24 (2019) Electricity  
Non-Residential: 10.7%

**Residential**

% savings over Title 24 (2019) Electricity  
Multi-Family without PV: 2%

|                      | T24 Electricity<br>(Kwh/size/yr) |
|----------------------|----------------------------------|
| Apartments High Rise | 3403.016                         |
| Day-Care Center      | 3567.457                         |

|                  |                          |  |
|------------------|--------------------------|--|
| T24 nat gas      |                          |  |
| energy intensity | Non -T24 nat gas energy  |  |
| (kBTU/size/yr)   | intensity (kBTU/size/yr) |  |

|          |       |  |
|----------|-------|--|
| 9,200.58 | 1,599 |  |
| 10517.5  | 1599  |  |

kBtu = 3.412 kWhr

|                  |                          |  |
|------------------|--------------------------|--|
| T24 nat gas      |                          |  |
| energy intensity | Non -T24 nat gas energy  |  |
| (kBTU/size/yr)   | intensity (kBTU/size/yr) |  |

|      |   |               |
|------|---|---------------|
| 0.00 | 0 | 14,659,655.76 |
| 0    | 0 | 10,229,182.02 |

Residential and Non-Residential Buildings, Section 1.2 (Non-  
 Report\_2018-06-29.pdf. Accessed January 2020.

|                      |    |
|----------------------|----|
| over Title 24 (2016) |    |
| Lighting             | NG |
| 0%                   | 1% |

|                      |    |
|----------------------|----|
| over Title 24 (2016) |    |
| Lighting             | NG |
| 0%                   | 5% |

|            |             |
|------------|-------------|
| 11727724.6 | 11727724.61 |
| 8183345.62 | 8183345.616 |

Dorado Oaks Subdivision - El Dorado-Mountain County County, Annual

**Dorado Oaks Subdivision**  
**El Dorado-Mountain County County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses             | Size   | Metric        | Lot Area |
|-----------------------|--------|---------------|----------|
| City Park             | 68.70  | Acre          | 68.70    |
| Apartments Low Rise   | 225.00 | Dwelling Unit | 18.17    |
| Single Family Housing | 157.00 | Dwelling Unit | 30.02    |

**1.2 Other Project Characteristics**

|                                |                                |                                |       |                                  |       |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>            | Urban                          | <b>Wind Speed (m/s)</b>        | 2.7   | <b>Precipitation Freq (Days)</b> | 7     |
| <b>Climate Zone</b>            | 1                              |                                |       | <b>Operational Year</b>          | 2     |
| <b>Utility Company</b>         | Pacific Gas & Electric Company |                                |       |                                  |       |
| <b>CO2 Intensity (lb/MWhr)</b> | 210                            | <b>CH4 Intensity (lb/MWhr)</b> | 0.029 | <b>N2O Intensity (lb/MWhr)</b>   | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Adjusted based on [http://www.pgecorp.com/corp\\_responsibility/reports/2019/assets/PGE\\_Land Use - From Project Description](http://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_Land Use - From Project Description)

Construction Phase - Applicant data. Demolition area associated with SR-49 improvement component

Off-road Equipment - Default used

Off-road Equipment - Default used

Off-road Equipment - Default equipment used

Off-road Equipment - Data from applicant

Off-road Equipment - Data from applicant

Off-road Equipment - Data from applicant

Trips and VMT - Building construction and architectural coating trips based on residential component only, default f data

Demolition -

Grading - Site area

Vehicle Trips - Adjusted based on project traffic study

Woodstoves - Default number of fireplaces assumed, all burning propane per applicant

Energy Use - Adjusted for 2019 Title 24 energy consumption rates and to account electricity replacing natural gas

Construction Off-road Equipment Mitigation -

Water And Wastewater - 20% reduction in indorr water use to account for CalGreen code requirement.

| Table Name           | Column Name                | Default Value | Ne |
|----------------------|----------------------------|---------------|----|
| tblConstructionPhase | NumDays                    | 200.00        | :  |
| tblConstructionPhase | NumDays                    | 120.00        | :  |
| tblConstructionPhase | NumDays                    | 310.00        | :  |
| tblConstructionPhase | NumDays                    | 3,100.00      | 8  |
| tblConstructionPhase | NumDays                    | 220.00        | (  |
| tblConstructionPhase | NumDays                    | 220.00        | (  |
| tblEnergyUse         | NT24E                      | 3,172.76      | 3, |
| tblEnergyUse         | NT24E                      | 6,155.97      | 6, |
| tblEnergyUse         | NT24NG                     | 1,599.00      |    |
| tblEnergyUse         | NT24NG                     | 1,599.00      |    |
| tblEnergyUse         | T24E                       | 775.93        | 3, |
| tblEnergyUse         | T24E                       | 912.41        | 3, |
| tblEnergyUse         | T24NG                      | 9,200.58      |    |
| tblEnergyUse         | T24NG                      | 10,517.50     |    |
| tblFireplaces        | NumberGas                  | 123.75        |    |
| tblFireplaces        | NumberGas                  | 86.35         |    |
| tblFireplaces        | NumberPropane              | 0.00          | 2  |
| tblFireplaces        | NumberPropane              | 0.00          | 1  |
| tblFireplaces        | NumberWood                 | 78.75         |    |
| tblFireplaces        | NumberWood                 | 54.95         |    |
| tblGrading           | AcresOfGrading             | 318.75        | 1  |
| tblGrading           | AcresOfGrading             | 102.00        |    |
| tblGrading           | MaterialImported           | 0.00          | 7, |
| tblLandUse           | LotAcreage                 | 14.06         | .  |
| tblLandUse           | LotAcreage                 | 50.97         | :  |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 2.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 2.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 3.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 2.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 2.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 4.00          |    |
| tblOffRoadEquipment  | UsageHours                 | 8.00          |    |
| tblOffRoadEquipment  | UsageHours                 | 8.00          |    |

|                           |                                      |               |      |
|---------------------------|--------------------------------------|---------------|------|
| tblOffRoadEquipment       | UsageHours                           | 8.00          |      |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |      |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |      |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |      |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |      |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |      |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |      |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |      |
| tblProjectCharacteristics | CO2IntensityFactor                   | 641.35        |      |
| tblTripsAndVMT            | HaulingTripNumber                    | 0.00          | 3    |
| tblTripsAndVMT            | HaulingTripNumber                    | 988.00        | 1,   |
| tblTripsAndVMT            | HaulingTripNumber                    | 0.00          | 2,   |
| tblTripsAndVMT            | VendorTripNumber                     | 0.00          |      |
| tblTripsAndVMT            | VendorTripNumber                     | 0.00          |      |
| tblTripsAndVMT            | VendorTripNumber                     | 531.00        | ,    |
| tblTripsAndVMT            | VendorTripNumber                     | 0.00          |      |
| tblTripsAndVMT            | WorkerTripNumber                     | 30.00         | ;    |
| tblTripsAndVMT            | WorkerTripNumber                     | 68.00         | ,    |
| tblTripsAndVMT            | WorkerTripNumber                     | 1,475.00      | 2    |
| tblTripsAndVMT            | WorkerTripNumber                     | 38.00         | ;    |
| tblTripsAndVMT            | WorkerTripNumber                     | 295.00        | ,    |
| tblVehicleTrips           | ST_TR                                | 7.16          |      |
| tblVehicleTrips           | ST_TR                                | 22.75         |      |
| tblVehicleTrips           | ST_TR                                | 9.91          |      |
| tblVehicleTrips           | SU_TR                                | 6.07          |      |
| tblVehicleTrips           | SU_TR                                | 16.74         |      |
| tblVehicleTrips           | SU_TR                                | 8.62          |      |
| tblVehicleTrips           | WD_TR                                | 6.59          |      |
| tblVehicleTrips           | WD_TR                                | 1.89          |      |
| tblVehicleTrips           | WD_TR                                | 9.52          |      |
| tblWater                  | AerobicPercent                       | 87.46         | 1    |
| tblWater                  | AerobicPercent                       | 87.46         | 1    |
| tblWater                  | AerobicPercent                       | 87.46         | 1    |
| tblWater                  | AnaerobicandFacultativeLagoonsPercen | 2.21          |      |
| tblWater                  | AnaerobicandFacultativeLagoonsPercen | 2.21          |      |
| tblWater                  | AnaerobicandFacultativeLagoonsPercen | 2.21          |      |
| tblWater                  | IndoorWaterUseRate                   | 14,659,655.76 | 11,7 |
| tblWater                  | IndoorWaterUseRate                   | 10,229,182.02 | 8,18 |
| tblWater                  | SepticTankPercent                    | 10.33         |      |

|          |                   |       |
|----------|-------------------|-------|
| tblWater | SepticTankPercent | 10.33 |
| tblWater | SepticTankPercent | 10.33 |

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

|                | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     |
|----------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|
| Year           | tons/yr       |               |               |                 |               |               |               |                |               |               |          |               |
| 2022           | 0.4507        | 4.5706        | 3.9437        | 8.99E-03        | 0.1649        | 0.1827        | 0.3476        | 0.0314         | 0.169         | 0.2004        | 0        | 795.52        |
| 2023           | 0.3374        | 2.4071        | 3.0032        | 6.88E-03        | 0.2588        | 0.0936        | 0.3523        | 0.0697         | 0.088         | 0.1577        | 0        | 612.30        |
| 2024           | 0.3195        | 2.2818        | 2.9506        | 6.85E-03        | 0.2608        | 0.0829        | 0.3436        | 0.0702         | 0.0779        | 0.1481        | 0        | 609.48        |
| 2025           | 0.2983        | 2.1277        | 2.8729        | 6.74E-03        | 0.2598        | 0.0713        | 0.331         | 0.0699         | 0.067         | 0.1369        | 0        | 599.81        |
| 2026           | 8.0073        | 0.6598        | 0.7388        | 2.19E-03        | 0.047         | 0.0189        | 0.0659        | 0.0127         | 0.0178        | 0.0306        | 0        | 197.58        |
| <b>Maximum</b> | <b>8.0073</b> | <b>4.5706</b> | <b>3.9437</b> | <b>8.99E-03</b> | <b>0.2608</b> | <b>0.1827</b> | <b>0.3523</b> | <b>0.0702</b>  | <b>0.169</b>  | <b>0.2004</b> | <b>0</b> | <b>795.52</b> |

#### Mitigated Construction

|                | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     |
|----------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|
| Year           | tons/yr       |               |               |                 |               |               |               |                |               |               |          |               |
| 2022           | 0.4507        | 4.5706        | 3.9437        | 8.99E-03        | 0.1649        | 0.1827        | 0.3476        | 0.0314         | 0.169         | 0.2004        | 0        | 795.52        |
| 2023           | 0.3374        | 2.4071        | 3.0032        | 6.88E-03        | 0.2588        | 0.0936        | 0.3523        | 0.0697         | 0.088         | 0.1577        | 0        | 612.30        |
| 2024           | 0.3195        | 2.2818        | 2.9506        | 6.85E-03        | 0.2608        | 0.0829        | 0.3436        | 0.0702         | 0.0779        | 0.1481        | 0        | 609.48        |
| 2025           | 0.2983        | 2.1277        | 2.8729        | 6.74E-03        | 0.2598        | 0.0713        | 0.331         | 0.0699         | 0.067         | 0.1369        | 0        | 599.81        |
| 2026           | 8.0073        | 0.6598        | 0.7388        | 2.19E-03        | 0.047         | 0.0189        | 0.0659        | 0.0127         | 0.0178        | 0.0306        | 0        | 197.58        |
| <b>Maximum</b> | <b>8.0073</b> | <b>4.5706</b> | <b>3.9437</b> | <b>8.99E-03</b> | <b>0.2608</b> | <b>0.1827</b> | <b>0.3523</b> | <b>0.0702</b>  | <b>0.169</b>  | <b>0.2004</b> | <b>0</b> | <b>795.52</b> |

|                          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2    | NBio- CO2   |
|--------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|-------------|-------------|
| <b>Percent Reduction</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>   | <b>0.00</b>  | <b>0.00</b> | <b>0.00</b>    | <b>0.00</b>   | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|----------|--|--|
|---------|------------|----------|--|--|

|    |            |            |        |        |
|----|------------|------------|--------|--------|
| 1  | 5-15-2022  | 8-14-2022  | 2.4183 | 2.4183 |
| 2  | 8-15-2022  | 11-14-2022 | 2.1992 | 2.1992 |
| 3  | 11-15-2022 | 2-14-2023  | 0.7379 | 0.7379 |
| 4  | 2-15-2023  | 5-14-2023  | 0.6726 | 0.6726 |
| 5  | 5-15-2023  | 8-14-2023  | 0.6921 | 0.6921 |
| 6  | 8-15-2023  | 11-14-2023 | 0.6952 | 0.6952 |
| 7  | 11-15-2023 | 2-14-2024  | 0.6780 | 0.6780 |
| 8  | 2-15-2024  | 5-14-2024  | 0.6398 | 0.6398 |
| 9  | 5-15-2024  | 8-14-2024  | 0.6511 | 0.6511 |
| 10 | 8-15-2024  | 11-14-2024 | 0.6539 | 0.6539 |
| 11 | 11-15-2024 | 2-14-2025  | 0.6363 | 0.6363 |
| 12 | 2-15-2025  | 5-14-2025  | 0.5923 | 0.5923 |
| 13 | 5-15-2025  | 8-14-2025  | 0.6096 | 0.6096 |
| 14 | 8-15-2025  | 11-14-2025 | 0.6122 | 0.6122 |
| 15 | 11-15-2025 | 2-14-2026  | 0.6166 | 0.6166 |
| 16 | 2-15-2026  | 5-14-2026  | 3.5006 | 3.5006 |
| 17 | 5-15-2026  | 8-14-2026  | 4.9698 | 4.9698 |
|    |            | Highest    | 4.9698 | 4.9698 |

**2.2 Overall Operational**  
**Unmitigated Operational**

|              | ROG          | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2        | NBio- CO2      |
|--------------|--------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|-----------------|----------------|
| Category     | tons/yr      |               |                |               |               |               |               |                |               |               |                 |                |
| Area         | 3.3067       | 0.4508        | 6.5773         | 0.0117        |               | 0.6118        | 0.6118        |                | 0.6118        | 0.6118        | 77.216          | 319.08         |
| Energy       | 0            | 0             | 0              | 0             |               | 0             | 0             |                | 0             | 0             | 0               | 344.827        |
| Mobile       | 0.6693       | 2.1725        | 7.91           | 0.0274        | 2.9399        | 0.0241        | 2.964         | 0.7876         | 0.0224        | 0.81          | 0               | 2,497.1        |
| Waste        |              |               |                |               |               | 0             | 0             |                | 0             | 0             | 44.995          | 0              |
| Water        |              |               |                |               |               | 0             | 0             |                | 0             | 0             | 7.0446          | 42.783         |
| <b>Total</b> | <b>3.976</b> | <b>2.6233</b> | <b>14.4873</b> | <b>0.0391</b> | <b>2.9399</b> | <b>0.6359</b> | <b>3.5758</b> | <b>0.7876</b>  | <b>0.6342</b> | <b>1.4218</b> | <b>129.2556</b> | <b>3,203.8</b> |

**Mitigated Operational**



|              | ROG          | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2        | NBio- CO2      |
|--------------|--------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|-----------------|----------------|
| Category     | tons/yr      |               |                |               |               |               |               |                |               |               |                 |                |
| Area         | 3.3067       | 0.4508        | 6.5773         | 0.0117        |               | 0.6118        | 0.6118        |                | 0.6118        | 0.6118        | 77.216          | 319.08         |
| Energy       | 0            | 0             | 0              | 0             |               | 0             | 0             |                | 0             | 0             | 0               | 344.827        |
| Mobile       | 0.6693       | 2.1725        | 7.91           | 0.0274        | 2.9399        | 0.0241        | 2.964         | 0.7876         | 0.0224        | 0.81          | 0               | 2,497.1        |
| Waste        |              |               |                |               |               | 0             | 0             |                | 0             | 0             | 44.995          | 0              |
| Water        |              |               |                |               |               | 0             | 0             |                | 0             | 0             | 7.0446          | 42.783         |
| <b>Total</b> | <b>3.976</b> | <b>2.6233</b> | <b>14.4873</b> | <b>0.0391</b> | <b>2.9399</b> | <b>0.6359</b> | <b>3.5758</b> | <b>0.7876</b>  | <b>0.6342</b> | <b>1.4218</b> | <b>129.2556</b> | <b>3,203.8</b> |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00         | 0.00       | 0.00           | 0.00          | 0.00        | 0.00     |           |

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date   | Num Days Week | Num Days |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|
| 1            | Demolition            | Demolition            | 5/15/2022  | 6/14/2022  | 5             | 22       |
| 2            | Site Preparation      | Site Preparation      | 5/15/2022  | 6/30/2022  | 5             | 34       |
| 3            | Grading               | Grading               | 7/1/2022   | 10/27/2022 | 5             | 85       |
| 4            | Building Construction | Building Construction | 10/28/2022 | 1/14/2026  | 5             | 839      |
| 5            | Paving                | Paving                | 1/15/2026  | 4/10/2026  | 5             | 62       |
| 6            | Architectural Coating | Architectural Coating | 4/11/2026  | 7/7/2026   | 5             | 62       |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 142.5

Acres of Paving: 0

Residential Indoor: 1,027,890; Residential Outdoor: 342,630; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

#### OffRoad Equipment

| Phase Name       | Offroad Equipment Type   | Amount | Usage Hours | Horse Power |
|------------------|--------------------------|--------|-------------|-------------|
| Demolition       | Concrete/Industrial Saws | 1      | 8.00        | 81          |
| Demolition       | Excavators               | 3      | 8.00        | 158         |
| Demolition       | Rubber Tired Dozers      | 2      | 8.00        | 247         |
| Site Preparation | Off-Highway Trucks       | 4      | 6.00        | 402         |
| Site Preparation | Rubber Tired Dozers      | 0      | 0.00        | 247         |

|                       |                              |   |      |     |
|-----------------------|------------------------------|---|------|-----|
| Site Preparation      | Scrapers                     | 4 | 6.00 | 367 |
| Site Preparation      | Skid Steer Loaders           | 2 | 6.00 | 65  |
| Site Preparation      | Tractors/Loaders/Backhoes    | 2 | 6.00 | 97  |
| Grading               | Dumpers/Tenders              | 6 | 6.00 | 16  |
| Grading               | Excavators                   | 2 | 6.00 | 158 |
| Grading               | Graders                      | 2 | 6.00 | 187 |
| Grading               | Off-Highway Tractors         | 2 | 6.00 | 124 |
| Grading               | Other Construction Equipment | 5 | 6.00 | 172 |
| Grading               | Rollers                      | 2 | 6.00 | 80  |
| Grading               | Rubber Tired Dozers          | 0 | 0.00 | 247 |
| Grading               | Scrapers                     | 4 | 6.00 | 367 |
| Grading               | Tractors/Loaders/Backhoes    | 4 | 6.00 | 97  |
| Building Construction | Cranes                       | 1 | 7.00 | 231 |
| Building Construction | Forklifts                    | 3 | 8.00 | 89  |
| Building Construction | Generator Sets               | 1 | 8.00 | 84  |
| Building Construction | Tractors/Loaders/Backhoes    | 3 | 7.00 | 97  |
| Building Construction | Welders                      | 1 | 8.00 | 46  |
| Paving                | Dumpers/Tenders              | 6 | 6.00 | 16  |
| Paving                | Pavers                       | 1 | 6.00 | 130 |
| Paving                | Paving Equipment             | 4 | 6.00 | 132 |
| Paving                | Plate Compactors             | 2 | 6.00 | 8   |
| Paving                | Rollers                      | 2 | 6.00 | 80  |
| Architectural Coating | Air Compressors              | 1 | 6.00 | 78  |

### Trips and VMT

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Work   |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|--------|
| Demolition            | 6                       | 15.00              | 0.00               | 60.00               | 10.80              | 7.30               | 20.00               | LD_Mix |
| Site Preparation      | 12                      | 20.00              | 4.00               | 340.00              | 10.80              | 7.30               | 20.00               | LD_Mix |
| Grading               | 27                      | 40.00              | 4.00               | 1,700.00            | 10.80              | 7.30               | 20.00               | LD_Mix |
| Building Construction | 9                       | 219.00             | 41.00              | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix |
| Paving                | 15                      | 20.00              | 4.00               | 2,480.00            | 10.80              | 7.30               | 20.00               | LD_Mix |
| Architectural Coating | 1                       | 44.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix |

### 3.1 Mitigation Measures Construction

### 3.2 Demolition - 2022

#### Unmitigated Construction On-Site

|  | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|--|-----|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|
|--|-----|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|

| Category      | tons/yr      |               |               |                 |                 |               |               |                 |               |               |          |               |
|---------------|--------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|---------------|---------------|----------|---------------|
| Fugitive Dust |              |               |               |                 | 6.60E-03        | 0             | 6.60E-03      | 1.00E-03        | 0             | 1.00E-03      | 0        | 0             |
| Off-Road      | 0.029        | 0.2829        | 0.2265        | 4.30E-04        |                 | 0.0137        | 0.0137        |                 | 0.0127        | 0.0127        | 0        | 37.389        |
| <b>Total</b>  | <b>0.029</b> | <b>0.2829</b> | <b>0.2265</b> | <b>4.30E-04</b> | <b>6.60E-03</b> | <b>0.0137</b> | <b>0.0203</b> | <b>1.00E-03</b> | <b>0.0127</b> | <b>0.0137</b> | <b>0</b> | <b>37.389</b> |

### Unmitigated Construction Off-Site

|              | ROG             | NOx             | CO              | SO2             | Fugitive PM10   | Exhaust PM10    | PM10 Total      | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC      |
|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------|---------------|
| Category     | tons/yr         |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |               |
| Hauling      | 2.40E-04        | 8.78E-03        | 2.64E-03        | 2.00E-05        | 5.00E-04        | 3.00E-05        | 5.30E-04        | 1.40E-04        | 3.00E-05        | 1.70E-04        | 0        | 2.2808        |
| Vendor       | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0        | 0             |
| Worker       | 7.30E-04        | 4.10E-04        | 4.53E-03        | 1.00E-05        | 1.30E-03        | 1.00E-05        | 1.31E-03        | 3.50E-04        | 1.00E-05        | 3.50E-04        | 0        | 1.0837        |
| <b>Total</b> | <b>9.70E-04</b> | <b>9.19E-03</b> | <b>7.17E-03</b> | <b>3.00E-05</b> | <b>1.80E-03</b> | <b>4.00E-05</b> | <b>1.84E-03</b> | <b>4.90E-04</b> | <b>4.00E-05</b> | <b>5.20E-04</b> | <b>0</b> | <b>3.3646</b> |

### Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10  | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CC      |
|---------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|
| Category      | tons/yr       |               |               |                    |                    |               |               |                    |               |               |               |               |
| Fugitive Dust |               |               |               |                    | 6.6000e-003        | 0.0000        | 6.6000e-003   | 1.0000e-003        | 0.0000        | 1.0000e-003   | 0.0000        | 0.0000        |
| Off-Road      | 0.0290        | 0.2829        | 0.2265        | 4.3000e-004        |                    | 0.0137        | 0.0137        |                    | 0.0127        | 0.0127        | 0.0000        | 37.389        |
| <b>Total</b>  | <b>0.0290</b> | <b>0.2829</b> | <b>0.2265</b> | <b>4.3000e-004</b> | <b>6.6000e-003</b> | <b>0.0137</b> | <b>0.0203</b> | <b>1.0000e-003</b> | <b>0.0127</b> | <b>0.0137</b> | <b>0.0000</b> | <b>37.389</b> |

### Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CC      |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    |               |               |
| Hauling      | 2.4000e-004        | 8.7800e-003        | 2.6400e-003        | 2.0000e-005        | 5.0000e-004        | 3.0000e-005        | 5.3000e-004        | 1.4000e-004        | 3.0000e-005        | 1.7000e-004        | 0.0000        | 2.2808        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 7.3000e-004        | 4.1000e-004        | 4.5300e-003        | 1.0000e-005        | 1.3000e-003        | 1.0000e-005        | 1.3100e-003        | 3.5000e-004        | 1.0000e-005        | 3.5000e-004        | 0.0000        | 1.0837        |
| <b>Total</b> | <b>9.7000e-004</b> | <b>9.1900e-003</b> | <b>7.1700e-003</b> | <b>3.0000e-005</b> | <b>1.8000e-003</b> | <b>4.0000e-005</b> | <b>1.8400e-003</b> | <b>4.9000e-004</b> | <b>4.0000e-005</b> | <b>5.2000e-004</b> | <b>0.0000</b> | <b>3.3646</b> |

## 3.3 Site Preparation - 2022

### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|---------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|----------------|
| Category      | tons/yr       |               |               |                 |               |               |               |                |               |               |          |                |
| Fugitive Dust |               |               |               |                 | 0             | 0             | 0             | 0              | 0             | 0             | 0        | 0              |
| Off-Road      | 0.0747        | 0.7272        | 0.5889        | 1.58E-03        |               | 0.0284        | 0.0284        |                | 0.0262        | 0.0262        | 0        | 138.803        |
| <b>Total</b>  | <b>0.0747</b> | <b>0.7272</b> | <b>0.5889</b> | <b>1.58E-03</b> | <b>0</b>      | <b>0.0284</b> | <b>0.0284</b> | <b>0</b>       | <b>0.0262</b> | <b>0.0262</b> | <b>0</b> | <b>138.803</b> |

### Unmitigated Construction Off-Site

|              | ROG             | NOx           | CO            | SO2             | Fugitive PM10   | Exhaust PM10    | PM10 Total      | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC       |
|--------------|-----------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------|----------------|
| Category     | tons/yr         |               |               |                 |                 |                 |                 |                 |                 |                 |          |                |
| Hauling      | 1.34E-03        | 0.0498        | 0.015         | 1.40E-04        | 2.82E-03        | 1.80E-04        | 3.01E-03        | 7.70E-04        | 1.80E-04        | 9.50E-04        | 0        | 12.9244        |
| Vendor       | 2.20E-04        | 7.44E-03      | 2.43E-03      | 2.00E-05        | 4.40E-04        | 2.00E-05        | 4.60E-04        | 1.30E-04        | 2.00E-05        | 1.50E-04        | 0        | 1.7068         |
| Worker       | 1.50E-03        | 8.50E-04      | 9.34E-03      | 2.00E-05        | 2.68E-03        | 2.00E-05        | 2.70E-03        | 7.10E-04        | 2.00E-05        | 7.30E-04        | 0        | 2.2331         |
| <b>Total</b> | <b>3.06E-03</b> | <b>0.0581</b> | <b>0.0267</b> | <b>1.80E-04</b> | <b>5.94E-03</b> | <b>2.20E-04</b> | <b>6.17E-03</b> | <b>1.61E-03</b> | <b>2.20E-04</b> | <b>1.83E-03</b> | <b>0</b> | <b>16.8647</b> |

### Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CC       |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0747        | 0.7272        | 0.5889        | 1.5800e-003        |               | 0.0284        | 0.0284        |                | 0.0262        | 0.0262        | 0.0000        | 138.803        |
| <b>Total</b>  | <b>0.0747</b> | <b>0.7272</b> | <b>0.5889</b> | <b>1.5800e-003</b> | <b>0.0000</b> | <b>0.0284</b> | <b>0.0284</b> | <b>0.0000</b>  | <b>0.0262</b> | <b>0.0262</b> | <b>0.0000</b> | <b>138.803</b> |

### Mitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CC       |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    |               |                |
| Hauling      | 1.3400e-003        | 0.0498        | 0.0150        | 1.4000e-004        | 2.8200e-003        | 1.8000e-004        | 3.0100e-003        | 7.7000e-004        | 1.8000e-004        | 9.5000e-004        | 0.0000        | 12.9244        |
| Vendor       | 2.2000e-004        | 7.4400e-003   | 2.4300e-003   | 2.0000e-005        | 4.4000e-004        | 2.0000e-005        | 4.6000e-004        | 1.3000e-004        | 2.0000e-005        | 1.5000e-004        | 0.0000        | 1.7068         |
| Worker       | 1.5000e-003        | 8.5000e-004   | 9.3400e-003   | 2.0000e-005        | 2.6800e-003        | 2.0000e-005        | 2.7000e-003        | 7.1000e-004        | 2.0000e-005        | 7.3000e-004        | 0.0000        | 2.2331         |
| <b>Total</b> | <b>3.0600e-003</b> | <b>0.0581</b> | <b>0.0267</b> | <b>1.8000e-004</b> | <b>5.9400e-003</b> | <b>2.2000e-004</b> | <b>6.1700e-003</b> | <b>1.6100e-003</b> | <b>2.2000e-004</b> | <b>1.8300e-003</b> | <b>0.0000</b> | <b>16.8647</b> |

### 3.4 Grading - 2022

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5  | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2 | NBio- CC       |
|---------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|-----------------|---------------|--------------|----------|----------------|
| Category      | tons/yr       |               |               |                 |               |               |               |                 |               |              |          |                |
| Fugitive Dust |               |               |               |                 | 0.0761        | 0             | 0.0761        | 8.25E-03        | 0             | 8.25E-03     | 0        | 0              |
| Off-Road      | 0.2636        | 2.7466        | 2.4183        | 4.68E-03        |               | 0.1201        | 0.1201        |                 | 0.1108        | 0.1108       | 0        | 409.000        |
| <b>Total</b>  | <b>0.2636</b> | <b>2.7466</b> | <b>2.4183</b> | <b>4.68E-03</b> | <b>0.0761</b> | <b>0.1201</b> | <b>0.1963</b> | <b>8.25E-03</b> | <b>0.1108</b> | <b>0.119</b> | <b>0</b> | <b>409.000</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC       |
|--------------|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|-----------------|-----------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |                 |               |                 |                 |                 |          |                |
| Hauling      | 6.70E-03      | 0.2488        | 0.0748        | 6.80E-04        | 0.0141        | 9.20E-04        | 0.0151        | 3.87E-03        | 8.80E-04        | 4.75E-03        | 0        | 64.6236        |
| Vendor       | 5.60E-04      | 0.0186        | 6.08E-03      | 5.00E-05        | 1.10E-03      | 5.00E-05        | 1.16E-03      | 3.20E-04        | 5.00E-05        | 3.70E-04        | 0        | 4.2669         |
| Worker       | 7.52E-03      | 4.24E-03      | 0.0467        | 1.20E-04        | 0.0134        | 1.00E-04        | 0.0135        | 3.56E-03        | 9.00E-05        | 3.65E-03        | 0        | 11.1656        |
| <b>Total</b> | <b>0.0148</b> | <b>0.2717</b> | <b>0.1276</b> | <b>8.50E-04</b> | <b>0.0286</b> | <b>1.07E-03</b> | <b>0.0297</b> | <b>7.75E-03</b> | <b>1.02E-03</b> | <b>8.77E-03</b> | <b>0</b> | <b>80.0562</b> |

#### Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5  | Exhaust PM2.5 | PM2.5 Total  | Bio- CO2 | NBio- CC       |
|---------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|-----------------|---------------|--------------|----------|----------------|
| Category      | tons/yr       |               |               |                 |               |               |               |                 |               |              |          |                |
| Fugitive Dust |               |               |               |                 | 0.0761        | 0             | 0.0761        | 8.25E-03        | 0             | 8.25E-03     | 0        | 0              |
| Off-Road      | 0.2636        | 2.7466        | 2.4183        | 4.68E-03        |               | 0.1201        | 0.1201        |                 | 0.1108        | 0.1108       | 0        | 408.999        |
| <b>Total</b>  | <b>0.2636</b> | <b>2.7466</b> | <b>2.4183</b> | <b>4.68E-03</b> | <b>0.0761</b> | <b>0.1201</b> | <b>0.1963</b> | <b>8.25E-03</b> | <b>0.1108</b> | <b>0.119</b> | <b>0</b> | <b>408.999</b> |

#### Mitigated Construction Off-Site

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|----------|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          |          |
| Hauling  | 6.7000e-003 | 0.2488      | 0.0748      | 6.8000e-004 | 0.0141        | 9.2000e-004  | 0.0151      | 3.8700e-003    | 8.8000e-004   | 4.7500e-003 | 0.0000   | 64.6236  |
| Vendor   | 5.6000e-004 | 0.0186      | 6.0800e-003 | 5.0000e-005 | 1.1000e-003   | 5.0000e-005  | 1.1600e-003 | 3.2000e-004    | 5.0000e-005   | 3.7000e-004 | 0.0000   | 4.2669   |
| Worker   | 7.5200e-003 | 4.2400e-003 | 0.0467      | 1.2000e-004 | 0.0134        | 1.0000e-004  | 0.0135      | 3.5600e-003    | 9.0000e-005   | 3.6500e-003 | 0.0000   | 11.1656  |

|              |               |               |               |                    |               |                    |               |                    |                    |                    |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|
| <b>Total</b> | <b>0.0148</b> | <b>0.2717</b> | <b>0.1276</b> | <b>8.5000e-004</b> | <b>0.0286</b> | <b>1.0700e-003</b> | <b>0.0297</b> | <b>7.7500e-003</b> | <b>1.0200e-003</b> | <b>8.7700e-003</b> | <b>0.0000</b> | <b>80.0563</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|

### 3.5 Building Construction - 2022

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2      |
|--------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |               |               |                |               |               |          |                |
| Off-Road     | 0.0392        | 0.3592        | 0.3764        | 6.20E-04        |               | 0.0186        | 0.0186        |                | 0.0175        | 0.0175        | 0        | 53.2968        |
| <b>Total</b> | <b>0.0392</b> | <b>0.3592</b> | <b>0.3764</b> | <b>6.20E-04</b> |               | <b>0.0186</b> | <b>0.0186</b> |                | <b>0.0175</b> | <b>0.0175</b> | <b>0</b> | <b>53.2968</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total   | Bio- CO2 | NBio- CO2      |
|--------------|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|----------------|-----------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |                 |               |                |                 |               |          |                |
| Hauling      | 0             | 0             | 0             | 0               | 0             | 0               | 0             | 0              | 0               | 0             | 0        | 0              |
| Vendor       | 3.08E-03      | 0.1032        | 0.0337        | 2.50E-04        | 6.13E-03      | 2.90E-04        | 6.42E-03      | 1.77E-03       | 2.80E-04        | 2.05E-03      | 0        | 23.6683        |
| Worker       | 0.0223        | 0.0126        | 0.1384        | 3.70E-04        | 0.0397        | 2.90E-04        | 0.04          | 0.0106         | 2.70E-04        | 0.0108        | 0        | 33.0833        |
| <b>Total</b> | <b>0.0254</b> | <b>0.1158</b> | <b>0.1721</b> | <b>6.20E-04</b> | <b>0.0458</b> | <b>5.80E-04</b> | <b>0.0464</b> | <b>0.0123</b>  | <b>5.50E-04</b> | <b>0.0129</b> | <b>0</b> | <b>56.7514</b> |

#### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Off-Road     | 0.0392        | 0.3592        | 0.3764        | 6.2000e-004        |               | 0.0186        | 0.0186        |                | 0.0175        | 0.0175        | 0.0000        | 53.2968        |
| <b>Total</b> | <b>0.0392</b> | <b>0.3592</b> | <b>0.3764</b> | <b>6.2000e-004</b> |               | <b>0.0186</b> | <b>0.0186</b> |                | <b>0.0175</b> | <b>0.0175</b> | <b>0.0000</b> | <b>53.2968</b> |

#### Mitigated Construction Off-Site

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|
| Category | tons/yr     |        |        |             |               |              |             |                |               |             |          |           |
| Hauling  | 0.0000      | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    |
| Vendor   | 3.0800e-003 | 0.1032 | 0.0337 | 2.5000e-004 | 6.1300e-003   | 2.9000e-004  | 6.4200e-003 | 1.7700e-003    | 2.8000e-004   | 2.0500e-003 | 0.0000   | 23.6683   |
| Worker   | 0.0223      | 0.0126 | 0.1384 | 3.7000e-004 | 0.0397        | 2.9000e-004  | 0.0400      | 0.0106         | 2.7000e-004   | 0.0108      | 0.0000   | 33.0833   |

|              |               |               |               |                    |               |                    |               |               |                    |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|
| <b>Total</b> | <b>0.0254</b> | <b>0.1158</b> | <b>0.1721</b> | <b>6.2000e-004</b> | <b>0.0458</b> | <b>5.8000e-004</b> | <b>0.0464</b> | <b>0.0123</b> | <b>5.5000e-004</b> | <b>0.0129</b> | <b>0.0000</b> | <b>56.7514</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|

### 3.5 Building Construction - 2023

#### Unmitigated Construction On-Site

|              | ROG           | NOx         | CO            | SO2             | Fugitive PM10 | Exhaust PM10 | PM10 Total   | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|--------------|---------------|-------------|---------------|-----------------|---------------|--------------|--------------|----------------|---------------|---------------|----------|----------------|
| Category     | tons/yr       |             |               |                 |               |              |              |                |               |               |          |                |
| Off-Road     | 0.2045        | 1.87        | 2.1117        | 3.50E-03        |               | 0.091        | 0.091        |                | 0.0856        | 0.0856        | 0        | 301.346        |
| <b>Total</b> | <b>0.2045</b> | <b>1.87</b> | <b>2.1117</b> | <b>3.50E-03</b> |               | <b>0.091</b> | <b>0.091</b> |                | <b>0.0856</b> | <b>0.0856</b> | <b>0</b> | <b>301.346</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|--------------|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|----------------|-----------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |                 |               |                |                 |               |          |                |
| Hauling      | 0             | 0             | 0             | 0               | 0             | 0               | 0             | 0              | 0               | 0             | 0        | 0              |
| Vendor       | 0.0141        | 0.4731        | 0.1765        | 1.38E-03        | 0.0346        | 1.01E-03        | 0.0356        | 0.01           | 9.70E-04        | 0.011         | 0        | 130.899        |
| Worker       | 0.1188        | 0.064         | 0.7149        | 1.99E-03        | 0.2241        | 1.60E-03        | 0.2257        | 0.0596         | 1.47E-03        | 0.0611        | 0        | 180.061        |
| <b>Total</b> | <b>0.1329</b> | <b>0.5371</b> | <b>0.8915</b> | <b>3.37E-03</b> | <b>0.2588</b> | <b>2.61E-03</b> | <b>0.2614</b> | <b>0.0697</b>  | <b>2.44E-03</b> | <b>0.0721</b> | <b>0</b> | <b>310.960</b> |

#### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CC       |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Off-Road     | 0.2045        | 1.8700        | 2.1117        | 3.5000e-003        |               | 0.0910        | 0.0910        |                | 0.0856        | 0.0856        | 0.0000        | 301.345        |
| <b>Total</b> | <b>0.2045</b> | <b>1.8700</b> | <b>2.1117</b> | <b>3.5000e-003</b> |               | <b>0.0910</b> | <b>0.0910</b> |                | <b>0.0856</b> | <b>0.0856</b> | <b>0.0000</b> | <b>301.345</b> |

#### Mitigated Construction Off-Site

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|
| Category | tons/yr |        |        |             |               |              |            |                |               |             |          |          |
| Hauling  | 0.0000  | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000   |
| Vendor   | 0.0141  | 0.4731 | 0.1765 | 1.3800e-003 | 0.0346        | 1.0100e-003  | 0.0356     | 0.0100         | 9.7000e-004   | 0.0110      | 0.0000   | 130.899  |
| Worker   | 0.1188  | 0.0640 | 0.7149 | 1.9900e-003 | 0.2241        | 1.6000e-003  | 0.2257     | 0.0596         | 1.4700e-003   | 0.0611      | 0.0000   | 180.061  |

|              |               |               |               |                    |               |                    |               |               |                    |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|
| <b>Total</b> | <b>0.1329</b> | <b>0.5371</b> | <b>0.8915</b> | <b>3.3700e-003</b> | <b>0.2588</b> | <b>2.6100e-003</b> | <b>0.2614</b> | <b>0.0697</b> | <b>2.4400e-003</b> | <b>0.0721</b> | <b>0.0000</b> | <b>310.960</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|

### 3.5 Building Construction - 2024

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|--------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |               |               |                |               |               |          |                |
| Off-Road     | 0.1928        | 1.7611        | 2.1179        | 3.53E-03        |               | 0.0803        | 0.0803        |                | 0.0756        | 0.0756        | 0        | 303.722        |
| <b>Total</b> | <b>0.1928</b> | <b>1.7611</b> | <b>2.1179</b> | <b>3.53E-03</b> |               | <b>0.0803</b> | <b>0.0803</b> |                | <b>0.0756</b> | <b>0.0756</b> | <b>0</b> | <b>303.722</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|--------------|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|----------------|-----------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |                 |               |                |                 |               |          |                |
| Hauling      | 0             | 0             | 0             | 0               | 0             | 0               | 0             | 0              | 0               | 0             | 0        | 0              |
| Vendor       | 0.0136        | 0.4624        | 0.1687        | 1.39E-03        | 0.0349        | 9.50E-04        | 0.0359        | 0.0101         | 9.10E-04        | 0.011         | 0        | 131.264        |
| Worker       | 0.1131        | 0.0583        | 0.664         | 1.93E-03        | 0.2259        | 1.57E-03        | 0.2274        | 0.0601         | 1.44E-03        | 0.0615        | 0        | 174.501        |
| <b>Total</b> | <b>0.1267</b> | <b>0.5207</b> | <b>0.8328</b> | <b>3.32E-03</b> | <b>0.2608</b> | <b>2.52E-03</b> | <b>0.2633</b> | <b>0.0702</b>  | <b>2.35E-03</b> | <b>0.0725</b> | <b>0</b> | <b>305.766</b> |

#### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CC       |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Off-Road     | 0.1928        | 1.7611        | 2.1179        | 3.5300e-003        |               | 0.0803        | 0.0803        |                | 0.0756        | 0.0756        | 0.0000        | 303.722        |
| <b>Total</b> | <b>0.1928</b> | <b>1.7611</b> | <b>2.1179</b> | <b>3.5300e-003</b> |               | <b>0.0803</b> | <b>0.0803</b> |                | <b>0.0756</b> | <b>0.0756</b> | <b>0.0000</b> | <b>303.722</b> |

#### Mitigated Construction Off-Site

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|
| Category | tons/yr |        |        |             |               |              |            |                |               |             |          |          |
| Hauling  | 0.0000  | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000   |
| Vendor   | 0.0136  | 0.4624 | 0.1687 | 1.3900e-003 | 0.0349        | 9.5000e-004  | 0.0359     | 0.0101         | 9.1000e-004   | 0.0110      | 0.0000   | 131.264  |
| Worker   | 0.1131  | 0.0583 | 0.6640 | 1.9300e-003 | 0.2259        | 1.5700e-003  | 0.2274     | 0.0601         | 1.4400e-003   | 0.0615      | 0.0000   | 174.501  |



|              |               |               |               |                    |               |                    |               |               |                    |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|
| <b>Total</b> | <b>0.1267</b> | <b>0.5207</b> | <b>0.8328</b> | <b>3.3200e-003</b> | <b>0.2608</b> | <b>2.5200e-003</b> | <b>0.2633</b> | <b>0.0702</b> | <b>2.3500e-003</b> | <b>0.0725</b> | <b>0.0000</b> | <b>305.766</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|

### 3.5 Building Construction - 2025

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|--------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |               |               |                |               |               |          |                |
| Off-Road     | 0.1785        | 1.6273        | 2.0991        | 3.52E-03        |               | 0.0689        | 0.0689        |                | 0.0648        | 0.0648        | 0        | 302.654        |
| <b>Total</b> | <b>0.1785</b> | <b>1.6273</b> | <b>2.0991</b> | <b>3.52E-03</b> |               | <b>0.0689</b> | <b>0.0689</b> |                | <b>0.0648</b> | <b>0.0648</b> | <b>0</b> | <b>302.654</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|--------------|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|----------------|-----------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |                 |               |                |                 |               |          |                |
| Hauling      | 0             | 0             | 0             | 0               | 0             | 0               | 0             | 0              | 0               | 0             | 0        | 0              |
| Vendor       | 0.0131        | 0.4478        | 0.1626        | 1.37E-03        | 0.0348        | 8.80E-04        | 0.0357        | 0.0101         | 8.50E-04        | 0.0109        | 0        | 130.167        |
| Worker       | 0.1068        | 0.0526        | 0.6113        | 1.85E-03        | 0.225         | 1.52E-03        | 0.2265        | 0.0599         | 1.40E-03        | 0.0613        | 0        | 166.991        |
| <b>Total</b> | <b>0.1198</b> | <b>0.5004</b> | <b>0.7738</b> | <b>3.22E-03</b> | <b>0.2598</b> | <b>2.40E-03</b> | <b>0.2622</b> | <b>0.0699</b>  | <b>2.25E-03</b> | <b>0.0722</b> | <b>0</b> | <b>297.158</b> |

#### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CC       |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Off-Road     | 0.1784        | 1.6273        | 2.0991        | 3.5200e-003        |               | 0.0689        | 0.0689        |                | 0.0648        | 0.0648        | 0.0000        | 302.654        |
| <b>Total</b> | <b>0.1784</b> | <b>1.6273</b> | <b>2.0991</b> | <b>3.5200e-003</b> |               | <b>0.0689</b> | <b>0.0689</b> |                | <b>0.0648</b> | <b>0.0648</b> | <b>0.0000</b> | <b>302.654</b> |

#### Mitigated Construction Off-Site

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|
| Category | tons/yr |        |        |             |               |              |            |                |               |             |          |          |
| Hauling  | 0.0000  | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000   |
| Vendor   | 0.0131  | 0.4478 | 0.1626 | 1.3700e-003 | 0.0348        | 8.8000e-004  | 0.0357     | 0.0101         | 8.5000e-004   | 0.0109      | 0.0000   | 130.167  |
| Worker   | 0.1068  | 0.0526 | 0.6113 | 1.8500e-003 | 0.2250        | 1.5200e-003  | 0.2265     | 0.0599         | 1.4000e-003   | 0.0613      | 0.0000   | 166.991  |

|              |               |               |               |                    |               |                    |               |               |                    |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|
| <b>Total</b> | <b>0.1198</b> | <b>0.5004</b> | <b>0.7738</b> | <b>3.2200e-003</b> | <b>0.2598</b> | <b>2.4000e-003</b> | <b>0.2622</b> | <b>0.0699</b> | <b>2.2500e-003</b> | <b>0.0722</b> | <b>0.0000</b> | <b>297.158</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|

### 3.5 Building Construction - 2026

#### Unmitigated Construction On-Site

|              | ROG             | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total      | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC      |
|--------------|-----------------|---------------|---------------|-----------------|---------------|-----------------|-----------------|----------------|-----------------|-----------------|----------|---------------|
| Category     | tons/yr         |               |               |                 |               |                 |                 |                |                 |                 |          |               |
| Off-Road     | 6.84E-03        | 0.0624        | 0.0804        | 1.30E-04        |               | 2.64E-03        | 2.64E-03        |                | 2.48E-03        | 2.48E-03        | 0        | 11.596        |
| <b>Total</b> | <b>6.84E-03</b> | <b>0.0624</b> | <b>0.0804</b> | <b>1.30E-04</b> |               | <b>2.64E-03</b> | <b>2.64E-03</b> |                | <b>2.48E-03</b> | <b>2.48E-03</b> | <b>0</b> | <b>11.596</b> |

#### Unmitigated Construction Off-Site

|              | ROG             | NOx           | CO            | SO2             | Fugitive PM10   | Exhaust PM10    | PM10 Total  | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC      |
|--------------|-----------------|---------------|---------------|-----------------|-----------------|-----------------|-------------|-----------------|-----------------|-----------------|----------|---------------|
| Category     | tons/yr         |               |               |                 |                 |                 |             |                 |                 |                 |          |               |
| Hauling      | 0               | 0             | 0             | 0               | 0               | 0               | 0           | 0               | 0               | 0               | 0        | 0             |
| Vendor       | 4.80E-04        | 0.0167        | 6.05E-03      | 5.00E-05        | 1.33E-03        | 3.00E-05        | 1.36E-03    | 3.80E-04        | 3.00E-05        | 4.20E-04        | 0        | 4.9668        |
| Worker       | 3.87E-03        | 1.84E-03      | 0.0217        | 7.00E-05        | 8.62E-03        | 6.00E-05        | 8.68E-03    | 2.29E-03        | 5.00E-05        | 2.35E-03        | 0        | 6.1645        |
| <b>Total</b> | <b>4.35E-03</b> | <b>0.0185</b> | <b>0.0278</b> | <b>1.20E-04</b> | <b>9.95E-03</b> | <b>9.00E-05</b> | <b>0.01</b> | <b>2.67E-03</b> | <b>8.00E-05</b> | <b>2.77E-03</b> | <b>0</b> | <b>11.131</b> |

#### Mitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CC      |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    |               |               |
| Off-Road     | 6.8400e-003        | 0.0624        | 0.0804        | 1.3000e-004        |               | 2.6400e-003        | 2.6400e-003        |                | 2.4800e-003        | 2.4800e-003        | 0.0000        | 11.596        |
| <b>Total</b> | <b>6.8400e-003</b> | <b>0.0624</b> | <b>0.0804</b> | <b>1.3000e-004</b> |               | <b>2.6400e-003</b> | <b>2.6400e-003</b> |                | <b>2.4800e-003</b> | <b>2.4800e-003</b> | <b>0.0000</b> | <b>11.596</b> |

#### Mitigated Construction Off-Site

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|----------|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          |          |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000   |
| Vendor   | 4.8000e-004 | 0.0167      | 6.0500e-003 | 5.0000e-005 | 1.3300e-003   | 3.0000e-005  | 1.3600e-003 | 3.8000e-004    | 3.0000e-005   | 4.2000e-004 | 0.0000   | 4.9668   |
| Worker   | 3.8700e-003 | 1.8400e-003 | 0.0217      | 7.0000e-005 | 8.6200e-003   | 6.0000e-005  | 8.6800e-003 | 2.2900e-003    | 5.0000e-005   | 2.3500e-003 | 0.0000   | 6.1645   |

|              |                    |               |               |                    |                    |                    |               |                    |                    |                    |               |                |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|
| <b>Total</b> | <b>4.3500e-003</b> | <b>0.0185</b> | <b>0.0278</b> | <b>1.2000e-004</b> | <b>9.9500e-003</b> | <b>9.0000e-005</b> | <b>0.0100</b> | <b>2.6700e-003</b> | <b>8.0000e-005</b> | <b>2.7700e-003</b> | <b>0.0000</b> | <b>11.1313</b> |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|

### 3.6 Paving - 2026

#### Unmitigated Construction On-Site

|              | ROG           | NOx          | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2      |
|--------------|---------------|--------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|----------------|
| Category     | tons/yr       |              |               |                 |               |               |               |                |               |               |          |                |
| Off-Road     | 0.0362        | 0.298        | 0.4348        | 7.40E-04        |               | 0.0138        | 0.0138        |                | 0.0129        | 0.0129        | 0        | 62.7486        |
| Paving       | 0             |              |               |                 |               | 0             | 0             |                | 0             | 0             | 0        | 0              |
| <b>Total</b> | <b>0.0362</b> | <b>0.298</b> | <b>0.4348</b> | <b>7.40E-04</b> |               | <b>0.0138</b> | <b>0.0138</b> |                | <b>0.0129</b> | <b>0.0129</b> | <b>0</b> | <b>62.7486</b> |

#### Unmitigated Construction Off-Site

|              | ROG             | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total   | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CO2      |
|--------------|-----------------|---------------|---------------|-----------------|---------------|-----------------|--------------|-----------------|-----------------|-----------------|----------|----------------|
| Category     | tons/yr         |               |               |                 |               |                 |              |                 |                 |                 |          |                |
| Hauling      | 6.90E-03        | 0.232         | 0.0967        | 9.50E-04        | 0.0206        | 6.80E-04        | 0.0213       | 5.65E-03        | 6.50E-04        | 6.30E-03        | 0        | 90.0245        |
| Vendor       | 2.90E-04        | 0.0101        | 3.66E-03      | 3.00E-05        | 8.10E-04      | 2.00E-05        | 8.20E-04     | 2.30E-04        | 2.00E-05        | 2.50E-04        | 0        | 3.0043         |
| Worker       | 2.19E-03        | 1.04E-03      | 0.0123        | 4.00E-05        | 4.88E-03      | 3.00E-05        | 4.91E-03     | 1.30E-03        | 3.00E-05        | 1.33E-03        | 0        | 3.4904         |
| <b>Total</b> | <b>9.38E-03</b> | <b>0.2431</b> | <b>0.1126</b> | <b>1.02E-03</b> | <b>0.0263</b> | <b>7.30E-04</b> | <b>0.027</b> | <b>7.18E-03</b> | <b>7.00E-04</b> | <b>7.88E-03</b> | <b>0</b> | <b>96.5195</b> |

#### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Off-Road     | 0.0362        | 0.2980        | 0.4348        | 7.4000e-004        |               | 0.0138        | 0.0138        |                | 0.0129        | 0.0129        | 0.0000        | 62.7486        |
| Paving       | 0.0000        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000         |
| <b>Total</b> | <b>0.0362</b> | <b>0.2980</b> | <b>0.4348</b> | <b>7.4000e-004</b> |               | <b>0.0138</b> | <b>0.0138</b> |                | <b>0.0129</b> | <b>0.0129</b> | <b>0.0000</b> | <b>62.7486</b> |

#### Mitigated Construction Off-Site

|          | ROG         | NOx    | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|----------|-------------|--------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|
| Category | tons/yr     |        |             |             |               |              |             |                |               |             |          |           |
| Hauling  | 6.9000e-003 | 0.2320 | 0.0967      | 9.5000e-004 | 0.0206        | 6.8000e-004  | 0.0213      | 5.6500e-003    | 6.5000e-004   | 6.3000e-003 | 0.0000   | 90.0245   |
| Vendor   | 2.9000e-004 | 0.0101 | 3.6600e-003 | 3.0000e-005 | 8.1000e-004   | 2.0000e-005  | 8.2000e-004 | 2.3000e-004    | 2.0000e-005   | 2.5000e-004 | 0.0000   | 3.0043    |

|              |                    |               |               |                    |               |                    |               |                    |                    |                    |               |                |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|
| Worker       | 2.1900e-003        | 1.0400e-003   | 0.0123        | 4.0000e-005        | 4.8800e-003   | 3.0000e-005        | 4.9100e-003   | 1.3000e-003        | 3.0000e-005        | 1.3300e-003        | 0.0000        | 3.4904         |
| <b>Total</b> | <b>9.3800e-003</b> | <b>0.2431</b> | <b>0.1126</b> | <b>1.0200e-003</b> | <b>0.0263</b> | <b>7.3000e-004</b> | <b>0.0270</b> | <b>7.1800e-003</b> | <b>7.0000e-004</b> | <b>7.8800e-003</b> | <b>0.0000</b> | <b>96.5193</b> |

### 3.7 Architectural Coating - 2026

#### Unmitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total      | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC      |
|-----------------|---------------|---------------|---------------|-----------------|---------------|-----------------|-----------------|----------------|-----------------|-----------------|----------|---------------|
| Category        | tons/yr       |               |               |                 |               |                 |                 |                |                 |                 |          |               |
| Archit. Coating | 7.9405        |               |               |                 |               | 0               | 0               |                | 0               | 0               | 0        | 0             |
| Off-Road        | 5.30E-03      | 0.0355        | 0.0561        | 9.00E-05        |               | 1.60E-03        | 1.60E-03        |                | 1.60E-03        | 1.60E-03        | 0        | 7.9151        |
| <b>Total</b>    | <b>7.9458</b> | <b>0.0355</b> | <b>0.0561</b> | <b>9.00E-05</b> |               | <b>1.60E-03</b> | <b>1.60E-03</b> |                | <b>1.60E-03</b> | <b>1.60E-03</b> | <b>0</b> | <b>7.9151</b> |

#### Unmitigated Construction Off-Site

|              | ROG             | NOx             | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC      |
|--------------|-----------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|-----------------|-----------------|----------|---------------|
| Category     | tons/yr         |                 |               |                 |               |                 |               |                 |                 |                 |          |               |
| Hauling      | 0               | 0               | 0             | 0               | 0             | 0               | 0             | 0               | 0               | 0               | 0        | 0             |
| Vendor       | 0               | 0               | 0             | 0               | 0             | 0               | 0             | 0               | 0               | 0               | 0        | 0             |
| Worker       | 4.83E-03        | 2.29E-03        | 0.0271        | 8.00E-05        | 0.0107        | 7.00E-05        | 0.0108        | 2.86E-03        | 6.00E-05        | 2.92E-03        | 0        | 7.6789        |
| <b>Total</b> | <b>4.83E-03</b> | <b>2.29E-03</b> | <b>0.0271</b> | <b>8.00E-05</b> | <b>0.0107</b> | <b>7.00E-05</b> | <b>0.0108</b> | <b>2.86E-03</b> | <b>6.00E-05</b> | <b>2.92E-03</b> | <b>0</b> | <b>7.6789</b> |

#### Mitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CC      |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|
| Category        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    |               |               |
| Archit. Coating | 7.9405        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 5.3000e-003   | 0.0355        | 0.0561        | 9.0000e-005        |               | 1.6000e-003        | 1.6000e-003        |                | 1.6000e-003        | 1.6000e-003        | 0.0000        | 7.9151        |
| <b>Total</b>    | <b>7.9458</b> | <b>0.0355</b> | <b>0.0561</b> | <b>9.0000e-005</b> |               | <b>1.6000e-003</b> | <b>1.6000e-003</b> |                | <b>1.6000e-003</b> | <b>1.6000e-003</b> | <b>0.0000</b> | <b>7.9151</b> |

#### Mitigated Construction Off-Site

|          | ROG     | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|----------|---------|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|
| Category | tons/yr |     |    |     |               |              |            |                |               |             |          |          |

|              |                    |                    |               |                    |               |                    |               |                    |                    |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|---------------|
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 4.8300e-003        | 2.2900e-003        | 0.0271        | 8.0000e-005        | 0.0107        | 7.0000e-005        | 0.0108        | 2.8600e-003        | 6.0000e-005        | 2.9200e-003        | 0.0000        | 7.6789        |
| <b>Total</b> | <b>4.8300e-003</b> | <b>2.2900e-003</b> | <b>0.0271</b> | <b>8.0000e-005</b> | <b>0.0107</b> | <b>7.0000e-005</b> | <b>0.0108</b> | <b>2.8600e-003</b> | <b>6.0000e-005</b> | <b>2.9200e-003</b> | <b>0.0000</b> | <b>7.6789</b> |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

|             | ROG     | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC  |
|-------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
| Category    | tons/yr |        |        |        |               |              |            |                |               |             |          |           |
| Mitigated   | 0.6693  | 2.1725 | 7.9100 | 0.0274 | 2.9399        | 0.0241       | 2.9640     | 0.7876         | 0.0224        | 0.8100      | 0.0000   | 2,497.106 |
| Unmitigated | 0.6693  | 2.1725 | 7.9100 | 0.0274 | 2.9399        | 0.0241       | 2.9640     | 0.7876         | 0.0224        | 0.8100      | 0.0000   | 2,497.106 |

### 4.2 Trip Summary Information

| Land Use              | Average Daily Trip Rate |                 |                 | Unmitigated Annual VMT |
|-----------------------|-------------------------|-----------------|-----------------|------------------------|
|                       | Weekday                 | Saturday        | Sunday          |                        |
| Apartments Low Rise   | 1,307.25                | 1,419.75        | 1203.75         | 3,748,356              |
| City Park             | 0.00                    | 0.00            | 0.00            |                        |
| Single Family Housing | 1,485.22                | 1,546.45        | 1343.92         | 4,221,710              |
| <b>Total</b>          | <b>2,792.47</b>         | <b>2,966.20</b> | <b>2,547.67</b> | <b>7,970,066</b>       |

### 4.3 Trip Type Information

| Land Use              | Miles      |            |             | Trip %     |            |             | Primary | D |
|-----------------------|------------|------------|-------------|------------|------------|-------------|---------|---|
|                       | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW |         |   |
| Apartments Low Rise   | 10.80      | 7.30       | 7.50        | 42.60      | 21.00      | 36.40       | 86      |   |
| City Park             | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 66      |   |
| Single Family Housing | 10.80      | 7.30       | 7.50        | 42.60      | 21.00      | 36.40       | 86      |   |

### 4.4 Fleet Mix

| Land Use              | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     |
|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Low Rise   | 0.557019 | 0.034577 | 0.225137 | 0.122292 | 0.020027 | 0.004692 | 0.017649 | 0.009477 | 0.001627 |
| City Park             | 0.557019 | 0.034577 | 0.225137 | 0.122292 | 0.020027 | 0.004692 | 0.017649 | 0.009477 | 0.001627 |
| Single Family Housing | 0.557019 | 0.034577 | 0.225137 | 0.122292 | 0.020027 | 0.004692 | 0.017649 | 0.009477 | 0.001627 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

|                         | ROG     | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|-------------------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
| Category                | tons/yr |        |        |        |               |              |            |                |               |             |          |           |
| Electricity Mitigated   |         |        |        |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 344.827   |
| Electricity Unmitigated |         |        |        |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 344.827   |
| NaturalGas Mitigated    | 0.0000  | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    |
| NaturalGas Unmitigated  | 0.0000  | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

|                       | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      |
|-----------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|
| Land Use              | kBTU/yr        | tons/yr       |               |               |               |               |               |               |                |               |               |               |
| Apartments Low Rise   | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| City Park             | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| Single Family Housing | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>          |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

### Mitigated

|                       | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      |
|-----------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|
| Land Use              | kBTU/yr        | tons/yr       |               |               |               |               |               |               |                |               |               |               |
| Apartments Low Rise   | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| City Park             | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| Single Family Housing | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>          |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

|                     | Electricity Use | Total CO2 | CH4    | N2O      | CO2e   |
|---------------------|-----------------|-----------|--------|----------|--------|
| Land Use            | kWh/yr          | MT/yr     |        |          |        |
| Apartments Low Rise | 1.77E+06        | 168.3454  | 0.0233 | 4.81E-03 | 170.36 |
| City Park           | 0               | 0         | 0      | 0        | 0      |

|                       |          |                 |               |                 |                 |
|-----------------------|----------|-----------------|---------------|-----------------|-----------------|
| Single Family Housing | 1.85E+06 | 176.4819        | 0.0244        | 5.04E-03        | 178.5938        |
| <b>Total</b>          |          | <b>344.8273</b> | <b>0.0476</b> | <b>9.85E-03</b> | <b>348.9537</b> |

**Mitigated**

|                       | Electricity Use | Total CO2       | CH4           | N2O                | CO2e            |
|-----------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use              | kWh/yr          | MT/yr           |               |                    |                 |
| Apartments Low Rise   | 1.76732e+006    | 168.3454        | 0.0233        | 4.8100e-003        | 170.3600        |
| City Park             | 0               | 0.0000          | 0.0000        | 0.0000             | 0.0000          |
| Single Family Housing | 1.85274e+006    | 176.4819        | 0.0244        | 5.0400e-003        | 178.5938        |
| <b>Total</b>          |                 | <b>344.8273</b> | <b>0.0476</b> | <b>9.8500e-003</b> | <b>348.9537</b> |

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

|             | ROG     | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|-------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
| Category    | tons/yr |        |        |        |               |              |            |                |               |             |          |           |
| Mitigated   | 3.3067  | 0.4508 | 6.5773 | 0.0117 |               | 0.6118       | 0.6118     |                | 0.6118        | 0.6118      | 77.2160  | 319.081   |
| Unmitigated | 3.3067  | 0.4508 | 6.5773 | 0.0117 |               | 0.6118       | 0.6118     |                | 0.6118        | 0.6118      | 77.2160  | 319.081   |

**6.2 Area by SubCategory**

**Unmitigated**

|                       | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2       | NBio- CO2      |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|----------------|
| SubCategory           | tons/yr       |               |               |               |               |               |               |                |               |               |                |                |
| Architectural Coating | 0.7941        |               |               |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000         | 0.0000         |
| Consumer Products     | 2.0106        |               |               |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000         | 0.0000         |
| Hearth                | 0.4170        | 0.4182        | 3.7429        | 0.0115        |               | 0.5961        | 0.5961        |                | 0.5961        | 0.5961        | 77.2160        | 314.446        |
| Landscaping           | 0.0851        | 0.0327        | 2.8343        | 1.5000e-004   |               | 0.0157        | 0.0157        |                | 0.0157        | 0.0157        | 0.0000         | 4.6344         |
| <b>Total</b>          | <b>3.3067</b> | <b>0.4508</b> | <b>6.5773</b> | <b>0.0117</b> |               | <b>0.6118</b> | <b>0.6118</b> |                | <b>0.6118</b> | <b>0.6118</b> | <b>77.2160</b> | <b>319.081</b> |

**Mitigated**

|  | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|--|-----|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
|--|-----|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|

| SubCategory           | tons/yr       |               |               |               |  |               |               |  |               |               |                |                |
|-----------------------|---------------|---------------|---------------|---------------|--|---------------|---------------|--|---------------|---------------|----------------|----------------|
| Architectural Coating | 0.7941        |               |               |               |  | 0.0000        | 0.0000        |  | 0.0000        | 0.0000        | 0.0000         | 0.0000         |
| Consumer Products     | 2.0106        |               |               |               |  | 0.0000        | 0.0000        |  | 0.0000        | 0.0000        | 0.0000         | 0.0000         |
| Hearth                | 0.4170        | 0.4182        | 3.7429        | 0.0115        |  | 0.5961        | 0.5961        |  | 0.5961        | 0.5961        | 77.2160        | 314.446        |
| Landscaping           | 0.0851        | 0.0327        | 2.8343        | 1.5000e-004   |  | 0.0157        | 0.0157        |  | 0.0157        | 0.0157        | 0.0000         | 4.6344         |
| <b>Total</b>          | <b>3.3067</b> | <b>0.4508</b> | <b>6.5773</b> | <b>0.0117</b> |  | <b>0.6118</b> | <b>0.6118</b> |  | <b>0.6118</b> | <b>0.6118</b> | <b>77.2160</b> | <b>319.081</b> |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

|             | Total CO2 | CH4    | N2O    | CO2e    |
|-------------|-----------|--------|--------|---------|
| Category    | MT/yr     |        |        |         |
| Mitigated   | 49.8279   | 0.0302 | 0.0165 | 55.5113 |
| Unmitigated | 49.8279   | 0.0302 | 0.0165 | 55.5113 |

### 7.2 Water by Land Use

#### Unmitigated

|                       | Indoor/Outdoor Use | Total CO2      | CH4           | N2O           | CO2e           |
|-----------------------|--------------------|----------------|---------------|---------------|----------------|
| Land Use              | Mgal               | MT/yr          |               |               |                |
| Apartments Low Rise   | 11.7277 / 9.24196  | 13.2752        | 0.0155        | 9.2800e-003   | 16.4304        |
| City Park             | 0 / 81.8548        | 27.2896        | 3.7700e-003   | 7.8000e-004   | 27.6162        |
| Single Family Housing | 8.18335 / 6.44883  | 9.2631         | 0.0108        | 6.4800e-003   | 11.4648        |
| <b>Total</b>          |                    | <b>49.8279</b> | <b>0.0302</b> | <b>0.0165</b> | <b>55.5113</b> |

#### Mitigated

|                       | Indoor/Outdoor Use | Total CO2      | CH4           | N2O           | CO2e           |
|-----------------------|--------------------|----------------|---------------|---------------|----------------|
| Land Use              | Mgal               | MT/yr          |               |               |                |
| Apartments Low Rise   | 11.7277 / 9.24196  | 13.2752        | 0.0155        | 9.2800e-003   | 16.4304        |
| City Park             | 0 / 81.8548        | 27.2896        | 3.7700e-003   | 7.8000e-004   | 27.6162        |
| Single Family Housing | 8.18335 / 6.44883  | 9.2631         | 0.0108        | 6.4800e-003   | 11.4648        |
| <b>Total</b>          |                    | <b>49.8279</b> | <b>0.0302</b> | <b>0.0165</b> | <b>55.5113</b> |



## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

#### Category/Year

|             | Total CO2 | CH4    | N2O    | CO2e     |
|-------------|-----------|--------|--------|----------|
|             | MT/yr     |        |        |          |
| Mitigated   | 44.9950   | 2.6591 | 0.0000 | 111.4732 |
| Unmitigated | 44.9950   | 2.6591 | 0.0000 | 111.4732 |

### 8.2 Waste by Land Use

#### Unmitigated

|                       | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e            |
|-----------------------|----------------|----------------|---------------|---------------|-----------------|
| Land Use              | tons           | MT/yr          |               |               |                 |
| Apartments Low Rise   | 103.5          | 21.0096        | 1.2416        | 0.0000        | 52.0503         |
| City Park             | 5.91           | 1.1997         | 0.0709        | 0.0000        | 2.9722          |
| Single Family Housing | 112.25         | 22.7857        | 1.3466        | 0.0000        | 56.4507         |
| <b>Total</b>          |                | <b>44.9950</b> | <b>2.6591</b> | <b>0.0000</b> | <b>111.4732</b> |

#### Mitigated

|                       | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e            |
|-----------------------|----------------|----------------|---------------|---------------|-----------------|
| Land Use              | tons           | MT/yr          |               |               |                 |
| Apartments Low Rise   | 103.5          | 21.0096        | 1.2416        | 0.0000        | 52.0503         |
| City Park             | 5.91           | 1.1997         | 0.0709        | 0.0000        | 2.9722          |
| Single Family Housing | 112.25         | 22.7857        | 1.3466        | 0.0000        | 56.4507         |
| <b>Total</b>          |                | <b>44.9950</b> | <b>2.6591</b> | <b>0.0000</b> | <b>111.4732</b> |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power |
|----------------|--------|-----------|-----------|-------------|
|----------------|--------|-----------|-----------|-------------|

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

---

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power |
|----------------|--------|-----------|------------|-------------|
|----------------|--------|-----------|------------|-------------|

---

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating |
|----------------|--------|----------------|-----------------|---------------|
|----------------|--------|----------------|-----------------|---------------|

---

**User Defined Equipment**

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

**11.0 Vegetation**

---

Date: 9/1/2020 2:04 PM

il

---

| age | Floor Surface Area | Population |
|-----|--------------------|------------|
|     | 2,992,572.00       | 0          |
|     | 225,000.00         | 644        |
|     | 282,600.00         | 449        |

0

027

\_CRSR\_2019.pdf

for demolition, others based on applicant

| w Value |
|---------|
| 22.00   |
| 34.00   |
| 35.00   |
| 39.00   |
| 52.00   |
| 52.00   |
| 641.40  |
| 624.61  |
| 0.00    |
| 0.00    |
| 403.02  |
| 567.46  |
| 0.00    |
| 0.00    |
| 0.00    |
| 0.00    |
| 102.50  |
| 41.30   |
| 0.00    |
| 0.00    |
| 42.50   |
| 0.00    |
| 900.00  |
| 18.17   |
| 30.02   |
| 2.00    |
| 1.00    |
| 4.00    |
| 0.00    |
| 0.00    |
| 4.00    |
| 4.00    |
| 2.00    |
| 6.00    |
| 6.00    |

|           |
|-----------|
| 6.00      |
| 6.00      |
| 6.00      |
| 0.00      |
| 0.00      |
| 6.00      |
| 6.00      |
| 6.00      |
| 210       |
| 40.00     |
| 700.00    |
| 480.00    |
| 4.00      |
| 4.00      |
| 41.00     |
| 4.00      |
| 20.00     |
| 40.00     |
| 19.00     |
| 20.00     |
| 44.00     |
| 6.31      |
| 0.00      |
| 9.85      |
| 5.35      |
| 0.00      |
| 8.56      |
| 5.81      |
| 0.00      |
| 9.46      |
| 00.00     |
| 00.00     |
| 00.00     |
| 0.00      |
| 0.00      |
| 0.00      |
| 27,724.61 |
| 3,345.62  |
| 0.00      |

0.00

0.00

| 02       | Total CO2      | CH4           | N2O      | CO2e            |
|----------|----------------|---------------|----------|-----------------|
| MT/yr    |                |               |          |                 |
| 7        | 795.527        | 0.2009        | 0        | 800.5481        |
| i4       | 612.3064       | 0.0782        | 0        | 614.2606        |
| i3       | 609.4883       | 0.0778        | 0        | 611.4321        |
| i5       | 599.8135       | 0.0766        | 0        | 601.7276        |
| i2       | 197.5892       | 0.0227        | 0        | 198.1566        |
| <b>7</b> | <b>795.527</b> | <b>0.2009</b> | <b>0</b> | <b>800.5481</b> |

| 02        | Total CO2       | CH4           | N2O      | CO2e            |
|-----------|-----------------|---------------|----------|-----------------|
| MT/yr     |                 |               |          |                 |
| i2        | 795.5262        | 0.2009        | 0        | 800.5473        |
| i1        | 612.3061        | 0.0782        | 0        | 614.2602        |
| 8         | 609.488         | 0.0778        | 0        | 611.4318        |
| i1        | 599.8131        | 0.0766        | 0        | 601.7273        |
| i1        | 197.5891        | 0.0227        | 0        | 198.1565        |
| <b>i2</b> | <b>795.5262</b> | <b>0.2009</b> | <b>0</b> | <b>800.5473</b> |

| 2 | Total CO2 | CH4  | N2O  | CO2e |
|---|-----------|------|------|------|
|   | 0.00      | 0.00 | 0.00 | 0.00 |

NOX (tons/quarter)

|  |
|--|
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

|          | Total CO2       | CH4           | N2O          | CO2e            |
|----------|-----------------|---------------|--------------|-----------------|
|          | MT/yr           |               |              |                 |
| 1        | 396.297         | 0.3704        | 0.0226       | 412.3048        |
| '3       | 344.8273        | 0.0476        | 9.85E-03     | 348.9537        |
| 1        | 2,497.11        | 0.0655        | 0            | 2,498.74        |
|          | 44.995          | 2.6591        | 0            | 111.4732        |
| 4        | 49.8279         | 0.0302        | 0.0165       | 55.5113         |
| <b>0</b> | <b>3,333.05</b> | <b>3.1728</b> | <b>0.049</b> | <b>3,426.99</b> |

| 02       | Total CO2       | CH4           | N2O          | CO2e            |
|----------|-----------------|---------------|--------------|-----------------|
| MT/yr    |                 |               |              |                 |
| 1        | 396.297         | 0.3704        | 0.0226       | 412.3048        |
| 3        | 344.8273        | 0.0476        | 9.85E-03     | 348.9537        |
| 1        | 2,497.11        | 0.0655        | 0            | 2,498.74        |
|          | 44.995          | 2.6591        | 0            | 111.4732        |
| 4        | 49.8279         | 0.0302        | 0.0165       | 55.5113         |
| <b>0</b> | <b>3,333.05</b> | <b>3.1728</b> | <b>0.049</b> | <b>3,426.99</b> |

| 0    | Total CO2 | CH4  | N2O  | CO2e |
|------|-----------|------|------|------|
| 0.00 | 0.00      | 0.00 | 0.00 | 0.00 |

| Phase Description |
|-------------------|
|                   |
|                   |
|                   |
|                   |
|                   |
|                   |
|                   |
|                   |

Indoor: 0; Striped Parking Area:

| Load Factor |
|-------------|
| 0.73        |
| 0.38        |
| 0.40        |
| 0.38        |
| 0.40        |



|      |
|------|
| 0.48 |
| 0.37 |
| 0.37 |
| 0.38 |
| 0.38 |
| 0.41 |
| 0.44 |
| 0.42 |
| 0.38 |
| 0.40 |
| 0.48 |
| 0.37 |
| 0.29 |
| 0.20 |
| 0.74 |
| 0.37 |
| 0.45 |
| 0.38 |
| 0.42 |
| 0.36 |
| 0.43 |
| 0.38 |
| 0.48 |

| er Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|------------------|----------------------|-----------------------|
|                  | HDT_Mix              | HHDT                  |
|                  | HDT_Mix              | HHDT                  |
|                  | HDT_Mix              | HHDT                  |
|                  | HDT_Mix              | HHDT                  |
|                  | HDT_Mix              | HHDT                  |
|                  | HDT_Mix              | HHDT                  |

|    |           |     |     |      |
|----|-----------|-----|-----|------|
| 02 | Total CO2 | CH4 | N2O | CO2e |
|----|-----------|-----|-----|------|

| MT/yr    |                |               |          |                |
|----------|----------------|---------------|----------|----------------|
|          | 0              | 0             | 0        | 0              |
| 3        | 37.3893        | 0.0105        | 0        | 37.6518        |
| <b>3</b> | <b>37.3893</b> | <b>0.0105</b> | <b>0</b> | <b>37.6518</b> |

| 02    | Total CO2     | CH4             | N2O      | CO2e          |
|-------|---------------|-----------------|----------|---------------|
| MT/yr |               |                 |          |               |
|       | 2.2808        | 3.00E-05        | 0        | 2.2815        |
|       | 0             | 0               | 0        | 0             |
|       | 1.0837        | 3.00E-05        | 0        | 1.0845        |
|       | <b>3.3646</b> | <b>6.00E-05</b> | <b>0</b> | <b>3.3659</b> |

| 02       | Total CO2      | CH4           | N2O           | CO2e           |
|----------|----------------|---------------|---------------|----------------|
| MT/yr    |                |               |               |                |
|          | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| 2        | 37.3892        | 0.0105        | 0.0000        | 37.6518        |
| <b>2</b> | <b>37.3892</b> | <b>0.0105</b> | <b>0.0000</b> | <b>37.6518</b> |

| 02    | Total CO2     | CH4                | N2O           | CO2e          |
|-------|---------------|--------------------|---------------|---------------|
| MT/yr |               |                    |               |               |
|       | 2.2808        | 3.0000e-005        | 0.0000        | 2.2815        |
|       | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
|       | 1.0837        | 3.0000e-005        | 0.0000        | 1.0845        |
|       | <b>3.3646</b> | <b>6.0000e-005</b> | <b>0.0000</b> | <b>3.3659</b> |

| 02       | Total CO2       | CH4           | N2O      | CO2e            |
|----------|-----------------|---------------|----------|-----------------|
| MT/yr    |                 |               |          |                 |
|          | 0               | 0             | 0        | 0               |
| 6        | 138.8036        | 0.0449        | 0        | 139.9259        |
| <b>6</b> | <b>138.8036</b> | <b>0.0449</b> | <b>0</b> | <b>139.9259</b> |

| 02       | Total CO2      | CH4             | N2O      | CO2e           |
|----------|----------------|-----------------|----------|----------------|
| MT/yr    |                |                 |          |                |
| 3        | 12.9248        | 1.40E-04        | 0        | 12.9284        |
|          | 1.7068         | 3.00E-05        | 0        | 1.7075         |
|          | 2.2331         | 6.00E-05        | 0        | 2.2347         |
| <b>7</b> | <b>16.8647</b> | <b>2.30E-04</b> | <b>0</b> | <b>16.8705</b> |

| 02       | Total CO2       | CH4           | N2O           | CO2e            |
|----------|-----------------|---------------|---------------|-----------------|
| MT/yr    |                 |               |               |                 |
|          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| 5        | 138.8035        | 0.0449        | 0.0000        | 139.9258        |
| <b>5</b> | <b>138.8035</b> | <b>0.0449</b> | <b>0.0000</b> | <b>139.9258</b> |

| 02       | Total CO2      | CH4                | N2O           | CO2e           |
|----------|----------------|--------------------|---------------|----------------|
| MT/yr    |                |                    |               |                |
| 3        | 12.9248        | 1.4000e-004        | 0.0000        | 12.9284        |
|          | 1.7068         | 3.0000e-005        | 0.0000        | 1.7075         |
|          | 2.2331         | 6.0000e-005        | 0.0000        | 2.2347         |
| <b>7</b> | <b>16.8647</b> | <b>2.3000e-004</b> | <b>0.0000</b> | <b>16.8705</b> |

| 02       | Total CO2       | CH4         | N2O      | CO2e          |
|----------|-----------------|-------------|----------|---------------|
| MT/yr    |                 |             |          |               |
|          | 0               | 0           | 0        | 0             |
| 2        | 409.0002        | 0.13        | 0        | 412.25        |
| <b>2</b> | <b>409.0002</b> | <b>0.13</b> | <b>0</b> | <b>412.25</b> |

| 02       | Total CO2      | CH4             | N2O      | CO2e           |
|----------|----------------|-----------------|----------|----------------|
| MT/yr    |                |                 |          |                |
| 3        | 64.6239        | 7.20E-04        | 0        | 64.6419        |
| 1        | 4.2669         | 7.00E-05        | 0        | 4.2686         |
| 5        | 11.1656        | 3.10E-04        | 0        | 11.1733        |
| <b>3</b> | <b>80.0563</b> | <b>1.10E-03</b> | <b>0</b> | <b>80.0838</b> |

| 02       | Total CO2       | CH4         | N2O      | CO2e            |
|----------|-----------------|-------------|----------|-----------------|
| MT/yr    |                 |             |          |                 |
|          | 0               | 0           | 0        | 0               |
| 7        | 408.9997        | 0.13        | 0        | 412.2495        |
| <b>7</b> | <b>408.9997</b> | <b>0.13</b> | <b>0</b> | <b>412.2495</b> |

| 02    | Total CO2 | CH4         | N2O    | CO2e    |
|-------|-----------|-------------|--------|---------|
| MT/yr |           |             |        |         |
| 3     | 64.6239   | 7.2000e-004 | 0.0000 | 64.6419 |
| 1     | 4.2669    | 7.0000e-005 | 0.0000 | 4.2686  |
| 5     | 11.1656   | 3.1000e-004 | 0.0000 | 11.1733 |

|   |         |             |        |         |
|---|---------|-------------|--------|---------|
| 3 | 80.0563 | 1.1000e-003 | 0.0000 | 80.0838 |
|---|---------|-------------|--------|---------|

| 02    | Total CO2 | CH4    | N2O | CO2e   |
|-------|-----------|--------|-----|--------|
| MT/yr |           |        |     |        |
| 3     | 53.2968   | 0.0128 | 0   | 53.616 |
| 3     | 53.2968   | 0.0128 | 0   | 53.616 |

| 02    | Total CO2 | CH4      | N2O | CO2e    |
|-------|-----------|----------|-----|---------|
| MT/yr |           |          |     |         |
|       | 0         | 0        | 0   | 0       |
| 5     | 23.6685   | 3.90E-04 | 0   | 23.6784 |
|       | 33.083    | 9.10E-04 | 0   | 33.1057 |
| 5     | 56.7515   | 1.30E-03 | 0   | 56.7841 |

| 02    | Total CO2 | CH4    | N2O    | CO2e    |
|-------|-----------|--------|--------|---------|
| MT/yr |           |        |        |         |
| 7     | 53.2967   | 0.0128 | 0.0000 | 53.6160 |
| 7     | 53.2967   | 0.0128 | 0.0000 | 53.6160 |

| 02    | Total CO2 | CH4         | N2O    | CO2e    |
|-------|-----------|-------------|--------|---------|
| MT/yr |           |             |        |         |
|       | 0.0000    | 0.0000      | 0.0000 | 0.0000  |
| 5     | 23.6685   | 3.9000e-004 | 0.0000 | 23.6784 |
| 0     | 33.0830   | 9.1000e-004 | 0.0000 | 33.1057 |

|   |         |             |        |         |
|---|---------|-------------|--------|---------|
| 5 | 56.7515 | 1.3000e-003 | 0.0000 | 56.7841 |
|---|---------|-------------|--------|---------|

| 02    | Total CO2 | CH4    | N2O | CO2e     |
|-------|-----------|--------|-----|----------|
| MT/yr |           |        |     |          |
| 2     | 301.3462  | 0.0717 | 0   | 303.1383 |
| 2     | 301.3462  | 0.0717 | 0   | 303.1383 |

| 02    | Total CO2 | CH4      | N2O | CO2e     |
|-------|-----------|----------|-----|----------|
| MT/yr |           |          |     |          |
|       | 0         | 0        | 0   | 0        |
| 2     | 130.8992  | 1.90E-03 | 0   | 130.9467 |
| 1     | 180.0611  | 4.58E-03 | 0   | 180.1756 |
| 3     | 310.9603  | 6.48E-03 | 0   | 311.1223 |

| 02    | Total CO2 | CH4    | N2O    | CO2e     |
|-------|-----------|--------|--------|----------|
| MT/yr |           |        |        |          |
| 8     | 301.3458  | 0.0717 | 0.0000 | 303.1380 |
| 8     | 301.3458  | 0.0717 | 0.0000 | 303.1380 |

| 02    | Total CO2 | CH4         | N2O    | CO2e     |
|-------|-----------|-------------|--------|----------|
| MT/yr |           |             |        |          |
|       | 0.0000    | 0.0000      | 0.0000 | 0.0000   |
| 2     | 130.8992  | 1.9000e-003 | 0.0000 | 130.9467 |
| 1     | 180.0611  | 4.5800e-003 | 0.0000 | 180.1756 |

|   |          |             |        |          |
|---|----------|-------------|--------|----------|
| 3 | 310.9603 | 6.4800e-003 | 0.0000 | 311.1223 |
|---|----------|-------------|--------|----------|

| 02    | Total CO2 | CH4    | N2O | CO2e     |
|-------|-----------|--------|-----|----------|
| MT/yr |           |        |     |          |
| 3     | 303.7223  | 0.0718 | 0   | 305.5179 |
| 3     | 303.7223  | 0.0718 | 0   | 305.5179 |

| 02    | Total CO2 | CH4      | N2O | CO2e     |
|-------|-----------|----------|-----|----------|
| MT/yr |           |          |     |          |
|       | 0         | 0        | 0   | 0        |
| 5     | 131.2645  | 1.79E-03 | 0   | 131.3092 |
| 5     | 174.5015  | 4.14E-03 | 0   | 174.605  |
| 3     | 305.766   | 5.93E-03 | 0   | 305.9142 |

| 02    | Total CO2 | CH4    | N2O    | CO2e     |
|-------|-----------|--------|--------|----------|
| MT/yr |           |        |        |          |
| 0     | 303.7220  | 0.0718 | 0.0000 | 305.5175 |
| 0     | 303.7220  | 0.0718 | 0.0000 | 305.5175 |

| 02    | Total CO2 | CH4         | N2O    | CO2e     |
|-------|-----------|-------------|--------|----------|
| MT/yr |           |             |        |          |
|       | 0.0000    | 0.0000      | 0.0000 | 0.0000   |
| 5     | 131.2645  | 1.7900e-003 | 0.0000 | 131.3092 |
| 5     | 174.5015  | 4.1400e-003 | 0.0000 | 174.6050 |

|   |          |             |        |          |
|---|----------|-------------|--------|----------|
| 0 | 305.7660 | 5.9300e-003 | 0.0000 | 305.9142 |
|---|----------|-------------|--------|----------|

| 02    | Total CO2 | CH4    | N2O | CO2e     |
|-------|-----------|--------|-----|----------|
| MT/yr |           |        |     |          |
| 9     | 302.6549  | 0.0711 | 0   | 304.4335 |
| 9     | 302.6549  | 0.0711 | 0   | 304.4335 |

| 02    | Total CO2 | CH4      | N2O | CO2e     |
|-------|-----------|----------|-----|----------|
| MT/yr |           |          |     |          |
|       | 0         | 0        | 0   | 0        |
| 4     | 130.1674  | 1.70E-03 | 0   | 130.2098 |
| 2     | 166.9912  | 3.72E-03 | 0   | 167.0843 |
| 6     | 297.1586  | 5.42E-03 | 0   | 297.2941 |

| 02    | Total CO2 | CH4    | N2O    | CO2e     |
|-------|-----------|--------|--------|----------|
| MT/yr |           |        |        |          |
| 5     | 302.6545  | 0.0711 | 0.0000 | 304.4331 |
| 5     | 302.6545  | 0.0711 | 0.0000 | 304.4331 |

| 02    | Total CO2 | CH4         | N2O    | CO2e     |
|-------|-----------|-------------|--------|----------|
| MT/yr |           |             |        |          |
|       | 0.0000    | 0.0000      | 0.0000 | 0.0000   |
| 4     | 130.1674  | 1.7000e-003 | 0.0000 | 130.2098 |
| 2     | 166.9912  | 3.7200e-003 | 0.0000 | 167.0843 |



|   |          |             |        |          |
|---|----------|-------------|--------|----------|
| 6 | 297.1586 | 5.4200e-003 | 0.0000 | 297.2941 |
|---|----------|-------------|--------|----------|

| 02    | Total CO2 | CH4      | N2O | CO2e    |
|-------|-----------|----------|-----|---------|
| MT/yr |           |          |     |         |
|       | 11.596    | 2.73E-03 | 0   | 11.6641 |
|       | 11.596    | 2.73E-03 | 0   | 11.6641 |

| 02    | Total CO2 | CH4      | N2O | CO2e    |
|-------|-----------|----------|-----|---------|
| MT/yr |           |          |     |         |
|       | 0         | 0        | 0   | 0       |
|       | 4.9668    | 6.00E-05 | 0   | 4.9684  |
|       | 6.1645    | 1.30E-04 | 0   | 6.1678  |
| 3     | 11.1313   | 1.90E-04 | 0   | 11.1361 |

| 02    | Total CO2 | CH4         | N2O    | CO2e    |
|-------|-----------|-------------|--------|---------|
| MT/yr |           |             |        |         |
|       | 11.5960   | 2.7300e-003 | 0.0000 | 11.6641 |
|       | 11.5960   | 2.7300e-003 | 0.0000 | 11.6641 |

| 02    | Total CO2 | CH4         | N2O    | CO2e   |
|-------|-----------|-------------|--------|--------|
| MT/yr |           |             |        |        |
|       | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
|       | 4.9668    | 6.0000e-005 | 0.0000 | 4.9684 |
|       | 6.1645    | 1.3000e-004 | 0.0000 | 6.1678 |

|   |         |             |        |         |
|---|---------|-------------|--------|---------|
| 3 | 11.1313 | 1.9000e-004 | 0.0000 | 11.1361 |
|---|---------|-------------|--------|---------|

| 02    | Total CO2      | CH4           | N2O      | CO2e           |
|-------|----------------|---------------|----------|----------------|
| MT/yr |                |               |          |                |
| 3     | 62.7486        | 0.0183        | 0        | 63.2063        |
|       | 0              | 0             | 0        | 0              |
| 3     | <b>62.7486</b> | <b>0.0183</b> | <b>0</b> | <b>63.2063</b> |

| 02    | Total CO2      | CH4             | N2O      | CO2e           |
|-------|----------------|-----------------|----------|----------------|
| MT/yr |                |                 |          |                |
| 5     | 90.0245        | 7.70E-04        | 0        | 90.0437        |
|       | 3.0043         | 4.00E-05        | 0        | 3.0053         |
|       | 3.4904         | 7.00E-05        | 0        | 3.4923         |
| 3     | <b>96.5193</b> | <b>8.80E-04</b> | <b>0</b> | <b>96.5412</b> |

| 02    | Total CO2      | CH4           | N2O           | CO2e           |
|-------|----------------|---------------|---------------|----------------|
| MT/yr |                |               |               |                |
| 5     | 62.7485        | 0.0183        | 0.0000        | 63.2062        |
|       | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| 5     | <b>62.7485</b> | <b>0.0183</b> | <b>0.0000</b> | <b>63.2062</b> |

| 02    | Total CO2 | CH4         | N2O    | CO2e    |
|-------|-----------|-------------|--------|---------|
| MT/yr |           |             |        |         |
| 5     | 90.0245   | 7.7000e-004 | 0.0000 | 90.0437 |
|       | 3.0043    | 4.0000e-005 | 0.0000 | 3.0053  |

|          |                |                    |               |                |
|----------|----------------|--------------------|---------------|----------------|
|          | 3.4904         | 7.0000e-005        | 0.0000        | 3.4923         |
| <b>3</b> | <b>96.5193</b> | <b>8.8000e-004</b> | <b>0.0000</b> | <b>96.5412</b> |

| 02    | Total CO2     | CH4             | N2O      | CO2e          |
|-------|---------------|-----------------|----------|---------------|
| MT/yr |               |                 |          |               |
|       | 0             | 0               | 0        | 0             |
|       | 7.9151        | 4.30E-04        | 0        | 7.9259        |
|       | <b>7.9151</b> | <b>4.30E-04</b> | <b>0</b> | <b>7.9259</b> |

| 02    | Total CO2     | CH4             | N2O      | CO2e         |
|-------|---------------|-----------------|----------|--------------|
| MT/yr |               |                 |          |              |
|       | 0             | 0               | 0        | 0            |
|       | 0             | 0               | 0        | 0            |
|       | 7.6789        | 1.60E-04        | 0        | 7.683        |
|       | <b>7.6789</b> | <b>1.60E-04</b> | <b>0</b> | <b>7.683</b> |

| 02    | Total CO2     | CH4                | N2O           | CO2e          |
|-------|---------------|--------------------|---------------|---------------|
| MT/yr |               |                    |               |               |
|       | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
|       | 7.9151        | 4.3000e-004        | 0.0000        | 7.9259        |
|       | <b>7.9151</b> | <b>4.3000e-004</b> | <b>0.0000</b> | <b>7.9259</b> |

| 02    | Total CO2 | CH4 | N2O | CO2e |
|-------|-----------|-----|-----|------|
| MT/yr |           |     |     |      |

|               |                    |               |               |
|---------------|--------------------|---------------|---------------|
| 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| 7.6789        | 1.6000e-004        | 0.0000        | 7.6830        |
| <b>7.6789</b> | <b>1.6000e-004</b> | <b>0.0000</b> | <b>7.6830</b> |

---

| 02    | Total CO2  | CH4    | N2O    | CO2e       |
|-------|------------|--------|--------|------------|
| MT/yr |            |        |        |            |
| 07    | 2,497.1076 | 0.0655 | 0.0000 | 2,498.7447 |
| 07    | 2,497.1076 | 0.0655 | 0.0000 | 2,498.7447 |

|            |
|------------|
| Mitigated  |
| Annual VMT |
| 3,748,356  |
| 4,221,710  |
| 7,970,066  |

| Trip Purpose % |         |
|----------------|---------|
| Diverted       | Pass-by |
| 11             | 3       |
| 28             | 6       |
| 11             | 3       |

| UBUS     | MCY      | SBUS     | MH       |
|----------|----------|----------|----------|
| 0.000999 | 0.004800 | 0.000764 | 0.000939 |
| 0.000999 | 0.004800 | 0.000764 | 0.000939 |
| 0.000999 | 0.004800 | 0.000764 | 0.000939 |

---

| 02    | Total CO2 | CH4    | N2O         | CO2e     |
|-------|-----------|--------|-------------|----------|
| MT/yr |           |        |             |          |
| 3     | 344.8273  | 0.0476 | 9.8500e-003 | 348.9537 |
| 3     | 344.8273  | 0.0476 | 9.8500e-003 | 348.9537 |
| 1     | 0.0000    | 0.0000 | 0.0000      | 0.0000   |
| 1     | 0.0000    | 0.0000 | 0.0000      | 0.0000   |

| 2     | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|-------|---------------|---------------|---------------|---------------|---------------|
| MT/yr |               |               |               |               |               |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

| 2     | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|-------|---------------|---------------|---------------|---------------|---------------|
| MT/yr |               |               |               |               |               |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

---

| 02    | Total CO2 | CH4    | N2O    | CO2e     |
|-------|-----------|--------|--------|----------|
| MT/yr |           |        |        |          |
| 0     | 396.2970  | 0.3704 | 0.0226 | 412.3048 |
| 0     | 396.2970  | 0.3704 | 0.0226 | 412.3048 |

| 02       | Total CO2       | CH4           | N2O           | CO2e            |
|----------|-----------------|---------------|---------------|-----------------|
| MT/yr    |                 |               |               |                 |
| )        | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| )        | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| i6       | 391.6626        | 0.3660        | 0.0226        | 407.5594        |
| i        | 4.6344          | 4.4400e-003   | 0.0000        | 4.7454          |
| <b>0</b> | <b>396.2970</b> | <b>0.3704</b> | <b>0.0226</b> | <b>412.3048</b> |

| 02 | Total CO2 | CH4 | N2O | CO2e |
|----|-----------|-----|-----|------|
|----|-----------|-----|-----|------|

| MT/yr |                 |               |               |                 |
|-------|-----------------|---------------|---------------|-----------------|
| )     | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| )     | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| 6     | 391.6626        | 0.3660        | 0.0226        | 407.5594        |
| f     | 4.6344          | 4.4400e-003   | 0.0000        | 4.7454          |
| 0     | <b>396.2970</b> | <b>0.3704</b> | <b>0.0226</b> | <b>412.3048</b> |

---

---

---

|             |           |
|-------------|-----------|
| Load Factor | Fuel Type |
|-------------|-----------|

---



|             |           |
|-------------|-----------|
| Load Factor | Fuel Type |
|-------------|-----------|

|           |
|-----------|
| Fuel Type |
|-----------|

---

EMFAC2017 (v1.0.2) Emissions Inventory

Region Type: County

Region: EL DORADO

Calendar Year: 2027

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption.

| Region    | Calendar Y | Vehicle Ca  | Model Yea | Speed     | Fuel | Population | VMT      | Trips    | NOx_RUNI |
|-----------|------------|-------------|-----------|-----------|------|------------|----------|----------|----------|
| EL DORADO | 2027       | All Other B | Aggregate | Aggregate | DSL  | 45.46046   | 2427.695 | 381.8679 | 0.005229 |
| EL DORADO | 2027       | LDA         | Aggregate | Aggregate | GAS  | 62638.02   | 2411770  | 295341.3 | 0.071389 |
| EL DORADO | 2027       | LDA         | Aggregate | Aggregate | DSL  | 837.258    | 31481.18 | 3911.46  | 0.001761 |
| EL DORADO | 2027       | LDA         | Aggregate | Aggregate | ELEC | 2356.166   | 99821.22 | 11611.44 | 0        |
| EL DORADO | 2027       | LDT1        | Aggregate | Aggregate | GAS  | 8908.334   | 288186.7 | 39636.77 | 0.021181 |
| EL DORADO | 2027       | LDT1        | Aggregate | Aggregate | DSL  | 5.972078   | 76.99461 | 19.5758  | 6.67E-05 |
| EL DORADO | 2027       | LDT1        | Aggregate | Aggregate | ELEC | 118.1137   | 5191.403 | 589.4844 | 0        |
| EL DORADO | 2027       | LDT2        | Aggregate | Aggregate | GAS  | 31885.59   | 1056810  | 143531   | 0.077505 |
| EL DORADO | 2027       | LDT2        | Aggregate | Aggregate | DSL  | 228.1966   | 8886.026 | 1087.967 | 0.000378 |
| EL DORADO | 2027       | LDT2        | Aggregate | Aggregate | ELEC | 532.7833   | 15833.3  | 2637.657 | 0        |
| EL DORADO | 2027       | LHD1        | Aggregate | Aggregate | GAS  | 2753.211   | 82839.14 | 41018.75 | 0.027855 |
| EL DORADO | 2027       | LHD1        | Aggregate | Aggregate | DSL  | 3258.523   | 92311.63 | 40988.11 | 0.28571  |
| EL DORADO | 2027       | LHD2        | Aggregate | Aggregate | GAS  | 212.8819   | 7218.051 | 3171.623 | 0.001275 |
| EL DORADO | 2027       | LHD2        | Aggregate | Aggregate | DSL  | 1016.348   | 30627.24 | 12784.38 | 0.060671 |
| EL DORADO | 2027       | MCY         | Aggregate | Aggregate | GAS  | 5256.393   | 24221.56 | 10512.79 | 0.032038 |
| EL DORADO | 2027       | MDV         | Aggregate | Aggregate | GAS  | 21145.78   | 638933.2 | 94132.87 | 0.049271 |
| EL DORADO | 2027       | MDV         | Aggregate | Aggregate | DSL  | 672.0982   | 22813.77 | 3104.297 | 0.00128  |
| EL DORADO | 2027       | MDV         | Aggregate | Aggregate | ELEC | 332.8519   | 10186.47 | 1664.071 | 0        |
| EL DORADO | 2027       | MH          | Aggregate | Aggregate | GAS  | 603.3582   | 4485.017 | 60.35995 | 0.001908 |
| EL DORADO | 2027       | MH          | Aggregate | Aggregate | DSL  | 351.8273   | 2478.384 | 35.18273 | 0.014284 |
| EL DORADO | 2027       | Motor Coa   | Aggregate | Aggregate | DSL  | 10.99796   | 1362.172 | 160.5703 | 0.002988 |
| EL DORADO | 2027       | OBUS        | Aggregate | Aggregate | GAS  | 42.86832   | 1568.115 | 857.7093 | 0.000817 |
| EL DORADO | 2027       | PTO         | Aggregate | Aggregate | DSL  | 0          | 1614.88  | 0        | 0.012199 |
| EL DORADO | 2027       | SBUS        | Aggregate | Aggregate | GAS  | 20.49279   | 794.3722 | 81.97118 | 0.000628 |
| EL DORADO | 2027       | SBUS        | Aggregate | Aggregate | DSL  | 155.1608   | 4865.189 | 1790.534 | 0.035973 |
| EL DORADO | 2027       | T6 Ag       | Aggregate | Aggregate | DSL  | 1.115192   | 7.040424 | 4.906845 | 1.68E-05 |
| EL DORADO | 2027       | T6 CAIRP h  | Aggregate | Aggregate | DSL  | 11.07825   | 2031.026 | 161.7424 | 0.002083 |
| EL DORADO | 2027       | T6 CAIRP s  | Aggregate | Aggregate | DSL  | 5.629947   | 267.9575 | 82.19722 | 0.000283 |
| EL DORADO | 2027       | T6 instate  | Aggregate | Aggregate | DSL  | 20.83533   | 1279.163 | 94.1957  | 0.003453 |
| EL DORADO | 2027       | T6 instate  | Aggregate | Aggregate | DSL  | 171.2232   | 8813.503 | 774.0934 | 0.020502 |
| EL DORADO | 2027       | T6 instate  | Aggregate | Aggregate | DSL  | 149.4508   | 16010.56 | 1724.642 | 0.038277 |
| EL DORADO | 2027       | T6 instate  | Aggregate | Aggregate | DSL  | 639.2539   | 27928.46 | 7376.901 | 0.050567 |
| EL DORADO | 2027       | T6 OOS he   | Aggregate | Aggregate | DSL  | 5.342326   | 957.6059 | 77.99796 | 0.000996 |
| EL DORADO | 2027       | T6 OOS smr  | Aggregate | Aggregate | DSL  | 1.831874   | 80.78655 | 26.74536 | 9.19E-05 |
| EL DORADO | 2027       | T6 Public   | Aggregate | Aggregate | DSL  | 494.7141   | 8063.216 | 1500.633 | 0.017091 |
| EL DORADO | 2027       | T6 utility  | Aggregate | Aggregate | DSL  | 10.39695   | 172.4697 | 119.5649 | 0.000185 |
| EL DORADO | 2027       | T6TS        | Aggregate | Aggregate | GAS  | 190.3371   | 8209.147 | 3808.264 | 0.002623 |
| EL DORADO | 2027       | T7 Ag       | Aggregate | Aggregate | DSL  | 2.996568   | 11.47369 | 13.1849  | 4.68E-05 |

|          |                  |           |           |      |          |          |          |          |
|----------|------------------|-----------|-----------|------|----------|----------|----------|----------|
| EL DORAD | 2027 T7 CAIRP    | Aggregate | Aggregate | DSL  | 30.98776 | 5871.92  | 452.4213 | 0.014294 |
| EL DORAD | 2027 T7 CAIRP c  | Aggregate | Aggregate | DSL  | 5.012078 | 918.8339 | 22.65941 | 0.004139 |
| EL DORAD | 2027 T7 NNOOS    | Aggregate | Aggregate | DSL  | 39.10067 | 7238.812 | 570.8698 | 0.015165 |
| EL DORAD | 2027 T7 NOOS     | Aggregate | Aggregate | DSL  | 12.34229 | 2302.494 | 180.1974 | 0.005623 |
| EL DORAD | 2027 T7 POAK     | Aggregate | Aggregate | DSL  | 0.508371 | 85.37072 | 3.86362  | 0.000398 |
| EL DORAD | 2027 T7 Public   | Aggregate | Aggregate | DSL  | 279.6424 | 5659.478 | 848.2485 | 0.033634 |
| EL DORAD | 2027 T7 Single   | Aggregate | Aggregate | DSL  | 131.7781 | 8132.859 | 1520.701 | 0.040908 |
| EL DORAD | 2027 T7 single c | Aggregate | Aggregate | DSL  | 32.42397 | 2279.458 | 146.5875 | 0.00859  |
| EL DORAD | 2027 T7 SWCV     | Aggregate | Aggregate | DSL  | 54.74706 | 2233.462 | 213.5135 | 0.01069  |
| EL DORAD | 2027 T7 tractor  | Aggregate | Aggregate | DSL  | 0.957741 | 109.7028 | 12.16331 | 0.000294 |
| EL DORAD | 2027 T7 tractor  | Aggregate | Aggregate | DSL  | 27.54878 | 1880.352 | 124.547  | 0.009349 |
| EL DORAD | 2027 T7 utility  | Aggregate | Aggregate | DSL  | 1.42608  | 28.79541 | 16.39992 | 5.83E-05 |
| EL DORAD | 2027 T7IS        | Aggregate | Aggregate | GAS  | 1.756639 | 129.5524 | 35.14682 | 0.000465 |
| EL DORAD | 2027 UBUS        | Aggregate | Aggregate | GAS  | 31.75192 | 3043.01  | 127.0077 | 0.000641 |
| EL DORAD | 2027 UBUS        | Aggregate | Aggregate | DSL  | 41.93432 | 3689.093 | 167.7373 | 0.002758 |
| EL DORAD | 2027 UBUS        | Aggregate | Aggregate | ELEC | 0.00433  | 0.105476 | 0.017322 | 0        |
| EL DORAD | 2027 UBUS        | Aggregate | Aggregate | NG   | 0.783912 | 91.78611 | 3.135649 | 5.13E-05 |

Note 'day' in the unit is operation day.

| NOx_IDLE | NOx_STRE | NOx_TOTE | PM2.5_RU | PM2.5_IDI | PM2.5_STI | PM2.5_TO | PM2.5_PM | PM2.5_PV | PM2.5_TO |
|----------|----------|----------|----------|-----------|-----------|----------|----------|----------|----------|
| 0.000143 | 0.000926 | 0.006298 | 1.37E-05 | 3.42E-08  | 0         | 1.37E-05 | 8.03E-06 | 0.000149 | 0.000171 |
| 0        | 0.05032  | 0.12171  | 0.003087 | 0         | 0.000492  | 0.003579 | 0.005317 | 0.041872 | 0.050767 |
| 0        | 0        | 0.001761 | 0.000143 | 0         | 0         | 0.000143 | 6.94E-05 | 0.000547 | 0.000759 |
| 0        | 0        | 0        | 0        | 0         | 0         | 0        | 0.00022  | 0.001733 | 0.001953 |
| 0        | 0.011225 | 0.032406 | 0.000458 | 0         | 8.92E-05  | 0.000547 | 0.000635 | 0.005003 | 0.006186 |
| 0        | 0        | 6.67E-05 | 6.24E-06 | 0         | 0         | 6.24E-06 | 1.7E-07  | 1.34E-06 | 7.74E-06 |
| 0        | 0        | 0        | 0        | 0         | 0         | 0        | 1.14E-05 | 9.01E-05 | 0.000102 |
| 0        | 0.046769 | 0.124274 | 0.001465 | 0         | 0.000262  | 0.001727 | 0.00233  | 0.018348 | 0.022404 |
| 0        | 0        | 0.000378 | 4.29E-05 | 0         | 0         | 4.29E-05 | 1.96E-05 | 0.000154 | 0.000217 |
| 0        | 0        | 0        | 0        | 0         | 0         | 0        | 3.49E-05 | 0.000275 | 0.00031  |
| 0.00011  | 0.023442 | 0.051407 | 0.000239 | 0         | 2.18E-05  | 0.000261 | 0.000183 | 0.002991 | 0.003435 |
| 0.008108 | 0        | 0.293818 | 0.003279 | 9.37E-05  | 0         | 0.003373 | 0.000305 | 0.003334 | 0.007011 |
| 8.02E-06 | 0.001666 | 0.002949 | 1.56E-05 | 0         | 1.1E-06   | 1.67E-05 | 1.59E-05 | 0.000304 | 0.000337 |
| 0.002429 | 0        | 0.0631   | 0.000938 | 2.92E-05  | 0         | 0.000967 | 0.000101 | 0.00129  | 0.002358 |
| 0        | 0.003236 | 0.035274 | 5.14E-05 | 0         | 3.13E-05  | 8.27E-05 | 2.67E-05 | 0.000135 | 0.000244 |
| 0        | 0.034524 | 0.083795 | 0.000881 | 0         | 0.000182  | 0.001062 | 0.001409 | 0.011093 | 0.013564 |
| 0        | 0        | 0.00128  | 0.000112 | 0         | 0         | 0.000112 | 5.03E-05 | 0.000396 | 0.000558 |
| 0        | 0        | 0        | 0        | 0         | 0         | 0        | 2.25E-05 | 0.000177 | 0.000199 |
| 0        | 2.63E-05 | 0.001934 | 6.87E-06 | 0         | 1.91E-08  | 6.89E-06 | 1.48E-05 | 0.000276 | 0.000298 |
| 0        | 0        | 0.014284 | 0.000347 | 0         | 0         | 0.000347 | 1.09E-05 | 0.000153 | 0.000511 |
| 0.000572 | 0.000393 | 0.003953 | 3.51E-05 | 1.97E-07  | 0         | 3.53E-05 | 4.5E-06  | 8.39E-05 | 0.000124 |
| 3.07E-06 | 0.000315 | 0.001135 | 2.09E-06 | 0         | 2.64E-07  | 2.35E-06 | 5.19E-06 | 9.66E-05 | 0.000104 |
| 0        | 0        | 0.012199 | 4.64E-05 | 0         | 0         | 4.64E-05 | 0        | 0        | 4.64E-05 |
| 2.09E-05 | 5.04E-05 | 0.000699 | 1.37E-06 | 0         | 5.9E-08   | 1.43E-06 | 1.75E-06 | 0.00028  | 0.000283 |
| 0.007235 | 0.001942 | 0.045149 | 0.000215 | 7.29E-06  | 0         | 0.000222 | 1.61E-05 | 0.001712 | 0.00195  |
| 3.51E-06 | 2.11E-05 | 4.14E-05 | 1.59E-07 | 8.38E-10  | 0         | 1.6E-07  | 2.33E-08 | 4.34E-07 | 6.17E-07 |
| 3.49E-05 | 0.000234 | 0.002352 | 2.11E-05 | 8.33E-09  | 0         | 2.11E-05 | 6.72E-06 | 0.000125 | 0.000153 |
| 1.77E-05 | 0.000119 | 0.00042  | 2.9E-06  | 4.23E-09  | 0         | 2.91E-06 | 8.86E-07 | 1.65E-05 | 2.03E-05 |
| 6.75E-05 | 0.000273 | 0.003793 | 1.6E-05  | 2.02E-08  | 0         | 1.6E-05  | 4.23E-06 | 7.88E-05 | 9.9E-05  |
| 0.000541 | 0.002282 | 0.023325 | 8.26E-05 | 1.31E-07  | 0         | 8.27E-05 | 2.91E-05 | 0.000543 | 0.000655 |
| 0.000591 | 0.003688 | 0.042557 | 0.00022  | 4.33E-07  | 0         | 0.000221 | 5.29E-05 | 0.000986 | 0.001259 |
| 0.002094 | 0.017088 | 0.069749 | 0.000239 | 5.69E-07  | 0         | 0.00024  | 9.24E-05 | 0.00172  | 0.002052 |
| 1.68E-05 | 0.000113 | 0.001126 | 1.01E-05 | 4.02E-09  | 0         | 1.01E-05 | 3.17E-06 | 5.9E-05  | 7.23E-05 |
| 5.77E-06 | 3.87E-05 | 0.000136 | 9.49E-07 | 1.38E-09  | 0         | 9.5E-07  | 2.67E-07 | 4.97E-06 | 6.19E-06 |
| 0.01099  | 0.004546 | 0.032627 | 7.4E-05  | 6.69E-06  | 0         | 8.07E-05 | 2.67E-05 | 0.000496 | 0.000604 |
| 8.99E-05 | 0.000259 | 0.000534 | 6.36E-07 | 2.15E-08  | 0         | 6.58E-07 | 5.7E-07  | 1.06E-05 | 1.18E-05 |
| 1.87E-05 | 0.001505 | 0.004147 | 1.19E-05 | 0         | 1.79E-06  | 1.37E-05 | 2.71E-05 | 0.000505 | 0.000546 |
| 2.85E-05 | 9.61E-05 | 0.000171 | 4.79E-07 | 9.82E-09  | 0         | 4.88E-07 | 1.14E-07 | 3.35E-07 | 9.37E-07 |

|          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.004212 | 0.001111 | 0.019618 | 0.000184 | 1.45E-06 | 0        | 0.000186 | 5.83E-05 | 0.000171 | 0.000415 |
| 0.000104 | 0.000114 | 0.004357 | 2.07E-05 | 3.59E-08 | 0        | 2.08E-05 | 9.12E-06 | 2.68E-05 | 5.67E-05 |
| 0.006596 | 0.001404 | 0.023164 | 0.000187 | 2.27E-06 | 0        | 0.000189 | 7.18E-05 | 0.000211 | 0.000472 |
| 0.002082 | 0.000443 | 0.008148 | 7.25E-05 | 7.17E-07 | 0        | 7.32E-05 | 2.28E-05 | 6.72E-05 | 0.000163 |
| 1.74E-05 | 7.56E-06 | 0.000423 | 1.53E-06 | 5.98E-09 | 0        | 1.53E-06 | 8.47E-07 | 2.49E-06 | 4.87E-06 |
| 0.007006 | 0.003833 | 0.044472 | 0.000172 | 1.1E-05  | 0        | 0.000183 | 5.61E-05 | 0.000165 | 0.000404 |
| 0.003816 | 0.0055   | 0.050224 | 0.000251 | 1.86E-06 | 0        | 0.000253 | 8.07E-05 | 0.000237 | 0.000571 |
| 0.000677 | 0.000723 | 0.00999  | 4.02E-05 | 2.48E-07 | 0        | 4.05E-05 | 2.26E-05 | 6.65E-05 | 0.00013  |
| 0.001869 | 0.000894 | 0.013453 | 3.75E-05 | 1.62E-06 | 0        | 3.91E-05 | 2.22E-05 | 6.51E-05 | 0.000126 |
| 2.38E-05 | 2.4E-05  | 0.000342 | 3.64E-06 | 9.58E-09 | 0        | 3.65E-06 | 1.09E-06 | 3.2E-06  | 7.94E-06 |
| 0.000573 | 0.000619 | 0.010541 | 4.84E-05 | 2E-07    | 0        | 4.86E-05 | 1.87E-05 | 5.48E-05 | 0.000122 |
| 1.18E-05 | 5.93E-05 | 0.000129 | 2.13E-07 | 4.07E-09 | 0        | 2.17E-07 | 2.86E-07 | 8.4E-07  | 1.34E-06 |
| 0        | 8.55E-08 | 0.000466 | 8.01E-08 | 0        | 5.01E-09 | 8.51E-08 | 7.14E-07 | 3.78E-06 | 4.58E-06 |
| 0        | 9.24E-05 | 0.000734 | 7.16E-06 | 0        | 1.03E-07 | 7.26E-06 | 8.81E-06 | 0.000165 | 0.000181 |
| 0        | 0        | 0.002758 | 2.49E-05 | 0        | 0        | 2.49E-05 | 2.8E-05  | 0.000143 | 0.000196 |
| 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1.05E-09 | 3.08E-09 | 4.12E-09 |
| 0        | 0        | 5.13E-05 | 3.33E-07 | 0        | 0        | 3.33E-07 | 9.11E-07 | 2.68E-06 | 3.92E-06 |

| PM10_RUI | PM10_IDL | PM10_STR | PM10_TO  | PM10_PM  | PM10_PM  | PM10_TO  | CO2_RUN  | CO2_IDLE | CO2_STRE |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1.43E-05 | 3.57E-08 | 0        | 1.44E-05 | 3.21E-05 | 0.000349 | 0.000395 | 2.684847 | 0.02978  | 0        |
| 0.003357 | 0        | 0.000535 | 0.003892 | 0.021268 | 0.097701 | 0.122861 | 612.7938 | 0        | 15.68101 |
| 0.00015  | 0        | 0        | 0.00015  | 0.000278 | 0.001275 | 0.001703 | 6.3843   | 0        | 0        |
| 0        | 0        | 0        | 0        | 0.00088  | 0.004044 | 0.004924 | 0        | 0        | 0        |
| 0.000498 | 0        | 9.7E-05  | 0.000595 | 0.002541 | 0.011674 | 0.014811 | 89.35284 | 0        | 2.655738 |
| 6.52E-06 | 0        | 0        | 6.52E-06 | 6.79E-07 | 3.12E-06 | 1.03E-05 | 0.03578  | 0        | 0        |
| 0        | 0        | 0        | 0        | 4.58E-05 | 0.00021  | 0.000256 | 0        | 0        | 0        |
| 0.001593 | 0        | 0.000285 | 0.001878 | 0.009319 | 0.042811 | 0.054009 | 349.1617 | 0        | 10.46485 |
| 4.49E-05 | 0        | 0        | 4.49E-05 | 7.84E-05 | 0.00036  | 0.000483 | 2.458226 | 0        | 0        |
| 0        | 0        | 0        | 0        | 0.00014  | 0.000641 | 0.000781 | 0        | 0        | 0        |
| 0.00026  | 0        | 2.37E-05 | 0.000283 | 0.000731 | 0.00698  | 0.007994 | 88.75364 | 0.36009  | 0.862798 |
| 0.003427 | 9.79E-05 | 0        | 0.003525 | 0.001221 | 0.007778 | 0.012524 | 56.34383 | 0.489865 | 0        |
| 1.7E-05  | 0        | 1.19E-06 | 1.82E-05 | 6.37E-05 | 0.00071  | 0.000791 | 8.604791 | 0.03131  | 0.072428 |
| 0.00098  | 3.05E-05 | 0        | 0.00101  | 0.000405 | 0.003011 | 0.004426 | 20.70807 | 0.242639 | 0        |
| 5.49E-05 | 0        | 3.32E-05 | 8.81E-05 | 0.000107 | 0.000314 | 0.000509 | 5.767022 | 0        | 0.749966 |
| 0.000958 | 0        | 0.000198 | 0.001156 | 0.005634 | 0.025883 | 0.032673 | 254.011  | 0        | 8.405773 |
| 0.000117 | 0        | 0        | 0.000117 | 0.000201 | 0.000924 | 0.001243 | 8.584037 | 0        | 0        |
| 0        | 0        | 0        | 0        | 8.98E-05 | 0.000413 | 0.000502 | 0        | 0        | 0        |
| 7.48E-06 | 0        | 2.08E-08 | 7.5E-06  | 5.93E-05 | 0.000644 | 0.000711 | 8.683564 | 0        | 0.001709 |
| 0.000363 | 0        | 0        | 0.000363 | 4.37E-05 | 0.000356 | 0.000762 | 2.830651 | 0        | 0        |
| 3.67E-05 | 2.06E-07 | 0        | 3.69E-05 | 1.8E-05  | 0.000196 | 0.000251 | 2.069879 | 0.120337 | 0        |
| 2.27E-06 | 0        | 2.87E-07 | 2.56E-06 | 2.07E-05 | 0.000225 | 0.000249 | 2.840292 | 0.017077 | 0.025121 |
| 4.85E-05 | 0        | 0        | 4.85E-05 | 0        | 0        | 4.85E-05 | 3.529371 | 0        | 0        |
| 1.49E-06 | 0        | 6.41E-08 | 1.55E-06 | 7.01E-06 | 0.000652 | 0.000661 | 0.714299 | 0.05516  | 0.00455  |
| 0.000224 | 7.62E-06 | 0        | 0.000232 | 6.44E-05 | 0.003994 | 0.004291 | 5.877504 | 0.61319  | 0        |
| 1.66E-07 | 8.76E-10 | 0        | 1.67E-07 | 9.31E-08 | 1.01E-06 | 1.27E-06 | 0.00824  | 0.000804 | 0        |
| 2.21E-05 | 8.7E-09  | 0        | 2.21E-05 | 2.69E-05 | 0.000292 | 0.000341 | 1.748125 | 0.006709 | 0        |
| 3.03E-06 | 4.42E-09 | 0        | 3.04E-06 | 3.54E-06 | 3.85E-05 | 4.51E-05 | 0.251479 | 0.003417 | 0        |
| 1.67E-05 | 2.11E-08 | 0        | 1.68E-05 | 1.69E-05 | 0.000184 | 0.000217 | 1.603481 | 0.013738 | 0        |
| 8.63E-05 | 1.37E-07 | 0        | 8.64E-05 | 0.000117 | 0.001266 | 0.001469 | 10.72    | 0.109509 | 0        |
| 0.00023  | 4.53E-07 | 0        | 0.000231 | 0.000212 | 0.0023   | 0.002743 | 16.26228 | 0.098422 | 0        |
| 0.00025  | 5.95E-07 | 0        | 0.000251 | 0.000369 | 0.004013 | 0.004633 | 29.70691 | 0.418049 | 0        |
| 1.06E-05 | 4.2E-09  | 0        | 1.06E-05 | 1.27E-05 | 0.000138 | 0.000161 | 0.828966 | 0.003254 | 0        |
| 9.92E-07 | 1.44E-09 | 0        | 9.93E-07 | 1.07E-06 | 1.16E-05 | 1.37E-05 | 0.07762  | 0.001141 | 0        |
| 7.73E-05 | 6.99E-06 | 0        | 8.43E-05 | 0.000107 | 0.001158 | 0.001349 | 8.865435 | 1.64316  | 0        |
| 6.65E-07 | 2.25E-08 | 0        | 6.88E-07 | 2.28E-06 | 2.48E-05 | 2.77E-05 | 0.17286  | 0.017484 | 0        |
| 1.29E-05 | 0        | 1.95E-06 | 1.49E-05 | 0.000109 | 0.001179 | 0.001303 | 14.63454 | 0.105993 | 0.15331  |
| 5E-07    | 1.03E-08 | 0        | 5.1E-07  | 4.55E-07 | 7.81E-07 | 1.75E-06 | 0.020583 | 0.006804 | 0        |

|          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.000193 | 1.52E-06 | 0        | 0.000194 | 0.000233 | 0.0004   | 0.000827 | 7.678642 | 0.821962 | 0        |
| 2.17E-05 | 3.75E-08 | 0        | 2.17E-05 | 3.65E-05 | 6.25E-05 | 0.000121 | 1.541201 | 0.019959 | 0        |
| 0.000195 | 2.38E-06 | 0        | 0.000198 | 0.000287 | 0.000493 | 0.000978 | 8.723283 | 1.203969 | 0        |
| 7.58E-05 | 7.5E-07  | 0        | 7.65E-05 | 9.14E-05 | 0.000157 | 0.000325 | 3.017834 | 0.406981 | 0        |
| 1.6E-06  | 6.25E-09 | 0        | 1.6E-06  | 3.39E-06 | 5.81E-06 | 1.08E-05 | 0.14744  | 0.003561 | 0        |
| 0.000179 | 1.15E-05 | 0        | 0.000191 | 0.000225 | 0.000385 | 0.000801 | 9.538203 | 0.893186 | 0        |
| 0.000262 | 1.94E-06 | 0        | 0.000264 | 0.000323 | 0.000553 | 0.00114  | 13.39315 | 0.760284 | 0        |
| 4.2E-05  | 2.59E-07 | 0        | 4.23E-05 | 9.05E-05 | 0.000155 | 0.000288 | 4.111637 | 0.136865 | 0        |
| 3.91E-05 | 1.69E-06 | 0        | 4.08E-05 | 8.86E-05 | 0.000152 | 0.000281 | 8.93471  | 0.232531 | 0        |
| 3.81E-06 | 1E-08    | 0        | 3.82E-06 | 4.35E-06 | 7.47E-06 | 1.56E-05 | 0.145388 | 0.004673 | 0        |
| 5.06E-05 | 2.09E-07 | 0        | 5.08E-05 | 7.46E-05 | 0.000128 | 0.000253 | 3.421104 | 0.116732 | 0        |
| 2.23E-07 | 4.25E-09 | 0        | 2.27E-07 | 1.14E-06 | 1.96E-06 | 3.33E-06 | 0.049372 | 0.002547 | 0        |
| 8.71E-08 | 0        | 5.45E-09 | 9.26E-08 | 2.86E-06 | 8.82E-06 | 1.18E-05 | 0.293364 | 0        | 0.001747 |
| 7.79E-06 | 0        | 1.12E-07 | 7.9E-06  | 3.52E-05 | 0.000386 | 0.000429 | 5.42885  | 0        | 0.009685 |
| 2.6E-05  | 0        | 0        | 2.6E-05  | 0.000112 | 0.000333 | 0.000472 | 5.42265  | 0        | 0        |
| 0        | 0        | 0        | 0        | 4.19E-09 | 7.18E-09 | 1.14E-08 | 0        | 0        | 0        |
| 3.48E-07 | 0        | 0        | 3.48E-07 | 3.64E-06 | 6.25E-06 | 1.02E-05 | 0.210287 | 0        | 0        |

| CO2_TOTE | CH4_RUNE | CH4_IDLE | CH4_STRE | CH4_TOTE | N2O_RUNE | N2O_IDLE | N2O_STRE | N2O_TOTE | ROG_RUNE |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2.714626 | 1.3E-06  | 1.15E-07 | 0        | 1.42E-06 | 0.000422 | 4.68E-06 | 0        | 0.000427 | 2.81E-05 |
| 628.4748 | 0.004015 | 0        | 0.013264 | 0.017279 | 0.009699 | 0        | 0.007388 | 0.017087 | 0.014363 |
| 6.3843   | 1.71E-05 | 0        | 0        | 1.71E-05 | 0.001004 | 0        | 0        | 0.001004 | 0.000368 |
| 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 92.00858 | 0.001118 | 0        | 0.003039 | 0.004157 | 0.001866 | 0        | 0.001222 | 0.003088 | 0.004862 |
| 0.03578  | 4.05E-07 | 0        | 0        | 4.05E-07 | 5.62E-06 | 0        | 0        | 5.62E-06 | 8.71E-06 |
| 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 359.6266 | 0.003641 | 0        | 0.011326 | 0.014967 | 0.006674 | 0        | 0.004951 | 0.011625 | 0.014991 |
| 2.458226 | 6.91E-06 | 0        | 0        | 6.91E-06 | 0.000386 | 0        | 0        | 0.000386 | 0.000149 |
| 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 89.97652 | 0.001307 | 0.000338 | 0.001195 | 0.00284  | 0.001533 | 8.55E-06 | 0.001729 | 0.003271 | 0.006578 |
| 56.83369 | 0.000929 | 1.83E-05 | 0        | 0.000947 | 0.008856 | 7.7E-05  | 0        | 0.008933 | 0.019998 |
| 8.708529 | 4.44E-05 | 2.61E-05 | 7.29E-05 | 0.000143 | 8.64E-05 | 6.77E-07 | 0.000132 | 0.00022  | 0.000194 |
| 20.9507  | 0.000264 | 5.71E-06 | 0        | 0.00027  | 0.003255 | 3.81E-05 | 0        | 0.003293 | 0.00568  |
| 6.516988 | 0.009401 | 0        | 0.003217 | 0.012617 | 0.001803 | 0        | 0.000179 | 0.001982 | 0.065845 |
| 262.4167 | 0.002355 | 0        | 0.008357 | 0.010712 | 0.004213 | 0        | 0.003371 | 0.007584 | 0.009912 |
| 8.584037 | 1.34E-05 | 0        | 0        | 1.34E-05 | 0.001349 | 0        | 0        | 0.001349 | 0.000289 |
| 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 8.685273 | 5.9E-05  | 0        | 2.18E-06 | 6.12E-05 | 0.000123 | 0        | 2.75E-06 | 0.000125 | 0.000246 |
| 2.830651 | 1.83E-05 | 0        | 0        | 1.83E-05 | 0.000445 | 0        | 0        | 0.000445 | 0.000393 |
| 2.190216 | 1.31E-06 | 2.25E-06 | 0        | 3.56E-06 | 0.000325 | 1.89E-05 | 0        | 0.000344 | 2.81E-05 |
| 2.882489 | 2.33E-05 | 9.04E-06 | 3E-05    | 6.24E-05 | 3.96E-05 | 2.47E-07 | 2.34E-05 | 6.32E-05 | 0.000115 |
| 3.529371 | 7.36E-06 | 0        | 0        | 7.36E-06 | 0.000555 | 0        | 0        | 0.000555 | 0.000158 |
| 0.774008 | 1.6E-05  | 5.35E-05 | 6.04E-06 | 7.55E-05 | 2.97E-05 | 1.92E-06 | 4.46E-06 | 3.61E-05 | 8.09E-05 |
| 6.490694 | 2.42E-05 | 2.04E-06 | 0        | 2.62E-05 | 0.000924 | 9.64E-05 | 0        | 0.00102  | 0.00052  |
| 0.009044 | 3.82E-09 | 2.82E-09 | 0        | 6.63E-09 | 1.3E-06  | 1.26E-07 | 0        | 1.42E-06 | 8.22E-08 |
| 1.754834 | 8.07E-07 | 2.8E-08  | 0        | 8.35E-07 | 0.000275 | 1.05E-06 | 0        | 0.000276 | 1.74E-05 |
| 0.254896 | 1.08E-07 | 1.42E-08 | 0        | 1.22E-07 | 3.95E-05 | 5.37E-07 | 0        | 4.01E-05 | 2.33E-06 |
| 1.61722  | 1.47E-06 | 5.28E-08 | 0        | 1.52E-06 | 0.000252 | 2.16E-06 | 0        | 0.000254 | 3.17E-05 |
| 10.82951 | 6.85E-06 | 4.32E-07 | 0        | 7.28E-06 | 0.001685 | 1.72E-05 | 0        | 0.001702 | 0.000148 |
| 16.3607  | 1.81E-05 | 3.95E-07 | 0        | 1.85E-05 | 0.002556 | 1.55E-05 | 0        | 0.002572 | 0.00039  |
| 30.12496 | 1.61E-05 | 1.62E-06 | 0        | 1.77E-05 | 0.00467  | 6.57E-05 | 0        | 0.004735 | 0.000346 |
| 0.832221 | 3.83E-07 | 1.35E-08 | 0        | 3.97E-07 | 0.00013  | 5.12E-07 | 0        | 0.000131 | 8.25E-06 |
| 0.078761 | 3.37E-08 | 4.63E-09 | 0        | 3.84E-08 | 1.22E-05 | 1.79E-07 | 0        | 1.24E-05 | 7.26E-07 |
| 10.5086  | 9.62E-06 | 6.74E-06 | 0        | 1.64E-05 | 0.001394 | 0.000258 | 0        | 0.001652 | 0.000207 |
| 0.190344 | 6.48E-08 | 7.22E-08 | 0        | 1.37E-07 | 2.72E-05 | 2.75E-06 | 0        | 2.99E-05 | 1.4E-06  |
| 14.89385 | 7.45E-05 | 5.57E-05 | 0.000153 | 0.000283 | 0.000144 | 1.62E-06 | 0.000121 | 0.000266 | 0.000355 |
| 0.027387 | 1.3E-08  | 1.12E-07 | 0        | 1.25E-07 | 3.24E-06 | 1.07E-06 | 0        | 4.3E-06  | 2.8E-07  |



|          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 8.500603 | 6.19E-06 | 1.66E-05 | 0        | 2.27E-05 | 0.001207 | 0.000129 | 0        | 0.001336 | 0.000133 |
| 1.561161 | 1.68E-06 | 4.09E-07 | 0        | 2.09E-06 | 0.000242 | 3.14E-06 | 0        | 0.000245 | 3.62E-05 |
| 9.927252 | 6.94E-06 | 2.59E-05 | 0        | 3.29E-05 | 0.001371 | 0.000189 | 0        | 0.00156  | 0.000149 |
| 3.424816 | 2.43E-06 | 8.18E-06 | 0        | 1.06E-05 | 0.000474 | 6.4E-05  | 0        | 0.000538 | 5.24E-05 |
| 0.151001 | 1.33E-07 | 6.82E-08 | 0        | 2.01E-07 | 2.32E-05 | 5.6E-07  | 0        | 2.37E-05 | 2.86E-06 |
| 10.43139 | 2.01E-05 | 1.67E-05 | 0        | 3.69E-05 | 0.001499 | 0.00014  | 0        | 0.00164  | 0.000434 |
| 14.15344 | 2.47E-05 | 1.38E-05 | 0        | 3.85E-05 | 0.002105 | 0.00012  | 0        | 0.002225 | 0.000531 |
| 4.248501 | 4.41E-06 | 2.63E-06 | 0        | 7.04E-06 | 0.000646 | 2.15E-05 | 0        | 0.000668 | 9.5E-05  |
| 9.167241 | 4.03E-06 | 3.95E-06 | 0        | 7.98E-06 | 0.001404 | 3.66E-05 | 0        | 0.001441 | 8.68E-05 |
| 0.15006  | 1.34E-07 | 9E-08    | 0        | 2.24E-07 | 2.29E-05 | 7.34E-07 | 0        | 2.36E-05 | 2.89E-06 |
| 3.537835 | 3.93E-06 | 2.24E-06 | 0        | 6.18E-06 | 0.000538 | 1.83E-05 | 0        | 0.000556 | 8.46E-05 |
| 0.05192  | 2.33E-08 | 4.64E-08 | 0        | 6.97E-08 | 7.76E-06 | 4E-07    | 0        | 8.16E-06 | 5.02E-07 |
| 0.295111 | 1.1E-05  | 0        | 3.6E-09  | 1.1E-05  | 1.99E-05 | 0        | 4.15E-09 | 1.99E-05 | 4.94E-05 |
| 5.438535 | 1.71E-05 | 0        | 1.25E-05 | 2.96E-05 | 6.03E-05 | 0        | 8.89E-06 | 6.92E-05 | 5.47E-05 |
| 5.42265  | 0.000258 | 0        | 0        | 0.000258 | 0.000852 | 0        | 0        | 0.000852 | 5.79E-05 |
| 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 0.210287 | 0.000679 | 0        | 0        | 0.000679 | 4.29E-05 | 0        | 0        | 4.29E-05 | 9.71E-06 |

| ROG_IDLE | ROG_STRE | ROG_TOTE | ROG_DIUR | ROG_HTSK | ROG_RUN  | ROG_REST | ROG_TOT  | TOG_RUN  | TOG_IDLE |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 2.47E-06 | 0        | 3.05E-05 | 0        | 0        | 0        | 0        | 3.05E-05 | 3.2E-05  | 2.81E-06 |
| 0        | 0.057023 | 0.071386 | 0.011212 | 0.026033 | 0.064125 | 0.007708 | 0.180463 | 0.020958 | 0        |
| 0        | 0        | 0.000368 | 0        | 0        | 0        | 0        | 0.000368 | 0.000419 | 0        |
| 0        | 0        | 0        | 5.15E-05 | 6.26E-05 | 0        | 1.32E-05 | 0.000127 | 0        | 0        |
| 0        | 0.015776 | 0.020638 | 0.005235 | 0.009876 | 0.036838 | 0.003271 | 0.075858 | 0.007094 | 0        |
| 0        | 0        | 8.71E-06 | 0        | 0        | 0        | 0        | 8.71E-06 | 9.92E-06 | 0        |
| 0        | 0        | 0        | 2.6E-06  | 3.18E-06 | 0        | 6.69E-07 | 6.45E-06 | 0        | 0        |
| 0        | 0.055662 | 0.070652 | 0.013804 | 0.027104 | 0.097518 | 0.009973 | 0.219052 | 0.021874 | 0        |
| 0        | 0        | 0.000149 | 0        | 0        | 0        | 0        | 0.000149 | 0.000169 | 0        |
| 0        | 0        | 0        | 1.17E-05 | 1.42E-05 | 0        | 3.01E-06 | 2.89E-05 | 0        | 0        |
| 0.001259 | 0.006353 | 0.014189 | 0.000223 | 0.008983 | 0.084385 | 8.78E-05 | 0.107868 | 0.009598 | 0.001837 |
| 0.000394 | 0        | 0.020392 | 0        | 0        | 0        | 0        | 0.020392 | 0.022767 | 0.000449 |
| 9.2E-05  | 0.000361 | 0.000647 | 8.74E-06 | 0.000374 | 0.002514 | 3.93E-06 | 0.003548 | 0.000283 | 0.000134 |
| 0.000123 | 0        | 0.005803 | 0        | 0        | 0        | 0        | 0.005803 | 0.006466 | 0.00014  |
| 0        | 0.025368 | 0.091213 | 0.013442 | 0.010663 | 0.0242   | 0.006115 | 0.145633 | 0.080756 | 0        |
| 0        | 0.043245 | 0.053157 | 0.010655 | 0.019842 | 0.067411 | 0.007888 | 0.158953 | 0.014464 | 0        |
| 0        | 0        | 0.000289 | 0        | 0        | 0        | 0        | 0.000289 | 0.000329 | 0        |
| 0        | 0        | 0        | 7.33E-06 | 8.97E-06 | 0        | 1.88E-06 | 1.82E-05 | 0        | 0        |
| 0        | 8.89E-06 | 0.000255 | 6.87E-05 | 5.78E-06 | 0.000121 | 2.07E-05 | 0.000471 | 0.000359 | 0        |
| 0        | 0        | 0.000393 | 0        | 0        | 0        | 0        | 0.000393 | 0.000448 | 0        |
| 4.84E-05 | 0        | 7.66E-05 | 0        | 0        | 0        | 0        | 7.66E-05 | 3.2E-05  | 5.51E-05 |
| 3.53E-05 | 0.000166 | 0.000316 | 2.28E-06 | 3.59E-05 | 0.000408 | 7.86E-07 | 0.000763 | 0.000167 | 5.15E-05 |
| 0        | 0        | 0.000158 | 0        | 0        | 0        | 0        | 0.000158 | 0.00018  | 0        |
| 0.000239 | 3.6E-05  | 0.000356 | 8.83E-07 | 8.54E-06 | 5.42E-05 | 2.83E-07 | 0.00042  | 0.000118 | 0.000349 |
| 4.38E-05 | 0        | 0.000564 | 0        | 0        | 0        | 0        | 0.000564 | 0.000593 | 4.99E-05 |
| 6.06E-08 | 0        | 1.43E-07 | 0        | 0        | 0        | 0        | 1.43E-07 | 9.35E-08 | 6.9E-08  |
| 6.02E-07 | 0        | 1.8E-05  | 0        | 0        | 0        | 0        | 1.8E-05  | 1.98E-05 | 6.86E-07 |
| 3.06E-07 | 0        | 2.64E-06 | 0        | 0        | 0        | 0        | 2.64E-06 | 2.65E-06 | 3.49E-07 |
| 1.14E-06 | 0        | 3.28E-05 | 0        | 0        | 0        | 0        | 3.28E-05 | 3.61E-05 | 1.29E-06 |
| 9.31E-06 | 0        | 0.000157 | 0        | 0        | 0        | 0        | 0.000157 | 0.000168 | 1.06E-05 |
| 8.51E-06 | 0        | 0.000399 | 0        | 0        | 0        | 0        | 0.000399 | 0.000444 | 9.69E-06 |
| 3.48E-05 | 0        | 0.000381 | 0        | 0        | 0        | 0        | 0.000381 | 0.000394 | 3.96E-05 |
| 2.91E-07 | 0        | 8.54E-06 | 0        | 0        | 0        | 0        | 8.54E-06 | 9.39E-06 | 3.31E-07 |
| 9.96E-08 | 0        | 8.26E-07 | 0        | 0        | 0        | 0        | 8.26E-07 | 8.27E-07 | 1.13E-07 |
| 0.000145 | 0        | 0.000352 | 0        | 0        | 0        | 0        | 0.000352 | 0.000236 | 0.000165 |
| 1.55E-06 | 0        | 2.95E-06 | 0        | 0        | 0        | 0        | 2.95E-06 | 1.59E-06 | 1.77E-06 |
| 0.000214 | 0.000818 | 0.001387 | 6.33E-06 | 0.000331 | 0.001857 | 2.79E-06 | 0.003584 | 0.000518 | 0.000312 |
| 2.41E-06 | 0        | 2.69E-06 | 0        | 0        | 0        | 0        | 2.69E-06 | 3.19E-07 | 2.75E-06 |

|          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.000356 | 0        | 0.00049  | 0        | 0        | 0        | 0        | 0.00049  | 0.000152 | 0.000406 |
| 8.81E-06 | 0        | 4.5E-05  | 0        | 0        | 0        | 0        | 4.5E-05  | 4.12E-05 | 1E-05    |
| 0.000558 | 0        | 0.000708 | 0        | 0        | 0        | 0        | 0.000708 | 0.00017  | 0.000635 |
| 0.000176 | 0        | 0.000229 | 0        | 0        | 0        | 0        | 0.000229 | 5.96E-05 | 0.000201 |
| 1.47E-06 | 0        | 4.33E-06 | 0        | 0        | 0        | 0        | 4.33E-06 | 3.25E-06 | 1.67E-06 |
| 0.00036  | 0        | 0.000794 | 0        | 0        | 0        | 0        | 0.000794 | 0.000494 | 0.00041  |
| 0.000298 | 0        | 0.000829 | 0        | 0        | 0        | 0        | 0.000829 | 0.000604 | 0.000339 |
| 5.66E-05 | 0        | 0.000152 | 0        | 0        | 0        | 0        | 0.000152 | 0.000108 | 6.45E-05 |
| 8.5E-05  | 0        | 0.000172 | 0        | 0        | 0        | 0        | 0.000172 | 9.88E-05 | 9.68E-05 |
| 1.94E-06 | 0        | 4.83E-06 | 0        | 0        | 0        | 0        | 4.83E-06 | 3.29E-06 | 2.21E-06 |
| 4.83E-05 | 0        | 0.000133 | 0        | 0        | 0        | 0        | 0.000133 | 9.63E-05 | 5.5E-05  |
| 9.99E-07 | 0        | 1.5E-06  | 0        | 0        | 0        | 0        | 1.5E-06  | 5.72E-07 | 1.14E-06 |
| 0        | 1.88E-08 | 4.94E-05 | 6.66E-08 | 2.71E-06 | 1.44E-05 | 3.39E-08 | 6.66E-05 | 7.2E-05  | 0        |
| 0        | 5.17E-05 | 0.000106 | 4.03E-07 | 4.03E-06 | 2.17E-05 | 1.8E-07  | 0.000133 | 7.99E-05 | 0        |
| 0        | 0        | 5.79E-05 | 0        | 0        | 0        | 0        | 5.79E-05 | 0.000322 | 0        |
| 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 0        | 0        | 9.71E-06 | 0        | 0        | 0        | 0        | 9.71E-06 | 0.000693 | 0        |

| TOG_STRE | TOG_TOTE | TOG_DIUR | TOG_HTSK | TOG_RUNI | TOG_REST | TOG_TOTA | CO_RUNE  | CO_IDLEX | CO_STREX |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0        | 3.48E-05 | 0        | 0        | 0        | 0        | 3.48E-05 | 0.000362 | 0.000105 | 0        |
| 0.062433 | 0.083391 | 0.011212 | 0.026033 | 0.064125 | 0.007708 | 0.192468 | 1.408956 | 0        | 0.687856 |
| 0        | 0.000419 | 0        | 0        | 0        | 0        | 0.000419 | 0.007105 | 0        | 0        |
| 0        | 0        | 5.15E-05 | 6.26E-05 | 0        | 1.32E-05 | 0.000127 | 0        | 0        | 0        |
| 0.017273 | 0.024367 | 0.005235 | 0.009876 | 0.036838 | 0.003271 | 0.079587 | 0.278791 | 0        | 0.104105 |
| 0        | 9.92E-06 | 0        | 0        | 0        | 0        | 9.92E-06 | 6.73E-05 | 0        | 0        |
| 0        | 0        | 2.6E-06  | 3.18E-06 | 0        | 6.69E-07 | 6.45E-06 | 0        | 0        | 0        |
| 0.060943 | 0.082817 | 0.013804 | 0.027104 | 0.097518 | 0.009973 | 0.231216 | 0.948379 | 0        | 0.465101 |
| 0        | 0.000169 | 0        | 0        | 0        | 0        | 0.000169 | 0.001511 | 0        | 0        |
| 0        | 0        | 1.17E-05 | 1.42E-05 | 0        | 3.01E-06 | 2.89E-05 | 0        | 0        | 0        |
| 0.006955 | 0.018391 | 0.000223 | 0.008983 | 0.084385 | 8.78E-05 | 0.11207  | 0.139843 | 0.011323 | 0.093408 |
| 0        | 0.023215 | 0        | 0        | 0        | 0        | 0.023215 | 0.097923 | 0.003268 | 0        |
| 0.000395 | 0.000812 | 8.74E-06 | 0.000374 | 0.002514 | 3.93E-06 | 0.003713 | 0.004101 | 0.000884 | 0.0058   |
| 0        | 0.006606 | 0        | 0        | 0        | 0        | 0.006606 | 0.028245 | 0.001019 | 0        |
| 0.027594 | 0.10835  | 0.013442 | 0.010663 | 0.0242   | 0.006115 | 0.16277  | 0.555689 | 0        | 0.113868 |
| 0.047348 | 0.061812 | 0.010655 | 0.019842 | 0.067411 | 0.007888 | 0.167608 | 0.578447 | 0        | 0.336824 |
| 0        | 0.000329 | 0        | 0        | 0        | 0        | 0.000329 | 0.005812 | 0        | 0        |
| 0        | 0        | 7.33E-06 | 8.97E-06 | 0        | 1.88E-06 | 1.82E-05 | 0        | 0        | 0        |
| 9.74E-06 | 0.000369 | 6.87E-05 | 5.78E-06 | 0.000121 | 2.07E-05 | 0.000585 | 0.0059   | 0        | 0.00019  |
| 0        | 0.000448 | 0        | 0        | 0        | 0        | 0.000448 | 0.001441 | 0        | 0        |
| 0        | 8.72E-05 | 0        | 0        | 0        | 0        | 8.72E-05 | 0.000261 | 0.000716 | 0        |
| 0.000182 | 0.000401 | 2.28E-06 | 3.59E-05 | 0.000408 | 7.86E-07 | 0.000847 | 0.002514 | 0.000273 | 0.00371  |
| 0        | 0.00018  | 0        | 0        | 0        | 0        | 0.00018  | 0.001034 | 0        | 0        |
| 3.94E-05 | 0.000507 | 8.83E-07 | 8.54E-06 | 5.42E-05 | 2.83E-07 | 0.000571 | 0.001794 | 0.001851 | 0.000975 |
| 0        | 0.000642 | 0        | 0        | 0        | 0        | 0.000642 | 0.001474 | 0.001119 | 0        |
| 0        | 1.63E-07 | 0        | 0        | 0        | 0        | 1.63E-07 | 6.4E-07  | 2.57E-06 | 0        |
| 0        | 2.05E-05 | 0        | 0        | 0        | 0        | 2.05E-05 | 0.000144 | 2.55E-05 | 0        |
| 0        | 3E-06    | 0        | 0        | 0        | 0        | 3E-06    | 1.93E-05 | 1.3E-05  | 0        |
| 0        | 3.73E-05 | 0        | 0        | 0        | 0        | 3.73E-05 | 0.000289 | 4.76E-05 | 0        |
| 0        | 0.000179 | 0        | 0        | 0        | 0        | 0.000179 | 0.001821 | 0.000394 | 0        |
| 0        | 0.000454 | 0        | 0        | 0        | 0        | 0.000454 | 0.002351 | 0.000323 | 0        |
| 0        | 0.000434 | 0        | 0        | 0        | 0        | 0.000434 | 0.003418 | 0.001456 | 0        |
| 0        | 9.72E-06 | 0        | 0        | 0        | 0        | 9.72E-06 | 6.83E-05 | 1.23E-05 | 0        |
| 0        | 9.4E-07  | 0        | 0        | 0        | 0        | 9.4E-07  | 6.02E-06 | 4.22E-06 | 0        |
| 0        | 0.000401 | 0        | 0        | 0        | 0        | 0.000401 | 0.001162 | 0.005394 | 0        |
| 0        | 3.36E-06 | 0        | 0        | 0        | 0        | 3.36E-06 | 1.63E-05 | 6.58E-05 | 0        |
| 0.000895 | 0.001725 | 6.33E-06 | 0.000331 | 0.001857 | 2.79E-06 | 0.003923 | 0.007805 | 0.003189 | 0.018559 |
| 0        | 3.06E-06 | 0        | 0        | 0        | 0        | 3.06E-06 | 2.38E-06 | 3.56E-05 | 0        |

|          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0        | 0.000557 | 0        | 0        | 0        | 0        | 0.000557 | 0.001239 | 0.005266 | 0        |
| 0        | 5.13E-05 | 0        | 0        | 0        | 0        | 5.13E-05 | 0.000505 | 0.00013  | 0        |
| 0        | 0.000806 | 0        | 0        | 0        | 0        | 0.000806 | 0.001388 | 0.008247 | 0        |
| 0        | 0.00026  | 0        | 0        | 0        | 0        | 0.00026  | 0.000487 | 0.002603 | 0        |
| 0        | 4.92E-06 | 0        | 0        | 0        | 0        | 4.92E-06 | 4.08E-05 | 2.17E-05 | 0        |
| 0        | 0.000904 | 0        | 0        | 0        | 0        | 0.000904 | 0.002129 | 0.004511 | 0        |
| 0        | 0.000944 | 0        | 0        | 0        | 0        | 0.000944 | 0.0029   | 0.004329 | 0        |
| 0        | 0.000173 | 0        | 0        | 0        | 0        | 0.000173 | 0.001076 | 0.000835 | 0        |
| 0        | 0.000196 | 0        | 0        | 0        | 0        | 0.000196 | 0.000234 | 0.00102  | 0        |
| 0        | 5.5E-06  | 0        | 0        | 0        | 0        | 5.5E-06  | 2.16E-05 | 2.84E-05 | 0        |
| 0        | 0.000151 | 0        | 0        | 0        | 0        | 0.000151 | 0.001101 | 0.000713 | 0        |
| 0        | 1.71E-06 | 0        | 0        | 0        | 0        | 1.71E-06 | 6.55E-06 | 1.48E-05 | 0        |
| 2.05E-08 | 7.2E-05  | 6.66E-08 | 2.71E-06 | 1.44E-05 | 3.39E-08 | 8.93E-05 | 0.004557 | 0        | 0.000144 |
| 5.66E-05 | 0.000136 | 4.03E-07 | 4.03E-06 | 2.17E-05 | 1.8E-07  | 0.000163 | 0.000917 | 0        | 0.000975 |
| 0        | 0.000322 | 0        | 0        | 0        | 0        | 0.000322 | 0.00065  | 0        | 0        |
| 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| 0        | 0.000693 | 0        | 0        | 0        | 0        | 0.000693 | 0.005303 | 0        | 0        |

| CO_TOTEX | SOx_RUNE | SOx_IDLE | SOx_STRE | SOx_TOTE | Fuel Consumption |
|----------|----------|----------|----------|----------|------------------|
| 0.000467 | 2.54E-05 | 2.81E-07 | 0        | 2.56E-05 | 0.241936         |
| 2.096812 | 0.006064 | 0        | 0.000155 | 0.006219 | 66.33753         |
| 0.007105 | 6.04E-05 | 0        | 0        | 6.04E-05 | 0.568988         |
| 0        | 0        | 0        | 0        | 0        | 0                |
| 0.382896 | 0.000884 | 0        | 2.63E-05 | 0.00091  | 9.7118           |
| 6.73E-05 | 3.38E-07 | 0        | 0        | 3.38E-07 | 0.003189         |
| 0        | 0        | 0        | 0        | 0        | 0                |
| 1.41348  | 0.003455 | 0        | 0.000104 | 0.003559 | 37.95973         |
| 0.001511 | 2.32E-05 | 0        | 0        | 2.32E-05 | 0.219085         |
| 0        | 0        | 0        | 0        | 0        | 0                |
| 0.244574 | 0.000878 | 3.56E-06 | 8.54E-06 | 0.00089  | 9.49731          |
| 0.101191 | 0.000533 | 4.63E-06 | 0        | 0.000537 | 5.065191         |
| 0.010785 | 8.52E-05 | 3.1E-07  | 7.17E-07 | 8.62E-05 | 0.919213         |
| 0.029264 | 0.000196 | 2.29E-06 | 0        | 0.000198 | 1.86719          |
| 0.669557 | 5.71E-05 | 0        | 7.42E-06 | 6.45E-05 | 0.687889         |
| 0.915272 | 0.002514 | 0        | 8.32E-05 | 0.002597 | 27.69893         |
| 0.005812 | 8.12E-05 | 0        | 0        | 8.12E-05 | 0.765035         |
| 0        | 0        | 0        | 0        | 0        | 0                |
| 0.00609  | 8.59E-05 | 0        | 1.69E-08 | 8.59E-05 | 0.916758         |
| 0.001441 | 2.68E-05 | 0        | 0        | 2.68E-05 | 0.252276         |
| 0.000977 | 1.96E-05 | 1.14E-06 | 0        | 2.07E-05 | 0.195199         |
| 0.006497 | 2.81E-05 | 1.69E-07 | 2.49E-07 | 2.85E-05 | 0.304256         |
| 0.001034 | 3.33E-05 | 0        | 0        | 3.33E-05 | 0.314548         |
| 0.004621 | 7.07E-06 | 5.46E-07 | 4.5E-08  | 7.66E-06 | 0.081699         |
| 0.002593 | 5.55E-05 | 5.79E-06 | 0        | 6.13E-05 | 0.57847          |
| 3.21E-06 | 7.78E-08 | 7.59E-09 | 0        | 8.54E-08 | 0.000806         |
| 0.00017  | 1.65E-05 | 6.34E-08 | 0        | 1.66E-05 | 0.156396         |
| 3.23E-05 | 2.38E-06 | 3.23E-08 | 0        | 2.41E-06 | 0.022717         |
| 0.000337 | 1.51E-05 | 1.3E-07  | 0        | 1.53E-05 | 0.144132         |
| 0.002215 | 0.000101 | 1.03E-06 | 0        | 0.000102 | 0.965158         |
| 0.002674 | 0.000154 | 9.3E-07  | 0        | 0.000155 | 1.458115         |
| 0.004873 | 0.000281 | 3.95E-06 | 0        | 0.000285 | 2.684828         |
| 8.07E-05 | 7.83E-06 | 3.07E-08 | 0        | 7.86E-06 | 0.07417          |
| 1.02E-05 | 7.33E-07 | 1.08E-08 | 0        | 7.44E-07 | 0.007019         |
| 0.006556 | 8.38E-05 | 1.55E-05 | 0        | 9.93E-05 | 0.936558         |
| 8.21E-05 | 1.63E-06 | 1.65E-07 | 0        | 1.8E-06  | 0.016964         |
| 0.029552 | 0.000145 | 1.05E-06 | 1.52E-06 | 0.000147 | 1.572093         |
| 3.8E-05  | 1.94E-07 | 6.43E-08 | 0        | 2.59E-07 | 0.002441         |

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| 0.006505 | 7.25E-05 | 7.77E-06 | 0        | 8.03E-05 | 0.7576   |
| 0.000635 | 1.46E-05 | 1.89E-07 | 0        | 1.47E-05 | 0.139135 |
| 0.009636 | 8.24E-05 | 1.14E-05 | 0        | 9.38E-05 | 0.884747 |
| 0.00309  | 2.85E-05 | 3.84E-06 | 0        | 3.24E-05 | 0.30523  |
| 6.25E-05 | 1.39E-06 | 3.36E-08 | 0        | 1.43E-06 | 0.013458 |
| 0.00664  | 9.01E-05 | 8.44E-06 | 0        | 9.86E-05 | 0.929677 |
| 0.00723  | 0.000127 | 7.18E-06 | 0        | 0.000134 | 1.261397 |
| 0.001911 | 3.88E-05 | 1.29E-06 | 0        | 4.01E-05 | 0.378639 |
| 0.001253 | 8.44E-05 | 2.2E-06  | 0        | 8.66E-05 | 0.817012 |
| 4.99E-05 | 1.37E-06 | 4.41E-08 | 0        | 1.42E-06 | 0.013374 |
| 0.001814 | 3.23E-05 | 1.1E-06  | 0        | 3.34E-05 | 0.315303 |
| 2.13E-05 | 4.66E-07 | 2.41E-08 | 0        | 4.91E-07 | 0.004627 |
| 0.004701 | 2.9E-06  | 0        | 1.73E-08 | 2.92E-06 | 0.03115  |
| 0.001892 | 5.37E-05 | 0        | 9.58E-08 | 5.38E-05 | 0.574055 |
| 0.00065  | 5.13E-05 | 0        | 0        | 5.13E-05 | 0.483283 |
| 0        | 0        | 0        | 0        | 0        | 0        |
| 0.005303 | 0        | 0        | 0        | 0        | 0.024306 |

EMFAC2017 (v1.0.2) Emissions Inventory

Region Type: County

Region: EL DORADO

Calendar Year: 2027

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel

| Region    | Calendar Year | Vehicle Category | Fleet %  | Project VMT |
|-----------|---------------|------------------|----------|-------------|
| EL DORADO | 2027          | HHDT             | 0.009477 | 75532.31505 |
| EL DORADO | 2027          | HHDT             |          |             |
| EL DORADO | 2027          | LDA              |          |             |
| EL DORADO | 2027          | LDA              | 0.557019 | 4439478.168 |
| EL DORADO | 2027          | LDA              |          |             |
| EL DORADO | 2027          | LDT1             |          |             |
| EL DORADO | 2027          | LDT1             | 0.034577 | 275580.9705 |
| EL DORADO | 2027          | LDT1             |          |             |
| EL DORADO | 2027          | LDT2             |          |             |
| EL DORADO | 2027          | LDT2             | 0.225137 | 1794356.739 |
| EL DORADO | 2027          | LDT2             |          |             |
| EL DORADO | 2027          | LHDT1            | 0.020027 | 159616.5109 |
| EL DORADO | 2027          | LHDT1            |          |             |
| EL DORADO | 2027          | LHDT2            | 0.004692 | 37395.54946 |
| EL DORADO | 2027          | LHDT2            |          |             |
| EL DORADO | 2027          | MCY              | 0.004800 | 38256.31658 |
| EL DORADO | 2027          | MDV              |          |             |
| EL DORADO | 2027          | MDV              | 0.122292 | 974675.3057 |
| EL DORADO | 2027          | MDV              |          |             |
| EL DORADO | 2027          | MH               | 0.000939 | 7483.891931 |
| EL DORADO | 2027          | MH               |          |             |
| EL DORADO | 2027          | MHDT             | 0.017649 | 140663.694  |
| EL DORADO | 2027          | MHDT             |          |             |
| EL DORADO | 2027          | OBUS             | 0.001627 | 12967.29731 |
| EL DORADO | 2027          | OBUS             |          |             |
| EL DORADO | 2027          | SBUS             | 0.000764 | 6089.130389 |
| EL DORADO | 2027          | SBUS             |          |             |
| EL DORADO | 2027          | UBUS             |          |             |
| EL DORADO | 2027          | UBUS             | 0.000999 | 7962.095889 |
| EL DORADO | 2027          | UBUS             |          |             |
| EL DORADO | 2027          | UBUS             |          | 7970057.985 |



Consumption. Note 'day' in the unit is operation day.

| Project VMT | Model Year | Speed      | Fuel | Population  |
|-------------|------------|------------|------|-------------|
| 254.182983  | Aggregated | Aggregated | GAS  | 1.756638555 |
| 75278.13207 | Aggregated | Aggregated | DSL  | 619.4718349 |
| 4210261.703 | Aggregated | Aggregated | GAS  | 62638.01522 |
| 54957.13915 | Aggregated | Aggregated | DSL  | 837.2580136 |
| 174259.3255 | Aggregated | Aggregated | ELEC | 2356.16568  |
| 270633.4675 | Aggregated | Aggregated | GAS  | 8908.334445 |
| 72.30491814 | Aggregated | Aggregated | DSL  | 5.972078296 |
| 4875.198076 | Aggregated | Aggregated | ELEC | 118.1137091 |
| 1753345.103 | Aggregated | Aggregated | GAS  | 31885.59274 |
| 14742.73775 | Aggregated | Aggregated | DSL  | 228.1965918 |
| 26268.89769 | Aggregated | Aggregated | ELEC | 532.7833075 |
| 75492.07184 | Aggregated | Aggregated | GAS  | 2753.21131  |
| 84124.43904 | Aggregated | Aggregated | DSL  | 3258.522528 |
| 7132.273175 | Aggregated | Aggregated | GAS  | 212.8818917 |
| 30263.27628 | Aggregated | Aggregated | DSL  | 1016.348222 |
| 38256.31658 | Aggregated | Aggregated | GAS  | 5256.393374 |
| 926806.6977 | Aggregated | Aggregated | GAS  | 21145.78089 |
| 33092.58739 | Aggregated | Aggregated | DSL  | 672.0981672 |
| 14776.02059 | Aggregated | Aggregated | ELEC | 332.8518675 |
| 4820.256986 | Aggregated | Aggregated | GAS  | 603.3581832 |
| 2663.634946 | Aggregated | Aggregated | DSL  | 351.8272892 |
| 15642.29721 | Aggregated | Aggregated | GAS  | 190.3370534 |
| 125021.3968 | Aggregated | Aggregated | DSL  | 1510.871917 |
| 3795.124018 | Aggregated | Aggregated | GAS  | 42.86831764 |
| 9172.17329  | Aggregated | Aggregated | DSL  | 56.45842628 |
| 854.6663322 | Aggregated | Aggregated | GAS  | 20.49279437 |
| 5234.464057 | Aggregated | Aggregated | DSL  | 155.1608199 |
| 3550.521377 | Aggregated | Aggregated | GAS  | 31.75191598 |
| 4304.357313 | Aggregated | Aggregated | DSL  | 41.93432272 |
| 0.123067025 | Aggregated | Aggregated | ELEC | 0.004330414 |
| 107.0941314 | Aggregated | Aggregated | NG   | 0.78391232  |
| 7970057.985 |            |            |      |             |

| VMT         |             | Trips       | NOx_RUNEX   |
|-------------|-------------|-------------|-------------|
| 129.5524367 | 0.003365222 | 35.14682421 | 0.000465476 |
| 38367.89279 | 0.996634778 | 4125.35721  | 0.155387857 |
| 2411770.287 | 0.948368602 | 295341.2645 | 0.071389344 |
| 31481.17733 | 0.012379189 | 3911.460413 | 0.001760912 |
| 99821.22088 | 0.039252209 | 11611.44158 | 0           |
| 288186.7344 | 0.982047008 | 39636.77121 | 0.021180654 |
| 76.99460984 | 0.000262373 | 19.57580081 | 6.66735E-05 |
| 5191.403067 | 0.017690619 | 589.4844137 | 0           |
| 1056809.883 | 0.977144102 | 143530.9765 | 0.077504771 |
| 8886.026443 | 0.008216169 | 1087.967107 | 0.000378069 |
| 15833.29524 | 0.01463973  | 2637.656968 | 0           |
| 82839.14301 | 0.472959041 | 41018.74623 | 0.027854534 |
| 92311.63309 | 0.527040959 | 40988.11418 | 0.285709704 |
| 7218.050914 | 0.190725187 | 3171.622992 | 0.001275183 |
| 30627.24375 | 0.809274813 | 12784.38206 | 0.060670908 |
| 24221.56084 | 1           | 10512.78675 | 0.032038301 |
| 638933.1698 | 0.950887636 | 94132.86569 | 0.049270857 |
| 22813.76668 | 0.033952422 | 3104.296575 | 0.001279513 |
| 10186.47113 | 0.015159941 | 1664.070681 | 0           |
| 4485.01735  | 0.644084259 | 60.35995265 | 0.001907807 |
| 2478.38424  | 0.355915741 | 35.18272892 | 0.014284197 |
| 8209.146786 | 0.111203515 | 3808.263764 | 0.002623393 |
| 65611.78219 | 0.888796485 | 11943.61987 | 0.133547837 |
| 1568.114521 | 0.292668852 | 857.7092994 | 0.000817482 |
| 3789.867751 | 0.707331148 | 542.4381557 | 0.008216862 |
| 794.3722308 | 0.140359342 | 81.97117746 | 0.000628162 |
| 4865.188593 | 0.859640658 | 1790.53435  | 0.035972567 |
| 3043.010328 | 0.445927985 | 127.0076639 | 0.000641491 |
| 3689.093058 | 0.540606063 | 167.7372909 | 0.002757581 |
| 0.105475841 | 1.54566E-05 | 0.017321658 | 0           |
| 91.78611068 | 0.013450495 | 3.135649279 | 5.12969E-05 |

| NOx_IDLEX   | NOx_STREX   | NOx_TOTEX   | PM2.5_RUNEX | PM2.5_IDLEX |
|-------------|-------------|-------------|-------------|-------------|
| 0           | 8.55408E-08 | 0.000465562 | 8.01115E-08 | 0           |
| 0.027016622 | 0.014828237 | 0.197232715 | 0.001065278 | 1.94587E-05 |
| 0           | 0.050320413 | 0.121709757 | 0.003087062 | 0           |
| 0           | 0           | 0.001760912 | 0.000143354 | 0           |
| 0           | 0           | 0           | 0           | 0           |
| 0           | 0.011224856 | 0.032405509 | 0.000457968 | 0           |
| 0           | 0           | 6.66735E-05 | 6.23795E-06 | 0           |
| 0           | 0           | 0           | 0           | 0           |
| 0           | 0.04676927  | 0.12427404  | 0.001464813 | 0           |
| 0           | 0           | 0.000378069 | 4.29395E-05 | 0           |
| 0           | 0           | 0           | 0           | 0           |
| 0.000110148 | 0.023442304 | 0.051406986 | 0.000238801 | 0           |
| 0.008108314 | 0           | 0.293818018 | 0.003278945 | 9.3672E-05  |
| 8.02086E-06 | 0.001665889 | 0.002949092 | 1.56115E-05 | 0           |
| 0.002429286 | 0           | 0.063100194 | 0.00093756  | 2.92111E-05 |
| 0           | 0.003235559 | 0.03527386  | 5.13826E-05 | 0           |
| 0           | 0.034524152 | 0.083795009 | 0.000880675 | 0           |
| 0           | 0           | 0.001279513 | 0.000112124 | 0           |
| 0           | 0           | 0           | 0           | 0           |
| 0           | 2.6259E-05  | 0.001934066 | 6.87394E-06 | 0           |
| 0           | 0           | 0.014284197 | 0.000346989 | 0           |
| 1.86629E-05 | 0.001505061 | 0.004147116 | 1.18924E-05 | 0           |
| 0.014451697 | 0.028661463 | 0.176660997 | 0.000667998 | 7.88641E-06 |
| 3.0743E-06  | 0.000314581 | 0.001135137 | 2.08877E-06 | 0           |
| 0.0007154   | 0.00131946  | 0.010251722 | 4.88472E-05 | 2.3137E-07  |
| 2.08575E-05 | 5.03818E-05 | 0.000699401 | 1.36973E-06 | 0           |
| 0.007234942 | 0.001941754 | 0.045149263 | 0.000214555 | 7.28678E-06 |
| 0           | 9.23836E-05 | 0.000733875 | 7.15863E-06 | 0           |
| 0           | 0           | 0.002757581 | 2.49147E-05 | 0           |
| 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 5.12969E-05 | 3.33036E-07 | 0           |

| PM2.5_STREX | PM2.5_TOTEX | PM2.5_PMTW  | PM2.5_PMBW  | PM2.5_TOTAL |
|-------------|-------------|-------------|-------------|-------------|
| 5.01432E-09 | 8.51258E-08 | 7.14036E-07 | 3.77868E-06 | 4.57784E-06 |
| 0           | 0.001084737 | 0.000364619 | 0.001071981 | 0.002521337 |
| 0.000491618 | 0.00357868  | 0.005317043 | 0.041871716 | 0.05076744  |
| 0           | 0.000143354 | 6.94041E-05 | 0.000546557 | 0.000759316 |
| 0           | 0           | 0.000220068 | 0.001733036 | 0.001953105 |
| 8.91878E-05 | 0.000547155 | 0.000635343 | 0.005003326 | 0.006185824 |
| 0           | 6.23795E-06 | 1.69744E-07 | 1.33673E-06 | 7.74442E-06 |
| 0           | 0           | 1.14451E-05 | 9.013E-05   | 0.000101575 |
| 0.000261928 | 0.001726741 | 0.002329867 | 0.018347702 | 0.02240431  |
| 0           | 4.29395E-05 | 1.95903E-05 | 0.000154274 | 0.000216804 |
| 0           | 0           | 3.49064E-05 | 0.000274888 | 0.000309795 |
| 2.18204E-05 | 0.000260621 | 0.000182629 | 0.002991464 | 0.003434714 |
| 0           | 0.003372617 | 0.000305268 | 0.003333532 | 0.007011417 |
| 1.09753E-06 | 1.67091E-05 | 1.59131E-05 | 0.000304099 | 0.000336721 |
| 0           | 0.000966771 | 0.000101282 | 0.001290336 | 0.002358389 |
| 3.12883E-05 | 8.26709E-05 | 2.66997E-05 | 0.000134566 | 0.000243937 |
| 0.000181822 | 0.001062498 | 0.001408607 | 0.011092776 | 0.013563881 |
| 0           | 0.000112124 | 5.02957E-05 | 0.000396079 | 0.000558499 |
| 0           | 0           | 2.24573E-05 | 0.000176851 | 0.000199309 |
| 1.9143E-08  | 6.89308E-06 | 1.48317E-05 | 0.000276165 | 0.00029789  |
| 0           | 0.000346989 | 1.09278E-05 | 0.000152607 | 0.000510523 |
| 1.78898E-06 | 1.36814E-05 | 2.71471E-05 | 0.000505479 | 0.000546308 |
| 0           | 0.000675884 | 0.000216974 | 0.004040053 | 0.00493291  |
| 2.63776E-07 | 2.35254E-06 | 5.18565E-06 | 9.65568E-05 | 0.000104095 |
| 0           | 4.90786E-05 | 1.25328E-05 | 0.000233362 | 0.000294973 |
| 5.89578E-08 | 1.42869E-06 | 1.75129E-06 | 0.000279506 | 0.000282686 |
| 0           | 0.000221841 | 1.60889E-05 | 0.001711854 | 0.001949785 |
| 1.02787E-07 | 7.26142E-06 | 8.80795E-06 | 0.000165234 | 0.000181303 |
| 0           | 2.49147E-05 | 2.80449E-05 | 0.000142894 | 0.000195854 |
| 0           | 0           | 1.04641E-09 | 3.07643E-09 | 4.12284E-09 |
| 0           | 3.33036E-07 | 9.10592E-07 | 2.67714E-06 | 3.92077E-06 |

| PM10_RUNEX  | PM10_IDLEX  | PM10_STREX | PM10_TOTEX  | PM10_PMTW   |             |
|-------------|-------------|------------|-------------|-------------|-------------|
| 8.71286E-08 |             | 0          | 5.45353E-09 | 9.25821E-08 | 2.85614E-06 |
| 0.001113445 | 2.03385E-05 |            | 0           | 0.001133784 | 0.001458477 |
| 0.003357461 |             | 0          | 0.00053468  | 0.003892141 | 0.021268173 |
| 0.000149836 |             | 0          | 0           | 0.000149836 | 0.000277616 |
| 0           |             | 0          | 0           | 0           | 0.000880272 |
| 0.000498081 |             | 0          | 9.69999E-05 | 0.000595081 | 0.002541372 |
| 6.52E-06    |             | 0          | 0           | 6.52E-06    | 6.78976E-07 |
| 0           |             | 0          | 0           | 0           | 4.57803E-05 |
| 0.001593118 |             | 0          | 0.000284871 | 0.001877988 | 0.009319468 |
| 4.48811E-05 |             | 0          | 0           | 4.48811E-05 | 7.83613E-05 |
| 0           |             | 0          | 0           | 0           | 0.000139626 |
| 0.000259718 |             | 0          | 2.37316E-05 | 0.00028345  | 0.000730516 |
| 0.003427205 | 9.79075E-05 |            | 0           | 0.003525112 | 0.001221074 |
| 1.6979E-05  |             | 0          | 1.19366E-06 | 1.81726E-05 | 6.36523E-05 |
| 0.000979952 | 3.05319E-05 |            | 0           | 0.001010484 | 0.000405129 |
| 5.49181E-05 |             | 0          | 3.32169E-05 | 8.8135E-05  | 0.000106799 |
| 0.000957815 |             | 0          | 0.000197748 | 0.001155563 | 0.005634426 |
| 0.000117194 |             | 0          | 0           | 0.000117194 | 0.000201183 |
| 0           |             | 0          | 0           | 0           | 8.98293E-05 |
| 7.47603E-06 |             | 0          | 2.08197E-08 | 7.49685E-06 | 5.93266E-05 |
| 0.000362678 |             | 0          | 0           | 0.000362678 | 4.37112E-05 |
| 1.29341E-05 |             | 0          | 1.94568E-06 | 1.48797E-05 | 0.000108588 |
| 0.000698201 | 8.24299E-06 |            | 0           | 0.000706444 | 0.000867895 |
| 2.27172E-06 |             | 0          | 2.8688E-07  | 2.5586E-06  | 2.07426E-05 |
| 5.10558E-05 | 2.41831E-07 |            | 0           | 5.12977E-05 | 5.01314E-05 |
| 1.48971E-06 |             | 0          | 6.4122E-08  | 1.55383E-06 | 7.00516E-06 |
| 0.000224256 | 7.61625E-06 |            | 0           | 0.000231872 | 6.43554E-05 |
| 7.78566E-06 |             | 0          | 1.1179E-07  | 7.89745E-06 | 3.52318E-05 |
| 2.60413E-05 |             | 0          | 0           | 2.60413E-05 | 0.00011218  |
| 0           |             | 0          | 0           | 0           | 4.18562E-09 |
| 3.48095E-07 |             | 0          | 0           | 3.48095E-07 | 3.64237E-06 |

| PM10_PMBW   | PM10_TOTAL  | CO2_RUNEX   | CO2_IDLEX   | CO2_STREX   |
|-------------|-------------|-------------|-------------|-------------|
| 8.81691E-06 | 1.17656E-05 | 0.29336381  | 0           | 0.001747339 |
| 0.002501289 | 0.00509355  | 64.25192259 | 4.610051456 | 0           |
| 0.097700671 | 0.122860986 | 612.7937867 | 0           | 15.68101401 |
| 0.001275301 | 0.001702753 | 6.384300422 | 0           | 0           |
| 0.004043752 | 0.004924024 | 0           | 0           | 0           |
| 0.011674428 | 0.014810881 | 89.35283755 | 0           | 2.655737798 |
| 3.11905E-06 | 1.0318E-05  | 0.035779514 | 0           | 0           |
| 0.000210303 | 0.000256084 | 0           | 0           | 0           |
| 0.042811306 | 0.054008762 | 349.1616986 | 0           | 10.46485473 |
| 0.000359972 | 0.000483215 | 2.458226167 | 0           | 0           |
| 0.000641406 | 0.000781032 | 0           | 0           | 0           |
| 0.006980082 | 0.007994048 | 88.75363524 | 0.360090351 | 0.862797603 |
| 0.007778241 | 0.012524427 | 56.34382886 | 0.489864807 | 0           |
| 0.000709564 | 0.000791389 | 8.604790523 | 0.031310446 | 0.072428193 |
| 0.003010784 | 0.004426397 | 20.70806572 | 0.242639262 | 0           |
| 0.000313988 | 0.000508922 | 5.767022251 | 0           | 0.749966092 |
| 0.025883145 | 0.032673134 | 254.0109559 | 0           | 8.405772789 |
| 0.000924184 | 0.001242561 | 8.584036853 | 0           | 0           |
| 0.000412653 | 0.000502483 | 0           | 0           | 0           |
| 0.000644386 | 0.000711209 | 8.683564004 | 0           | 0.001709018 |
| 0.000356082 | 0.000762472 | 2.830651344 | 0           | 0           |
| 0.001179451 | 0.001302919 | 14.63454308 | 0.105992689 | 0.153309609 |
| 0.00942679  | 0.011001129 | 70.24539182 | 2.315689111 | 0           |
| 0.000225299 | 0.0002486   | 2.840291838 | 0.017076815 | 0.025120502 |
| 0.00054451  | 0.000645939 | 4.754726133 | 0.150116137 | 0           |
| 0.000652181 | 0.00066074  | 0.714298709 | 0.055159569 | 0.004549584 |
| 0.003994327 | 0.004290554 | 5.877503593 | 0.613190156 | 0           |
| 0.000385546 | 0.000428675 | 5.428850231 | 0           | 0.009684715 |
| 0.00033342  | 0.000471641 | 5.422650216 | 0           | 0           |
| 7.17834E-09 | 1.1364E-08  | 0           | 0           | 0           |
| 6.24666E-06 | 1.02371E-05 | 0.210287034 | 0           | 0           |

| CO2_TOTEX   | CH4_RUNEX   | CH4_IDLEX   | CH4_STREX   | CH4_TOTEX   |
|-------------|-------------|-------------|-------------|-------------|
| 0.295111149 | 1.10316E-05 | 0           | 3.60185E-09 | 1.10352E-05 |
| 68.86197405 | 8.20829E-05 | 9.0789E-05  | 0           | 0.000172872 |
| 628.4748007 | 0.004014786 | 0           | 0.013264142 | 0.017278928 |
| 6.384300422 | 1.70935E-05 | 0           | 0           | 1.70935E-05 |
| 0           | 0           | 0           | 0           | 0           |
| 92.00857535 | 0.001117638 | 0           | 0.003039063 | 0.004156701 |
| 0.035779514 | 4.04602E-07 | 0           | 0           | 4.04602E-07 |
| 0           | 0           | 0           | 0           | 0           |
| 359.6265533 | 0.003640963 | 0           | 0.011326446 | 0.014967409 |
| 2.458226167 | 6.91007E-06 | 0           | 0           | 6.91007E-06 |
| 0           | 0           | 0           | 0           | 0           |
| 89.97652319 | 0.001307189 | 0.000337876 | 0.001194532 | 0.002839597 |
| 56.83369367 | 0.000928875 | 1.8312E-05  | 0           | 0.000947187 |
| 8.708529162 | 4.44174E-05 | 2.60825E-05 | 7.28619E-05 | 0.000143362 |
| 20.95070499 | 0.000263819 | 5.7116E-06  | 0           | 0.00026953  |
| 6.516988343 | 0.009400695 | 0           | 0.003216565 | 0.01261726  |
| 262.4167287 | 0.002354826 | 0           | 0.008357082 | 0.010711908 |
| 8.584036853 | 1.34395E-05 | 0           | 0           | 1.34395E-05 |
| 0           | 0           | 0           | 0           | 0           |
| 8.685273022 | 5.90097E-05 | 0           | 2.18316E-06 | 6.11928E-05 |
| 2.830651344 | 1.82604E-05 | 0           | 0           | 1.82604E-05 |
| 14.89384538 | 7.45235E-05 | 5.56866E-05 | 0.000152877 | 0.000283087 |
| 72.56108093 | 5.3548E-05  | 9.37678E-06 | 0           | 6.29248E-05 |
| 2.882489156 | 2.3338E-05  | 9.03994E-06 | 3.00356E-05 | 6.24135E-05 |
| 4.90484227  | 2.60993E-06 | 2.36432E-06 | 0           | 4.97425E-06 |
| 0.774007862 | 1.60148E-05 | 5.34582E-05 | 6.04102E-06 | 7.55141E-05 |
| 6.490693749 | 2.41759E-05 | 2.03632E-06 | 0           | 2.62122E-05 |
| 5.438534946 | 1.71383E-05 | 0           | 1.24803E-05 | 2.96185E-05 |
| 5.422650216 | 0.000257781 | 0           | 0           | 0.000257781 |
| 0           | 0           | 0           | 0           | 0           |
| 0.210287034 | 0.000679304 | 0           | 0           | 0.000679304 |

| N2O_RUNEX   | N2O_IDLEX   | N2O_STREX   | N2O_TOTEX   | ROG_RUNEX   |
|-------------|-------------|-------------|-------------|-------------|
| 1.98697E-05 | 0           | 4.14593E-09 | 1.98738E-05 | 4.93543E-05 |
| 0.010099507 | 0.000724636 | 0           | 0.010824143 | 0.001767223 |
| 0.009698741 | 0           | 0.007388427 | 0.017087167 | 0.014362523 |
| 0.001003523 | 0           | 0           | 0.001003523 | 0.000368013 |
| 0           | 0           | 0           | 0           | 0           |
| 0.001865581 | 0           | 0.001222406 | 0.003087987 | 0.004861854 |
| 5.62404E-06 | 0           | 0           | 5.62404E-06 | 8.71085E-06 |
| 0           | 0           | 0           | 0           | 0           |
| 0.006674181 | 0           | 0.004951202 | 0.011625383 | 0.014990551 |
| 0.000386399 | 0           | 0           | 0.000386399 | 0.00014877  |
| 0           | 0           | 0           | 0           | 0           |
| 0.001533014 | 8.54948E-06 | 0.001729356 | 0.003270919 | 0.006577863 |
| 0.008856465 | 7.69999E-05 | 0           | 0.008933465 | 0.019998122 |
| 8.63961E-05 | 6.77424E-07 | 0.00013245  | 0.000219523 | 0.000194069 |
| 0.00325502  | 3.81395E-05 | 0           | 0.003293159 | 0.005679858 |
| 0.001803394 | 0           | 0.000178525 | 0.001981918 | 0.065845484 |
| 0.004213426 | 0           | 0.003370531 | 0.007583957 | 0.009912438 |
| 0.001349291 | 0           | 0           | 0.001349291 | 0.000289345 |
| 0           | 0           | 0           | 0           | 0           |
| 0.000122537 | 0           | 2.75176E-06 | 0.000125288 | 0.000245939 |
| 0.000444939 | 0           | 0           | 0.000444939 | 0.000393135 |
| 0.000143527 | 1.62041E-06 | 0.000120732 | 0.000265879 | 0.000354795 |
| 0.011041597 | 0.000363994 | 0           | 0.011405591 | 0.001152873 |
| 3.96042E-05 | 2.46634E-07 | 2.33895E-05 | 6.32403E-05 | 0.00011478  |
| 0.000747377 | 2.35962E-05 | 0           | 0.000770973 | 5.61911E-05 |
| 2.97373E-05 | 1.91607E-06 | 4.46041E-06 | 3.61138E-05 | 8.09458E-05 |
| 0.000923862 | 9.6385E-05  | 0           | 0.001020247 | 0.0005205   |
| 6.02957E-05 | 0           | 8.88599E-06 | 6.91817E-05 | 5.47321E-05 |
| 0.000852365 | 0           | 0           | 0.000852365 | 5.78627E-05 |
| 0           | 0           | 0           | 0           | 0           |
| 4.28684E-05 | 0           | 0           | 4.28684E-05 | 9.70592E-06 |



| ROG_IDLEX   | ROG_STREX   | ROG_TOTEX   | ROG_DIURN   | ROG_HTSK    |
|-------------|-------------|-------------|-------------|-------------|
| 0           | 1.87665E-08 | 4.93731E-05 | 6.66395E-08 | 2.7141E-06  |
| 0.001954662 | 0           | 0.003721885 | 0           | 0           |
| 0           | 0.057023077 | 0.0713856   | 0.011212344 | 0.026032708 |
| 0           | 0           | 0.000368013 | 0           | 0           |
| 0           | 0           | 0           | 5.1532E-05  | 6.25639E-05 |
| 0           | 0.015775828 | 0.020637681 | 0.005234521 | 0.009876228 |
| 0           | 0           | 8.71085E-06 | 0           | 0           |
| 0           | 0           | 0           | 2.60489E-06 | 3.17622E-06 |
| 0           | 0.055661658 | 0.070652209 | 0.013804095 | 0.027104142 |
| 0           | 0           | 0.00014877  | 0           | 0           |
| 0           | 0           | 0           | 1.1726E-05  | 1.4212E-05  |
| 0.001259078 | 0.006352506 | 0.014189447 | 0.000222993 | 0.008983206 |
| 0.000394246 | 0           | 0.020392369 | 0           | 0           |
| 9.20061E-05 | 0.000360708 | 0.000646783 | 8.7407E-06  | 0.000374071 |
| 0.000122967 | 0           | 0.005802825 | 0           | 0           |
| 0           | 0.025367676 | 0.09121316  | 0.013441535 | 0.010662992 |
| 0           | 0.043244854 | 0.053157292 | 0.010655173 | 0.019841591 |
| 0           | 0           | 0.000289345 | 0           | 0           |
| 0           | 0           | 0           | 7.32886E-06 | 8.96622E-06 |
| 0           | 8.89175E-06 | 0.000254831 | 6.86787E-05 | 5.7826E-06  |
| 0           | 0           | 0.000393135 | 0           | 0           |
| 0.000213938 | 0.000817813 | 0.001386545 | 6.32788E-06 | 0.000331047 |
| 0.00020188  | 0           | 0.001354753 | 0           | 0           |
| 3.5264E-05  | 0.000166164 | 0.000316208 | 2.27924E-06 | 3.58813E-05 |
| 5.09031E-05 | 0           | 0.000107094 | 0           | 0           |
| 0.00023933  | 3.60166E-05 | 0.000356292 | 8.83036E-07 | 8.53669E-06 |
| 4.38413E-05 | 0           | 0.000564341 | 0           | 0           |
| 0           | 5.17101E-05 | 0.000106442 | 4.03411E-07 | 4.03301E-06 |
| 0           | 0           | 5.78627E-05 | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           |
| 0           | 0           | 9.70592E-06 | 0           | 0           |

| ROG_RUNLS   | ROG_RESTL   | ROG_TOTAL   | TOG_RUNEX   | TOG_IDLEX   |   |
|-------------|-------------|-------------|-------------|-------------|---|
| 1.44354E-05 | 3.39399E-08 | 6.66232E-05 | 7.20177E-05 |             | 0 |
| 0           | 0           | 0.003721885 | 0.002011849 | 0.002225234 |   |
| 0.064124509 | 0.007707926 | 0.180463087 | 0.020957759 |             | 0 |
| 0           | 0           | 0.000368013 | 0.000418958 |             | 0 |
| 0           | 1.32188E-05 | 0.000127315 | 0           |             | 0 |
| 0.036838275 | 0.003271033 | 0.075857738 | 0.007094405 |             | 0 |
| 0           | 0           | 8.71085E-06 | 9.91672E-06 |             | 0 |
| 0           | 6.68735E-07 | 6.44985E-06 | 0           |             | 0 |
| 0.097517982 | 0.009973181 | 0.21905161  | 0.021874177 |             | 0 |
| 0           | 0           | 0.00014877  | 0.000169364 |             | 0 |
| 0           | 3.00972E-06 | 2.89477E-05 | 0           |             | 0 |
| 0.084384895 | 8.77714E-05 | 0.107868312 | 0.009598402 | 0.001837243 |   |
| 0           | 0           | 0.020392369 | 0.022766533 | 0.000448823 |   |
| 0.002514177 | 3.93332E-06 | 0.003547704 | 0.000283184 | 0.000134255 |   |
| 0           | 0           | 0.005802825 | 0.006466141 | 0.00013999  |   |
| 0.024200101 | 0.006114987 | 0.145632775 | 0.080755926 |             | 0 |
| 0.067411139 | 0.007888098 | 0.158953293 | 0.014464206 |             | 0 |
| 0           | 0           | 0.000289345 | 0.000329401 |             | 0 |
| 0           | 1.88119E-06 | 1.81763E-05 | 0           |             | 0 |
| 0.000120879 | 2.07171E-05 | 0.000470889 | 0.000358874 |             | 0 |
| 0           | 0           | 0.000393135 | 0.000447558 |             | 0 |
| 0.001857071 | 2.7854E-06  | 0.003583777 | 0.000517716 | 0.000312178 |   |
| 0           | 0           | 0.001354753 | 0.001312459 | 0.000229825 |   |
| 0.000407604 | 7.86317E-07 | 0.00076276  | 0.000167487 | 5.14572E-05 |   |
| 0           | 0           | 0.000107094 | 6.39693E-05 | 5.79493E-05 |   |
| 5.42115E-05 | 2.83097E-07 | 0.000420207 | 0.000118116 | 0.00034923  |   |
| 0           | 0           | 0.000564341 | 0.000592549 | 4.991E-05   |   |
| 2.17371E-05 | 1.80283E-07 | 0.000132796 | 7.98649E-05 |             | 0 |
| 0           | 0           | 5.78627E-05 | 0.000322235 |             | 0 |
| 0           | 0           | 0           | 0           |             | 0 |
| 0           | 0           | 9.70592E-06 | 0.00069328  |             | 0 |

| TOG_STREX   | TOG_TOTEX   | TOG_DIURN   | TOG_HTSK    | TOG_RUNLS   |
|-------------|-------------|-------------|-------------|-------------|
| 2.0547E-08  | 7.20382E-05 | 6.66395E-08 | 2.7141E-06  | 1.44354E-05 |
| 0           | 0.004237083 | 0           | 0           | 0           |
| 0.062433092 | 0.083390851 | 0.011212344 | 0.026032708 | 0.064124509 |
| 0           | 0.000418958 | 0           | 0           | 0           |
| 0           | 0           | 5.1532E-05  | 6.25639E-05 | 0           |
| 0.017272546 | 0.024366951 | 0.005234521 | 0.009876228 | 0.036838275 |
| 0           | 9.91672E-06 | 0           | 0           | 0           |
| 0           | 0           | 2.60489E-06 | 3.17622E-06 | 0           |
| 0.060942509 | 0.082816686 | 0.013804095 | 0.027104142 | 0.097517982 |
| 0           | 0.000169364 | 0           | 0           | 0           |
| 0           | 0           | 1.1726E-05  | 1.4212E-05  | 0           |
| 0.006955195 | 0.01839084  | 0.000222993 | 0.008983206 | 0.084384895 |
| 0           | 0.023215356 | 0           | 0           | 0           |
| 0.00039493  | 0.000812369 | 8.7407E-06  | 0.000374071 | 0.002514177 |
| 0           | 0.006606131 | 0           | 0           | 0           |
| 0.027594099 | 0.108350025 | 0.013441535 | 0.010662992 | 0.024200101 |
| 0.047347672 | 0.061811877 | 0.010655173 | 0.019841591 | 0.067411139 |
| 0           | 0.000329401 | 0           | 0           | 0           |
| 0           | 0           | 7.32886E-06 | 8.96622E-06 | 0           |
| 9.73534E-06 | 0.000368609 | 6.86787E-05 | 5.7826E-06  | 0.000120879 |
| 0           | 0.000447558 | 0           | 0           | 0           |
| 0.000895402 | 0.001725295 | 6.32788E-06 | 0.000331047 | 0.001857071 |
| 0           | 0.001542283 | 0           | 0           | 0           |
| 0.000181929 | 0.000400873 | 2.27924E-06 | 3.58813E-05 | 0.000407604 |
| 0           | 0.000121919 | 0           | 0           | 0           |
| 3.94336E-05 | 0.000506779 | 8.83036E-07 | 8.53669E-06 | 5.42115E-05 |
| 0           | 0.00064246  | 0           | 0           | 0           |
| 5.6616E-05  | 0.000136481 | 4.03411E-07 | 4.03301E-06 | 2.17371E-05 |
| 0           | 0.000322235 | 0           | 0           | 0           |
| 0           | 0           | 0           | 0           | 0           |
| 0           | 0.00069328  | 0           | 0           | 0           |

| TOG_RESTL   | TOG_TOTAL   | CO_RUNEX    | CO_IDLEX    | CO_STREX      |
|-------------|-------------|-------------|-------------|---------------|
| 3.39399E-08 | 8.92883E-05 | 0.004556948 |             | 0 0.000144472 |
| 0           | 0.004237083 | 0.01216272  | 0.027756546 | 0             |
| 0.007707926 | 0.192468338 | 1.408956498 |             | 0 0.687855806 |
| 0           | 0.000418958 | 0.007105165 |             | 0 0           |
| 1.32188E-05 | 0.000127315 | 0           |             | 0 0           |
| 0.003271033 | 0.079587008 | 0.278791044 |             | 0 0.104104523 |
| 0           | 9.91672E-06 | 6.73006E-05 |             | 0 0           |
| 6.68735E-07 | 6.44985E-06 | 0           |             | 0 0           |
| 0.009973181 | 0.231216087 | 0.948379146 |             | 0 0.465100657 |
| 0           | 0.000169364 | 0.001510724 |             | 0 0           |
| 3.00972E-06 | 2.89477E-05 | 0           |             | 0 0           |
| 8.77714E-05 | 0.112069705 | 0.139843158 | 0.01132258  | 0.093408356   |
| 0           | 0.023215356 | 0.097923179 | 0.003267718 | 0             |
| 3.93332E-06 | 0.003713291 | 0.004100887 | 0.000884284 | 0.00580003    |
| 0           | 0.006606131 | 0.02824484  | 0.001019216 | 0             |
| 0.006114987 | 0.16276964  | 0.555689023 |             | 0 0.113868122 |
| 0.007888098 | 0.167607879 | 0.578447279 |             | 0 0.336824492 |
| 0           | 0.000329401 | 0.005811609 |             | 0 0           |
| 1.88119E-06 | 1.81763E-05 | 0           |             | 0 0           |
| 2.07171E-05 | 0.000584667 | 0.005900391 |             | 0 0.000189999 |
| 0           | 0.000447558 | 0.001440649 |             | 0 0           |
| 2.7854E-06  | 0.003922527 | 0.007804861 | 0.003188518 | 0.018558566   |
| 0           | 0.001542283 | 0.009296372 | 0.007736995 | 0             |
| 7.86317E-07 | 0.000847424 | 0.002513903 | 0.00027287  | 0.003710212   |
| 0           | 0.000121919 | 0.00062328  | 0.000820289 | 0             |
| 2.83097E-07 | 0.000570694 | 0.001794281 | 0.001851364 | 0.000975077   |
| 0           | 0.00064246  | 0.001474034 | 0.001119437 | 0             |
| 1.80283E-07 | 0.000162835 | 0.000916693 |             | 0 0.000974907 |
| 0           | 0.000322235 | 0.000649983 |             | 0 0           |
| 0           | 0           | 0           |             | 0 0           |
| 0           | 0.00069328  | 0.005303236 |             | 0 0           |

| CO_TOTEX    | SOx_RUNEX   | SOx_IDLEX   | SOx_STREX | SOx_TOTEX   |             |
|-------------|-------------|-------------|-----------|-------------|-------------|
| 0.00470142  | 2.90307E-06 |             | 0         | 1.72913E-08 | 2.92036E-06 |
| 0.039919266 | 0.00060702  | 4.35535E-05 |           | 0           | 0.000650574 |
| 2.096812304 | 0.006064091 |             | 0         | 0.000155176 | 0.006219268 |
| 0.007105165 | 6.03546E-05 |             | 0         | 0           | 6.03546E-05 |
| 0           | 0           |             | 0         | 0           | 0           |
| 0.382895567 | 0.000884219 |             | 0         | 2.62807E-05 | 0.000910499 |
| 6.73006E-05 | 3.38245E-07 |             | 0         | 0           | 3.38245E-07 |
| 0           | 0           |             | 0         | 0           | 0           |
| 1.413479802 | 0.003455238 |             | 0         | 0.000103558 | 0.003558796 |
| 0.001510724 | 2.32391E-05 |             | 0         | 0           | 2.32391E-05 |
| 0           | 0           |             | 0         | 0           | 0           |
| 0.244574094 | 0.000878289 | 3.56339E-06 |           | 8.53808E-06 | 0.000890391 |
| 0.101190898 | 0.000532652 | 4.63098E-06 |           | 0           | 0.000537283 |
| 0.010785201 | 8.51514E-05 | 3.09842E-07 |           | 7.16736E-07 | 8.6178E-05  |
| 0.029264057 | 0.000195766 | 2.29381E-06 |           | 0           | 0.00019806  |
| 0.669557144 | 5.70694E-05 |             | 0         | 7.42152E-06 | 6.44909E-05 |
| 0.915271771 | 0.002513644 |             | 0         | 8.31819E-05 | 0.002596826 |
| 0.005811609 | 8.115E-05   |             | 0         | 0           | 8.115E-05   |
| 0           | 0           |             | 0         | 0           | 0           |
| 0.00609039  | 8.59309E-05 |             | 0         | 1.69121E-08 | 8.59478E-05 |
| 0.001440649 | 2.67598E-05 |             | 0         | 0           | 2.67598E-05 |
| 0.029551945 | 0.000144821 | 1.04888E-06 |           | 1.51712E-06 | 0.000147387 |
| 0.017033367 | 0.000663644 | 2.18775E-05 |           | 0           | 0.000685521 |
| 0.006496985 | 2.8107E-05  | 1.68989E-07 |           | 2.48588E-07 | 2.85246E-05 |
| 0.001443568 | 4.49203E-05 | 1.41822E-06 |           | 0           | 4.63385E-05 |
| 0.004620721 | 7.06856E-06 | 5.45849E-07 |           | 4.50218E-08 | 7.65944E-06 |
| 0.002593471 | 5.55277E-05 | 5.79312E-06 |           | 0           | 6.13209E-05 |
| 0.0018916   | 5.37229E-05 |             | 0         | 9.58381E-08 | 5.38187E-05 |
| 0.000649983 | 5.12635E-05 |             | 0         | 0           | 5.12635E-05 |
| 0           | 0           |             | 0         | 0           | 0           |
| 0.005303236 | 0           |             | 0         | 0           | 0           |

Fuel Consumption

0.031149927

6.137187809

66.33752797

0.568988201

0

9.711799794

0.003188779

0

37.95973444

0.219084566

0

9.497310182

5.065191011

0.919213143

1.867190318

0.687888991

27.69892613

0.765035378

0

0.916758383

0.252276226

1.572093079

6.466863424

0.304255962

0.437134407

0.081699009

0.578470297

0.574054781

0.48328302

0

0.024305974

## Welcome to the Road Construction Emissions Model, Version 9.0.0

### User Instructions

This spreadsheet system contains the following individual worksheets:

- 1 This worksheet of User Instructions
- 2 Updates
- 3 Emission Estimates
- 4 Data Entry
- 5 Non-default Off-road Equipment
- 6 EMFAC2017
- 7 On-road Mitigation EF
- 8 OFFROAD Convert
- 9 Off-road Tier 4 EF
- 10 OFFROAD HP & LF
- 11 OFFROAD EF
- 12 x-ref



The Emission Estimates worksheet calculates a project's emissions in pounds per day (and tons) by project phase and tons over the entire construction period.

The worksheet can be used to estimate emissions for both vehicle exhaust and fugitive dust. The methodology used to estimate fugitive dust emissions is a simplified methodology involving estimates of the maximum area (acreage) of land disturbed daily. Detailed fugitive dust emission estimates associated with individual materials handling operations and/or activity/vehicle types cannot be conducted with this version of the model.

The Emission Estimates worksheet cannot be modified directly, it is a protected worksheet. It can only be modified indirectly by entering information for the project in selected areas of the Data Entry worksheet.

The last seven of these worksheets - EMFAC2017, On-road Mitigation EF, OFFROAD Convert, Off-road Tier 4 EF, OFFROAD HP & LP, OFFROAD EF and x-ref - cannot be modified by the user. They are protected worksheets.

Even though all or portions of several worksheets are protected, the individual formulas used in the calculations can be seen by the user.

The Data Entry worksheet includes several areas that can be modified by the user.

User instructions in the Data Entry worksheet are highlighted in red.

On the Data Entry worksheet, the user has two options for entering project data: required data and optional data. Required data is entered in the data input section (yellow cells). That required data is then used by the worksheet to calculate default values for the project.

The user can override the default values (blue cells) calculated for a project and is encouraged to do so if project specific information is available. Due to the difficulty in developing reliable default values for road construction projects, the user is encouraged to enter as much site specific information as is available for the project being analyzed.

The Data Entry Worksheet also includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet.

When projects are discontinuous, the user must make adjustments to the spreadsheet manually, since the program cannot be setup to anticipate unexpected project delays.

#VALUE! <- This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bar!

Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.



<http://www.airquality.org>

Karen Huss



<http://www.ramboll.com/>

John Grant

## Road Construction Emissions Model, Version 9.0.0

### Updates Log

*Changes from previous version of Road Construction Emissions Model*

#### **(Version 8.1.0 to 9.0.0) (updated by SMAQMD 04/22/18 with assistance from Ramboll)**

- 1) Project length changed to include calendar years 2014 through 2040.
- 2) On-road vehicle emission factors have been updated to EMFAC2017 version 1.0.2.
- 3) Off-road emission rates updated to include calendar years 2014 through 2040.
- 4) Average Offroad HP by Equipment Type updated to be consistent with CalEEMod (version 2016.3.2)
- 5) Modified 'Data Entry' tab to calculate NOx start emissions from heavy duty trucks in "soil hauling", "asphalt hauling"

#### **(Version 7.1.5 to 8.1.0) (updated by SMAQMD 05/09/16 with assistance from Ramboll ENVIRON US Corporation)**

- 1) Project length changed to include calendar years 2014 through 2025.
- 2) Added a new project type: Type 4: Other Linear Project Type. Note that there are no default vehicle or equipment at
- 3) Emissions estimates were extended to include SOx, CH4, N2O and CO2e.
- 4) Updated off-road equipment emission factors and default average horsepower by equipment type to be consistent
- 5) On-road vehicle emission factors have been updated to EMFAC2014.
- 6) Revised pollutant order for consistency throughout the calculator.
- 7) Added flexibility for users to specify a non-default number of working days per month.
- 8) Modified soil hauling import and export quantity and haul truck capacity data requests to allow users to specify soil
- 9) Soil hauling emissions are now estimated separately for each construction phase.
- 10) Added a new feature to allow users to provide asphalt hauling quantities by phase in the "Data Entry" tab.
- 11) New component added where the user can specify construction start date and duration by phase.
- 12) The maximum daily emissions calculation was modified to sum emissions from overlapping construction phases.
- 13) Water truck activity can be specified and emissions estimated for the paving phase.
- 14) Mitigation options were added for on-road vehicles and off-road equipment. Emissions calculations include the eff
- 15) Model allows user to estimate emissions from non-default off-road equipment for all phases and for all project type equipment type for horsepower, number of equipment, load factor, hours of operation and emission factors in the "Nor
- 16) New table of total project emissions with units of tons/phase was added in the "Emission Estimates" tab.
- 17) Removed table of daily emissions in metric units from the "Emission Estimates" tab.
- 18) Removed unnecessary data from all tabs.

#### **(Version 7.1.4 to 7.1.5) (updated by SMAQMD 12/11/13 with assistance from ENVIRON Corporation)**

- 1) Grubbing and Land Clearing Phase calculation of active months in 2007, 2017, 2019 fixed.
- 2) Soil Hauling Emissions calculation to select override if it exists for round trips/day.
- 3) Worker Commute Emissions calculation of starting and hot soak emissions; drainage phase PM<sub>10</sub> emission rate.
- 4) Water Truck Emissions calculation to select number of months for Grubbing and Land Clearing Phase; maximum a

#### **(Version 6.3.2 to Version 7.1.0, 7.1.1, 7.1.2, 7.1.3 & 7.1.4) (updated by SMAQMD 8/2/13)**

- 1) EMFAC2011 emission factors added (previous EMFAC versions dropped).
- 2) OFFROAD2011 emission factors added (and fixed error).
- 3) OFFROAD2007 for categories not in OFFROAD2011 (and fixed error)
- 4) Project length changed to include calendar years 2009 through 2025.
- 5) Average Offroad HP by Equipment Type calculation updated and corrected
- 6) Load Factor Adjustment deactivated (default load factors already incorporated in ARB's calculation of emission fact
- 7) Crawler Tractor equipment added to model
- 8) Air Compressors ROG & Default Excavators calculation on Data Entry sheet corrected.
- 9) Default equipment list updated
- 10) Corrections to Worker Commute Emissions calculations





and "water truck" section

n)

activities available for the Project Type 4.

with CalEEMod (version 2013.2.2).

hauling activity by phase.

ffects of mitigations if a mitigation option is selected by the user.  
es. Non-default off-road equipment specification must be included by  
n-default Off-road Equipment" tab.

crease/day after 2025.

ors)

Road Construction Emissions Model, Version 9.0.0

| Daily Emission Estimates for -> Fowler Lane Improvements |               |              |               |                      |                        |                              |                       |                         |                               |               |               |               |               |                |
|--|---------------|--------------|---------------|----------------------|------------------------|------------------------------|-----------------------|-------------------------|-------------------------------|---------------|---------------|---------------|---------------|----------------|
| Project Phases (Pounds)                                  | ROG (lbs/day) | CO (lbs/day) | NOx (lbs/day) | Total PM10 (lbs/day) | Exhaust PM10 (lbs/day) | Fugitive Dust PM10 (lbs/day) | Total PM2.5 (lbs/day) | Exhaust PM2.5 (lbs/day) | Fugitive Dust PM2.5 (lbs/day) | SOx (lbs/day) | CO2 (lbs/day) | CH4 (lbs/day) | N2O (lbs/day) | CO2e (lbs/day) |
| Grubbing/Land Clearing                                   | 1.82          | 21.90        | 19.15         | 3.26                 | 0.97                   | 2.30                         | 1.34                  | 0.86                    | 0.48                          | 0.04          | 3,837.56      | 1.01          | 0.13          | 3,900.08       |
| Grading/Excavation                                       | 1.89          | 19.73        | 19.79         | 3.26                 | 0.96                   | 2.30                         | 1.30                  | 0.82                    | 0.48                          | 0.04          | 4,119.61      | 0.97          | 0.14          | 4,184.16       |
| Drainage/Utilities/Sub-Grade                             | 0.86          | 11.01        | 8.03          | 2.75                 | 0.45                   | 2.30                         | 0.86                  | 0.38                    | 0.48                          | 0.02          | 2,047.05      | 0.46          | 0.06          | 2,076.78       |
| Paving   | 1.03          | 13.99        | 10.68         | 0.53                 | 0.53                   | 0.00                         | 0.45                  | 0.45                    | 0.00                          | 0.03          | 2,826.08      | 0.64          | 0.12          | 2,877.35       |
| Maximum (pounds/day)                                     | 1.89          | 21.90        | 19.79         | 3.26                 | 0.97                   | 2.30                         | 1.34                  | 0.86                    | 0.48                          | 0.04          | 4,119.61      | 1.01          | 0.14          | 4,184.16       |
| Total (tons/construction project)                        | 0.02          | 0.27         | 0.24          | 0.04                 | 0.01                   | 0.03                         | 0.02                  | 0.01                    | 0.01                          | 0.00          | 52.24         | 0.01          | 0.00          | 53.07          |

Notes:  
 Project Start Year -> 2022  
 Project Length (months) -> 2  
 Total Project Area (acres) -> 2  
 Maximum Area Disturbed/Day (acres) -> 0  
 Water Truck Used? -> No

| Phase                        | Total Material Imported/Exported Volume (yd <sup>3</sup> /day) |         | Daily VMT (miles/day) |                 |                |             |
|------------------------------|--|---------|-----------------------|-----------------|----------------|-------------|
|                              | Soil   | Asphalt | Soil Hauling          | Asphalt Hauling | Worker Commute | Water Truck |
| Grubbing/Land Clearing       | 100  | 0       | 150                   | 0               | 200            | 0           |
| Grading/Excavation           | 100  | 0       | 150                   | 0               | 800            | 0           |
| Drainage/Utilities/Sub-Grade | 40   | 0       | 60                    | 0               | 560            | 0           |
| Paving                       | 0  | 100     | 0                     | 150             | 400            | 0           |

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.  
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

| Total Emission Estimates by Phase for -> Fowler Lane Improvements |                  |                 |                  |                         |                           |                                 |                          |                            |                                  |                  |                  |                  |                  |                 |
|---|------------------|-----------------|------------------|-------------------------|---------------------------|---------------------------------|--------------------------|----------------------------|----------------------------------|------------------|------------------|------------------|------------------|-----------------|
| Project Phases (Tons for all except CO2e. Metric tonnes for CO2e) | ROG (tons/phase) | CO (tons/phase) | NOx (tons/phase) | Total PM10 (tons/phase) | Exhaust PM10 (tons/phase) | Fugitive Dust PM10 (tons/phase) | Total PM2.5 (tons/phase) | Exhaust PM2.5 (tons/phase) | Fugitive Dust PM2.5 (tons/phase) | SOx (tons/phase) | CO2 (tons/phase) | CH4 (tons/phase) | N2O (tons/phase) | CO2e (MT/phase) |
| Grubbing/Land Clearing  | 0.01             | 0.06            | 0.05             | 0.01                    | 0.00                      | 0.01                            | 0.00                     | 0.00                       | 0.00                             | 0.00             | 10.55            | 0.00             | 0.00             | 9.73            |
| Grading/Excavation  | 0.01             | 0.11            | 0.11             | 0.02                    | 0.01                      | 0.01                            | 0.01                     | 0.00                       | 0.00                             | 0.00             | 22.66            | 0.01             | 0.00             | 20.88           |
| Drainage/Utilities/Sub-Grade                                      | 0.00             | 0.06            | 0.04             | 0.02                    | 0.00                      | 0.01                            | 0.00                     | 0.00                       | 0.00                             | 0.00             | 11.26            | 0.00             | 0.00             | 10.36           |
| Paving  | 0.00             | 0.04            | 0.03             | 0.00                    | 0.00                      | 0.00                            | 0.00                     | 0.00                       | 0.00                             | 0.00             | 7.77             | 0.00             | 0.00             | 7.18            |
| Maximum (tons/phase)  | 0.01             | 0.11            | 0.11             | 0.02                    | 0.01                      | 0.01                            | 0.01                     | 0.00                       | 0.00                             | 0.00             | 22.66            | 0.01             | 0.00             | 20.88           |
| Total (tons/construction project)                                 | 0.02             | 0.27            | 0.24             | 0.04                    | 0.01                      | 0.03                            | 0.02                     | 0.01                       | 0.01                             | 0.00             | 52.24            | 0.01             | 0.00             | 48.15           |

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.  
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.  
 The CO2e emissions are reported as metric tons per phase.

**Road Construction Emissions Model**  
**Data Entry Worksheet**

Version 9.0.0

Note: Required data input sections have a yellow background.  
 Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.  
 The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.  
 Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

**Input Type**

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

|  |                          |  |
|--|--------------------------|--|
| Project Name   | Fowler Lane Improvements |  |
| Construction Start Year  | 2022                     | Enter a Year between 2014 and 2040 (inclusive)   |
| Project Type   | 2                        | 1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway<br>2) Road Widening : Project to add a new lane to an existing roadway<br>3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane<br>4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction |
| Project Construction Time  | 1.50                     | months<br>days (assume 22 if unknown)  |
| Working Days per Month   | 22.00                    |  |
| Predominant Soil/Site Type: Enter 1, 2, or 3<br><span style="font-size: x-small; color: red;">(for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)</span> | 2                        | 1) Sand Gravel : Use for quaternary deposits (Delta/West County)<br>2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta)<br>3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)   |
| Project Length   | 0.49                     | miles  |
| Total Project Area   | 1.79                     | acres  |
| Maximum Area Disturbed/Day   | 0.11                     | acres  |
| Water Trucks Used?   | 2                        | 1. Yes<br>2. No  |

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

[http://www.conservation.ca.gov/cgs/information/geologic\\_mapping/Pages/googlemaps.aspx#regionalseries](http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries)

**Material Hauling Quantity Input**

| Material Type | Phase                        | Haul Truck Capacity (yd <sup>3</sup> ) (assume 20 if unknown) | Import Volume (yd <sup>3</sup> /day) | Export Volume (yd <sup>3</sup> /day) |
|---------------|------------------------------|---|--------------------------------------|--------------------------------------|
| Soil          | Grubbing/Land Clearing       | 20.00   | 50.00                                | 50.00                                |
|               | Grading/Excavation           | 20.00   | 50.00                                | 50.00                                |
|               | Drainage/Utilities/Sub-Grade | 20.00   | 20.00                                | 20.00                                |
|               | Paving                       | 20.00   | 0.00                                 | 0.00                                 |
| Asphalt       | Grubbing/Land Clearing       | 20.00   | 0.00                                 | 0.00                                 |
|               | Grading/Excavation           | 20.00   | 0.00                                 | 0.00                                 |
|               | Drainage/Utilities/Sub-Grade | 20.00   | 0.00                                 | 0.00                                 |
|               | Paving                       | 20.00   | 100.00                               | 0.00                                 |

**Mitigation Options**

|   |               |  |
|---|---------------|--|
| On-road Fleet Emissions Mitigation      | No Mitigation | Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer<br>Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAGMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure ( <a href="http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation">http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation</a> ).<br>Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard |
| Off-road Equipment Emissions Mitigation | No Mitigation |  |

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

| Construction Periods         | User Override of Construction Months | Program Calculated Months | User Override of Phase Starting Date | Program Default Phase Starting Date |
|------------------------------|--------------------------------------|---------------------------|--------------------------------------|-------------------------------------|
| Grubbing/Land Clearing       | 0.25                                 | 0.15                      |                                      | 1/1/2022                            |
| Grading/Excavation           | 0.50                                 | 0.68                      |                                      | 1/9/2022                            |
| Drainage/Utilities/Sub-Grade | 0.50                                 | 0.45                      |                                      | 1/25/2022                           |
| Paving                       | 0.25                                 | 0.23                      |                                      | 2/10/2022                           |
| <b>Totals (Months)</b>       |                                      | 2                         |                                      |                                     |

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

| Soil Hauling Emissions                                | User Override of Miles/Round Trip | Program Estimate of Miles/Round Trip | User Override of Truck Round Trips/Day | Default Values Round Trips/Day | Calculated Daily VMT |            |            |            |            |             |
|---|-----------------------------------|--------------------------------------|--|--------------------------------|----------------------|------------|------------|------------|------------|-------------|
| <b>User Input</b>                                     |                                   |                                      |  |                                |                      |            |            |            |            |             |
| Miles/round trip: Grubbing/Land Clearing              |                                   | 30.00                                |  | 5                              | 150.00               |            |            |            |            |             |
| Miles/round trip: Grading/Excavation                  |                                   | 30.00                                |  | 5                              | 150.00               |            |            |            |            |             |
| Miles/round trip: Drainage/Utilities/Sub-Grade        |                                   | 30.00                                |  | 2                              | 60.00                |            |            |            |            |             |
| Miles/round trip: Paving                              |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| <b>Emission Rates</b>                                 | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Grubbing/Land Clearing (grams/mile)                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grading/Excavation (grams/mile)                       | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Draining/Utilities/Sub-Grade (grams/mile)             | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Paving (grams/mile)                                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grubbing/Land Clearing (grams/trip)                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Grading/Excavation (grams/trip)                       | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Draining/Utilities/Sub-Grade (grams/trip)             | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Paving (grams/trip)                                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| <b>Hauling Emissions</b>                              | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Pounds per day - Grubbing/Land Clearing               | 0.06                              | 0.22                                 | 1.60                                   | 0.05                           | 0.03                 | 0.01       | 593.19     | 0.00       | 0.09       | 621.04      |
| Tons per const. Period - Grubbing/Land Clearing       | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 1.63       | 0.00       | 0.00       | 1.71        |
| Pounds per day - Grading/Excavation                   | 0.06                              | 0.22                                 | 1.60                                   | 0.05                           | 0.03                 | 0.01       | 593.19     | 0.00       | 0.09       | 621.04      |
| Tons per const. Period - Grading/Excavation           | 0.00                              | 0.00                                 | 0.01                                   | 0.00                           | 0.00                 | 0.00       | 3.26       | 0.00       | 0.00       | 3.42        |
| Pounds per day - Drainage/Utilities/Sub-Grade         | 0.02                              | 0.09                                 | 0.64                                   | 0.02                           | 0.01                 | 0.00       | 237.27     | 0.00       | 0.04       | 248.42      |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 1.31       | 0.00       | 0.00       | 1.37        |
| Pounds per day - Paving                               | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Paving                       | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Total tons per construction project                   | 0.00                              | 0.00                                 | 0.02                                   | 0.00                           | 0.00                 | 0.00       | 6.20       | 0.00       | 0.00       | 6.49        |

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

| Asphalt Hauling Emissions                             | User Override of Miles/Round Trip | Program Estimate of Miles/Round Trip | User Override of Truck Round Trips/Day | Default Values Round Trips/Day | Calculated Daily VMT |            |            |            |            |             |
|---|-----------------------------------|--------------------------------------|--|--------------------------------|----------------------|------------|------------|------------|------------|-------------|
| <b>User Input</b>                                     |                                   |                                      |  |                                |                      |            |            |            |            |             |
| Miles/round trip: Grubbing/Land Clearing              |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| Miles/round trip: Grading/Excavation                  |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| Miles/round trip: Drainage/Utilities/Sub-Grade        |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| Miles/round trip: Paving                              |                                   | 30.00                                |  | 5                              | 150.00               |            |            |            |            |             |
| <b>Emission Rates</b>                                 | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Grubbing/Land Clearing (grams/mile)                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grading/Excavation (grams/mile)                       | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Draining/Utilities/Sub-Grade (grams/mile)             | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Paving (grams/mile)                                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grubbing/Land Clearing (grams/trip)                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Grading/Excavation (grams/trip)                       | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Draining/Utilities/Sub-Grade (grams/trip)             | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Paving (grams/trip)                                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| <b>Emissions</b>                                      | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Pounds per day - Grubbing/Land Clearing               | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Grubbing/Land Clearing       | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Pounds per day - Grading/Excavation                   | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Grading/Excavation           | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Pounds per day - Drainage/Utilities/Sub-Grade         | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Pounds per day - Paving                               | 0.06                              | 0.22                                 | 1.60                                   | 0.05                           | 0.03                 | 0.01       | 593.19     | 0.00       | 0.09       | 621.04      |
| Tons per const. Period - Paving                       | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 1.63       | 0.00       | 0.00       | 1.71        |
| Total tons per construction project                   | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 1.63       | 0.00       | 0.00       | 1.71        |

Note: Worker commute default values can be overridden in cells D121 through D126.

| Worker Commute Emissions                              |  | User Override of Worker Commute Default Values | Default Values |             |             |              | Calculated |            |            |            |             |
|---|--|--|----------------|-------------|-------------|--------------|------------|------------|------------|------------|-------------|
| User Input  |  |  |                |             |             |              |            |            |            |            |             |
| Miles/ one-way trip                                   |  | 20   |                | Calculated  |             | Calculated   |            |            |            |            |             |
| One-way trips/day                                     |  | 2  |                | Daily Trips |             | Daily VMT    |            |            |            |            |             |
| No. of employees: Grubbing/Land Clearing              |  | 5  |                | 10          |             | 200.00       |            |            |            |            |             |
| No. of employees: Grading/Excavation                  |  | 20   |                | 40          |             | 800.00       |            |            |            |            |             |
| No. of employees: Drainage/Utilities/Sub-Grade        |  | 14   |                | 28          |             | 560.00       |            |            |            |            |             |
| No. of employees: Paving                              |  | 10   |                | 20          |             | 400.00       |            |            |            |            |             |
| <b>Emission Rates</b>                                 |  | <b>ROG</b>                                     | <b>CO</b>      | <b>NOx</b>  | <b>PM10</b> | <b>PM2.5</b> | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Grubbing/Land Clearing (grams/mile)                   |  | 0.02   | 1.00           | 0.08        | 0.05        | 0.02         | 0.00       | 328.72     | 0.00       | 0.01       | 330.96      |
| Grading/Excavation (grams/mile)                       |  | 0.02   | 1.00           | 0.08        | 0.05        | 0.02         | 0.00       | 328.72     | 0.00       | 0.01       | 330.96      |
| Draining/Utilities/Sub-Grade (grams/mile)             |  | 0.02   | 1.00           | 0.08        | 0.05        | 0.02         | 0.00       | 328.72     | 0.00       | 0.01       | 330.96      |
| Paving (grams/mile)                                   |  | 0.02   | 1.00           | 0.08        | 0.05        | 0.02         | 0.00       | 328.72     | 0.00       | 0.01       | 330.96      |
| Grubbing/Land Clearing (grams/trip)                   |  | 1.11   | 2.85           | 0.32        | 0.00        | 0.00         | 0.00       | 70.54      | 0.08       | 0.03       | 82.43       |
| Grading/Excavation (grams/trip)                       |  | 1.11   | 2.85           | 0.32        | 0.00        | 0.00         | 0.00       | 70.54      | 0.08       | 0.03       | 82.43       |
| Draining/Utilities/Sub-Grade (grams/trip)             |  | 1.11   | 2.85           | 0.32        | 0.00        | 0.00         | 0.00       | 70.54      | 0.08       | 0.03       | 82.43       |
| Paving (grams/trip)                                   |  | 1.11   | 2.85           | 0.32        | 0.00        | 0.00         | 0.00       | 70.54      | 0.08       | 0.03       | 82.43       |
| <b>Emissions</b>                                      |  | <b>ROG</b>                                     | <b>CO</b>      | <b>NOx</b>  | <b>PM10</b> | <b>PM2.5</b> | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Pounds per day - Grubbing/Land Clearing               |  | 0.03   | 0.50           | 0.04        | 0.02        | 0.01         | 0.00       | 146.50     | 0.00       | 0.00       | 147.74      |
| Tons per const. Period - Grubbing/Land Clearing       |  | 0.00   | 0.00           | 0.00        | 0.00        | 0.00         | 0.00       | 0.40       | 0.00       | 0.00       | 0.41        |
| Pounds per day - Grading/Excavation                   |  | 0.13   | 2.02           | 0.18        | 0.08        | 0.03         | 0.01       | 585.99     | 0.01       | 0.02       | 590.98      |
| Tons per const. Period - Grading/Excavation           |  | 0.00   | 0.01           | 0.00        | 0.00        | 0.00         | 0.00       | 3.22       | 0.00       | 0.00       | 3.25        |
| Pounds per day - Drainage/Utilities/Sub-Grade         |  | 0.09   | 1.41           | 0.12        | 0.05        | 0.02         | 0.00       | 410.19     | 0.01       | 0.01       | 413.69      |
| Tons per const. Period - Drainage/Utilities/Sub-Grade |  | 0.00   | 0.01           | 0.00        | 0.00        | 0.00         | 0.00       | 2.26       | 0.00       | 0.00       | 2.28        |
| Pounds per day - Paving                               |  | 0.06   | 1.01           | 0.09        | 0.04        | 0.02         | 0.00       | 292.99     | 0.01       | 0.01       | 295.49      |
| Tons per const. Period - Paving                       |  | 0.00   | 0.00           | 0.00        | 0.00        | 0.00         | 0.00       | 0.81       | 0.00       | 0.00       | 0.81        |
| Total tons per construction project                   |  | 0.00   | 0.02           | 0.00        | 0.00        | 0.00         | 0.00       | 6.69       | 0.00       | 0.00       | 6.74        |

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

| Water Truck Emissions                                 |  | User Override of Default # Water Trucks | Program Estimate of Number of Water Trucks | User Override of Truck Round Trips/Vehicle/Day | Default Values Round Trips/Vehicle/Day | Calculated Trips/day | User Override of Miles/Round Trip | Default Values Miles/Round Trip | Calculated Daily VMT |            |             |
|---|--|---|--|--|--|----------------------|-----------------------------------|---------------------------------|----------------------|------------|-------------|
| Grubbing/Land Clearing - Exhaust                      |  | 0                                       | 0  | 5  | 5                                      | 0                    | 8.00                              | 8.00                            | 0.00                 |            |             |
| Grading/Excavation - Exhaust                          |  | 0                                       | 0  | 5  | 5                                      | 0                    | 8.00                              | 8.00                            | 0.00                 |            |             |
| Drainage/Utilities/Subgrade                           |  | 0                                       | 0  | 5  | 5                                      | 0                    | 8.00                              | 8.00                            | 0.00                 |            |             |
| Paving  |  | 0                                       | 0  | 5  | 5                                      | 0                    | 8.00                              | 8.00                            | 0.00                 |            |             |
| <b>Emission Rates</b>                                 |  | <b>ROG</b>                              | <b>CO</b>                                  | <b>NOx</b>                                     | <b>PM10</b>                            | <b>PM2.5</b>         | <b>SOx</b>                        | <b>CO2</b>                      | <b>CH4</b>           | <b>N2O</b> | <b>CO2e</b> |
| Grubbing/Land Clearing (grams/mile)                   |  | 0.18                                    | 0.66                                       | 4.71   | 0.14                                   | 0.08                 | 0.02                              | 1,793.76                        | 0.01                 | 0.28       | 1,877.99    |
| Grading/Excavation (grams/mile)                       |  | 0.18                                    | 0.66                                       | 4.71   | 0.14                                   | 0.08                 | 0.02                              | 1,793.76                        | 0.01                 | 0.28       | 1,877.99    |
| Draining/Utilities/Sub-Grade (grams/mile)             |  | 0.18                                    | 0.66                                       | 4.71   | 0.14                                   | 0.08                 | 0.02                              | 1,793.76                        | 0.01                 | 0.28       | 1,877.99    |
| Paving (grams/mile)                                   |  | 0.18                                    | 0.66                                       | 4.71   | 0.14                                   | 0.08                 | 0.02                              | 1,793.76                        | 0.01                 | 0.28       | 1,877.99    |
| Grubbing/Land Clearing (grams/trip)                   |  | 0.00                                    | 0.00                                       | 3.99   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Grading/Excavation (grams/trip)                       |  | 0.00                                    | 0.00                                       | 3.99   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Draining/Utilities/Sub-Grade (grams/trip)             |  | 0.00                                    | 0.00                                       | 3.99   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Paving (grams/trip)                                   |  | 0.00                                    | 0.00                                       | 3.99   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| <b>Emissions</b>                                      |  | <b>ROG</b>                              | <b>CO</b>                                  | <b>NOx</b>                                     | <b>PM10</b>                            | <b>PM2.5</b>         | <b>SOx</b>                        | <b>CO2</b>                      | <b>CH4</b>           | <b>N2O</b> | <b>CO2e</b> |
| Pounds per day - Grubbing/Land Clearing               |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Tons per const. Period - Grubbing/Land Clearing       |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Pounds per day - Grading/Excavation                   |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Tons per const. Period - Grading/Excavation           |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Pounds per day - Drainage/Utilities/Sub-Grade         |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Tons per const. Period - Drainage/Utilities/Sub-Grade |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Pounds per day - Paving                               |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Tons per const. Period - Paving                       |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |
| Total tons per construction project                   |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00       | 0.00        |

Note: Fugitive dust default values can be overridden in cells D183 through D185.

| Fugitive Dust                               |  | User Override of Max Acreage Disturbed/Day | Default Maximum Acreage/Day | PM10 pounds/day | PM10 tons/per period | PM2.5 pounds/day | PM2.5 tons/per period |
|---|--|--|-----------------------------|-----------------|----------------------|------------------|-----------------------|
| Fugitive Dust - Grubbing/Land Clearing      |  | 0.11                                       | 0.11                        | 2.30            | 0.01                 | 0.48             | 0.00                  |
| Fugitive Dust - Grading/Excavation          |  | 0.11                                       | 0.11                        | 2.30            | 0.01                 | 0.48             | 0.00                  |
| Fugitive Dust - Drainage/Utilities/Subgrade |  | 0.11                                       | 0.11                        | 2.30            | 0.01                 | 0.48             | 0.00                  |

| Off-Road Equipment Emissions   |                        |  |   |                    |                                 |            |            |            |            |            |            |            |  |
|--|------------------------|--|---|--------------------|---------------------------------|------------|------------|------------|------------|------------|------------|------------|--|
| Grubbing/Land Clearing   |                        | Default<br>Number of Vehicles  | Mitigation Option<br>Override of<br>Default | Default            | ROG                             | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |  |
| Override of Default Number of Vehicles   | Program-estimate       | Default Equipment Tier (applicable only<br>when "Tier 4 Mitigation" Option Selected) |   | Equipment Tier     | Type                            | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |  |
|  |                        |  |   | Model Default Tier | Aerial Lifts                    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Air Compressors                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Bore/Drill Rigs                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Cement and Mortar Mixers        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Concrete/Industrial Saws        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Cranes                          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00   | 1                      |  |   | Model Default Tier | Crawler Tractors                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Crushing/Proc. Equipment        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 1.00   | 2                      |  |   | Model Default Tier | Excavators                      | 0.20       | 3.26       | 1.78       | 0.09       | 0.08       | 0.01       | 500.02     |  |
|  |                        |  |   | Model Default Tier | Forklifts                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Generator Sets                  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Graders                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Off-Highway Tractors            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 3.00   |                        |  |   | Model Default Tier | Off-Highway Trucks              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Other Construction Equipment    | 1.13       | 12.06      | 11.45      | 0.60       | 0.55       | 0.02       | 1,795.00   |  |
|  |                        |  |   | Model Default Tier | Other General Industrial Equipm | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Other Material Handling Equipm  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Pavers                          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Paving Equipment                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Plate Compactors                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Pressure Washers                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Pumps                           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Rollers                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Rough Terrain Forklifts         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Rubber Tired Dozers             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Rubber Tired Loaders            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00   | 1                      |  |   | Model Default Tier | Scrapers                        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 1.00   |                        |  |   | Model Default Tier | Signal Boards                   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Skid Steer Loaders              | 0.07       | 1.39       | 0.93       | 0.03       | 0.03       | 0.00       | 200.39     |  |
|  |                        |  |   | Model Default Tier | Surfacing Equipment             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Sweepers/Scrubbers              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 2.00   |                        |  |   | Model Default Tier | Tractors/Loaders/Backhoes       | 0.33       | 4.48       | 3.35       | 0.18       | 0.17       | 0.01       | 602.48     |  |
|  |                        |  |   | Model Default Tier | Trenchers                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |   | Model Default Tier | Welders                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| User-Defined Off-road Equipment  |                        |  |   |                    | ROG                             | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |  |
| If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab |                        |  |   |                    | pounds/day                      | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |  |
| Number of Vehicles   | Equipment Tier         | Type   |   |                    |                                 |            |            |            |            |            |            |            |  |
| 0.00   | N/A                    |  |   |                    | 0                               | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00   | N/A                    |  |   |                    | 0                               | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00   | N/A                    |  |   |                    | 0                               | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00   | N/A                    |  |   |                    | 0                               | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00   | N/A                    |  |   |                    | 0                               | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00   | N/A                    |  |   |                    | 0                               | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00   | N/A                    |  |   |                    | 0                               | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00   | N/A                    |  |   |                    | 0                               | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  | Grubbing/Land Clearing | pounds per day   |   |                    | 1.73                            | 21.18      | 17.50      | 0.90       | 0.83       | 0.03       | 3,097.88   | 1.00       |  |
|  | Grubbing/Land Clearing | tons per phase   |   |                    | 0.00                            | 0.06       | 0.05       | 0.00       | 0.00       | 0.00       | 8.52       | 0.00       |  |

| Grading/Excavation                     | Default            |   | Mitigation Option  |                                 | ROG            | CO             | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |            |      |
|--|--------------------|---|--------------------|---------------------------------|----------------|----------------|------------|------------|------------|------------|------------|------------|------------|------|
|  | Number of Vehicles | Override of   | Default            | Default                         |                |                |            |            |            |            |            |            |            |      |
| Override of Default Number of Vehicles | Program-estimate   | Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected) |                    | Equipment Tier                  | Type           | pounds/day     | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |            |      |
|  |                    |   | Model Default Tier | Aerial Lifts                    |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Air Compressors                 |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Bore/Drill Rigs                 |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Cement and Mortar Mixers        |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Concrete/Industrial Saws        |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Cranes                          |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 0.00                                   |                    | 0   | Model Default Tier | Crawler Tractors                |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Crushing/Proc. Equipment        |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    | 3   | Model Default Tier | Excavators                      |                | 0.20           | 3.26       | 1.78       | 0.09       | 0.08       | 0.01       | 500.02     |            |      |
|  |                    |   | Model Default Tier | Forklifts                       |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Generator Sets                  |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    | 2   | Model Default Tier | Graders                         |                | 0.41           | 1.72       | 5.26       | 0.17       | 0.15       | 0.01       | 641.28     |            |      |
|  |                    |   | Model Default Tier | Off-Highway Tractors            |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Off-Highway Trucks              |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 2.00                                   |                    |   | Model Default Tier | Other Construction Equipment    |                | 0.75           | 8.04       | 7.63       | 0.40       | 0.37       | 0.01       | 1,196.66   |            |      |
|  |                    |   | Model Default Tier | Other General Industrial Equipm |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Other Material Handling Equipm  |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Pavers                          |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Paving Equipment                |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Plate Compactors                |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Pressure Washers                |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Pumps                           |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 0.00                                   |                    | 2   | Model Default Tier | Rollers                         |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Rough Terrain Forklifts         |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Rubber Tired Dozers             |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 0.00                                   |                    | 1   | Model Default Tier | Rubber Tired Loaders            |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 0.00                                   |                    | 2   | Model Default Tier | Scrapers                        |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 0.00                                   |                    | 1   | Model Default Tier | Signal Boards                   |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Skid Steer Loaders              |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Surfacing Equipment             |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Sweepers/Scrubbers              |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 2.00                                   |                    | 4   | Model Default Tier | Tractors/Loaders/Backhoes       |                | 0.33           | 4.48       | 3.35       | 0.18       | 0.17       | 0.01       | 602.48     |            |      |
|  |                    |   | Model Default Tier | Trenchers                       |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Welders                         |                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| <b>User-Defined Off-road Equipment</b> |                    |   |                    |                                 |                | ROG            | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |      |
| Number of Vehicles                     |                    |   |                    |                                 | Equipment Tier | Type           | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |                | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |                | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |                | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |                | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |                | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |                | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |                | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| Grading/Excavation                     |                    |   |                    |                                 |                | pounds per day | 1.70       | 17.49      | 18.02      | 0.83       | 0.76       | 0.03       | 2,940.44   | 0.95 |
| Grading/Excavation                     |                    |   |                    |                                 |                | tons per phase | 0.01       | 0.10       | 0.10       | 0.00       | 0.00       | 0.00       | 16.17      | 0.01 |



| Drainage/Utilities/Subgrade  |   | Default<br>Number of Vehicles | Mitigation Option<br>Override of<br>Default                                       | Default                         | ROG            | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |      |
|--|---|-------------------------------|---|---------------------------------|----------------|------------|------------|------------|------------|------------|------------|------------|------|
| Override of Default Number of Vehicles   |   | Program-estimate              | Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected) | Equipment Tier                  | pounds/day     | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |      |
| 0.00   | 1 |                               | Model Default Tier  | Aerial Lifts                    | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Air Compressors                 | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Bore/Drill Rigs                 | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Cement and Mortar Mixers        | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Concrete/Industrial Saws        | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Cranes                          | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Crawler Tractors                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Crushing/Proc. Equipment        | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 1.00   |   |                               | Model Default Tier  | Excavators                      | 0.20           | 3.26       | 1.78       | 0.09       | 0.08       | 0.01       | 500.02     | 0.16       |      |
|  |   |                               | Model Default Tier  | Forklifts                       | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   | 1 |                               | Model Default Tier  | Generator Sets                  | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   | 1 |                               | Model Default Tier  | Graders                         | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Off-Highway Tractors            | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Off-Highway Trucks              | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 1.00   |   |                               | Model Default Tier  | Other Construction Equipment    | 0.38           | 4.02       | 3.82       | 0.20       | 0.18       | 0.01       | 598.33     | 0.19       |      |
|  |   |                               | Model Default Tier  | Other General Industrial Equipm | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Other Material Handling Equipm  | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Pavers                          | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Paving Equipment                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   | 1 |                               | Model Default Tier  | Plate Compactors                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Pressure Washers                | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   | 1 |                               | Model Default Tier  | Pumps                           | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Rollers                         | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   | 1 |                               | Model Default Tier  | Rough Terrain Forklifts         | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Rubber Tired Dozers             | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Rubber Tired Loaders            | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   | 1 |                               | Model Default Tier  | Scrapers                        | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   | 1 |                               | Model Default Tier  | Signal Boards                   | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Skid Steer Loaders              | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Surfacing Equipment             | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Sweepers/Scrubbers              | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 1.00   | 3 |                               | Model Default Tier  | Tractors/Loaders/Backhoes       | 0.16           | 2.24       | 1.68       | 0.09       | 0.08       | 0.00       | 301.24     | 0.10       |      |
|  |   |                               | Model Default Tier  | Trenchers                       | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
|  |   |                               | Model Default Tier  | Welders                         | 0.00           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| <b>User-Defined Off-road Equipment</b>   |   |                               |   |                                 | ROG            | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |      |
| Number of Vehicles   |   |                               |   |                                 | pounds/day     | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |      |
| If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab |   |                               |   |                                 |                |            |            |            |            |            |            |            |      |
| 0.00   |   |                               | N/A   | Type                            | 0              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   |   |                               | N/A   |                                 | 0              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   |   |                               | N/A   |                                 | 0              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   |   |                               | N/A   |                                 | 0              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   |   |                               | N/A   |                                 | 0              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   |   |                               | N/A   |                                 | 0              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00   |   |                               | N/A   |                                 | 0              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| Drainage/Utilities/Sub-Grade   |   |                               |   |                                 | pounds per day | 0.74       | 9.51       | 7.27       | 0.38       | 0.35       | 0.01       | 1,399.59   | 0.45 |
| Drainage/Utilities/Sub-Grade   |   |                               |   |                                 | tons per phase | 0.00       | 0.05       | 0.04       | 0.00       | 0.00       | 0.00       | 7.70       | 0.00 |

| Paving   | Default                                |                  | Mitigation Option   |                                 | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |
|--|--|------------------|---|---------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
|  | Number of Vehicles                     | Override of      | Default   | Default                         |            |            |            |            |            |            |            |            |
|  | Override of Default Number of Vehicles | Program-estimate | Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected) | Equipment Tier                  |            |            |            |            |            |            |            |            |
|  |  |                  | Model Default Tier  | Aerial Lifts                    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Air Compressors                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Bore/Drill Rigs                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Cement and Mortar Mixers        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Concrete/Industrial Saws        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Cranes                          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Crawler Tractors                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Crushing/Proc. Equipment        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Excavators                      | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Forklifts                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Generator Sets                  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Graders                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Off-Highway Tractors            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Off-Highway Trucks              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Other Construction Equipment    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Other General Industrial Equipm | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Other Material Handling Equipm  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  | 1                | Model Default Tier  | Pavers                          | 0.21       | 2.88       | 2.10       | 0.10       | 0.09       | 0.00       | 455.26     | 0.15       |
| 3.00   |  | 1                | Model Default Tier  | Paving Equipment                | 0.53       | 7.64       | 5.21       | 0.25       | 0.23       | 0.01       | 1,183.41   | 0.38       |
|  |  |                  | Model Default Tier  | Plate Compactors                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Pressure Washers                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Pumps                           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |  | 2                | Model Default Tier  | Rollers                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Rough Terrain Forklifts         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Rubber Tired Dozers             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Rubber Tired Loaders            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Scrapers                        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |  | 1                | Model Default Tier  | Signal Boards                   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Skid Steer Loaders              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Surfacing Equipment             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Sweepers/Scrubbers              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 1.00   |  | 3                | Model Default Tier  | Tractors/Loaders/Backhoes       | 0.16       | 2.24       | 1.68       | 0.09       | 0.08       | 0.00       | 301.24     | 0.10       |
|  |  |                  | Model Default Tier  | Trenchers                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                  | Model Default Tier  | Welders                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| <b>User-Defined Off-road Equipment</b>   |  |                  |   |                                 |            |            |            |            |            |            |            |            |
| If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab |  |                  |   |                                 | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |
| Number of Vehicles   |  | Equipment Tier   | Type  |                                 | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |
| 0.00   |  | N/A              |   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |  | N/A              |   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |  | N/A              |   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |  | N/A              |   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |  | N/A              |   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |  | N/A              |   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | Paving                                 |                  | pounds per day  |                                 | 0.91       | 12.76      | 8.99       | 0.44       | 0.41       | 0.02       | 1,939.90   | 0.63       |
|  | Paving                                 |                  | tons per phase  |                                 | 0.00       | 0.04       | 0.02       | 0.00       | 0.00       | 0.00       | 5.33       | 0.00       |
| <b>Total Emissions all Phases (tons per construction period) =&gt;</b>                               |  |                  |   |                                 | 0.02       | 0.24       | 0.21       | 0.01       | 0.01       | 0.00       | 37.72      | 0.01       |

| N2O        | CO2e       |
|------------|------------|
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 505.41     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.02       | 1,814.38   |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 202.55     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 608.96     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| N2O        | CO2e       |
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.03       | 3,131.30   |
| 0.00       | 8.61       |

| N2O        | CO2e       |
|------------|------------|
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 505.41     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 648.19     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 1,209.59   |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 608.96     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| <hr/>      |            |
| N2O        | CO2e       |
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.03       | 2,972.14   |
| 0.00       | 16.35      |

| N2O        | CO2e       |
|------------|------------|
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 505.41     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 604.79     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 304.48     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| N2O        | CO2e       |
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 1,414.68   |
| 0.00       | 7.78       |

| N2O        | CO2e       |
|------------|------------|
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 460.17     |
| 0.01       | 1,196.18   |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 304.48     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| N2O        | CO2e       |
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.02       | 1,960.82   |
| 0.00       | 5.39       |
| 0.00       | 38.13      |

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

| Equipment                          | User Override of Horsepower | Default Values Horsepower | User Override of Hours/day | Default Values Hours/day |
|------------------------------------|-----------------------------|---------------------------|----------------------------|--------------------------|
| Aerial Lifts                       |                             | 63                        |                            | 8                        |
| Air Compressors                    |                             | 78                        |                            | 8                        |
| Bore/Drill Rigs                    |                             | 221                       |                            | 8                        |
| Cement and Mortar Mixers           |                             | 9                         |                            | 8                        |
| Concrete/Industrial Saws           |                             | 81                        |                            | 8                        |
| Cranes                             |                             | 231                       |                            | 8                        |
| Crawler Tractors                   |                             | 212                       |                            | 8                        |
| Crushing/Proc. Equipment           |                             | 85                        |                            | 8                        |
| Excavators                         |                             | 158                       |                            | 8                        |
| Forklifts                          |                             | 89                        |                            | 8                        |
| Generator Sets                     |                             | 84                        |                            | 8                        |
| Graders                            |                             | 187                       |                            | 8                        |
| Off-Highway Tractors               |                             | 124                       |                            | 8                        |
| Off-Highway Trucks                 |                             | 402                       |                            | 8                        |
| Other Construction Equipment       |                             | 172                       |                            | 8                        |
| Other General Industrial Equipment |                             | 88                        |                            | 8                        |
| Other Material Handling Equipment  |                             | 168                       |                            | 8                        |
| Pavers                             |                             | 130                       |                            | 8                        |
| Paving Equipment                   |                             | 132                       |                            | 8                        |
| Plate Compactors                   |                             | 8                         |                            | 8                        |
| Pressure Washers                   |                             | 13                        |                            | 8                        |
| Pumps                              |                             | 84                        |                            | 8                        |
| Rollers                            |                             | 80                        |                            | 8                        |
| Rough Terrain Forklifts            |                             | 100                       |                            | 8                        |
| Rubber Tired Dozers                |                             | 247                       |                            | 8                        |
| Rubber Tired Loaders               |                             | 203                       |                            | 8                        |
| Scrapers                           |                             | 367                       |                            | 8                        |
| Signal Boards                      |                             | 6                         |                            | 8                        |
| Skid Steer Loaders                 |                             | 65                        |                            | 8                        |
| Surfacing Equipment                |                             | 263                       |                            | 8                        |
| Sweepers/Scrubbers                 |                             | 64                        |                            | 8                        |
| Tractors/Loaders/Backhoes          |                             | 97                        |                            | 8                        |
| Trenchers                          |                             | 78                        |                            | 8                        |
| Welders                            |                             | 46                        |                            | 8                        |

END OF DATA ENTRY SHEET









| Year  | ROG    | Weighted - Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted - Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx    |
|-------|--------|---------------------|--------------------|---------------------|-------------------|--------|---------------------|--------------------|---------------------|-------------------|--------|
| 2014  | 0.0704 | -                   | -                  | -                   | -                 | 2.5553 | -                   | -                  | -                   | -                 | 0.2855 |
| 2015  | 0.0597 | -                   | -                  | -                   | -                 | 2.2699 | -                   | -                  | -                   | -                 | 0.2490 |
| 2016  | 0.0491 | -                   | -                  | -                   | -                 | 1.9702 | -                   | -                  | -                   | -                 | 0.2095 |
| 2017  | 0.0405 | -                   | -                  | -                   | -                 | 1.7329 | -                   | -                  | -                   | -                 | 0.1791 |
| 2018  | 0.0335 | -                   | -                  | -                   | -                 | 1.5296 | -                   | -                  | -                   | -                 | 0.1530 |
| 2019  | 0.0279 | -                   | -                  | -                   | -                 | 1.3662 | -                   | -                  | -                   | -                 | 0.1307 |
| 2020  | 0.0236 | -                   | -                  | -                   | -                 | 1.2220 | -                   | -                  | -                   | -                 | 0.1123 |
| 2021  | 0.0204 | -                   | -                  | -                   | -                 | 1.1018 | -                   | -                  | -                   | -                 | 0.0968 |
| 2022  | 0.0178 | 0.0178              | 0.0178             | 0.0178              | 0.0178            | 1.0001 | 1.0001              | 1.0001             | 1.0001              | 1.0001            | 0.0838 |
| 2023  | 0.0154 | -                   | -                  | -                   | -                 | 0.9126 | -                   | -                  | -                   | -                 | 0.0726 |
| 2024  | 0.0134 | -                   | -                  | -                   | -                 | 0.8386 | -                   | -                  | -                   | -                 | 0.0632 |
| 2025  | 0.0117 | -                   | -                  | -                   | -                 | 0.7754 | -                   | -                  | -                   | -                 | 0.0554 |
| 2026  | 0.0103 | -                   | -                  | -                   | -                 | 0.7225 | -                   | -                  | -                   | -                 | 0.0491 |
| 2027  | 0.0091 | -                   | -                  | -                   | -                 | 0.6774 | -                   | -                  | -                   | -                 | 0.0437 |
| 2028  | 0.0081 | -                   | -                  | -                   | -                 | 0.6398 | -                   | -                  | -                   | -                 | 0.0393 |
| 2029  | 0.0072 | -                   | -                  | -                   | -                 | 0.6075 | -                   | -                  | -                   | -                 | 0.0355 |
| 2030  | 0.0065 | -                   | -                  | -                   | -                 | 0.5801 | -                   | -                  | -                   | -                 | 0.0324 |
| 2031  | 0.0059 | -                   | -                  | -                   | -                 | 0.5565 | -                   | -                  | -                   | -                 | 0.0297 |
| 2032  | 0.0053 | -                   | -                  | -                   | -                 | 0.5366 | -                   | -                  | -                   | -                 | 0.0275 |
| 2033  | 0.0048 | -                   | -                  | -                   | -                 | 0.5196 | -                   | -                  | -                   | -                 | 0.0257 |
| 2034  | 0.0044 | -                   | -                  | -                   | -                 | 0.5049 | -                   | -                  | -                   | -                 | 0.0242 |
| 2035  | 0.0041 | -                   | -                  | -                   | -                 | 0.4922 | -                   | -                  | -                   | -                 | 0.0229 |
| 2036  | 0.0037 | -                   | -                  | -                   | -                 | 0.4811 | -                   | -                  | -                   | -                 | 0.0219 |
| 2037  | 0.0035 | -                   | -                  | -                   | -                 | 0.4719 | -                   | -                  | -                   | -                 | 0.0211 |
| 2038  | 0.0033 | -                   | -                  | -                   | -                 | 0.4637 | -                   | -                  | -                   | -                 | 0.0203 |
| 2039  | 0.0030 | -                   | -                  | -                   | -                 | 0.4566 | -                   | -                  | -                   | -                 | 0.0197 |
| 2040  | 0.0029 | -                   | -                  | -                   | -                 | 0.4506 | -                   | -                  | -                   | -                 | 0.0191 |
| 2041  | 0.0027 |                     |                    |                     |                   | 0.4452 |                     |                    |                     |                   | 0.0187 |
| 2042  | 0.0026 |                     |                    |                     |                   | 0.4404 |                     |                    |                     |                   | 0.0183 |
| 2043  | 0.0025 |                     |                    |                     |                   | 0.4367 |                     |                    |                     |                   | 0.0180 |
| 2044  | 0.0024 |                     |                    |                     |                   | 0.4339 |                     |                    |                     |                   | 0.0178 |
| 2045  | 0.0023 |                     |                    |                     |                   | 0.4317 |                     |                    |                     |                   | 0.0177 |
| 2046  | 0.0023 |                     |                    |                     |                   | 0.4300 |                     |                    |                     |                   | 0.0176 |
| 2047  | 0.0023 |                     |                    |                     |                   | 0.4286 |                     |                    |                     |                   | 0.0175 |
| 2048  | 0.0023 |                     |                    |                     |                   | 0.4274 |                     |                    |                     |                   | 0.0174 |
| 2049  | 0.0022 |                     |                    |                     |                   | 0.4268 |                     |                    |                     |                   | 0.0174 |
| 2050  | 0.0022 |                     |                    |                     |                   | 0.4264 |                     |                    |                     |                   | 0.0174 |
| Total |        | 0.0178              | 0.0178             | 0.0178              | 0.0178            |        | 1.0001              | 1.0001             | 1.0001              | 1.0001            |        |

**Heavy-Heavy Duty Diesel Truck**

Water Truck Commute Emissions (EMFAC2017 - web 1.0.2, T7 Single Unit Construction Truck)

| Year | ROG    | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx     |
|------|--------|-------------------|--------------------|---------------------|-------------------|--------|-------------------|--------------------|---------------------|-------------------|---------|
| 2014 | 1.8521 | -                 | -                  | -                   | -                 | 4.0026 | -                 | -                  | -                   | -                 | 15.4709 |
| 2015 | 1.5946 | -                 | -                  | -                   | -                 | 3.4621 | -                 | -                  | -                   | -                 | 13.7491 |
| 2016 | 1.2921 | -                 | -                  | -                   | -                 | 2.8379 | -                 | -                  | -                   | -                 | 11.7429 |
| 2017 | 1.0636 | -                 | -                  | -                   | -                 | 2.3588 | -                 | -                  | -                   | -                 | 10.5229 |
| 2018 | 0.9069 | -                 | -                  | -                   | -                 | 2.0416 | -                 | -                  | -                   | -                 | 9.6970  |
| 2019 | 0.7863 | -                 | -                  | -                   | -                 | 1.7985 | -                 | -                  | -                   | -                 | 9.0623  |
| 2020 | 0.5270 | -                 | -                  | -                   | -                 | 1.2976 | -                 | -                  | -                   | -                 | 7.5546  |
| 2021 | 0.4260 | -                 | -                  | -                   | -                 | 1.1373 | -                 | -                  | -                   | -                 | 6.4922  |
| 2022 | 0.1785 | 0.1785            | 0.1785             | 0.1785              | 0.1785            | 0.6644 | 0.6644            | 0.6644             | 0.6644              | 0.6644            | 4.7102  |
| 2023 | 0.0441 | -                 | -                  | -                   | -                 | 0.4262 | -                 | -                  | -                   | -                 | 3.5373  |
| 2024 | 0.0423 | -                 | -                  | -                   | -                 | 0.4266 | -                 | -                  | -                   | -                 | 3.4943  |
| 2025 | 0.0406 | -                 | -                  | -                   | -                 | 0.4273 | -                 | -                  | -                   | -                 | 3.4600  |
| 2026 | 0.0391 | -                 | -                  | -                   | -                 | 0.4279 | -                 | -                  | -                   | -                 | 3.4290  |
| 2027 | 0.0378 | -                 | -                  | -                   | -                 | 0.4281 | -                 | -                  | -                   | -                 | 3.4003  |
| 2028 | 0.0367 | -                 | -                  | -                   | -                 | 0.4288 | -                 | -                  | -                   | -                 | 3.3809  |
| 2029 | 0.0359 | -                 | -                  | -                   | -                 | 0.4297 | -                 | -                  | -                   | -                 | 3.3699  |
| 2030 | 0.0351 | -                 | -                  | -                   | -                 | 0.4306 | -                 | -                  | -                   | -                 | 3.3633  |
| 2031 | 0.0345 | -                 | -                  | -                   | -                 | 0.4315 | -                 | -                  | -                   | -                 | 3.3580  |
| 2032 | 0.0339 | -                 | -                  | -                   | -                 | 0.4322 | -                 | -                  | -                   | -                 | 3.3517  |
| 2033 | 0.0334 | -                 | -                  | -                   | -                 | 0.4325 | -                 | -                  | -                   | -                 | 3.3446  |
| 2034 | 0.0330 | -                 | -                  | -                   | -                 | 0.4325 | -                 | -                  | -                   | -                 | 3.3345  |
| 2035 | 0.0326 | -                 | -                  | -                   | -                 | 0.4321 | -                 | -                  | -                   | -                 | 3.3228  |
| 2036 | 0.0323 | -                 | -                  | -                   | -                 | 0.4320 | -                 | -                  | -                   | -                 | 3.3141  |
| 2037 | 0.0321 | -                 | -                  | -                   | -                 | 0.4317 | -                 | -                  | -                   | -                 | 3.3050  |
| 2038 | 0.0319 | -                 | -                  | -                   | -                 | 0.4314 | -                 | -                  | -                   | -                 | 3.2967  |
| 2039 | 0.0317 | -                 | -                  | -                   | -                 | 0.4312 | -                 | -                  | -                   | -                 | 3.2899  |
| 2040 | 0.0315 | -                 | -                  | -                   | -                 | 0.4308 | -                 | -                  | -                   | -                 | 3.2821  |
| 2041 | 0.0314 | -                 | -                  | -                   | -                 | 0.4305 | -                 | -                  | -                   | -                 | 3.2754  |
| 2042 | 0.0313 | -                 | -                  | -                   | -                 | 0.4302 | -                 | -                  | -                   | -                 | 3.2703  |
| 2043 | 0.0312 | -                 | -                  | -                   | -                 | 0.4300 | -                 | -                  | -                   | -                 | 3.2653  |
| 2044 | 0.0311 | -                 | -                  | -                   | -                 | 0.4298 | -                 | -                  | -                   | -                 | 3.2610  |
| 2045 | 0.0310 | -                 | -                  | -                   | -                 | 0.4296 | -                 | -                  | -                   | -                 | 3.2578  |
| 2046 | 0.0309 | -                 | -                  | -                   | -                 | 0.4295 | -                 | -                  | -                   | -                 | 3.2551  |
| 2047 | 0.0309 | -                 | -                  | -                   | -                 | 0.4294 | -                 | -                  | -                   | -                 | 3.2533  |
| 2048 | 0.0309 | -                 | -                  | -                   | -                 | 0.4293 | -                 | -                  | -                   | -                 | 3.2519  |
| 2049 | 0.0309 | -                 | -                  | -                   | -                 | 0.4292 | -                 | -                  | -                   | -                 | 3.2510  |

|       |        |        |        |        |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2050  | 0.0308 |        |        |        |        | 0.4292 |        |        |        |        | 3.2504 |
| Total |        | 0.1785 | 0.1785 | 0.1785 | 0.1785 |        | 0.6644 | 0.6644 | 0.6644 | 0.6644 |        |

| Year  | ROG    | Weighted - Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted - Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx    |
|-------|--------|---------------------|--------------------|---------------------|-------------------|--------|---------------------|--------------------|---------------------|-------------------|--------|
| 2014  | 0.0055 | -                   | -                  | -                   | -                 | 0.5214 | -                   | -                  | -                   | -                 | 0.0236 |
| 2015  | 0.0055 | -                   | -                  | -                   | -                 | 0.5173 | -                   | -                  | -                   | -                 | 0.0237 |
| 2016  | 0.0055 | -                   | -                  | -                   | -                 | 0.5163 | -                   | -                  | -                   | -                 | 0.0238 |
| 2017  | 0.0056 | -                   | -                  | -                   | -                 | 0.5153 | -                   | -                  | -                   | -                 | 0.0239 |
| 2018  | 0.0056 | -                   | -                  | -                   | -                 | 0.5147 | -                   | -                  | -                   | -                 | 0.0239 |
| 2019  | 0.0055 | -                   | -                  | -                   | -                 | 0.5170 | -                   | -                  | -                   | -                 | 0.0236 |
| 2020  | 0.0054 | -                   | -                  | -                   | -                 | 0.5158 | -                   | -                  | -                   | -                 | 0.0232 |
| 2021  | 0.0052 | -                   | -                  | -                   | -                 | 0.5136 | -                   | -                  | -                   | -                 | 0.0226 |
| 2022  | 0.0051 | 0.0051              | 0.0051             | 0.0051              | 0.0051            | 0.5106 | 0.5106              | 0.5106             | 0.5106              | 0.5106            | 0.0220 |
| 2023  | 0.0049 | -                   | -                  | -                   | -                 | 0.5066 | -                   | -                  | -                   | -                 | 0.0213 |
| 2024  | 0.0047 | -                   | -                  | -                   | -                 | 0.5012 | -                   | -                  | -                   | -                 | 0.0205 |
| 2025  | 0.0044 | -                   | -                  | -                   | -                 | 0.4942 | -                   | -                  | -                   | -                 | 0.0199 |
| 2026  | 0.0042 | -                   | -                  | -                   | -                 | 0.4875 | -                   | -                  | -                   | -                 | 0.0193 |
| 2027  | 0.0040 | -                   | -                  | -                   | -                 | 0.4813 | -                   | -                  | -                   | -                 | 0.0188 |
| 2028  | 0.0038 | -                   | -                  | -                   | -                 | 0.4755 | -                   | -                  | -                   | -                 | 0.0184 |
| 2029  | 0.0036 | -                   | -                  | -                   | -                 | 0.4701 | -                   | -                  | -                   | -                 | 0.0181 |
| 2030  | 0.0035 | -                   | -                  | -                   | -                 | 0.4650 | -                   | -                  | -                   | -                 | 0.0178 |
| 2031  | 0.0033 | -                   | -                  | -                   | -                 | 0.4603 | -                   | -                  | -                   | -                 | 0.0175 |
| 2032  | 0.0032 | -                   | -                  | -                   | -                 | 0.4560 | -                   | -                  | -                   | -                 | 0.0174 |
| 2033  | 0.0030 | -                   | -                  | -                   | -                 | 0.4521 | -                   | -                  | -                   | -                 | 0.0172 |
| 2034  | 0.0029 | -                   | -                  | -                   | -                 | 0.4485 | -                   | -                  | -                   | -                 | 0.0171 |
| 2035  | 0.0028 | -                   | -                  | -                   | -                 | 0.4452 | -                   | -                  | -                   | -                 | 0.0171 |
| 2036  | 0.0027 | -                   | -                  | -                   | -                 | 0.4423 | -                   | -                  | -                   | -                 | 0.0170 |
| 2037  | 0.0026 | -                   | -                  | -                   | -                 | 0.4397 | -                   | -                  | -                   | -                 | 0.0170 |
| 2038  | 0.0026 | -                   | -                  | -                   | -                 | 0.4375 | -                   | -                  | -                   | -                 | 0.0171 |
| 2039  | 0.0025 | -                   | -                  | -                   | -                 | 0.4355 | -                   | -                  | -                   | -                 | 0.0171 |
| 2040  | 0.0024 | -                   | -                  | -                   | -                 | 0.4338 | -                   | -                  | -                   | -                 | 0.0171 |
| 2041  | 0.0024 |                     |                    |                     |                   | 0.4323 |                     |                    |                     |                   | 0.0171 |
| 2042  | 0.0024 |                     |                    |                     |                   | 0.4310 |                     |                    |                     |                   | 0.0172 |
| 2043  | 0.0023 |                     |                    |                     |                   | 0.4300 |                     |                    |                     |                   | 0.0172 |
| 2044  | 0.0023 |                     |                    |                     |                   | 0.4291 |                     |                    |                     |                   | 0.0173 |
| 2045  | 0.0023 |                     |                    |                     |                   | 0.4283 |                     |                    |                     |                   | 0.0173 |
| 2046  | 0.0023 |                     |                    |                     |                   | 0.4277 |                     |                    |                     |                   | 0.0173 |
| 2047  | 0.0023 |                     |                    |                     |                   | 0.4272 |                     |                    |                     |                   | 0.0174 |
| 2048  | 0.0022 |                     |                    |                     |                   | 0.4268 |                     |                    |                     |                   | 0.0174 |
| 2049  | 0.0022 |                     |                    |                     |                   | 0.4265 |                     |                    |                     |                   | 0.0174 |
| 2050  | 0.0022 |                     |                    |                     |                   | 0.4262 |                     |                    |                     |                   | 0.0174 |
| Total |        | 0.0051              | 0.0051             | 0.0051              | 0.0051            |        | 0.5106              | 0.5106             | 0.5106              | 0.5106            |        |

**Heavy-Heavy Duty Diesel Truck**

Water Truck Commute Emissions (EMFAC2017 - web 1.0.2, T7 Single Unit Construction Truck)

| Year | ROG    | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx    |
|------|--------|-------------------|--------------------|---------------------|-------------------|--------|-------------------|--------------------|---------------------|-------------------|--------|
| 2014 | 0.0583 | -                 | -                  | -                   | -                 | 0.4129 | -                 | -                  | -                   | -                 | 2.9101 |
| 2015 | 0.0529 | -                 | -                  | -                   | -                 | 0.4082 | -                 | -                  | -                   | -                 | 2.8491 |
| 2016 | 0.0508 | -                 | -                  | -                   | -                 | 0.4094 | -                 | -                  | -                   | -                 | 2.8549 |
| 2017 | 0.0476 | -                 | -                  | -                   | -                 | 0.4102 | -                 | -                  | -                   | -                 | 2.8769 |
| 2018 | 0.0457 | -                 | -                  | -                   | -                 | 0.4130 | -                 | -                  | -                   | -                 | 2.9175 |
| 2019 | 0.0444 | -                 | -                  | -                   | -                 | 0.4157 | -                 | -                  | -                   | -                 | 2.9546 |
| 2020 | 0.0425 | -                 | -                  | -                   | -                 | 0.4199 | -                 | -                  | -                   | -                 | 3.0272 |
| 2021 | 0.0418 | -                 | -                  | -                   | -                 | 0.4228 | -                 | -                  | -                   | -                 | 3.0635 |
| 2022 | 0.0402 | 0.0402            | 0.0402             | 0.0402              | 0.0402            | 0.4233 | 0.4233            | 0.4233             | 0.4233              | 0.4233            | 3.0792 |
| 2023 | 0.0291 | -                 | -                  | -                   | -                 | 0.4046 | -                 | -                  | -                   | -                 | 2.9826 |
| 2024 | 0.0294 | -                 | -                  | -                   | -                 | 0.4082 | -                 | -                  | -                   | -                 | 3.0228 |
| 2025 | 0.0296 | -                 | -                  | -                   | -                 | 0.4118 | -                 | -                  | -                   | -                 | 3.0634 |
| 2026 | 0.0298 | -                 | -                  | -                   | -                 | 0.4149 | -                 | -                  | -                   | -                 | 3.0980 |
| 2027 | 0.0300 | -                 | -                  | -                   | -                 | 0.4172 | -                 | -                  | -                   | -                 | 3.1232 |
| 2028 | 0.0302 | -                 | -                  | -                   | -                 | 0.4197 | -                 | -                  | -                   | -                 | 3.1503 |
| 2029 | 0.0303 | -                 | -                  | -                   | -                 | 0.4221 | -                 | -                  | -                   | -                 | 3.1777 |
| 2030 | 0.0305 | -                 | -                  | -                   | -                 | 0.4243 | -                 | -                  | -                   | -                 | 3.2028 |
| 2031 | 0.0306 | -                 | -                  | -                   | -                 | 0.4263 | -                 | -                  | -                   | -                 | 3.2255 |
| 2032 | 0.0307 | -                 | -                  | -                   | -                 | 0.4279 | -                 | -                  | -                   | -                 | 3.2430 |
| 2033 | 0.0308 | -                 | -                  | -                   | -                 | 0.4291 | -                 | -                  | -                   | -                 | 3.2559 |
| 2034 | 0.0309 | -                 | -                  | -                   | -                 | 0.4297 | -                 | -                  | -                   | -                 | 3.2619 |
| 2035 | 0.0309 | -                 | -                  | -                   | -                 | 0.4299 | -                 | -                  | -                   | -                 | 3.2635 |
| 2036 | 0.0309 | -                 | -                  | -                   | -                 | 0.4301 | -                 | -                  | -                   | -                 | 3.2652 |
| 2037 | 0.0309 | -                 | -                  | -                   | -                 | 0.4302 | -                 | -                  | -                   | -                 | 3.2648 |
| 2038 | 0.0309 | -                 | -                  | -                   | -                 | 0.4301 | -                 | -                  | -                   | -                 | 3.2639 |
| 2039 | 0.0309 | -                 | -                  | -                   | -                 | 0.4301 | -                 | -                  | -                   | -                 | 3.2635 |
| 2040 | 0.0309 | -                 | -                  | -                   | -                 | 0.4300 | -                 | -                  | -                   | -                 | 3.2612 |
| 2041 | 0.0309 |                   |                    |                     |                   | 0.4298 |                   |                    |                     |                   | 3.2588 |
| 2042 | 0.0309 |                   |                    |                     |                   | 0.4297 |                   |                    |                     |                   | 3.2571 |
| 2043 | 0.0308 |                   |                    |                     |                   | 0.4295 |                   |                    |                     |                   | 3.2551 |
| 2044 | 0.0308 |                   |                    |                     |                   | 0.4294 |                   |                    |                     |                   | 3.2535 |
| 2045 | 0.0308 |                   |                    |                     |                   | 0.4294 |                   |                    |                     |                   | 3.2526 |
| 2046 | 0.0308 |                   |                    |                     |                   | 0.4293 |                   |                    |                     |                   | 3.2514 |
| 2047 | 0.0308 |                   |                    |                     |                   | 0.4292 |                   |                    |                     |                   | 3.2507 |
| 2048 | 0.0308 |                   |                    |                     |                   | 0.4292 |                   |                    |                     |                   | 3.2500 |
| 2049 | 0.0308 |                   |                    |                     |                   | 0.4291 |                   |                    |                     |                   | 3.2496 |

|       |        |        |        |        |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2050  | 0.0308 |        |        |        |        | 0.4291 |        |        |        |        | 3.2496 |
| Total |        | 0.0402 | 0.0402 | 0.0402 | 0.0402 |        | 0.4233 | 0.4233 | 0.4233 | 0.4233 |        |



|    | B                    | C      | D          | E          | F          | G          | H      | I          | J          | K          | L          | M      |
|----|----------------------|--------|------------|------------|------------|------------|--------|------------|------------|------------|------------|--------|
| 5  | Emissions (g/bhp-hr) |        | ROG        | ROG        | ROG        | ROG        |        | CO         | CO         | CO         | CO         |        |
| 6  | Aerial Lifts         |        | Weighted - | Weighted - | Weighted - | Weighted - |        | Weighted - | Weighted - | Weighted - | Weighted - |        |
| 7  |                      | ROG    | Grubbing   | Grading    | Drainage   | Paving     | CO     | Grubbing   | Grading    | Drainage   | Paving     | NOx    |
| 8  | 2014                 | 0.2023 | -          | -          | -          | -          | 3.2195 | -          | -          | -          | -          | 3.3728 |
| 9  | 2015                 | 0.1906 | -          | -          | -          | -          | 3.2178 | -          | -          | -          | -          | 3.1134 |
| 10 | 2016                 | 0.1655 | -          | -          | -          | -          | 3.2010 | -          | -          | -          | -          | 2.7222 |
| 11 | 2017                 | 0.1427 | -          | -          | -          | -          | 3.1843 | -          | -          | -          | -          | 2.3637 |
| 12 | 2018                 | 0.1219 | -          | -          | -          | -          | 3.1669 | -          | -          | -          | -          | 2.0636 |
| 13 | 2019                 | 0.1182 | -          | -          | -          | -          | 3.1725 | -          | -          | -          | -          | 1.9766 |
| 14 | 2020                 | 0.1149 | -          | -          | -          | -          | 3.1768 | -          | -          | -          | -          | 1.8686 |
| 15 | 2021                 | 0.1088 | -          | -          | -          | -          | 3.1762 | -          | -          | -          | -          | 1.7437 |
| 16 | 2022                 | 0.1047 | 0.1047     | 0.1047     | 0.1047     | 0.1047     | 3.1760 | 3.1760     | 3.1760     | 3.1760     | 3.1760     | 1.6266 |
| 17 | 2023                 | 0.1005 | -          | -          | -          | -          | 3.1703 | -          | -          | -          | -          | 1.5481 |
| 18 | 2024                 | 0.1005 | -          | -          | -          | -          | 3.1726 | -          | -          | -          | -          | 1.5279 |
| 19 | 2025                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 20 | 2026                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 21 | 2027                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 22 | 2028                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 23 | 2029                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 24 | 2030                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 25 | 2031                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 26 | 2032                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 27 | 2033                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 28 | 2034                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 29 | 2035                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 30 | 2036                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 31 | 2037                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 32 | 2038                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 33 | 2039                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 34 | 2040                 | 0.1610 | -          | -          | -          | -          | 3.3440 | -          | -          | -          | -          | 1.4070 |
| 35 | Aerial Lifts Total   |        | 0.1047     | 0.1047     | 0.1047     | 0.1047     |        | 3.1760     | 3.1760     | 3.1760     | 3.1760     |        |

|    | N          | O         | P          | Q          | R      | S          | T          | U          | V          |
|----|------------|-----------|------------|------------|--------|------------|------------|------------|------------|
| 5  | NOx        | NOx       | NOx        | NOx        |        | PM10       | PM10       | PM10       | PM10       |
| 6  | Weighted   | Weighted  | Weighted   | Weighted - |        | Weighted - | Weighted - | Weighted - | Weighted - |
| 7  | - Grubbing | - Grading | - Drainage | Paving     | PM10   | Grubbing   | Grading    | Drainage   | Paving     |
| 8  | -          | -         | -          | -          | 0.1608 | -          | -          | -          | -          |
| 9  | -          | -         | -          | -          | 0.1431 | -          | -          | -          | -          |
| 10 | -          | -         | -          | -          | 0.1119 | -          | -          | -          | -          |
| 11 | -          | -         | -          | -          | 0.0834 | -          | -          | -          | -          |
| 12 | -          | -         | -          | -          | 0.0571 | -          | -          | -          | -          |
| 13 | -          | -         | -          | -          | 0.0485 | -          | -          | -          | -          |
| 14 | -          | -         | -          | -          | 0.0416 | -          | -          | -          | -          |
| 15 | -          | -         | -          | -          | 0.0333 | -          | -          | -          | -          |
| 16 | 1.6266     | 1.6266    | 1.6266     | 1.6266     | 0.0302 | 0.0302     | 0.0302     | 0.0302     | 0.0302     |
| 17 | -          | -         | -          | -          | 0.0267 | -          | -          | -          | -          |
| 18 | -          | -         | -          | -          | 0.0265 | -          | -          | -          | -          |
| 19 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 20 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 21 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 22 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 23 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 24 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 25 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 26 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 27 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 28 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 29 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 30 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 31 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 32 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 33 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 34 | -          | -         | -          | -          | 0.0120 | -          | -          | -          | -          |
| 35 | 1.6266     | 1.6266    | 1.6266     | 1.6266     |        | 0.0302     | 0.0302     | 0.0302     | 0.0302     |

### Off-road Equipment Tier 4 Emission Factors

| HP Bin |         | Emission Factor (g/bhp-hr) |      |      |      |       |
|--------|---------|----------------------------|------|------|------|-------|
| Low HP | High HP | ROG                        | CO   | NOx  | PM10 | PM2.5 |
| 0      | 11      | 0.30                       | 6.00 | 5.32 | 0.30 | 0.28  |
| 11     | 25      | 0.30                       | 4.90 | 5.32 | 0.30 | 0.28  |
| 25     | 50      | 0.19                       | 4.10 | 3.33 | 0.02 | 0.02  |
| 50     | 75      | 0.19                       | 3.70 | 3.33 | 0.02 | 0.02  |
| 75     | 100     | 0.15                       | 3.70 | 0.30 | 0.02 | 0.01  |
| 100    | 175     | 0.15                       | 3.70 | 0.30 | 0.02 | 0.01  |
| 175    | 300     | 0.15                       | 2.60 | 0.30 | 0.02 | 0.01  |
| 300    | 600     | 0.15                       | 2.60 | 0.30 | 0.02 | 0.01  |
| 600    | 750     | 0.15                       | 2.60 | 0.30 | 0.02 | 0.01  |
| 750    | 1200    | 0.15                       | 2.60 | 2.60 | 0.03 | 0.03  |
| 1200   | 9999    | 0.15                       | 2.60 | 2.60 | 0.03 | 0.03  |

92  
95  
1.07

**Note:**

1. Tier 4 Emission Factors are converted from EPA Non-road Diesel Engine Standards. Available at [www.epa.gov](http://www.epa.gov)
2. Assume PM2.5 is 92% of PM10.

% of PM2.5 in PM10 (from CEIDARS)

% of NOx in NMHC+NOx (from [http://www.arb.ca.gov/msprog/moyer/guidelines/2005\\_Carl\\_Moyer\\_Guidelir](http://www.arb.ca.gov/msprog/moyer/guidelines/2005_Carl_Moyer_Guidelir)  
VOC/NMHC

[www.arb.ca.gov/msprog/ordiesel/documents/Off-Road\\_Diesel\\_Std.xls](http://www.arb.ca.gov/msprog/ordiesel/documents/Off-Road_Diesel_Std.xls)

nes\_Part4.pdf)

**Default Horsepower and Load Factor**

| <b>OFFROAD Equipment Type</b>      | <b>Horsepower</b> | <b>Load Factor</b> |
|------------------------------------|-------------------|--------------------|
| Aerial Lifts                       | 63                | 0.31               |
| Air Compressors                    | 78                | 0.48               |
| Bore/Drill Rigs                    | 221               | 0.5                |
| Cement and Mortar Mixers           | 9                 | 0.56               |
| Concrete/Industrial Saws           | 81                | 0.73               |
| Cranes                             | 231               | 0.29               |
| Crawler Tractors                   | 212               | 0.43               |
| Crushing/Proc. Equipment           | 85                | 0.78               |
| Excavators                         | 158               | 0.38               |
| Forklifts                          | 89                | 0.2                |
| Generator Sets                     | 84                | 0.74               |
| Graders                            | 187               | 0.41               |
| Off-Highway Tractors               | 124               | 0.44               |
| Off-Highway Trucks                 | 402               | 0.38               |
| Other Construction Equipment       | 172               | 0.42               |
| Other General Industrial Equipment | 88                | 0.34               |
| Other Material Handling Equipment  | 168               | 0.4                |
| Pavers                             | 130               | 0.42               |
| Paving Equipment                   | 132               | 0.36               |
| Plate Compactors                   | 8                 | 0.43               |
| Pressure Washers                   | 13                | 0.3                |
| Pumps                              | 84                | 0.74               |
| Rollers                            | 80                | 0.38               |
| Rough Terrain Forklifts            | 100               | 0.4                |
| Rubber Tired Dozers                | 247               | 0.4                |
| Rubber Tired Loaders               | 203               | 0.36               |
| Scrapers                           | 367               | 0.48               |
| Signal Boards                      | 6                 | 0.82               |
| Skid Steer Loaders                 | 65                | 0.37               |
| Surfacing Equipment                | 263               | 0.3                |
| Sweepers/Scrubbers                 | 64                | 0.46               |
| Tractors/Loaders/Backhoes          | 97                | 0.37               |
| Trenchers                          | 78                | 0.5                |
| Welders                            | 46                | 0.45               |
|                                    |                   |                    |

Default Horsepower and Load Factor from CalEEMod2016 Appendix D: Table 3.3













































## Sacramento Valley Air Basin Fleet Average Emission Factors (Diesel)

2014

| 2014            |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-----------------|-------|---------|---------|---------|---------|
| Equipment       | MaxHP | ROG     | CO      | NOX     | SOX     |
| Aerial Lifts    | 15    | 0.261   | 3.233   | 4.096   | 0.005   |
| Aerial Lifts    | 25    | 0.261   | 3.233   | 4.096   | 0.005   |
| Aerial Lifts    | 50    | 0.261   | 3.233   | 4.096   | 0.005   |
| Aerial Lifts    | 120   | 0.202   | 3.220   | 3.373   | 0.005   |
| Aerial Lifts    | 500   | 0.236   | 0.983   | 4.602   | 0.005   |
| Aerial Lifts    | 750   | 0.299   | 1.178   | 3.761   | 0.005   |
| Air Compressors |       |         |         |         |         |
|                 | 15    | 0.891   | 3.723   | 5.445   | 0.008   |
| Air Compressors |       |         |         |         |         |
|                 | 25    | 0.960   | 2.780   | 5.000   | 0.007   |
| Air Compressors |       |         |         |         |         |
|                 | 50    | 2.076   | 6.181   | 5.421   | 0.007   |
| Air Compressors |       |         |         |         |         |
|                 | 120   | 0.901   | 3.880   | 5.608   | 0.006   |
| Air Compressors |       |         |         |         |         |
|                 | 175   | 0.621   | 3.227   | 4.973   | 0.006   |
| Air Compressors |       |         |         |         |         |
|                 | 250   | 0.405   | 1.237   | 4.399   | 0.006   |
| Air Compressors |       |         |         |         |         |
|                 | 500   | 0.373   | 1.249   | 3.855   | 0.005   |
| Air Compressors |       |         |         |         |         |
|                 | 750   | 0.378   | 1.249   | 3.991   | 0.005   |
| Air Compressors |       |         |         |         |         |
|                 | 1000  | 0.445   | 1.493   | 5.512   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 15    | 0.834   | 4.691   | 5.332   | 0.006   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 25    | 0.834   | 4.691   | 5.332   | 0.006   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 50    | 0.834   | 4.691   | 5.332   | 0.006   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 120   | 0.319   | 3.327   | 4.195   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 175   | 0.308   | 3.040   | 4.066   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 250   | 0.217   | 1.174   | 3.525   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 500   | 0.202   | 1.239   | 3.186   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 750   | 0.157   | 1.087   | 2.373   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 1000  | 0.105   | 0.951   | 2.984   | 0.005   |

|                          |      |       |       |        |       |
|--------------------------|------|-------|-------|--------|-------|
| Cement and Mortar Mixers | 15   | 0.666 | 3.469 | 4.191  | 0.008 |
| Cement and Mortar Mixers | 25   | 0.837 | 2.570 | 4.793  | 0.007 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332  | 0.007 |
| Concrete/Industrial Saws | 50   | 1.626 | 5.313 | 5.172  | 0.007 |
| Concrete/Industrial Saws | 120  | 0.749 | 3.675 | 5.160  | 0.006 |
| Concrete/Industrial Saws | 175  | 0.517 | 3.080 | 4.531  | 0.006 |
| Cranes                   | 50   | 2.115 | 7.126 | 6.093  | 0.005 |
| Cranes                   | 120  | 1.245 | 4.923 | 10.302 | 0.005 |
| Cranes                   | 175  | 0.793 | 3.932 | 8.471  | 0.005 |
| Cranes                   | 250  | 0.661 | 2.726 | 7.860  | 0.005 |
| Cranes                   | 500  | 0.483 | 4.177 | 6.264  | 0.005 |
| Cranes                   | 750  | 0.280 | 1.635 | 4.327  | 0.005 |
| Cranes                   | 9999 | 0.120 | 0.948 | 2.281  | 0.005 |
| Crawler Tractors         | 50   | 2.521 | 8.047 | 6.396  | 0.005 |
| Crawler Tractors         | 120  | 0.884 | 4.168 | 7.524  | 0.005 |
| Crawler Tractors         | 175  | 0.629 | 3.459 | 6.875  | 0.005 |
| Crawler Tractors         | 250  | 0.454 | 1.838 | 6.238  | 0.005 |
| Crawler Tractors         | 500  | 0.412 | 2.911 | 5.616  | 0.005 |
| Crawler Tractors         | 750  | 0.347 | 1.675 | 4.895  | 0.005 |
| Crawler Tractors         | 1000 | 0.475 | 2.080 | 7.426  | 0.005 |
| Crushing/Proc. Equipment | 50   | 2.012 | 6.212 | 5.399  | 0.007 |
| Crushing/Proc. Equipment | 120  | 0.877 | 3.898 | 5.468  | 0.006 |
| Crushing/Proc. Equipment | 175  | 0.612 | 3.256 | 4.823  | 0.006 |
| Crushing/Proc. Equipment | 250  | 0.405 | 1.228 | 4.239  | 0.006 |
| Crushing/Proc. Equipment | 500  | 0.377 | 1.230 | 3.702  | 0.005 |
| Crushing/Proc. Equipment | 750  | 0.378 | 1.218 | 3.844  | 0.005 |
| Crushing/Proc. Equipment | 9999 | 0.456 | 1.460 | 5.391  | 0.005 |

|                      |      |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|
| Dumpers/Tenders      | 25   | 0.705 | 2.364 | 4.433 | 0.007 |
| Excavators           | 25   | 0.825 | 4.844 | 4.965 | 0.005 |
| Excavators           | 50   | 0.825 | 4.844 | 4.965 | 0.005 |
| Excavators           | 120  | 0.513 | 3.663 | 5.131 | 0.005 |
| Excavators           | 175  | 0.390 | 3.154 | 4.657 | 0.005 |
| Excavators           | 250  | 0.294 | 1.346 | 4.374 | 0.005 |
| Excavators           | 500  | 0.233 | 1.327 | 3.353 | 0.005 |
| Excavators           | 750  | 0.239 | 1.347 | 3.541 | 0.005 |
| Forklifts            | 50   | 2.114 | 7.321 | 6.006 | 0.005 |
| Forklifts            | 120  | 0.795 | 4.079 | 6.848 | 0.005 |
| Forklifts            | 175  | 0.578 | 3.521 | 6.352 | 0.005 |
| Forklifts            | 250  | 0.615 | 2.501 | 7.276 | 0.005 |
| Forklifts            | 500  | 0.541 | 4.252 | 6.353 | 0.005 |
| Generator Sets       | 15   | 0.783 | 3.723 | 5.369 | 0.008 |
| Generator Sets       | 25   | 0.821 | 2.780 | 5.000 | 0.007 |
| Generator Sets       | 50   | 1.427 | 4.683 | 5.048 | 0.007 |
| Generator Sets       | 120  | 0.721 | 3.532 | 5.147 | 0.006 |
| Generator Sets       | 175  | 0.486 | 2.945 | 4.565 | 0.006 |
| Generator Sets       | 250  | 0.311 | 1.130 | 4.025 | 0.006 |
| Generator Sets       | 500  | 0.279 | 1.157 | 3.603 | 0.005 |
| Generator Sets       | 750  | 0.289 | 1.157 | 3.724 | 0.005 |
| Generator Sets       | 9999 | 0.389 | 1.377 | 5.150 | 0.005 |
| Graders              | 50   | 3.094 | 9.065 | 6.550 | 0.005 |
| Graders              | 120  | 1.269 | 4.920 | 9.986 | 0.005 |
| Graders              | 175  | 0.847 | 3.951 | 8.702 | 0.005 |
| Graders              | 250  | 0.390 | 1.462 | 5.740 | 0.005 |
| Graders              | 500  | 0.314 | 1.791 | 3.714 | 0.005 |
| Graders              | 750  | 0.437 | 1.483 | 3.876 | 0.005 |
| Off-Highway Tractors | 120  | 0.698 | 3.972 | 6.281 | 0.005 |
| Off-Highway Tractors | 175  | 0.424 | 3.265 | 5.025 | 0.005 |
| Off-Highway Tractors | 250  | 0.405 | 1.628 | 5.661 | 0.005 |
| Off-Highway Tractors | 750  | 0.267 | 1.334 | 4.007 | 0.005 |
| Off-Highway Tractors | 1000 | 0.085 | 0.947 | 2.279 | 0.005 |
| Off-Highway Trucks   | 175  | 0.513 | 3.473 | 5.219 | 0.005 |
| Off-Highway Trucks   | 250  | 0.483 | 1.932 | 5.441 | 0.005 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.393 | 2.075 | 4.686 | 0.005 |
| Off-Highway Trucks                 | 750  | 0.485 | 2.953 | 5.578 | 0.005 |
| Off-Highway Trucks                 | 1000 | 0.415 | 1.779 | 6.365 | 0.005 |
| Other Construction Equipment       | 15   | 1.301 | 5.602 | 5.565 | 0.005 |
| Other Construction Equipment       | 25   | 1.301 | 5.602 | 5.565 | 0.005 |
| Other Construction Equipment       | 50   | 1.301 | 5.602 | 5.565 | 0.005 |
| Other Construction Equipment       | 120  | 0.729 | 3.906 | 6.633 | 0.005 |
| Other Construction Equipment       | 175  | 0.567 | 3.385 | 6.372 | 0.005 |
| Other Construction Equipment       | 500  | 0.330 | 2.476 | 4.561 | 0.005 |
| Other General Industrial Equipment | 15   | 1.521 | 6.288 | 5.584 | 0.005 |
| Other General Industrial Equipment | 25   | 1.521 | 6.288 | 5.584 | 0.005 |
| Other General Industrial Equipment | 50   | 1.521 | 6.288 | 5.584 | 0.005 |
| Other General Industrial Equipment | 120  | 0.789 | 4.090 | 6.723 | 0.005 |
| Other General Industrial Equipment | 175  | 0.523 | 3.469 | 5.792 | 0.005 |
| Other General Industrial Equipment | 250  | 0.488 | 2.054 | 6.153 | 0.005 |
| Other General Industrial Equipment | 500  | 0.355 | 2.499 | 4.565 | 0.005 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.256 | 1.489 | 3.622 | 0.005 |
| Other General Industrial Equipment | 1000 | 0.346 | 1.080 | 6.379 | 0.005 |
| Other Material Handling Equipment  | 50   | 1.695 | 6.590 | 5.751 | 0.005 |
| Other Material Handling Equipment  | 120  | 0.558 | 3.779 | 5.372 | 0.005 |
| Other Material Handling Equipment  | 175  | 0.528 | 3.431 | 5.798 | 0.005 |
| Other Material Handling Equipment  | 250  | 0.475 | 1.936 | 6.173 | 0.005 |
| Other Material Handling Equipment  | 500  | 0.331 | 1.927 | 4.357 | 0.005 |
| Other Material Handling Equipment  | 9999 | 0.141 | 0.978 | 3.436 | 0.005 |
| Pavers                             | 25   | 1.898 | 6.381 | 5.717 | 0.005 |
| Pavers                             | 50   | 1.898 | 6.381 | 5.717 | 0.005 |
| Pavers                             | 120  | 0.683 | 3.773 | 6.199 | 0.005 |
| Pavers                             | 175  | 0.502 | 3.115 | 5.736 | 0.005 |
| Pavers                             | 250  | 0.208 | 1.023 | 4.140 | 0.005 |
| Pavers                             | 500  | 0.180 | 1.005 | 3.047 | 0.005 |
| Paving Equipment                   | 25   | 1.053 | 4.952 | 5.184 | 0.005 |
| Paving Equipment                   | 50   | 1.053 | 4.952 | 5.184 | 0.005 |
| Paving Equipment                   | 120  | 0.677 | 3.837 | 6.370 | 0.005 |
| Paving Equipment                   | 175  | 0.415 | 3.097 | 5.216 | 0.005 |
| Paving Equipment                   | 250  | 0.310 | 1.370 | 4.782 | 0.005 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Pressure Washers                   | 15   | 0.783 | 3.723 | 5.369 | 0.008 |
| Pressure Washers                   | 25   | 0.821 | 2.780 | 5.000 | 0.007 |
| Pressure Washers                   | 50   | 1.096 | 3.951 | 4.873 | 0.007 |
| Pressure Washers                   | 120  | 0.634 | 3.367 | 4.912 | 0.006 |
| Pressure Washers                   | 175  | 0.469 | 2.923 | 4.513 | 0.006 |

|                         |      |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.137 | 0.986 | 1.047 | 0.006 |
| Pumps                   | 15   | 0.891 | 3.723 | 5.445 | 0.008 |
| Pumps                   | 25   | 0.960 | 2.780 | 5.000 | 0.007 |
| Pumps                   | 50   | 1.538 | 4.929 | 5.107 | 0.007 |
| Pumps                   | 120  | 0.751 | 3.587 | 5.226 | 0.006 |
| Pumps                   | 175  | 0.508 | 2.989 | 4.635 | 0.006 |
| Pumps                   | 250  | 0.326 | 1.149 | 4.090 | 0.006 |
| Pumps                   | 500  | 0.294 | 1.181 | 3.648 | 0.005 |
| Pumps                   | 750  | 0.303 | 1.181 | 3.770 | 0.005 |
| Pumps                   | 9999 | 0.399 | 1.406 | 5.210 | 0.005 |
| Rollers                 | 15   | 1.308 | 5.243 | 5.393 | 0.005 |
| Rollers                 | 25   | 1.308 | 5.243 | 5.393 | 0.005 |
| Rollers                 | 50   | 1.308 | 5.243 | 5.393 | 0.005 |
| Rollers                 | 120  | 0.695 | 3.809 | 6.390 | 0.005 |
| Rollers                 | 175  | 0.368 | 2.998 | 4.724 | 0.005 |
| Rollers                 | 250  | 0.381 | 1.760 | 5.403 | 0.005 |
| Rollers                 | 500  | 0.378 | 3.318 | 5.183 | 0.005 |
| Rough Terrain Forklifts | 50   | 1.182 | 4.887 | 5.226 | 0.005 |
| Rough Terrain Forklifts | 120  | 0.351 | 3.367 | 4.467 | 0.005 |
| Rough Terrain Forklifts | 175  | 0.221 | 2.852 | 3.594 | 0.005 |
| Rough Terrain Forklifts | 250  | 0.186 | 1.212 | 2.984 | 0.005 |
| Rough Terrain Forklifts | 500  | 0.170 | 0.954 | 3.500 | 0.005 |
| Rubber Tired Dozers     | 175  | 0.961 | 4.226 | 9.834 | 0.005 |
| Rubber Tired Dozers     | 250  | 0.721 | 2.712 | 7.972 | 0.005 |
| Rubber Tired Dozers     | 500  | 0.707 | 6.165 | 8.058 | 0.005 |
| Rubber Tired Dozers     | 750  | 0.513 | 2.756 | 7.147 | 0.005 |
| Rubber Tired Dozers     | 1000 | 0.691 | 3.096 | 6.849 | 0.005 |
| Rubber Tired Loaders    | 25   | 2.115 | 7.770 | 6.103 | 0.005 |
| Rubber Tired Loaders    | 50   | 2.115 | 7.770 | 6.103 | 0.005 |
| Rubber Tired Loaders    | 120  | 0.868 | 4.268 | 7.129 | 0.005 |
| Rubber Tired Loaders    | 175  | 0.605 | 3.585 | 6.272 | 0.005 |

|                               |      |       |       |       |       |
|-------------------------------|------|-------|-------|-------|-------|
| Rubber Tired Loaders          | 250  | 0.407 | 1.486 | 5.495 | 0.005 |
| Rubber Tired Loaders          | 500  | 0.421 | 2.407 | 5.194 | 0.005 |
| Rubber Tired Loaders          | 750  | 0.406 | 1.946 | 4.810 | 0.005 |
| Rubber Tired Loaders          | 1000 | 0.414 | 1.457 | 6.692 | 0.005 |
| Scrapers                      | 120  | 0.719 | 4.100 | 7.065 | 0.005 |
| Scrapers                      | 175  | 0.718 | 3.807 | 7.907 | 0.005 |
| Scrapers                      | 250  | 0.742 | 3.061 | 8.815 | 0.005 |
| Scrapers                      | 500  | 0.479 | 3.898 | 6.233 | 0.005 |
| Scrapers                      | 750  | 0.369 | 2.846 | 5.012 | 0.005 |
| Signal Boards                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Signal Boards                 | 50   | 1.625 | 5.231 | 5.139 | 0.007 |
| Signal Boards                 | 120  | 0.759 | 3.658 | 5.186 | 0.006 |
| Signal Boards                 | 175  | 0.520 | 3.058 | 4.582 | 0.006 |
| Signal Boards                 | 250  | 0.408 | 1.402 | 4.857 | 0.007 |
| Skid Steer Loaders            | 25   | 0.664 | 4.016 | 4.541 | 0.005 |
| Skid Steer Loaders            | 50   | 0.664 | 4.016 | 4.541 | 0.005 |
| Skid Steer Loaders            | 120  | 0.304 | 3.338 | 4.013 | 0.005 |
| Surfacing Equipment           | 50   | 1.141 | 4.877 | 5.425 | 0.006 |
| Surfacing Equipment           | 120  | 0.559 | 3.580 | 5.520 | 0.005 |
| Surfacing Equipment           | 175  | 0.472 | 3.012 | 5.711 | 0.005 |
| Surfacing Equipment           | 250  | 0.306 | 1.434 | 5.102 | 0.005 |
| Surfacing Equipment           | 500  | 0.237 | 1.501 | 3.895 | 0.005 |
| Surfacing Equipment           | 750  | 0.174 | 1.020 | 3.284 | 0.005 |
| Sweepers/Scrubbers            | 15   | 1.767 | 6.592 | 5.752 | 0.005 |
| Sweepers/Scrubbers            | 25   | 1.767 | 6.592 | 5.752 | 0.005 |
| Sweepers/Scrubbers            | 50   | 1.767 | 6.592 | 5.752 | 0.005 |
| Sweepers/Scrubbers            | 120  | 0.833 | 4.071 | 6.934 | 0.005 |
| Sweepers/Scrubbers            | 175  | 0.875 | 4.042 | 9.108 | 0.005 |
| Sweepers/Scrubbers            | 250  | 0.505 | 2.066 | 6.704 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 25   | 1.336 | 5.772 | 5.369 | 0.005 |



|                               |      |       |       |       |       |
|-------------------------------|------|-------|-------|-------|-------|
| Tractors/Loaders/Bac<br>khoes | 50   | 1.336 | 5.772 | 5.369 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 120  | 0.582 | 3.827 | 5.581 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 175  | 0.423 | 3.239 | 4.938 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 250  | 0.327 | 1.376 | 4.922 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 500  | 0.312 | 1.878 | 4.488 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 750  | 0.305 | 1.833 | 4.243 | 0.005 |
| Trenchers                     | 15   | 1.268 | 5.293 | 5.455 | 0.005 |
| Trenchers                     | 25   | 1.268 | 5.293 | 5.455 | 0.005 |
| Trenchers                     | 50   | 1.268 | 5.293 | 5.455 | 0.005 |
| Trenchers                     | 120  | 0.818 | 3.999 | 7.217 | 0.005 |
| Trenchers                     | 175  | 0.693 | 3.668 | 7.699 | 0.005 |
| Trenchers                     | 250  | 0.497 | 2.070 | 6.484 | 0.005 |
| Trenchers                     | 500  | 0.306 | 2.035 | 4.370 | 0.005 |
| Trenchers                     | 750  | 0.118 | 0.964 | 1.825 | 0.005 |
| Welders                       | 15   | 0.891 | 3.723 | 5.445 | 0.008 |
| Welders                       | 25   | 0.960 | 2.780 | 5.000 | 0.007 |
| Welders                       | 50   | 1.900 | 5.749 | 5.308 | 0.007 |
| Welders                       | 120  | 0.849 | 3.774 | 5.481 | 0.006 |
| Welders                       | 175  | 0.581 | 3.141 | 4.862 | 0.006 |
| Welders                       | 250  | 0.376 | 1.207 | 4.297 | 0.006 |
| Welders                       | 500  | 0.343 | 1.227 | 3.788 | 0.005 |
| Water Trucks                  | 175  | 0.513 | 3.473 | 5.219 | 0.005 |
| Water Trucks                  | 250  | 0.483 | 1.932 | 5.441 | 0.005 |
| Water Trucks                  | 500  | 0.393 | 2.075 | 4.686 | 0.005 |
| Water Trucks                  | 750  | 0.485 | 2.953 | 5.578 | 0.005 |
| Water Trucks                  | 1000 | 0.415 | 1.779 | 6.365 | 0.005 |

2015

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|
| PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.158   | 0.145   | 574.665 | 0.170   | 0.005   |
| 0.158   | 0.145   | 574.665 | 0.170   | 0.005   |
| 0.158   | 0.145   | 574.665 | 0.170   | 0.005   |
| 0.161   | 0.148   | 516.703 | 0.153   | 0.004   |
| 0.101   | 0.093   | 516.638 | 0.153   | 0.004   |
| 0.109   | 0.109   | 568.299 | 0.027   | 0.004   |
| 0.341   | 0.341   | 568.300 | 0.080   | 0.005   |
| 0.291   | 0.291   | 568.299 | 0.086   | 0.005   |
| 0.505   | 0.505   | 568.299 | 0.187   | 0.005   |
| 0.495   | 0.495   | 568.299 | 0.081   | 0.004   |
| 0.272   | 0.272   | 568.299 | 0.056   | 0.004   |
| 0.134   | 0.134   | 568.299 | 0.036   | 0.004   |
| 0.125   | 0.125   | 568.299 | 0.033   | 0.004   |
| 0.128   | 0.128   | 568.299 | 0.034   | 0.004   |
| 0.157   | 0.157   | 568.300 | 0.040   | 0.004   |
| 0.382   | 0.351   | 591.442 | 0.175   | 0.005   |
| 0.382   | 0.351   | 591.442 | 0.175   | 0.005   |
| 0.382   | 0.351   | 591.442 | 0.175   | 0.005   |
| 0.249   | 0.229   | 501.365 | 0.148   | 0.004   |
| 0.186   | 0.171   | 524.052 | 0.155   | 0.004   |
| 0.105   | 0.097   | 512.336 | 0.151   | 0.004   |
| 0.101   | 0.093   | 506.154 | 0.150   | 0.004   |
| 0.081   | 0.074   | 525.240 | 0.155   | 0.004   |
| 0.058   | 0.054   | 516.600 | 0.153   | 0.004   |

| 2015            |       | g/hp/hr |
|-----------------|-------|---------|
| Equipment       | MaxHP | ROG     |
| Aerial Lifts    | 15    | 0.248   |
| Aerial Lifts    | 25    | 0.248   |
| Aerial Lifts    | 50    | 0.248   |
| Aerial Lifts    | 120   | 0.191   |
| Aerial Lifts    | 500   | 0.239   |
| Aerial Lifts    | 750   | 0.278   |
| Air Compressors | 15    | 0.840   |
| Air Compressors | 25    | 0.894   |
| Air Compressors | 50    | 1.868   |
| Air Compressors | 120   | 0.821   |
| Air Compressors | 175   | 0.571   |
| Air Compressors | 250   | 0.381   |
| Air Compressors | 500   | 0.354   |
| Air Compressors | 750   | 0.358   |
| Air Compressors | 1000  | 0.409   |
| Bore/Drill Rigs | 15    | 0.847   |
| Bore/Drill Rigs | 25    | 0.847   |
| Bore/Drill Rigs | 50    | 0.847   |
| Bore/Drill Rigs | 120   | 0.318   |
| Bore/Drill Rigs | 175   | 0.302   |
| Bore/Drill Rigs | 250   | 0.213   |
| Bore/Drill Rigs | 500   | 0.199   |
| Bore/Drill Rigs | 750   | 0.162   |
| Bore/Drill Rigs | 1000  | 0.109   |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.177 | 0.177 | 568.299 | 0.060 | 0.005 |
| 0.253 | 0.253 | 568.299 | 0.075 | 0.005 |
| 0.164 | 0.164 | 568.299 | 0.061 | 0.005 |
| 0.424 | 0.424 | 568.299 | 0.146 | 0.005 |
| 0.412 | 0.412 | 568.299 | 0.067 | 0.004 |
| 0.228 | 0.228 | 568.299 | 0.046 | 0.004 |
| 0.607 | 0.559 | 567.006 | 0.168 | 0.005 |
| 0.765 | 0.704 | 514.029 | 0.152 | 0.004 |
| 0.457 | 0.421 | 519.511 | 0.154 | 0.004 |
| 0.360 | 0.331 | 517.683 | 0.153 | 0.004 |
| 0.260 | 0.239 | 516.578 | 0.153 | 0.004 |
| 0.151 | 0.139 | 515.607 | 0.152 | 0.004 |
| 0.054 | 0.050 | 516.638 | 0.153 | 0.004 |
| 0.743 | 0.684 | 564.564 | 0.167 | 0.005 |
| 0.629 | 0.578 | 522.119 | 0.154 | 0.004 |
| 0.374 | 0.344 | 516.404 | 0.153 | 0.004 |
| 0.241 | 0.222 | 518.036 | 0.153 | 0.004 |
| 0.217 | 0.200 | 520.515 | 0.154 | 0.004 |
| 0.179 | 0.164 | 517.861 | 0.153 | 0.004 |
| 0.218 | 0.201 | 520.005 | 0.154 | 0.004 |
| 0.494 | 0.494 | 568.299 | 0.181 | 0.005 |
| 0.481 | 0.481 | 568.299 | 0.079 | 0.004 |
| 0.265 | 0.265 | 568.299 | 0.055 | 0.004 |
| 0.130 | 0.130 | 568.299 | 0.036 | 0.004 |
| 0.121 | 0.121 | 568.299 | 0.034 | 0.004 |
| 0.123 | 0.123 | 568.299 | 0.034 | 0.004 |
| 0.155 | 0.155 | 568.299 | 0.041 | 0.004 |

|                          |      |       |
|--------------------------|------|-------|
| Cement and Mortar Mixers | 15   | 0.663 |
| Cement and Mortar Mixers | 25   | 0.811 |
| Concrete/Industrial Saws | 25   | 0.685 |
| Concrete/Industrial Saws | 50   | 1.470 |
| Concrete/Industrial Saws | 120  | 0.683 |
| Concrete/Industrial Saws | 175  | 0.475 |
| Cranes                   | 50   | 2.087 |
| Cranes                   | 120  | 1.214 |
| Cranes                   | 175  | 0.782 |
| Cranes                   | 250  | 0.642 |
| Cranes                   | 500  | 0.475 |
| Cranes                   | 750  | 0.286 |
| Cranes                   | 9999 | 0.131 |
| Crawler Tractors         | 50   | 2.513 |
| Crawler Tractors         | 120  | 0.885 |
| Crawler Tractors         | 175  | 0.632 |
| Crawler Tractors         | 250  | 0.451 |
| Crawler Tractors         | 500  | 0.408 |
| Crawler Tractors         | 750  | 0.351 |
| Crawler Tractors         | 1000 | 0.479 |
| Crushing/Proc. Equipment | 50   | 1.796 |
| Crushing/Proc. Equipment | 120  | 0.797 |
| Crushing/Proc. Equipment | 175  | 0.562 |
| Crushing/Proc. Equipment | 250  | 0.382 |
| Crushing/Proc. Equipment | 500  | 0.358 |
| Crushing/Proc. Equipment | 750  | 0.358 |
| Crushing/Proc. Equipment | 9999 | 0.422 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.200 | 0.200 | 568.300 | 0.063 | 0.005 |
| 0.380 | 0.350 | 575.267 | 0.170 | 0.005 |
| 0.380 | 0.350 | 575.267 | 0.170 | 0.005 |
| 0.382 | 0.352 | 511.306 | 0.151 | 0.004 |
| 0.229 | 0.211 | 516.907 | 0.153 | 0.004 |
| 0.139 | 0.128 | 517.323 | 0.153 | 0.004 |
| 0.108 | 0.099 | 515.215 | 0.152 | 0.004 |
| 0.114 | 0.105 | 511.945 | 0.151 | 0.004 |
| 0.656 | 0.604 | 575.112 | 0.170 | 0.005 |
| 0.574 | 0.528 | 516.062 | 0.153 | 0.004 |
| 0.345 | 0.318 | 516.694 | 0.153 | 0.004 |
| 0.330 | 0.304 | 518.028 | 0.153 | 0.004 |
| 0.289 | 0.266 | 518.345 | 0.153 | 0.004 |
| 0.298 | 0.298 | 568.299 | 0.070 | 0.005 |
| 0.272 | 0.272 | 568.299 | 0.074 | 0.005 |
| 0.389 | 0.389 | 568.299 | 0.128 | 0.005 |
| 0.385 | 0.385 | 568.299 | 0.065 | 0.004 |
| 0.212 | 0.212 | 568.299 | 0.043 | 0.004 |
| 0.111 | 0.111 | 568.300 | 0.028 | 0.004 |
| 0.104 | 0.104 | 568.299 | 0.025 | 0.004 |
| 0.106 | 0.106 | 568.299 | 0.026 | 0.004 |
| 0.138 | 0.138 | 568.299 | 0.035 | 0.004 |
| 0.867 | 0.798 | 539.122 | 0.159 | 0.005 |
| 0.832 | 0.765 | 515.382 | 0.152 | 0.004 |
| 0.488 | 0.449 | 527.834 | 0.156 | 0.004 |
| 0.185 | 0.171 | 522.330 | 0.154 | 0.004 |
| 0.143 | 0.131 | 517.377 | 0.153 | 0.004 |
| 0.138 | 0.138 | 568.299 | 0.039 | 0.004 |
| 0.513 | 0.472 | 520.824 | 0.154 | 0.004 |
| 0.258 | 0.237 | 518.164 | 0.153 | 0.004 |
| 0.203 | 0.187 | 514.370 | 0.152 | 0.004 |
| 0.133 | 0.122 | 516.904 | 0.153 | 0.004 |
| 0.054 | 0.050 | 516.638 | 0.153 | 0.004 |
| 0.292 | 0.269 | 514.057 | 0.152 | 0.004 |
| 0.236 | 0.217 | 512.833 | 0.152 | 0.004 |

|                      |      |       |
|----------------------|------|-------|
| Dumpers/Tenders      | 25   | 0.696 |
| Excavators           | 25   | 0.833 |
| Excavators           | 50   | 0.833 |
| Excavators           | 120  | 0.507 |
| Excavators           | 175  | 0.384 |
| Excavators           | 250  | 0.289 |
| Excavators           | 500  | 0.232 |
| Excavators           | 750  | 0.242 |
| Forklifts            | 50   | 2.073 |
| Forklifts            | 120  | 0.768 |
| Forklifts            | 175  | 0.566 |
| Forklifts            | 250  | 0.565 |
| Forklifts            | 500  | 0.454 |
| Generator Sets       | 15   | 0.747 |
| Generator Sets       | 25   | 0.793 |
| Generator Sets       | 50   | 1.281 |
| Generator Sets       | 120  | 0.651 |
| Generator Sets       | 175  | 0.440 |
| Generator Sets       | 250  | 0.287 |
| Generator Sets       | 500  | 0.258 |
| Generator Sets       | 750  | 0.267 |
| Generator Sets       | 9999 | 0.351 |
| Graders              | 50   | 3.119 |
| Graders              | 120  | 1.239 |
| Graders              | 175  | 0.844 |
| Graders              | 250  | 0.396 |
| Graders              | 500  | 0.326 |
| Graders              | 750  | 0.414 |
| Off-Highway Tractors | 120  | 0.674 |
| Off-Highway Tractors | 175  | 0.402 |
| Off-Highway Tractors | 250  | 0.400 |
| Off-Highway Tractors | 750  | 0.262 |
| Off-Highway Tractors | 1000 | 0.096 |
| Off-Highway Trucks   | 175  | 0.508 |
| Off-Highway Trucks   | 250  | 0.473 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.180 | 0.165 | 521.057 | 0.154 | 0.004 |
| 0.231 | 0.212 | 521.230 | 0.154 | 0.004 |
| 0.187 | 0.172 | 516.939 | 0.153 | 0.004 |
| 0.502 | 0.462 | 578.959 | 0.171 | 0.005 |
| 0.502 | 0.462 | 578.959 | 0.171 | 0.005 |
| 0.502 | 0.462 | 578.959 | 0.171 | 0.005 |
| 0.518 | 0.476 | 515.285 | 0.152 | 0.004 |
| 0.333 | 0.307 | 514.552 | 0.152 | 0.004 |
| 0.168 | 0.155 | 520.944 | 0.154 | 0.004 |
| 0.544 | 0.500 | 575.871 | 0.170 | 0.005 |
| 0.544 | 0.500 | 575.871 | 0.170 | 0.005 |
| 0.544 | 0.500 | 575.871 | 0.170 | 0.005 |
| 0.574 | 0.528 | 514.389 | 0.152 | 0.004 |
| 0.312 | 0.287 | 516.414 | 0.153 | 0.004 |
| 0.255 | 0.234 | 517.916 | 0.153 | 0.004 |
| 0.172 | 0.159 | 517.595 | 0.153 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Off-Highway Trucks                 | 500  | 0.385 |
| Off-Highway Trucks                 | 750  | 0.452 |
| Off-Highway Trucks                 | 1000 | 0.411 |
| Other Construction Equipment       | 15   | 1.309 |
| Other Construction Equipment       | 25   | 1.309 |
| Other Construction Equipment       | 50   | 1.309 |
| Other Construction Equipment       | 120  | 0.723 |
| Other Construction Equipment       | 175  | 0.557 |
| Other Construction Equipment       | 500  | 0.324 |
| Other General Industrial Equipment | 15   | 1.495 |
| Other General Industrial Equipment | 25   | 1.495 |
| Other General Industrial Equipment | 50   | 1.495 |
| Other General Industrial Equipment | 120  | 0.761 |
| Other General Industrial Equipment | 175  | 0.495 |
| Other General Industrial Equipment | 250  | 0.452 |
| Other General Industrial Equipment | 500  | 0.353 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.115 | 0.106 | 518.180 | 0.153 | 0.004 |
| 0.167 | 0.153 | 516.638 | 0.153 | 0.004 |
| 0.575 | 0.529 | 573.170 | 0.169 | 0.005 |
| 0.412 | 0.379 | 518.316 | 0.153 | 0.004 |
| 0.313 | 0.288 | 516.818 | 0.153 | 0.004 |
| 0.242 | 0.223 | 516.011 | 0.153 | 0.004 |
| 0.169 | 0.155 | 514.714 | 0.152 | 0.004 |
| 0.067 | 0.061 | 516.638 | 0.153 | 0.004 |
| 0.595 | 0.547 | 577.016 | 0.171 | 0.005 |
| 0.595 | 0.547 | 577.016 | 0.171 | 0.005 |
| 0.483 | 0.444 | 514.377 | 0.152 | 0.004 |
| 0.287 | 0.264 | 516.745 | 0.153 | 0.004 |
| 0.105 | 0.097 | 518.723 | 0.153 | 0.004 |
| 0.101 | 0.093 | 512.191 | 0.151 | 0.004 |
| 0.437 | 0.402 | 569.482 | 0.168 | 0.005 |
| 0.437 | 0.402 | 569.482 | 0.168 | 0.005 |
| 0.486 | 0.447 | 518.076 | 0.153 | 0.004 |
| 0.249 | 0.229 | 515.034 | 0.152 | 0.004 |
| 0.158 | 0.146 | 516.900 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.298 | 0.298 | 568.299 | 0.070 | 0.005 |
| 0.272 | 0.272 | 568.299 | 0.074 | 0.005 |
| 0.332 | 0.332 | 568.299 | 0.098 | 0.005 |
| 0.332 | 0.332 | 568.299 | 0.057 | 0.004 |
| 0.206 | 0.206 | 568.299 | 0.042 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Other General Industrial Equipment | 750  | 0.251 |
| Other General Industrial Equipment | 1000 | 0.355 |
| Other Material Handling Equipment  | 50   | 1.733 |
| Other Material Handling Equipment  | 120  | 0.528 |
| Other Material Handling Equipment  | 175  | 0.525 |
| Other Material Handling Equipment  | 250  | 0.423 |
| Other Material Handling Equipment  | 500  | 0.333 |
| Other Material Handling Equipment  | 9999 | 0.148 |
| Pavers                             | 25   | 1.853 |
| Pavers                             | 50   | 1.853 |
| Pavers                             | 120  | 0.680 |
| Pavers                             | 175  | 0.489 |
| Pavers                             | 250  | 0.214 |
| Pavers                             | 500  | 0.176 |
| Paving Equipment                   | 25   | 0.981 |
| Paving Equipment                   | 50   | 0.981 |
| Paving Equipment                   | 120  | 0.661 |
| Paving Equipment                   | 175  | 0.411 |
| Paving Equipment                   | 250  | 0.315 |
| Plate Compactors                   | 15   | 0.661 |
| Pressure Washers                   | 15   | 0.747 |
| Pressure Washers                   | 25   | 0.793 |
| Pressure Washers                   | 50   | 0.976 |
| Pressure Washers                   | 120  | 0.567 |
| Pressure Washers                   | 175  | 0.427 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 0.341 | 0.341 | 568.299 | 0.080 | 0.005 |
| 0.291 | 0.291 | 568.299 | 0.086 | 0.005 |
| 0.409 | 0.409 | 568.299 | 0.138 | 0.005 |
| 0.403 | 0.403 | 568.299 | 0.067 | 0.004 |
| 0.222 | 0.222 | 568.299 | 0.045 | 0.004 |
| 0.115 | 0.115 | 568.299 | 0.029 | 0.004 |
| 0.108 | 0.108 | 568.299 | 0.026 | 0.004 |
| 0.110 | 0.110 | 568.299 | 0.027 | 0.004 |
| 0.141 | 0.141 | 568.299 | 0.036 | 0.004 |
| 0.484 | 0.445 | 575.795 | 0.170 | 0.005 |
| 0.484 | 0.445 | 575.795 | 0.170 | 0.005 |
| 0.484 | 0.445 | 575.795 | 0.170 | 0.005 |
| 0.476 | 0.438 | 518.787 | 0.153 | 0.004 |
| 0.219 | 0.202 | 516.591 | 0.153 | 0.004 |
| 0.191 | 0.176 | 517.811 | 0.153 | 0.004 |
| 0.202 | 0.185 | 522.052 | 0.154 | 0.004 |
| 0.436 | 0.401 | 575.353 | 0.170 | 0.005 |
| 0.261 | 0.240 | 517.260 | 0.153 | 0.004 |
| 0.140 | 0.128 | 516.091 | 0.153 | 0.004 |
| 0.087 | 0.080 | 517.766 | 0.153 | 0.004 |
| 0.076 | 0.070 | 511.657 | 0.151 | 0.004 |
| 0.563 | 0.518 | 518.335 | 0.153 | 0.004 |
| 0.393 | 0.361 | 520.011 | 0.154 | 0.004 |
| 0.376 | 0.346 | 524.676 | 0.155 | 0.004 |
| 0.258 | 0.237 | 517.790 | 0.153 | 0.004 |
| 0.236 | 0.236 | 568.300 | 0.062 | 0.004 |
| 0.676 | 0.622 | 573.522 | 0.170 | 0.005 |
| 0.676 | 0.622 | 573.522 | 0.170 | 0.005 |
| 0.619 | 0.569 | 510.010 | 0.151 | 0.004 |
| 0.350 | 0.322 | 515.769 | 0.152 | 0.004 |

|                         |      |       |
|-------------------------|------|-------|
| Pressure Washers        | 250  | 0.121 |
| Pumps                   | 15   | 0.840 |
| Pumps                   | 25   | 0.894 |
| Pumps                   | 50   | 1.384 |
| Pumps                   | 120  | 0.679 |
| Pumps                   | 175  | 0.461 |
| Pumps                   | 250  | 0.302 |
| Pumps                   | 500  | 0.273 |
| Pumps                   | 750  | 0.281 |
| Pumps                   | 9999 | 0.363 |
| Rollers                 | 15   | 1.311 |
| Rollers                 | 25   | 1.311 |
| Rollers                 | 50   | 1.311 |
| Rollers                 | 120  | 0.683 |
| Rollers                 | 175  | 0.364 |
| Rollers                 | 250  | 0.347 |
| Rollers                 | 500  | 0.371 |
| Rough Terrain Forklifts | 50   | 1.189 |
| Rough Terrain Forklifts | 120  | 0.338 |
| Rough Terrain Forklifts | 175  | 0.217 |
| Rough Terrain Forklifts | 250  | 0.140 |
| Rough Terrain Forklifts | 500  | 0.174 |
| Rubber Tired Dozers     | 175  | 0.965 |
| Rubber Tired Dozers     | 250  | 0.728 |
| Rubber Tired Dozers     | 500  | 0.708 |
| Rubber Tired Dozers     | 750  | 0.518 |
| Rubber Tired Dozers     | 1000 | 0.661 |
| Rubber Tired Loaders    | 25   | 2.108 |
| Rubber Tired Loaders    | 50   | 2.108 |
| Rubber Tired Loaders    | 120  | 0.856 |
| Rubber Tired Loaders    | 175  | 0.595 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.187 | 0.172 | 514.217 | 0.152 | 0.004 |
| 0.196 | 0.180 | 512.510 | 0.152 | 0.004 |
| 0.190 | 0.175 | 499.695 | 0.148 | 0.004 |
| 0.195 | 0.179 | 515.307 | 0.152 | 0.004 |
| 0.526 | 0.484 | 529.945 | 0.157 | 0.004 |
| 0.419 | 0.385 | 524.171 | 0.155 | 0.004 |
| 0.403 | 0.371 | 512.853 | 0.152 | 0.004 |
| 0.251 | 0.231 | 517.361 | 0.153 | 0.004 |
| 0.190 | 0.174 | 517.394 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.422 | 0.422 | 568.299 | 0.146 | 0.005 |
| 0.414 | 0.414 | 568.299 | 0.068 | 0.004 |
| 0.228 | 0.228 | 568.299 | 0.046 | 0.004 |
| 0.141 | 0.141 | 686.695 | 0.036 | 0.004 |
| 0.286 | 0.263 | 577.076 | 0.171 | 0.005 |
| 0.286 | 0.263 | 577.076 | 0.171 | 0.005 |
| 0.235 | 0.216 | 517.062 | 0.153 | 0.004 |
| 0.434 | 0.400 | 582.725 | 0.172 | 0.005 |
| 0.391 | 0.360 | 516.338 | 0.153 | 0.004 |
| 0.273 | 0.251 | 515.820 | 0.152 | 0.004 |
| 0.149 | 0.137 | 521.452 | 0.154 | 0.004 |
| 0.126 | 0.116 | 513.616 | 0.152 | 0.004 |
| 0.103 | 0.095 | 516.321 | 0.153 | 0.004 |
| 0.603 | 0.555 | 574.943 | 0.170 | 0.005 |
| 0.603 | 0.555 | 574.943 | 0.170 | 0.005 |
| 0.603 | 0.555 | 574.943 | 0.170 | 0.005 |
| 0.610 | 0.562 | 518.893 | 0.153 | 0.004 |
| 0.503 | 0.463 | 517.806 | 0.153 | 0.004 |
| 0.265 | 0.244 | 514.527 | 0.152 | 0.004 |
| 0.488 | 0.449 | 564.042 | 0.167 | 0.005 |

|                           |      |       |
|---------------------------|------|-------|
| Rubber Tired Loaders      | 250  | 0.406 |
| Rubber Tired Loaders      | 500  | 0.415 |
| Rubber Tired Loaders      | 750  | 0.395 |
| Rubber Tired Loaders      | 1000 | 0.420 |
| Scrapers                  | 120  | 0.731 |
| Scrapers                  | 175  | 0.714 |
| Scrapers                  | 250  | 0.730 |
| Scrapers                  | 500  | 0.472 |
| Scrapers                  | 750  | 0.360 |
| Signal Boards             | 15   | 0.661 |
| Signal Boards             | 50   | 1.461 |
| Signal Boards             | 120  | 0.687 |
| Signal Boards             | 175  | 0.474 |
| Signal Boards             | 250  | 0.380 |
| Skid Steer Loaders        | 25   | 0.639 |
| Skid Steer Loaders        | 50   | 0.639 |
| Skid Steer Loaders        | 120  | 0.294 |
| Surfacing Equipment       | 50   | 1.028 |
| Surfacing Equipment       | 120  | 0.548 |
| Surfacing Equipment       | 175  | 0.477 |
| Surfacing Equipment       | 250  | 0.310 |
| Surfacing Equipment       | 500  | 0.241 |
| Surfacing Equipment       | 750  | 0.178 |
| Sweepers/Scrubbers        | 15   | 1.808 |
| Sweepers/Scrubbers        | 25   | 1.808 |
| Sweepers/Scrubbers        | 50   | 1.808 |
| Sweepers/Scrubbers        | 120  | 0.833 |
| Sweepers/Scrubbers        | 175  | 0.839 |
| Sweepers/Scrubbers        | 250  | 0.513 |
| Tractors/Loaders/Backhoes | 25   | 1.307 |



|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.488 | 0.449 | 564.042 | 0.167 | 0.005 |
| 0.438 | 0.403 | 523.017 | 0.155 | 0.004 |
| 0.248 | 0.229 | 513.890 | 0.152 | 0.004 |
| 0.159 | 0.146 | 515.175 | 0.152 | 0.004 |
| 0.152 | 0.140 | 517.124 | 0.153 | 0.004 |
| 0.154 | 0.141 | 511.337 | 0.151 | 0.004 |
| 0.501 | 0.461 | 577.728 | 0.171 | 0.005 |
| 0.501 | 0.461 | 577.728 | 0.171 | 0.005 |
| 0.501 | 0.461 | 577.728 | 0.171 | 0.005 |
| 0.563 | 0.518 | 520.766 | 0.154 | 0.004 |
| 0.395 | 0.364 | 512.148 | 0.151 | 0.004 |
| 0.258 | 0.237 | 517.719 | 0.153 | 0.004 |
| 0.161 | 0.148 | 513.744 | 0.152 | 0.004 |
| 0.061 | 0.056 | 519.658 | 0.154 | 0.004 |
| 0.341 | 0.341 | 568.300 | 0.080 | 0.005 |
| 0.291 | 0.291 | 568.299 | 0.086 | 0.005 |
| 0.473 | 0.473 | 568.300 | 0.171 | 0.005 |
| 0.464 | 0.464 | 568.299 | 0.076 | 0.004 |
| 0.255 | 0.255 | 568.299 | 0.052 | 0.004 |
| 0.128 | 0.128 | 568.299 | 0.034 | 0.004 |
| 0.119 | 0.119 | 568.299 | 0.031 | 0.004 |
| 0.292 | 0.269 | 514.057 | 0.152 | 0.004 |
| 0.236 | 0.217 | 512.833 | 0.152 | 0.004 |
| 0.180 | 0.165 | 521.057 | 0.154 | 0.004 |
| 0.231 | 0.212 | 521.230 | 0.154 | 0.004 |
| 0.187 | 0.172 | 516.939 | 0.153 | 0.004 |

|                           |      |       |
|---------------------------|------|-------|
| Tractors/Loaders/Backhoes | 50   | 1.307 |
| Tractors/Loaders/Backhoes | 120  | 0.569 |
| Tractors/Loaders/Backhoes | 175  | 0.421 |
| Tractors/Loaders/Backhoes | 250  | 0.326 |
| Tractors/Loaders/Backhoes | 500  | 0.312 |
| Tractors/Loaders/Backhoes | 750  | 0.308 |
| Trenchers                 | 15   | 1.259 |
| Trenchers                 | 25   | 1.259 |
| Trenchers                 | 50   | 1.259 |
| Trenchers                 | 120  | 0.817 |
| Trenchers                 | 175  | 0.697 |
| Trenchers                 | 250  | 0.502 |
| Trenchers                 | 500  | 0.311 |
| Trenchers                 | 750  | 0.114 |
| Welders                   | 15   | 0.840 |
| Welders                   | 25   | 0.894 |
| Welders                   | 50   | 1.715 |
| Welders                   | 120  | 0.772 |
| Welders                   | 175  | 0.532 |
| Welders                   | 250  | 0.352 |
| Welders                   | 500  | 0.324 |
| Water Trucks              | 175  | 0.508 |
| Water Trucks              | 250  | 0.473 |
| Water Trucks              | 500  | 0.385 |
| Water Trucks              | 750  | 0.452 |
| Water Trucks              | 1000 | 0.411 |

2016

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|
| CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 3.233   | 3.933   | 0.005   | 0.136   | 0.125   | 568.831 | 0.170   | 0.005   |
| 3.233   | 3.933   | 0.005   | 0.136   | 0.125   | 568.831 | 0.170   | 0.005   |
| 3.233   | 3.933   | 0.005   | 0.136   | 0.125   | 568.831 | 0.170   | 0.005   |
| 3.218   | 3.113   | 0.005   | 0.143   | 0.132   | 511.457 | 0.153   | 0.004   |
| 0.988   | 4.621   | 0.005   | 0.102   | 0.094   | 511.392 | 0.153   | 0.004   |
| 1.130   | 3.380   | 0.005   | 0.098   | 0.098   | 568.299 | 0.025   | 0.004   |
| 3.658   | 5.196   | 0.008   | 0.311   | 0.311   | 568.299 | 0.075   | 0.005   |
| 2.666   | 4.890   | 0.007   | 0.270   | 0.270   | 568.299 | 0.080   | 0.005   |
| 5.968   | 5.223   | 0.007   | 0.459   | 0.459   | 568.299 | 0.168   | 0.005   |
| 3.840   | 5.190   | 0.006   | 0.446   | 0.446   | 568.299 | 0.074   | 0.004   |
| 3.218   | 4.504   | 0.006   | 0.245   | 0.245   | 568.299 | 0.051   | 0.004   |
| 1.207   | 3.967   | 0.006   | 0.121   | 0.121   | 568.299 | 0.034   | 0.004   |
| 1.198   | 3.455   | 0.005   | 0.113   | 0.113   | 568.300 | 0.032   | 0.004   |
| 1.198   | 3.586   | 0.005   | 0.116   | 0.116   | 568.299 | 0.032   | 0.004   |
| 1.370   | 5.157   | 0.005   | 0.142   | 0.142   | 568.299 | 0.036   | 0.004   |
| 4.735   | 5.303   | 0.006   | 0.379   | 0.349   | 585.171 | 0.175   | 0.005   |
| 4.735   | 5.303   | 0.006   | 0.379   | 0.349   | 585.171 | 0.175   | 0.005   |
| 4.735   | 5.303   | 0.006   | 0.379   | 0.349   | 585.171 | 0.175   | 0.005   |
| 3.335   | 4.028   | 0.005   | 0.239   | 0.220   | 496.949 | 0.148   | 0.004   |
| 3.035   | 3.904   | 0.005   | 0.176   | 0.162   | 517.207 | 0.154   | 0.004   |
| 1.178   | 3.325   | 0.005   | 0.100   | 0.092   | 506.505 | 0.151   | 0.004   |
| 1.256   | 3.003   | 0.005   | 0.096   | 0.088   | 499.902 | 0.149   | 0.004   |
| 1.105   | 2.376   | 0.005   | 0.081   | 0.074   | 520.473 | 0.155   | 0.004   |
| 0.956   | 2.994   | 0.005   | 0.059   | 0.054   | 511.253 | 0.153   | 0.004   |

|       |        |       |       |       |         |       |       |
|-------|--------|-------|-------|-------|---------|-------|-------|
| 3.469 | 4.168  | 0.008 | 0.171 | 0.171 | 568.300 | 0.059 | 0.005 |
| 2.531 | 4.712  | 0.007 | 0.240 | 0.240 | 568.299 | 0.073 | 0.005 |
| 2.339 | 4.332  | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 5.165 | 4.989  | 0.007 | 0.386 | 0.386 | 568.299 | 0.132 | 0.005 |
| 3.647 | 4.789  | 0.006 | 0.372 | 0.372 | 568.300 | 0.061 | 0.004 |
| 3.077 | 4.112  | 0.006 | 0.207 | 0.207 | 568.299 | 0.042 | 0.004 |
| 7.125 | 6.075  | 0.005 | 0.601 | 0.553 | 561.224 | 0.168 | 0.005 |
| 4.884 | 10.060 | 0.005 | 0.747 | 0.687 | 508.837 | 0.152 | 0.004 |
| 3.918 | 8.325  | 0.005 | 0.450 | 0.414 | 514.260 | 0.154 | 0.004 |
| 2.653 | 7.622  | 0.005 | 0.348 | 0.320 | 512.448 | 0.153 | 0.004 |
| 4.110 | 6.124  | 0.005 | 0.253 | 0.233 | 511.197 | 0.153 | 0.004 |
| 1.643 | 4.312  | 0.005 | 0.152 | 0.140 | 510.334 | 0.152 | 0.004 |
| 0.957 | 2.295  | 0.005 | 0.055 | 0.051 | 511.392 | 0.153 | 0.004 |
| 8.076 | 6.377  | 0.005 | 0.741 | 0.682 | 558.888 | 0.167 | 0.005 |
| 4.189 | 7.494  | 0.005 | 0.630 | 0.580 | 516.843 | 0.154 | 0.004 |
| 3.479 | 6.849  | 0.005 | 0.376 | 0.346 | 511.306 | 0.153 | 0.004 |
| 1.816 | 6.143  | 0.005 | 0.237 | 0.218 | 512.897 | 0.153 | 0.004 |
| 2.845 | 5.483  | 0.005 | 0.212 | 0.195 | 515.373 | 0.154 | 0.004 |
| 1.664 | 4.883  | 0.005 | 0.179 | 0.165 | 512.540 | 0.153 | 0.004 |
| 2.088 | 7.463  | 0.005 | 0.220 | 0.202 | 514.830 | 0.154 | 0.004 |
| 5.996 | 5.195  | 0.007 | 0.446 | 0.446 | 568.299 | 0.162 | 0.005 |
| 3.859 | 5.040  | 0.006 | 0.430 | 0.430 | 568.299 | 0.071 | 0.004 |
| 3.247 | 4.343  | 0.006 | 0.237 | 0.237 | 568.299 | 0.050 | 0.004 |
| 1.201 | 3.801  | 0.006 | 0.117 | 0.117 | 568.299 | 0.034 | 0.004 |
| 1.184 | 3.304  | 0.005 | 0.109 | 0.109 | 568.299 | 0.032 | 0.004 |
| 1.176 | 3.422  | 0.005 | 0.111 | 0.111 | 568.299 | 0.032 | 0.004 |
| 1.343 | 5.019  | 0.005 | 0.140 | 0.140 | 568.299 | 0.038 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.350 | 4.402 | 0.007 | 0.187 | 0.187 | 568.299 | 0.062 | 0.005 |
| 4.925 | 4.918 | 0.005 | 0.375 | 0.345 | 569.512 | 0.170 | 0.005 |
| 4.925 | 4.918 | 0.005 | 0.375 | 0.345 | 569.512 | 0.170 | 0.005 |
| 3.679 | 5.019 | 0.005 | 0.374 | 0.344 | 506.173 | 0.151 | 0.004 |
| 3.168 | 4.481 | 0.005 | 0.221 | 0.204 | 511.687 | 0.153 | 0.004 |
| 1.331 | 4.182 | 0.005 | 0.133 | 0.122 | 512.056 | 0.153 | 0.004 |
| 1.317 | 3.214 | 0.005 | 0.104 | 0.096 | 509.868 | 0.152 | 0.004 |
| 1.354 | 3.473 | 0.005 | 0.113 | 0.104 | 506.682 | 0.151 | 0.004 |
| 7.300 | 5.931 | 0.005 | 0.643 | 0.591 | 569.274 | 0.170 | 0.005 |
| 4.063 | 6.601 | 0.005 | 0.555 | 0.510 | 510.823 | 0.153 | 0.004 |
| 3.520 | 6.135 | 0.005 | 0.335 | 0.308 | 511.448 | 0.153 | 0.004 |
| 2.325 | 6.697 | 0.005 | 0.298 | 0.274 | 512.769 | 0.153 | 0.004 |
| 3.300 | 5.332 | 0.005 | 0.237 | 0.218 | 513.083 | 0.153 | 0.004 |
| 3.658 | 5.141 | 0.008 | 0.280 | 0.280 | 568.299 | 0.067 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.256 | 0.256 | 568.299 | 0.071 | 0.005 |
| 4.538 | 4.858 | 0.007 | 0.353 | 0.353 | 568.299 | 0.115 | 0.005 |
| 3.499 | 4.769 | 0.006 | 0.347 | 0.347 | 568.299 | 0.058 | 0.004 |
| 2.938 | 4.138 | 0.006 | 0.191 | 0.191 | 568.299 | 0.039 | 0.004 |
| 1.104 | 3.633 | 0.006 | 0.100 | 0.100 | 568.300 | 0.025 | 0.004 |
| 1.114 | 3.231 | 0.005 | 0.094 | 0.094 | 568.299 | 0.023 | 0.004 |
| 1.114 | 3.347 | 0.005 | 0.096 | 0.096 | 568.299 | 0.024 | 0.004 |
| 1.269 | 4.822 | 0.005 | 0.124 | 0.124 | 568.299 | 0.031 | 0.004 |
| 9.144 | 6.570 | 0.005 | 0.874 | 0.804 | 533.681 | 0.159 | 0.005 |
| 4.884 | 9.738 | 0.005 | 0.813 | 0.748 | 509.597 | 0.152 | 0.004 |
| 3.958 | 8.637 | 0.005 | 0.486 | 0.447 | 522.218 | 0.156 | 0.004 |
| 1.466 | 5.728 | 0.005 | 0.186 | 0.171 | 517.128 | 0.154 | 0.004 |
| 1.791 | 3.721 | 0.005 | 0.144 | 0.133 | 512.098 | 0.153 | 0.004 |
| 1.420 | 3.501 | 0.005 | 0.124 | 0.124 | 568.299 | 0.037 | 0.004 |
| 3.965 | 6.067 | 0.005 | 0.494 | 0.455 | 515.320 | 0.154 | 0.004 |
| 3.264 | 4.724 | 0.005 | 0.239 | 0.220 | 512.608 | 0.153 | 0.004 |
| 1.605 | 5.528 | 0.005 | 0.199 | 0.183 | 509.190 | 0.152 | 0.004 |
| 1.172 | 3.874 | 0.005 | 0.126 | 0.116 | 511.081 | 0.153 | 0.004 |
| 0.960 | 2.300 | 0.005 | 0.056 | 0.051 | 511.392 | 0.153 | 0.004 |
| 3.489 | 5.104 | 0.005 | 0.284 | 0.262 | 508.701 | 0.152 | 0.004 |
| 1.900 | 5.242 | 0.005 | 0.227 | 0.209 | 507.809 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.037 | 4.528 | 0.005 | 0.173 | 0.159 | 515.842 | 0.154 | 0.004 |
| 2.620 | 5.124 | 0.005 | 0.209 | 0.192 | 514.644 | 0.154 | 0.004 |
| 1.772 | 6.280 | 0.005 | 0.185 | 0.170 | 511.137 | 0.153 | 0.004 |
| 5.681 | 5.564 | 0.005 | 0.503 | 0.463 | 573.020 | 0.171 | 0.005 |
| 5.681 | 5.564 | 0.005 | 0.503 | 0.463 | 573.020 | 0.171 | 0.005 |
| 5.681 | 5.564 | 0.005 | 0.503 | 0.463 | 573.020 | 0.171 | 0.005 |
| 3.916 | 6.536 | 0.005 | 0.512 | 0.471 | 510.171 | 0.152 | 0.004 |
| 3.382 | 6.231 | 0.005 | 0.326 | 0.300 | 509.307 | 0.152 | 0.004 |
| 2.407 | 4.415 | 0.005 | 0.163 | 0.150 | 515.195 | 0.154 | 0.004 |
| 6.325 | 5.524 | 0.005 | 0.532 | 0.490 | 570.024 | 0.170 | 0.005 |
| 6.325 | 5.524 | 0.005 | 0.532 | 0.490 | 570.024 | 0.170 | 0.005 |
| 6.325 | 5.524 | 0.005 | 0.532 | 0.490 | 570.024 | 0.170 | 0.005 |
| 4.081 | 6.502 | 0.005 | 0.553 | 0.509 | 509.166 | 0.152 | 0.004 |
| 3.454 | 5.397 | 0.005 | 0.294 | 0.270 | 511.171 | 0.153 | 0.004 |
| 1.926 | 5.643 | 0.005 | 0.230 | 0.211 | 512.658 | 0.153 | 0.004 |
| 2.436 | 4.425 | 0.005 | 0.167 | 0.154 | 512.340 | 0.153 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.491 | 3.365 | 0.005 | 0.109 | 0.100 | 512.919 | 0.153 | 0.004 |
| 1.094 | 6.448 | 0.005 | 0.171 | 0.158 | 511.392 | 0.153 | 0.004 |
| 6.756 | 5.799 | 0.005 | 0.586 | 0.539 | 567.351 | 0.169 | 0.005 |
| 3.758 | 4.983 | 0.005 | 0.383 | 0.352 | 513.054 | 0.153 | 0.004 |
| 3.433 | 5.645 | 0.005 | 0.306 | 0.282 | 511.571 | 0.153 | 0.004 |
| 1.742 | 5.532 | 0.005 | 0.207 | 0.191 | 510.772 | 0.153 | 0.004 |
| 1.918 | 4.272 | 0.005 | 0.166 | 0.152 | 509.489 | 0.152 | 0.004 |
| 0.984 | 3.458 | 0.005 | 0.068 | 0.063 | 511.392 | 0.153 | 0.004 |
| 6.340 | 5.637 | 0.005 | 0.579 | 0.533 | 571.086 | 0.171 | 0.005 |
| 6.340 | 5.637 | 0.005 | 0.579 | 0.533 | 571.086 | 0.171 | 0.005 |
| 3.788 | 6.141 | 0.005 | 0.479 | 0.441 | 509.377 | 0.152 | 0.004 |
| 3.115 | 5.537 | 0.005 | 0.277 | 0.255 | 511.646 | 0.153 | 0.004 |
| 1.031 | 4.161 | 0.005 | 0.107 | 0.098 | 513.468 | 0.153 | 0.004 |
| 0.978 | 2.917 | 0.005 | 0.097 | 0.089 | 506.097 | 0.151 | 0.004 |
| 4.869 | 5.028 | 0.005 | 0.407 | 0.374 | 563.553 | 0.168 | 0.005 |
| 4.869 | 5.028 | 0.005 | 0.407 | 0.374 | 563.553 | 0.168 | 0.005 |
| 3.833 | 6.145 | 0.005 | 0.471 | 0.433 | 513.167 | 0.153 | 0.004 |
| 3.104 | 4.966 | 0.005 | 0.242 | 0.223 | 509.894 | 0.152 | 0.004 |
| 1.379 | 4.772 | 0.005 | 0.159 | 0.146 | 511.654 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.657 | 5.141 | 0.008 | 0.280 | 0.280 | 568.299 | 0.067 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.256 | 0.256 | 568.299 | 0.071 | 0.005 |
| 3.833 | 4.685 | 0.007 | 0.300 | 0.300 | 568.299 | 0.088 | 0.005 |
| 3.336 | 4.551 | 0.006 | 0.297 | 0.297 | 568.299 | 0.051 | 0.004 |
| 2.917 | 4.115 | 0.006 | 0.187 | 0.187 | 568.299 | 0.038 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.986 | 0.690 | 0.006 | 0.010 | 0.010 | 568.299 | 0.010 | 0.004 |
| 3.658 | 5.196 | 0.008 | 0.311 | 0.311 | 568.299 | 0.075 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.270 | 0.270 | 568.299 | 0.080 | 0.005 |
| 4.775 | 4.916 | 0.007 | 0.371 | 0.371 | 568.300 | 0.124 | 0.005 |
| 3.554 | 4.842 | 0.006 | 0.364 | 0.364 | 568.300 | 0.061 | 0.004 |
| 2.983 | 4.202 | 0.006 | 0.200 | 0.200 | 568.299 | 0.041 | 0.004 |
| 1.122 | 3.693 | 0.006 | 0.104 | 0.104 | 568.299 | 0.027 | 0.004 |
| 1.134 | 3.272 | 0.005 | 0.097 | 0.097 | 568.299 | 0.024 | 0.004 |
| 1.134 | 3.389 | 0.005 | 0.099 | 0.099 | 568.299 | 0.025 | 0.004 |
| 1.293 | 4.878 | 0.005 | 0.127 | 0.127 | 568.299 | 0.032 | 0.004 |
| 5.290 | 5.365 | 0.005 | 0.481 | 0.443 | 569.921 | 0.170 | 0.005 |
| 5.290 | 5.365 | 0.005 | 0.481 | 0.443 | 569.921 | 0.170 | 0.005 |
| 5.290 | 5.365 | 0.005 | 0.481 | 0.443 | 569.921 | 0.170 | 0.005 |
| 3.809 | 6.272 | 0.005 | 0.467 | 0.430 | 513.505 | 0.153 | 0.004 |
| 3.006 | 4.630 | 0.005 | 0.216 | 0.198 | 511.394 | 0.153 | 0.004 |
| 1.650 | 4.932 | 0.005 | 0.171 | 0.157 | 512.823 | 0.153 | 0.004 |
| 3.245 | 5.031 | 0.005 | 0.195 | 0.179 | 517.285 | 0.154 | 0.004 |
| 4.933 | 5.190 | 0.005 | 0.431 | 0.397 | 569.488 | 0.170 | 0.005 |
| 3.366 | 4.280 | 0.005 | 0.247 | 0.228 | 512.086 | 0.153 | 0.004 |
| 2.859 | 3.420 | 0.005 | 0.133 | 0.122 | 510.854 | 0.153 | 0.004 |
| 1.012 | 2.463 | 0.005 | 0.058 | 0.054 | 512.164 | 0.153 | 0.004 |
| 0.958 | 3.521 | 0.005 | 0.077 | 0.071 | 506.435 | 0.151 | 0.004 |
| 4.238 | 9.844 | 0.005 | 0.564 | 0.519 | 513.055 | 0.153 | 0.004 |
| 2.720 | 7.984 | 0.005 | 0.394 | 0.362 | 514.736 | 0.154 | 0.004 |
| 6.102 | 7.997 | 0.005 | 0.373 | 0.343 | 519.147 | 0.155 | 0.004 |
| 2.761 | 7.158 | 0.005 | 0.259 | 0.238 | 512.525 | 0.153 | 0.004 |
| 2.901 | 6.556 | 0.005 | 0.222 | 0.222 | 568.299 | 0.059 | 0.004 |
| 7.834 | 6.112 | 0.005 | 0.675 | 0.621 | 567.672 | 0.170 | 0.005 |
| 7.834 | 6.112 | 0.005 | 0.675 | 0.621 | 567.672 | 0.170 | 0.005 |
| 4.274 | 7.012 | 0.005 | 0.606 | 0.558 | 505.023 | 0.151 | 0.004 |
| 3.588 | 6.097 | 0.005 | 0.341 | 0.313 | 510.468 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.480 | 5.369 | 0.005 | 0.183 | 0.169 | 508.913 | 0.152 | 0.004 |
| 2.332 | 5.020 | 0.005 | 0.190 | 0.174 | 506.372 | 0.151 | 0.004 |
| 1.789 | 4.556 | 0.005 | 0.179 | 0.165 | 495.310 | 0.148 | 0.004 |
| 1.462 | 6.713 | 0.005 | 0.197 | 0.181 | 510.045 | 0.152 | 0.004 |
| 4.137 | 7.105 | 0.005 | 0.535 | 0.492 | 524.560 | 0.157 | 0.004 |
| 3.809 | 7.765 | 0.005 | 0.415 | 0.382 | 518.829 | 0.155 | 0.004 |
| 3.008 | 8.663 | 0.005 | 0.395 | 0.364 | 507.570 | 0.152 | 0.004 |
| 3.788 | 6.086 | 0.005 | 0.246 | 0.226 | 511.947 | 0.153 | 0.004 |
| 2.685 | 4.839 | 0.005 | 0.182 | 0.167 | 512.084 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 5.068 | 4.943 | 0.007 | 0.382 | 0.382 | 568.299 | 0.131 | 0.005 |
| 3.624 | 4.791 | 0.006 | 0.371 | 0.371 | 568.299 | 0.062 | 0.004 |
| 3.052 | 4.136 | 0.006 | 0.205 | 0.205 | 568.299 | 0.042 | 0.004 |
| 1.371 | 4.365 | 0.007 | 0.127 | 0.127 | 686.695 | 0.034 | 0.004 |
| 4.004 | 4.436 | 0.005 | 0.267 | 0.246 | 571.420 | 0.171 | 0.005 |
| 4.004 | 4.436 | 0.005 | 0.267 | 0.246 | 571.420 | 0.171 | 0.005 |
| 3.338 | 3.811 | 0.005 | 0.220 | 0.203 | 511.595 | 0.153 | 0.004 |
| 4.692 | 5.255 | 0.006 | 0.402 | 0.370 | 576.771 | 0.172 | 0.005 |
| 3.575 | 5.374 | 0.005 | 0.378 | 0.348 | 510.142 | 0.152 | 0.004 |
| 3.027 | 5.733 | 0.005 | 0.276 | 0.254 | 510.548 | 0.152 | 0.004 |
| 1.442 | 5.112 | 0.005 | 0.151 | 0.139 | 516.058 | 0.154 | 0.004 |
| 1.513 | 3.900 | 0.005 | 0.127 | 0.116 | 508.399 | 0.152 | 0.004 |
| 1.024 | 3.287 | 0.005 | 0.104 | 0.096 | 511.116 | 0.153 | 0.004 |
| 6.754 | 5.772 | 0.005 | 0.611 | 0.562 | 569.106 | 0.170 | 0.005 |
| 6.754 | 5.772 | 0.005 | 0.611 | 0.562 | 569.106 | 0.170 | 0.005 |
| 6.754 | 5.772 | 0.005 | 0.611 | 0.562 | 569.106 | 0.170 | 0.005 |
| 4.097 | 6.886 | 0.005 | 0.610 | 0.561 | 513.625 | 0.153 | 0.004 |
| 3.982 | 8.697 | 0.005 | 0.479 | 0.441 | 512.549 | 0.153 | 0.004 |
| 2.078 | 6.745 | 0.005 | 0.268 | 0.246 | 509.304 | 0.152 | 0.004 |
| 5.791 | 5.320 | 0.005 | 0.477 | 0.439 | 558.709 | 0.167 | 0.005 |



|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 5.791 | 5.320 | 0.005 | 0.477 | 0.439 | 558.709 | 0.167 | 0.005 |
| 3.832 | 5.422 | 0.005 | 0.424 | 0.390 | 517.365 | 0.155 | 0.004 |
| 3.256 | 4.836 | 0.005 | 0.244 | 0.225 | 508.682 | 0.152 | 0.004 |
| 1.374 | 4.783 | 0.005 | 0.155 | 0.143 | 509.627 | 0.152 | 0.004 |
| 1.884 | 4.348 | 0.005 | 0.149 | 0.137 | 511.869 | 0.153 | 0.004 |
| 1.823 | 4.185 | 0.005 | 0.152 | 0.140 | 506.147 | 0.151 | 0.004 |
| 5.323 | 5.406 | 0.005 | 0.493 | 0.454 | 571.667 | 0.171 | 0.005 |
| 5.323 | 5.406 | 0.005 | 0.493 | 0.454 | 571.667 | 0.171 | 0.005 |
| 5.323 | 5.406 | 0.005 | 0.493 | 0.454 | 571.667 | 0.171 | 0.005 |
| 4.014 | 7.179 | 0.005 | 0.562 | 0.517 | 515.396 | 0.154 | 0.004 |
| 3.684 | 7.674 | 0.005 | 0.396 | 0.364 | 506.943 | 0.151 | 0.004 |
| 2.080 | 6.510 | 0.005 | 0.260 | 0.239 | 512.433 | 0.153 | 0.004 |
| 2.051 | 4.383 | 0.005 | 0.163 | 0.150 | 508.330 | 0.152 | 0.004 |
| 0.965 | 1.623 | 0.005 | 0.053 | 0.049 | 514.400 | 0.154 | 0.004 |
| 3.658 | 5.196 | 0.008 | 0.311 | 0.311 | 568.299 | 0.075 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.270 | 0.270 | 568.299 | 0.080 | 0.005 |
| 5.562 | 5.113 | 0.007 | 0.430 | 0.430 | 568.300 | 0.154 | 0.005 |
| 3.738 | 5.077 | 0.006 | 0.419 | 0.419 | 568.299 | 0.069 | 0.004 |
| 3.133 | 4.408 | 0.006 | 0.230 | 0.230 | 568.299 | 0.048 | 0.004 |
| 1.178 | 3.880 | 0.006 | 0.116 | 0.116 | 568.299 | 0.031 | 0.004 |
| 1.176 | 3.398 | 0.005 | 0.108 | 0.108 | 568.299 | 0.029 | 0.004 |
| 3.489 | 5.104 | 0.005 | 0.284 | 0.262 | 508.701 | 0.152 | 0.004 |
| 1.900 | 5.242 | 0.005 | 0.227 | 0.209 | 507.809 | 0.152 | 0.004 |
| 2.037 | 4.528 | 0.005 | 0.173 | 0.159 | 515.842 | 0.154 | 0.004 |
| 2.620 | 5.124 | 0.005 | 0.209 | 0.192 | 514.644 | 0.154 | 0.004 |
| 1.772 | 6.280 | 0.005 | 0.185 | 0.170 | 511.137 | 0.153 | 0.004 |

| 2016            |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-----------------|-------|---------|---------|---------|---------|---------|---------|---------|
| Equipment       | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     |
| Aerial Lifts    | 15    | 0.228   | 3.197   | 3.676   | 0.005   | 0.105   | 0.096   | 562.996 |
| Aerial Lifts    | 25    | 0.228   | 3.197   | 3.676   | 0.005   | 0.105   | 0.096   | 562.996 |
| Aerial Lifts    | 50    | 0.228   | 3.197   | 3.676   | 0.005   | 0.105   | 0.096   | 562.996 |
| Aerial Lifts    | 120   | 0.166   | 3.201   | 2.722   | 0.005   | 0.112   | 0.103   | 506.211 |
| Aerial Lifts    | 500   | 0.243   | 0.992   | 4.639   | 0.005   | 0.103   | 0.095   | 506.147 |
| Aerial Lifts    | 750   | 0.257   | 1.089   | 3.015   | 0.005   | 0.088   | 0.088   | 568.299 |
| Air Compressors |       |         |         |         |         |         |         |         |
|                 | 15    | 0.809   | 3.622   | 5.023   | 0.008   | 0.289   | 0.289   | 568.299 |
| Air Compressors |       |         |         |         |         |         |         |         |
|                 | 25    | 0.855   | 2.604   | 4.803   | 0.007   | 0.255   | 0.255   | 568.299 |
| Air Compressors |       |         |         |         |         |         |         |         |
|                 | 50    | 1.670   | 5.779   | 5.042   | 0.007   | 0.415   | 0.415   | 568.299 |
| Air Compressors |       |         |         |         |         |         |         |         |
|                 | 120   | 0.744   | 3.804   | 4.790   | 0.006   | 0.397   | 0.397   | 568.299 |
| Air Compressors |       |         |         |         |         |         |         |         |
|                 | 175   | 0.522   | 3.211   | 4.052   | 0.006   | 0.219   | 0.219   | 568.299 |
| Air Compressors |       |         |         |         |         |         |         |         |
|                 | 250   | 0.359   | 1.182   | 3.553   | 0.006   | 0.109   | 0.109   | 568.299 |
| Air Compressors |       |         |         |         |         |         |         |         |
|                 | 500   | 0.337   | 1.155   | 3.080   | 0.005   | 0.102   | 0.102   | 568.299 |
| Air Compressors |       |         |         |         |         |         |         |         |
|                 | 750   | 0.340   | 1.155   | 3.201   | 0.005   | 0.104   | 0.104   | 568.299 |
| Air Compressors |       |         |         |         |         |         |         |         |
|                 | 1000  | 0.383   | 1.295   | 4.854   | 0.005   | 0.131   | 0.131   | 568.299 |
| Bore/Drill Rigs |       |         |         |         |         |         |         |         |
|                 | 15    | 0.869   | 4.797   | 5.298   | 0.006   | 0.383   | 0.352   | 579.326 |
| Bore/Drill Rigs |       |         |         |         |         |         |         |         |
|                 | 25    | 0.869   | 4.797   | 5.298   | 0.006   | 0.383   | 0.352   | 579.326 |
| Bore/Drill Rigs |       |         |         |         |         |         |         |         |
|                 | 50    | 0.869   | 4.797   | 5.298   | 0.006   | 0.383   | 0.352   | 579.326 |
| Bore/Drill Rigs |       |         |         |         |         |         |         |         |
|                 | 120   | 0.307   | 3.326   | 3.821   | 0.005   | 0.221   | 0.204   | 491.655 |
| Bore/Drill Rigs |       |         |         |         |         |         |         |         |
|                 | 175   | 0.286   | 3.023   | 3.616   | 0.005   | 0.162   | 0.149   | 511.433 |
| Bore/Drill Rigs |       |         |         |         |         |         |         |         |
|                 | 250   | 0.193   | 1.133   | 2.902   | 0.005   | 0.085   | 0.078   | 502.128 |
| Bore/Drill Rigs |       |         |         |         |         |         |         |         |
|                 | 500   | 0.171   | 1.133   | 2.510   | 0.005   | 0.077   | 0.071   | 494.761 |
| Bore/Drill Rigs |       |         |         |         |         |         |         |         |
|                 | 750   | 0.153   | 1.120   | 2.166   | 0.005   | 0.072   | 0.066   | 514.883 |
| Bore/Drill Rigs |       |         |         |         |         |         |         |         |
|                 | 1000  | 0.115   | 0.964   | 3.008   | 0.005   | 0.059   | 0.055   | 506.000 |

|                          |      |       |       |       |       |       |       |         |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Cement and Mortar Mixers | 15   | 0.662 | 3.469 | 4.153 | 0.008 | 0.167 | 0.167 | 568.300 |
| Cement and Mortar Mixers | 25   | 0.788 | 2.496 | 4.636 | 0.007 | 0.227 | 0.227 | 568.299 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 50   | 1.322 | 5.029 | 4.818 | 0.007 | 0.350 | 0.350 | 568.300 |
| Concrete/Industrial Saws | 120  | 0.620 | 3.620 | 4.432 | 0.006 | 0.333 | 0.333 | 568.300 |
| Concrete/Industrial Saws | 175  | 0.435 | 3.074 | 3.708 | 0.006 | 0.186 | 0.186 | 568.299 |
| Cranes                   | 50   | 2.130 | 7.268 | 6.110 | 0.005 | 0.610 | 0.561 | 555.441 |
| Cranes                   | 120  | 1.154 | 4.797 | 9.608 | 0.005 | 0.710 | 0.653 | 503.599 |
| Cranes                   | 175  | 0.744 | 3.862 | 7.887 | 0.005 | 0.427 | 0.393 | 508.952 |
| Cranes                   | 250  | 0.623 | 2.582 | 7.381 | 0.005 | 0.335 | 0.308 | 507.155 |
| Cranes                   | 500  | 0.443 | 3.834 | 5.649 | 0.005 | 0.233 | 0.215 | 506.088 |
| Cranes                   | 750  | 0.292 | 1.650 | 4.314 | 0.005 | 0.153 | 0.141 | 505.070 |
| Cranes                   | 9999 | 0.142 | 0.966 | 2.309 | 0.005 | 0.057 | 0.052 | 506.147 |
| Crawler Tractors         | 50   | 2.519 | 8.104 | 6.317 | 0.005 | 0.733 | 0.674 | 553.214 |
| Crawler Tractors         | 120  | 0.869 | 4.185 | 7.346 | 0.005 | 0.619 | 0.570 | 511.268 |
| Crawler Tractors         | 175  | 0.624 | 3.482 | 6.721 | 0.005 | 0.371 | 0.341 | 506.034 |
| Crawler Tractors         | 250  | 0.449 | 1.803 | 6.047 | 0.005 | 0.233 | 0.215 | 507.355 |
| Crawler Tractors         | 500  | 0.398 | 2.744 | 5.279 | 0.005 | 0.205 | 0.188 | 510.339 |
| Crawler Tractors         | 750  | 0.346 | 1.621 | 4.724 | 0.005 | 0.174 | 0.160 | 507.253 |
| Crawler Tractors         | 1000 | 0.483 | 2.094 | 7.499 | 0.005 | 0.222 | 0.204 | 509.667 |
| Crushing/Proc. Equipment | 50   | 1.593 | 5.801 | 5.006 | 0.007 | 0.399 | 0.399 | 568.299 |
| Crushing/Proc. Equipment | 120  | 0.720 | 3.823 | 4.631 | 0.006 | 0.379 | 0.379 | 568.299 |
| Crushing/Proc. Equipment | 175  | 0.513 | 3.241 | 3.883 | 0.006 | 0.210 | 0.210 | 568.299 |
| Crushing/Proc. Equipment | 250  | 0.360 | 1.178 | 3.381 | 0.006 | 0.105 | 0.105 | 568.299 |
| Crushing/Proc. Equipment | 500  | 0.340 | 1.146 | 2.928 | 0.005 | 0.098 | 0.098 | 568.299 |
| Crushing/Proc. Equipment | 750  | 0.339 | 1.140 | 3.021 | 0.005 | 0.099 | 0.099 | 568.299 |
| Crushing/Proc. Equipment | 9999 | 0.397 | 1.274 | 4.700 | 0.005 | 0.127 | 0.127 | 568.299 |

|                      |      |       |       |       |       |       |       |         |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Dumpers/Tenders      | 25   | 0.690 | 2.342 | 4.378 | 0.007 | 0.175 | 0.175 | 568.299 |
| Excavators           | 25   | 0.815 | 4.942 | 4.824 | 0.005 | 0.359 | 0.330 | 563.803 |
| Excavators           | 50   | 0.815 | 4.942 | 4.824 | 0.005 | 0.359 | 0.330 | 563.803 |
| Excavators           | 120  | 0.476 | 3.661 | 4.708 | 0.005 | 0.344 | 0.317 | 500.966 |
| Excavators           | 175  | 0.358 | 3.158 | 4.081 | 0.005 | 0.201 | 0.185 | 506.495 |
| Excavators           | 250  | 0.262 | 1.277 | 3.667 | 0.005 | 0.116 | 0.107 | 506.544 |
| Excavators           | 500  | 0.213 | 1.233 | 2.815 | 0.005 | 0.091 | 0.083 | 504.290 |
| Excavators           | 750  | 0.242 | 1.349 | 3.358 | 0.005 | 0.110 | 0.101 | 501.660 |
| Forklifts            | 50   | 1.864 | 6.935 | 5.662 | 0.005 | 0.583 | 0.537 | 563.435 |
| Forklifts            | 120  | 0.723 | 4.023 | 6.222 | 0.005 | 0.520 | 0.479 | 505.583 |
| Forklifts            | 175  | 0.530 | 3.473 | 5.675 | 0.005 | 0.310 | 0.285 | 506.203 |
| Forklifts            | 250  | 0.539 | 2.226 | 6.353 | 0.005 | 0.280 | 0.258 | 507.510 |
| Forklifts            | 500  | 0.353 | 2.572 | 4.042 | 0.005 | 0.174 | 0.160 | 507.821 |
| Generator Sets       | 15   | 0.720 | 3.622 | 4.978 | 0.008 | 0.264 | 0.264 | 568.299 |
| Generator Sets       | 25   | 0.773 | 2.604 | 4.803 | 0.007 | 0.244 | 0.244 | 568.299 |
| Generator Sets       | 50   | 1.146 | 4.410 | 4.685 | 0.007 | 0.318 | 0.318 | 568.299 |
| Generator Sets       | 120  | 0.583 | 3.469 | 4.410 | 0.006 | 0.309 | 0.309 | 568.299 |
| Generator Sets       | 175  | 0.396 | 2.934 | 3.731 | 0.006 | 0.170 | 0.170 | 568.299 |
| Generator Sets       | 250  | 0.265 | 1.081 | 3.259 | 0.006 | 0.090 | 0.090 | 568.299 |
| Generator Sets       | 500  | 0.239 | 1.077 | 2.882 | 0.005 | 0.084 | 0.084 | 568.299 |
| Generator Sets       | 750  | 0.247 | 1.077 | 2.989 | 0.005 | 0.086 | 0.086 | 568.300 |
| Generator Sets       | 9999 | 0.324 | 1.204 | 4.542 | 0.005 | 0.113 | 0.113 | 568.299 |
| Graders              | 50   | 3.085 | 9.106 | 6.520 | 0.005 | 0.864 | 0.795 | 528.244 |
| Graders              | 120  | 1.193 | 4.829 | 9.415 | 0.005 | 0.780 | 0.718 | 503.161 |
| Graders              | 175  | 0.810 | 3.916 | 8.250 | 0.005 | 0.464 | 0.426 | 516.131 |
| Graders              | 250  | 0.398 | 1.459 | 5.663 | 0.005 | 0.184 | 0.169 | 511.696 |
| Graders              | 500  | 0.334 | 1.774 | 3.686 | 0.005 | 0.144 | 0.133 | 506.506 |
| Graders              | 750  | 0.393 | 1.367 | 3.154 | 0.005 | 0.112 | 0.112 | 568.299 |
| Off-Highway Tractors | 120  | 0.625 | 3.925 | 5.647 | 0.005 | 0.454 | 0.418 | 509.447 |
| Off-Highway Tractors | 175  | 0.391 | 3.278 | 4.511 | 0.005 | 0.229 | 0.211 | 507.629 |
| Off-Highway Tractors | 250  | 0.359 | 1.472 | 4.930 | 0.005 | 0.171 | 0.157 | 504.123 |
| Off-Highway Tractors | 750  | 0.252 | 1.143 | 3.573 | 0.005 | 0.117 | 0.108 | 505.762 |
| Off-Highway Tractors | 1000 | 0.107 | 0.973 | 2.320 | 0.005 | 0.057 | 0.053 | 506.147 |
| Off-Highway Trucks   | 175  | 0.473 | 3.459 | 4.647 | 0.005 | 0.258 | 0.237 | 503.552 |
| Off-Highway Trucks   | 250  | 0.446 | 1.824 | 4.826 | 0.005 | 0.208 | 0.191 | 502.473 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Off-Highway Trucks                 | 500  | 0.351 | 1.885 | 4.048 | 0.005 | 0.153 | 0.141 | 509.860 |
| Off-Highway Trucks                 | 750  | 0.418 | 2.436 | 4.642 | 0.005 | 0.187 | 0.172 | 508.392 |
| Off-Highway Trucks                 | 1000 | 0.393 | 1.707 | 6.035 | 0.005 | 0.175 | 0.161 | 505.722 |
| Other Construction Equipment       | 15   | 1.281 | 5.677 | 5.499 | 0.005 | 0.492 | 0.453 | 566.978 |
| Other Construction Equipment       | 25   | 1.281 | 5.677 | 5.499 | 0.005 | 0.492 | 0.453 | 566.978 |
| Other Construction Equipment       | 50   | 1.281 | 5.677 | 5.499 | 0.005 | 0.492 | 0.453 | 566.978 |
| Other Construction Equipment       | 120  | 0.703 | 3.909 | 6.325 | 0.005 | 0.496 | 0.456 | 505.349 |
| Other Construction Equipment       | 175  | 0.524 | 3.357 | 5.818 | 0.005 | 0.306 | 0.282 | 503.964 |
| Other Construction Equipment       | 500  | 0.308 | 2.285 | 4.090 | 0.005 | 0.151 | 0.139 | 509.706 |
| Other General Industrial Equipment | 15   | 1.421 | 6.259 | 5.407 | 0.005 | 0.507 | 0.466 | 564.178 |
| Other General Industrial Equipment | 25   | 1.421 | 6.259 | 5.407 | 0.005 | 0.507 | 0.466 | 564.178 |
| Other General Industrial Equipment | 50   | 1.421 | 6.259 | 5.407 | 0.005 | 0.507 | 0.466 | 564.178 |
| Other General Industrial Equipment | 120  | 0.716 | 4.045 | 6.144 | 0.005 | 0.518 | 0.476 | 503.944 |
| Other General Industrial Equipment | 175  | 0.470 | 3.437 | 5.055 | 0.005 | 0.276 | 0.254 | 505.928 |
| Other General Industrial Equipment | 250  | 0.437 | 1.867 | 5.407 | 0.005 | 0.217 | 0.200 | 507.400 |
| Other General Industrial Equipment | 500  | 0.342 | 2.367 | 4.150 | 0.005 | 0.159 | 0.146 | 507.085 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Other General Industrial Equipment | 750  | 0.243 | 1.491 | 3.102 | 0.005 | 0.100 | 0.092 | 507.658 |
| Other General Industrial Equipment | 1000 | 0.242 | 1.045 | 4.746 | 0.005 | 0.112 | 0.103 | 506.147 |
| Other Material Handling Equipment  | 50   | 1.765 | 6.892 | 5.802 | 0.005 | 0.593 | 0.546 | 561.532 |
| Other Material Handling Equipment  | 120  | 0.514 | 3.766 | 4.798 | 0.005 | 0.367 | 0.338 | 507.792 |
| Other Material Handling Equipment  | 175  | 0.489 | 3.418 | 5.212 | 0.005 | 0.280 | 0.257 | 506.324 |
| Other Material Handling Equipment  | 250  | 0.398 | 1.643 | 5.196 | 0.005 | 0.189 | 0.174 | 505.534 |
| Other Material Handling Equipment  | 500  | 0.323 | 1.871 | 4.053 | 0.005 | 0.156 | 0.143 | 504.263 |
| Other Material Handling Equipment  | 9999 | 0.159 | 0.997 | 3.489 | 0.005 | 0.070 | 0.065 | 506.147 |
| Pavers                             | 25   | 1.827 | 6.340 | 5.579 | 0.005 | 0.569 | 0.523 | 565.234 |
| Pavers                             | 50   | 1.827 | 6.340 | 5.579 | 0.005 | 0.569 | 0.523 | 565.234 |
| Pavers                             | 120  | 0.650 | 3.769 | 5.886 | 0.005 | 0.457 | 0.420 | 503.780 |
| Pavers                             | 175  | 0.433 | 3.080 | 4.874 | 0.005 | 0.242 | 0.223 | 506.540 |
| Pavers                             | 250  | 0.214 | 1.036 | 4.024 | 0.005 | 0.104 | 0.096 | 508.070 |
| Pavers                             | 500  | 0.180 | 0.983 | 2.885 | 0.005 | 0.096 | 0.089 | 500.936 |
| Paving Equipment                   | 25   | 0.991 | 4.937 | 4.985 | 0.005 | 0.404 | 0.371 | 557.706 |
| Paving Equipment                   | 50   | 0.991 | 4.937 | 4.985 | 0.005 | 0.404 | 0.371 | 557.706 |
| Paving Equipment                   | 120  | 0.623 | 3.796 | 5.733 | 0.005 | 0.438 | 0.403 | 507.910 |
| Paving Equipment                   | 175  | 0.372 | 3.081 | 4.322 | 0.005 | 0.215 | 0.197 | 504.820 |
| Paving Equipment                   | 250  | 0.297 | 1.331 | 4.428 | 0.005 | 0.148 | 0.136 | 506.197 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Pressure Washers                   | 15   | 0.720 | 3.622 | 4.978 | 0.008 | 0.264 | 0.264 | 568.299 |
| Pressure Washers                   | 25   | 0.773 | 2.604 | 4.803 | 0.007 | 0.244 | 0.244 | 568.299 |
| Pressure Washers                   | 50   | 0.865 | 3.729 | 4.515 | 0.007 | 0.269 | 0.269 | 568.299 |
| Pressure Washers                   | 120  | 0.504 | 3.308 | 4.209 | 0.006 | 0.264 | 0.264 | 568.299 |
| Pressure Washers                   | 175  | 0.386 | 2.913 | 3.726 | 0.006 | 0.168 | 0.168 | 568.299 |

|                         |      |       |       |       |       |       |       |         |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Pressure Washers        | 250  | 0.107 | 0.986 | 0.399 | 0.006 | 0.009 | 0.009 | 568.299 |
| Pumps                   | 15   | 0.809 | 3.622 | 5.023 | 0.008 | 0.289 | 0.289 | 568.299 |
| Pumps                   | 25   | 0.855 | 2.604 | 4.803 | 0.007 | 0.255 | 0.255 | 568.299 |
| Pumps                   | 50   | 1.240 | 4.640 | 4.742 | 0.007 | 0.335 | 0.335 | 568.299 |
| Pumps                   | 120  | 0.610 | 3.523 | 4.478 | 0.006 | 0.325 | 0.325 | 568.299 |
| Pumps                   | 175  | 0.417 | 2.978 | 3.789 | 0.006 | 0.179 | 0.179 | 568.299 |
| Pumps                   | 250  | 0.280 | 1.099 | 3.313 | 0.006 | 0.094 | 0.094 | 568.299 |
| Pumps                   | 500  | 0.254 | 1.093 | 2.919 | 0.005 | 0.088 | 0.088 | 568.299 |
| Pumps                   | 750  | 0.262 | 1.093 | 3.028 | 0.005 | 0.089 | 0.089 | 568.299 |
| Pumps                   | 9999 | 0.335 | 1.223 | 4.596 | 0.005 | 0.116 | 0.116 | 568.300 |
| Rollers                 | 15   | 1.259 | 5.231 | 5.236 | 0.005 | 0.459 | 0.423 | 563.972 |
| Rollers                 | 25   | 1.259 | 5.231 | 5.236 | 0.005 | 0.459 | 0.423 | 563.972 |
| Rollers                 | 50   | 1.259 | 5.231 | 5.236 | 0.005 | 0.459 | 0.423 | 563.972 |
| Rollers                 | 120  | 0.628 | 3.755 | 5.806 | 0.005 | 0.428 | 0.393 | 508.199 |
| Rollers                 | 175  | 0.338 | 2.993 | 4.239 | 0.005 | 0.197 | 0.181 | 505.904 |
| Rollers                 | 250  | 0.308 | 1.507 | 4.395 | 0.005 | 0.150 | 0.138 | 507.694 |
| Rollers                 | 500  | 0.334 | 2.956 | 4.456 | 0.005 | 0.173 | 0.159 | 513.415 |
| Rough Terrain Forklifts |      |       |       |       |       |       |       |         |
|                         | 50   | 1.159 | 4.918 | 5.099 | 0.005 | 0.415 | 0.382 | 563.360 |
| Rough Terrain Forklifts |      |       |       |       |       |       |       |         |
|                         | 120  | 0.302 | 3.342 | 3.840 | 0.005 | 0.213 | 0.196 | 507.066 |
| Rough Terrain Forklifts |      |       |       |       |       |       |       |         |
|                         | 175  | 0.209 | 2.865 | 3.209 | 0.005 | 0.124 | 0.115 | 505.596 |
| Rough Terrain Forklifts |      |       |       |       |       |       |       |         |
|                         | 250  | 0.144 | 1.018 | 2.468 | 0.005 | 0.059 | 0.054 | 506.896 |
| Rough Terrain Forklifts |      |       |       |       |       |       |       |         |
|                         | 500  | 0.178 | 0.962 | 3.542 | 0.005 | 0.078 | 0.072 | 501.213 |
| Rubber Tired Dozers     |      |       |       |       |       |       |       |         |
|                         | 175  | 0.968 | 4.249 | 9.853 | 0.005 | 0.566 | 0.521 | 507.774 |
| Rubber Tired Dozers     |      |       |       |       |       |       |       |         |
|                         | 250  | 0.736 | 2.729 | 7.995 | 0.005 | 0.395 | 0.364 | 509.462 |
| Rubber Tired Dozers     |      |       |       |       |       |       |       |         |
|                         | 500  | 0.688 | 5.828 | 7.710 | 0.005 | 0.359 | 0.330 | 513.311 |
| Rubber Tired Dozers     |      |       |       |       |       |       |       |         |
|                         | 750  | 0.523 | 2.765 | 7.168 | 0.005 | 0.260 | 0.239 | 507.260 |
| Rubber Tired Dozers     |      |       |       |       |       |       |       |         |
|                         | 1000 | 0.631 | 2.723 | 6.277 | 0.005 | 0.208 | 0.208 | 568.300 |
| Rubber Tired Loaders    |      |       |       |       |       |       |       |         |
|                         | 25   | 2.055 | 7.791 | 6.053 | 0.005 | 0.660 | 0.607 | 561.903 |
| Rubber Tired Loaders    |      |       |       |       |       |       |       |         |
|                         | 50   | 2.055 | 7.791 | 6.053 | 0.005 | 0.660 | 0.607 | 561.903 |
| Rubber Tired Loaders    |      |       |       |       |       |       |       |         |
|                         | 120  | 0.803 | 4.212 | 6.583 | 0.005 | 0.565 | 0.520 | 499.594 |
| Rubber Tired Loaders    |      |       |       |       |       |       |       |         |
|                         | 175  | 0.565 | 3.562 | 5.726 | 0.005 | 0.319 | 0.294 | 505.131 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Rubber Tired Loaders      | 250  | 0.393 | 1.452 | 5.115 | 0.005 | 0.175 | 0.161 | 503.654 |
| Rubber Tired Loaders      | 500  | 0.391 | 2.155 | 4.627 | 0.005 | 0.174 | 0.160 | 500.431 |
| Rubber Tired Loaders      | 750  | 0.373 | 1.703 | 4.172 | 0.005 | 0.164 | 0.151 | 491.918 |
| Rubber Tired Loaders      | 1000 | 0.425 | 1.464 | 6.724 | 0.005 | 0.198 | 0.182 | 504.780 |
| Scrapers                  | 120  | 0.742 | 4.173 | 7.143 | 0.005 | 0.543 | 0.500 | 519.167 |
| Scrapers                  | 175  | 0.688 | 3.781 | 7.384 | 0.005 | 0.397 | 0.365 | 513.436 |
| Scrapers                  | 250  | 0.684 | 2.840 | 8.109 | 0.005 | 0.367 | 0.338 | 502.255 |
| Scrapers                  | 500  | 0.452 | 3.606 | 5.757 | 0.005 | 0.232 | 0.214 | 506.350 |
| Scrapers                  | 750  | 0.340 | 2.482 | 4.484 | 0.005 | 0.168 | 0.154 | 506.638 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Signal Boards             | 50   | 1.306 | 4.921 | 4.761 | 0.007 | 0.343 | 0.343 | 568.299 |
| Signal Boards             | 120  | 0.618 | 3.594 | 4.414 | 0.006 | 0.330 | 0.330 | 568.299 |
| Signal Boards             | 175  | 0.430 | 3.047 | 3.708 | 0.006 | 0.183 | 0.183 | 568.299 |
| Signal Boards             | 250  | 0.354 | 1.344 | 3.894 | 0.007 | 0.114 | 0.114 | 686.695 |
| Skid Steer Loaders        | 25   | 0.599 | 3.957 | 4.268 | 0.005 | 0.241 | 0.221 | 565.228 |
| Skid Steer Loaders        | 50   | 0.599 | 3.957 | 4.268 | 0.005 | 0.241 | 0.221 | 565.228 |
| Skid Steer Loaders        | 120  | 0.273 | 3.328 | 3.534 | 0.005 | 0.197 | 0.182 | 506.297 |
| Surfacing Equipment       | 50   | 1.045 | 4.763 | 5.273 | 0.006 | 0.406 | 0.374 | 570.815 |
| Surfacing Equipment       | 120  | 0.522 | 3.550 | 5.051 | 0.005 | 0.349 | 0.321 | 505.087 |
| Surfacing Equipment       | 175  | 0.458 | 3.006 | 5.458 | 0.005 | 0.265 | 0.244 | 504.558 |
| Surfacing Equipment       | 250  | 0.307 | 1.429 | 5.048 | 0.005 | 0.148 | 0.137 | 510.706 |
| Surfacing Equipment       | 500  | 0.217 | 1.425 | 3.468 | 0.005 | 0.111 | 0.102 | 502.471 |
| Surfacing Equipment       | 750  | 0.162 | 1.000 | 2.880 | 0.005 | 0.093 | 0.085 | 506.967 |
| Sweepers/Scrubbers        | 15   | 1.781 | 6.785 | 5.726 | 0.005 | 0.603 | 0.555 | 563.269 |
| Sweepers/Scrubbers        | 25   | 1.781 | 6.785 | 5.726 | 0.005 | 0.603 | 0.555 | 563.269 |
| Sweepers/Scrubbers        | 50   | 1.781 | 6.785 | 5.726 | 0.005 | 0.603 | 0.555 | 563.269 |
| Sweepers/Scrubbers        | 120  | 0.783 | 4.059 | 6.454 | 0.005 | 0.571 | 0.525 | 508.357 |
| Sweepers/Scrubbers        | 175  | 0.746 | 3.839 | 7.787 | 0.005 | 0.419 | 0.385 | 507.292 |
| Sweepers/Scrubbers        | 250  | 0.521 | 2.089 | 6.782 | 0.005 | 0.270 | 0.248 | 504.080 |
| Tractors/Loaders/Backhoes | 25   | 1.250 | 5.741 | 5.214 | 0.005 | 0.455 | 0.418 | 553.400 |



|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Tractors/Loaders/Backhoes | 50   | 1.250 | 5.741 | 5.214 | 0.005 | 0.455 | 0.418 | 553.400 |
| Tractors/Loaders/Backhoes | 120  | 0.538 | 3.811 | 5.142 | 0.005 | 0.396 | 0.364 | 511.346 |
| Tractors/Loaders/Backhoes | 175  | 0.389 | 3.232 | 4.379 | 0.005 | 0.222 | 0.204 | 502.629 |
| Tractors/Loaders/Backhoes | 250  | 0.311 | 1.347 | 4.426 | 0.005 | 0.145 | 0.133 | 504.401 |
| Tractors/Loaders/Backhoes | 500  | 0.284 | 1.786 | 3.787 | 0.005 | 0.131 | 0.121 | 505.270 |
| Tractors/Loaders/Backhoes | 750  | 0.300 | 1.674 | 4.022 | 0.005 | 0.144 | 0.133 | 500.955 |
| Trenchers                 | 15   | 1.219 | 5.285 | 5.298 | 0.005 | 0.475 | 0.437 | 565.994 |
| Trenchers                 | 25   | 1.219 | 5.285 | 5.298 | 0.005 | 0.475 | 0.437 | 565.994 |
| Trenchers                 | 50   | 1.219 | 5.285 | 5.298 | 0.005 | 0.475 | 0.437 | 565.994 |
| Trenchers                 | 120  | 0.788 | 3.988 | 6.902 | 0.005 | 0.541 | 0.498 | 509.903 |
| Trenchers                 | 175  | 0.583 | 3.507 | 6.503 | 0.005 | 0.328 | 0.302 | 501.781 |
| Trenchers                 | 250  | 0.487 | 2.030 | 6.312 | 0.005 | 0.251 | 0.231 | 507.145 |
| Trenchers                 | 500  | 0.296 | 1.966 | 4.099 | 0.005 | 0.150 | 0.138 | 504.410 |
| Trenchers                 | 750  | 0.120 | 0.971 | 1.630 | 0.005 | 0.054 | 0.050 | 509.143 |
| Welders                   | 15   | 0.809 | 3.622 | 5.023 | 0.008 | 0.289 | 0.289 | 568.299 |
| Welders                   | 25   | 0.855 | 2.604 | 4.803 | 0.007 | 0.255 | 0.255 | 568.299 |
| Welders                   | 50   | 1.540 | 5.395 | 4.936 | 0.007 | 0.389 | 0.389 | 568.299 |
| Welders                   | 120  | 0.699 | 3.705 | 4.692 | 0.006 | 0.375 | 0.375 | 568.300 |
| Welders                   | 175  | 0.486 | 3.128 | 3.973 | 0.006 | 0.206 | 0.206 | 568.299 |
| Welders                   | 250  | 0.330 | 1.153 | 3.481 | 0.006 | 0.104 | 0.104 | 568.299 |
| Welders                   | 500  | 0.306 | 1.134 | 3.032 | 0.005 | 0.097 | 0.097 | 568.299 |
| Water Trucks              | 175  | 0.473 | 3.459 | 4.647 | 0.005 | 0.258 | 0.237 | 503.552 |
| Water Trucks              | 250  | 0.446 | 1.824 | 4.826 | 0.005 | 0.208 | 0.191 | 502.473 |
| Water Trucks              | 500  | 0.351 | 1.885 | 4.048 | 0.005 | 0.153 | 0.141 | 509.860 |
| Water Trucks              | 750  | 0.418 | 2.436 | 4.642 | 0.005 | 0.187 | 0.172 | 508.392 |
| Water Trucks              | 1000 | 0.393 | 1.707 | 6.035 | 0.005 | 0.175 | 0.161 | 505.722 |

2017

| g/hp/hr | g/hp/hr |
|---------|---------|
| CH4     | N2O     |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.153   | 0.004   |
| 0.153   | 0.004   |
| 0.023   | 0.004   |
| 0.073   | 0.005   |
| 0.077   | 0.005   |
| 0.150   | 0.005   |
| 0.067   | 0.004   |
| 0.047   | 0.004   |
| 0.032   | 0.004   |
| 0.030   | 0.004   |
| 0.030   | 0.004   |
| 0.034   | 0.004   |
| 0.175   | 0.005   |
| 0.175   | 0.005   |
| 0.175   | 0.005   |
| 0.148   | 0.004   |
| 0.154   | 0.004   |
| 0.152   | 0.004   |
| 0.149   | 0.004   |
| 0.155   | 0.004   |
| 0.153   | 0.004   |

| 2017            |       | g/hp/hr | g/hp/hr |
|-----------------|-------|---------|---------|
| Equipment       | MaxHP | ROG     | CO      |
| Aerial Lifts    | 15    | 0.209   | 3.169   |
| Aerial Lifts    | 25    | 0.209   | 3.169   |
| Aerial Lifts    | 50    | 0.209   | 3.169   |
| Aerial Lifts    | 120   | 0.143   | 3.184   |
| Aerial Lifts    | 500   | 0.246   | 0.997   |
| Aerial Lifts    | 750   | 0.239   | 1.059   |
| Air Compressors |       |         |         |
|                 | 15    | 0.786   | 3.599   |
| Air Compressors |       |         |         |
|                 | 25    | 0.830   | 2.564   |
| Air Compressors |       |         |         |
|                 | 50    | 1.481   | 5.604   |
| Air Compressors |       |         |         |
|                 | 120   | 0.671   | 3.772   |
| Air Compressors |       |         |         |
|                 | 175   | 0.477   | 3.207   |
| Air Compressors |       |         |         |
|                 | 250   | 0.339   | 1.162   |
| Air Compressors |       |         |         |
|                 | 500   | 0.321   | 1.123   |
| Air Compressors |       |         |         |
|                 | 750   | 0.323   | 1.123   |
| Air Compressors |       |         |         |
|                 | 1000  | 0.362   | 1.246   |
| Bore/Drill Rigs |       |         |         |
|                 | 15    | 0.804   | 4.652   |
| Bore/Drill Rigs |       |         |         |
|                 | 25    | 0.804   | 4.652   |
| Bore/Drill Rigs |       |         |         |
|                 | 50    | 0.804   | 4.652   |
| Bore/Drill Rigs |       |         |         |
|                 | 120   | 0.298   | 3.331   |
| Bore/Drill Rigs |       |         |         |
|                 | 175   | 0.245   | 3.001   |
| Bore/Drill Rigs |       |         |         |
|                 | 250   | 0.174   | 1.102   |
| Bore/Drill Rigs |       |         |         |
|                 | 500   | 0.166   | 1.119   |
| Bore/Drill Rigs |       |         |         |
|                 | 750   | 0.155   | 1.137   |
| Bore/Drill Rigs |       |         |         |
|                 | 1000  | 0.121   | 0.971   |

|       |       |
|-------|-------|
| 0.059 | 0.005 |
| 0.071 | 0.005 |
| 0.061 | 0.005 |
| 0.119 | 0.005 |
| 0.055 | 0.004 |
| 0.039 | 0.004 |
| 0.168 | 0.005 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.167 | 0.005 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.143 | 0.005 |
| 0.065 | 0.004 |
| 0.046 | 0.004 |
| 0.032 | 0.004 |
| 0.030 | 0.004 |
| 0.030 | 0.004 |
| 0.035 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 |
| Cement and Mortar Mixers | 25   | 0.767 | 2.466 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.340 |
| Concrete/Industrial Saws | 50   | 1.175 | 4.894 |
| Concrete/Industrial Saws | 120  | 0.557 | 3.595 |
| Concrete/Industrial Saws | 175  | 0.395 | 3.073 |
| Cranes                   | 50   | 2.173 | 7.408 |
| Cranes                   | 120  | 1.097 | 4.710 |
| Cranes                   | 175  | 0.696 | 3.787 |
| Cranes                   | 250  | 0.561 | 2.385 |
| Cranes                   | 500  | 0.410 | 3.547 |
| Cranes                   | 750  | 0.287 | 1.633 |
| Cranes                   | 9999 | 0.152 | 0.974 |
| Crawler Tractors         | 50   | 2.459 | 8.006 |
| Crawler Tractors         | 120  | 0.849 | 4.176 |
| Crawler Tractors         | 175  | 0.614 | 3.483 |
| Crawler Tractors         | 250  | 0.430 | 1.742 |
| Crawler Tractors         | 500  | 0.385 | 2.635 |
| Crawler Tractors         | 750  | 0.324 | 1.522 |
| Crawler Tractors         | 1000 | 0.486 | 2.100 |
| Crushing/Proc. Equipment | 50   | 1.402 | 5.623 |
| Crushing/Proc. Equipment | 120  | 0.647 | 3.791 |
| Crushing/Proc. Equipment | 175  | 0.468 | 3.236 |
| Crushing/Proc. Equipment | 250  | 0.340 | 1.160 |
| Crushing/Proc. Equipment | 500  | 0.324 | 1.118 |
| Crushing/Proc. Equipment | 750  | 0.323 | 1.114 |
| Crushing/Proc. Equipment | 9999 | 0.378 | 1.231 |

|       |       |
|-------|-------|
| 0.062 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.065 | 0.005 |
| 0.069 | 0.005 |
| 0.103 | 0.005 |
| 0.052 | 0.004 |
| 0.035 | 0.004 |
| 0.023 | 0.004 |
| 0.021 | 0.004 |
| 0.022 | 0.004 |
| 0.029 | 0.004 |
| 0.159 | 0.005 |
| 0.152 | 0.004 |
| 0.156 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.035 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |

|                      |      |       |       |
|----------------------|------|-------|-------|
| Dumpers/Tenders      | 25   | 0.687 | 2.340 |
| Excavators           | 25   | 0.771 | 4.889 |
| Excavators           | 50   | 0.771 | 4.889 |
| Excavators           | 120  | 0.440 | 3.639 |
| Excavators           | 175  | 0.334 | 3.151 |
| Excavators           | 250  | 0.247 | 1.249 |
| Excavators           | 500  | 0.200 | 1.199 |
| Excavators           | 750  | 0.210 | 1.228 |
| Forklifts            | 50   | 1.703 | 6.673 |
| Forklifts            | 120  | 0.672 | 3.979 |
| Forklifts            | 175  | 0.508 | 3.452 |
| Forklifts            | 250  | 0.496 | 2.092 |
| Forklifts            | 500  | 0.338 | 2.508 |
| Generator Sets       | 15   | 0.699 | 3.599 |
| Generator Sets       | 25   | 0.757 | 2.564 |
| Generator Sets       | 50   | 1.017 | 4.292 |
| Generator Sets       | 120  | 0.520 | 3.442 |
| Generator Sets       | 175  | 0.356 | 2.931 |
| Generator Sets       | 250  | 0.245 | 1.063 |
| Generator Sets       | 500  | 0.224 | 1.048 |
| Generator Sets       | 750  | 0.230 | 1.048 |
| Generator Sets       | 9999 | 0.301 | 1.161 |
| Graders              | 50   | 3.007 | 8.978 |
| Graders              | 120  | 1.164 | 4.810 |
| Graders              | 175  | 0.757 | 3.845 |
| Graders              | 250  | 0.396 | 1.449 |
| Graders              | 500  | 0.334 | 1.707 |
| Graders              | 750  | 0.372 | 1.323 |
| Off-Highway Tractors | 120  | 0.586 | 3.901 |
| Off-Highway Tractors | 175  | 0.356 | 3.259 |
| Off-Highway Tractors | 250  | 0.328 | 1.403 |
| Off-Highway Tractors | 750  | 0.248 | 1.145 |
| Off-Highway Tractors | 1000 | 0.118 | 0.985 |
| Off-Highway Trucks   | 175  | 0.441 | 3.436 |
| Off-Highway Trucks   | 250  | 0.417 | 1.753 |

|       |       |
|-------|-------|
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.325 | 1.748 |
| Off-Highway Trucks                 | 750  | 0.394 | 2.356 |
| Off-Highway Trucks                 | 1000 | 0.362 | 1.546 |
| Other Construction Equipment       | 15   | 1.244 | 5.655 |
| Other Construction Equipment       | 25   | 1.244 | 5.655 |
| Other Construction Equipment       | 50   | 1.244 | 5.655 |
| Other Construction Equipment       | 120  | 0.676 | 3.885 |
| Other Construction Equipment       | 175  | 0.500 | 3.338 |
| Other Construction Equipment       | 500  | 0.290 | 2.121 |
| Other General Industrial Equipment | 15   | 1.349 | 6.179 |
| Other General Industrial Equipment | 25   | 1.349 | 6.179 |
| Other General Industrial Equipment | 50   | 1.349 | 6.179 |
| Other General Industrial Equipment | 120  | 0.660 | 3.998 |
| Other General Industrial Equipment | 175  | 0.437 | 3.399 |
| Other General Industrial Equipment | 250  | 0.411 | 1.780 |
| Other General Industrial Equipment | 500  | 0.334 | 2.365 |

|       |       |
|-------|-------|
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.169 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.168 | 0.005 |
| 0.168 | 0.005 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.065 | 0.005 |
| 0.069 | 0.005 |
| 0.078 | 0.005 |
| 0.045 | 0.004 |
| 0.034 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.219 | 1.480 |
| Other General Industrial Equipment | 1000 | 0.251 | 1.057 |
| Other Material Handling Equipment  | 50   | 1.615 | 6.635 |
| Other Material Handling Equipment  | 120  | 0.488 | 3.758 |
| Other Material Handling Equipment  | 175  | 0.427 | 3.351 |
| Other Material Handling Equipment  | 250  | 0.359 | 1.512 |
| Other Material Handling Equipment  | 500  | 0.325 | 1.863 |
| Other Material Handling Equipment  | 9999 | 0.169 | 1.010 |
| Pavers                             | 25   | 1.731 | 6.199 |
| Pavers                             | 50   | 1.731 | 6.199 |
| Pavers                             | 120  | 0.625 | 3.759 |
| Pavers                             | 175  | 0.389 | 3.063 |
| Pavers                             | 250  | 0.208 | 1.037 |
| Pavers                             | 500  | 0.168 | 0.979 |
| Paving Equipment                   | 25   | 0.926 | 4.804 |
| Paving Equipment                   | 50   | 0.926 | 4.804 |
| Paving Equipment                   | 120  | 0.563 | 3.741 |
| Paving Equipment                   | 175  | 0.343 | 3.073 |
| Paving Equipment                   | 250  | 0.288 | 1.333 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.699 | 3.599 |
| Pressure Washers                   | 25   | 0.757 | 2.564 |
| Pressure Washers                   | 50   | 0.760 | 3.632 |
| Pressure Washers                   | 120  | 0.444 | 3.283 |
| Pressure Washers                   | 175  | 0.346 | 2.910 |

|       |       |
|-------|-------|
| 0.009 | 0.004 |
| 0.073 | 0.005 |
| 0.077 | 0.005 |
| 0.111 | 0.005 |
| 0.055 | 0.004 |
| 0.037 | 0.004 |
| 0.025 | 0.004 |
| 0.022 | 0.004 |
| 0.023 | 0.004 |
| 0.030 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.155 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.155 | 0.004 |
| 0.153 | 0.004 |
| 0.057 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.151 | 0.004 |
| 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.102 | 0.986 |
| Pumps                   | 15   | 0.786 | 3.599 |
| Pumps                   | 25   | 0.830 | 2.564 |
| Pumps                   | 50   | 1.104 | 4.514 |
| Pumps                   | 120  | 0.546 | 3.495 |
| Pumps                   | 175  | 0.376 | 2.975 |
| Pumps                   | 250  | 0.260 | 1.080 |
| Pumps                   | 500  | 0.239 | 1.062 |
| Pumps                   | 750  | 0.244 | 1.062 |
| Pumps                   | 9999 | 0.313 | 1.177 |
| Rollers                 | 15   | 1.198 | 5.147 |
| Rollers                 | 25   | 1.198 | 5.147 |
| Rollers                 | 50   | 1.198 | 5.147 |
| Rollers                 | 120  | 0.580 | 3.713 |
| Rollers                 | 175  | 0.314 | 2.981 |
| Rollers                 | 250  | 0.274 | 1.408 |
| Rollers                 | 500  | 0.297 | 2.685 |
| Rough Terrain Forklifts | 50   | 1.108 | 4.833 |
| Rough Terrain Forklifts | 120  | 0.271 | 3.318 |
| Rough Terrain Forklifts | 175  | 0.194 | 2.866 |
| Rough Terrain Forklifts | 250  | 0.148 | 1.024 |
| Rough Terrain Forklifts | 500  | 0.182 | 0.966 |
| Rubber Tired Dozers     | 175  | 0.903 | 4.149 |
| Rubber Tired Dozers     | 250  | 0.707 | 2.655 |
| Rubber Tired Dozers     | 500  | 0.662 | 5.526 |
| Rubber Tired Dozers     | 750  | 0.526 | 2.767 |
| Rubber Tired Dozers     | 1000 | 0.602 | 2.560 |
| Rubber Tired Loaders    | 25   | 1.957 | 7.660 |
| Rubber Tired Loaders    | 50   | 1.957 | 7.660 |
| Rubber Tired Loaders    | 120  | 0.757 | 4.171 |
| Rubber Tired Loaders    | 175  | 0.522 | 3.518 |

|       |       |
|-------|-------|
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.148 | 0.004 |
| 0.152 | 0.004 |
| 0.157 | 0.004 |
| 0.155 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.117 | 0.005 |
| 0.055 | 0.004 |
| 0.038 | 0.004 |
| 0.031 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.153 | 0.004 |
| 0.172 | 0.005 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.167 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.373 | 1.417 |
| Rubber Tired Loaders      | 500  | 0.369 | 2.060 |
| Rubber Tired Loaders      | 750  | 0.367 | 1.700 |
| Rubber Tired Loaders      | 1000 | 0.415 | 1.456 |
| Scrapers                  | 120  | 0.754 | 4.207 |
| Scrapers                  | 175  | 0.629 | 3.705 |
| Scrapers                  | 250  | 0.627 | 2.647 |
| Scrapers                  | 500  | 0.425 | 3.337 |
| Scrapers                  | 750  | 0.325 | 2.295 |
| Signal Boards             | 15   | 0.661 | 3.469 |
| Signal Boards             | 50   | 1.158 | 4.785 |
| Signal Boards             | 120  | 0.553 | 3.566 |
| Signal Boards             | 175  | 0.388 | 3.044 |
| Signal Boards             | 250  | 0.330 | 1.323 |
| Skid Steer Loaders        | 25   | 0.568 | 3.919 |
| Skid Steer Loaders        | 50   | 0.568 | 3.919 |
| Skid Steer Loaders        | 120  | 0.255 | 3.319 |
| Surfacing Equipment       | 50   | 0.928 | 4.603 |
| Surfacing Equipment       | 120  | 0.508 | 3.556 |
| Surfacing Equipment       | 175  | 0.455 | 3.003 |
| Surfacing Equipment       | 250  | 0.274 | 1.343 |
| Surfacing Equipment       | 500  | 0.204 | 1.396 |
| Surfacing Equipment       | 750  | 0.160 | 1.003 |
| Sweepers/Scrubbers        | 15   | 1.712 | 6.719 |
| Sweepers/Scrubbers        | 25   | 1.712 | 6.719 |
| Sweepers/Scrubbers        | 50   | 1.712 | 6.719 |
| Sweepers/Scrubbers        | 120  | 0.721 | 4.010 |
| Sweepers/Scrubbers        | 175  | 0.711 | 3.784 |
| Sweepers/Scrubbers        | 250  | 0.513 | 2.090 |
| Tractors/Loaders/Backhoes | 25   | 1.194 | 5.689 |



|       |       |
|-------|-------|
| 0.167 | 0.005 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.154 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.073 | 0.005 |
| 0.077 | 0.005 |
| 0.138 | 0.005 |
| 0.063 | 0.004 |
| 0.043 | 0.004 |
| 0.029 | 0.004 |
| 0.027 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 1.194 | 5.689 |
| Tractors/Loaders/Backhoes | 120  | 0.501 | 3.782 |
| Tractors/Loaders/Backhoes | 175  | 0.354 | 3.200 |
| Tractors/Loaders/Backhoes | 250  | 0.291 | 1.304 |
| Tractors/Loaders/Backhoes | 500  | 0.272 | 1.739 |
| Tractors/Loaders/Backhoes | 750  | 0.296 | 1.646 |
| Trenchers                 | 15   | 1.149 | 5.197 |
| Trenchers                 | 25   | 1.149 | 5.197 |
| Trenchers                 | 50   | 1.149 | 5.197 |
| Trenchers                 | 120  | 0.762 | 3.968 |
| Trenchers                 | 175  | 0.536 | 3.434 |
| Trenchers                 | 250  | 0.486 | 2.037 |
| Trenchers                 | 500  | 0.265 | 1.966 |
| Trenchers                 | 750  | 0.114 | 0.972 |
| Welders                   | 15   | 0.786 | 3.599 |
| Welders                   | 25   | 0.830 | 2.564 |
| Welders                   | 50   | 1.372 | 5.239 |
| Welders                   | 120  | 0.630 | 3.675 |
| Welders                   | 175  | 0.442 | 3.124 |
| Welders                   | 250  | 0.310 | 1.133 |
| Welders                   | 500  | 0.290 | 1.102 |
| Water Trucks              | 175  | 0.441 | 3.436 |
| Water Trucks              | 250  | 0.417 | 1.753 |
| Water Trucks              | 500  | 0.325 | 1.748 |
| Water Trucks              | 750  | 0.394 | 2.356 |
| Water Trucks              | 1000 | 0.362 | 1.546 |





|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.362 | 0.007 | 0.171 | 0.171 | 568.299 | 0.062 | 0.005 |
| 4.678 | 0.005 | 0.332 | 0.305 | 554.910 | 0.170 | 0.005 |
| 4.678 | 0.005 | 0.332 | 0.305 | 554.910 | 0.170 | 0.005 |
| 4.380 | 0.005 | 0.310 | 0.286 | 493.409 | 0.151 | 0.004 |
| 3.700 | 0.005 | 0.182 | 0.168 | 498.522 | 0.153 | 0.004 |
| 3.319 | 0.005 | 0.105 | 0.097 | 498.436 | 0.153 | 0.004 |
| 2.507 | 0.005 | 0.081 | 0.075 | 496.810 | 0.152 | 0.004 |
| 2.719 | 0.005 | 0.090 | 0.083 | 494.550 | 0.152 | 0.004 |
| 5.450 | 0.005 | 0.536 | 0.493 | 554.677 | 0.170 | 0.005 |
| 5.818 | 0.005 | 0.480 | 0.442 | 497.725 | 0.153 | 0.004 |
| 5.362 | 0.005 | 0.294 | 0.270 | 498.334 | 0.153 | 0.004 |
| 5.751 | 0.005 | 0.252 | 0.232 | 499.621 | 0.153 | 0.004 |
| 3.780 | 0.005 | 0.161 | 0.148 | 499.927 | 0.153 | 0.004 |
| 4.847 | 0.008 | 0.250 | 0.250 | 568.299 | 0.063 | 0.005 |
| 4.729 | 0.007 | 0.233 | 0.233 | 568.299 | 0.068 | 0.005 |
| 4.522 | 0.007 | 0.285 | 0.285 | 568.299 | 0.091 | 0.005 |
| 4.072 | 0.006 | 0.274 | 0.274 | 568.299 | 0.046 | 0.004 |
| 3.347 | 0.006 | 0.151 | 0.151 | 568.299 | 0.032 | 0.004 |
| 2.910 | 0.006 | 0.081 | 0.081 | 568.299 | 0.022 | 0.004 |
| 2.579 | 0.005 | 0.076 | 0.076 | 568.299 | 0.020 | 0.004 |
| 2.660 | 0.005 | 0.077 | 0.077 | 568.299 | 0.020 | 0.004 |
| 4.293 | 0.005 | 0.104 | 0.104 | 568.299 | 0.027 | 0.004 |
| 6.423 | 0.005 | 0.843 | 0.776 | 520.075 | 0.159 | 0.005 |
| 9.191 | 0.005 | 0.759 | 0.698 | 495.919 | 0.152 | 0.004 |
| 7.663 | 0.005 | 0.430 | 0.396 | 506.748 | 0.155 | 0.004 |
| 5.525 | 0.005 | 0.180 | 0.166 | 503.802 | 0.154 | 0.004 |
| 3.557 | 0.005 | 0.139 | 0.128 | 498.600 | 0.153 | 0.004 |
| 2.835 | 0.005 | 0.100 | 0.100 | 568.299 | 0.033 | 0.004 |
| 5.317 | 0.005 | 0.423 | 0.389 | 501.245 | 0.154 | 0.004 |
| 4.026 | 0.005 | 0.205 | 0.189 | 499.245 | 0.153 | 0.004 |
| 4.382 | 0.005 | 0.151 | 0.139 | 496.498 | 0.152 | 0.004 |
| 3.324 | 0.005 | 0.112 | 0.103 | 497.618 | 0.153 | 0.004 |
| 2.340 | 0.005 | 0.059 | 0.054 | 498.280 | 0.153 | 0.004 |
| 4.236 | 0.005 | 0.233 | 0.215 | 495.924 | 0.152 | 0.004 |
| 4.368 | 0.005 | 0.189 | 0.174 | 494.794 | 0.152 | 0.004 |

|                      |
|----------------------|
| Dumpers/Trailers     |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Trucks   |
| Off-Highway Trucks   |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 2.592 | 0.005 | 0.086 | 0.079 | 499.767 | 0.153 | 0.004 |
| 4.787 | 0.005 | 0.115 | 0.105 | 498.280 | 0.153 | 0.004 |
| 5.574 | 0.005 | 0.546 | 0.502 | 552.804 | 0.169 | 0.005 |
| 4.561 | 0.005 | 0.341 | 0.314 | 499.899 | 0.153 | 0.004 |
| 4.488 | 0.005 | 0.238 | 0.219 | 498.454 | 0.153 | 0.004 |
| 4.705 | 0.005 | 0.163 | 0.150 | 497.676 | 0.153 | 0.004 |
| 3.971 | 0.005 | 0.154 | 0.141 | 496.425 | 0.152 | 0.004 |
| 3.520 | 0.005 | 0.072 | 0.067 | 498.280 | 0.153 | 0.004 |
| 5.437 | 0.005 | 0.540 | 0.497 | 556.453 | 0.171 | 0.005 |
| 5.437 | 0.005 | 0.540 | 0.497 | 556.453 | 0.171 | 0.005 |
| 5.692 | 0.005 | 0.437 | 0.402 | 495.925 | 0.152 | 0.004 |
| 4.353 | 0.005 | 0.214 | 0.197 | 498.967 | 0.153 | 0.004 |
| 3.809 | 0.005 | 0.100 | 0.092 | 499.562 | 0.153 | 0.004 |
| 2.487 | 0.005 | 0.087 | 0.081 | 491.784 | 0.151 | 0.004 |
| 4.728 | 0.005 | 0.359 | 0.331 | 548.648 | 0.168 | 0.005 |
| 4.728 | 0.005 | 0.359 | 0.331 | 548.648 | 0.168 | 0.005 |
| 5.207 | 0.005 | 0.391 | 0.359 | 500.165 | 0.153 | 0.004 |
| 3.896 | 0.005 | 0.195 | 0.179 | 497.148 | 0.152 | 0.004 |
| 4.121 | 0.005 | 0.142 | 0.130 | 498.732 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.847 | 0.008 | 0.250 | 0.250 | 568.299 | 0.063 | 0.005 |
| 4.729 | 0.007 | 0.233 | 0.233 | 568.299 | 0.068 | 0.005 |
| 4.355 | 0.007 | 0.240 | 0.240 | 568.299 | 0.068 | 0.005 |
| 3.888 | 0.006 | 0.233 | 0.233 | 568.300 | 0.040 | 0.004 |
| 3.349 | 0.006 | 0.149 | 0.149 | 568.299 | 0.031 | 0.004 |

|   |
|---|
| Other<br>General<br>Industrial<br>Equipment |
| Other<br>General<br>Industrial<br>Equipment |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Plate<br>Compactors                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.317 | 0.006 | 0.009 | 0.009 | 568.299 | 0.009 | 0.004 |
| 4.887 | 0.008 | 0.272 | 0.272 | 568.299 | 0.070 | 0.005 |
| 4.729 | 0.007 | 0.243 | 0.243 | 568.299 | 0.074 | 0.005 |
| 4.578 | 0.007 | 0.301 | 0.301 | 568.299 | 0.099 | 0.005 |
| 4.134 | 0.006 | 0.287 | 0.287 | 568.299 | 0.049 | 0.004 |
| 3.400 | 0.006 | 0.159 | 0.159 | 568.299 | 0.033 | 0.004 |
| 2.958 | 0.006 | 0.084 | 0.084 | 568.299 | 0.023 | 0.004 |
| 2.613 | 0.005 | 0.079 | 0.079 | 568.299 | 0.021 | 0.004 |
| 2.695 | 0.005 | 0.080 | 0.080 | 568.299 | 0.022 | 0.004 |
| 4.343 | 0.005 | 0.106 | 0.106 | 568.299 | 0.028 | 0.004 |
| 5.098 | 0.005 | 0.436 | 0.401 | 555.020 | 0.170 | 0.005 |
| 5.098 | 0.005 | 0.436 | 0.401 | 555.020 | 0.170 | 0.005 |
| 5.098 | 0.005 | 0.436 | 0.401 | 555.020 | 0.170 | 0.005 |
| 5.411 | 0.005 | 0.392 | 0.361 | 500.153 | 0.153 | 0.004 |
| 3.874 | 0.005 | 0.180 | 0.166 | 497.909 | 0.153 | 0.004 |
| 3.921 | 0.005 | 0.129 | 0.119 | 499.702 | 0.153 | 0.004 |
| 3.840 | 0.005 | 0.150 | 0.138 | 505.832 | 0.155 | 0.004 |
| 4.903 | 0.005 | 0.382 | 0.352 | 554.623 | 0.170 | 0.005 |
| 3.418 | 0.005 | 0.182 | 0.167 | 499.168 | 0.153 | 0.004 |
| 2.902 | 0.005 | 0.112 | 0.103 | 497.777 | 0.153 | 0.004 |
| 2.474 | 0.005 | 0.059 | 0.054 | 499.001 | 0.153 | 0.004 |
| 3.568 | 0.005 | 0.079 | 0.073 | 493.336 | 0.151 | 0.004 |
| 9.129 | 0.005 | 0.525 | 0.483 | 499.410 | 0.153 | 0.004 |
| 7.671 | 0.005 | 0.376 | 0.345 | 501.548 | 0.154 | 0.004 |
| 7.333 | 0.005 | 0.341 | 0.313 | 505.849 | 0.155 | 0.004 |
| 7.172 | 0.005 | 0.260 | 0.239 | 499.367 | 0.153 | 0.004 |
| 6.013 | 0.005 | 0.195 | 0.195 | 568.299 | 0.054 | 0.004 |
| 5.954 | 0.005 | 0.633 | 0.582 | 553.583 | 0.170 | 0.005 |
| 5.954 | 0.005 | 0.633 | 0.582 | 553.583 | 0.170 | 0.005 |
| 6.236 | 0.005 | 0.530 | 0.487 | 491.853 | 0.151 | 0.004 |
| 5.195 | 0.005 | 0.290 | 0.266 | 497.353 | 0.152 | 0.004 |

|                         |
|-------------------------|
| Pressure Washers        |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.755 | 0.005 | 0.162 | 0.149 | 495.950 | 0.152 | 0.004 |
| 4.253 | 0.005 | 0.160 | 0.148 | 492.276 | 0.151 | 0.004 |
| 4.050 | 0.005 | 0.160 | 0.147 | 484.366 | 0.148 | 0.004 |
| 6.553 | 0.005 | 0.192 | 0.177 | 496.897 | 0.152 | 0.004 |
| 7.179 | 0.005 | 0.551 | 0.507 | 511.112 | 0.157 | 0.004 |
| 6.671 | 0.005 | 0.359 | 0.331 | 505.331 | 0.155 | 0.004 |
| 7.399 | 0.005 | 0.333 | 0.306 | 494.523 | 0.152 | 0.004 |
| 5.340 | 0.005 | 0.214 | 0.197 | 498.457 | 0.153 | 0.004 |
| 4.216 | 0.005 | 0.156 | 0.143 | 498.693 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.590 | 0.007 | 0.306 | 0.306 | 568.299 | 0.104 | 0.005 |
| 4.059 | 0.006 | 0.290 | 0.290 | 568.299 | 0.049 | 0.004 |
| 3.305 | 0.006 | 0.161 | 0.161 | 568.299 | 0.035 | 0.004 |
| 3.452 | 0.007 | 0.101 | 0.101 | 686.695 | 0.029 | 0.004 |
| 4.113 | 0.005 | 0.218 | 0.200 | 556.714 | 0.171 | 0.005 |
| 4.113 | 0.005 | 0.218 | 0.200 | 556.714 | 0.171 | 0.005 |
| 3.286 | 0.005 | 0.177 | 0.163 | 498.326 | 0.153 | 0.004 |
| 5.064 | 0.006 | 0.365 | 0.336 | 564.477 | 0.173 | 0.005 |
| 4.942 | 0.005 | 0.337 | 0.310 | 498.360 | 0.153 | 0.004 |
| 5.393 | 0.005 | 0.264 | 0.243 | 496.274 | 0.152 | 0.004 |
| 4.468 | 0.005 | 0.129 | 0.119 | 501.847 | 0.154 | 0.004 |
| 3.106 | 0.005 | 0.103 | 0.094 | 496.885 | 0.152 | 0.004 |
| 2.770 | 0.005 | 0.090 | 0.083 | 499.712 | 0.153 | 0.004 |
| 5.626 | 0.005 | 0.582 | 0.535 | 554.513 | 0.170 | 0.005 |
| 5.626 | 0.005 | 0.582 | 0.535 | 554.513 | 0.170 | 0.005 |
| 5.626 | 0.005 | 0.582 | 0.535 | 554.513 | 0.170 | 0.005 |
| 6.020 | 0.005 | 0.520 | 0.479 | 500.456 | 0.153 | 0.004 |
| 7.424 | 0.005 | 0.395 | 0.363 | 499.407 | 0.153 | 0.004 |
| 6.509 | 0.005 | 0.264 | 0.243 | 496.244 | 0.152 | 0.004 |
| 5.110 | 0.005 | 0.433 | 0.399 | 544.929 | 0.167 | 0.005 |

|                           |
|---------------------------|
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Tractors/Loaders/Backhoes |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 5.110 | 0.005 | 0.433 | 0.399 | 544.929 | 0.167 | 0.005 |
| 4.809 | 0.005 | 0.362 | 0.333 | 502.795 | 0.154 | 0.004 |
| 3.879 | 0.005 | 0.197 | 0.182 | 493.912 | 0.151 | 0.004 |
| 4.041 | 0.005 | 0.132 | 0.121 | 496.845 | 0.152 | 0.004 |
| 3.490 | 0.005 | 0.122 | 0.112 | 497.113 | 0.152 | 0.004 |
| 3.862 | 0.005 | 0.139 | 0.128 | 492.953 | 0.151 | 0.004 |
| 5.166 | 0.005 | 0.449 | 0.413 | 557.460 | 0.171 | 0.005 |
| 5.166 | 0.005 | 0.449 | 0.413 | 557.460 | 0.171 | 0.005 |
| 5.166 | 0.005 | 0.449 | 0.413 | 557.460 | 0.171 | 0.005 |
| 6.679 | 0.005 | 0.523 | 0.481 | 501.992 | 0.154 | 0.004 |
| 5.927 | 0.005 | 0.300 | 0.276 | 493.764 | 0.151 | 0.004 |
| 6.194 | 0.005 | 0.250 | 0.230 | 499.228 | 0.153 | 0.004 |
| 3.442 | 0.005 | 0.129 | 0.119 | 497.020 | 0.152 | 0.004 |
| 1.430 | 0.005 | 0.046 | 0.042 | 501.183 | 0.154 | 0.004 |
| 4.887 | 0.008 | 0.272 | 0.272 | 568.299 | 0.070 | 0.005 |
| 4.729 | 0.007 | 0.243 | 0.243 | 568.299 | 0.074 | 0.005 |
| 4.768 | 0.007 | 0.350 | 0.350 | 568.299 | 0.123 | 0.005 |
| 4.328 | 0.006 | 0.332 | 0.332 | 568.299 | 0.056 | 0.004 |
| 3.562 | 0.006 | 0.183 | 0.183 | 568.299 | 0.039 | 0.004 |
| 3.105 | 0.006 | 0.094 | 0.094 | 568.299 | 0.028 | 0.004 |
| 2.713 | 0.005 | 0.088 | 0.088 | 568.299 | 0.026 | 0.004 |
| 4.236 | 0.005 | 0.233 | 0.215 | 495.924 | 0.152 | 0.004 |
| 4.368 | 0.005 | 0.189 | 0.174 | 494.794 | 0.152 | 0.004 |
| 3.668 | 0.005 | 0.136 | 0.125 | 501.437 | 0.154 | 0.004 |
| 4.257 | 0.005 | 0.170 | 0.157 | 500.199 | 0.153 | 0.004 |
| 5.653 | 0.005 | 0.159 | 0.146 | 497.115 | 0.152 | 0.004 |

|                           |
|---------------------------|
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |

|       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 15    | 0.182   | 3.116   | 3.210   | 0.005   | 0.054   | 0.050   | 545.494 | 0.170   | 0.005   |
| 25    | 0.182   | 3.116   | 3.210   | 0.005   | 0.054   | 0.050   | 545.494 | 0.170   | 0.005   |
| 50    | 0.182   | 3.116   | 3.210   | 0.005   | 0.054   | 0.050   | 545.494 | 0.170   | 0.005   |
| 120   | 0.122   | 3.167   | 2.064   | 0.005   | 0.057   | 0.053   | 490.474 | 0.153   | 0.004   |
| 500   | 0.062   | 0.937   | 0.634   | 0.005   | 0.009   | 0.008   | 490.412 | 0.153   | 0.004   |
| 750   | 0.225   | 1.037   | 2.385   | 0.005   | 0.071   | 0.071   | 568.299 | 0.020   | 0.004   |
| 15    | 0.766   | 3.580   | 4.762   | 0.008   | 0.256   | 0.256   | 568.299 | 0.069   | 0.005   |
| 25    | 0.807   | 2.531   | 4.661   | 0.007   | 0.232   | 0.232   | 568.300 | 0.072   | 0.005   |
| 50    | 1.300   | 5.439   | 4.707   | 0.007   | 0.329   | 0.329   | 568.299 | 0.117   | 0.005   |
| 120   | 0.603   | 3.744   | 4.050   | 0.006   | 0.304   | 0.304   | 568.300 | 0.054   | 0.004   |
| 175   | 0.435   | 3.205   | 3.228   | 0.006   | 0.170   | 0.170   | 568.299 | 0.039   | 0.004   |
| 250   | 0.321   | 1.146   | 2.797   | 0.006   | 0.087   | 0.087   | 568.300 | 0.029   | 0.004   |
| 500   | 0.307   | 1.101   | 2.465   | 0.005   | 0.083   | 0.083   | 568.299 | 0.027   | 0.004   |
| 750   | 0.309   | 1.101   | 2.533   | 0.005   | 0.084   | 0.084   | 568.299 | 0.027   | 0.004   |
| 1000  | 0.343   | 1.210   | 4.325   | 0.005   | 0.111   | 0.111   | 568.299 | 0.030   | 0.004   |
| 15    | 0.767   | 4.569   | 4.869   | 0.006   | 0.329   | 0.303   | 554.204 | 0.173   | 0.005   |
| 25    | 0.767   | 4.569   | 4.869   | 0.006   | 0.329   | 0.303   | 554.204 | 0.173   | 0.005   |
| 50    | 0.767   | 4.569   | 4.869   | 0.006   | 0.329   | 0.303   | 554.204 | 0.173   | 0.005   |
| 120   | 0.269   | 3.323   | 3.400   | 0.005   | 0.184   | 0.170   | 479.672 | 0.149   | 0.004   |
| 175   | 0.203   | 2.961   | 2.357   | 0.005   | 0.103   | 0.095   | 495.073 | 0.154   | 0.004   |
| 250   | 0.155   | 1.073   | 2.153   | 0.005   | 0.061   | 0.056   | 484.561 | 0.151   | 0.004   |
| 500   | 0.135   | 1.032   | 1.746   | 0.005   | 0.052   | 0.048   | 485.689 | 0.151   | 0.004   |
| 750   | 0.126   | 1.006   | 1.679   | 0.005   | 0.055   | 0.050   | 489.730 | 0.153   | 0.004   |
| 1000  | 0.125   | 0.978   | 3.032   | 0.005   | 0.060   | 0.056   | 490.243 | 0.153   | 0.004   |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.163 | 0.163 | 568.299 | 0.059 | 0.005 |
| 25   | 0.749 | 2.440 | 4.504 | 0.007 | 0.205 | 0.205 | 568.299 | 0.067 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 1.032 | 4.766 | 4.492 | 0.007 | 0.277 | 0.277 | 568.299 | 0.093 | 0.005 |
| 120  | 0.498 | 3.571 | 3.754 | 0.006 | 0.256 | 0.256 | 568.299 | 0.044 | 0.004 |
| 175  | 0.359 | 3.072 | 2.945 | 0.006 | 0.145 | 0.145 | 568.299 | 0.032 | 0.004 |
| 50   | 2.072 | 7.247 | 6.004 | 0.005 | 0.624 | 0.574 | 538.122 | 0.168 | 0.005 |
| 120  | 0.932 | 4.452 | 7.931 | 0.005 | 0.583 | 0.536 | 488.117 | 0.152 | 0.004 |
| 175  | 0.621 | 3.666 | 6.557 | 0.005 | 0.351 | 0.323 | 493.045 | 0.154 | 0.004 |
| 250  | 0.483 | 2.134 | 5.773 | 0.005 | 0.250 | 0.230 | 491.407 | 0.153 | 0.004 |
| 500  | 0.370 | 3.187 | 4.634 | 0.005 | 0.187 | 0.172 | 490.891 | 0.153 | 0.004 |
| 750  | 0.271 | 1.613 | 3.769 | 0.005 | 0.137 | 0.126 | 489.054 | 0.152 | 0.004 |
| 9999 | 0.162 | 0.983 | 2.335 | 0.005 | 0.059 | 0.054 | 490.412 | 0.153 | 0.004 |
| 50   | 2.446 | 8.009 | 6.163 | 0.005 | 0.704 | 0.648 | 536.141 | 0.167 | 0.005 |
| 120  | 0.798 | 4.123 | 6.723 | 0.005 | 0.566 | 0.521 | 494.922 | 0.154 | 0.004 |
| 175  | 0.555 | 3.421 | 5.859 | 0.005 | 0.326 | 0.299 | 490.000 | 0.153 | 0.004 |
| 250  | 0.398 | 1.654 | 5.290 | 0.005 | 0.200 | 0.184 | 491.606 | 0.153 | 0.004 |
| 500  | 0.344 | 2.382 | 4.373 | 0.005 | 0.169 | 0.156 | 493.510 | 0.154 | 0.004 |
| 750  | 0.296 | 1.445 | 3.834 | 0.005 | 0.142 | 0.130 | 491.266 | 0.153 | 0.004 |
| 1000 | 0.489 | 2.105 | 7.564 | 0.005 | 0.225 | 0.207 | 494.105 | 0.154 | 0.004 |
| 50   | 1.225 | 5.461 | 4.657 | 0.007 | 0.310 | 0.310 | 568.299 | 0.110 | 0.005 |
| 120  | 0.580 | 3.763 | 3.881 | 0.006 | 0.284 | 0.284 | 568.299 | 0.052 | 0.004 |
| 175  | 0.427 | 3.234 | 3.049 | 0.006 | 0.161 | 0.161 | 568.299 | 0.038 | 0.004 |
| 250  | 0.322 | 1.146 | 2.622 | 0.006 | 0.083 | 0.083 | 568.299 | 0.029 | 0.004 |
| 500  | 0.309 | 1.099 | 2.312 | 0.005 | 0.079 | 0.079 | 568.299 | 0.027 | 0.004 |
| 750  | 0.308 | 1.097 | 2.358 | 0.005 | 0.079 | 0.079 | 568.299 | 0.027 | 0.004 |
| 9999 | 0.361 | 1.198 | 4.168 | 0.005 | 0.107 | 0.107 | 568.299 | 0.032 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 25   | 0.686 | 2.339 | 4.350 | 0.007 | 0.169 | 0.169 | 568.299 | 0.061 | 0.005 |
| 25   | 0.687 | 4.700 | 4.395 | 0.005 | 0.284 | 0.261 | 545.347 | 0.170 | 0.005 |
| 50   | 0.687 | 4.700 | 4.395 | 0.005 | 0.284 | 0.261 | 545.347 | 0.170 | 0.005 |
| 120  | 0.368 | 3.562 | 3.764 | 0.005 | 0.251 | 0.230 | 486.056 | 0.151 | 0.004 |
| 175  | 0.273 | 3.093 | 2.924 | 0.005 | 0.142 | 0.130 | 490.673 | 0.153 | 0.004 |
| 250  | 0.202 | 1.152 | 2.594 | 0.005 | 0.079 | 0.073 | 490.257 | 0.153 | 0.004 |
| 500  | 0.175 | 1.140 | 2.050 | 0.005 | 0.066 | 0.061 | 489.103 | 0.152 | 0.004 |
| 750  | 0.189 | 1.224 | 2.266 | 0.005 | 0.076 | 0.070 | 487.653 | 0.152 | 0.004 |
| 50   | 1.393 | 6.103 | 5.052 | 0.005 | 0.447 | 0.411 | 545.919 | 0.170 | 0.005 |
| 120  | 0.567 | 3.858 | 5.015 | 0.005 | 0.400 | 0.368 | 489.866 | 0.153 | 0.004 |
| 175  | 0.427 | 3.336 | 4.430 | 0.005 | 0.241 | 0.222 | 490.466 | 0.153 | 0.004 |
| 250  | 0.425 | 1.835 | 4.938 | 0.005 | 0.207 | 0.191 | 491.733 | 0.153 | 0.004 |
| 500  | 0.282 | 1.878 | 3.019 | 0.005 | 0.125 | 0.115 | 492.034 | 0.153 | 0.004 |
| 15   | 0.679 | 3.580 | 4.728 | 0.008 | 0.237 | 0.237 | 568.299 | 0.061 | 0.005 |
| 25   | 0.744 | 2.531 | 4.661 | 0.007 | 0.224 | 0.224 | 568.299 | 0.067 | 0.005 |
| 50   | 0.895 | 4.182 | 4.366 | 0.007 | 0.253 | 0.253 | 568.299 | 0.080 | 0.005 |
| 120  | 0.461 | 3.418 | 3.752 | 0.006 | 0.239 | 0.239 | 568.299 | 0.041 | 0.004 |
| 175  | 0.319 | 2.930 | 2.989 | 0.006 | 0.133 | 0.133 | 568.299 | 0.028 | 0.004 |
| 250  | 0.226 | 1.048 | 2.582 | 0.006 | 0.072 | 0.072 | 568.299 | 0.020 | 0.004 |
| 500  | 0.211 | 1.028 | 2.310 | 0.005 | 0.069 | 0.069 | 568.299 | 0.019 | 0.004 |
| 750  | 0.215 | 1.028 | 2.370 | 0.005 | 0.070 | 0.070 | 568.299 | 0.019 | 0.004 |
| 9999 | 0.280 | 1.128 | 4.058 | 0.005 | 0.095 | 0.095 | 568.299 | 0.025 | 0.004 |
| 50   | 2.809 | 8.626 | 6.180 | 0.005 | 0.790 | 0.726 | 511.910 | 0.159 | 0.005 |
| 120  | 1.075 | 4.697 | 8.520 | 0.005 | 0.697 | 0.641 | 487.698 | 0.152 | 0.004 |
| 175  | 0.661 | 3.710 | 6.605 | 0.005 | 0.371 | 0.342 | 497.377 | 0.155 | 0.004 |
| 250  | 0.384 | 1.416 | 5.271 | 0.005 | 0.171 | 0.158 | 495.431 | 0.154 | 0.004 |
| 500  | 0.324 | 1.564 | 3.345 | 0.005 | 0.130 | 0.119 | 490.576 | 0.153 | 0.004 |
| 750  | 0.353 | 1.286 | 2.543 | 0.005 | 0.090 | 0.090 | 568.299 | 0.031 | 0.004 |
| 120  | 0.522 | 3.832 | 4.787 | 0.005 | 0.373 | 0.343 | 492.871 | 0.153 | 0.004 |
| 175  | 0.315 | 3.219 | 3.498 | 0.005 | 0.176 | 0.162 | 491.313 | 0.153 | 0.004 |
| 250  | 0.272 | 1.295 | 3.454 | 0.005 | 0.119 | 0.109 | 488.677 | 0.152 | 0.004 |
| 750  | 0.196 | 1.119 | 2.166 | 0.005 | 0.081 | 0.074 | 490.182 | 0.153 | 0.004 |
| 1000 | 0.129 | 0.998 | 2.359 | 0.005 | 0.060 | 0.055 | 490.412 | 0.153 | 0.004 |
| 175  | 0.383 | 3.383 | 3.543 | 0.005 | 0.192 | 0.177 | 488.044 | 0.152 | 0.004 |
| 250  | 0.341 | 1.543 | 3.451 | 0.005 | 0.141 | 0.130 | 487.635 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 500  | 0.287 | 1.560 | 3.090 | 0.005 | 0.113 | 0.104 | 493.506 | 0.154 | 0.004 |
| 750  | 0.348 | 2.176 | 3.691 | 0.005 | 0.143 | 0.132 | 492.114 | 0.153 | 0.004 |
| 1000 | 0.297 | 1.357 | 4.858 | 0.005 | 0.127 | 0.116 | 487.790 | 0.152 | 0.004 |
| 15   | 1.169 | 5.541 | 5.272 | 0.005 | 0.449 | 0.413 | 548.939 | 0.171 | 0.005 |
| 25   | 1.169 | 5.541 | 5.272 | 0.005 | 0.449 | 0.413 | 548.939 | 0.171 | 0.005 |
| 50   | 1.169 | 5.541 | 5.272 | 0.005 | 0.449 | 0.413 | 548.939 | 0.171 | 0.005 |
| 120  | 0.598 | 3.799 | 5.441 | 0.005 | 0.417 | 0.383 | 490.018 | 0.153 | 0.004 |
| 175  | 0.436 | 3.263 | 4.755 | 0.005 | 0.250 | 0.230 | 487.986 | 0.152 | 0.004 |
| 500  | 0.251 | 1.813 | 3.167 | 0.005 | 0.115 | 0.105 | 493.360 | 0.154 | 0.004 |
| 15   | 1.154 | 5.827 | 4.979 | 0.005 | 0.414 | 0.381 | 546.639 | 0.170 | 0.005 |
| 25   | 1.154 | 5.827 | 4.979 | 0.005 | 0.414 | 0.381 | 546.639 | 0.170 | 0.005 |
| 50   | 1.154 | 5.827 | 4.979 | 0.005 | 0.414 | 0.381 | 546.639 | 0.170 | 0.005 |
| 120  | 0.557 | 3.876 | 4.955 | 0.005 | 0.392 | 0.360 | 488.278 | 0.152 | 0.004 |
| 175  | 0.318 | 3.237 | 3.237 | 0.005 | 0.172 | 0.158 | 490.200 | 0.153 | 0.004 |
| 250  | 0.303 | 1.455 | 3.648 | 0.005 | 0.135 | 0.124 | 491.626 | 0.153 | 0.004 |
| 500  | 0.254 | 1.583 | 2.907 | 0.005 | 0.104 | 0.095 | 491.321 | 0.153 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 750  | 0.217 | 1.483 | 2.419 | 0.005 | 0.083 | 0.076 | 491.876 | 0.153 | 0.004 |
| 1000 | 0.257 | 1.066 | 4.810 | 0.005 | 0.116 | 0.107 | 490.412 | 0.153 | 0.004 |
| 50   | 1.289 | 6.061 | 5.182 | 0.005 | 0.457 | 0.420 | 544.075 | 0.169 | 0.005 |
| 120  | 0.407 | 3.675 | 3.944 | 0.005 | 0.271 | 0.249 | 492.006 | 0.153 | 0.004 |
| 175  | 0.327 | 3.218 | 3.332 | 0.005 | 0.173 | 0.159 | 490.583 | 0.153 | 0.004 |
| 250  | 0.316 | 1.388 | 4.092 | 0.005 | 0.135 | 0.124 | 489.817 | 0.153 | 0.004 |
| 500  | 0.296 | 1.633 | 3.524 | 0.005 | 0.134 | 0.123 | 488.587 | 0.152 | 0.004 |
| 9999 | 0.180 | 1.023 | 3.551 | 0.005 | 0.074 | 0.068 | 490.412 | 0.153 | 0.004 |
| 25   | 1.539 | 5.849 | 5.121 | 0.005 | 0.478 | 0.440 | 547.079 | 0.170 | 0.005 |
| 50   | 1.539 | 5.849 | 5.121 | 0.005 | 0.478 | 0.440 | 547.079 | 0.170 | 0.005 |
| 120  | 0.536 | 3.660 | 5.019 | 0.005 | 0.375 | 0.345 | 488.181 | 0.152 | 0.004 |
| 175  | 0.339 | 3.039 | 3.747 | 0.005 | 0.183 | 0.168 | 491.322 | 0.153 | 0.004 |
| 250  | 0.198 | 1.034 | 3.474 | 0.005 | 0.092 | 0.085 | 491.543 | 0.153 | 0.004 |
| 500  | 0.164 | 0.981 | 2.320 | 0.005 | 0.083 | 0.076 | 484.277 | 0.151 | 0.004 |
| 25   | 0.737 | 4.416 | 4.312 | 0.005 | 0.286 | 0.263 | 540.612 | 0.168 | 0.005 |
| 50   | 0.737 | 4.416 | 4.312 | 0.005 | 0.286 | 0.263 | 540.612 | 0.168 | 0.005 |
| 120  | 0.449 | 3.607 | 4.270 | 0.005 | 0.302 | 0.278 | 492.118 | 0.153 | 0.004 |
| 175  | 0.284 | 3.026 | 3.172 | 0.005 | 0.155 | 0.143 | 489.202 | 0.152 | 0.004 |
| 250  | 0.258 | 1.281 | 3.587 | 0.005 | 0.123 | 0.113 | 490.683 | 0.153 | 0.004 |
| 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.300 | 0.059 | 0.005 |
| 15   | 0.679 | 3.580 | 4.728 | 0.008 | 0.237 | 0.237 | 568.299 | 0.061 | 0.005 |
| 25   | 0.744 | 2.531 | 4.661 | 0.007 | 0.224 | 0.224 | 568.299 | 0.067 | 0.005 |
| 50   | 0.661 | 3.542 | 4.202 | 0.007 | 0.212 | 0.212 | 568.299 | 0.059 | 0.005 |
| 120  | 0.388 | 3.260 | 3.584 | 0.006 | 0.203 | 0.203 | 568.299 | 0.035 | 0.004 |
| 175  | 0.309 | 2.908 | 2.989 | 0.006 | 0.132 | 0.132 | 568.299 | 0.027 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.099 | 0.986 | 0.277 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 15   | 0.766 | 3.580 | 4.762 | 0.008 | 0.256 | 0.256 | 568.299 | 0.069 | 0.005 |
| 25   | 0.807 | 2.531 | 4.661 | 0.007 | 0.232 | 0.232 | 568.299 | 0.072 | 0.005 |
| 50   | 0.973 | 4.397 | 4.422 | 0.007 | 0.267 | 0.267 | 568.299 | 0.087 | 0.005 |
| 120  | 0.485 | 3.471 | 3.808 | 0.006 | 0.252 | 0.252 | 568.299 | 0.043 | 0.004 |
| 175  | 0.338 | 2.974 | 3.035 | 0.006 | 0.140 | 0.140 | 568.299 | 0.030 | 0.004 |
| 250  | 0.242 | 1.065 | 2.624 | 0.006 | 0.075 | 0.075 | 568.299 | 0.021 | 0.004 |
| 500  | 0.226 | 1.041 | 2.340 | 0.005 | 0.071 | 0.071 | 568.299 | 0.020 | 0.004 |
| 750  | 0.230 | 1.041 | 2.401 | 0.005 | 0.072 | 0.072 | 568.299 | 0.020 | 0.004 |
| 9999 | 0.293 | 1.144 | 4.105 | 0.005 | 0.098 | 0.098 | 568.299 | 0.026 | 0.004 |
| 15   | 1.064 | 4.923 | 4.842 | 0.005 | 0.387 | 0.356 | 546.291 | 0.170 | 0.005 |
| 25   | 1.064 | 4.923 | 4.842 | 0.005 | 0.387 | 0.356 | 546.291 | 0.170 | 0.005 |
| 50   | 1.064 | 4.923 | 4.842 | 0.005 | 0.387 | 0.356 | 546.291 | 0.170 | 0.005 |
| 120  | 0.481 | 3.610 | 4.650 | 0.005 | 0.320 | 0.294 | 492.212 | 0.153 | 0.004 |
| 175  | 0.265 | 2.949 | 3.181 | 0.005 | 0.147 | 0.136 | 490.181 | 0.153 | 0.004 |
| 250  | 0.211 | 1.243 | 2.995 | 0.005 | 0.094 | 0.086 | 491.664 | 0.153 | 0.004 |
| 500  | 0.245 | 2.231 | 3.098 | 0.005 | 0.119 | 0.110 | 497.996 | 0.155 | 0.004 |
| 50   | 1.070 | 4.768 | 4.735 | 0.005 | 0.359 | 0.330 | 545.869 | 0.170 | 0.005 |
| 120  | 0.222 | 3.270 | 2.845 | 0.005 | 0.136 | 0.125 | 491.211 | 0.153 | 0.004 |
| 175  | 0.164 | 2.842 | 2.342 | 0.005 | 0.088 | 0.081 | 489.987 | 0.153 | 0.004 |
| 250  | 0.152 | 1.029 | 2.487 | 0.005 | 0.060 | 0.055 | 491.100 | 0.153 | 0.004 |
| 500  | 0.145 | 0.958 | 2.701 | 0.005 | 0.060 | 0.055 | 485.954 | 0.151 | 0.004 |
| 175  | 0.802 | 3.990 | 8.021 | 0.005 | 0.461 | 0.424 | 491.492 | 0.153 | 0.004 |
| 250  | 0.669 | 2.512 | 7.208 | 0.005 | 0.350 | 0.322 | 493.634 | 0.154 | 0.004 |
| 500  | 0.598 | 4.982 | 6.502 | 0.005 | 0.300 | 0.276 | 498.186 | 0.155 | 0.004 |
| 750  | 0.506 | 2.759 | 6.727 | 0.005 | 0.248 | 0.228 | 491.473 | 0.153 | 0.004 |
| 1000 | 0.574 | 2.413 | 5.764 | 0.005 | 0.183 | 0.183 | 568.299 | 0.051 | 0.004 |
| 25   | 1.765 | 7.299 | 5.679 | 0.005 | 0.576 | 0.530 | 545.053 | 0.170 | 0.005 |
| 50   | 1.765 | 7.299 | 5.679 | 0.005 | 0.576 | 0.530 | 545.053 | 0.170 | 0.005 |
| 120  | 0.655 | 4.047 | 5.470 | 0.005 | 0.452 | 0.416 | 484.093 | 0.151 | 0.004 |
| 175  | 0.448 | 3.423 | 4.368 | 0.005 | 0.242 | 0.223 | 489.511 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.334 | 1.346 | 4.131 | 0.005 | 0.140 | 0.129 | 487.902 | 0.152 | 0.004 |
| 500  | 0.334 | 1.868 | 3.726 | 0.005 | 0.140 | 0.128 | 484.571 | 0.151 | 0.004 |
| 750  | 0.331 | 1.555 | 3.544 | 0.005 | 0.140 | 0.129 | 476.566 | 0.148 | 0.004 |
| 1000 | 0.336 | 1.213 | 5.673 | 0.005 | 0.154 | 0.142 | 488.404 | 0.152 | 0.004 |
| 120  | 0.740 | 4.204 | 7.036 | 0.005 | 0.543 | 0.499 | 502.829 | 0.157 | 0.004 |
| 175  | 0.539 | 3.568 | 5.641 | 0.005 | 0.303 | 0.279 | 497.340 | 0.155 | 0.004 |
| 250  | 0.557 | 2.407 | 6.563 | 0.005 | 0.290 | 0.267 | 486.991 | 0.152 | 0.004 |
| 500  | 0.369 | 2.828 | 4.568 | 0.005 | 0.180 | 0.166 | 490.773 | 0.153 | 0.004 |
| 750  | 0.294 | 1.965 | 3.746 | 0.005 | 0.135 | 0.124 | 490.578 | 0.153 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 50   | 1.018 | 4.657 | 4.427 | 0.007 | 0.270 | 0.270 | 568.299 | 0.091 | 0.005 |
| 120  | 0.492 | 3.541 | 3.723 | 0.006 | 0.252 | 0.252 | 568.299 | 0.044 | 0.004 |
| 175  | 0.351 | 3.043 | 2.930 | 0.006 | 0.141 | 0.141 | 568.299 | 0.031 | 0.004 |
| 250  | 0.309 | 1.306 | 3.040 | 0.007 | 0.090 | 0.090 | 686.695 | 0.027 | 0.004 |
| 25   | 0.487 | 3.787 | 3.890 | 0.005 | 0.178 | 0.164 | 547.558 | 0.171 | 0.005 |
| 50   | 0.487 | 3.787 | 3.890 | 0.005 | 0.178 | 0.164 | 547.558 | 0.171 | 0.005 |
| 120  | 0.216 | 3.282 | 2.860 | 0.005 | 0.140 | 0.129 | 490.094 | 0.153 | 0.004 |
| 50   | 0.779 | 4.353 | 4.820 | 0.006 | 0.320 | 0.294 | 555.736 | 0.173 | 0.005 |
| 120  | 0.414 | 3.489 | 4.284 | 0.005 | 0.269 | 0.247 | 491.317 | 0.153 | 0.004 |
| 175  | 0.375 | 2.976 | 4.475 | 0.005 | 0.215 | 0.198 | 488.441 | 0.152 | 0.004 |
| 250  | 0.241 | 1.234 | 3.989 | 0.005 | 0.113 | 0.104 | 494.139 | 0.154 | 0.004 |
| 500  | 0.157 | 1.226 | 2.204 | 0.005 | 0.076 | 0.070 | 487.872 | 0.152 | 0.004 |
| 750  | 0.143 | 0.993 | 2.269 | 0.005 | 0.078 | 0.072 | 488.860 | 0.152 | 0.004 |
| 15   | 1.545 | 6.444 | 5.399 | 0.005 | 0.531 | 0.488 | 545.758 | 0.170 | 0.005 |
| 25   | 1.545 | 6.444 | 5.399 | 0.005 | 0.531 | 0.488 | 545.758 | 0.170 | 0.005 |
| 50   | 1.545 | 6.444 | 5.399 | 0.005 | 0.531 | 0.488 | 545.758 | 0.170 | 0.005 |
| 120  | 0.600 | 3.882 | 5.136 | 0.005 | 0.428 | 0.394 | 492.554 | 0.153 | 0.004 |
| 175  | 0.589 | 3.588 | 6.071 | 0.005 | 0.320 | 0.294 | 491.521 | 0.153 | 0.004 |
| 250  | 0.350 | 1.605 | 4.302 | 0.005 | 0.169 | 0.156 | 488.409 | 0.152 | 0.004 |
| 25   | 0.992 | 5.310 | 4.764 | 0.005 | 0.363 | 0.334 | 536.112 | 0.167 | 0.005 |



|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 50   | 0.992 | 5.310 | 4.764 | 0.005 | 0.363 | 0.334 | 536.112 | 0.167 | 0.005 |
| 120  | 0.420 | 3.692 | 4.154 | 0.005 | 0.294 | 0.271 | 494.124 | 0.154 | 0.004 |
| 175  | 0.297 | 3.137 | 3.168 | 0.005 | 0.160 | 0.147 | 485.775 | 0.151 | 0.004 |
| 250  | 0.259 | 1.242 | 3.460 | 0.005 | 0.112 | 0.103 | 489.456 | 0.152 | 0.004 |
| 500  | 0.222 | 1.445 | 2.669 | 0.005 | 0.092 | 0.085 | 486.294 | 0.151 | 0.004 |
| 750  | 0.271 | 1.601 | 3.402 | 0.005 | 0.124 | 0.114 | 485.010 | 0.151 | 0.004 |
| 15   | 1.039 | 5.018 | 4.960 | 0.005 | 0.409 | 0.377 | 548.361 | 0.171 | 0.005 |
| 25   | 1.039 | 5.018 | 4.960 | 0.005 | 0.409 | 0.377 | 548.361 | 0.171 | 0.005 |
| 50   | 1.039 | 5.018 | 4.960 | 0.005 | 0.409 | 0.377 | 548.361 | 0.171 | 0.005 |
| 120  | 0.658 | 3.855 | 5.915 | 0.005 | 0.450 | 0.414 | 493.715 | 0.154 | 0.004 |
| 175  | 0.470 | 3.331 | 5.127 | 0.005 | 0.261 | 0.240 | 485.925 | 0.151 | 0.004 |
| 250  | 0.419 | 1.849 | 5.296 | 0.005 | 0.212 | 0.195 | 491.565 | 0.153 | 0.004 |
| 500  | 0.256 | 1.974 | 3.211 | 0.005 | 0.121 | 0.112 | 489.628 | 0.152 | 0.004 |
| 750  | 0.094 | 0.966 | 1.025 | 0.005 | 0.029 | 0.026 | 494.643 | 0.154 | 0.004 |
| 15   | 0.766 | 3.580 | 4.762 | 0.008 | 0.256 | 0.256 | 568.300 | 0.069 | 0.005 |
| 25   | 0.807 | 2.531 | 4.661 | 0.007 | 0.232 | 0.232 | 568.299 | 0.072 | 0.005 |
| 50   | 1.210 | 5.092 | 4.607 | 0.007 | 0.311 | 0.311 | 568.299 | 0.109 | 0.005 |
| 120  | 0.564 | 3.648 | 3.980 | 0.006 | 0.290 | 0.290 | 568.299 | 0.050 | 0.004 |
| 175  | 0.402 | 3.123 | 3.176 | 0.006 | 0.162 | 0.162 | 568.299 | 0.036 | 0.004 |
| 250  | 0.292 | 1.118 | 2.751 | 0.006 | 0.084 | 0.084 | 568.299 | 0.026 | 0.004 |
| 500  | 0.277 | 1.080 | 2.430 | 0.005 | 0.080 | 0.080 | 568.299 | 0.025 | 0.004 |
| 175  | 0.383 | 3.383 | 3.543 | 0.005 | 0.192 | 0.177 | 488.044 | 0.152 | 0.004 |
| 250  | 0.341 | 1.543 | 3.451 | 0.005 | 0.141 | 0.130 | 487.635 | 0.152 | 0.004 |
| 500  | 0.287 | 1.560 | 3.090 | 0.005 | 0.113 | 0.104 | 493.506 | 0.154 | 0.004 |
| 750  | 0.348 | 2.176 | 3.691 | 0.005 | 0.143 | 0.132 | 492.114 | 0.153 | 0.004 |
| 1000 | 0.297 | 1.357 | 4.858 | 0.005 | 0.127 | 0.116 | 487.790 | 0.152 | 0.004 |

2019

| 2019            |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-----------------|-------|---------|---------|---------|---------|---------|
| Equipment       | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    |
| Aerial Lifts    | 15    | 0.172   | 3.115   | 3.079   | 0.005   | 0.042   |
| Aerial Lifts    | 25    | 0.172   | 3.115   | 3.079   | 0.005   | 0.042   |
| Aerial Lifts    | 50    | 0.172   | 3.115   | 3.079   | 0.005   | 0.042   |
| Aerial Lifts    | 120   | 0.118   | 3.173   | 1.977   | 0.005   | 0.049   |
| Aerial Lifts    | 500   | 0.066   | 0.941   | 0.636   | 0.005   | 0.009   |
| Aerial Lifts    | 750   | 0.212   | 1.023   | 2.117   | 0.005   | 0.064   |
| Air Compressors |       |         |         |         |         |         |
|                 | 15    | 0.748   | 3.562   | 4.647   | 0.008   | 0.241   |
| Air Compressors |       |         |         |         |         |         |
|                 | 25    | 0.787   | 2.501   | 4.596   | 0.007   | 0.222   |
| Air Compressors |       |         |         |         |         |         |
|                 | 50    | 1.129   | 5.283   | 4.546   | 0.007   | 0.287   |
| Air Compressors |       |         |         |         |         |         |
|                 | 120   | 0.538   | 3.718   | 3.706   | 0.006   | 0.260   |
| Air Compressors |       |         |         |         |         |         |
|                 | 175   | 0.401   | 3.204   | 2.874   | 0.006   | 0.150   |
| Air Compressors |       |         |         |         |         |         |
|                 | 250   | 0.304   | 1.132   | 2.469   | 0.006   | 0.078   |
| Air Compressors |       |         |         |         |         |         |
|                 | 500   | 0.293   | 1.086   | 2.193   | 0.005   | 0.075   |
| Air Compressors |       |         |         |         |         |         |
|                 | 750   | 0.294   | 1.086   | 2.247   | 0.005   | 0.076   |
| Air Compressors |       |         |         |         |         |         |
|                 | 1000  | 0.324   | 1.182   | 4.073   | 0.005   | 0.102   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 15    | 0.722   | 4.497   | 4.718   | 0.006   | 0.303   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 25    | 0.722   | 4.497   | 4.718   | 0.006   | 0.303   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 50    | 0.722   | 4.497   | 4.718   | 0.006   | 0.303   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 120   | 0.267   | 3.332   | 3.321   | 0.005   | 0.180   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 175   | 0.181   | 2.956   | 2.018   | 0.005   | 0.088   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 250   | 0.143   | 1.061   | 1.894   | 0.005   | 0.054   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 500   | 0.129   | 1.034   | 1.551   | 0.005   | 0.048   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 750   | 0.117   | 0.971   | 1.449   | 0.005   | 0.048   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 1000  | 0.129   | 0.983   | 3.041   | 0.005   | 0.061   |

|                          |      |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.162 |
| Cement and Mortar Mixers | 25   | 0.735 | 2.417 | 4.469 | 0.007 | 0.196 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.899 | 4.645 | 4.338 | 0.007 | 0.242 |
| Concrete/Industrial Saws | 120  | 0.443 | 3.550 | 3.441 | 0.006 | 0.220 |
| Concrete/Industrial Saws | 175  | 0.330 | 3.072 | 2.618 | 0.006 | 0.128 |
| Cranes                   | 50   | 2.045 | 7.245 | 5.952 | 0.005 | 0.615 |
| Cranes                   | 120  | 0.803 | 4.265 | 6.958 | 0.005 | 0.501 |
| Cranes                   | 175  | 0.568 | 3.598 | 5.949 | 0.005 | 0.318 |
| Cranes                   | 250  | 0.427 | 1.941 | 5.084 | 0.005 | 0.216 |
| Cranes                   | 500  | 0.349 | 2.969 | 4.297 | 0.005 | 0.173 |
| Cranes                   | 750  | 0.252 | 1.446 | 3.428 | 0.005 | 0.124 |
| Cranes                   | 9999 | 0.172 | 0.991 | 2.349 | 0.005 | 0.060 |
| Crawler Tractors         | 50   | 2.225 | 7.589 | 5.855 | 0.005 | 0.640 |
| Crawler Tractors         | 120  | 0.757 | 4.088 | 6.393 | 0.005 | 0.535 |
| Crawler Tractors         | 175  | 0.517 | 3.379 | 5.382 | 0.005 | 0.300 |
| Crawler Tractors         | 250  | 0.380 | 1.604 | 4.972 | 0.005 | 0.188 |
| Crawler Tractors         | 500  | 0.319 | 2.219 | 3.934 | 0.005 | 0.153 |
| Crawler Tractors         | 750  | 0.266 | 1.356 | 3.343 | 0.005 | 0.123 |
| Crawler Tractors         | 1000 | 0.460 | 2.020 | 7.212 | 0.005 | 0.211 |
| Crushing/Proc. Equipment | 50   | 1.064 | 5.316 | 4.495 | 0.007 | 0.269 |
| Crushing/Proc. Equipment | 120  | 0.519 | 3.739 | 3.544 | 0.006 | 0.241 |
| Crushing/Proc. Equipment | 175  | 0.394 | 3.233 | 2.700 | 0.006 | 0.141 |
| Crushing/Proc. Equipment | 250  | 0.304 | 1.134 | 2.300 | 0.006 | 0.074 |
| Crushing/Proc. Equipment | 500  | 0.295 | 1.087 | 2.046 | 0.005 | 0.071 |
| Crushing/Proc. Equipment | 750  | 0.294 | 1.085 | 2.085 | 0.005 | 0.071 |
| Crushing/Proc. Equipment | 9999 | 0.345 | 1.173 | 3.927 | 0.005 | 0.098 |

|                      |      |       |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|-------|
| Dumpers/Tenders      | 25   | 0.686 | 2.339 | 4.341 | 0.007 | 0.167 |
| Excavators           | 25   | 0.637 | 4.597 | 4.199 | 0.005 | 0.250 |
| Excavators           | 50   | 0.637 | 4.597 | 4.199 | 0.005 | 0.250 |
| Excavators           | 120  | 0.325 | 3.524 | 3.369 | 0.005 | 0.211 |
| Excavators           | 175  | 0.246 | 3.082 | 2.533 | 0.005 | 0.122 |
| Excavators           | 250  | 0.186 | 1.127 | 2.242 | 0.005 | 0.068 |
| Excavators           | 500  | 0.162 | 1.114 | 1.780 | 0.005 | 0.058 |
| Excavators           | 750  | 0.176 | 1.173 | 1.987 | 0.005 | 0.067 |
| Forklifts            | 50   | 1.244 | 5.880 | 4.862 | 0.005 | 0.401 |
| Forklifts            | 120  | 0.510 | 3.804 | 4.550 | 0.005 | 0.353 |
| Forklifts            | 175  | 0.382 | 3.288 | 3.865 | 0.005 | 0.210 |
| Forklifts            | 250  | 0.374 | 1.677 | 4.250 | 0.005 | 0.175 |
| Forklifts            | 500  | 0.268 | 1.814 | 2.751 | 0.005 | 0.112 |
| Generator Sets       | 15   | 0.662 | 3.562 | 4.617 | 0.008 | 0.224 |
| Generator Sets       | 25   | 0.731 | 2.501 | 4.596 | 0.007 | 0.214 |
| Generator Sets       | 50   | 0.779 | 4.076 | 4.215 | 0.007 | 0.222 |
| Generator Sets       | 120  | 0.405 | 3.396 | 3.446 | 0.006 | 0.206 |
| Generator Sets       | 175  | 0.290 | 2.929 | 2.669 | 0.006 | 0.118 |
| Generator Sets       | 250  | 0.211 | 1.036 | 2.285 | 0.006 | 0.064 |
| Generator Sets       | 500  | 0.199 | 1.015 | 2.056 | 0.005 | 0.062 |
| Generator Sets       | 750  | 0.202 | 1.015 | 2.104 | 0.005 | 0.062 |
| Generator Sets       | 9999 | 0.261 | 1.103 | 3.829 | 0.005 | 0.087 |
| Graders              | 50   | 2.616 | 8.279 | 5.945 | 0.005 | 0.737 |
| Graders              | 120  | 1.032 | 4.642 | 8.159 | 0.005 | 0.665 |
| Graders              | 175  | 0.609 | 3.656 | 6.014 | 0.005 | 0.337 |
| Graders              | 250  | 0.360 | 1.359 | 4.866 | 0.005 | 0.156 |
| Graders              | 500  | 0.323 | 1.528 | 3.218 | 0.005 | 0.124 |
| Graders              | 750  | 0.335 | 1.255 | 2.276 | 0.005 | 0.080 |
| Off-Highway Tractors | 120  | 0.473 | 3.795 | 4.421 | 0.005 | 0.331 |
| Off-Highway Tractors | 175  | 0.294 | 3.219 | 3.208 | 0.005 | 0.159 |
| Off-Highway Tractors | 250  | 0.239 | 1.218 | 2.914 | 0.005 | 0.098 |
| Off-Highway Tractors | 750  | 0.205 | 1.129 | 2.177 | 0.005 | 0.082 |
| Off-Highway Tractors | 1000 | 0.140 | 1.010 | 2.378 | 0.005 | 0.062 |
| Off-Highway Trucks   | 175  | 0.323 | 3.326 | 2.825 | 0.005 | 0.149 |
| Off-Highway Trucks   | 250  | 0.307 | 1.461 | 2.985 | 0.005 | 0.119 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.264 | 1.483 | 2.669 | 0.005 | 0.097 |
| Off-Highway Trucks                 | 750  | 0.327 | 2.041 | 3.320 | 0.005 | 0.129 |
| Off-Highway Trucks                 | 1000 | 0.295 | 1.356 | 4.765 | 0.005 | 0.124 |
| Other Construction Equipment       | 15   | 1.152 | 5.541 | 5.203 | 0.005 | 0.437 |
| Other Construction Equipment       | 25   | 1.152 | 5.541 | 5.203 | 0.005 | 0.437 |
| Other Construction Equipment       | 50   | 1.152 | 5.541 | 5.203 | 0.005 | 0.437 |
| Other Construction Equipment       | 120  | 0.550 | 3.754 | 5.048 | 0.005 | 0.379 |
| Other Construction Equipment       | 175  | 0.412 | 3.256 | 4.433 | 0.005 | 0.234 |
| Other Construction Equipment       | 500  | 0.234 | 1.667 | 2.855 | 0.005 | 0.103 |
| Other General Industrial Equipment | 15   | 1.042 | 5.662 | 4.807 | 0.005 | 0.374 |
| Other General Industrial Equipment | 25   | 1.042 | 5.662 | 4.807 | 0.005 | 0.374 |
| Other General Industrial Equipment | 50   | 1.042 | 5.662 | 4.807 | 0.005 | 0.374 |
| Other General Industrial Equipment | 120  | 0.500 | 3.821 | 4.497 | 0.005 | 0.343 |
| Other General Industrial Equipment | 175  | 0.302 | 3.241 | 2.999 | 0.005 | 0.157 |
| Other General Industrial Equipment | 250  | 0.259 | 1.299 | 3.020 | 0.005 | 0.106 |
| Other General Industrial Equipment | 500  | 0.239 | 1.561 | 2.575 | 0.005 | 0.092 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.199 | 1.474 | 2.115 | 0.005 | 0.076 |
| Other General Industrial Equipment | 1000 | 0.264 | 1.076 | 4.834 | 0.005 | 0.117 |
| Other Material Handling Equipment  | 50   | 1.275 | 6.139 | 5.179 | 0.005 | 0.452 |
| Other Material Handling Equipment  | 120  | 0.360 | 3.636 | 3.566 | 0.005 | 0.231 |
| Other Material Handling Equipment  | 175  | 0.280 | 3.185 | 2.774 | 0.005 | 0.139 |
| Other Material Handling Equipment  | 250  | 0.300 | 1.341 | 3.817 | 0.005 | 0.123 |
| Other Material Handling Equipment  | 500  | 0.291 | 1.620 | 3.371 | 0.005 | 0.128 |
| Other Material Handling Equipment  | 9999 | 0.190 | 1.036 | 3.583 | 0.005 | 0.076 |
| Pavers                             | 25   | 1.418 | 5.657 | 4.916 | 0.005 | 0.436 |
| Pavers                             | 50   | 1.418 | 5.657 | 4.916 | 0.005 | 0.436 |
| Pavers                             | 120  | 0.496 | 3.622 | 4.670 | 0.005 | 0.346 |
| Pavers                             | 175  | 0.299 | 3.013 | 3.245 | 0.005 | 0.159 |
| Pavers                             | 250  | 0.187 | 1.032 | 3.111 | 0.005 | 0.084 |
| Pavers                             | 500  | 0.167 | 0.986 | 2.270 | 0.005 | 0.081 |
| Paving Equipment                   | 25   | 0.705 | 4.408 | 4.238 | 0.005 | 0.270 |
| Paving Equipment                   | 50   | 0.705 | 4.408 | 4.238 | 0.005 | 0.270 |
| Paving Equipment                   | 120  | 0.425 | 3.598 | 4.042 | 0.005 | 0.281 |
| Paving Equipment                   | 175  | 0.254 | 3.011 | 2.692 | 0.005 | 0.134 |
| Paving Equipment                   | 250  | 0.241 | 1.244 | 3.251 | 0.005 | 0.112 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Pressure Washers                   | 15   | 0.662 | 3.562 | 4.617 | 0.008 | 0.224 |
| Pressure Washers                   | 25   | 0.731 | 2.501 | 4.596 | 0.007 | 0.214 |
| Pressure Washers                   | 50   | 0.569 | 3.457 | 4.053 | 0.007 | 0.184 |
| Pressure Washers                   | 120  | 0.337 | 3.240 | 3.295 | 0.006 | 0.174 |
| Pressure Washers                   | 175  | 0.280 | 2.907 | 2.670 | 0.006 | 0.117 |

|                         |      |       |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 |
| Pumps                   | 15   | 0.748 | 3.562 | 4.647 | 0.008 | 0.241 |
| Pumps                   | 25   | 0.787 | 2.501 | 4.596 | 0.007 | 0.222 |
| Pumps                   | 50   | 0.849 | 4.284 | 4.269 | 0.007 | 0.235 |
| Pumps                   | 120  | 0.429 | 3.449 | 3.497 | 0.006 | 0.217 |
| Pumps                   | 175  | 0.309 | 2.974 | 2.711 | 0.006 | 0.124 |
| Pumps                   | 250  | 0.226 | 1.052 | 2.323 | 0.006 | 0.067 |
| Pumps                   | 500  | 0.214 | 1.027 | 2.084 | 0.005 | 0.064 |
| Pumps                   | 750  | 0.217 | 1.027 | 2.133 | 0.005 | 0.065 |
| Pumps                   | 9999 | 0.273 | 1.118 | 3.873 | 0.005 | 0.089 |
| Rollers                 | 15   | 0.972 | 4.778 | 4.645 | 0.005 | 0.349 |
| Rollers                 | 25   | 0.972 | 4.778 | 4.645 | 0.005 | 0.349 |
| Rollers                 | 50   | 0.972 | 4.778 | 4.645 | 0.005 | 0.349 |
| Rollers                 | 120  | 0.423 | 3.557 | 4.179 | 0.005 | 0.275 |
| Rollers                 | 175  | 0.231 | 2.933 | 2.699 | 0.005 | 0.124 |
| Rollers                 | 250  | 0.211 | 1.249 | 2.883 | 0.005 | 0.092 |
| Rollers                 | 500  | 0.234 | 2.101 | 2.908 | 0.005 | 0.111 |
| Rough Terrain Forklifts | 50   | 1.009 | 4.674 | 4.557 | 0.005 | 0.328 |
| Rough Terrain Forklifts | 120  | 0.202 | 3.258 | 2.622 | 0.005 | 0.117 |
| Rough Terrain Forklifts | 175  | 0.149 | 2.841 | 2.058 | 0.005 | 0.075 |
| Rough Terrain Forklifts | 250  | 0.109 | 0.974 | 1.639 | 0.005 | 0.036 |
| Rough Terrain Forklifts | 500  | 0.116 | 0.950 | 1.961 | 0.005 | 0.043 |
| Rubber Tired Dozers     | 175  | 0.759 | 3.949 | 7.520 | 0.005 | 0.433 |
| Rubber Tired Dozers     | 250  | 0.651 | 2.459 | 6.929 | 0.005 | 0.338 |
| Rubber Tired Dozers     | 500  | 0.572 | 4.743 | 6.143 | 0.005 | 0.283 |
| Rubber Tired Dozers     | 750  | 0.455 | 2.598 | 6.122 | 0.005 | 0.218 |
| Rubber Tired Dozers     | 1000 | 0.547 | 2.281 | 5.528 | 0.005 | 0.171 |
| Rubber Tired Loaders    | 25   | 1.602 | 6.978 | 5.432 | 0.005 | 0.518 |
| Rubber Tired Loaders    | 50   | 1.602 | 6.978 | 5.432 | 0.005 | 0.518 |
| Rubber Tired Loaders    | 120  | 0.595 | 3.979 | 5.006 | 0.005 | 0.402 |
| Rubber Tired Loaders    | 175  | 0.405 | 3.381 | 3.859 | 0.005 | 0.213 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.309 | 1.302 | 3.745 | 0.005 | 0.126 |
| Rubber Tired Loaders      | 500  | 0.306 | 1.725 | 3.288 | 0.005 | 0.123 |
| Rubber Tired Loaders      | 750  | 0.293 | 1.452 | 3.019 | 0.005 | 0.118 |
| Rubber Tired Loaders      | 1000 | 0.323 | 1.208 | 5.459 | 0.005 | 0.146 |
| Scrapers                  | 120  | 0.718 | 4.197 | 6.841 | 0.005 | 0.526 |
| Scrapers                  | 175  | 0.510 | 3.533 | 5.264 | 0.005 | 0.283 |
| Scrapers                  | 250  | 0.501 | 2.233 | 5.831 | 0.005 | 0.257 |
| Scrapers                  | 500  | 0.343 | 2.595 | 4.156 | 0.005 | 0.163 |
| Scrapers                  | 750  | 0.277 | 1.829 | 3.431 | 0.005 | 0.123 |
| Signal Boards             | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 |
| Signal Boards             | 50   | 0.887 | 4.538 | 4.272 | 0.007 | 0.236 |
| Signal Boards             | 120  | 0.437 | 3.519 | 3.410 | 0.006 | 0.216 |
| Signal Boards             | 175  | 0.321 | 3.043 | 2.601 | 0.006 | 0.125 |
| Signal Boards             | 250  | 0.291 | 1.292 | 2.676 | 0.007 | 0.080 |
| Skid Steer Loaders        | 25   | 0.446 | 3.740 | 3.750 | 0.005 | 0.154 |
| Skid Steer Loaders        | 50   | 0.446 | 3.740 | 3.750 | 0.005 | 0.154 |
| Skid Steer Loaders        | 120  | 0.199 | 3.277 | 2.656 | 0.005 | 0.122 |
| Surfacing Equipment       | 50   | 0.643 | 4.100 | 4.420 | 0.006 | 0.250 |
| Surfacing Equipment       | 120  | 0.355 | 3.449 | 3.823 | 0.005 | 0.226 |
| Surfacing Equipment       | 175  | 0.357 | 2.972 | 4.239 | 0.005 | 0.204 |
| Surfacing Equipment       | 250  | 0.217 | 1.216 | 3.400 | 0.005 | 0.101 |
| Surfacing Equipment       | 500  | 0.146 | 1.214 | 1.899 | 0.005 | 0.068 |
| Surfacing Equipment       | 750  | 0.142 | 0.994 | 2.179 | 0.005 | 0.076 |
| Sweepers/Scrubbers        | 15   | 1.431 | 6.268 | 5.225 | 0.005 | 0.491 |
| Sweepers/Scrubbers        | 25   | 1.431 | 6.268 | 5.225 | 0.005 | 0.491 |
| Sweepers/Scrubbers        | 50   | 1.431 | 6.268 | 5.225 | 0.005 | 0.491 |
| Sweepers/Scrubbers        | 120  | 0.550 | 3.846 | 4.773 | 0.005 | 0.387 |
| Sweepers/Scrubbers        | 175  | 0.523 | 3.449 | 5.301 | 0.005 | 0.277 |
| Sweepers/Scrubbers        | 250  | 0.235 | 1.230 | 2.866 | 0.005 | 0.099 |
| Tractors/Loaders/Backhoes | 25   | 0.920 | 5.203 | 4.609 | 0.005 | 0.330 |



|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.920 | 5.203 | 4.609 | 0.005 | 0.330 |
| Tractors/Loaders/Backhoes | 120  | 0.368 | 3.638 | 3.693 | 0.005 | 0.247 |
| Tractors/Loaders/Backhoes | 175  | 0.270 | 3.122 | 2.784 | 0.005 | 0.140 |
| Tractors/Loaders/Backhoes | 250  | 0.245 | 1.220 | 3.147 | 0.005 | 0.102 |
| Tractors/Loaders/Backhoes | 500  | 0.206 | 1.389 | 2.345 | 0.005 | 0.082 |
| Tractors/Loaders/Backhoes | 750  | 0.262 | 1.603 | 3.120 | 0.005 | 0.117 |
| Trenchers                 | 15   | 0.955 | 4.892 | 4.785 | 0.005 | 0.377 |
| Trenchers                 | 25   | 0.955 | 4.892 | 4.785 | 0.005 | 0.377 |
| Trenchers                 | 50   | 0.955 | 4.892 | 4.785 | 0.005 | 0.377 |
| Trenchers                 | 120  | 0.631 | 3.837 | 5.695 | 0.005 | 0.431 |
| Trenchers                 | 175  | 0.460 | 3.342 | 4.960 | 0.005 | 0.255 |
| Trenchers                 | 250  | 0.405 | 1.810 | 5.047 | 0.005 | 0.203 |
| Trenchers                 | 500  | 0.254 | 1.987 | 3.128 | 0.005 | 0.118 |
| Trenchers                 | 750  | 0.078 | 0.956 | 0.707 | 0.005 | 0.015 |
| Welders                   | 15   | 0.748 | 3.562 | 4.647 | 0.008 | 0.241 |
| Welders                   | 25   | 0.787 | 2.501 | 4.596 | 0.007 | 0.222 |
| Welders                   | 50   | 1.055 | 4.950 | 4.449 | 0.007 | 0.273 |
| Welders                   | 120  | 0.503 | 3.623 | 3.648 | 0.006 | 0.250 |
| Welders                   | 175  | 0.370 | 3.122 | 2.832 | 0.006 | 0.143 |
| Welders                   | 250  | 0.276 | 1.104 | 2.432 | 0.006 | 0.075 |
| Welders                   | 500  | 0.264 | 1.065 | 2.163 | 0.005 | 0.072 |
| Water Trucks              | 175  | 0.323 | 3.326 | 2.825 | 0.005 | 0.149 |
| Water Trucks              | 250  | 0.307 | 1.461 | 2.985 | 0.005 | 0.119 |
| Water Trucks              | 500  | 0.264 | 1.483 | 2.669 | 0.005 | 0.097 |
| Water Trucks              | 750  | 0.327 | 2.041 | 3.320 | 0.005 | 0.129 |
| Water Trucks              | 1000 | 0.295 | 1.356 | 4.765 | 0.005 | 0.124 |

2020

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|
| PM2.5   | CO2     | CH4     | N2O     |
| 0.038   | 536.743 | 0.170   | 0.005   |
| 0.038   | 536.743 | 0.170   | 0.005   |
| 0.038   | 536.743 | 0.170   | 0.005   |
| 0.045   | 482.606 | 0.153   | 0.004   |
| 0.008   | 482.545 | 0.153   | 0.004   |
| 0.064   | 568.299 | 0.019   | 0.004   |
| 0.241   | 568.299 | 0.067   | 0.005   |
| 0.222   | 568.299 | 0.071   | 0.005   |
| 0.287   | 568.299 | 0.101   | 0.005   |
| 0.260   | 568.299 | 0.048   | 0.004   |
| 0.150   | 568.299 | 0.036   | 0.004   |
| 0.078   | 568.299 | 0.027   | 0.004   |
| 0.075   | 568.299 | 0.026   | 0.004   |
| 0.076   | 568.299 | 0.026   | 0.004   |
| 0.102   | 568.299 | 0.029   | 0.004   |
| 0.278   | 545.293 | 0.173   | 0.005   |
| 0.278   | 545.293 | 0.173   | 0.005   |
| 0.278   | 545.293 | 0.173   | 0.005   |
| 0.166   | 472.453 | 0.150   | 0.004   |
| 0.081   | 487.355 | 0.154   | 0.004   |
| 0.049   | 475.790 | 0.151   | 0.004   |
| 0.044   | 477.046 | 0.151   | 0.004   |
| 0.044   | 481.836 | 0.152   | 0.004   |
| 0.056   | 482.359 | 0.153   | 0.004   |

| 2020             |       | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      |
| Aerial Lifts     | 15    | 0.168   | 3.099   |
| Aerial Lifts     | 25    | 0.168   | 3.099   |
| Aerial Lifts     | 50    | 0.168   | 3.099   |
| Aerial Lifts     | 120   | 0.115   | 3.177   |
| Aerial Lifts     | 500   | 0.069   | 0.946   |
| Aerial Lifts     | 750   | 0.200   | 1.013   |
| Air Compressor s | 15    | 0.731   | 3.546   |
| Air Compressor s | 25    | 0.769   | 2.473   |
| Air Compressor s | 50    | 1.001   | 5.164   |
| Air Compressor s | 120   | 0.489   | 3.698   |
| Air Compressor s | 175   | 0.374   | 3.203   |
| Air Compressor s | 250   | 0.288   | 1.121   |
| Air Compressor s | 500   | 0.279   | 1.076   |
| Air Compressor s | 750   | 0.280   | 1.076   |
| Air Compressor s | 1000  | 0.306   | 1.158   |
| Bore/Drill Rigs  | 15    | 0.716   | 4.510   |
| Bore/Drill Rigs  | 25    | 0.716   | 4.510   |
| Bore/Drill Rigs  | 50    | 0.716   | 4.510   |
| Bore/Drill Rigs  | 120   | 0.246   | 3.323   |
| Bore/Drill Rigs  | 175   | 0.174   | 2.969   |
| Bore/Drill Rigs  | 250   | 0.142   | 1.068   |
| Bore/Drill Rigs  | 500   | 0.125   | 1.013   |
| Bore/Drill Rigs  | 750   | 0.109   | 0.974   |
| Bore/Drill Rigs  | 1000  | 0.133   | 0.988   |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.162 | 568.299 | 0.059 | 0.005 |
| 0.196 | 568.299 | 0.066 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.242 | 568.299 | 0.081 | 0.005 |
| 0.220 | 568.300 | 0.040 | 0.004 |
| 0.128 | 568.299 | 0.029 | 0.004 |
| 0.566 | 529.463 | 0.168 | 0.005 |
| 0.460 | 480.325 | 0.152 | 0.004 |
| 0.292 | 485.182 | 0.154 | 0.004 |
| 0.198 | 483.462 | 0.153 | 0.004 |
| 0.159 | 483.142 | 0.153 | 0.004 |
| 0.114 | 481.119 | 0.152 | 0.004 |
| 0.055 | 482.545 | 0.153 | 0.004 |
| 0.589 | 525.977 | 0.166 | 0.005 |
| 0.492 | 486.991 | 0.154 | 0.004 |
| 0.276 | 481.622 | 0.152 | 0.004 |
| 0.173 | 483.449 | 0.153 | 0.004 |
| 0.141 | 485.865 | 0.154 | 0.004 |
| 0.113 | 483.388 | 0.153 | 0.004 |
| 0.194 | 486.255 | 0.154 | 0.004 |
| 0.269 | 568.299 | 0.096 | 0.005 |
| 0.241 | 568.299 | 0.046 | 0.004 |
| 0.141 | 568.299 | 0.035 | 0.004 |
| 0.074 | 568.299 | 0.027 | 0.004 |
| 0.071 | 568.299 | 0.026 | 0.004 |
| 0.071 | 568.299 | 0.026 | 0.004 |
| 0.098 | 568.299 | 0.031 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.470 |
| Cement and Mortar Mixers | 25   | 0.723 | 2.397 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 50   | 0.798 | 4.552 |
| Concrete/Industrial Saws | 120  | 0.401 | 3.535 |
| Concrete/Industrial Saws | 175  | 0.306 | 3.072 |
| Cranes                   | 50   | 2.084 | 7.376 |
| Cranes                   | 120  | 0.732 | 4.171 |
| Cranes                   | 175  | 0.537 | 3.562 |
| Cranes                   | 250  | 0.384 | 1.790 |
| Cranes                   | 500  | 0.321 | 2.660 |
| Cranes                   | 750  | 0.242 | 1.444 |
| Cranes                   | 9999 | 0.182 | 0.999 |
| Crawler Tractors         | 50   | 2.053 | 7.300 |
| Crawler Tractors         | 120  | 0.715 | 4.044 |
| Crawler Tractors         | 175  | 0.476 | 3.340 |
| Crawler Tractors         | 250  | 0.360 | 1.555 |
| Crawler Tractors         | 500  | 0.301 | 2.088 |
| Crawler Tractors         | 750  | 0.256 | 1.310 |
| Crawler Tractors         | 1000 | 0.463 | 2.028 |
| Crushing/Proc. Equipment | 50   | 0.947 | 5.211 |
| Crushing/Proc. Equipment | 120  | 0.473 | 3.722 |
| Crushing/Proc. Equipment | 175  | 0.367 | 3.234 |
| Crushing/Proc. Equipment | 250  | 0.289 | 1.125 |
| Crushing/Proc. Equipment | 500  | 0.281 | 1.078 |
| Crushing/Proc. Equipment | 750  | 0.281 | 1.077 |
| Crushing/Proc. Equipment | 9999 | 0.329 | 1.153 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.167 | 568.299 | 0.061 | 0.005 |
| 0.230 | 536.913 | 0.170 | 0.005 |
| 0.230 | 536.913 | 0.170 | 0.005 |
| 0.194 | 478.245 | 0.151 | 0.004 |
| 0.112 | 482.684 | 0.153 | 0.004 |
| 0.063 | 482.250 | 0.153 | 0.004 |
| 0.053 | 481.236 | 0.152 | 0.004 |
| 0.062 | 479.288 | 0.152 | 0.004 |
| 0.369 | 537.161 | 0.170 | 0.005 |
| 0.324 | 482.007 | 0.153 | 0.004 |
| 0.193 | 482.598 | 0.153 | 0.004 |
| 0.161 | 483.844 | 0.153 | 0.004 |
| 0.103 | 484.140 | 0.153 | 0.004 |
| 0.224 | 568.299 | 0.059 | 0.005 |
| 0.214 | 568.299 | 0.066 | 0.005 |
| 0.222 | 568.299 | 0.070 | 0.005 |
| 0.206 | 568.299 | 0.036 | 0.004 |
| 0.118 | 568.299 | 0.026 | 0.004 |
| 0.064 | 568.299 | 0.019 | 0.004 |
| 0.062 | 568.299 | 0.018 | 0.004 |
| 0.062 | 568.299 | 0.018 | 0.004 |
| 0.087 | 568.299 | 0.023 | 0.004 |
| 0.678 | 503.751 | 0.159 | 0.005 |
| 0.612 | 479.901 | 0.152 | 0.004 |
| 0.310 | 489.042 | 0.155 | 0.004 |
| 0.144 | 486.329 | 0.154 | 0.004 |
| 0.115 | 482.588 | 0.153 | 0.004 |
| 0.080 | 568.299 | 0.030 | 0.004 |
| 0.305 | 484.269 | 0.153 | 0.004 |
| 0.146 | 483.431 | 0.153 | 0.004 |
| 0.090 | 481.275 | 0.152 | 0.004 |
| 0.075 | 482.309 | 0.153 | 0.004 |
| 0.057 | 482.545 | 0.153 | 0.004 |
| 0.138 | 480.362 | 0.152 | 0.004 |
| 0.110 | 480.170 | 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Dumpers/Te<br>nders     | 25   | 0.685 | 2.339 |
| Excavators              | 25   | 0.593 | 4.500 |
| Excavators              | 50   | 0.593 | 4.500 |
| Excavators              | 120  | 0.299 | 3.505 |
| Excavators              | 175  | 0.231 | 3.086 |
| Excavators              | 250  | 0.177 | 1.118 |
| Excavators              | 500  | 0.153 | 1.102 |
| Excavators              | 750  | 0.170 | 1.145 |
| Forklifts               | 50   | 1.124 | 5.706 |
| Forklifts               | 120  | 0.459 | 3.760 |
| Forklifts               | 175  | 0.338 | 3.249 |
| Forklifts               | 250  | 0.293 | 1.442 |
| Forklifts               | 500  | 0.251 | 1.478 |
| Generator<br>Sets       | 15   | 0.646 | 3.546 |
| Generator<br>Sets       | 25   | 0.721 | 2.473 |
| Generator<br>Sets       | 50   | 0.691 | 3.995 |
| Generator<br>Sets       | 120  | 0.364 | 3.380 |
| Generator<br>Sets       | 175  | 0.267 | 2.930 |
| Generator<br>Sets       | 250  | 0.198 | 1.026 |
| Generator<br>Sets       | 500  | 0.188 | 1.005 |
| Generator<br>Sets       | 750  | 0.191 | 1.005 |
| Generator<br>Sets       | 9999 | 0.242 | 1.082 |
| Graders                 | 50   | 2.516 | 8.134 |
| Graders                 | 120  | 0.976 | 4.561 |
| Graders                 | 175  | 0.567 | 3.621 |
| Graders                 | 250  | 0.352 | 1.342 |
| Graders                 | 500  | 0.322 | 1.526 |
| Graders                 | 750  | 0.319 | 1.229 |
| Off-Highway<br>Tractors | 120  | 0.448 | 3.788 |
| Off-Highway<br>Tractors | 175  | 0.271 | 3.215 |
| Off-Highway<br>Tractors | 250  | 0.221 | 1.181 |
| Off-Highway<br>Tractors | 750  | 0.201 | 1.131 |
| Off-Highway<br>Tractors | 1000 | 0.150 | 1.022 |
| Off-Highway<br>Trucks   | 175  | 0.310 | 3.339 |
| Off-Highway<br>Trucks   | 250  | 0.275 | 1.391 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.089 | 485.383 | 0.154 | 0.004 |
| 0.118 | 483.218 | 0.153 | 0.004 |
| 0.114 | 480.348 | 0.152 | 0.004 |
| 0.402 | 539.735 | 0.171 | 0.005 |
| 0.402 | 539.735 | 0.171 | 0.005 |
| 0.402 | 539.735 | 0.171 | 0.005 |
| 0.349 | 482.218 | 0.153 | 0.004 |
| 0.215 | 480.452 | 0.152 | 0.004 |
| 0.094 | 485.413 | 0.154 | 0.004 |
| 0.344 | 537.869 | 0.170 | 0.005 |
| 0.344 | 537.869 | 0.170 | 0.005 |
| 0.344 | 537.869 | 0.170 | 0.005 |
| 0.316 | 480.444 | 0.152 | 0.004 |
| 0.144 | 482.336 | 0.153 | 0.004 |
| 0.097 | 483.739 | 0.153 | 0.004 |
| 0.085 | 483.439 | 0.153 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.246 | 1.414 |
| Off-Highway Trucks                 | 750  | 0.312 | 2.027 |
| Off-Highway Trucks                 | 1000 | 0.303 | 1.372 |
| Other Construction Equipment       | 15   | 1.072 | 5.404 |
| Other Construction Equipment       | 25   | 1.072 | 5.404 |
| Other Construction Equipment       | 50   | 1.072 | 5.404 |
| Other Construction Equipment       | 120  | 0.519 | 3.732 |
| Other Construction Equipment       | 175  | 0.388 | 3.235 |
| Other Construction Equipment       | 500  | 0.224 | 1.634 |
| Other General Industrial Equipment | 15   | 0.946 | 5.504 |
| Other General Industrial Equipment | 25   | 0.946 | 5.504 |
| Other General Industrial Equipment | 50   | 0.946 | 5.504 |
| Other General Industrial Equipment | 120  | 0.446 | 3.771 |
| Other General Industrial Equipment | 175  | 0.268 | 3.229 |
| Other General Industrial Equipment | 250  | 0.237 | 1.239 |
| Other General Industrial Equipment | 500  | 0.208 | 1.344 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.070 | 483.985 | 0.153 | 0.004 |
| 0.108 | 482.545 | 0.153 | 0.004 |
| 0.416 | 535.347 | 0.169 | 0.005 |
| 0.212 | 484.113 | 0.153 | 0.004 |
| 0.128 | 482.713 | 0.153 | 0.004 |
| 0.113 | 481.959 | 0.153 | 0.004 |
| 0.118 | 480.748 | 0.152 | 0.004 |
| 0.070 | 482.545 | 0.153 | 0.004 |
| 0.401 | 538.325 | 0.170 | 0.005 |
| 0.401 | 538.325 | 0.170 | 0.005 |
| 0.318 | 480.251 | 0.152 | 0.004 |
| 0.146 | 483.394 | 0.153 | 0.004 |
| 0.077 | 483.574 | 0.153 | 0.004 |
| 0.075 | 476.971 | 0.151 | 0.004 |
| 0.248 | 531.861 | 0.168 | 0.005 |
| 0.248 | 531.861 | 0.168 | 0.005 |
| 0.258 | 484.387 | 0.153 | 0.004 |
| 0.123 | 481.225 | 0.152 | 0.004 |
| 0.103 | 482.644 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.224 | 568.299 | 0.059 | 0.005 |
| 0.214 | 568.299 | 0.066 | 0.005 |
| 0.184 | 568.299 | 0.051 | 0.005 |
| 0.174 | 568.299 | 0.030 | 0.004 |
| 0.117 | 568.299 | 0.025 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.175 | 1.462 |
| Other General Industrial Equipment | 1000 | 0.271 | 1.085 |
| Other Material Handling Equipment  | 50   | 1.245 | 6.167 |
| Other Material Handling Equipment  | 120  | 0.307 | 3.589 |
| Other Material Handling Equipment  | 175  | 0.252 | 3.171 |
| Other Material Handling Equipment  | 250  | 0.291 | 1.319 |
| Other Material Handling Equipment  | 500  | 0.283 | 1.523 |
| Other Material Handling Equipment  | 9999 | 0.200 | 1.049 |
| Pavers                             | 25   | 1.318 | 5.523 |
| Pavers                             | 50   | 1.318 | 5.523 |
| Pavers                             | 120  | 0.470 | 3.604 |
| Pavers                             | 175  | 0.273 | 3.010 |
| Pavers                             | 250  | 0.176 | 1.028 |
| Pavers                             | 500  | 0.165 | 0.987 |
| Paving Equipment                   | 25   | 0.621 | 4.223 |
| Paving Equipment                   | 50   | 0.621 | 4.223 |
| Paving Equipment                   | 120  | 0.397 | 3.582 |
| Paving Equipment                   | 175  | 0.248 | 3.024 |
| Paving Equipment                   | 250  | 0.244 | 1.252 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.646 | 3.546 |
| Pressure Washers                   | 25   | 0.721 | 2.473 |
| Pressure Washers                   | 50   | 0.499 | 3.393 |
| Pressure Washers                   | 120  | 0.298 | 3.225 |
| Pressure Washers                   | 175  | 0.258 | 2.907 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.009 | 568.299 | 0.008 | 0.004 |
| 0.241 | 568.300 | 0.067 | 0.005 |
| 0.222 | 568.300 | 0.071 | 0.005 |
| 0.235 | 568.299 | 0.076 | 0.005 |
| 0.217 | 568.299 | 0.038 | 0.004 |
| 0.124 | 568.299 | 0.027 | 0.004 |
| 0.067 | 568.299 | 0.020 | 0.004 |
| 0.064 | 568.300 | 0.019 | 0.004 |
| 0.065 | 568.299 | 0.019 | 0.004 |
| 0.089 | 568.299 | 0.024 | 0.004 |
| 0.321 | 537.546 | 0.170 | 0.005 |
| 0.321 | 537.546 | 0.170 | 0.005 |
| 0.321 | 537.546 | 0.170 | 0.005 |
| 0.253 | 484.336 | 0.153 | 0.004 |
| 0.114 | 482.453 | 0.153 | 0.004 |
| 0.084 | 483.777 | 0.153 | 0.004 |
| 0.102 | 489.977 | 0.155 | 0.004 |
|       |         |       |       |
| 0.302 | 537.329 | 0.170 | 0.005 |
|       |         |       |       |
| 0.108 | 483.311 | 0.153 | 0.004 |
|       |         |       |       |
| 0.069 | 482.119 | 0.153 | 0.004 |
|       |         |       |       |
| 0.034 | 483.088 | 0.153 | 0.004 |
|       |         |       |       |
| 0.040 | 477.254 | 0.151 | 0.004 |
|       |         |       |       |
| 0.398 | 483.559 | 0.153 | 0.004 |
|       |         |       |       |
| 0.311 | 485.172 | 0.154 | 0.004 |
|       |         |       |       |
| 0.260 | 490.383 | 0.155 | 0.004 |
|       |         |       |       |
| 0.201 | 483.579 | 0.153 | 0.004 |
|       |         |       |       |
| 0.171 | 568.299 | 0.049 | 0.004 |
|       |         |       |       |
| 0.476 | 536.225 | 0.170 | 0.005 |
|       |         |       |       |
| 0.476 | 536.225 | 0.170 | 0.005 |
|       |         |       |       |
| 0.370 | 475.864 | 0.151 | 0.004 |
|       |         |       |       |
| 0.196 | 481.736 | 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 |
| Pumps                   | 15   | 0.731 | 3.546 |
| Pumps                   | 25   | 0.769 | 2.473 |
| Pumps                   | 50   | 0.755 | 4.197 |
| Pumps                   | 120  | 0.386 | 3.432 |
| Pumps                   | 175  | 0.285 | 2.974 |
| Pumps                   | 250  | 0.212 | 1.042 |
| Pumps                   | 500  | 0.203 | 1.017 |
| Pumps                   | 750  | 0.205 | 1.017 |
| Pumps                   | 9999 | 0.255 | 1.096 |
| Rollers                 | 15   | 0.926 | 4.725 |
| Rollers                 | 25   | 0.926 | 4.725 |
| Rollers                 | 50   | 0.926 | 4.725 |
| Rollers                 | 120  | 0.388 | 3.531 |
| Rollers                 | 175  | 0.215 | 2.933 |
| Rollers                 | 250  | 0.209 | 1.253 |
| Rollers                 | 500  | 0.235 | 2.113 |
|                         |      |       |       |
| Rough Terrain Forklifts | 50   | 0.999 | 4.686 |
|                         |      |       |       |
| Rough Terrain Forklifts | 120  | 0.189 | 3.256 |
|                         |      |       |       |
| Rough Terrain Forklifts | 175  | 0.143 | 2.845 |
|                         |      |       |       |
| Rough Terrain Forklifts | 250  | 0.112 | 0.978 |
|                         |      |       |       |
| Rough Terrain Forklifts | 500  | 0.089 | 0.942 |
|                         |      |       |       |
| Rubber Tired Dozers     | 175  | 0.726 | 3.893 |
|                         |      |       |       |
| Rubber Tired Dozers     | 250  | 0.620 | 2.371 |
|                         |      |       |       |
| Rubber Tired Dozers     | 500  | 0.535 | 4.411 |
|                         |      |       |       |
| Rubber Tired Dozers     | 750  | 0.457 | 2.601 |
|                         |      |       |       |
| Rubber Tired Dozers     | 1000 | 0.522 | 2.164 |
|                         |      |       |       |
| Rubber Tired Loaders    | 25   | 1.481 | 6.768 |
|                         |      |       |       |
| Rubber Tired Loaders    | 50   | 1.481 | 6.768 |
|                         |      |       |       |
| Rubber Tired Loaders    | 120  | 0.556 | 3.948 |
|                         |      |       |       |
| Rubber Tired Loaders    | 175  | 0.379 | 3.368 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.116 | 480.100 | 0.152 | 0.004 |
| 0.113 | 477.042 | 0.151 | 0.004 |
| 0.109 | 471.187 | 0.149 | 0.004 |
| 0.135 | 480.523 | 0.152 | 0.004 |
| 0.483 | 494.100 | 0.156 | 0.004 |
| 0.261 | 489.255 | 0.155 | 0.004 |
| 0.236 | 479.032 | 0.152 | 0.004 |
| 0.150 | 482.732 | 0.153 | 0.004 |
| 0.113 | 482.596 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.236 | 568.300 | 0.080 | 0.005 |
| 0.216 | 568.299 | 0.039 | 0.004 |
| 0.125 | 568.299 | 0.029 | 0.004 |
| 0.080 | 686.695 | 0.026 | 0.004 |
| 0.141 | 539.267 | 0.171 | 0.005 |
| 0.141 | 539.267 | 0.171 | 0.005 |
| 0.112 | 482.384 | 0.153 | 0.004 |
| 0.230 | 547.046 | 0.173 | 0.005 |
| 0.208 | 484.076 | 0.153 | 0.004 |
| 0.187 | 479.672 | 0.152 | 0.004 |
| 0.093 | 486.842 | 0.154 | 0.004 |
| 0.063 | 481.897 | 0.153 | 0.004 |
| 0.070 | 480.166 | 0.152 | 0.004 |
| 0.452 | 537.002 | 0.170 | 0.005 |
| 0.452 | 537.002 | 0.170 | 0.005 |
| 0.452 | 537.002 | 0.170 | 0.005 |
| 0.356 | 484.652 | 0.153 | 0.004 |
| 0.255 | 483.636 | 0.153 | 0.004 |
| 0.091 | 480.574 | 0.152 | 0.004 |
| 0.304 | 527.684 | 0.167 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.290 | 1.269 |
| Rubber Tired Loaders      | 500  | 0.289 | 1.630 |
| Rubber Tired Loaders      | 750  | 0.277 | 1.400 |
| Rubber Tired Loaders      | 1000 | 0.312 | 1.204 |
| Scrapers                  | 120  | 0.701 | 4.198 |
| Scrapers                  | 175  | 0.478 | 3.501 |
| Scrapers                  | 250  | 0.446 | 2.065 |
| Scrapers                  | 500  | 0.320 | 2.401 |
| Scrapers                  | 750  | 0.262 | 1.725 |
| Signal Boards             | 15   | 0.661 | 3.469 |
| Signal Boards             | 50   | 0.788 | 4.448 |
| Signal Boards             | 120  | 0.395 | 3.504 |
| Signal Boards             | 175  | 0.298 | 3.043 |
| Signal Boards             | 250  | 0.274 | 1.281 |
| Skid Steer Loaders        | 25   | 0.439 | 3.764 |
| Skid Steer Loaders        | 50   | 0.439 | 3.764 |
| Skid Steer Loaders        | 120  | 0.188 | 3.277 |
| Surfacing Equipment       | 50   | 0.536 | 3.934 |
| Surfacing Equipment       | 120  | 0.330 | 3.439 |
| Surfacing Equipment       | 175  | 0.308 | 2.931 |
| Surfacing Equipment       | 250  | 0.212 | 1.218 |
| Surfacing Equipment       | 500  | 0.146 | 1.219 |
| Surfacing Equipment       | 750  | 0.142 | 0.996 |
| Sweepers/Scrubbers        | 15   | 1.344 | 6.155 |
| Sweepers/Scrubbers        | 25   | 1.344 | 6.155 |
| Sweepers/Scrubbers        | 50   | 1.344 | 6.155 |
| Sweepers/Scrubbers        | 120  | 0.520 | 3.828 |
| Sweepers/Scrubbers        | 175  | 0.462 | 3.359 |
| Sweepers/Scrubbers        | 250  | 0.207 | 1.137 |
| Tractors/Loaders/Backhoes | 25   | 0.830 | 5.035 |



|       |         |       |       |
|-------|---------|-------|-------|
| 0.304 | 527.684 | 0.167 | 0.005 |
| 0.227 | 485.855 | 0.154 | 0.004 |
| 0.129 | 477.915 | 0.151 | 0.004 |
| 0.094 | 481.421 | 0.152 | 0.004 |
| 0.075 | 479.083 | 0.152 | 0.004 |
| 0.107 | 478.922 | 0.152 | 0.004 |
| 0.347 | 539.104 | 0.171 | 0.005 |
| 0.347 | 539.104 | 0.171 | 0.005 |
| 0.347 | 539.104 | 0.171 | 0.005 |
| 0.396 | 485.364 | 0.154 | 0.004 |
| 0.234 | 478.129 | 0.151 | 0.004 |
| 0.187 | 484.117 | 0.153 | 0.004 |
| 0.109 | 482.165 | 0.153 | 0.004 |
| 0.014 | 484.542 | 0.153 | 0.004 |
| 0.241 | 568.299 | 0.067 | 0.005 |
| 0.222 | 568.299 | 0.071 | 0.005 |
| 0.273 | 568.299 | 0.095 | 0.005 |
| 0.250 | 568.299 | 0.045 | 0.004 |
| 0.143 | 568.300 | 0.033 | 0.004 |
| 0.075 | 568.299 | 0.024 | 0.004 |
| 0.072 | 568.300 | 0.023 | 0.004 |
| 0.138 | 480.362 | 0.152 | 0.004 |
| 0.110 | 480.170 | 0.152 | 0.004 |
| 0.089 | 485.383 | 0.154 | 0.004 |
| 0.118 | 483.218 | 0.153 | 0.004 |
| 0.114 | 480.348 | 0.152 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.830 | 5.035 |
| Tractors/Loaders/Backhoes | 120  | 0.331 | 3.601 |
| Tractors/Loaders/Backhoes | 175  | 0.246 | 3.105 |
| Tractors/Loaders/Backhoes | 250  | 0.225 | 1.196 |
| Tractors/Loaders/Backhoes | 500  | 0.194 | 1.358 |
| Tractors/Loaders/Backhoes | 750  | 0.268 | 1.610 |
| Trenchers                 | 15   | 0.905 | 4.833 |
| Trenchers                 | 25   | 0.905 | 4.833 |
| Trenchers                 | 50   | 0.905 | 4.833 |
| Trenchers                 | 120  | 0.610 | 3.833 |
| Trenchers                 | 175  | 0.421 | 3.330 |
| Trenchers                 | 250  | 0.392 | 1.774 |
| Trenchers                 | 500  | 0.233 | 1.859 |
| Trenchers                 | 750  | 0.070 | 0.950 |
| Welders                   | 15   | 0.731 | 3.546 |
| Welders                   | 25   | 0.769 | 2.473 |
| Welders                   | 50   | 0.937 | 4.840 |
| Welders                   | 120  | 0.455 | 3.605 |
| Welders                   | 175  | 0.344 | 3.122 |
| Welders                   | 250  | 0.261 | 1.093 |
| Welders                   | 500  | 0.252 | 1.055 |
| Water Trucks              | 175  | 0.310 | 3.339 |
| Water Trucks              | 250  | 0.275 | 1.391 |
| Water Trucks              | 500  | 0.246 | 1.414 |
| Water Trucks              | 750  | 0.312 | 2.027 |
| Water Trucks              | 1000 | 0.303 | 1.372 |





|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.336 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 4.031 | 0.005 | 0.222 | 0.204 | 525.368 | 0.170 | 0.005 |
| 4.031 | 0.005 | 0.222 | 0.204 | 525.368 | 0.170 | 0.005 |
| 3.090 | 0.005 | 0.185 | 0.170 | 468.055 | 0.151 | 0.004 |
| 2.278 | 0.005 | 0.110 | 0.102 | 472.289 | 0.153 | 0.004 |
| 2.027 | 0.005 | 0.061 | 0.057 | 471.883 | 0.153 | 0.004 |
| 1.572 | 0.005 | 0.052 | 0.048 | 470.296 | 0.152 | 0.004 |
| 1.797 | 0.005 | 0.061 | 0.056 | 468.871 | 0.152 | 0.004 |
| 4.686 | 0.005 | 0.360 | 0.331 | 525.483 | 0.170 | 0.005 |
| 4.133 | 0.005 | 0.308 | 0.283 | 471.529 | 0.153 | 0.004 |
| 3.320 | 0.005 | 0.180 | 0.165 | 472.106 | 0.153 | 0.004 |
| 3.241 | 0.005 | 0.126 | 0.116 | 473.326 | 0.153 | 0.004 |
| 2.440 | 0.005 | 0.097 | 0.089 | 473.615 | 0.153 | 0.004 |
| 4.516 | 0.008 | 0.212 | 0.212 | 568.299 | 0.058 | 0.005 |
| 4.538 | 0.007 | 0.205 | 0.205 | 568.299 | 0.065 | 0.005 |
| 4.075 | 0.007 | 0.194 | 0.194 | 568.299 | 0.062 | 0.005 |
| 3.173 | 0.006 | 0.179 | 0.179 | 568.299 | 0.032 | 0.004 |
| 2.380 | 0.006 | 0.105 | 0.105 | 568.299 | 0.024 | 0.004 |
| 2.016 | 0.006 | 0.057 | 0.057 | 568.299 | 0.017 | 0.004 |
| 1.816 | 0.005 | 0.055 | 0.055 | 568.299 | 0.017 | 0.004 |
| 1.858 | 0.005 | 0.056 | 0.056 | 568.299 | 0.017 | 0.004 |
| 3.608 | 0.005 | 0.079 | 0.079 | 568.300 | 0.021 | 0.004 |
| 5.825 | 0.005 | 0.709 | 0.652 | 492.862 | 0.159 | 0.005 |
| 7.725 | 0.005 | 0.622 | 0.572 | 469.337 | 0.152 | 0.004 |
| 5.530 | 0.005 | 0.309 | 0.284 | 478.040 | 0.155 | 0.004 |
| 4.678 | 0.005 | 0.150 | 0.138 | 475.304 | 0.154 | 0.004 |
| 3.107 | 0.005 | 0.121 | 0.111 | 471.980 | 0.153 | 0.004 |
| 2.031 | 0.005 | 0.072 | 0.072 | 568.299 | 0.028 | 0.004 |
| 4.183 | 0.005 | 0.307 | 0.283 | 474.148 | 0.153 | 0.004 |
| 2.890 | 0.005 | 0.140 | 0.129 | 472.917 | 0.153 | 0.004 |
| 2.575 | 0.005 | 0.086 | 0.079 | 470.943 | 0.152 | 0.004 |
| 2.047 | 0.005 | 0.076 | 0.070 | 471.815 | 0.153 | 0.004 |
| 2.396 | 0.005 | 0.063 | 0.058 | 472.055 | 0.153 | 0.004 |
| 2.628 | 0.005 | 0.137 | 0.126 | 470.097 | 0.152 | 0.004 |
| 2.507 | 0.005 | 0.098 | 0.090 | 470.168 | 0.152 | 0.004 |

|                      |
|----------------------|
| Dumpers/Trailers     |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Trucks   |
| Off-Highway Trucks   |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 1.676 | 0.005 | 0.062 | 0.057 | 473.464 | 0.153 | 0.004 |
| 4.857 | 0.005 | 0.119 | 0.109 | 472.055 | 0.153 | 0.004 |
| 5.139 | 0.005 | 0.439 | 0.404 | 523.709 | 0.169 | 0.005 |
| 3.104 | 0.005 | 0.182 | 0.168 | 473.588 | 0.153 | 0.004 |
| 2.367 | 0.005 | 0.118 | 0.109 | 472.219 | 0.153 | 0.004 |
| 3.599 | 0.005 | 0.115 | 0.106 | 471.482 | 0.153 | 0.004 |
| 3.210 | 0.005 | 0.120 | 0.110 | 470.297 | 0.152 | 0.004 |
| 3.614 | 0.005 | 0.078 | 0.072 | 472.055 | 0.153 | 0.004 |
| 4.764 | 0.005 | 0.402 | 0.370 | 526.210 | 0.170 | 0.005 |
| 4.764 | 0.005 | 0.402 | 0.370 | 526.210 | 0.170 | 0.005 |
| 4.427 | 0.005 | 0.325 | 0.299 | 469.882 | 0.152 | 0.004 |
| 2.918 | 0.005 | 0.142 | 0.131 | 472.775 | 0.153 | 0.004 |
| 2.777 | 0.005 | 0.076 | 0.070 | 472.834 | 0.153 | 0.004 |
| 2.134 | 0.005 | 0.077 | 0.071 | 466.206 | 0.151 | 0.004 |
| 3.952 | 0.005 | 0.217 | 0.200 | 520.124 | 0.168 | 0.005 |
| 3.952 | 0.005 | 0.217 | 0.200 | 520.124 | 0.168 | 0.005 |
| 3.781 | 0.005 | 0.256 | 0.235 | 473.325 | 0.153 | 0.004 |
| 2.555 | 0.005 | 0.128 | 0.118 | 470.736 | 0.152 | 0.004 |
| 3.220 | 0.005 | 0.111 | 0.102 | 472.151 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.516 | 0.008 | 0.212 | 0.212 | 568.299 | 0.058 | 0.005 |
| 4.538 | 0.007 | 0.205 | 0.205 | 568.299 | 0.065 | 0.005 |
| 3.917 | 0.007 | 0.161 | 0.161 | 568.299 | 0.045 | 0.005 |
| 3.036 | 0.006 | 0.151 | 0.151 | 568.299 | 0.026 | 0.004 |
| 2.383 | 0.006 | 0.104 | 0.104 | 568.299 | 0.023 | 0.004 |

|                                    |
|------------------------------------|
| Other General Industrial Equipment |
| Other General Industrial Equipment |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Plate Compactors                   |
| Pressure Washers                   |
| Pressure Washers                   |
| Pressure Washers                   |
| Pressure Washers                   |
| Pressure Washers                   |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 4.542 | 0.008 | 0.227 | 0.227 | 568.299 | 0.066 | 0.005 |
| 4.538 | 0.007 | 0.212 | 0.212 | 568.299 | 0.069 | 0.005 |
| 4.128 | 0.007 | 0.206 | 0.206 | 568.299 | 0.068 | 0.005 |
| 3.219 | 0.006 | 0.189 | 0.189 | 568.299 | 0.034 | 0.004 |
| 2.418 | 0.006 | 0.111 | 0.111 | 568.299 | 0.025 | 0.004 |
| 2.050 | 0.006 | 0.060 | 0.060 | 568.299 | 0.019 | 0.004 |
| 1.841 | 0.005 | 0.057 | 0.057 | 568.300 | 0.018 | 0.004 |
| 1.884 | 0.005 | 0.058 | 0.058 | 568.299 | 0.018 | 0.004 |
| 3.649 | 0.005 | 0.081 | 0.081 | 568.300 | 0.023 | 0.004 |
| 4.534 | 0.005 | 0.329 | 0.303 | 525.880 | 0.170 | 0.005 |
| 4.534 | 0.005 | 0.329 | 0.303 | 525.880 | 0.170 | 0.005 |
| 4.534 | 0.005 | 0.329 | 0.303 | 525.880 | 0.170 | 0.005 |
| 3.882 | 0.005 | 0.248 | 0.228 | 473.859 | 0.153 | 0.004 |
| 2.452 | 0.005 | 0.113 | 0.104 | 471.918 | 0.153 | 0.004 |
| 2.751 | 0.005 | 0.089 | 0.082 | 473.367 | 0.153 | 0.004 |
| 2.828 | 0.005 | 0.109 | 0.101 | 479.325 | 0.155 | 0.004 |
| 4.495 | 0.005 | 0.316 | 0.291 | 525.622 | 0.170 | 0.005 |
| 2.452 | 0.005 | 0.103 | 0.094 | 472.984 | 0.153 | 0.004 |
| 1.869 | 0.005 | 0.068 | 0.063 | 471.715 | 0.153 | 0.004 |
| 1.609 | 0.005 | 0.037 | 0.034 | 472.567 | 0.153 | 0.004 |
| 1.302 | 0.005 | 0.028 | 0.026 | 465.771 | 0.151 | 0.004 |
| 7.185 | 0.005 | 0.411 | 0.378 | 473.012 | 0.153 | 0.004 |
| 6.503 | 0.005 | 0.319 | 0.293 | 474.793 | 0.154 | 0.004 |
| 5.641 | 0.005 | 0.259 | 0.238 | 479.757 | 0.155 | 0.004 |
| 6.123 | 0.005 | 0.218 | 0.201 | 473.056 | 0.153 | 0.004 |
| 5.306 | 0.005 | 0.160 | 0.160 | 568.299 | 0.047 | 0.004 |
| 5.254 | 0.005 | 0.474 | 0.436 | 524.697 | 0.170 | 0.005 |
| 5.254 | 0.005 | 0.474 | 0.436 | 524.697 | 0.170 | 0.005 |
| 4.686 | 0.005 | 0.367 | 0.338 | 465.674 | 0.151 | 0.004 |
| 3.517 | 0.005 | 0.194 | 0.178 | 471.214 | 0.152 | 0.004 |

|                         |
|-------------------------|
| Pressure Washers        |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 3.421 | 0.005 | 0.114 | 0.105 | 469.513 | 0.152 | 0.004 |
| 3.017 | 0.005 | 0.112 | 0.103 | 466.783 | 0.151 | 0.004 |
| 2.767 | 0.005 | 0.108 | 0.099 | 462.193 | 0.150 | 0.004 |
| 5.253 | 0.005 | 0.139 | 0.127 | 469.935 | 0.152 | 0.004 |
| 6.677 | 0.005 | 0.510 | 0.469 | 483.745 | 0.157 | 0.004 |
| 4.869 | 0.005 | 0.262 | 0.241 | 478.608 | 0.155 | 0.004 |
| 5.089 | 0.005 | 0.223 | 0.205 | 468.988 | 0.152 | 0.004 |
| 3.783 | 0.005 | 0.148 | 0.136 | 472.175 | 0.153 | 0.004 |
| 3.126 | 0.005 | 0.113 | 0.104 | 471.778 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.132 | 0.007 | 0.206 | 0.206 | 568.299 | 0.071 | 0.005 |
| 3.134 | 0.006 | 0.187 | 0.187 | 568.299 | 0.035 | 0.004 |
| 2.309 | 0.006 | 0.110 | 0.110 | 568.299 | 0.026 | 0.004 |
| 2.350 | 0.007 | 0.071 | 0.071 | 686.695 | 0.024 | 0.004 |
| 3.691 | 0.005 | 0.145 | 0.133 | 527.758 | 0.171 | 0.005 |
| 3.691 | 0.005 | 0.145 | 0.133 | 527.758 | 0.171 | 0.005 |
| 2.505 | 0.005 | 0.108 | 0.100 | 471.908 | 0.153 | 0.004 |
| 4.239 | 0.006 | 0.216 | 0.199 | 535.528 | 0.173 | 0.005 |
| 3.612 | 0.005 | 0.206 | 0.190 | 473.819 | 0.153 | 0.004 |
| 3.672 | 0.005 | 0.175 | 0.161 | 469.208 | 0.152 | 0.004 |
| 3.222 | 0.005 | 0.097 | 0.089 | 476.426 | 0.154 | 0.004 |
| 1.838 | 0.005 | 0.067 | 0.062 | 471.633 | 0.153 | 0.004 |
| 2.094 | 0.005 | 0.074 | 0.068 | 469.625 | 0.152 | 0.004 |
| 5.095 | 0.005 | 0.463 | 0.426 | 525.328 | 0.170 | 0.005 |
| 5.095 | 0.005 | 0.463 | 0.426 | 525.328 | 0.170 | 0.005 |
| 5.095 | 0.005 | 0.463 | 0.426 | 525.328 | 0.170 | 0.005 |
| 4.482 | 0.005 | 0.360 | 0.331 | 474.116 | 0.153 | 0.004 |
| 4.608 | 0.005 | 0.237 | 0.218 | 473.122 | 0.153 | 0.004 |
| 2.486 | 0.005 | 0.079 | 0.073 | 470.126 | 0.152 | 0.004 |
| 4.398 | 0.005 | 0.288 | 0.265 | 515.874 | 0.167 | 0.005 |

|                           |
|---------------------------|
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Tractors/Loaders/Backhoes |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.398 | 0.005 | 0.288 | 0.265 | 515.874 | 0.167 | 0.005 |
| 3.326 | 0.005 | 0.210 | 0.194 | 475.154 | 0.154 | 0.004 |
| 2.415 | 0.005 | 0.122 | 0.112 | 467.513 | 0.151 | 0.004 |
| 2.738 | 0.005 | 0.090 | 0.083 | 470.500 | 0.152 | 0.004 |
| 2.080 | 0.005 | 0.073 | 0.067 | 468.245 | 0.151 | 0.004 |
| 3.119 | 0.005 | 0.117 | 0.108 | 468.660 | 0.152 | 0.004 |
| 4.677 | 0.005 | 0.356 | 0.328 | 527.096 | 0.171 | 0.005 |
| 4.677 | 0.005 | 0.356 | 0.328 | 527.096 | 0.171 | 0.005 |
| 4.677 | 0.005 | 0.356 | 0.328 | 527.096 | 0.171 | 0.005 |
| 5.520 | 0.005 | 0.413 | 0.380 | 475.127 | 0.154 | 0.004 |
| 4.460 | 0.005 | 0.228 | 0.210 | 467.735 | 0.151 | 0.004 |
| 4.809 | 0.005 | 0.195 | 0.179 | 473.595 | 0.153 | 0.004 |
| 2.775 | 0.005 | 0.105 | 0.097 | 470.637 | 0.152 | 0.004 |
| 0.560 | 0.005 | 0.009 | 0.008 | 472.656 | 0.153 | 0.004 |
| 4.542 | 0.008 | 0.227 | 0.227 | 568.299 | 0.066 | 0.005 |
| 4.538 | 0.007 | 0.212 | 0.212 | 568.299 | 0.069 | 0.005 |
| 4.304 | 0.007 | 0.238 | 0.238 | 568.299 | 0.084 | 0.005 |
| 3.351 | 0.006 | 0.216 | 0.216 | 568.299 | 0.041 | 0.004 |
| 2.523 | 0.006 | 0.127 | 0.127 | 568.299 | 0.031 | 0.004 |
| 2.143 | 0.006 | 0.066 | 0.066 | 568.299 | 0.023 | 0.004 |
| 1.910 | 0.005 | 0.064 | 0.064 | 568.299 | 0.022 | 0.004 |
| 2.628 | 0.005 | 0.137 | 0.126 | 470.097 | 0.152 | 0.004 |
| 2.507 | 0.005 | 0.098 | 0.090 | 470.168 | 0.152 | 0.004 |
| 2.347 | 0.005 | 0.086 | 0.079 | 474.579 | 0.154 | 0.004 |
| 3.058 | 0.005 | 0.120 | 0.110 | 472.750 | 0.153 | 0.004 |
| 4.794 | 0.005 | 0.125 | 0.115 | 469.889 | 0.152 | 0.004 |

|                           |
|---------------------------|
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |

|       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 15    | 0.165   | 3.114   | 2.922   | 0.005   | 0.027   | 0.024   | 525.074 | 0.170   | 0.005   |
| 25    | 0.165   | 3.114   | 2.922   | 0.005   | 0.027   | 0.024   | 525.074 | 0.170   | 0.005   |
| 50    | 0.165   | 3.114   | 2.922   | 0.005   | 0.027   | 0.024   | 525.074 | 0.170   | 0.005   |
| 120   | 0.109   | 3.176   | 1.744   | 0.005   | 0.033   | 0.031   | 472.114 | 0.153   | 0.004   |
| 500   | 0.072   | 0.951   | 0.640   | 0.005   | 0.009   | 0.008   | 472.055 | 0.153   | 0.004   |
| 750   | 0.187   | 1.004   | 1.610   | 0.005   | 0.050   | 0.050   | 568.299 | 0.016   | 0.004   |
| 15    | 0.717   | 3.531   | 4.462   | 0.008   | 0.214   | 0.214   | 568.299 | 0.064   | 0.005   |
| 25    | 0.752   | 2.446   | 4.497   | 0.007   | 0.201   | 0.201   | 568.299 | 0.067   | 0.005   |
| 50    | 0.887   | 5.021   | 4.221   | 0.007   | 0.212   | 0.212   | 568.299 | 0.080   | 0.005   |
| 120   | 0.442   | 3.670   | 3.083   | 0.006   | 0.190   | 0.190   | 568.299 | 0.039   | 0.004   |
| 175   | 0.343   | 3.192   | 2.218   | 0.006   | 0.115   | 0.115   | 568.299 | 0.030   | 0.004   |
| 250   | 0.268   | 1.108   | 1.859   | 0.006   | 0.060   | 0.060   | 568.299 | 0.024   | 0.004   |
| 500   | 0.261   | 1.064   | 1.663   | 0.005   | 0.058   | 0.058   | 568.299 | 0.023   | 0.004   |
| 750   | 0.262   | 1.064   | 1.699   | 0.005   | 0.058   | 0.058   | 568.299 | 0.023   | 0.004   |
| 1000  | 0.284   | 1.134   | 3.565   | 0.005   | 0.082   | 0.082   | 568.300 | 0.025   | 0.004   |
| 15    | 0.711   | 4.548   | 4.634   | 0.006   | 0.291   | 0.268   | 535.378 | 0.173   | 0.005   |
| 25    | 0.711   | 4.548   | 4.634   | 0.006   | 0.291   | 0.268   | 535.378 | 0.173   | 0.005   |
| 50    | 0.711   | 4.548   | 4.634   | 0.006   | 0.291   | 0.268   | 535.378 | 0.173   | 0.005   |
| 120   | 0.217   | 3.306   | 2.737   | 0.005   | 0.131   | 0.121   | 464.973 | 0.150   | 0.004   |
| 175   | 0.154   | 2.961   | 1.598   | 0.005   | 0.070   | 0.064   | 477.048 | 0.154   | 0.004   |
| 250   | 0.133   | 1.064   | 1.551   | 0.005   | 0.047   | 0.043   | 467.992 | 0.151   | 0.004   |
| 500   | 0.117   | 1.015   | 1.221   | 0.005   | 0.041   | 0.038   | 469.816 | 0.152   | 0.004   |
| 750   | 0.098   | 0.972   | 0.955   | 0.005   | 0.033   | 0.031   | 474.079 | 0.153   | 0.004   |
| 1000  | 0.136   | 0.993   | 3.058   | 0.005   | 0.061   | 0.057   | 471.816 | 0.153   | 0.004   |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.712 | 2.381 | 4.419 | 0.007 | 0.180 | 0.180 | 568.299 | 0.064 | 0.005 |
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.722 | 4.481 | 4.063 | 0.007 | 0.184 | 0.184 | 568.300 | 0.065 | 0.005 |
| 120  | 0.369 | 3.523 | 2.913 | 0.006 | 0.166 | 0.166 | 568.299 | 0.033 | 0.004 |
| 175  | 0.286 | 3.072 | 2.055 | 0.006 | 0.101 | 0.101 | 568.299 | 0.025 | 0.004 |
| 50   | 2.115 | 7.489 | 6.014 | 0.005 | 0.631 | 0.581 | 517.900 | 0.168 | 0.005 |
| 120  | 0.651 | 4.065 | 5.731 | 0.005 | 0.398 | 0.366 | 469.887 | 0.152 | 0.004 |
| 175  | 0.498 | 3.516 | 5.113 | 0.005 | 0.273 | 0.251 | 474.546 | 0.154 | 0.004 |
| 250  | 0.350 | 1.678 | 4.104 | 0.005 | 0.167 | 0.153 | 472.906 | 0.153 | 0.004 |
| 500  | 0.295 | 2.448 | 3.443 | 0.005 | 0.139 | 0.127 | 472.455 | 0.153 | 0.004 |
| 750  | 0.228 | 1.440 | 2.727 | 0.005 | 0.107 | 0.098 | 470.550 | 0.152 | 0.004 |
| 9999 | 0.192 | 1.008 | 2.374 | 0.005 | 0.061 | 0.057 | 472.055 | 0.153 | 0.004 |
| 50   | 2.064 | 7.349 | 5.615 | 0.005 | 0.591 | 0.543 | 516.108 | 0.167 | 0.005 |
| 120  | 0.673 | 4.005 | 5.657 | 0.005 | 0.466 | 0.429 | 476.437 | 0.154 | 0.004 |
| 175  | 0.436 | 3.310 | 4.395 | 0.005 | 0.245 | 0.225 | 471.421 | 0.153 | 0.004 |
| 250  | 0.343 | 1.515 | 4.334 | 0.005 | 0.163 | 0.150 | 472.925 | 0.153 | 0.004 |
| 500  | 0.283 | 2.024 | 3.276 | 0.005 | 0.129 | 0.119 | 474.484 | 0.154 | 0.004 |
| 750  | 0.239 | 1.270 | 2.825 | 0.005 | 0.104 | 0.096 | 473.094 | 0.153 | 0.004 |
| 1000 | 0.399 | 1.896 | 6.399 | 0.005 | 0.182 | 0.167 | 471.822 | 0.153 | 0.004 |
| 50   | 0.862 | 5.136 | 4.211 | 0.007 | 0.201 | 0.201 | 568.299 | 0.077 | 0.005 |
| 120  | 0.438 | 3.711 | 2.989 | 0.006 | 0.178 | 0.178 | 568.299 | 0.039 | 0.004 |
| 175  | 0.344 | 3.235 | 2.114 | 0.006 | 0.109 | 0.109 | 568.299 | 0.031 | 0.004 |
| 250  | 0.274 | 1.119 | 1.756 | 0.006 | 0.057 | 0.057 | 568.299 | 0.024 | 0.004 |
| 500  | 0.268 | 1.072 | 1.574 | 0.005 | 0.055 | 0.055 | 568.300 | 0.024 | 0.004 |
| 750  | 0.268 | 1.072 | 1.606 | 0.005 | 0.055 | 0.055 | 568.299 | 0.024 | 0.004 |
| 9999 | 0.314 | 1.136 | 3.487 | 0.005 | 0.080 | 0.080 | 568.299 | 0.028 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 25   | 0.685 | 2.339 | 4.333 | 0.007 | 0.163 | 0.163 | 568.299 | 0.061 | 0.005 |
| 25   | 0.562 | 4.461 | 3.919 | 0.005 | 0.202 | 0.186 | 525.377 | 0.170 | 0.005 |
| 50   | 0.562 | 4.461 | 3.919 | 0.005 | 0.202 | 0.186 | 525.377 | 0.170 | 0.005 |
| 120  | 0.275 | 3.492 | 2.849 | 0.005 | 0.161 | 0.148 | 467.791 | 0.151 | 0.004 |
| 175  | 0.216 | 3.090 | 2.034 | 0.005 | 0.099 | 0.091 | 472.359 | 0.153 | 0.004 |
| 250  | 0.163 | 1.103 | 1.706 | 0.005 | 0.052 | 0.048 | 471.793 | 0.153 | 0.004 |
| 500  | 0.143 | 1.088 | 1.332 | 0.005 | 0.045 | 0.041 | 469.616 | 0.152 | 0.004 |
| 750  | 0.165 | 1.150 | 1.619 | 0.005 | 0.056 | 0.052 | 469.547 | 0.152 | 0.004 |
| 50   | 1.002 | 5.535 | 4.520 | 0.005 | 0.318 | 0.292 | 525.483 | 0.170 | 0.005 |
| 120  | 0.412 | 3.720 | 3.756 | 0.005 | 0.267 | 0.245 | 471.529 | 0.153 | 0.004 |
| 175  | 0.308 | 3.231 | 2.921 | 0.005 | 0.158 | 0.145 | 472.106 | 0.153 | 0.004 |
| 250  | 0.249 | 1.337 | 2.582 | 0.005 | 0.099 | 0.091 | 473.326 | 0.153 | 0.004 |
| 500  | 0.254 | 1.485 | 2.303 | 0.005 | 0.094 | 0.086 | 473.615 | 0.153 | 0.004 |
| 15   | 0.634 | 3.531 | 4.441 | 0.008 | 0.201 | 0.201 | 568.299 | 0.057 | 0.005 |
| 25   | 0.712 | 2.446 | 4.497 | 0.007 | 0.196 | 0.196 | 568.299 | 0.064 | 0.005 |
| 50   | 0.613 | 3.905 | 3.916 | 0.007 | 0.165 | 0.165 | 568.299 | 0.055 | 0.005 |
| 120  | 0.326 | 3.361 | 2.888 | 0.006 | 0.153 | 0.153 | 568.299 | 0.029 | 0.004 |
| 175  | 0.243 | 2.925 | 2.068 | 0.006 | 0.091 | 0.091 | 568.299 | 0.021 | 0.004 |
| 250  | 0.183 | 1.016 | 1.730 | 0.006 | 0.049 | 0.049 | 568.299 | 0.016 | 0.004 |
| 500  | 0.175 | 0.996 | 1.562 | 0.005 | 0.048 | 0.048 | 568.299 | 0.015 | 0.004 |
| 750  | 0.177 | 0.996 | 1.596 | 0.005 | 0.048 | 0.048 | 568.299 | 0.016 | 0.004 |
| 9999 | 0.220 | 1.060 | 3.372 | 0.005 | 0.070 | 0.070 | 568.300 | 0.019 | 0.004 |
| 50   | 2.235 | 7.626 | 5.485 | 0.005 | 0.631 | 0.581 | 492.935 | 0.159 | 0.005 |
| 120  | 0.901 | 4.452 | 7.125 | 0.005 | 0.570 | 0.524 | 469.070 | 0.152 | 0.004 |
| 175  | 0.505 | 3.559 | 4.839 | 0.005 | 0.270 | 0.248 | 478.529 | 0.155 | 0.004 |
| 250  | 0.335 | 1.307 | 4.381 | 0.005 | 0.139 | 0.128 | 474.539 | 0.154 | 0.004 |
| 500  | 0.322 | 1.460 | 3.013 | 0.005 | 0.117 | 0.108 | 471.898 | 0.153 | 0.004 |
| 750  | 0.303 | 1.207 | 1.808 | 0.005 | 0.064 | 0.064 | 568.299 | 0.027 | 0.004 |
| 120  | 0.395 | 3.743 | 3.773 | 0.005 | 0.261 | 0.240 | 474.516 | 0.154 | 0.004 |
| 175  | 0.259 | 3.220 | 2.660 | 0.005 | 0.129 | 0.118 | 472.924 | 0.153 | 0.004 |
| 250  | 0.200 | 1.162 | 2.113 | 0.005 | 0.072 | 0.067 | 471.003 | 0.152 | 0.004 |
| 750  | 0.181 | 1.122 | 1.715 | 0.005 | 0.063 | 0.058 | 471.806 | 0.153 | 0.004 |
| 1000 | 0.160 | 1.033 | 2.414 | 0.005 | 0.064 | 0.059 | 472.055 | 0.153 | 0.004 |
| 175  | 0.278 | 3.324 | 2.246 | 0.005 | 0.113 | 0.104 | 470.290 | 0.152 | 0.004 |
| 250  | 0.249 | 1.348 | 2.109 | 0.005 | 0.082 | 0.076 | 470.193 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 500  | 0.225 | 1.338 | 1.954 | 0.005 | 0.072 | 0.066 | 474.542 | 0.154 | 0.004 |
| 750  | 0.293 | 1.935 | 2.668 | 0.005 | 0.106 | 0.098 | 472.991 | 0.153 | 0.004 |
| 1000 | 0.256 | 1.252 | 4.158 | 0.005 | 0.099 | 0.091 | 471.055 | 0.152 | 0.004 |
| 15   | 1.010 | 5.307 | 4.902 | 0.005 | 0.382 | 0.351 | 527.783 | 0.171 | 0.005 |
| 25   | 1.010 | 5.307 | 4.902 | 0.005 | 0.382 | 0.351 | 527.783 | 0.171 | 0.005 |
| 50   | 1.010 | 5.307 | 4.902 | 0.005 | 0.382 | 0.351 | 527.783 | 0.171 | 0.005 |
| 120  | 0.482 | 3.703 | 4.456 | 0.005 | 0.323 | 0.298 | 472.275 | 0.153 | 0.004 |
| 175  | 0.330 | 3.183 | 3.438 | 0.005 | 0.180 | 0.165 | 469.764 | 0.152 | 0.004 |
| 500  | 0.215 | 1.599 | 2.428 | 0.005 | 0.090 | 0.083 | 475.212 | 0.154 | 0.004 |
| 15   | 0.831 | 5.314 | 4.425 | 0.005 | 0.289 | 0.266 | 526.176 | 0.170 | 0.005 |
| 25   | 0.831 | 5.314 | 4.425 | 0.005 | 0.289 | 0.266 | 526.176 | 0.170 | 0.005 |
| 50   | 0.831 | 5.314 | 4.425 | 0.005 | 0.289 | 0.266 | 526.176 | 0.170 | 0.005 |
| 120  | 0.404 | 3.740 | 3.718 | 0.005 | 0.256 | 0.235 | 470.000 | 0.152 | 0.004 |
| 175  | 0.254 | 3.234 | 2.347 | 0.005 | 0.121 | 0.111 | 471.850 | 0.153 | 0.004 |
| 250  | 0.204 | 1.171 | 2.094 | 0.005 | 0.070 | 0.064 | 473.223 | 0.153 | 0.004 |
| 500  | 0.195 | 1.330 | 1.796 | 0.005 | 0.064 | 0.059 | 472.929 | 0.153 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 750  | 0.166 | 1.463 | 1.387 | 0.005 | 0.054 | 0.050 | 473.464 | 0.153 | 0.004 |
| 1000 | 0.276 | 1.093 | 4.876 | 0.005 | 0.120 | 0.110 | 472.055 | 0.153 | 0.004 |
| 50   | 1.108 | 5.960 | 4.966 | 0.005 | 0.396 | 0.364 | 523.709 | 0.169 | 0.005 |
| 120  | 0.294 | 3.602 | 2.956 | 0.005 | 0.166 | 0.152 | 473.588 | 0.153 | 0.004 |
| 175  | 0.249 | 3.196 | 2.246 | 0.005 | 0.114 | 0.105 | 472.219 | 0.153 | 0.004 |
| 250  | 0.269 | 1.309 | 3.082 | 0.005 | 0.102 | 0.094 | 471.482 | 0.153 | 0.004 |
| 500  | 0.254 | 1.442 | 2.602 | 0.005 | 0.101 | 0.093 | 470.297 | 0.152 | 0.004 |
| 9999 | 0.073 | 0.972 | 2.318 | 0.005 | 0.020 | 0.018 | 472.055 | 0.153 | 0.004 |
| 25   | 1.208 | 5.302 | 4.602 | 0.005 | 0.370 | 0.340 | 526.515 | 0.170 | 0.005 |
| 50   | 1.208 | 5.302 | 4.602 | 0.005 | 0.370 | 0.340 | 526.515 | 0.170 | 0.005 |
| 120  | 0.420 | 3.563 | 4.026 | 0.005 | 0.285 | 0.263 | 469.774 | 0.152 | 0.004 |
| 175  | 0.256 | 3.016 | 2.695 | 0.005 | 0.130 | 0.120 | 472.555 | 0.153 | 0.004 |
| 250  | 0.166 | 1.024 | 2.484 | 0.005 | 0.070 | 0.064 | 472.477 | 0.153 | 0.004 |
| 500  | 0.164 | 0.988 | 2.053 | 0.005 | 0.074 | 0.068 | 465.591 | 0.151 | 0.004 |
| 25   | 0.587 | 4.211 | 3.882 | 0.005 | 0.200 | 0.184 | 520.397 | 0.168 | 0.005 |
| 50   | 0.587 | 4.211 | 3.882 | 0.005 | 0.200 | 0.184 | 520.397 | 0.168 | 0.005 |
| 120  | 0.355 | 3.554 | 3.451 | 0.005 | 0.219 | 0.202 | 473.221 | 0.153 | 0.004 |
| 175  | 0.229 | 3.032 | 2.315 | 0.005 | 0.114 | 0.105 | 470.650 | 0.152 | 0.004 |
| 250  | 0.211 | 1.209 | 2.582 | 0.005 | 0.092 | 0.085 | 472.151 | 0.153 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 15   | 0.634 | 3.531 | 4.441 | 0.008 | 0.201 | 0.201 | 568.299 | 0.057 | 0.005 |
| 25   | 0.712 | 2.446 | 4.497 | 0.007 | 0.196 | 0.196 | 568.299 | 0.064 | 0.005 |
| 50   | 0.439 | 3.329 | 3.765 | 0.007 | 0.136 | 0.136 | 568.299 | 0.039 | 0.005 |
| 120  | 0.264 | 3.210 | 2.766 | 0.006 | 0.129 | 0.129 | 568.299 | 0.023 | 0.004 |
| 175  | 0.238 | 2.907 | 2.118 | 0.006 | 0.093 | 0.093 | 568.299 | 0.021 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 15   | 0.717 | 3.531 | 4.462 | 0.008 | 0.214 | 0.214 | 568.299 | 0.064 | 0.005 |
| 25   | 0.752 | 2.446 | 4.497 | 0.007 | 0.201 | 0.201 | 568.299 | 0.067 | 0.005 |
| 50   | 0.671 | 4.099 | 3.966 | 0.007 | 0.175 | 0.175 | 568.299 | 0.060 | 0.005 |
| 120  | 0.347 | 3.412 | 2.928 | 0.006 | 0.162 | 0.162 | 568.300 | 0.031 | 0.004 |
| 175  | 0.260 | 2.968 | 2.101 | 0.006 | 0.096 | 0.096 | 568.299 | 0.023 | 0.004 |
| 250  | 0.197 | 1.031 | 1.759 | 0.006 | 0.052 | 0.052 | 568.299 | 0.017 | 0.004 |
| 500  | 0.189 | 1.007 | 1.584 | 0.005 | 0.050 | 0.050 | 568.299 | 0.017 | 0.004 |
| 750  | 0.191 | 1.007 | 1.618 | 0.005 | 0.050 | 0.050 | 568.299 | 0.017 | 0.004 |
| 9999 | 0.233 | 1.074 | 3.409 | 0.005 | 0.072 | 0.072 | 568.300 | 0.021 | 0.004 |
| 15   | 0.848 | 4.597 | 4.351 | 0.005 | 0.294 | 0.270 | 525.791 | 0.170 | 0.005 |
| 25   | 0.848 | 4.597 | 4.351 | 0.005 | 0.294 | 0.270 | 525.791 | 0.170 | 0.005 |
| 50   | 0.848 | 4.597 | 4.351 | 0.005 | 0.294 | 0.270 | 525.791 | 0.170 | 0.005 |
| 120  | 0.353 | 3.507 | 3.589 | 0.005 | 0.219 | 0.202 | 473.901 | 0.153 | 0.004 |
| 175  | 0.193 | 2.926 | 2.117 | 0.005 | 0.097 | 0.090 | 471.980 | 0.153 | 0.004 |
| 250  | 0.197 | 1.228 | 2.493 | 0.005 | 0.081 | 0.075 | 473.470 | 0.153 | 0.004 |
| 500  | 0.221 | 1.950 | 2.589 | 0.005 | 0.100 | 0.092 | 479.329 | 0.155 | 0.004 |
| 50   | 0.969 | 4.657 | 4.411 | 0.005 | 0.304 | 0.280 | 525.384 | 0.170 | 0.005 |
| 120  | 0.175 | 3.252 | 2.285 | 0.005 | 0.089 | 0.082 | 473.110 | 0.153 | 0.004 |
| 175  | 0.130 | 2.845 | 1.617 | 0.005 | 0.060 | 0.055 | 471.758 | 0.153 | 0.004 |
| 250  | 0.115 | 0.984 | 1.612 | 0.005 | 0.037 | 0.034 | 472.547 | 0.153 | 0.004 |
| 500  | 0.092 | 0.946 | 1.302 | 0.005 | 0.028 | 0.026 | 465.744 | 0.151 | 0.004 |
| 175  | 0.691 | 3.848 | 6.790 | 0.005 | 0.386 | 0.356 | 472.975 | 0.153 | 0.004 |
| 250  | 0.601 | 2.317 | 6.296 | 0.005 | 0.306 | 0.281 | 474.798 | 0.154 | 0.004 |
| 500  | 0.492 | 4.041 | 5.081 | 0.005 | 0.232 | 0.214 | 478.987 | 0.155 | 0.004 |
| 750  | 0.458 | 2.604 | 6.123 | 0.005 | 0.218 | 0.201 | 473.046 | 0.153 | 0.004 |
| 1000 | 0.497 | 2.057 | 5.095 | 0.005 | 0.150 | 0.150 | 568.299 | 0.044 | 0.004 |
| 25   | 1.326 | 6.449 | 4.974 | 0.005 | 0.409 | 0.377 | 524.551 | 0.170 | 0.005 |
| 50   | 1.326 | 6.449 | 4.974 | 0.005 | 0.409 | 0.377 | 524.551 | 0.170 | 0.005 |
| 120  | 0.498 | 3.892 | 4.215 | 0.005 | 0.316 | 0.291 | 466.421 | 0.151 | 0.004 |
| 175  | 0.346 | 3.354 | 3.119 | 0.005 | 0.171 | 0.157 | 471.080 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.266 | 1.240 | 2.998 | 0.005 | 0.100 | 0.092 | 469.564 | 0.152 | 0.004 |
| 500  | 0.264 | 1.529 | 2.610 | 0.005 | 0.097 | 0.090 | 467.928 | 0.151 | 0.004 |
| 750  | 0.271 | 1.397 | 2.641 | 0.005 | 0.102 | 0.094 | 462.055 | 0.149 | 0.004 |
| 1000 | 0.294 | 1.206 | 4.975 | 0.005 | 0.128 | 0.118 | 471.258 | 0.152 | 0.004 |
| 120  | 0.704 | 4.218 | 6.659 | 0.005 | 0.512 | 0.471 | 483.713 | 0.156 | 0.004 |
| 175  | 0.432 | 3.456 | 4.341 | 0.005 | 0.232 | 0.213 | 478.654 | 0.155 | 0.004 |
| 250  | 0.391 | 1.884 | 4.367 | 0.005 | 0.189 | 0.174 | 469.126 | 0.152 | 0.004 |
| 500  | 0.299 | 2.255 | 3.445 | 0.005 | 0.134 | 0.123 | 472.464 | 0.153 | 0.004 |
| 750  | 0.250 | 1.658 | 2.887 | 0.005 | 0.105 | 0.097 | 471.786 | 0.153 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 50   | 0.714 | 4.380 | 4.002 | 0.007 | 0.179 | 0.179 | 568.299 | 0.064 | 0.005 |
| 120  | 0.363 | 3.493 | 2.889 | 0.006 | 0.162 | 0.162 | 568.299 | 0.032 | 0.004 |
| 175  | 0.278 | 3.043 | 2.043 | 0.006 | 0.098 | 0.098 | 568.299 | 0.025 | 0.004 |
| 250  | 0.260 | 1.273 | 2.053 | 0.007 | 0.063 | 0.063 | 686.695 | 0.023 | 0.004 |
| 25   | 0.409 | 3.732 | 3.573 | 0.005 | 0.126 | 0.116 | 527.450 | 0.171 | 0.005 |
| 50   | 0.409 | 3.732 | 3.573 | 0.005 | 0.126 | 0.116 | 527.450 | 0.171 | 0.005 |
| 120  | 0.178 | 3.277 | 2.366 | 0.005 | 0.096 | 0.089 | 471.977 | 0.153 | 0.004 |
| 50   | 0.507 | 3.932 | 4.189 | 0.006 | 0.204 | 0.188 | 535.784 | 0.173 | 0.005 |
| 120  | 0.312 | 3.436 | 3.461 | 0.005 | 0.191 | 0.175 | 474.091 | 0.153 | 0.004 |
| 175  | 0.258 | 2.919 | 3.099 | 0.005 | 0.145 | 0.134 | 469.169 | 0.152 | 0.004 |
| 250  | 0.207 | 1.219 | 2.994 | 0.005 | 0.092 | 0.085 | 476.802 | 0.154 | 0.004 |
| 500  | 0.141 | 1.202 | 1.753 | 0.005 | 0.064 | 0.058 | 471.748 | 0.153 | 0.004 |
| 750  | 0.125 | 0.992 | 1.597 | 0.005 | 0.062 | 0.057 | 470.409 | 0.152 | 0.004 |
| 15   | 1.219 | 5.900 | 4.849 | 0.005 | 0.412 | 0.379 | 525.328 | 0.170 | 0.005 |
| 25   | 1.219 | 5.900 | 4.849 | 0.005 | 0.412 | 0.379 | 525.328 | 0.170 | 0.005 |
| 50   | 1.219 | 5.900 | 4.849 | 0.005 | 0.412 | 0.379 | 525.328 | 0.170 | 0.005 |
| 120  | 0.440 | 3.757 | 3.962 | 0.005 | 0.291 | 0.268 | 474.116 | 0.153 | 0.004 |
| 175  | 0.385 | 3.247 | 3.707 | 0.005 | 0.187 | 0.172 | 473.122 | 0.153 | 0.004 |
| 250  | 0.164 | 1.108 | 1.758 | 0.005 | 0.055 | 0.051 | 470.126 | 0.152 | 0.004 |
| 25   | 0.756 | 4.902 | 4.226 | 0.005 | 0.255 | 0.234 | 515.121 | 0.167 | 0.005 |



|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 50   | 0.756 | 4.902 | 4.226 | 0.005 | 0.255 | 0.234 | 515.121 | 0.167 | 0.005 |
| 120  | 0.296 | 3.571 | 2.995 | 0.005 | 0.177 | 0.163 | 475.362 | 0.154 | 0.004 |
| 175  | 0.221 | 3.091 | 2.062 | 0.005 | 0.104 | 0.096 | 467.529 | 0.151 | 0.004 |
| 250  | 0.209 | 1.186 | 2.369 | 0.005 | 0.080 | 0.074 | 470.572 | 0.152 | 0.004 |
| 500  | 0.179 | 1.341 | 1.776 | 0.005 | 0.064 | 0.059 | 469.303 | 0.152 | 0.004 |
| 750  | 0.247 | 1.433 | 2.754 | 0.005 | 0.104 | 0.096 | 466.456 | 0.151 | 0.004 |
| 15   | 0.809 | 4.666 | 4.459 | 0.005 | 0.313 | 0.288 | 527.017 | 0.170 | 0.005 |
| 25   | 0.809 | 4.666 | 4.459 | 0.005 | 0.313 | 0.288 | 527.017 | 0.170 | 0.005 |
| 50   | 0.809 | 4.666 | 4.459 | 0.005 | 0.313 | 0.288 | 527.017 | 0.170 | 0.005 |
| 120  | 0.556 | 3.789 | 5.106 | 0.005 | 0.371 | 0.341 | 475.287 | 0.154 | 0.004 |
| 175  | 0.407 | 3.304 | 4.272 | 0.005 | 0.219 | 0.201 | 467.734 | 0.151 | 0.004 |
| 250  | 0.356 | 1.668 | 4.360 | 0.005 | 0.172 | 0.158 | 473.854 | 0.153 | 0.004 |
| 500  | 0.221 | 1.865 | 2.491 | 0.005 | 0.100 | 0.092 | 470.701 | 0.152 | 0.004 |
| 750  | 0.066 | 0.947 | 0.475 | 0.005 | 0.009 | 0.008 | 472.529 | 0.153 | 0.004 |
| 15   | 0.717 | 3.531 | 4.462 | 0.008 | 0.214 | 0.214 | 568.299 | 0.064 | 0.005 |
| 25   | 0.752 | 2.446 | 4.497 | 0.007 | 0.201 | 0.201 | 568.299 | 0.067 | 0.005 |
| 50   | 0.829 | 4.708 | 4.133 | 0.007 | 0.203 | 0.203 | 568.299 | 0.074 | 0.005 |
| 120  | 0.411 | 3.579 | 3.042 | 0.006 | 0.184 | 0.184 | 568.299 | 0.037 | 0.004 |
| 175  | 0.315 | 3.112 | 2.189 | 0.006 | 0.110 | 0.110 | 568.299 | 0.028 | 0.004 |
| 250  | 0.243 | 1.081 | 1.836 | 0.006 | 0.057 | 0.057 | 568.299 | 0.021 | 0.004 |
| 500  | 0.236 | 1.044 | 1.642 | 0.005 | 0.055 | 0.055 | 568.299 | 0.021 | 0.004 |
| 175  | 0.278 | 3.324 | 2.246 | 0.005 | 0.113 | 0.104 | 470.290 | 0.152 | 0.004 |
| 250  | 0.249 | 1.348 | 2.109 | 0.005 | 0.082 | 0.076 | 470.193 | 0.152 | 0.004 |
| 500  | 0.225 | 1.338 | 1.954 | 0.005 | 0.072 | 0.066 | 474.542 | 0.154 | 0.004 |
| 750  | 0.293 | 1.935 | 2.668 | 0.005 | 0.106 | 0.098 | 472.991 | 0.153 | 0.004 |
| 1000 | 0.256 | 1.252 | 4.158 | 0.005 | 0.099 | 0.091 | 471.055 | 0.152 | 0.004 |

2022

| 2022             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   |
| Aerial Lifts     | 15    | 0.162   | 3.112   | 2.907   | 0.005   | 0.024   | 0.022   |
| Aerial Lifts     | 25    | 0.162   | 3.112   | 2.907   | 0.005   | 0.024   | 0.022   |
| Aerial Lifts     | 50    | 0.162   | 3.112   | 2.907   | 0.005   | 0.024   | 0.022   |
| Aerial Lifts     | 120   | 0.105   | 3.176   | 1.627   | 0.005   | 0.030   | 0.028   |
| Aerial Lifts     | 500   | 0.075   | 0.956   | 0.642   | 0.005   | 0.009   | 0.008   |
| Aerial Lifts     | 750   | 0.177   | 0.998   | 1.424   | 0.005   | 0.044   | 0.044   |
| Air Compressor s | 15    | 0.707   | 3.519   | 4.408   | 0.008   | 0.203   | 0.203   |
| Air Compressor s | 25    | 0.739   | 2.426   | 4.470   | 0.007   | 0.193   | 0.193   |
| Air Compressor s | 50    | 0.814   | 4.959   | 4.093   | 0.007   | 0.183   | 0.183   |
| Air Compressor s | 120   | 0.413   | 3.662   | 2.844   | 0.006   | 0.165   | 0.165   |
| Air Compressor s | 175   | 0.322   | 3.194   | 1.959   | 0.006   | 0.101   | 0.101   |
| Air Compressor s | 250   | 0.255   | 1.102   | 1.617   | 0.006   | 0.052   | 0.052   |
| Air Compressor s | 500   | 0.249   | 1.059   | 1.472   | 0.005   | 0.051   | 0.051   |
| Air Compressor s | 750   | 0.250   | 1.059   | 1.502   | 0.005   | 0.051   | 0.051   |
| Air Compressor s | 1000  | 0.269   | 1.117   | 3.378   | 0.005   | 0.075   | 0.075   |
| Bore/Drill Rigs  | 15    | 0.631   | 4.334   | 4.285   | 0.006   | 0.241   | 0.221   |
| Bore/Drill Rigs  | 25    | 0.631   | 4.334   | 4.285   | 0.006   | 0.241   | 0.221   |
| Bore/Drill Rigs  | 50    | 0.631   | 4.334   | 4.285   | 0.006   | 0.241   | 0.221   |
| Bore/Drill Rigs  | 120   | 0.191   | 3.260   | 2.425   | 0.005   | 0.107   | 0.099   |
| Bore/Drill Rigs  | 175   | 0.137   | 2.954   | 1.288   | 0.005   | 0.057   | 0.052   |
| Bore/Drill Rigs  | 250   | 0.115   | 1.047   | 1.163   | 0.005   | 0.037   | 0.034   |
| Bore/Drill Rigs  | 500   | 0.108   | 1.002   | 1.035   | 0.005   | 0.035   | 0.032   |
| Bore/Drill Rigs  | 750   | 0.091   | 0.975   | 0.773   | 0.005   | 0.028   | 0.026   |
| Bore/Drill Rigs  | 1000  | 0.057   | 0.945   | 2.278   | 0.005   | 0.018   | 0.017   |

|                          |      |       |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.704 | 2.367 | 4.399 | 0.007 | 0.175 | 0.175 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.660 | 4.422 | 3.936 | 0.007 | 0.158 | 0.158 |
| Concrete/Industrial Saws | 120  | 0.343 | 3.514 | 2.686 | 0.006 | 0.144 | 0.144 |
| Concrete/Industrial Saws | 175  | 0.267 | 3.072 | 1.806 | 0.006 | 0.089 | 0.089 |
| Cranes                   | 50   | 2.028 | 7.368 | 5.899 | 0.005 | 0.603 | 0.555 |
| Cranes                   | 120  | 0.578 | 3.972 | 5.149 | 0.005 | 0.346 | 0.318 |
| Cranes                   | 175  | 0.457 | 3.475 | 4.617 | 0.005 | 0.246 | 0.227 |
| Cranes                   | 250  | 0.316 | 1.602 | 3.541 | 0.005 | 0.147 | 0.135 |
| Cranes                   | 500  | 0.261 | 2.212 | 2.894 | 0.005 | 0.117 | 0.108 |
| Cranes                   | 750  | 0.200 | 1.283 | 2.251 | 0.005 | 0.089 | 0.082 |
| Cranes                   | 9999 | 0.201 | 1.015 | 2.386 | 0.005 | 0.062 | 0.057 |
| Crawler Tractors         | 50   | 1.899 | 7.041 | 5.380 | 0.005 | 0.539 | 0.496 |
| Crawler Tractors         | 120  | 0.600 | 3.925 | 5.101 | 0.005 | 0.408 | 0.375 |
| Crawler Tractors         | 175  | 0.389 | 3.264 | 3.827 | 0.005 | 0.214 | 0.197 |
| Crawler Tractors         | 250  | 0.306 | 1.440 | 3.737 | 0.005 | 0.141 | 0.130 |
| Crawler Tractors         | 500  | 0.254 | 1.916 | 2.744 | 0.005 | 0.111 | 0.102 |
| Crawler Tractors         | 750  | 0.198 | 1.186 | 2.126 | 0.005 | 0.079 | 0.073 |
| Crawler Tractors         | 1000 | 0.357 | 1.732 | 5.923 | 0.005 | 0.162 | 0.149 |
| Crushing/Proc. Equipment | 50   | 0.795 | 5.081 | 4.083 | 0.007 | 0.172 | 0.172 |
| Crushing/Proc. Equipment | 120  | 0.410 | 3.704 | 2.758 | 0.006 | 0.154 | 0.154 |
| Crushing/Proc. Equipment | 175  | 0.323 | 3.237 | 1.861 | 0.006 | 0.095 | 0.095 |
| Crushing/Proc. Equipment | 250  | 0.260 | 1.114 | 1.521 | 0.006 | 0.050 | 0.050 |
| Crushing/Proc. Equipment | 500  | 0.255 | 1.067 | 1.389 | 0.005 | 0.048 | 0.048 |
| Crushing/Proc. Equipment | 750  | 0.256 | 1.067 | 1.416 | 0.005 | 0.048 | 0.048 |
| Crushing/Proc. Equipment | 9999 | 0.300 | 1.121 | 3.310 | 0.005 | 0.073 | 0.073 |

|                      |      |       |       |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|
| Dumpers/Tractors     | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.162 | 0.162 |
| Excavators           | 25   | 0.478 | 4.273 | 3.700 | 0.005 | 0.160 | 0.147 |
| Excavators           | 50   | 0.478 | 4.273 | 3.700 | 0.005 | 0.160 | 0.147 |
| Excavators           | 120  | 0.252 | 3.473 | 2.606 | 0.005 | 0.138 | 0.127 |
| Excavators           | 175  | 0.191 | 3.074 | 1.678 | 0.005 | 0.081 | 0.075 |
| Excavators           | 250  | 0.148 | 1.092 | 1.386 | 0.005 | 0.044 | 0.040 |
| Excavators           | 500  | 0.128 | 1.061 | 1.040 | 0.005 | 0.035 | 0.032 |
| Excavators           | 750  | 0.150 | 1.144 | 1.287 | 0.005 | 0.047 | 0.043 |
| Forklifts            | 50   | 0.859 | 5.304 | 4.312 | 0.005 | 0.270 | 0.248 |
| Forklifts            | 120  | 0.362 | 3.675 | 3.360 | 0.005 | 0.223 | 0.205 |
| Forklifts            | 175  | 0.273 | 3.197 | 2.480 | 0.005 | 0.132 | 0.122 |
| Forklifts            | 250  | 0.236 | 1.317 | 2.319 | 0.005 | 0.090 | 0.083 |
| Forklifts            | 500  | 0.232 | 1.219 | 1.991 | 0.005 | 0.077 | 0.071 |
| Generator Sets       | 15   | 0.626 | 3.519 | 4.390 | 0.008 | 0.193 | 0.193 |
| Generator Sets       | 25   | 0.706 | 2.426 | 4.470 | 0.007 | 0.188 | 0.188 |
| Generator Sets       | 50   | 0.560 | 3.858 | 3.796 | 0.007 | 0.143 | 0.143 |
| Generator Sets       | 120  | 0.301 | 3.353 | 2.671 | 0.006 | 0.134 | 0.134 |
| Generator Sets       | 175  | 0.226 | 2.926 | 1.830 | 0.006 | 0.081 | 0.081 |
| Generator Sets       | 250  | 0.173 | 1.010 | 1.508 | 0.006 | 0.043 | 0.043 |
| Generator Sets       | 500  | 0.166 | 0.990 | 1.384 | 0.005 | 0.042 | 0.042 |
| Generator Sets       | 750  | 0.168 | 0.990 | 1.412 | 0.005 | 0.043 | 0.043 |
| Generator Sets       | 9999 | 0.206 | 1.045 | 3.202 | 0.005 | 0.063 | 0.063 |
| Graders              | 50   | 2.106 | 7.428 | 5.332 | 0.005 | 0.595 | 0.547 |
| Graders              | 120  | 0.796 | 4.330 | 6.360 | 0.005 | 0.493 | 0.453 |
| Graders              | 175  | 0.440 | 3.493 | 4.125 | 0.005 | 0.229 | 0.211 |
| Graders              | 250  | 0.307 | 1.273 | 3.888 | 0.005 | 0.124 | 0.114 |
| Graders              | 500  | 0.311 | 1.390 | 2.802 | 0.005 | 0.108 | 0.100 |
| Graders              | 750  | 0.289 | 1.187 | 1.606 | 0.005 | 0.057 | 0.057 |
| Off-Highway Tractors | 120  | 0.348 | 3.710 | 3.400 | 0.005 | 0.219 | 0.202 |
| Off-Highway Tractors | 175  | 0.231 | 3.186 | 2.239 | 0.005 | 0.107 | 0.099 |
| Off-Highway Tractors | 250  | 0.180 | 1.143 | 1.732 | 0.005 | 0.060 | 0.055 |
| Off-Highway Tractors | 750  | 0.171 | 1.121 | 1.433 | 0.005 | 0.055 | 0.050 |
| Off-Highway Tractors | 1000 | 0.170 | 1.044 | 2.432 | 0.005 | 0.066 | 0.060 |
| Off-Highway Trucks   | 175  | 0.241 | 3.284 | 1.811 | 0.005 | 0.088 | 0.081 |
| Off-Highway Trucks   | 250  | 0.215 | 1.279 | 1.618 | 0.005 | 0.064 | 0.059 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.196 | 1.247 | 1.490 | 0.005 | 0.054 | 0.050 |
| Off-Highway Trucks                 | 750  | 0.263 | 1.746 | 2.268 | 0.005 | 0.088 | 0.081 |
| Off-Highway Trucks                 | 1000 | 0.234 | 1.214 | 3.842 | 0.005 | 0.086 | 0.079 |
| Other Construction Equipment       | 15   | 0.920 | 5.167 | 4.741 | 0.005 | 0.348 | 0.320 |
| Other Construction Equipment       | 25   | 0.920 | 5.167 | 4.741 | 0.005 | 0.348 | 0.320 |
| Other Construction Equipment       | 50   | 0.920 | 5.167 | 4.741 | 0.005 | 0.348 | 0.320 |
| Other Construction Equipment       | 120  | 0.440 | 3.666 | 4.098 | 0.005 | 0.288 | 0.265 |
| Other Construction Equipment       | 175  | 0.295 | 3.155 | 2.994 | 0.005 | 0.156 | 0.144 |
| Other Construction Equipment       | 500  | 0.188 | 1.438 | 1.975 | 0.005 | 0.074 | 0.068 |
| Other General Industrial Equipment | 15   | 0.702 | 5.076 | 4.197 | 0.005 | 0.238 | 0.219 |
| Other General Industrial Equipment | 25   | 0.702 | 5.076 | 4.197 | 0.005 | 0.238 | 0.219 |
| Other General Industrial Equipment | 50   | 0.702 | 5.076 | 4.197 | 0.005 | 0.238 | 0.219 |
| Other General Industrial Equipment | 120  | 0.339 | 3.668 | 3.200 | 0.005 | 0.199 | 0.183 |
| Other General Industrial Equipment | 175  | 0.244 | 3.233 | 2.150 | 0.005 | 0.111 | 0.102 |
| Other General Industrial Equipment | 250  | 0.187 | 1.138 | 1.759 | 0.005 | 0.057 | 0.052 |
| Other General Industrial Equipment | 500  | 0.175 | 1.171 | 1.433 | 0.005 | 0.050 | 0.046 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.149 | 1.457 | 1.062 | 0.005 | 0.046 | 0.042 |
| Other General Industrial Equipment | 1000 | 0.187 | 1.039 | 3.942 | 0.005 | 0.079 | 0.073 |
| Other Material Handling Equipment  | 50   | 1.103 | 5.984 | 4.920 | 0.005 | 0.385 | 0.354 |
| Other Material Handling Equipment  | 120  | 0.247 | 3.557 | 2.567 | 0.005 | 0.121 | 0.111 |
| Other Material Handling Equipment  | 175  | 0.226 | 3.176 | 1.894 | 0.005 | 0.103 | 0.095 |
| Other Material Handling Equipment  | 250  | 0.229 | 1.239 | 2.425 | 0.005 | 0.083 | 0.076 |
| Other Material Handling Equipment  | 500  | 0.226 | 1.346 | 2.063 | 0.005 | 0.083 | 0.077 |
| Other Material Handling Equipment  | 9999 | 0.076 | 0.978 | 2.328 | 0.005 | 0.020 | 0.018 |
| Pavers                             | 25   | 1.092 | 5.114 | 4.421 | 0.005 | 0.330 | 0.303 |
| Pavers                             | 50   | 1.092 | 5.114 | 4.421 | 0.005 | 0.330 | 0.303 |
| Pavers                             | 120  | 0.373 | 3.525 | 3.659 | 0.005 | 0.248 | 0.228 |
| Pavers                             | 175  | 0.215 | 2.995 | 2.180 | 0.005 | 0.104 | 0.095 |
| Pavers                             | 250  | 0.140 | 1.012 | 1.900 | 0.005 | 0.055 | 0.050 |
| Pavers                             | 500  | 0.150 | 0.982 | 1.810 | 0.005 | 0.063 | 0.058 |
| Paving Equipment                   | 25   | 0.572 | 4.244 | 3.836 | 0.005 | 0.188 | 0.173 |
| Paving Equipment                   | 50   | 0.572 | 4.244 | 3.836 | 0.005 | 0.188 | 0.173 |
| Paving Equipment                   | 120  | 0.296 | 3.501 | 3.000 | 0.005 | 0.171 | 0.157 |
| Paving Equipment                   | 175  | 0.213 | 3.038 | 2.073 | 0.005 | 0.101 | 0.093 |
| Paving Equipment                   | 250  | 0.196 | 1.204 | 2.228 | 0.005 | 0.083 | 0.076 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Pressure Washers                   | 15   | 0.626 | 3.519 | 4.390 | 0.008 | 0.193 | 0.193 |
| Pressure Washers                   | 25   | 0.706 | 2.426 | 4.470 | 0.007 | 0.188 | 0.188 |
| Pressure Washers                   | 50   | 0.398 | 3.291 | 3.649 | 0.007 | 0.117 | 0.117 |
| Pressure Washers                   | 120  | 0.241 | 3.202 | 2.560 | 0.006 | 0.112 | 0.112 |
| Pressure Washers                   | 175  | 0.221 | 2.907 | 1.871 | 0.006 | 0.082 | 0.082 |

|                         |      |       |       |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 |
| Pumps                   | 15   | 0.707 | 3.519 | 4.408 | 0.008 | 0.203 | 0.203 |
| Pumps                   | 25   | 0.739 | 2.426 | 4.470 | 0.007 | 0.193 | 0.193 |
| Pumps                   | 50   | 0.614 | 4.048 | 3.846 | 0.007 | 0.152 | 0.152 |
| Pumps                   | 120  | 0.321 | 3.404 | 2.708 | 0.006 | 0.142 | 0.142 |
| Pumps                   | 175  | 0.242 | 2.969 | 1.860 | 0.006 | 0.085 | 0.085 |
| Pumps                   | 250  | 0.186 | 1.025 | 1.534 | 0.006 | 0.045 | 0.045 |
| Pumps                   | 500  | 0.180 | 1.001 | 1.404 | 0.005 | 0.044 | 0.044 |
| Pumps                   | 750  | 0.181 | 1.001 | 1.432 | 0.005 | 0.044 | 0.044 |
| Pumps                   | 9999 | 0.219 | 1.058 | 3.236 | 0.005 | 0.065 | 0.065 |
| Rollers                 | 15   | 0.738 | 4.402 | 4.128 | 0.005 | 0.250 | 0.230 |
| Rollers                 | 25   | 0.738 | 4.402 | 4.128 | 0.005 | 0.250 | 0.230 |
| Rollers                 | 50   | 0.738 | 4.402 | 4.128 | 0.005 | 0.250 | 0.230 |
| Rollers                 | 120  | 0.310 | 3.470 | 3.219 | 0.005 | 0.186 | 0.171 |
| Rollers                 | 175  | 0.164 | 2.913 | 1.714 | 0.005 | 0.079 | 0.072 |
| Rollers                 | 250  | 0.187 | 1.228 | 2.212 | 0.005 | 0.077 | 0.071 |
| Rollers                 | 500  | 0.218 | 1.955 | 2.463 | 0.005 | 0.097 | 0.089 |
| Rough Terrain Forklifts | 50   | 0.789 | 4.304 | 4.041 | 0.005 | 0.238 | 0.219 |
| Rough Terrain Forklifts | 120  | 0.159 | 3.244 | 2.098 | 0.005 | 0.073 | 0.067 |
| Rough Terrain Forklifts | 175  | 0.120 | 2.844 | 1.405 | 0.005 | 0.051 | 0.047 |
| Rough Terrain Forklifts | 250  | 0.119 | 0.989 | 1.617 | 0.005 | 0.037 | 0.034 |
| Rough Terrain Forklifts | 500  | 0.068 | 0.937 | 0.558 | 0.005 | 0.009 | 0.008 |
| Rubber Tired Dozers     | 175  | 0.600 | 3.752 | 5.808 | 0.005 | 0.326 | 0.300 |
| Rubber Tired Dozers     | 250  | 0.480 | 2.056 | 5.046 | 0.005 | 0.240 | 0.220 |
| Rubber Tired Dozers     | 500  | 0.475 | 3.895 | 4.808 | 0.005 | 0.220 | 0.202 |
| Rubber Tired Dozers     | 750  | 0.460 | 2.607 | 6.122 | 0.005 | 0.218 | 0.201 |
| Rubber Tired Dozers     | 1000 | 0.475 | 1.961 | 4.896 | 0.005 | 0.140 | 0.140 |
| Rubber Tired Loaders    | 25   | 1.179 | 6.204 | 4.748 | 0.005 | 0.354 | 0.326 |
| Rubber Tired Loaders    | 50   | 1.179 | 6.204 | 4.748 | 0.005 | 0.354 | 0.326 |
| Rubber Tired Loaders    | 120  | 0.440 | 3.839 | 3.768 | 0.005 | 0.267 | 0.245 |
| Rubber Tired Loaders    | 175  | 0.295 | 3.302 | 2.518 | 0.005 | 0.136 | 0.125 |

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.226 | 1.188 | 2.347 | 0.005 | 0.079 | 0.072 |
| Rubber Tired Loaders      | 500  | 0.237 | 1.441 | 2.175 | 0.005 | 0.081 | 0.075 |
| Rubber Tired Loaders      | 750  | 0.233 | 1.315 | 2.097 | 0.005 | 0.080 | 0.074 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.162 | 3.617 | 0.005 | 0.075 | 0.069 |
| Scrapers                  | 120  | 0.681 | 4.205 | 6.455 | 0.005 | 0.494 | 0.454 |
| Scrapers                  | 175  | 0.390 | 3.417 | 3.833 | 0.005 | 0.204 | 0.187 |
| Scrapers                  | 250  | 0.341 | 1.743 | 3.669 | 0.005 | 0.160 | 0.147 |
| Scrapers                  | 500  | 0.264 | 2.052 | 2.879 | 0.005 | 0.112 | 0.103 |
| Scrapers                  | 750  | 0.224 | 1.508 | 2.475 | 0.005 | 0.090 | 0.083 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Signal Boards             | 50   | 0.655 | 4.325 | 3.880 | 0.007 | 0.154 | 0.154 |
| Signal Boards             | 120  | 0.337 | 3.484 | 2.668 | 0.006 | 0.141 | 0.141 |
| Signal Boards             | 175  | 0.260 | 3.044 | 1.801 | 0.006 | 0.086 | 0.086 |
| Signal Boards             | 250  | 0.247 | 1.266 | 1.782 | 0.007 | 0.055 | 0.055 |
| Skid Steer Loaders        | 25   | 0.365 | 3.656 | 3.433 | 0.005 | 0.103 | 0.095 |
| Skid Steer Loaders        | 50   | 0.365 | 3.656 | 3.433 | 0.005 | 0.103 | 0.095 |
| Skid Steer Loaders        | 120  | 0.164 | 3.270 | 2.189 | 0.005 | 0.081 | 0.075 |
| Surfacing Equipment       | 50   | 0.428 | 3.772 | 3.911 | 0.006 | 0.154 | 0.142 |
| Surfacing Equipment       | 120  | 0.293 | 3.409 | 3.250 | 0.005 | 0.175 | 0.161 |
| Surfacing Equipment       | 175  | 0.239 | 2.910 | 2.701 | 0.005 | 0.130 | 0.120 |
| Surfacing Equipment       | 250  | 0.196 | 1.217 | 2.667 | 0.005 | 0.085 | 0.078 |
| Surfacing Equipment       | 500  | 0.132 | 1.160 | 1.557 | 0.005 | 0.057 | 0.053 |
| Surfacing Equipment       | 750  | 0.115 | 0.988 | 1.355 | 0.005 | 0.052 | 0.048 |
| Sweepers/Scrubbers        | 15   | 1.008 | 5.451 | 4.490 | 0.005 | 0.335 | 0.308 |
| Sweepers/Scrubbers        | 25   | 1.008 | 5.451 | 4.490 | 0.005 | 0.335 | 0.308 |
| Sweepers/Scrubbers        | 50   | 1.008 | 5.451 | 4.490 | 0.005 | 0.335 | 0.308 |
| Sweepers/Scrubbers        | 120  | 0.372 | 3.692 | 3.472 | 0.005 | 0.232 | 0.214 |
| Sweepers/Scrubbers        | 175  | 0.321 | 3.222 | 3.002 | 0.005 | 0.145 | 0.133 |
| Sweepers/Scrubbers        | 250  | 0.152 | 1.101 | 1.605 | 0.005 | 0.050 | 0.046 |
| Tractors/Loaders/Backhoes | 25   | 0.688 | 4.760 | 4.030 | 0.005 | 0.218 | 0.200 |



|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.688 | 4.760 | 4.030 | 0.005 | 0.218 | 0.200 |
| Tractors/Loaders/Backhoes | 120  | 0.260 | 3.536 | 2.647 | 0.005 | 0.142 | 0.131 |
| Tractors/Loaders/Backhoes | 175  | 0.200 | 3.079 | 1.753 | 0.005 | 0.089 | 0.082 |
| Tractors/Loaders/Backhoes | 250  | 0.187 | 1.162 | 1.943 | 0.005 | 0.067 | 0.062 |
| Tractors/Loaders/Backhoes | 500  | 0.160 | 1.280 | 1.437 | 0.005 | 0.053 | 0.049 |
| Tractors/Loaders/Backhoes | 750  | 0.232 | 1.353 | 2.453 | 0.005 | 0.094 | 0.087 |
| Trenchers                 | 15   | 0.722 | 4.518 | 4.269 | 0.005 | 0.275 | 0.253 |
| Trenchers                 | 25   | 0.722 | 4.518 | 4.269 | 0.005 | 0.275 | 0.253 |
| Trenchers                 | 50   | 0.722 | 4.518 | 4.269 | 0.005 | 0.275 | 0.253 |
| Trenchers                 | 120  | 0.529 | 3.778 | 4.913 | 0.005 | 0.348 | 0.320 |
| Trenchers                 | 175  | 0.396 | 3.313 | 4.103 | 0.005 | 0.212 | 0.195 |
| Trenchers                 | 250  | 0.335 | 1.663 | 3.853 | 0.005 | 0.161 | 0.148 |
| Trenchers                 | 500  | 0.212 | 1.872 | 2.212 | 0.005 | 0.094 | 0.086 |
| Trenchers                 | 750  | 0.057 | 0.945 | 0.301 | 0.005 | 0.009 | 0.008 |
| Welders                   | 15   | 0.707 | 3.519 | 4.408 | 0.008 | 0.203 | 0.203 |
| Welders                   | 25   | 0.739 | 2.426 | 4.470 | 0.007 | 0.193 | 0.193 |
| Welders                   | 50   | 0.758 | 4.645 | 4.007 | 0.007 | 0.175 | 0.175 |
| Welders                   | 120  | 0.382 | 3.570 | 2.808 | 0.006 | 0.160 | 0.160 |
| Welders                   | 175  | 0.295 | 3.113 | 1.935 | 0.006 | 0.097 | 0.097 |
| Welders                   | 250  | 0.231 | 1.074 | 1.598 | 0.006 | 0.050 | 0.050 |
| Welders                   | 500  | 0.225 | 1.038 | 1.454 | 0.005 | 0.049 | 0.049 |
| Water Trucks              | 175  | 0.241 | 3.284 | 1.811 | 0.005 | 0.088 | 0.081 |
| Water Trucks              | 250  | 0.215 | 1.279 | 1.618 | 0.005 | 0.064 | 0.059 |
| Water Trucks              | 500  | 0.196 | 1.247 | 1.490 | 0.005 | 0.054 | 0.050 |
| Water Trucks              | 750  | 0.263 | 1.746 | 2.268 | 0.005 | 0.088 | 0.081 |
| Water Trucks              | 1000 | 0.234 | 1.214 | 3.842 | 0.005 | 0.086 | 0.079 |

2023

| g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|
| CO2     | CH4     | N2O     |
| 525.074 | 0.170   | 0.005   |
| 525.074 | 0.170   | 0.005   |
| 525.074 | 0.170   | 0.005   |
| 472.114 | 0.153   | 0.004   |
| 472.055 | 0.153   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.063   | 0.005   |
| 568.299 | 0.066   | 0.005   |
| 568.299 | 0.073   | 0.005   |
| 568.299 | 0.037   | 0.004   |
| 568.299 | 0.029   | 0.004   |
| 568.300 | 0.023   | 0.004   |
| 568.299 | 0.022   | 0.004   |
| 568.299 | 0.022   | 0.004   |
| 568.300 | 0.024   | 0.004   |
| 529.870 | 0.171   | 0.005   |
| 529.870 | 0.171   | 0.005   |
| 529.870 | 0.171   | 0.005   |
| 462.267 | 0.150   | 0.004   |
| 477.372 | 0.154   | 0.004   |
| 468.760 | 0.152   | 0.004   |
| 467.192 | 0.151   | 0.004   |
| 477.141 | 0.154   | 0.004   |
| 472.921 | 0.153   | 0.004   |

| 2023             |       | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     |
| Aerial Lifts     | 15    | 0.163   | 3.122   | 2.897   |
| Aerial Lifts     | 25    | 0.163   | 3.122   | 2.897   |
| Aerial Lifts     | 50    | 0.163   | 3.122   | 2.897   |
| Aerial Lifts     | 120   | 0.101   | 3.170   | 1.548   |
| Aerial Lifts     | 500   | 0.079   | 0.961   | 0.645   |
| Aerial Lifts     | 750   | 0.169   | 0.995   | 1.265   |
| Air Compressor s | 15    | 0.698   | 3.508   | 4.359   |
| Air Compressor s | 25    | 0.728   | 2.407   | 4.447   |
| Air Compressor s | 50    | 0.753   | 4.913   | 3.975   |
| Air Compressor s | 120   | 0.387   | 3.657   | 2.631   |
| Air Compressor s | 175   | 0.303   | 3.197   | 1.748   |
| Air Compressor s | 250   | 0.243   | 1.099   | 1.420   |
| Air Compressor s | 500   | 0.238   | 1.055   | 1.305   |
| Air Compressor s | 750   | 0.239   | 1.055   | 1.331   |
| Air Compressor s | 1000  | 0.256   | 1.102   | 3.221   |
| Bore/Drill Rigs  | 15    | 0.606   | 4.311   | 4.208   |
| Bore/Drill Rigs  | 25    | 0.606   | 4.311   | 4.208   |
| Bore/Drill Rigs  | 50    | 0.606   | 4.311   | 4.208   |
| Bore/Drill Rigs  | 120   | 0.187   | 3.258   | 2.357   |
| Bore/Drill Rigs  | 175   | 0.125   | 2.969   | 1.078   |
| Bore/Drill Rigs  | 250   | 0.110   | 1.043   | 1.047   |
| Bore/Drill Rigs  | 500   | 0.101   | 0.989   | 0.898   |
| Bore/Drill Rigs  | 750   | 0.091   | 0.982   | 0.717   |
| Bore/Drill Rigs  | 1000  | 0.053   | 0.936   | 2.262   |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.063 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.300 | 0.059 | 0.005 |
| 568.299 | 0.031 | 0.004 |
| 568.300 | 0.024 | 0.004 |
| 517.872 | 0.168 | 0.005 |
| 469.993 | 0.152 | 0.004 |
| 474.589 | 0.154 | 0.004 |
| 472.983 | 0.153 | 0.004 |
| 472.181 | 0.153 | 0.004 |
| 470.476 | 0.152 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 516.148 | 0.167 | 0.005 |
| 476.022 | 0.154 | 0.004 |
| 471.567 | 0.153 | 0.004 |
| 472.098 | 0.153 | 0.004 |
| 474.412 | 0.153 | 0.004 |
| 472.876 | 0.153 | 0.004 |
| 470.701 | 0.152 | 0.004 |
| 568.299 | 0.071 | 0.005 |
| 568.299 | 0.037 | 0.004 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.027 | 0.004 |

|                          |      |       |       |       |
|--------------------------|------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 |
| Cement and Mortar Mixers | 25   | 0.697 | 2.356 | 4.382 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.340 | 4.332 |
| Concrete/Industrial Saws | 50   | 0.606 | 4.372 | 3.815 |
| Concrete/Industrial Saws | 120  | 0.320 | 3.507 | 2.478 |
| Concrete/Industrial Saws | 175  | 0.250 | 3.072 | 1.599 |
| Cranes                   | 50   | 2.047 | 7.453 | 5.923 |
| Cranes                   | 120  | 0.552 | 3.944 | 4.875 |
| Cranes                   | 175  | 0.423 | 3.443 | 4.222 |
| Cranes                   | 250  | 0.297 | 1.553 | 3.229 |
| Cranes                   | 500  | 0.236 | 2.010 | 2.511 |
| Cranes                   | 750  | 0.195 | 1.282 | 2.073 |
| Cranes                   | 9999 | 0.211 | 1.023 | 2.399 |
| Crawler Tractors         | 50   | 1.873 | 7.027 | 5.325 |
| Crawler Tractors         | 120  | 0.558 | 3.889 | 4.762 |
| Crawler Tractors         | 175  | 0.347 | 3.235 | 3.330 |
| Crawler Tractors         | 250  | 0.276 | 1.395 | 3.187 |
| Crawler Tractors         | 500  | 0.241 | 1.852 | 2.476 |
| Crawler Tractors         | 750  | 0.184 | 1.159 | 1.867 |
| Crawler Tractors         | 1000 | 0.268 | 1.610 | 4.770 |
| Crushing/Proc. Equipment | 50   | 0.739 | 5.039 | 3.962 |
| Crushing/Proc. Equipment | 120  | 0.385 | 3.700 | 2.552 |
| Crushing/Proc. Equipment | 175  | 0.304 | 3.240 | 1.654 |
| Crushing/Proc. Equipment | 250  | 0.248 | 1.111 | 1.330 |
| Crushing/Proc. Equipment | 500  | 0.244 | 1.064 | 1.227 |
| Crushing/Proc. Equipment | 750  | 0.244 | 1.065 | 1.251 |
| Crushing/Proc. Equipment | 9999 | 0.287 | 1.107 | 3.160 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.061 | 0.005 |
| 525.447 | 0.170 | 0.005 |
| 525.447 | 0.170 | 0.005 |
| 467.626 | 0.151 | 0.004 |
| 472.192 | 0.153 | 0.004 |
| 472.041 | 0.153 | 0.004 |
| 469.711 | 0.152 | 0.004 |
| 469.289 | 0.152 | 0.004 |
| 525.483 | 0.170 | 0.005 |
| 471.529 | 0.153 | 0.004 |
| 472.106 | 0.153 | 0.004 |
| 473.326 | 0.153 | 0.004 |
| 473.615 | 0.153 | 0.004 |
| 568.299 | 0.056 | 0.005 |
| 568.299 | 0.063 | 0.005 |
| 568.299 | 0.050 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 493.025 | 0.160 | 0.005 |
| 469.630 | 0.152 | 0.004 |
| 478.566 | 0.155 | 0.004 |
| 474.239 | 0.153 | 0.004 |
| 471.928 | 0.153 | 0.004 |
| 568.299 | 0.026 | 0.004 |
| 475.234 | 0.154 | 0.004 |
| 472.811 | 0.153 | 0.004 |
| 471.131 | 0.152 | 0.004 |
| 471.939 | 0.153 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 470.181 | 0.152 | 0.004 |
| 469.615 | 0.152 | 0.004 |

|                      |      |       |       |       |
|----------------------|------|-------|-------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 |
| Excavators           | 25   | 0.450 | 4.234 | 3.594 |
| Excavators           | 50   | 0.450 | 4.234 | 3.594 |
| Excavators           | 120  | 0.230 | 3.454 | 2.381 |
| Excavators           | 175  | 0.178 | 3.076 | 1.462 |
| Excavators           | 250  | 0.142 | 1.090 | 1.209 |
| Excavators           | 500  | 0.122 | 1.051 | 0.893 |
| Excavators           | 750  | 0.144 | 1.132 | 1.159 |
| Forklifts            | 50   | 0.766 | 5.166 | 4.152 |
| Forklifts            | 120  | 0.327 | 3.647 | 3.057 |
| Forklifts            | 175  | 0.244 | 3.180 | 2.112 |
| Forklifts            | 250  | 0.204 | 1.235 | 1.807 |
| Forklifts            | 500  | 0.220 | 1.216 | 1.788 |
| Generator Sets       | 15   | 0.618 | 3.508 | 4.345 |
| Generator Sets       | 25   | 0.701 | 2.407 | 4.447 |
| Generator Sets       | 50   | 0.514 | 3.819 | 3.685 |
| Generator Sets       | 120  | 0.279 | 3.347 | 2.477 |
| Generator Sets       | 175  | 0.211 | 2.927 | 1.635 |
| Generator Sets       | 250  | 0.164 | 1.006 | 1.328 |
| Generator Sets       | 500  | 0.158 | 0.986 | 1.228 |
| Generator Sets       | 750  | 0.160 | 0.986 | 1.253 |
| Generator Sets       | 9999 | 0.194 | 1.031 | 3.058 |
| Graders              | 50   | 1.947 | 7.191 | 5.148 |
| Graders              | 120  | 0.719 | 4.228 | 5.740 |
| Graders              | 175  | 0.390 | 3.450 | 3.548 |
| Graders              | 250  | 0.284 | 1.252 | 3.441 |
| Graders              | 500  | 0.309 | 1.385 | 2.705 |
| Graders              | 750  | 0.276 | 1.170 | 1.425 |
| Off-Highway Tractors | 120  | 0.316 | 3.687 | 3.095 |
| Off-Highway Tractors | 175  | 0.201 | 3.143 | 1.785 |
| Off-Highway Tractors | 250  | 0.171 | 1.138 | 1.491 |
| Off-Highway Tractors | 750  | 0.168 | 1.124 | 1.289 |
| Off-Highway Tractors | 1000 | 0.180 | 1.055 | 2.449 |
| Off-Highway Trucks   | 175  | 0.236 | 3.304 | 1.683 |
| Off-Highway Trucks   | 250  | 0.207 | 1.273 | 1.456 |

|         |       |       |
|---------|-------|-------|
| 474.714 | 0.154 | 0.004 |
| 473.977 | 0.153 | 0.004 |
| 472.344 | 0.153 | 0.004 |
| 529.183 | 0.171 | 0.005 |
| 529.183 | 0.171 | 0.005 |
| 529.183 | 0.171 | 0.005 |
| 472.318 | 0.153 | 0.004 |
| 469.613 | 0.152 | 0.004 |
| 475.998 | 0.154 | 0.004 |
| 526.176 | 0.170 | 0.005 |
| 526.176 | 0.170 | 0.005 |
| 526.176 | 0.170 | 0.005 |
| 470.000 | 0.152 | 0.004 |
| 471.850 | 0.153 | 0.004 |
| 473.223 | 0.153 | 0.004 |
| 472.929 | 0.153 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.187 | 1.221 | 1.324 |
| Off-Highway Trucks                 | 750  | 0.263 | 1.719 | 2.182 |
| Off-Highway Trucks                 | 1000 | 0.214 | 1.194 | 3.544 |
| Other Construction Equipment       | 15   | 0.866 | 5.074 | 4.594 |
| Other Construction Equipment       | 25   | 0.866 | 5.074 | 4.594 |
| Other Construction Equipment       | 50   | 0.866 | 5.074 | 4.594 |
| Other Construction Equipment       | 120  | 0.406 | 3.632 | 3.790 |
| Other Construction Equipment       | 175  | 0.274 | 3.142 | 2.698 |
| Other Construction Equipment       | 500  | 0.180 | 1.396 | 1.812 |
| Other General Industrial Equipment | 15   | 0.603 | 4.883 | 3.993 |
| Other General Industrial Equipment | 25   | 0.603 | 4.883 | 3.993 |
| Other General Industrial Equipment | 50   | 0.603 | 4.883 | 3.993 |
| Other General Industrial Equipment | 120  | 0.308 | 3.647 | 2.924 |
| Other General Industrial Equipment | 175  | 0.201 | 3.175 | 1.609 |
| Other General Industrial Equipment | 250  | 0.181 | 1.140 | 1.530 |
| Other General Industrial Equipment | 500  | 0.164 | 1.121 | 1.256 |

|         |       |       |
|---------|-------|-------|
| 473.464 | 0.153 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 523.709 | 0.169 | 0.005 |
| 473.588 | 0.153 | 0.004 |
| 472.219 | 0.153 | 0.004 |
| 471.482 | 0.153 | 0.004 |
| 470.297 | 0.152 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 526.896 | 0.170 | 0.005 |
| 526.896 | 0.170 | 0.005 |
| 470.185 | 0.152 | 0.004 |
| 472.760 | 0.153 | 0.004 |
| 472.372 | 0.153 | 0.004 |
| 466.004 | 0.151 | 0.004 |
| 520.659 | 0.168 | 0.005 |
| 520.659 | 0.168 | 0.005 |
| 473.448 | 0.153 | 0.004 |
| 470.665 | 0.152 | 0.004 |
| 472.169 | 0.153 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.056 | 0.005 |
| 568.299 | 0.063 | 0.005 |
| 568.300 | 0.035 | 0.005 |
| 568.299 | 0.021 | 0.004 |
| 568.299 | 0.019 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.111 | 1.105 | 0.626 |
| Other General Industrial Equipment | 1000 | 0.193 | 1.049 | 3.956 |
| Other Material Handling Equipment  | 50   | 1.011 | 5.757 | 4.684 |
| Other Material Handling Equipment  | 120  | 0.225 | 3.515 | 2.298 |
| Other Material Handling Equipment  | 175  | 0.217 | 3.171 | 1.769 |
| Other Material Handling Equipment  | 250  | 0.207 | 1.209 | 2.004 |
| Other Material Handling Equipment  | 500  | 0.218 | 1.344 | 1.870 |
| Other Material Handling Equipment  | 9999 | 0.054 | 0.939 | 2.268 |
| Pavers                             | 25   | 1.007 | 5.007 | 4.285 |
| Pavers                             | 50   | 1.007 | 5.007 | 4.285 |
| Pavers                             | 120  | 0.349 | 3.507 | 3.427 |
| Pavers                             | 175  | 0.199 | 2.994 | 1.955 |
| Pavers                             | 250  | 0.130 | 1.010 | 1.611 |
| Pavers                             | 500  | 0.152 | 0.987 | 1.771 |
| Paving Equipment                   | 25   | 0.541 | 4.241 | 3.774 |
| Paving Equipment                   | 50   | 0.541 | 4.241 | 3.774 |
| Paving Equipment                   | 120  | 0.278 | 3.503 | 2.837 |
| Paving Equipment                   | 175  | 0.204 | 3.051 | 1.913 |
| Paving Equipment                   | 250  | 0.175 | 1.165 | 1.885 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 |
| Pressure Washers                   | 15   | 0.618 | 3.508 | 4.345 |
| Pressure Washers                   | 25   | 0.701 | 2.407 | 4.447 |
| Pressure Washers                   | 50   | 0.363 | 3.260 | 3.541 |
| Pressure Washers                   | 120  | 0.222 | 3.196 | 2.377 |
| Pressure Washers                   | 175  | 0.205 | 2.907 | 1.665 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.008 | 0.004 |
| 568.299 | 0.063 | 0.005 |
| 568.299 | 0.066 | 0.005 |
| 568.299 | 0.055 | 0.005 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.021 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.300 | 0.016 | 0.004 |
| 568.300 | 0.016 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 525.691 | 0.170 | 0.005 |
| 525.691 | 0.170 | 0.005 |
| 525.691 | 0.170 | 0.005 |
| 473.929 | 0.153 | 0.004 |
| 471.948 | 0.153 | 0.004 |
| 473.514 | 0.153 | 0.004 |
| 478.982 | 0.155 | 0.004 |
|         |       |       |
| 525.015 | 0.170 | 0.005 |
|         |       |       |
| 473.089 | 0.153 | 0.004 |
|         |       |       |
| 471.677 | 0.153 | 0.004 |
|         |       |       |
| 472.541 | 0.153 | 0.004 |
|         |       |       |
| 466.560 | 0.151 | 0.004 |
|         |       |       |
| 473.912 | 0.153 | 0.004 |
|         |       |       |
| 474.617 | 0.154 | 0.004 |
|         |       |       |
| 479.311 | 0.155 | 0.004 |
|         |       |       |
| 473.035 | 0.153 | 0.004 |
|         |       |       |
| 568.299 | 0.042 | 0.004 |
|         |       |       |
| 524.791 | 0.170 | 0.005 |
|         |       |       |
| 524.791 | 0.170 | 0.005 |
|         |       |       |
| 466.494 | 0.151 | 0.004 |
|         |       |       |
| 470.927 | 0.152 | 0.004 |

|                         |      |       |       |       |
|-------------------------|------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 |
| Pumps                   | 15   | 0.698 | 3.508 | 4.359 |
| Pumps                   | 25   | 0.728 | 2.407 | 4.447 |
| Pumps                   | 50   | 0.565 | 4.007 | 3.734 |
| Pumps                   | 120  | 0.299 | 3.398 | 2.511 |
| Pumps                   | 175  | 0.227 | 2.971 | 1.662 |
| Pumps                   | 250  | 0.177 | 1.021 | 1.351 |
| Pumps                   | 500  | 0.171 | 0.998 | 1.246 |
| Pumps                   | 750  | 0.173 | 0.998 | 1.271 |
| Pumps                   | 9999 | 0.207 | 1.043 | 3.090 |
| Rollers                 | 15   | 0.661 | 4.252 | 3.921 |
| Rollers                 | 25   | 0.661 | 4.252 | 3.921 |
| Rollers                 | 50   | 0.661 | 4.252 | 3.921 |
| Rollers                 | 120  | 0.287 | 3.455 | 3.003 |
| Rollers                 | 175  | 0.150 | 2.909 | 1.483 |
| Rollers                 | 250  | 0.188 | 1.234 | 2.173 |
| Rollers                 | 500  | 0.211 | 1.956 | 2.290 |
|                         |      |       |       |       |
| Rough Terrain Forklifts | 50   | 0.690 | 4.125 | 3.853 |
|                         |      |       |       |       |
| Rough Terrain Forklifts | 120  | 0.150 | 3.242 | 1.984 |
|                         |      |       |       |       |
| Rough Terrain Forklifts | 175  | 0.111 | 2.843 | 1.218 |
|                         |      |       |       |       |
| Rough Terrain Forklifts | 250  | 0.116 | 0.990 | 1.474 |
|                         |      |       |       |       |
| Rough Terrain Forklifts | 500  | 0.069 | 0.938 | 0.558 |
| Rubber Tired Dozers     | 175  | 0.588 | 3.766 | 5.656 |
| Rubber Tired Dozers     | 250  | 0.393 | 1.783 | 4.090 |
| Rubber Tired Dozers     | 500  | 0.447 | 3.686 | 4.408 |
| Rubber Tired Dozers     | 750  | 0.423 | 2.591 | 5.334 |
| Rubber Tired Dozers     | 1000 | 0.453 | 1.874 | 4.709 |
| Rubber Tired Loaders    | 25   | 1.049 | 5.972 | 4.521 |
| Rubber Tired Loaders    | 50   | 1.049 | 5.972 | 4.521 |
| Rubber Tired Loaders    | 120  | 0.412 | 3.827 | 3.512 |
| Rubber Tired Loaders    | 175  | 0.269 | 3.292 | 2.196 |

|         |       |       |
|---------|-------|-------|
| 469.904 | 0.152 | 0.004 |
| 468.129 | 0.151 | 0.004 |
| 463.819 | 0.150 | 0.004 |
| 472.858 | 0.153 | 0.004 |
| 483.448 | 0.156 | 0.004 |
| 478.741 | 0.155 | 0.004 |
| 469.269 | 0.152 | 0.004 |
| 473.230 | 0.153 | 0.004 |
| 471.279 | 0.152 | 0.004 |
| 568.300 | 0.059 | 0.005 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 686.695 | 0.022 | 0.004 |
| 527.273 | 0.171 | 0.005 |
| 527.273 | 0.171 | 0.005 |
| 472.432 | 0.153 | 0.004 |
| 535.836 | 0.173 | 0.005 |
| 473.636 | 0.153 | 0.004 |
| 469.126 | 0.152 | 0.004 |
| 476.951 | 0.154 | 0.004 |
| 470.525 | 0.152 | 0.004 |
| 470.400 | 0.152 | 0.004 |
| 525.328 | 0.170 | 0.005 |
| 525.328 | 0.170 | 0.005 |
| 525.328 | 0.170 | 0.005 |
| 474.116 | 0.153 | 0.004 |
| 473.122 | 0.153 | 0.004 |
| 470.126 | 0.152 | 0.004 |
| 514.461 | 0.166 | 0.005 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.171 | 2.060 |
| Rubber Tired Loaders      | 500  | 0.217 | 1.384 | 1.866 |
| Rubber Tired Loaders      | 750  | 0.227 | 1.323 | 1.927 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.174 | 3.528 |
| Scrapers                  | 120  | 0.630 | 4.144 | 6.026 |
| Scrapers                  | 175  | 0.361 | 3.395 | 3.479 |
| Scrapers                  | 250  | 0.317 | 1.678 | 3.284 |
| Scrapers                  | 500  | 0.253 | 1.975 | 2.666 |
| Scrapers                  | 750  | 0.222 | 1.513 | 2.386 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 |
| Signal Boards             | 50   | 0.603 | 4.282 | 3.767 |
| Signal Boards             | 120  | 0.315 | 3.478 | 2.472 |
| Signal Boards             | 175  | 0.244 | 3.045 | 1.602 |
| Signal Boards             | 250  | 0.235 | 1.263 | 1.562 |
| Skid Steer Loaders        | 25   | 0.353 | 3.654 | 3.371 |
| Skid Steer Loaders        | 50   | 0.353 | 3.654 | 3.371 |
| Skid Steer Loaders        | 120  | 0.153 | 3.266 | 2.039 |
| Surfacing Equipment       | 50   | 0.437 | 3.832 | 3.924 |
| Surfacing Equipment       | 120  | 0.270 | 3.396 | 3.058 |
| Surfacing Equipment       | 175  | 0.224 | 2.914 | 2.455 |
| Surfacing Equipment       | 250  | 0.192 | 1.219 | 2.502 |
| Surfacing Equipment       | 500  | 0.132 | 1.163 | 1.476 |
| Surfacing Equipment       | 750  | 0.100 | 0.985 | 1.081 |
| Sweepers/Scrubbers        | 15   | 0.759 | 4.971 | 4.127 |
| Sweepers/Scrubbers        | 25   | 0.759 | 4.971 | 4.127 |
| Sweepers/Scrubbers        | 50   | 0.759 | 4.971 | 4.127 |
| Sweepers/Scrubbers        | 120  | 0.351 | 3.695 | 3.285 |
| Sweepers/Scrubbers        | 175  | 0.292 | 3.223 | 2.609 |
| Sweepers/Scrubbers        | 250  | 0.159 | 1.114 | 1.610 |
| Tractors/Loaders/Backhoes | 25   | 0.621 | 4.629 | 3.857 |



|         |       |       |
|---------|-------|-------|
| 514.461 | 0.166 | 0.005 |
| 475.898 | 0.154 | 0.004 |
| 467.800 | 0.151 | 0.004 |
| 470.124 | 0.152 | 0.004 |
| 469.256 | 0.152 | 0.004 |
| 466.633 | 0.151 | 0.004 |
| 527.026 | 0.171 | 0.005 |
| 527.026 | 0.171 | 0.005 |
| 527.026 | 0.171 | 0.005 |
| 475.326 | 0.154 | 0.004 |
| 467.734 | 0.151 | 0.004 |
| 473.851 | 0.153 | 0.004 |
| 470.585 | 0.152 | 0.004 |
| 474.289 | 0.153 | 0.004 |
| 568.300 | 0.063 | 0.005 |
| 568.299 | 0.066 | 0.005 |
| 568.299 | 0.068 | 0.005 |
| 568.299 | 0.034 | 0.004 |
| 568.300 | 0.026 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.020 | 0.004 |
| 470.181 | 0.152 | 0.004 |
| 469.615 | 0.152 | 0.004 |
| 474.714 | 0.154 | 0.004 |
| 473.977 | 0.153 | 0.004 |
| 472.344 | 0.153 | 0.004 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.621 | 4.629 | 3.857 |
| Tractors/Loaders/Backhoes | 120  | 0.239 | 3.525 | 2.426 |
| Tractors/Loaders/Backhoes | 175  | 0.184 | 3.078 | 1.521 |
| Tractors/Loaders/Backhoes | 250  | 0.169 | 1.148 | 1.588 |
| Tractors/Loaders/Backhoes | 500  | 0.152 | 1.279 | 1.247 |
| Tractors/Loaders/Backhoes | 750  | 0.234 | 1.361 | 2.419 |
| Trenchers                 | 15   | 0.642 | 4.302 | 3.959 |
| Trenchers                 | 25   | 0.642 | 4.302 | 3.959 |
| Trenchers                 | 50   | 0.642 | 4.302 | 3.959 |
| Trenchers                 | 120  | 0.504 | 3.768 | 4.700 |
| Trenchers                 | 175  | 0.359 | 3.291 | 3.657 |
| Trenchers                 | 250  | 0.328 | 1.639 | 3.737 |
| Trenchers                 | 500  | 0.199 | 1.723 | 2.005 |
| Trenchers                 | 750  | 0.060 | 0.951 | 0.303 |
| Welders                   | 15   | 0.698 | 3.508 | 4.359 |
| Welders                   | 25   | 0.728 | 2.407 | 4.447 |
| Welders                   | 50   | 0.697 | 4.596 | 3.891 |
| Welders                   | 120  | 0.357 | 3.564 | 2.599 |
| Welders                   | 175  | 0.277 | 3.115 | 1.726 |
| Welders                   | 250  | 0.000 | 1.071 | 1.404 |
| Welders                   | 500  | 0.215 | 1.034 | 1.289 |
| Water Trucks              | 175  | 0.236 | 3.304 | 1.683 |
| Water Trucks              | 250  | 0.207 | 1.273 | 1.456 |
| Water Trucks              | 500  | 0.187 | 1.221 | 1.324 |
| Water Trucks              | 750  | 0.263 | 1.719 | 2.182 |
| Water Trucks              | 1000 | 0.214 | 1.194 | 3.544 |

2024

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|
| SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.005   | 0.023   | 0.021   | 525.074 | 0.170   | 0.005   |
| 0.005   | 0.023   | 0.021   | 525.074 | 0.170   | 0.005   |
| 0.005   | 0.023   | 0.021   | 525.074 | 0.170   | 0.005   |
| 0.005   | 0.027   | 0.025   | 472.114 | 0.153   | 0.004   |
| 0.005   | 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.005   | 0.038   | 0.038   | 568.299 | 0.015   | 0.004   |
| 0.008   | 0.194   | 0.194   | 568.299 | 0.063   | 0.005   |
| 0.007   | 0.186   | 0.186   | 568.299 | 0.065   | 0.005   |
| 0.007   | 0.156   | 0.156   | 568.299 | 0.067   | 0.005   |
| 0.006   | 0.143   | 0.143   | 568.299 | 0.034   | 0.004   |
| 0.006   | 0.089   | 0.089   | 568.299 | 0.027   | 0.004   |
| 0.006   | 0.045   | 0.045   | 568.299 | 0.021   | 0.004   |
| 0.005   | 0.044   | 0.044   | 568.299 | 0.021   | 0.004   |
| 0.005   | 0.044   | 0.044   | 568.299 | 0.021   | 0.004   |
| 0.005   | 0.068   | 0.068   | 568.299 | 0.023   | 0.004   |
| 0.006   | 0.226   | 0.208   | 531.986 | 0.172   | 0.005   |
| 0.006   | 0.226   | 0.208   | 531.986 | 0.172   | 0.005   |
| 0.006   | 0.226   | 0.208   | 531.986 | 0.172   | 0.005   |
| 0.005   | 0.102   | 0.093   | 461.214 | 0.149   | 0.004   |
| 0.005   | 0.048   | 0.044   | 479.647 | 0.155   | 0.004   |
| 0.005   | 0.034   | 0.031   | 469.706 | 0.152   | 0.004   |
| 0.005   | 0.030   | 0.028   | 464.041 | 0.150   | 0.004   |
| 0.005   | 0.026   | 0.024   | 479.220 | 0.155   | 0.004   |
| 0.005   | 0.018   | 0.016   | 472.020 | 0.153   | 0.004   |

| 2024             |       |
|------------------|-------|
| Equipment        | MaxHP |
| Aerial Lifts     | 15    |
| Aerial Lifts     | 25    |
| Aerial Lifts     | 50    |
| Aerial Lifts     | 120   |
| Aerial Lifts     | 500   |
| Aerial Lifts     | 750   |
| Air Compressor s | 15    |
| Air Compressor s | 25    |
| Air Compressor s | 50    |
| Air Compressor s | 120   |
| Air Compressor s | 175   |
| Air Compressor s | 250   |
| Air Compressor s | 500   |
| Air Compressor s | 750   |
| Air Compressor s | 1000  |
| Bore/Drill Rigs  | 15    |
| Bore/Drill Rigs  | 25    |
| Bore/Drill Rigs  | 50    |
| Bore/Drill Rigs  | 120   |
| Bore/Drill Rigs  | 175   |
| Bore/Drill Rigs  | 250   |
| Bore/Drill Rigs  | 500   |
| Bore/Drill Rigs  | 750   |
| Bore/Drill Rigs  | 1000  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.172 | 0.172 | 568.299 | 0.062 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.134 | 0.134 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.123 | 0.123 | 568.300 | 0.028 | 0.004 |
| 0.006 | 0.077 | 0.077 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.608 | 0.559 | 517.872 | 0.168 | 0.005 |
| 0.005 | 0.323 | 0.297 | 469.889 | 0.152 | 0.004 |
| 0.005 | 0.224 | 0.206 | 474.595 | 0.154 | 0.004 |
| 0.005 | 0.135 | 0.124 | 472.974 | 0.153 | 0.004 |
| 0.005 | 0.102 | 0.093 | 472.294 | 0.153 | 0.004 |
| 0.005 | 0.084 | 0.077 | 470.251 | 0.152 | 0.004 |
| 0.005 | 0.063 | 0.058 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.526 | 0.484 | 516.159 | 0.167 | 0.005 |
| 0.005 | 0.373 | 0.343 | 476.158 | 0.154 | 0.004 |
| 0.005 | 0.185 | 0.170 | 471.781 | 0.153 | 0.004 |
| 0.005 | 0.124 | 0.114 | 471.624 | 0.153 | 0.004 |
| 0.005 | 0.102 | 0.094 | 474.613 | 0.154 | 0.004 |
| 0.005 | 0.069 | 0.064 | 472.530 | 0.153 | 0.004 |
| 0.005 | 0.118 | 0.109 | 473.666 | 0.153 | 0.004 |
| 0.007 | 0.146 | 0.146 | 568.299 | 0.066 | 0.005 |
| 0.006 | 0.132 | 0.132 | 568.299 | 0.034 | 0.004 |
| 0.006 | 0.083 | 0.083 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.042 | 0.042 | 568.300 | 0.022 | 0.004 |
| 0.005 | 0.066 | 0.066 | 568.299 | 0.025 | 0.004 |

|                          |      |
|--------------------------|------|
| Cement and Mortar Mixers | 15   |
| Cement and Mortar Mixers | 25   |
| Concrete/Industrial Saws | 25   |
| Concrete/Industrial Saws | 50   |
| Concrete/Industrial Saws | 120  |
| Concrete/Industrial Saws | 175  |
| Cranes                   | 50   |
| Cranes                   | 120  |
| Cranes                   | 175  |
| Cranes                   | 250  |
| Cranes                   | 500  |
| Cranes                   | 750  |
| Cranes                   | 9999 |
| Crawler Tractors         | 50   |
| Crawler Tractors         | 120  |
| Crawler Tractors         | 175  |
| Crawler Tractors         | 250  |
| Crawler Tractors         | 500  |
| Crawler Tractors         | 750  |
| Crawler Tractors         | 1000 |
| Crushing/Proc. Equipment | 50   |
| Crushing/Proc. Equipment | 120  |
| Crushing/Proc. Equipment | 175  |
| Crushing/Proc. Equipment | 250  |
| Crushing/Proc. Equipment | 500  |
| Crushing/Proc. Equipment | 750  |
| Crushing/Proc. Equipment | 9999 |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.005 | 0.139 | 0.128 | 525.429 | 0.170 | 0.005 |
| 0.005 | 0.139 | 0.128 | 525.429 | 0.170 | 0.005 |
| 0.005 | 0.116 | 0.107 | 467.157 | 0.151 | 0.004 |
| 0.005 | 0.072 | 0.066 | 472.277 | 0.153 | 0.004 |
| 0.005 | 0.039 | 0.036 | 472.213 | 0.153 | 0.004 |
| 0.005 | 0.030 | 0.028 | 469.889 | 0.152 | 0.004 |
| 0.005 | 0.043 | 0.040 | 468.683 | 0.152 | 0.004 |
| 0.005 | 0.232 | 0.213 | 525.483 | 0.170 | 0.005 |
| 0.005 | 0.189 | 0.174 | 471.529 | 0.153 | 0.004 |
| 0.005 | 0.111 | 0.102 | 472.106 | 0.153 | 0.004 |
| 0.005 | 0.069 | 0.063 | 473.326 | 0.153 | 0.004 |
| 0.005 | 0.069 | 0.063 | 473.615 | 0.153 | 0.004 |
| 0.008 | 0.186 | 0.186 | 568.299 | 0.055 | 0.005 |
| 0.007 | 0.182 | 0.182 | 568.299 | 0.063 | 0.005 |
| 0.007 | 0.124 | 0.124 | 568.299 | 0.046 | 0.005 |
| 0.006 | 0.117 | 0.117 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.071 | 0.071 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.038 | 0.038 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.037 | 0.037 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.037 | 0.037 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.058 | 0.058 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.549 | 0.505 | 494.020 | 0.160 | 0.005 |
| 0.005 | 0.436 | 0.401 | 469.286 | 0.152 | 0.004 |
| 0.005 | 0.195 | 0.180 | 478.463 | 0.155 | 0.004 |
| 0.005 | 0.112 | 0.103 | 473.926 | 0.153 | 0.004 |
| 0.005 | 0.105 | 0.097 | 471.031 | 0.152 | 0.004 |
| 0.005 | 0.051 | 0.051 | 568.300 | 0.024 | 0.004 |
| 0.005 | 0.187 | 0.172 | 476.087 | 0.154 | 0.004 |
| 0.005 | 0.085 | 0.079 | 472.996 | 0.153 | 0.004 |
| 0.005 | 0.053 | 0.049 | 470.845 | 0.152 | 0.004 |
| 0.005 | 0.051 | 0.047 | 471.932 | 0.153 | 0.004 |
| 0.005 | 0.067 | 0.062 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.081 | 0.074 | 470.292 | 0.152 | 0.004 |
| 0.005 | 0.059 | 0.054 | 469.446 | 0.152 | 0.004 |

|                      |      |
|----------------------|------|
| Dumpers/Trailers     | 25   |
| Excavators           | 25   |
| Excavators           | 50   |
| Excavators           | 120  |
| Excavators           | 175  |
| Excavators           | 250  |
| Excavators           | 500  |
| Excavators           | 750  |
| Forklifts            | 50   |
| Forklifts            | 120  |
| Forklifts            | 175  |
| Forklifts            | 250  |
| Forklifts            | 500  |
| Generator Sets       | 15   |
| Generator Sets       | 25   |
| Generator Sets       | 50   |
| Generator Sets       | 120  |
| Generator Sets       | 175  |
| Generator Sets       | 250  |
| Generator Sets       | 500  |
| Generator Sets       | 750  |
| Generator Sets       | 9999 |
| Graders              | 50   |
| Graders              | 120  |
| Graders              | 175  |
| Graders              | 250  |
| Graders              | 500  |
| Graders              | 750  |
| Off-Highway Tractors | 120  |
| Off-Highway Tractors | 175  |
| Off-Highway Tractors | 250  |
| Off-Highway Tractors | 750  |
| Off-Highway Tractors | 1000 |
| Off-Highway Trucks   | 175  |
| Off-Highway Trucks   | 250  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.048 | 0.044 | 475.049 | 0.154 | 0.004 |
| 0.005 | 0.084 | 0.078 | 473.767 | 0.153 | 0.004 |
| 0.005 | 0.074 | 0.068 | 472.857 | 0.153 | 0.004 |
| 0.006 | 0.322 | 0.296 | 529.339 | 0.171 | 0.005 |
| 0.006 | 0.322 | 0.296 | 529.339 | 0.171 | 0.005 |
| 0.006 | 0.322 | 0.296 | 529.339 | 0.171 | 0.005 |
| 0.005 | 0.259 | 0.238 | 471.990 | 0.153 | 0.004 |
| 0.005 | 0.141 | 0.129 | 469.558 | 0.152 | 0.004 |
| 0.005 | 0.069 | 0.063 | 476.185 | 0.154 | 0.004 |
| 0.005 | 0.194 | 0.179 | 526.176 | 0.170 | 0.005 |
| 0.005 | 0.194 | 0.179 | 526.176 | 0.170 | 0.005 |
| 0.005 | 0.194 | 0.179 | 526.176 | 0.170 | 0.005 |
| 0.005 | 0.169 | 0.155 | 470.000 | 0.152 | 0.004 |
| 0.005 | 0.080 | 0.074 | 471.850 | 0.153 | 0.004 |
| 0.005 | 0.051 | 0.047 | 473.223 | 0.153 | 0.004 |
| 0.005 | 0.043 | 0.040 | 472.929 | 0.153 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Off-Highway Trucks                 | 500  |
| Off-Highway Trucks                 | 750  |
| Off-Highway Trucks                 | 1000 |
| Other Construction Equipment       | 15   |
| Other Construction Equipment       | 25   |
| Other Construction Equipment       | 50   |
| Other Construction Equipment       | 120  |
| Other Construction Equipment       | 175  |
| Other Construction Equipment       | 500  |
| Other General Industrial Equipment | 15   |
| Other General Industrial Equipment | 25   |
| Other General Industrial Equipment | 50   |
| Other General Industrial Equipment | 120  |
| Other General Industrial Equipment | 175  |
| Other General Industrial Equipment | 250  |
| Other General Industrial Equipment | 500  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 0.005 | 0.080 | 0.073 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.340 | 0.313 | 523.709 | 0.169 | 0.005 |
| 0.005 | 0.104 | 0.095 | 473.588 | 0.153 | 0.004 |
| 0.005 | 0.096 | 0.088 | 472.219 | 0.153 | 0.004 |
| 0.005 | 0.069 | 0.064 | 471.482 | 0.153 | 0.004 |
| 0.005 | 0.078 | 0.072 | 470.297 | 0.152 | 0.004 |
| 0.005 | 0.018 | 0.017 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.299 | 0.275 | 526.860 | 0.170 | 0.005 |
| 0.005 | 0.299 | 0.275 | 526.860 | 0.170 | 0.005 |
| 0.005 | 0.226 | 0.208 | 470.084 | 0.152 | 0.004 |
| 0.005 | 0.092 | 0.085 | 472.718 | 0.153 | 0.004 |
| 0.005 | 0.047 | 0.043 | 472.605 | 0.153 | 0.004 |
| 0.005 | 0.062 | 0.057 | 466.004 | 0.151 | 0.004 |
| 0.005 | 0.173 | 0.159 | 521.114 | 0.169 | 0.005 |
| 0.005 | 0.173 | 0.159 | 521.114 | 0.169 | 0.005 |
| 0.005 | 0.153 | 0.140 | 473.427 | 0.153 | 0.004 |
| 0.005 | 0.093 | 0.086 | 470.663 | 0.152 | 0.004 |
| 0.005 | 0.070 | 0.065 | 472.169 | 0.153 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.008 | 0.186 | 0.186 | 568.299 | 0.055 | 0.005 |
| 0.007 | 0.182 | 0.182 | 568.299 | 0.063 | 0.005 |
| 0.007 | 0.101 | 0.101 | 568.299 | 0.032 | 0.005 |
| 0.006 | 0.097 | 0.097 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.072 | 0.072 | 568.299 | 0.018 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Other General Industrial Equipment | 750  |
| Other General Industrial Equipment | 1000 |
| Other Material Handling Equipment  | 50   |
| Other Material Handling Equipment  | 120  |
| Other Material Handling Equipment  | 175  |
| Other Material Handling Equipment  | 250  |
| Other Material Handling Equipment  | 500  |
| Other Material Handling Equipment  | 9999 |
| Pavers                             | 25   |
| Pavers                             | 50   |
| Pavers                             | 120  |
| Pavers                             | 175  |
| Pavers                             | 250  |
| Pavers                             | 500  |
| Paving Equipment                   | 25   |
| Paving Equipment                   | 50   |
| Paving Equipment                   | 120  |
| Paving Equipment                   | 175  |
| Paving Equipment                   | 250  |
| Plate Compactors                   | 15   |
| Pressure Washers                   | 15   |
| Pressure Washers                   | 25   |
| Pressure Washers                   | 50   |
| Pressure Washers                   | 120  |
| Pressure Washers                   | 175  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.008 | 0.194 | 0.194 | 568.299 | 0.063 | 0.005 |
| 0.007 | 0.186 | 0.186 | 568.299 | 0.065 | 0.005 |
| 0.007 | 0.131 | 0.131 | 568.299 | 0.051 | 0.005 |
| 0.006 | 0.123 | 0.123 | 568.299 | 0.026 | 0.004 |
| 0.006 | 0.075 | 0.075 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.040 | 0.040 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.038 | 0.038 | 568.300 | 0.015 | 0.004 |
| 0.005 | 0.039 | 0.039 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.059 | 0.059 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.212 | 0.195 | 525.862 | 0.170 | 0.005 |
| 0.005 | 0.212 | 0.195 | 525.862 | 0.170 | 0.005 |
| 0.005 | 0.212 | 0.195 | 525.862 | 0.170 | 0.005 |
| 0.005 | 0.165 | 0.152 | 473.936 | 0.153 | 0.004 |
| 0.005 | 0.068 | 0.062 | 471.935 | 0.153 | 0.004 |
| 0.005 | 0.076 | 0.070 | 473.516 | 0.153 | 0.004 |
| 0.005 | 0.093 | 0.085 | 478.303 | 0.155 | 0.004 |
| 0.005 | 0.204 | 0.187 | 524.802 | 0.170 | 0.005 |
| 0.005 | 0.064 | 0.059 | 473.158 | 0.153 | 0.004 |
| 0.005 | 0.044 | 0.040 | 471.622 | 0.153 | 0.004 |
| 0.005 | 0.034 | 0.032 | 472.778 | 0.153 | 0.004 |
| 0.005 | 0.009 | 0.008 | 466.554 | 0.151 | 0.004 |
| 0.005 | 0.316 | 0.291 | 473.901 | 0.153 | 0.004 |
| 0.005 | 0.184 | 0.169 | 474.597 | 0.154 | 0.004 |
| 0.005 | 0.202 | 0.185 | 479.468 | 0.155 | 0.004 |
| 0.005 | 0.196 | 0.180 | 473.023 | 0.153 | 0.004 |
| 0.005 | 0.131 | 0.131 | 568.299 | 0.040 | 0.004 |
| 0.005 | 0.304 | 0.279 | 524.304 | 0.170 | 0.005 |
| 0.005 | 0.304 | 0.279 | 524.304 | 0.170 | 0.005 |
| 0.005 | 0.239 | 0.219 | 466.558 | 0.151 | 0.004 |
| 0.005 | 0.118 | 0.108 | 470.660 | 0.152 | 0.004 |

|                         |      |
|-------------------------|------|
| Pressure Washers        | 250  |
| Pumps                   | 15   |
| Pumps                   | 25   |
| Pumps                   | 50   |
| Pumps                   | 120  |
| Pumps                   | 175  |
| Pumps                   | 250  |
| Pumps                   | 500  |
| Pumps                   | 750  |
| Pumps                   | 9999 |
| Rollers                 | 15   |
| Rollers                 | 25   |
| Rollers                 | 50   |
| Rollers                 | 120  |
| Rollers                 | 175  |
| Rollers                 | 250  |
| Rollers                 | 500  |
| Rough Terrain Forklifts | 50   |
| Rough Terrain Forklifts | 120  |
| Rough Terrain Forklifts | 175  |
| Rough Terrain Forklifts | 250  |
| Rough Terrain Forklifts | 500  |
| Rubber Tired Dozers     | 175  |
| Rubber Tired Dozers     | 250  |
| Rubber Tired Dozers     | 500  |
| Rubber Tired Dozers     | 750  |
| Rubber Tired Dozers     | 1000 |
| Rubber Tired Loaders    | 25   |
| Rubber Tired Loaders    | 50   |
| Rubber Tired Loaders    | 120  |
| Rubber Tired Loaders    | 175  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.069 | 0.064 | 469.824 | 0.152 | 0.004 |
| 0.005 | 0.069 | 0.064 | 468.466 | 0.152 | 0.004 |
| 0.005 | 0.075 | 0.069 | 464.555 | 0.150 | 0.004 |
| 0.005 | 0.071 | 0.065 | 472.303 | 0.153 | 0.004 |
| 0.005 | 0.458 | 0.421 | 483.030 | 0.156 | 0.004 |
| 0.005 | 0.184 | 0.169 | 478.681 | 0.155 | 0.004 |
| 0.005 | 0.144 | 0.133 | 469.560 | 0.152 | 0.004 |
| 0.005 | 0.105 | 0.096 | 473.177 | 0.153 | 0.004 |
| 0.005 | 0.087 | 0.080 | 471.295 | 0.152 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.132 | 0.132 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.122 | 0.122 | 568.299 | 0.028 | 0.004 |
| 0.006 | 0.075 | 0.075 | 568.299 | 0.022 | 0.004 |
| 0.007 | 0.048 | 0.048 | 686.695 | 0.021 | 0.004 |
| 0.005 | 0.093 | 0.086 | 527.423 | 0.171 | 0.005 |
| 0.005 | 0.093 | 0.086 | 527.423 | 0.171 | 0.005 |
| 0.005 | 0.069 | 0.063 | 472.656 | 0.153 | 0.004 |
| 0.006 | 0.156 | 0.143 | 535.930 | 0.173 | 0.005 |
| 0.005 | 0.157 | 0.144 | 474.470 | 0.154 | 0.004 |
| 0.005 | 0.119 | 0.110 | 470.014 | 0.152 | 0.004 |
| 0.005 | 0.082 | 0.075 | 476.961 | 0.154 | 0.004 |
| 0.005 | 0.056 | 0.051 | 470.375 | 0.152 | 0.004 |
| 0.005 | 0.040 | 0.037 | 472.447 | 0.153 | 0.004 |
| 0.005 | 0.249 | 0.229 | 525.328 | 0.170 | 0.005 |
| 0.005 | 0.249 | 0.229 | 525.328 | 0.170 | 0.005 |
| 0.005 | 0.249 | 0.229 | 525.328 | 0.170 | 0.005 |
| 0.005 | 0.210 | 0.193 | 474.116 | 0.153 | 0.004 |
| 0.005 | 0.126 | 0.116 | 473.122 | 0.153 | 0.004 |
| 0.005 | 0.050 | 0.046 | 470.126 | 0.152 | 0.004 |
| 0.005 | 0.185 | 0.170 | 513.796 | 0.166 | 0.005 |

|                           |      |
|---------------------------|------|
| Rubber Tired Loaders      | 250  |
| Rubber Tired Loaders      | 500  |
| Rubber Tired Loaders      | 750  |
| Rubber Tired Loaders      | 1000 |
| Scrapers                  | 120  |
| Scrapers                  | 175  |
| Scrapers                  | 250  |
| Scrapers                  | 500  |
| Scrapers                  | 750  |
| Signal Boards             | 15   |
| Signal Boards             | 50   |
| Signal Boards             | 120  |
| Signal Boards             | 175  |
| Signal Boards             | 250  |
| Skid Steer Loaders        | 25   |
| Skid Steer Loaders        | 50   |
| Skid Steer Loaders        | 120  |
| Surfacing Equipment       | 50   |
| Surfacing Equipment       | 120  |
| Surfacing Equipment       | 175  |
| Surfacing Equipment       | 250  |
| Surfacing Equipment       | 500  |
| Surfacing Equipment       | 750  |
| Sweepers/S crubbers       | 15   |
| Sweepers/S crubbers       | 25   |
| Sweepers/S crubbers       | 50   |
| Sweepers/S crubbers       | 120  |
| Sweepers/S crubbers       | 175  |
| Sweepers/S crubbers       | 250  |
| Tractors/Loaders/Backhoes | 25   |



|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.185 | 0.170 | 513.796 | 0.166 | 0.005 |
| 0.005 | 0.120 | 0.110 | 476.431 | 0.154 | 0.004 |
| 0.005 | 0.077 | 0.070 | 468.821 | 0.152 | 0.004 |
| 0.005 | 0.058 | 0.053 | 469.752 | 0.152 | 0.004 |
| 0.005 | 0.047 | 0.043 | 469.465 | 0.152 | 0.004 |
| 0.005 | 0.095 | 0.087 | 466.676 | 0.151 | 0.004 |
| 0.005 | 0.220 | 0.202 | 527.095 | 0.171 | 0.005 |
| 0.005 | 0.220 | 0.202 | 527.095 | 0.171 | 0.005 |
| 0.005 | 0.220 | 0.202 | 527.095 | 0.171 | 0.005 |
| 0.005 | 0.326 | 0.300 | 475.690 | 0.154 | 0.004 |
| 0.005 | 0.186 | 0.171 | 467.733 | 0.151 | 0.004 |
| 0.005 | 0.155 | 0.143 | 473.849 | 0.153 | 0.004 |
| 0.005 | 0.085 | 0.078 | 471.613 | 0.153 | 0.004 |
| 0.005 | 0.009 | 0.008 | 474.471 | 0.154 | 0.004 |
| 0.008 | 0.194 | 0.194 | 568.300 | 0.063 | 0.005 |
| 0.007 | 0.186 | 0.186 | 568.299 | 0.065 | 0.005 |
| 0.007 | 0.151 | 0.151 | 568.299 | 0.062 | 0.005 |
| 0.006 | 0.139 | 0.139 | 568.299 | 0.032 | 0.004 |
| 0.006 | 0.085 | 0.085 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.044 | 0.044 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.042 | 0.042 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.081 | 0.074 | 470.292 | 0.152 | 0.004 |
| 0.005 | 0.059 | 0.054 | 469.446 | 0.152 | 0.004 |
| 0.005 | 0.048 | 0.044 | 475.049 | 0.154 | 0.004 |
| 0.005 | 0.084 | 0.078 | 473.767 | 0.153 | 0.004 |
| 0.005 | 0.074 | 0.068 | 472.857 | 0.153 | 0.004 |

|                           |      |
|---------------------------|------|
| Tractors/Loaders/Backhoes | 50   |
| Tractors/Loaders/Backhoes | 120  |
| Tractors/Loaders/Backhoes | 175  |
| Tractors/Loaders/Backhoes | 250  |
| Tractors/Loaders/Backhoes | 500  |
| Tractors/Loaders/Backhoes | 750  |
| Trenchers                 | 15   |
| Trenchers                 | 25   |
| Trenchers                 | 50   |
| Trenchers                 | 120  |
| Trenchers                 | 175  |
| Trenchers                 | 250  |
| Trenchers                 | 500  |
| Trenchers                 | 750  |
| Welders                   | 15   |
| Welders                   | 25   |
| Welders                   | 50   |
| Welders                   | 120  |
| Welders                   | 175  |
| Welders                   | 250  |
| Welders                   | 500  |
| Water Trucks              | 175  |
| Water Trucks              | 250  |
| Water Trucks              | 500  |
| Water Trucks              | 750  |
| Water Trucks              | 1000 |

2025

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.159   | 3.113   | 2.888   | 0.005   | 0.022   | 0.020   | 525.074 | 0.170   | 0.005   |
| 0.159   | 3.113   | 2.888   | 0.005   | 0.022   | 0.020   | 525.074 | 0.170   | 0.005   |
| 0.159   | 3.113   | 2.888   | 0.005   | 0.022   | 0.020   | 525.074 | 0.170   | 0.005   |
| 0.101   | 3.173   | 1.528   | 0.005   | 0.027   | 0.024   | 472.114 | 0.153   | 0.004   |
| 0.082   | 0.966   | 0.647   | 0.005   | 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.161   | 0.991   | 1.115   | 0.005   | 0.033   | 0.033   | 568.299 | 0.014   | 0.004   |
| 0.690   | 3.499   | 4.316   | 0.008   | 0.188   | 0.188   | 568.300 | 0.062   | 0.005   |
| 0.718   | 2.390   | 4.426   | 0.007   | 0.181   | 0.181   | 568.300 | 0.064   | 0.005   |
| 0.702   | 4.880   | 3.864   | 0.007   | 0.135   | 0.135   | 568.299 | 0.063   | 0.005   |
| 0.365   | 3.655   | 2.461   | 0.006   | 0.123   | 0.123   | 568.299 | 0.032   | 0.004   |
| 0.286   | 3.202   | 1.561   | 0.006   | 0.077   | 0.077   | 568.299 | 0.025   | 0.004   |
| 0.232   | 1.096   | 1.247   | 0.006   | 0.039   | 0.039   | 568.299 | 0.020   | 0.004   |
| 0.228   | 1.053   | 1.148   | 0.005   | 0.038   | 0.038   | 568.299 | 0.020   | 0.004   |
| 0.228   | 1.053   | 1.171   | 0.005   | 0.038   | 0.038   | 568.299 | 0.020   | 0.004   |
| 0.243   | 1.090   | 3.082   | 0.005   | 0.061   | 0.061   | 568.299 | 0.021   | 0.004   |
| 0.609   | 4.331   | 4.159   | 0.006   | 0.219   | 0.202   | 529.866 | 0.171   | 0.005   |
| 0.609   | 4.331   | 4.159   | 0.006   | 0.219   | 0.202   | 529.866 | 0.171   | 0.005   |
| 0.609   | 4.331   | 4.159   | 0.006   | 0.219   | 0.202   | 529.866 | 0.171   | 0.005   |
| 0.177   | 3.251   | 2.216   | 0.005   | 0.090   | 0.083   | 461.208 | 0.149   | 0.004   |
| 0.125   | 2.978   | 1.029   | 0.005   | 0.046   | 0.043   | 478.944 | 0.155   | 0.004   |
| 0.108   | 1.046   | 0.975   | 0.005   | 0.032   | 0.030   | 470.712 | 0.152   | 0.004   |
| 0.103   | 0.994   | 0.861   | 0.005   | 0.029   | 0.027   | 464.480 | 0.150   | 0.004   |
| 0.089   | 0.985   | 0.671   | 0.005   | 0.026   | 0.024   | 480.225 | 0.155   | 0.004   |
| 0.057   | 0.943   | 2.273   | 0.005   | 0.018   | 0.017   | 471.926 | 0.153   | 0.004   |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.693 | 2.349 | 4.369 | 0.007 | 0.170 | 0.170 | 568.299 | 0.062 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.561 | 4.330 | 3.701 | 0.007 | 0.115 | 0.115 | 568.300 | 0.050 | 0.005 |
| 0.300 | 3.500 | 2.315 | 0.006 | 0.106 | 0.106 | 568.299 | 0.027 | 0.004 |
| 0.235 | 3.072 | 1.418 | 0.006 | 0.067 | 0.067 | 568.299 | 0.021 | 0.004 |
| 1.937 | 7.269 | 5.788 | 0.005 | 0.577 | 0.531 | 517.872 | 0.168 | 0.005 |
| 0.524 | 3.906 | 4.619 | 0.005 | 0.301 | 0.277 | 469.903 | 0.152 | 0.004 |
| 0.381 | 3.389 | 3.703 | 0.005 | 0.196 | 0.181 | 474.636 | 0.154 | 0.004 |
| 0.281 | 1.502 | 2.966 | 0.005 | 0.123 | 0.114 | 472.964 | 0.153 | 0.004 |
| 0.231 | 1.933 | 2.383 | 0.005 | 0.096 | 0.089 | 472.066 | 0.153 | 0.004 |
| 0.191 | 1.283 | 1.900 | 0.005 | 0.080 | 0.073 | 470.331 | 0.152 | 0.004 |
| 0.220 | 1.031 | 2.411 | 0.005 | 0.064 | 0.059 | 472.055 | 0.153 | 0.004 |
| 1.756 | 6.685 | 4.975 | 0.005 | 0.466 | 0.429 | 515.466 | 0.167 | 0.005 |
| 0.513 | 3.852 | 4.409 | 0.005 | 0.335 | 0.309 | 476.234 | 0.154 | 0.004 |
| 0.326 | 3.227 | 3.041 | 0.005 | 0.170 | 0.157 | 471.829 | 0.153 | 0.004 |
| 0.264 | 1.370 | 2.953 | 0.005 | 0.115 | 0.106 | 471.860 | 0.153 | 0.004 |
| 0.228 | 1.780 | 2.244 | 0.005 | 0.093 | 0.085 | 474.025 | 0.153 | 0.004 |
| 0.181 | 1.159 | 1.767 | 0.005 | 0.066 | 0.061 | 472.283 | 0.153 | 0.004 |
| 0.263 | 1.588 | 4.689 | 0.005 | 0.115 | 0.106 | 474.645 | 0.154 | 0.004 |
| 0.694 | 5.008 | 3.850 | 0.007 | 0.125 | 0.125 | 568.299 | 0.062 | 0.005 |
| 0.364 | 3.697 | 2.389 | 0.006 | 0.112 | 0.112 | 568.299 | 0.032 | 0.004 |
| 0.287 | 3.243 | 1.472 | 0.006 | 0.071 | 0.071 | 568.299 | 0.025 | 0.004 |
| 0.236 | 1.109 | 1.165 | 0.006 | 0.036 | 0.036 | 568.299 | 0.021 | 0.004 |
| 0.232 | 1.062 | 1.077 | 0.005 | 0.035 | 0.035 | 568.299 | 0.021 | 0.004 |
| 0.233 | 1.063 | 1.098 | 0.005 | 0.036 | 0.036 | 568.299 | 0.021 | 0.004 |
| 0.274 | 1.096 | 3.029 | 0.005 | 0.059 | 0.059 | 568.299 | 0.024 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.417 | 4.205 | 3.508 | 0.005 | 0.120 | 0.110 | 525.979 | 0.170 | 0.005 |
| 0.417 | 4.205 | 3.508 | 0.005 | 0.120 | 0.110 | 525.979 | 0.170 | 0.005 |
| 0.217 | 3.453 | 2.248 | 0.005 | 0.102 | 0.094 | 467.384 | 0.151 | 0.004 |
| 0.170 | 3.083 | 1.325 | 0.005 | 0.065 | 0.060 | 472.428 | 0.153 | 0.004 |
| 0.139 | 1.090 | 1.108 | 0.005 | 0.036 | 0.033 | 472.442 | 0.153 | 0.004 |
| 0.121 | 1.054 | 0.831 | 0.005 | 0.029 | 0.026 | 469.711 | 0.152 | 0.004 |
| 0.142 | 1.134 | 1.105 | 0.005 | 0.041 | 0.037 | 468.652 | 0.152 | 0.004 |
| 0.692 | 5.089 | 4.039 | 0.005 | 0.203 | 0.187 | 525.483 | 0.170 | 0.005 |
| 0.300 | 3.629 | 2.814 | 0.005 | 0.163 | 0.150 | 471.529 | 0.153 | 0.004 |
| 0.224 | 3.174 | 1.861 | 0.005 | 0.096 | 0.088 | 472.106 | 0.153 | 0.004 |
| 0.196 | 1.218 | 1.625 | 0.005 | 0.061 | 0.057 | 473.326 | 0.153 | 0.004 |
| 0.218 | 1.219 | 1.723 | 0.005 | 0.065 | 0.060 | 473.615 | 0.153 | 0.004 |
| 0.612 | 3.499 | 4.305 | 0.008 | 0.181 | 0.181 | 568.299 | 0.055 | 0.005 |
| 0.697 | 2.390 | 4.426 | 0.007 | 0.178 | 0.178 | 568.299 | 0.062 | 0.005 |
| 0.475 | 3.787 | 3.582 | 0.007 | 0.107 | 0.107 | 568.299 | 0.042 | 0.005 |
| 0.260 | 3.342 | 2.321 | 0.006 | 0.101 | 0.101 | 568.299 | 0.023 | 0.004 |
| 0.197 | 2.929 | 1.462 | 0.006 | 0.062 | 0.062 | 568.299 | 0.017 | 0.004 |
| 0.155 | 1.003 | 1.169 | 0.006 | 0.033 | 0.033 | 568.299 | 0.014 | 0.004 |
| 0.151 | 0.983 | 1.082 | 0.005 | 0.032 | 0.032 | 568.300 | 0.013 | 0.004 |
| 0.152 | 0.983 | 1.104 | 0.005 | 0.032 | 0.032 | 568.299 | 0.013 | 0.004 |
| 0.183 | 1.018 | 2.929 | 0.005 | 0.052 | 0.052 | 568.300 | 0.016 | 0.004 |
| 1.850 | 7.051 | 5.028 | 0.005 | 0.520 | 0.479 | 493.791 | 0.160 | 0.005 |
| 0.683 | 4.200 | 5.434 | 0.005 | 0.408 | 0.375 | 469.821 | 0.152 | 0.004 |
| 0.364 | 3.432 | 3.202 | 0.005 | 0.177 | 0.163 | 478.497 | 0.155 | 0.004 |
| 0.262 | 1.225 | 3.073 | 0.005 | 0.100 | 0.092 | 473.669 | 0.153 | 0.004 |
| 0.293 | 1.356 | 2.432 | 0.005 | 0.095 | 0.088 | 470.266 | 0.152 | 0.004 |
| 0.264 | 1.155 | 1.265 | 0.005 | 0.046 | 0.046 | 568.300 | 0.023 | 0.004 |
| 0.302 | 3.691 | 2.949 | 0.005 | 0.171 | 0.157 | 476.371 | 0.154 | 0.004 |
| 0.183 | 3.133 | 1.496 | 0.005 | 0.072 | 0.066 | 473.097 | 0.153 | 0.004 |
| 0.169 | 1.135 | 1.377 | 0.005 | 0.049 | 0.045 | 470.689 | 0.152 | 0.004 |
| 0.169 | 1.130 | 1.235 | 0.005 | 0.048 | 0.044 | 471.925 | 0.153 | 0.004 |
| 0.189 | 1.066 | 2.466 | 0.005 | 0.068 | 0.063 | 472.055 | 0.153 | 0.004 |
| 0.224 | 3.325 | 1.494 | 0.005 | 0.070 | 0.064 | 470.264 | 0.152 | 0.004 |
| 0.202 | 1.259 | 1.355 | 0.005 | 0.054 | 0.050 | 469.113 | 0.152 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.185 | 1.206 | 1.235 | 0.005 | 0.045 | 0.041 | 475.220 | 0.154 | 0.004 |
| 0.259 | 1.650 | 2.085 | 0.005 | 0.079 | 0.073 | 473.839 | 0.153 | 0.004 |
| 0.209 | 1.200 | 3.439 | 0.005 | 0.069 | 0.064 | 473.097 | 0.153 | 0.004 |
| 0.828 | 5.032 | 4.510 | 0.006 | 0.305 | 0.281 | 529.209 | 0.171 | 0.005 |
| 0.828 | 5.032 | 4.510 | 0.006 | 0.305 | 0.281 | 529.209 | 0.171 | 0.005 |
| 0.828 | 5.032 | 4.510 | 0.006 | 0.305 | 0.281 | 529.209 | 0.171 | 0.005 |
| 0.382 | 3.620 | 3.582 | 0.005 | 0.237 | 0.218 | 472.125 | 0.153 | 0.004 |
| 0.261 | 3.150 | 2.520 | 0.005 | 0.130 | 0.120 | 469.545 | 0.152 | 0.004 |
| 0.175 | 1.382 | 1.677 | 0.005 | 0.064 | 0.059 | 476.484 | 0.154 | 0.004 |
| 0.546 | 4.780 | 3.859 | 0.005 | 0.165 | 0.152 | 526.176 | 0.170 | 0.005 |
| 0.546 | 4.780 | 3.859 | 0.005 | 0.165 | 0.152 | 526.176 | 0.170 | 0.005 |
| 0.546 | 4.780 | 3.859 | 0.005 | 0.165 | 0.152 | 526.176 | 0.170 | 0.005 |
| 0.287 | 3.639 | 2.708 | 0.005 | 0.146 | 0.134 | 470.000 | 0.152 | 0.004 |
| 0.191 | 3.185 | 1.448 | 0.005 | 0.073 | 0.067 | 471.850 | 0.153 | 0.004 |
| 0.173 | 1.141 | 1.319 | 0.005 | 0.046 | 0.042 | 473.223 | 0.153 | 0.004 |
| 0.158 | 1.110 | 1.153 | 0.005 | 0.040 | 0.036 | 472.929 | 0.153 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.115 | 1.112 | 0.628 | 0.005 | 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 0.198 | 1.058 | 3.971 | 0.005 | 0.080 | 0.074 | 472.055 | 0.153 | 0.004 |
| 0.943 | 5.669 | 4.579 | 0.005 | 0.314 | 0.289 | 523.709 | 0.169 | 0.005 |
| 0.220 | 3.510 | 2.222 | 0.005 | 0.096 | 0.089 | 473.588 | 0.153 | 0.004 |
| 0.208 | 3.181 | 1.639 | 0.005 | 0.088 | 0.081 | 472.219 | 0.153 | 0.004 |
| 0.210 | 1.218 | 1.986 | 0.005 | 0.068 | 0.063 | 471.482 | 0.153 | 0.004 |
| 0.212 | 1.262 | 1.756 | 0.005 | 0.072 | 0.066 | 470.297 | 0.152 | 0.004 |
| 0.058 | 0.946 | 2.278 | 0.005 | 0.018 | 0.017 | 472.055 | 0.153 | 0.004 |
| 0.950 | 4.956 | 4.203 | 0.005 | 0.279 | 0.257 | 526.857 | 0.170 | 0.005 |
| 0.950 | 4.956 | 4.203 | 0.005 | 0.279 | 0.257 | 526.857 | 0.170 | 0.005 |
| 0.337 | 3.508 | 3.277 | 0.005 | 0.213 | 0.196 | 470.226 | 0.152 | 0.004 |
| 0.191 | 3.004 | 1.809 | 0.005 | 0.085 | 0.078 | 472.661 | 0.153 | 0.004 |
| 0.119 | 1.009 | 1.343 | 0.005 | 0.041 | 0.038 | 473.236 | 0.153 | 0.004 |
| 0.143 | 0.986 | 1.548 | 0.005 | 0.054 | 0.049 | 467.171 | 0.151 | 0.004 |
| 0.523 | 4.275 | 3.743 | 0.005 | 0.164 | 0.151 | 521.058 | 0.169 | 0.005 |
| 0.523 | 4.275 | 3.743 | 0.005 | 0.164 | 0.151 | 521.058 | 0.169 | 0.005 |
| 0.262 | 3.503 | 2.673 | 0.005 | 0.135 | 0.125 | 473.175 | 0.153 | 0.004 |
| 0.197 | 3.066 | 1.785 | 0.005 | 0.086 | 0.079 | 470.661 | 0.152 | 0.004 |
| 0.138 | 1.114 | 1.296 | 0.005 | 0.048 | 0.044 | 472.212 | 0.153 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.612 | 3.499 | 4.305 | 0.008 | 0.181 | 0.181 | 568.299 | 0.055 | 0.005 |
| 0.697 | 2.390 | 4.426 | 0.007 | 0.178 | 0.178 | 568.299 | 0.062 | 0.005 |
| 0.333 | 3.233 | 3.441 | 0.007 | 0.087 | 0.087 | 568.299 | 0.030 | 0.005 |
| 0.204 | 3.191 | 2.229 | 0.006 | 0.084 | 0.084 | 568.299 | 0.018 | 0.004 |
| 0.191 | 2.907 | 1.482 | 0.006 | 0.062 | 0.062 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.690 | 3.499 | 4.316 | 0.008 | 0.188 | 0.188 | 568.299 | 0.062 | 0.005 |
| 0.718 | 2.390 | 4.426 | 0.007 | 0.181 | 0.181 | 568.299 | 0.064 | 0.005 |
| 0.523 | 3.974 | 3.630 | 0.007 | 0.114 | 0.114 | 568.299 | 0.047 | 0.005 |
| 0.279 | 3.393 | 2.352 | 0.006 | 0.107 | 0.107 | 568.299 | 0.025 | 0.004 |
| 0.213 | 2.973 | 1.486 | 0.006 | 0.065 | 0.065 | 568.299 | 0.019 | 0.004 |
| 0.168 | 1.018 | 1.189 | 0.006 | 0.034 | 0.034 | 568.300 | 0.015 | 0.004 |
| 0.164 | 0.994 | 1.098 | 0.005 | 0.033 | 0.033 | 568.299 | 0.014 | 0.004 |
| 0.164 | 0.994 | 1.120 | 0.005 | 0.034 | 0.034 | 568.299 | 0.014 | 0.004 |
| 0.196 | 1.031 | 2.960 | 0.005 | 0.054 | 0.054 | 568.299 | 0.017 | 0.004 |
| 0.621 | 4.207 | 3.824 | 0.005 | 0.193 | 0.177 | 525.957 | 0.170 | 0.005 |
| 0.621 | 4.207 | 3.824 | 0.005 | 0.193 | 0.177 | 525.957 | 0.170 | 0.005 |
| 0.621 | 4.207 | 3.824 | 0.005 | 0.193 | 0.177 | 525.957 | 0.170 | 0.005 |
| 0.272 | 3.451 | 2.843 | 0.005 | 0.151 | 0.138 | 474.007 | 0.153 | 0.004 |
| 0.141 | 2.914 | 1.324 | 0.005 | 0.061 | 0.056 | 472.012 | 0.153 | 0.004 |
| 0.179 | 1.214 | 1.977 | 0.005 | 0.070 | 0.064 | 473.512 | 0.153 | 0.004 |
| 0.210 | 1.961 | 2.216 | 0.005 | 0.090 | 0.083 | 477.900 | 0.155 | 0.004 |
| 0.570 | 3.918 | 3.653 | 0.005 | 0.166 | 0.152 | 524.924 | 0.170 | 0.005 |
| 0.145 | 3.245 | 1.914 | 0.005 | 0.058 | 0.054 | 473.063 | 0.153 | 0.004 |
| 0.103 | 2.834 | 1.044 | 0.005 | 0.039 | 0.036 | 471.535 | 0.153 | 0.004 |
| 0.119 | 0.995 | 1.480 | 0.005 | 0.035 | 0.032 | 472.853 | 0.153 | 0.004 |
| 0.066 | 0.937 | 0.476 | 0.005 | 0.009 | 0.008 | 466.548 | 0.151 | 0.004 |
| 0.532 | 3.696 | 5.014 | 0.005 | 0.279 | 0.257 | 473.515 | 0.153 | 0.004 |
| 0.399 | 1.797 | 4.090 | 0.005 | 0.184 | 0.170 | 474.585 | 0.154 | 0.004 |
| 0.417 | 3.457 | 4.030 | 0.005 | 0.182 | 0.168 | 479.394 | 0.155 | 0.004 |
| 0.425 | 2.596 | 5.334 | 0.005 | 0.196 | 0.180 | 473.011 | 0.153 | 0.004 |
| 0.433 | 1.796 | 4.532 | 0.005 | 0.123 | 0.123 | 568.299 | 0.039 | 0.004 |
| 1.009 | 5.987 | 4.468 | 0.005 | 0.286 | 0.263 | 524.230 | 0.170 | 0.005 |
| 1.009 | 5.987 | 4.468 | 0.005 | 0.286 | 0.263 | 524.230 | 0.170 | 0.005 |
| 0.397 | 3.832 | 3.339 | 0.005 | 0.221 | 0.203 | 466.808 | 0.151 | 0.004 |
| 0.246 | 3.288 | 1.884 | 0.005 | 0.101 | 0.092 | 470.357 | 0.152 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.197 | 1.161 | 1.806 | 0.005 | 0.060 | 0.056 | 469.788 | 0.152 | 0.004 |
| 0.209 | 1.352 | 1.702 | 0.005 | 0.063 | 0.058 | 468.513 | 0.152 | 0.004 |
| 0.226 | 1.333 | 1.881 | 0.005 | 0.072 | 0.066 | 464.866 | 0.150 | 0.004 |
| 0.201 | 1.191 | 3.544 | 0.005 | 0.071 | 0.066 | 472.345 | 0.153 | 0.004 |
| 0.575 | 4.095 | 5.632 | 0.005 | 0.414 | 0.381 | 482.701 | 0.156 | 0.004 |
| 0.336 | 3.372 | 3.156 | 0.005 | 0.167 | 0.153 | 478.809 | 0.155 | 0.004 |
| 0.301 | 1.627 | 3.014 | 0.005 | 0.133 | 0.123 | 469.352 | 0.152 | 0.004 |
| 0.245 | 1.921 | 2.477 | 0.005 | 0.098 | 0.090 | 472.846 | 0.153 | 0.004 |
| 0.213 | 1.461 | 2.187 | 0.005 | 0.081 | 0.074 | 471.429 | 0.153 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.559 | 4.247 | 3.662 | 0.007 | 0.114 | 0.114 | 568.299 | 0.050 | 0.005 |
| 0.296 | 3.474 | 2.315 | 0.006 | 0.105 | 0.105 | 568.299 | 0.026 | 0.004 |
| 0.229 | 3.047 | 1.427 | 0.006 | 0.065 | 0.065 | 568.299 | 0.020 | 0.004 |
| 0.224 | 1.259 | 1.370 | 0.007 | 0.041 | 0.041 | 686.695 | 0.020 | 0.004 |
| 0.350 | 3.671 | 3.346 | 0.005 | 0.089 | 0.082 | 527.801 | 0.171 | 0.005 |
| 0.350 | 3.671 | 3.346 | 0.005 | 0.089 | 0.082 | 527.801 | 0.171 | 0.005 |
| 0.147 | 3.264 | 1.948 | 0.005 | 0.063 | 0.058 | 472.847 | 0.153 | 0.004 |
| 0.333 | 3.662 | 3.721 | 0.006 | 0.116 | 0.107 | 536.030 | 0.173 | 0.005 |
| 0.251 | 3.389 | 2.883 | 0.005 | 0.142 | 0.131 | 475.381 | 0.154 | 0.004 |
| 0.228 | 2.930 | 2.464 | 0.005 | 0.120 | 0.111 | 470.077 | 0.152 | 0.004 |
| 0.176 | 1.183 | 2.236 | 0.005 | 0.071 | 0.065 | 477.096 | 0.154 | 0.004 |
| 0.134 | 1.168 | 1.478 | 0.005 | 0.056 | 0.051 | 470.252 | 0.152 | 0.004 |
| 0.094 | 0.985 | 0.947 | 0.005 | 0.035 | 0.032 | 472.983 | 0.153 | 0.004 |
| 0.746 | 5.003 | 4.079 | 0.005 | 0.239 | 0.219 | 525.328 | 0.170 | 0.005 |
| 0.746 | 5.003 | 4.079 | 0.005 | 0.239 | 0.219 | 525.328 | 0.170 | 0.005 |
| 0.746 | 5.003 | 4.079 | 0.005 | 0.239 | 0.219 | 525.328 | 0.170 | 0.005 |
| 0.332 | 3.693 | 3.098 | 0.005 | 0.189 | 0.173 | 474.116 | 0.153 | 0.004 |
| 0.266 | 3.234 | 2.253 | 0.005 | 0.107 | 0.099 | 473.122 | 0.153 | 0.004 |
| 0.164 | 1.127 | 1.614 | 0.005 | 0.051 | 0.047 | 470.126 | 0.152 | 0.004 |
| 0.590 | 4.609 | 3.768 | 0.005 | 0.166 | 0.153 | 513.852 | 0.166 | 0.005 |



|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.590 | 4.609 | 3.768 | 0.005 | 0.166 | 0.153 | 513.852 | 0.166 | 0.005 |
| 0.227 | 3.532 | 2.288 | 0.005 | 0.105 | 0.097 | 476.731 | 0.154 | 0.004 |
| 0.176 | 3.089 | 1.376 | 0.005 | 0.069 | 0.063 | 469.403 | 0.152 | 0.004 |
| 0.168 | 1.151 | 1.491 | 0.005 | 0.055 | 0.050 | 469.914 | 0.152 | 0.004 |
| 0.150 | 1.277 | 1.163 | 0.005 | 0.044 | 0.041 | 470.084 | 0.152 | 0.004 |
| 0.221 | 1.311 | 2.215 | 0.005 | 0.085 | 0.079 | 466.638 | 0.151 | 0.004 |
| 0.601 | 4.233 | 3.834 | 0.005 | 0.197 | 0.181 | 527.022 | 0.170 | 0.005 |
| 0.601 | 4.233 | 3.834 | 0.005 | 0.197 | 0.181 | 527.022 | 0.170 | 0.005 |
| 0.601 | 4.233 | 3.834 | 0.005 | 0.197 | 0.181 | 527.022 | 0.170 | 0.005 |
| 0.494 | 3.769 | 4.593 | 0.005 | 0.318 | 0.292 | 475.632 | 0.154 | 0.004 |
| 0.364 | 3.311 | 3.667 | 0.005 | 0.187 | 0.172 | 467.733 | 0.151 | 0.004 |
| 0.312 | 1.598 | 3.483 | 0.005 | 0.146 | 0.134 | 473.846 | 0.153 | 0.004 |
| 0.192 | 1.668 | 1.859 | 0.005 | 0.080 | 0.074 | 469.994 | 0.152 | 0.004 |
| 0.064 | 0.958 | 0.304 | 0.005 | 0.009 | 0.008 | 474.478 | 0.154 | 0.004 |
| 0.690 | 3.499 | 4.316 | 0.008 | 0.188 | 0.188 | 568.299 | 0.062 | 0.005 |
| 0.718 | 2.390 | 4.426 | 0.007 | 0.181 | 0.181 | 568.299 | 0.064 | 0.005 |
| 0.646 | 4.557 | 3.782 | 0.007 | 0.130 | 0.130 | 568.299 | 0.058 | 0.005 |
| 0.336 | 3.560 | 2.430 | 0.006 | 0.120 | 0.120 | 568.299 | 0.030 | 0.004 |
| 0.261 | 3.118 | 1.541 | 0.006 | 0.074 | 0.074 | 568.299 | 0.023 | 0.004 |
| 0.210 | 1.068 | 1.234 | 0.006 | 0.038 | 0.038 | 568.299 | 0.018 | 0.004 |
| 0.206 | 1.032 | 1.135 | 0.005 | 0.037 | 0.037 | 568.299 | 0.018 | 0.004 |
| 0.224 | 3.325 | 1.494 | 0.005 | 0.070 | 0.064 | 470.264 | 0.152 | 0.004 |
| 0.202 | 1.259 | 1.355 | 0.005 | 0.054 | 0.050 | 469.113 | 0.152 | 0.004 |
| 0.185 | 1.206 | 1.235 | 0.005 | 0.045 | 0.041 | 475.220 | 0.154 | 0.004 |
| 0.259 | 1.650 | 2.085 | 0.005 | 0.079 | 0.073 | 473.839 | 0.153 | 0.004 |
| 0.209 | 1.200 | 3.439 | 0.005 | 0.069 | 0.064 | 473.097 | 0.153 | 0.004 |

| 2025             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     |
| Aerial Lifts     | 15    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 |
| Aerial Lifts     | 25    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 |
| Aerial Lifts     | 50    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 |
| Aerial Lifts     | 120   | 0.099   | 3.167   | 1.511   | 0.005   | 0.026   | 0.024   | 472.114 |
| Aerial Lifts     | 500   | 0.085   | 0.970   | 0.649   | 0.005   | 0.009   | 0.009   | 472.055 |
| Aerial Lifts     | 750   | 0.153   | 0.989   | 0.974   | 0.005   | 0.028   | 0.028   | 568.299 |
| Air Compressor s | 15    | 0.683   | 3.491   | 4.278   | 0.008   | 0.183   | 0.183   | 568.300 |
| Air Compressor s | 25    | 0.709   | 2.376   | 4.407   | 0.007   | 0.177   | 0.177   | 568.299 |
| Air Compressor s | 50    | 0.659   | 4.851   | 3.755   | 0.007   | 0.116   | 0.116   | 568.299 |
| Air Compressor s | 120   | 0.345   | 3.653   | 2.313   | 0.006   | 0.104   | 0.104   | 568.299 |
| Air Compressor s | 175   | 0.269   | 3.205   | 1.383   | 0.006   | 0.065   | 0.065   | 568.299 |
| Air Compressor s | 250   | 0.220   | 1.094   | 1.086   | 0.006   | 0.033   | 0.033   | 568.299 |
| Air Compressor s | 500   | 0.217   | 1.051   | 1.001   | 0.005   | 0.032   | 0.032   | 568.299 |
| Air Compressor s | 750   | 0.217   | 1.051   | 1.021   | 0.005   | 0.032   | 0.032   | 568.299 |
| Air Compressor s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   | 0.055   | 0.055   | 568.299 |
| Bore/Drill Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 |
| Bore/Drill Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 |
| Bore/Drill Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 |
| Bore/Drill Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   | 0.067   | 0.062   | 459.829 |
| Bore/Drill Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   | 0.039   | 0.036   | 478.266 |
| Bore/Drill Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   | 0.031   | 0.029   | 470.654 |
| Bore/Drill Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   | 0.028   | 0.026   | 467.289 |
| Bore/Drill Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   | 0.023   | 0.021   | 481.250 |
| Bore/Drill Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   | 0.019   | 0.017   | 471.917 |

|                          |      |       |       |       |       |       |       |         |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 | 0.168 | 0.168 | 568.299 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 | 0.099 | 0.099 | 568.299 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 | 0.089 | 0.089 | 568.300 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 | 0.056 | 0.056 | 568.300 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 | 0.543 | 0.499 | 517.872 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 | 0.260 | 0.240 | 469.533 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 | 0.166 | 0.153 | 474.748 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 | 0.114 | 0.105 | 472.980 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 | 0.088 | 0.081 | 471.967 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 | 0.068 | 0.062 | 470.276 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 | 0.065 | 0.060 | 472.055 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 | 0.456 | 0.420 | 516.128 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 | 0.285 | 0.262 | 476.134 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 | 0.150 | 0.138 | 471.592 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 | 0.096 | 0.088 | 471.622 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 | 0.081 | 0.074 | 474.007 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 | 0.057 | 0.052 | 472.408 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 | 0.112 | 0.103 | 475.490 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 | 0.107 | 0.107 | 568.299 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 | 0.095 | 0.095 | 568.299 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 | 0.060 | 0.060 | 568.299 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 | 0.031 | 0.031 | 568.299 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 | 0.030 | 0.030 | 568.299 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 | 0.030 | 0.030 | 568.299 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 | 0.053 | 0.053 | 568.299 |

|                      |      |       |       |       |       |       |       |         |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Dumpers/Tractors     | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Excavators           | 25   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 |
| Excavators           | 50   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 |
| Excavators           | 120  | 0.201 | 3.439 | 2.082 | 0.005 | 0.085 | 0.078 | 466.738 |
| Excavators           | 175  | 0.158 | 3.078 | 1.154 | 0.005 | 0.057 | 0.052 | 472.496 |
| Excavators           | 250  | 0.131 | 1.081 | 0.962 | 0.005 | 0.032 | 0.029 | 472.560 |
| Excavators           | 500  | 0.115 | 1.051 | 0.726 | 0.005 | 0.026 | 0.024 | 470.292 |
| Excavators           | 750  | 0.139 | 1.135 | 1.026 | 0.005 | 0.038 | 0.035 | 468.558 |
| Forklifts            | 50   | 0.636 | 5.029 | 3.932 | 0.005 | 0.178 | 0.164 | 525.483 |
| Forklifts            | 120  | 0.277 | 3.611 | 2.607 | 0.005 | 0.140 | 0.128 | 471.529 |
| Forklifts            | 175  | 0.209 | 3.170 | 1.653 | 0.005 | 0.084 | 0.078 | 472.106 |
| Forklifts            | 250  | 0.191 | 1.214 | 1.466 | 0.005 | 0.056 | 0.052 | 473.326 |
| Forklifts            | 500  | 0.215 | 1.222 | 1.658 | 0.005 | 0.062 | 0.057 | 473.615 |
| Generator Sets       | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 |
| Generator Sets       | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 |
| Generator Sets       | 50   | 0.440 | 3.758 | 3.481 | 0.007 | 0.093 | 0.093 | 568.300 |
| Generator Sets       | 120  | 0.243 | 3.338 | 2.185 | 0.006 | 0.087 | 0.087 | 568.299 |
| Generator Sets       | 175  | 0.184 | 2.930 | 1.297 | 0.006 | 0.053 | 0.053 | 568.299 |
| Generator Sets       | 250  | 0.147 | 1.000 | 1.020 | 0.006 | 0.028 | 0.028 | 568.299 |
| Generator Sets       | 500  | 0.144 | 0.981 | 0.945 | 0.005 | 0.027 | 0.027 | 568.300 |
| Generator Sets       | 750  | 0.145 | 0.981 | 0.964 | 0.005 | 0.027 | 0.027 | 568.299 |
| Generator Sets       | 9999 | 0.173 | 1.008 | 2.812 | 0.005 | 0.047 | 0.047 | 568.299 |
| Graders              | 50   | 1.864 | 7.125 | 5.043 | 0.005 | 0.522 | 0.480 | 493.532 |
| Graders              | 120  | 0.638 | 4.149 | 5.074 | 0.005 | 0.371 | 0.342 | 468.316 |
| Graders              | 175  | 0.329 | 3.418 | 2.774 | 0.005 | 0.152 | 0.140 | 478.508 |
| Graders              | 250  | 0.230 | 1.179 | 2.556 | 0.005 | 0.082 | 0.076 | 473.470 |
| Graders              | 500  | 0.280 | 1.315 | 2.265 | 0.005 | 0.088 | 0.081 | 470.753 |
| Graders              | 750  | 0.253 | 1.141 | 1.125 | 0.005 | 0.041 | 0.041 | 568.300 |
| Off-Highway Tractors | 120  | 0.276 | 3.669 | 2.707 | 0.005 | 0.144 | 0.132 | 476.921 |
| Off-Highway Tractors | 175  | 0.175 | 3.142 | 1.349 | 0.005 | 0.065 | 0.060 | 473.302 |
| Off-Highway Tractors | 250  | 0.155 | 1.130 | 1.116 | 0.005 | 0.040 | 0.037 | 470.861 |
| Off-Highway Tractors | 750  | 0.167 | 1.135 | 1.118 | 0.005 | 0.045 | 0.041 | 471.917 |
| Off-Highway Tractors | 1000 | 0.198 | 1.077 | 2.482 | 0.005 | 0.070 | 0.064 | 472.055 |
| Off-Highway Trucks   | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 |
| Off-Highway Trucks   | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 | 0.203 | 0.187 | 472.748 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 | 0.112 | 0.103 | 469.843 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 | 0.059 | 0.055 | 476.296 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 | 0.118 | 0.109 | 470.000 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 | 0.070 | 0.065 | 471.850 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 | 0.036 | 0.033 | 473.223 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 | 0.035 | 0.033 | 472.929 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 | 0.023 | 0.021 | 473.464 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 | 0.081 | 0.074 | 472.055 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 | 0.239 | 0.219 | 523.709 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 | 0.081 | 0.074 | 473.588 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 | 0.072 | 0.067 | 472.219 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 | 0.060 | 0.055 | 471.482 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 | 0.067 | 0.061 | 470.297 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 | 0.019 | 0.017 | 472.055 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 | 0.191 | 0.175 | 469.899 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 | 0.077 | 0.071 | 472.485 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 | 0.034 | 0.031 | 473.483 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 | 0.039 | 0.036 | 465.882 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 | 0.118 | 0.108 | 473.424 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 | 0.075 | 0.069 | 470.484 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 | 0.043 | 0.040 | 472.234 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 | 0.075 | 0.075 | 568.299 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 | 0.072 | 0.072 | 568.299 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 | 0.053 | 0.053 | 568.299 |

|                         |      |       |       |       |       |       |       |         |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 |
| Pumps                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.299 |
| Pumps                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 |
| Pumps                   | 50   | 0.485 | 3.943 | 3.528 | 0.007 | 0.099 | 0.099 | 568.299 |
| Pumps                   | 120  | 0.261 | 3.389 | 2.213 | 0.006 | 0.092 | 0.092 | 568.299 |
| Pumps                   | 175  | 0.199 | 2.974 | 1.318 | 0.006 | 0.056 | 0.056 | 568.300 |
| Pumps                   | 250  | 0.159 | 1.016 | 1.038 | 0.006 | 0.029 | 0.029 | 568.299 |
| Pumps                   | 500  | 0.156 | 0.992 | 0.958 | 0.005 | 0.028 | 0.028 | 568.300 |
| Pumps                   | 750  | 0.157 | 0.992 | 0.977 | 0.005 | 0.029 | 0.029 | 568.300 |
| Pumps                   | 9999 | 0.186 | 1.020 | 2.840 | 0.005 | 0.049 | 0.049 | 568.299 |
| Rollers                 | 15   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 |
| Rollers                 | 25   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 |
| Rollers                 | 50   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 |
| Rollers                 | 120  | 0.255 | 3.444 | 2.691 | 0.005 | 0.135 | 0.125 | 473.851 |
| Rollers                 | 175  | 0.127 | 2.909 | 1.101 | 0.005 | 0.049 | 0.046 | 471.970 |
| Rollers                 | 250  | 0.173 | 1.215 | 1.783 | 0.005 | 0.066 | 0.060 | 473.681 |
| Rollers                 | 500  | 0.212 | 1.968 | 2.200 | 0.005 | 0.091 | 0.083 | 477.573 |
| Rough Terrain Forklifts | 50   | 0.456 | 3.740 | 3.477 | 0.005 | 0.128 | 0.118 | 525.027 |
| Rough Terrain Forklifts | 120  | 0.137 | 3.240 | 1.821 | 0.005 | 0.051 | 0.047 | 473.037 |
| Rough Terrain Forklifts | 175  | 0.087 | 2.821 | 0.786 | 0.005 | 0.030 | 0.028 | 471.475 |
| Rough Terrain Forklifts | 250  | 0.123 | 1.001 | 1.489 | 0.005 | 0.035 | 0.033 | 472.927 |
| Rough Terrain Forklifts | 500  | 0.069 | 0.942 | 0.477 | 0.005 | 0.009 | 0.008 | 466.541 |
| Rubber Tired Dozers     | 175  | 0.461 | 3.612 | 4.229 | 0.005 | 0.231 | 0.212 | 474.103 |
| Rubber Tired Dozers     | 250  | 0.372 | 1.720 | 3.805 | 0.005 | 0.167 | 0.153 | 474.573 |
| Rubber Tired Dozers     | 500  | 0.367 | 2.959 | 3.370 | 0.005 | 0.151 | 0.139 | 479.092 |
| Rubber Tired Dozers     | 750  | 0.428 | 2.601 | 5.333 | 0.005 | 0.196 | 0.181 | 472.998 |
| Rubber Tired Dozers     | 1000 | 0.414 | 1.725 | 4.365 | 0.005 | 0.115 | 0.115 | 568.299 |
| Rubber Tired Loaders    | 25   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 |
| Rubber Tired Loaders    | 50   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 |
| Rubber Tired Loaders    | 120  | 0.352 | 3.791 | 2.970 | 0.005 | 0.179 | 0.165 | 466.898 |
| Rubber Tired Loaders    | 175  | 0.224 | 3.281 | 1.590 | 0.005 | 0.084 | 0.077 | 470.459 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 | 0.048 | 0.045 | 469.871 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 | 0.053 | 0.048 | 469.143 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 | 0.064 | 0.059 | 465.052 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 | 0.052 | 0.048 | 472.456 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 | 0.405 | 0.372 | 482.363 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 | 0.137 | 0.126 | 478.948 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 | 0.125 | 0.115 | 469.446 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 | 0.081 | 0.074 | 472.539 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 | 0.064 | 0.059 | 472.115 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 | 0.098 | 0.098 | 568.299 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 | 0.089 | 0.089 | 568.299 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 | 0.055 | 0.055 | 568.299 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 | 0.035 | 0.035 | 686.695 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 | 0.057 | 0.052 | 472.630 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 | 0.082 | 0.075 | 536.140 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 | 0.124 | 0.114 | 476.766 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 | 0.094 | 0.087 | 471.040 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 | 0.055 | 0.051 | 477.110 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 | 0.051 | 0.047 | 470.283 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 | 0.027 | 0.025 | 470.551 |
| Sweepers/Scrubbers        | 15   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 |
| Sweepers/Scrubbers        | 25   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 |
| Sweepers/Scrubbers        | 50   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 |
| Sweepers/Scrubbers        | 120  | 0.303 | 3.664 | 2.817 | 0.005 | 0.160 | 0.147 | 474.116 |
| Sweepers/Scrubbers        | 175  | 0.213 | 3.201 | 1.638 | 0.005 | 0.072 | 0.066 | 473.122 |
| Sweepers/Scrubbers        | 250  | 0.170 | 1.140 | 1.616 | 0.005 | 0.051 | 0.047 | 470.126 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 |



|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 | 0.086 | 0.079 | 477.188 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 | 0.059 | 0.054 | 469.329 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 | 0.047 | 0.044 | 470.598 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 | 0.039 | 0.036 | 470.910 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 | 0.067 | 0.062 | 466.452 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 | 0.285 | 0.262 | 475.901 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 | 0.179 | 0.165 | 467.732 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 | 0.144 | 0.133 | 473.917 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 | 0.079 | 0.072 | 470.439 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 | 0.009 | 0.009 | 474.486 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.300 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 | 0.112 | 0.112 | 568.299 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 | 0.102 | 0.102 | 568.299 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 | 0.063 | 0.063 | 568.299 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 | 0.032 | 0.032 | 568.299 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 | 0.031 | 0.031 | 568.299 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 |

2026

| g/hp/hr | g/hp/hr |
|---------|---------|
| CH4     | N2O     |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.153   | 0.004   |
| 0.153   | 0.004   |
| 0.013   | 0.004   |
|         |         |
| 0.061   | 0.005   |
|         |         |
| 0.064   | 0.005   |
|         |         |
| 0.059   | 0.005   |
|         |         |
| 0.031   | 0.004   |
|         |         |
| 0.024   | 0.004   |
|         |         |
| 0.019   | 0.004   |
|         |         |
| 0.019   | 0.004   |
|         |         |
| 0.019   | 0.004   |
|         |         |
| 0.020   | 0.004   |
|         |         |
| 0.172   | 0.005   |
|         |         |
| 0.172   | 0.005   |
|         |         |
| 0.172   | 0.005   |
|         |         |
| 0.149   | 0.004   |
|         |         |
| 0.155   | 0.004   |
|         |         |
| 0.152   | 0.004   |
|         |         |
| 0.151   | 0.004   |
|         |         |
| 0.156   | 0.004   |
|         |         |
| 0.153   | 0.004   |

| 2026             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     |
| Aerial Lifts     | 15    | 0.154   | 3.088   | 2.879   | 0.005   |
| Aerial Lifts     | 25    | 0.154   | 3.088   | 2.879   | 0.005   |
| Aerial Lifts     | 50    | 0.154   | 3.088   | 2.879   | 0.005   |
| Aerial Lifts     | 120   | 0.099   | 3.167   | 1.511   | 0.005   |
| Aerial Lifts     | 500   | 0.085   | 0.970   | 0.649   | 0.005   |
| Aerial Lifts     | 750   | 0.153   | 0.989   | 0.974   | 0.005   |
| Air Compressor s |       |         |         |         |         |
| Air Compressor s | 15    | 0.683   | 3.491   | 4.278   | 0.008   |
| Air Compressor s | 25    | 0.709   | 2.376   | 4.407   | 0.007   |
| Air Compressor s | 50    | 0.659   | 4.851   | 3.755   | 0.007   |
| Air Compressor s | 120   | 0.345   | 3.653   | 2.313   | 0.006   |
| Air Compressor s | 175   | 0.269   | 3.205   | 1.383   | 0.006   |
| Air Compressor s | 250   | 0.220   | 1.094   | 1.086   | 0.006   |
| Air Compressor s | 500   | 0.217   | 1.051   | 1.001   | 0.005   |
| Air Compressor s | 750   | 0.217   | 1.051   | 1.021   | 0.005   |
| Air Compressor s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   |
| Bore/Drill Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   |
| Bore/Drill Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   |
| Bore/Drill Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   |
| Bore/Drill Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   |
| Bore/Drill Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   |
| Bore/Drill Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   |
| Bore/Drill Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   |
| Bore/Drill Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   |
| Bore/Drill Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   |

|       |       |
|-------|-------|
| 0.059 | 0.005 |
| 0.062 | 0.005 |
| 0.061 | 0.005 |
| 0.047 | 0.005 |
| 0.025 | 0.004 |
| 0.019 | 0.004 |
| 0.168 | 0.005 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.167 | 0.005 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.059 | 0.005 |
| 0.031 | 0.004 |
| 0.024 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.023 | 0.004 |

|                          |      |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 |

|       |       |
|-------|-------|
| 0.061 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.054 | 0.005 |
| 0.062 | 0.005 |
| 0.039 | 0.005 |
| 0.021 | 0.004 |
| 0.016 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.015 | 0.004 |
| 0.160 | 0.005 |
| 0.152 | 0.004 |
| 0.155 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.022 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |

|                      |      |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|
| Dumpers/Truckers     | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Excavators           | 25   | 0.403 | 4.219 | 3.453 | 0.005 |
| Excavators           | 50   | 0.403 | 4.219 | 3.453 | 0.005 |
| Excavators           | 120  | 0.201 | 3.439 | 2.082 | 0.005 |
| Excavators           | 175  | 0.158 | 3.078 | 1.154 | 0.005 |
| Excavators           | 250  | 0.131 | 1.081 | 0.962 | 0.005 |
| Excavators           | 500  | 0.115 | 1.051 | 0.726 | 0.005 |
| Excavators           | 750  | 0.139 | 1.135 | 1.026 | 0.005 |
| Forklifts            | 50   | 0.636 | 5.029 | 3.932 | 0.005 |
| Forklifts            | 120  | 0.277 | 3.611 | 2.607 | 0.005 |
| Forklifts            | 175  | 0.209 | 3.170 | 1.653 | 0.005 |
| Forklifts            | 250  | 0.191 | 1.214 | 1.466 | 0.005 |
| Forklifts            | 500  | 0.215 | 1.222 | 1.658 | 0.005 |
| Generator Sets       | 15   | 0.607 | 3.491 | 4.269 | 0.008 |
| Generator Sets       | 25   | 0.694 | 2.376 | 4.407 | 0.007 |
| Generator Sets       | 50   | 0.440 | 3.758 | 3.481 | 0.007 |
| Generator Sets       | 120  | 0.243 | 3.338 | 2.185 | 0.006 |
| Generator Sets       | 175  | 0.184 | 2.930 | 1.297 | 0.006 |
| Generator Sets       | 250  | 0.147 | 1.000 | 1.020 | 0.006 |
| Generator Sets       | 500  | 0.144 | 0.981 | 0.945 | 0.005 |
| Generator Sets       | 750  | 0.145 | 0.981 | 0.964 | 0.005 |
| Generator Sets       | 9999 | 0.173 | 1.008 | 2.812 | 0.005 |
| Graders              | 50   | 1.864 | 7.125 | 5.043 | 0.005 |
| Graders              | 120  | 0.638 | 4.149 | 5.074 | 0.005 |
| Graders              | 175  | 0.329 | 3.418 | 2.774 | 0.005 |
| Graders              | 250  | 0.230 | 1.179 | 2.556 | 0.005 |
| Graders              | 500  | 0.280 | 1.315 | 2.265 | 0.005 |
| Graders              | 750  | 0.253 | 1.141 | 1.125 | 0.005 |
| Off-Highway Tractors | 120  | 0.276 | 3.669 | 2.707 | 0.005 |
| Off-Highway Tractors | 175  | 0.175 | 3.142 | 1.349 | 0.005 |
| Off-Highway Tractors | 250  | 0.155 | 1.130 | 1.116 | 0.005 |
| Off-Highway Tractors | 750  | 0.167 | 1.135 | 1.118 | 0.005 |
| Off-Highway Tractors | 1000 | 0.198 | 1.077 | 2.482 | 0.005 |
| Off-Highway Trucks   | 175  | 0.214 | 3.328 | 1.335 | 0.005 |
| Off-Highway Trucks   | 250  | 0.185 | 1.213 | 1.129 | 0.005 |

|       |       |
|-------|-------|
| 0.154 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 |

|       |       |
|-------|-------|
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.169 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.169 | 0.005 |
| 0.169 | 0.005 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.054 | 0.005 |
| 0.062 | 0.005 |
| 0.027 | 0.005 |
| 0.017 | 0.004 |
| 0.016 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 |

|       |       |
|-------|-------|
| 0.008 | 0.004 |
| 0.061 | 0.005 |
| 0.064 | 0.005 |
| 0.043 | 0.005 |
| 0.023 | 0.004 |
| 0.018 | 0.004 |
| 0.014 | 0.004 |
| 0.014 | 0.004 |
| 0.014 | 0.004 |
| 0.016 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.155 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.155 | 0.004 |
| 0.153 | 0.004 |
| 0.037 | 0.004 |
| 0.169 | 0.005 |
| 0.169 | 0.005 |
| 0.151 | 0.004 |
| 0.152 | 0.004 |

|                         |      |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 |
| Pumps                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 |
| Pumps                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 |
| Pumps                   | 50   | 0.485 | 3.943 | 3.528 | 0.007 |
| Pumps                   | 120  | 0.261 | 3.389 | 2.213 | 0.006 |
| Pumps                   | 175  | 0.199 | 2.974 | 1.318 | 0.006 |
| Pumps                   | 250  | 0.159 | 1.016 | 1.038 | 0.006 |
| Pumps                   | 500  | 0.156 | 0.992 | 0.958 | 0.005 |
| Pumps                   | 750  | 0.157 | 0.992 | 0.977 | 0.005 |
| Pumps                   | 9999 | 0.186 | 1.020 | 2.840 | 0.005 |
| Rollers                 | 15   | 0.569 | 4.125 | 3.689 | 0.005 |
| Rollers                 | 25   | 0.569 | 4.125 | 3.689 | 0.005 |
| Rollers                 | 50   | 0.569 | 4.125 | 3.689 | 0.005 |
| Rollers                 | 120  | 0.255 | 3.444 | 2.691 | 0.005 |
| Rollers                 | 175  | 0.127 | 2.909 | 1.101 | 0.005 |
| Rollers                 | 250  | 0.173 | 1.215 | 1.783 | 0.005 |
| Rollers                 | 500  | 0.212 | 1.968 | 2.200 | 0.005 |
| Rough Terrain Forklifts | 50   | 0.456 | 3.740 | 3.477 | 0.005 |
| Rough Terrain Forklifts | 120  | 0.137 | 3.240 | 1.821 | 0.005 |
| Rough Terrain Forklifts | 175  | 0.087 | 2.821 | 0.786 | 0.005 |
| Rough Terrain Forklifts | 250  | 0.123 | 1.001 | 1.489 | 0.005 |
| Rough Terrain Forklifts | 500  | 0.069 | 0.942 | 0.477 | 0.005 |
| Rubber Tired Dozers     | 175  | 0.461 | 3.612 | 4.229 | 0.005 |
| Rubber Tired Dozers     | 250  | 0.372 | 1.720 | 3.805 | 0.005 |
| Rubber Tired Dozers     | 500  | 0.367 | 2.959 | 3.370 | 0.005 |
| Rubber Tired Dozers     | 750  | 0.428 | 2.601 | 5.333 | 0.005 |
| Rubber Tired Dozers     | 1000 | 0.414 | 1.725 | 4.365 | 0.005 |
| Rubber Tired Loaders    | 25   | 0.960 | 5.941 | 4.348 | 0.005 |
| Rubber Tired Loaders    | 50   | 0.960 | 5.941 | 4.348 | 0.005 |
| Rubber Tired Loaders    | 120  | 0.352 | 3.791 | 2.970 | 0.005 |
| Rubber Tired Loaders    | 175  | 0.224 | 3.281 | 1.590 | 0.005 |

|       |       |
|-------|-------|
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.150 | 0.004 |
| 0.153 | 0.004 |
| 0.156 | 0.004 |
| 0.155 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.047 | 0.005 |
| 0.025 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.153 | 0.004 |
| 0.173 | 0.005 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.166 | 0.005 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 |
| Sweepers/Scrubbers        | 15   | 0.622 | 4.768 | 3.856 | 0.005 |
| Sweepers/Scrubbers        | 25   | 0.622 | 4.768 | 3.856 | 0.005 |
| Sweepers/Scrubbers        | 50   | 0.622 | 4.768 | 3.856 | 0.005 |
| Sweepers/Scrubbers        | 120  | 0.303 | 3.664 | 2.817 | 0.005 |
| Sweepers/Scrubbers        | 175  | 0.213 | 3.201 | 1.638 | 0.005 |
| Sweepers/Scrubbers        | 250  | 0.170 | 1.140 | 1.616 | 0.005 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 |



|       |       |
|-------|-------|
| 0.166 | 0.005 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.154 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.061 | 0.005 |
| 0.064 | 0.005 |
| 0.054 | 0.005 |
| 0.028 | 0.004 |
| 0.022 | 0.004 |
| 0.018 | 0.004 |
| 0.017 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 |

2027

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|
| PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 0.026   | 0.024   | 472.114 | 0.153   | 0.004   |
| 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.028   | 0.028   | 568.299 | 0.013   | 0.004   |
| 0.183   | 0.183   | 568.300 | 0.061   | 0.005   |
| 0.177   | 0.177   | 568.299 | 0.064   | 0.005   |
| 0.116   | 0.116   | 568.299 | 0.059   | 0.005   |
| 0.104   | 0.104   | 568.299 | 0.031   | 0.004   |
| 0.065   | 0.065   | 568.299 | 0.024   | 0.004   |
| 0.033   | 0.033   | 568.299 | 0.019   | 0.004   |
| 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
| 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
| 0.055   | 0.055   | 568.299 | 0.020   | 0.004   |
| 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 0.067   | 0.062   | 459.829 | 0.149   | 0.004   |
| 0.039   | 0.036   | 478.266 | 0.155   | 0.004   |
| 0.031   | 0.029   | 470.654 | 0.152   | 0.004   |
| 0.028   | 0.026   | 467.289 | 0.151   | 0.004   |
| 0.023   | 0.021   | 481.250 | 0.156   | 0.004   |
| 0.019   | 0.017   | 471.917 | 0.153   | 0.004   |

| 2027             |       | g/hp/hr |
|------------------|-------|---------|
| Equipment        | MaxHP | ROG     |
| Aerial Lifts     | 15    | 0.154   |
| Aerial Lifts     | 25    | 0.154   |
| Aerial Lifts     | 50    | 0.154   |
| Aerial Lifts     | 120   | 0.099   |
| Aerial Lifts     | 500   | 0.085   |
| Aerial Lifts     | 750   | 0.153   |
| Air Compressor s | 15    | 0.683   |
| Air Compressor s | 25    | 0.709   |
| Air Compressor s | 50    | 0.659   |
| Air Compressor s | 120   | 0.345   |
| Air Compressor s | 175   | 0.269   |
| Air Compressor s | 250   | 0.220   |
| Air Compressor s | 500   | 0.217   |
| Air Compressor s | 750   | 0.217   |
| Air Compressor s | 1000  | 0.231   |
| Bore/Drill Rigs  | 15    | 0.591   |
| Bore/Drill Rigs  | 25    | 0.591   |
| Bore/Drill Rigs  | 50    | 0.591   |
| Bore/Drill Rigs  | 120   | 0.155   |
| Bore/Drill Rigs  | 175   | 0.114   |
| Bore/Drill Rigs  | 250   | 0.107   |
| Bore/Drill Rigs  | 500   | 0.102   |
| Bore/Drill Rigs  | 750   | 0.085   |
| Bore/Drill Rigs  | 1000  | 0.062   |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.168 | 0.168 | 568.299 | 0.062 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.099 | 0.099 | 568.299 | 0.047 | 0.005 |
| 0.089 | 0.089 | 568.300 | 0.025 | 0.004 |
| 0.056 | 0.056 | 568.300 | 0.019 | 0.004 |
| 0.543 | 0.499 | 517.872 | 0.168 | 0.005 |
| 0.260 | 0.240 | 469.533 | 0.152 | 0.004 |
| 0.166 | 0.153 | 474.748 | 0.154 | 0.004 |
| 0.114 | 0.105 | 472.980 | 0.153 | 0.004 |
| 0.088 | 0.081 | 471.967 | 0.153 | 0.004 |
| 0.068 | 0.062 | 470.276 | 0.152 | 0.004 |
| 0.065 | 0.060 | 472.055 | 0.153 | 0.004 |
| 0.456 | 0.420 | 516.128 | 0.167 | 0.005 |
| 0.285 | 0.262 | 476.134 | 0.154 | 0.004 |
| 0.150 | 0.138 | 471.592 | 0.153 | 0.004 |
| 0.096 | 0.088 | 471.622 | 0.153 | 0.004 |
| 0.081 | 0.074 | 474.007 | 0.153 | 0.004 |
| 0.057 | 0.052 | 472.408 | 0.153 | 0.004 |
| 0.112 | 0.103 | 475.490 | 0.154 | 0.004 |
| 0.107 | 0.107 | 568.299 | 0.059 | 0.005 |
| 0.095 | 0.095 | 568.299 | 0.031 | 0.004 |
| 0.060 | 0.060 | 568.299 | 0.024 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.020 | 0.004 |
| 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 0.053 | 0.053 | 568.299 | 0.023 | 0.004 |

|                          |      |       |
|--------------------------|------|-------|
| Cement and Mortar Mixers | 15   | 0.661 |
| Cement and Mortar Mixers | 25   | 0.689 |
| Concrete/Industrial Saws | 25   | 0.685 |
| Concrete/Industrial Saws | 50   | 0.525 |
| Concrete/Industrial Saws | 120  | 0.283 |
| Concrete/Industrial Saws | 175  | 0.220 |
| Cranes                   | 50   | 1.811 |
| Cranes                   | 120  | 0.463 |
| Cranes                   | 175  | 0.334 |
| Cranes                   | 250  | 0.265 |
| Cranes                   | 500  | 0.218 |
| Cranes                   | 750  | 0.172 |
| Cranes                   | 9999 | 0.229 |
| Crawler Tractors         | 50   | 1.744 |
| Crawler Tractors         | 120  | 0.454 |
| Crawler Tractors         | 175  | 0.298 |
| Crawler Tractors         | 250  | 0.232 |
| Crawler Tractors         | 500  | 0.208 |
| Crawler Tractors         | 750  | 0.167 |
| Crawler Tractors         | 1000 | 0.260 |
| Crushing/Proc. Equipment | 50   | 0.656 |
| Crushing/Proc. Equipment | 120  | 0.345 |
| Crushing/Proc. Equipment | 175  | 0.270 |
| Crushing/Proc. Equipment | 250  | 0.224 |
| Crushing/Proc. Equipment | 500  | 0.221 |
| Crushing/Proc. Equipment | 750  | 0.222 |
| Crushing/Proc. Equipment | 9999 | 0.261 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 0.085 | 0.078 | 466.738 | 0.151 | 0.004 |
| 0.057 | 0.052 | 472.496 | 0.153 | 0.004 |
| 0.032 | 0.029 | 472.560 | 0.153 | 0.004 |
| 0.026 | 0.024 | 470.292 | 0.152 | 0.004 |
| 0.038 | 0.035 | 468.558 | 0.152 | 0.004 |
| 0.178 | 0.164 | 525.483 | 0.170 | 0.005 |
| 0.140 | 0.128 | 471.529 | 0.153 | 0.004 |
| 0.084 | 0.078 | 472.106 | 0.153 | 0.004 |
| 0.056 | 0.052 | 473.326 | 0.153 | 0.004 |
| 0.062 | 0.057 | 473.615 | 0.153 | 0.004 |
| 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 0.093 | 0.093 | 568.300 | 0.039 | 0.005 |
| 0.087 | 0.087 | 568.299 | 0.021 | 0.004 |
| 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.013 | 0.004 |
| 0.027 | 0.027 | 568.300 | 0.013 | 0.004 |
| 0.027 | 0.027 | 568.299 | 0.013 | 0.004 |
| 0.047 | 0.047 | 568.299 | 0.015 | 0.004 |
| 0.522 | 0.480 | 493.532 | 0.160 | 0.005 |
| 0.371 | 0.342 | 468.316 | 0.152 | 0.004 |
| 0.152 | 0.140 | 478.508 | 0.155 | 0.004 |
| 0.082 | 0.076 | 473.470 | 0.153 | 0.004 |
| 0.088 | 0.081 | 470.753 | 0.152 | 0.004 |
| 0.041 | 0.041 | 568.300 | 0.022 | 0.004 |
| 0.144 | 0.132 | 476.921 | 0.154 | 0.004 |
| 0.065 | 0.060 | 473.302 | 0.153 | 0.004 |
| 0.040 | 0.037 | 470.861 | 0.152 | 0.004 |
| 0.045 | 0.041 | 471.917 | 0.153 | 0.004 |
| 0.070 | 0.064 | 472.055 | 0.153 | 0.004 |
| 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |

|                      |      |       |
|----------------------|------|-------|
| Dumpers/Tractors     | 25   | 0.685 |
| Excavators           | 25   | 0.403 |
| Excavators           | 50   | 0.403 |
| Excavators           | 120  | 0.201 |
| Excavators           | 175  | 0.158 |
| Excavators           | 250  | 0.131 |
| Excavators           | 500  | 0.115 |
| Excavators           | 750  | 0.139 |
| Forklifts            | 50   | 0.636 |
| Forklifts            | 120  | 0.277 |
| Forklifts            | 175  | 0.209 |
| Forklifts            | 250  | 0.191 |
| Forklifts            | 500  | 0.215 |
| Generator Sets       | 15   | 0.607 |
| Generator Sets       | 25   | 0.694 |
| Generator Sets       | 50   | 0.440 |
| Generator Sets       | 120  | 0.243 |
| Generator Sets       | 175  | 0.184 |
| Generator Sets       | 250  | 0.147 |
| Generator Sets       | 500  | 0.144 |
| Generator Sets       | 750  | 0.145 |
| Generator Sets       | 9999 | 0.173 |
| Graders              | 50   | 1.864 |
| Graders              | 120  | 0.638 |
| Graders              | 175  | 0.329 |
| Graders              | 250  | 0.230 |
| Graders              | 500  | 0.280 |
| Graders              | 750  | 0.253 |
| Off-Highway Tractors | 120  | 0.276 |
| Off-Highway Tractors | 175  | 0.175 |
| Off-Highway Tractors | 250  | 0.155 |
| Off-Highway Tractors | 750  | 0.167 |
| Off-Highway Tractors | 1000 | 0.198 |
| Off-Highway Trucks   | 175  | 0.214 |
| Off-Highway Trucks   | 250  | 0.185 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |
| 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 0.203 | 0.187 | 472.748 | 0.153 | 0.004 |
| 0.112 | 0.103 | 469.843 | 0.152 | 0.004 |
| 0.059 | 0.055 | 476.296 | 0.154 | 0.004 |
| 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 0.118 | 0.109 | 470.000 | 0.152 | 0.004 |
| 0.070 | 0.065 | 471.850 | 0.153 | 0.004 |
| 0.036 | 0.033 | 473.223 | 0.153 | 0.004 |
| 0.035 | 0.033 | 472.929 | 0.153 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Off-Highway Trucks                 | 500  | 0.177 |
| Off-Highway Trucks                 | 750  | 0.235 |
| Off-Highway Trucks                 | 1000 | 0.187 |
| Other Construction Equipment       | 15   | 0.757 |
| Other Construction Equipment       | 25   | 0.757 |
| Other Construction Equipment       | 50   | 0.757 |
| Other Construction Equipment       | 120  | 0.341 |
| Other Construction Equipment       | 175  | 0.235 |
| Other Construction Equipment       | 500  | 0.168 |
| Other General Industrial Equipment | 15   | 0.492 |
| Other General Industrial Equipment | 25   | 0.492 |
| Other General Industrial Equipment | 50   | 0.492 |
| Other General Industrial Equipment | 120  | 0.258 |
| Other General Industrial Equipment | 175  | 0.189 |
| Other General Industrial Equipment | 250  | 0.155 |
| Other General Industrial Equipment | 500  | 0.152 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 0.081 | 0.074 | 472.055 | 0.153 | 0.004 |
| 0.239 | 0.219 | 523.709 | 0.169 | 0.005 |
| 0.081 | 0.074 | 473.588 | 0.153 | 0.004 |
| 0.072 | 0.067 | 472.219 | 0.153 | 0.004 |
| 0.060 | 0.055 | 471.482 | 0.153 | 0.004 |
| 0.067 | 0.061 | 470.297 | 0.152 | 0.004 |
| 0.019 | 0.017 | 472.055 | 0.153 | 0.004 |
| 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 0.191 | 0.175 | 469.899 | 0.152 | 0.004 |
| 0.077 | 0.071 | 472.485 | 0.153 | 0.004 |
| 0.034 | 0.031 | 473.483 | 0.153 | 0.004 |
| 0.039 | 0.036 | 465.882 | 0.151 | 0.004 |
| 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 0.118 | 0.108 | 473.424 | 0.153 | 0.004 |
| 0.075 | 0.069 | 470.484 | 0.152 | 0.004 |
| 0.043 | 0.040 | 472.234 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 0.075 | 0.075 | 568.299 | 0.027 | 0.005 |
| 0.072 | 0.072 | 568.299 | 0.017 | 0.004 |
| 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Other General Industrial Equipment | 750  | 0.117 |
| Other General Industrial Equipment | 1000 | 0.203 |
| Other Material Handling Equipment  | 50   | 0.744 |
| Other Material Handling Equipment  | 120  | 0.203 |
| Other Material Handling Equipment  | 175  | 0.189 |
| Other Material Handling Equipment  | 250  | 0.200 |
| Other Material Handling Equipment  | 500  | 0.204 |
| Other Material Handling Equipment  | 9999 | 0.065 |
| Pavers                             | 25   | 0.918 |
| Pavers                             | 50   | 0.918 |
| Pavers                             | 120  | 0.314 |
| Pavers                             | 175  | 0.181 |
| Pavers                             | 250  | 0.107 |
| Pavers                             | 500  | 0.115 |
| Paving Equipment                   | 25   | 0.476 |
| Paving Equipment                   | 50   | 0.476 |
| Paving Equipment                   | 120  | 0.242 |
| Paving Equipment                   | 175  | 0.175 |
| Paving Equipment                   | 250  | 0.133 |
| Plate Compactors                   | 15   | 0.661 |
| Pressure Washers                   | 15   | 0.607 |
| Pressure Washers                   | 25   | 0.694 |
| Pressure Washers                   | 50   | 0.306 |
| Pressure Washers                   | 120  | 0.189 |
| Pressure Washers                   | 175  | 0.178 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.183 | 0.183 | 568.299 | 0.061 | 0.005 |
| 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 0.099 | 0.099 | 568.299 | 0.043 | 0.005 |
| 0.092 | 0.092 | 568.299 | 0.023 | 0.004 |
| 0.056 | 0.056 | 568.300 | 0.018 | 0.004 |
| 0.029 | 0.029 | 568.299 | 0.014 | 0.004 |
| 0.028 | 0.028 | 568.300 | 0.014 | 0.004 |
| 0.029 | 0.029 | 568.300 | 0.014 | 0.004 |
| 0.049 | 0.049 | 568.299 | 0.016 | 0.004 |
| 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 0.135 | 0.125 | 473.851 | 0.153 | 0.004 |
| 0.049 | 0.046 | 471.970 | 0.153 | 0.004 |
| 0.066 | 0.060 | 473.681 | 0.153 | 0.004 |
| 0.091 | 0.083 | 477.573 | 0.155 | 0.004 |
| 0.128 | 0.118 | 525.027 | 0.170 | 0.005 |
| 0.051 | 0.047 | 473.037 | 0.153 | 0.004 |
| 0.030 | 0.028 | 471.475 | 0.153 | 0.004 |
| 0.035 | 0.033 | 472.927 | 0.153 | 0.004 |
| 0.009 | 0.008 | 466.541 | 0.151 | 0.004 |
| 0.231 | 0.212 | 474.103 | 0.153 | 0.004 |
| 0.167 | 0.153 | 474.573 | 0.154 | 0.004 |
| 0.151 | 0.139 | 479.092 | 0.155 | 0.004 |
| 0.196 | 0.181 | 472.998 | 0.153 | 0.004 |
| 0.115 | 0.115 | 568.299 | 0.037 | 0.004 |
| 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 0.179 | 0.165 | 466.898 | 0.151 | 0.004 |
| 0.084 | 0.077 | 470.459 | 0.152 | 0.004 |

|                         |      |       |
|-------------------------|------|-------|
| Pressure Washers        | 250  | 0.098 |
| Pumps                   | 15   | 0.683 |
| Pumps                   | 25   | 0.709 |
| Pumps                   | 50   | 0.485 |
| Pumps                   | 120  | 0.261 |
| Pumps                   | 175  | 0.199 |
| Pumps                   | 250  | 0.159 |
| Pumps                   | 500  | 0.156 |
| Pumps                   | 750  | 0.157 |
| Pumps                   | 9999 | 0.186 |
| Rollers                 | 15   | 0.569 |
| Rollers                 | 25   | 0.569 |
| Rollers                 | 50   | 0.569 |
| Rollers                 | 120  | 0.255 |
| Rollers                 | 175  | 0.127 |
| Rollers                 | 250  | 0.173 |
| Rollers                 | 500  | 0.212 |
| Rough Terrain Forklifts | 50   | 0.456 |
| Rough Terrain Forklifts | 120  | 0.137 |
| Rough Terrain Forklifts | 175  | 0.087 |
| Rough Terrain Forklifts | 250  | 0.123 |
| Rough Terrain Forklifts | 500  | 0.069 |
| Rubber Tired Dozers     | 175  | 0.461 |
| Rubber Tired Dozers     | 250  | 0.372 |
| Rubber Tired Dozers     | 500  | 0.367 |
| Rubber Tired Dozers     | 750  | 0.428 |
| Rubber Tired Dozers     | 1000 | 0.414 |
| Rubber Tired Loaders    | 25   | 0.960 |
| Rubber Tired Loaders    | 50   | 0.960 |
| Rubber Tired Loaders    | 120  | 0.352 |
| Rubber Tired Loaders    | 175  | 0.224 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.048 | 0.045 | 469.871 | 0.152 | 0.004 |
| 0.053 | 0.048 | 469.143 | 0.152 | 0.004 |
| 0.064 | 0.059 | 465.052 | 0.150 | 0.004 |
| 0.052 | 0.048 | 472.456 | 0.153 | 0.004 |
| 0.405 | 0.372 | 482.363 | 0.156 | 0.004 |
| 0.137 | 0.126 | 478.948 | 0.155 | 0.004 |
| 0.125 | 0.115 | 469.446 | 0.152 | 0.004 |
| 0.081 | 0.074 | 472.539 | 0.153 | 0.004 |
| 0.064 | 0.059 | 472.115 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.098 | 0.098 | 568.299 | 0.047 | 0.005 |
| 0.089 | 0.089 | 568.299 | 0.025 | 0.004 |
| 0.055 | 0.055 | 568.299 | 0.019 | 0.004 |
| 0.035 | 0.035 | 686.695 | 0.019 | 0.004 |
| 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 0.057 | 0.052 | 472.630 | 0.153 | 0.004 |
| 0.082 | 0.075 | 536.140 | 0.173 | 0.005 |
| 0.124 | 0.114 | 476.766 | 0.154 | 0.004 |
| 0.094 | 0.087 | 471.040 | 0.152 | 0.004 |
| 0.055 | 0.051 | 477.110 | 0.154 | 0.004 |
| 0.051 | 0.047 | 470.283 | 0.152 | 0.004 |
| 0.027 | 0.025 | 470.551 | 0.152 | 0.004 |
| 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 0.160 | 0.147 | 474.116 | 0.153 | 0.004 |
| 0.072 | 0.066 | 473.122 | 0.153 | 0.004 |
| 0.051 | 0.047 | 470.126 | 0.152 | 0.004 |
| 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |

|                           |      |       |
|---------------------------|------|-------|
| Rubber Tired Loaders      | 250  | 0.177 |
| Rubber Tired Loaders      | 500  | 0.193 |
| Rubber Tired Loaders      | 750  | 0.212 |
| Rubber Tired Loaders      | 1000 | 0.166 |
| Scrapers                  | 120  | 0.566 |
| Scrapers                  | 175  | 0.290 |
| Scrapers                  | 250  | 0.291 |
| Scrapers                  | 500  | 0.216 |
| Scrapers                  | 750  | 0.184 |
| Signal Boards             | 15   | 0.661 |
| Signal Boards             | 50   | 0.522 |
| Signal Boards             | 120  | 0.278 |
| Signal Boards             | 175  | 0.215 |
| Signal Boards             | 250  | 0.213 |
| Skid Steer Loaders        | 25   | 0.341 |
| Skid Steer Loaders        | 50   | 0.341 |
| Skid Steer Loaders        | 120  | 0.140 |
| Surfacing Equipment       | 50   | 0.235 |
| Surfacing Equipment       | 120  | 0.232 |
| Surfacing Equipment       | 175  | 0.187 |
| Surfacing Equipment       | 250  | 0.148 |
| Surfacing Equipment       | 500  | 0.128 |
| Surfacing Equipment       | 750  | 0.085 |
| Sweepers/Scrubbers        | 15   | 0.622 |
| Sweepers/Scrubbers        | 25   | 0.622 |
| Sweepers/Scrubbers        | 50   | 0.622 |
| Sweepers/Scrubbers        | 120  | 0.303 |
| Sweepers/Scrubbers        | 175  | 0.213 |
| Sweepers/Scrubbers        | 250  | 0.170 |
| Tractors/Loaders/Backhoes | 25   | 0.550 |



|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |
| 0.086 | 0.079 | 477.188 | 0.154 | 0.004 |
| 0.059 | 0.054 | 469.329 | 0.152 | 0.004 |
| 0.047 | 0.044 | 470.598 | 0.152 | 0.004 |
| 0.039 | 0.036 | 470.910 | 0.152 | 0.004 |
| 0.067 | 0.062 | 466.452 | 0.151 | 0.004 |
| 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 0.285 | 0.262 | 475.901 | 0.154 | 0.004 |
| 0.179 | 0.165 | 467.732 | 0.151 | 0.004 |
| 0.144 | 0.133 | 473.917 | 0.153 | 0.004 |
| 0.079 | 0.072 | 470.439 | 0.152 | 0.004 |
| 0.009 | 0.009 | 474.486 | 0.154 | 0.004 |
| 0.183 | 0.183 | 568.300 | 0.061 | 0.005 |
| 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 0.112 | 0.112 | 568.299 | 0.054 | 0.005 |
| 0.102 | 0.102 | 568.299 | 0.028 | 0.004 |
| 0.063 | 0.063 | 568.299 | 0.022 | 0.004 |
| 0.032 | 0.032 | 568.299 | 0.018 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.017 | 0.004 |
| 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |
| 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |

|                           |      |       |
|---------------------------|------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 |
| Tractors/Loaders/Backhoes | 120  | 0.209 |
| Tractors/Loaders/Backhoes | 175  | 0.162 |
| Tractors/Loaders/Backhoes | 250  | 0.154 |
| Tractors/Loaders/Backhoes | 500  | 0.144 |
| Tractors/Loaders/Backhoes | 750  | 0.187 |
| Trenchers                 | 15   | 0.542 |
| Trenchers                 | 25   | 0.542 |
| Trenchers                 | 50   | 0.542 |
| Trenchers                 | 120  | 0.457 |
| Trenchers                 | 175  | 0.358 |
| Trenchers                 | 250  | 0.307 |
| Trenchers                 | 500  | 0.191 |
| Trenchers                 | 750  | 0.067 |
| Welders                   | 15   | 0.683 |
| Welders                   | 25   | 0.709 |
| Welders                   | 50   | 0.602 |
| Welders                   | 120  | 0.316 |
| Welders                   | 175  | 0.245 |
| Welders                   | 250  | 0.199 |
| Welders                   | 500  | 0.196 |
| Water Trucks              | 175  | 0.214 |
| Water Trucks              | 250  | 0.185 |
| Water Trucks              | 500  | 0.177 |
| Water Trucks              | 750  | 0.235 |
| Water Trucks              | 1000 | 0.187 |

2028

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|
| CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 3.167   | 1.511   | 0.005   | 0.026   | 0.024   | 472.114 | 0.153   | 0.004   |
| 0.970   | 0.649   | 0.005   | 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.989   | 0.974   | 0.005   | 0.028   | 0.028   | 568.299 | 0.013   | 0.004   |
| 3.491   | 4.278   | 0.008   | 0.183   | 0.183   | 568.300 | 0.061   | 0.005   |
| 2.376   | 4.407   | 0.007   | 0.177   | 0.177   | 568.299 | 0.064   | 0.005   |
| 4.851   | 3.755   | 0.007   | 0.116   | 0.116   | 568.299 | 0.059   | 0.005   |
| 3.653   | 2.313   | 0.006   | 0.104   | 0.104   | 568.299 | 0.031   | 0.004   |
| 3.205   | 1.383   | 0.006   | 0.065   | 0.065   | 568.299 | 0.024   | 0.004   |
| 1.094   | 1.086   | 0.006   | 0.033   | 0.033   | 568.299 | 0.019   | 0.004   |
| 1.051   | 1.001   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
| 1.051   | 1.021   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
| 1.079   | 2.954   | 0.005   | 0.055   | 0.055   | 568.299 | 0.020   | 0.004   |
| 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 3.218   | 1.964   | 0.005   | 0.067   | 0.062   | 459.829 | 0.149   | 0.004   |
| 2.974   | 0.888   | 0.005   | 0.039   | 0.036   | 478.266 | 0.155   | 0.004   |
| 1.045   | 0.957   | 0.005   | 0.031   | 0.029   | 470.654 | 0.152   | 0.004   |
| 0.997   | 0.823   | 0.005   | 0.028   | 0.026   | 467.289 | 0.151   | 0.004   |
| 0.983   | 0.596   | 0.005   | 0.023   | 0.021   | 481.250 | 0.156   | 0.004   |
| 0.953   | 2.289   | 0.005   | 0.019   | 0.017   | 471.917 | 0.153   | 0.004   |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.344 | 4.357 | 0.007 | 0.168 | 0.168 | 568.299 | 0.062 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.297 | 3.592 | 0.007 | 0.099 | 0.099 | 568.299 | 0.047 | 0.005 |
| 3.495 | 2.176 | 0.006 | 0.089 | 0.089 | 568.300 | 0.025 | 0.004 |
| 3.073 | 1.249 | 0.006 | 0.056 | 0.056 | 568.300 | 0.019 | 0.004 |
| 7.072 | 5.636 | 0.005 | 0.543 | 0.499 | 517.872 | 0.168 | 0.005 |
| 3.831 | 4.135 | 0.005 | 0.260 | 0.240 | 469.533 | 0.152 | 0.004 |
| 3.335 | 3.160 | 0.005 | 0.166 | 0.153 | 474.748 | 0.154 | 0.004 |
| 1.470 | 2.681 | 0.005 | 0.114 | 0.105 | 472.980 | 0.153 | 0.004 |
| 1.834 | 2.154 | 0.005 | 0.088 | 0.081 | 471.967 | 0.153 | 0.004 |
| 1.274 | 1.638 | 0.005 | 0.068 | 0.062 | 470.276 | 0.152 | 0.004 |
| 1.038 | 2.422 | 0.005 | 0.065 | 0.060 | 472.055 | 0.153 | 0.004 |
| 6.686 | 4.936 | 0.005 | 0.456 | 0.420 | 516.128 | 0.167 | 0.005 |
| 3.788 | 3.961 | 0.005 | 0.285 | 0.262 | 476.134 | 0.154 | 0.004 |
| 3.209 | 2.688 | 0.005 | 0.150 | 0.138 | 471.592 | 0.153 | 0.004 |
| 1.308 | 2.462 | 0.005 | 0.096 | 0.088 | 471.622 | 0.153 | 0.004 |
| 1.717 | 1.920 | 0.005 | 0.081 | 0.074 | 474.007 | 0.153 | 0.004 |
| 1.122 | 1.545 | 0.005 | 0.057 | 0.052 | 472.408 | 0.153 | 0.004 |
| 1.593 | 4.598 | 0.005 | 0.112 | 0.103 | 475.490 | 0.154 | 0.004 |
| 4.982 | 3.742 | 0.007 | 0.107 | 0.107 | 568.299 | 0.059 | 0.005 |
| 3.694 | 2.248 | 0.006 | 0.095 | 0.095 | 568.299 | 0.031 | 0.004 |
| 3.246 | 1.301 | 0.006 | 0.060 | 0.060 | 568.299 | 0.024 | 0.004 |
| 1.108 | 1.012 | 0.006 | 0.031 | 0.031 | 568.299 | 0.020 | 0.004 |
| 1.061 | 0.937 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 1.061 | 0.955 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 1.087 | 2.910 | 0.005 | 0.053 | 0.053 | 568.299 | 0.023 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 3.439 | 2.082 | 0.005 | 0.085 | 0.078 | 466.738 | 0.151 | 0.004 |
| 3.078 | 1.154 | 0.005 | 0.057 | 0.052 | 472.496 | 0.153 | 0.004 |
| 1.081 | 0.962 | 0.005 | 0.032 | 0.029 | 472.560 | 0.153 | 0.004 |
| 1.051 | 0.726 | 0.005 | 0.026 | 0.024 | 470.292 | 0.152 | 0.004 |
| 1.135 | 1.026 | 0.005 | 0.038 | 0.035 | 468.558 | 0.152 | 0.004 |
| 5.029 | 3.932 | 0.005 | 0.178 | 0.164 | 525.483 | 0.170 | 0.005 |
| 3.611 | 2.607 | 0.005 | 0.140 | 0.128 | 471.529 | 0.153 | 0.004 |
| 3.170 | 1.653 | 0.005 | 0.084 | 0.078 | 472.106 | 0.153 | 0.004 |
| 1.214 | 1.466 | 0.005 | 0.056 | 0.052 | 473.326 | 0.153 | 0.004 |
| 1.222 | 1.658 | 0.005 | 0.062 | 0.057 | 473.615 | 0.153 | 0.004 |
| 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 3.758 | 3.481 | 0.007 | 0.093 | 0.093 | 568.300 | 0.039 | 0.005 |
| 3.338 | 2.185 | 0.006 | 0.087 | 0.087 | 568.299 | 0.021 | 0.004 |
| 2.930 | 1.297 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |
| 1.000 | 1.020 | 0.006 | 0.028 | 0.028 | 568.299 | 0.013 | 0.004 |
| 0.981 | 0.945 | 0.005 | 0.027 | 0.027 | 568.300 | 0.013 | 0.004 |
| 0.981 | 0.964 | 0.005 | 0.027 | 0.027 | 568.299 | 0.013 | 0.004 |
| 1.008 | 2.812 | 0.005 | 0.047 | 0.047 | 568.299 | 0.015 | 0.004 |
| 7.125 | 5.043 | 0.005 | 0.522 | 0.480 | 493.532 | 0.160 | 0.005 |
| 4.149 | 5.074 | 0.005 | 0.371 | 0.342 | 468.316 | 0.152 | 0.004 |
| 3.418 | 2.774 | 0.005 | 0.152 | 0.140 | 478.508 | 0.155 | 0.004 |
| 1.179 | 2.556 | 0.005 | 0.082 | 0.076 | 473.470 | 0.153 | 0.004 |
| 1.315 | 2.265 | 0.005 | 0.088 | 0.081 | 470.753 | 0.152 | 0.004 |
| 1.141 | 1.125 | 0.005 | 0.041 | 0.041 | 568.300 | 0.022 | 0.004 |
| 3.669 | 2.707 | 0.005 | 0.144 | 0.132 | 476.921 | 0.154 | 0.004 |
| 3.142 | 1.349 | 0.005 | 0.065 | 0.060 | 473.302 | 0.153 | 0.004 |
| 1.130 | 1.116 | 0.005 | 0.040 | 0.037 | 470.861 | 0.152 | 0.004 |
| 1.135 | 1.118 | 0.005 | 0.045 | 0.041 | 471.917 | 0.153 | 0.004 |
| 1.077 | 2.482 | 0.005 | 0.070 | 0.064 | 472.055 | 0.153 | 0.004 |
| 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |
| 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 3.584 | 3.252 | 0.005 | 0.203 | 0.187 | 472.748 | 0.153 | 0.004 |
| 3.136 | 2.167 | 0.005 | 0.112 | 0.103 | 469.843 | 0.152 | 0.004 |
| 1.358 | 1.552 | 0.005 | 0.059 | 0.055 | 476.296 | 0.154 | 0.004 |
| 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 3.612 | 2.439 | 0.005 | 0.118 | 0.109 | 470.000 | 0.152 | 0.004 |
| 3.204 | 1.364 | 0.005 | 0.070 | 0.065 | 471.850 | 0.153 | 0.004 |
| 1.132 | 1.028 | 0.005 | 0.036 | 0.033 | 473.223 | 0.153 | 0.004 |
| 1.109 | 1.053 | 0.005 | 0.035 | 0.033 | 472.929 | 0.153 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.115 | 0.629 | 0.005 | 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 1.067 | 3.985 | 0.005 | 0.081 | 0.074 | 472.055 | 0.153 | 0.004 |
| 5.248 | 4.233 | 0.005 | 0.239 | 0.219 | 523.709 | 0.169 | 0.005 |
| 3.497 | 2.055 | 0.005 | 0.081 | 0.074 | 473.588 | 0.153 | 0.004 |
| 3.168 | 1.396 | 0.005 | 0.072 | 0.067 | 472.219 | 0.153 | 0.004 |
| 1.197 | 1.774 | 0.005 | 0.060 | 0.055 | 471.482 | 0.153 | 0.004 |
| 1.260 | 1.601 | 0.005 | 0.067 | 0.061 | 470.297 | 0.152 | 0.004 |
| 0.959 | 2.298 | 0.005 | 0.019 | 0.017 | 472.055 | 0.153 | 0.004 |
| 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 3.493 | 3.068 | 0.005 | 0.191 | 0.175 | 469.899 | 0.152 | 0.004 |
| 3.007 | 1.644 | 0.005 | 0.077 | 0.071 | 472.485 | 0.153 | 0.004 |
| 1.004 | 1.035 | 0.005 | 0.034 | 0.031 | 473.483 | 0.153 | 0.004 |
| 0.969 | 1.134 | 0.005 | 0.039 | 0.036 | 465.882 | 0.151 | 0.004 |
| 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 3.483 | 2.496 | 0.005 | 0.118 | 0.108 | 473.424 | 0.153 | 0.004 |
| 3.038 | 1.509 | 0.005 | 0.075 | 0.069 | 470.484 | 0.152 | 0.004 |
| 1.117 | 1.110 | 0.005 | 0.043 | 0.040 | 472.234 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 3.210 | 3.344 | 0.007 | 0.075 | 0.075 | 568.299 | 0.027 | 0.005 |
| 3.186 | 2.100 | 0.006 | 0.072 | 0.072 | 568.299 | 0.017 | 0.004 |
| 2.907 | 1.310 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.299 | 0.061 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 3.943 | 3.528 | 0.007 | 0.099 | 0.099 | 568.299 | 0.043 | 0.005 |
| 3.389 | 2.213 | 0.006 | 0.092 | 0.092 | 568.299 | 0.023 | 0.004 |
| 2.974 | 1.318 | 0.006 | 0.056 | 0.056 | 568.300 | 0.018 | 0.004 |
| 1.016 | 1.038 | 0.006 | 0.029 | 0.029 | 568.299 | 0.014 | 0.004 |
| 0.992 | 0.958 | 0.005 | 0.028 | 0.028 | 568.300 | 0.014 | 0.004 |
| 0.992 | 0.977 | 0.005 | 0.029 | 0.029 | 568.300 | 0.014 | 0.004 |
| 1.020 | 2.840 | 0.005 | 0.049 | 0.049 | 568.299 | 0.016 | 0.004 |
| 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 3.444 | 2.691 | 0.005 | 0.135 | 0.125 | 473.851 | 0.153 | 0.004 |
| 2.909 | 1.101 | 0.005 | 0.049 | 0.046 | 471.970 | 0.153 | 0.004 |
| 1.215 | 1.783 | 0.005 | 0.066 | 0.060 | 473.681 | 0.153 | 0.004 |
| 1.968 | 2.200 | 0.005 | 0.091 | 0.083 | 477.573 | 0.155 | 0.004 |
| 3.740 | 3.477 | 0.005 | 0.128 | 0.118 | 525.027 | 0.170 | 0.005 |
| 3.240 | 1.821 | 0.005 | 0.051 | 0.047 | 473.037 | 0.153 | 0.004 |
| 2.821 | 0.786 | 0.005 | 0.030 | 0.028 | 471.475 | 0.153 | 0.004 |
| 1.001 | 1.489 | 0.005 | 0.035 | 0.033 | 472.927 | 0.153 | 0.004 |
| 0.942 | 0.477 | 0.005 | 0.009 | 0.008 | 466.541 | 0.151 | 0.004 |
| 3.612 | 4.229 | 0.005 | 0.231 | 0.212 | 474.103 | 0.153 | 0.004 |
| 1.720 | 3.805 | 0.005 | 0.167 | 0.153 | 474.573 | 0.154 | 0.004 |
| 2.959 | 3.370 | 0.005 | 0.151 | 0.139 | 479.092 | 0.155 | 0.004 |
| 2.601 | 5.333 | 0.005 | 0.196 | 0.181 | 472.998 | 0.153 | 0.004 |
| 1.725 | 4.365 | 0.005 | 0.115 | 0.115 | 568.299 | 0.037 | 0.004 |
| 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 3.791 | 2.970 | 0.005 | 0.179 | 0.165 | 466.898 | 0.151 | 0.004 |
| 3.281 | 1.590 | 0.005 | 0.084 | 0.077 | 470.459 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.142 | 1.442 | 0.005 | 0.048 | 0.045 | 469.871 | 0.152 | 0.004 |
| 1.276 | 1.433 | 0.005 | 0.053 | 0.048 | 469.143 | 0.152 | 0.004 |
| 1.333 | 1.654 | 0.005 | 0.064 | 0.059 | 465.052 | 0.150 | 0.004 |
| 1.122 | 3.089 | 0.005 | 0.052 | 0.048 | 472.456 | 0.153 | 0.004 |
| 4.094 | 5.503 | 0.005 | 0.405 | 0.372 | 482.363 | 0.156 | 0.004 |
| 3.321 | 2.631 | 0.005 | 0.137 | 0.126 | 478.948 | 0.155 | 0.004 |
| 1.602 | 2.803 | 0.005 | 0.125 | 0.115 | 469.446 | 0.152 | 0.004 |
| 1.732 | 2.051 | 0.005 | 0.081 | 0.074 | 472.539 | 0.153 | 0.004 |
| 1.338 | 1.713 | 0.005 | 0.064 | 0.059 | 472.115 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.217 | 3.561 | 0.007 | 0.098 | 0.098 | 568.299 | 0.047 | 0.005 |
| 3.470 | 2.179 | 0.006 | 0.089 | 0.089 | 568.299 | 0.025 | 0.004 |
| 3.049 | 1.262 | 0.006 | 0.055 | 0.055 | 568.299 | 0.019 | 0.004 |
| 1.257 | 1.192 | 0.007 | 0.035 | 0.035 | 686.695 | 0.019 | 0.004 |
| 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 3.252 | 1.867 | 0.005 | 0.057 | 0.052 | 472.630 | 0.153 | 0.004 |
| 3.537 | 3.576 | 0.006 | 0.082 | 0.075 | 536.140 | 0.173 | 0.005 |
| 3.385 | 2.659 | 0.005 | 0.124 | 0.114 | 476.766 | 0.154 | 0.004 |
| 2.926 | 1.999 | 0.005 | 0.094 | 0.087 | 471.040 | 0.152 | 0.004 |
| 1.143 | 1.747 | 0.005 | 0.055 | 0.051 | 477.110 | 0.154 | 0.004 |
| 1.169 | 1.327 | 0.005 | 0.051 | 0.047 | 470.283 | 0.152 | 0.004 |
| 0.978 | 0.768 | 0.005 | 0.027 | 0.025 | 470.551 | 0.152 | 0.004 |
| 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 3.664 | 2.817 | 0.005 | 0.160 | 0.147 | 474.116 | 0.153 | 0.004 |
| 3.201 | 1.638 | 0.005 | 0.072 | 0.066 | 473.122 | 0.153 | 0.004 |
| 1.140 | 1.616 | 0.005 | 0.051 | 0.047 | 470.126 | 0.152 | 0.004 |
| 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |



|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |
| 3.522 | 2.109 | 0.005 | 0.086 | 0.079 | 477.188 | 0.154 | 0.004 |
| 3.083 | 1.180 | 0.005 | 0.059 | 0.054 | 469.329 | 0.152 | 0.004 |
| 1.146 | 1.235 | 0.005 | 0.047 | 0.044 | 470.598 | 0.152 | 0.004 |
| 1.234 | 1.046 | 0.005 | 0.039 | 0.036 | 470.910 | 0.152 | 0.004 |
| 1.261 | 1.649 | 0.005 | 0.067 | 0.062 | 466.452 | 0.151 | 0.004 |
| 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 3.734 | 4.279 | 0.005 | 0.285 | 0.262 | 475.901 | 0.154 | 0.004 |
| 3.309 | 3.549 | 0.005 | 0.179 | 0.165 | 467.732 | 0.151 | 0.004 |
| 1.601 | 3.315 | 0.005 | 0.144 | 0.133 | 473.917 | 0.153 | 0.004 |
| 1.676 | 1.826 | 0.005 | 0.079 | 0.072 | 470.439 | 0.152 | 0.004 |
| 0.962 | 0.305 | 0.005 | 0.009 | 0.009 | 474.486 | 0.154 | 0.004 |
| 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.300 | 0.061 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 4.524 | 3.676 | 0.007 | 0.112 | 0.112 | 568.299 | 0.054 | 0.005 |
| 3.557 | 2.283 | 0.006 | 0.102 | 0.102 | 568.299 | 0.028 | 0.004 |
| 3.121 | 1.365 | 0.006 | 0.063 | 0.063 | 568.299 | 0.022 | 0.004 |
| 1.065 | 1.075 | 0.006 | 0.032 | 0.032 | 568.299 | 0.018 | 0.004 |
| 1.029 | 0.990 | 0.005 | 0.031 | 0.031 | 568.299 | 0.017 | 0.004 |
| 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |
| 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |

| 2028                |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| Equipment           | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     |
| Aerial Lifts        | 15    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   |
| Aerial Lifts        | 25    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   |
| Aerial Lifts        | 50    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   |
| Aerial Lifts        | 120   | 0.099   | 3.167   | 1.511   | 0.005   | 0.026   | 0.024   | 472.114 | 0.153   |
| Aerial Lifts        | 500   | 0.085   | 0.970   | 0.649   | 0.005   | 0.009   | 0.009   | 472.055 | 0.153   |
| Aerial Lifts        | 750   | 0.153   | 0.989   | 0.974   | 0.005   | 0.028   | 0.028   | 568.299 | 0.013   |
| Air Compressor<br>s | 15    | 0.683   | 3.491   | 4.278   | 0.008   | 0.183   | 0.183   | 568.300 | 0.061   |
| Air Compressor<br>s | 25    | 0.709   | 2.376   | 4.407   | 0.007   | 0.177   | 0.177   | 568.299 | 0.064   |
| Air Compressor<br>s | 50    | 0.659   | 4.851   | 3.755   | 0.007   | 0.116   | 0.116   | 568.299 | 0.059   |
| Air Compressor<br>s | 120   | 0.345   | 3.653   | 2.313   | 0.006   | 0.104   | 0.104   | 568.299 | 0.031   |
| Air Compressor<br>s | 175   | 0.269   | 3.205   | 1.383   | 0.006   | 0.065   | 0.065   | 568.299 | 0.024   |
| Air Compressor<br>s | 250   | 0.220   | 1.094   | 1.086   | 0.006   | 0.033   | 0.033   | 568.299 | 0.019   |
| Air Compressor<br>s | 500   | 0.217   | 1.051   | 1.001   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   |
| Air Compressor<br>s | 750   | 0.217   | 1.051   | 1.021   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   |
| Air Compressor<br>s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   | 0.055   | 0.055   | 568.299 | 0.020   |
| Bore/Drill<br>Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   |
| Bore/Drill<br>Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   |
| Bore/Drill<br>Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   |
| Bore/Drill<br>Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   | 0.067   | 0.062   | 459.829 | 0.149   |
| Bore/Drill<br>Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   | 0.039   | 0.036   | 478.266 | 0.155   |
| Bore/Drill<br>Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   | 0.031   | 0.029   | 470.654 | 0.152   |
| Bore/Drill<br>Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   | 0.028   | 0.026   | 467.289 | 0.151   |
| Bore/Drill<br>Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   | 0.023   | 0.021   | 481.250 | 0.156   |
| Bore/Drill<br>Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   | 0.019   | 0.017   | 471.917 | 0.153   |

|                          |      |       |       |       |       |       |       |         |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 | 0.168 | 0.168 | 568.299 | 0.062 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 | 0.099 | 0.099 | 568.299 | 0.047 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 | 0.089 | 0.089 | 568.300 | 0.025 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 | 0.056 | 0.056 | 568.300 | 0.019 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 | 0.543 | 0.499 | 517.872 | 0.168 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 | 0.260 | 0.240 | 469.533 | 0.152 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 | 0.166 | 0.153 | 474.748 | 0.154 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 | 0.114 | 0.105 | 472.980 | 0.153 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 | 0.088 | 0.081 | 471.967 | 0.153 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 | 0.068 | 0.062 | 470.276 | 0.152 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 | 0.065 | 0.060 | 472.055 | 0.153 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 | 0.456 | 0.420 | 516.128 | 0.167 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 | 0.285 | 0.262 | 476.134 | 0.154 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 | 0.150 | 0.138 | 471.592 | 0.153 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 | 0.096 | 0.088 | 471.622 | 0.153 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 | 0.081 | 0.074 | 474.007 | 0.153 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 | 0.057 | 0.052 | 472.408 | 0.153 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 | 0.112 | 0.103 | 475.490 | 0.154 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 | 0.107 | 0.107 | 568.299 | 0.059 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 | 0.095 | 0.095 | 568.299 | 0.031 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 | 0.060 | 0.060 | 568.299 | 0.024 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 | 0.031 | 0.031 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 | 0.053 | 0.053 | 568.299 | 0.023 |

|                      |      |       |       |       |       |       |       |         |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Excavators           | 25   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 |
| Excavators           | 50   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 |
| Excavators           | 120  | 0.201 | 3.439 | 2.082 | 0.005 | 0.085 | 0.078 | 466.738 | 0.151 |
| Excavators           | 175  | 0.158 | 3.078 | 1.154 | 0.005 | 0.057 | 0.052 | 472.496 | 0.153 |
| Excavators           | 250  | 0.131 | 1.081 | 0.962 | 0.005 | 0.032 | 0.029 | 472.560 | 0.153 |
| Excavators           | 500  | 0.115 | 1.051 | 0.726 | 0.005 | 0.026 | 0.024 | 470.292 | 0.152 |
| Excavators           | 750  | 0.139 | 1.135 | 1.026 | 0.005 | 0.038 | 0.035 | 468.558 | 0.152 |
| Forklifts            | 50   | 0.636 | 5.029 | 3.932 | 0.005 | 0.178 | 0.164 | 525.483 | 0.170 |
| Forklifts            | 120  | 0.277 | 3.611 | 2.607 | 0.005 | 0.140 | 0.128 | 471.529 | 0.153 |
| Forklifts            | 175  | 0.209 | 3.170 | 1.653 | 0.005 | 0.084 | 0.078 | 472.106 | 0.153 |
| Forklifts            | 250  | 0.191 | 1.214 | 1.466 | 0.005 | 0.056 | 0.052 | 473.326 | 0.153 |
| Forklifts            | 500  | 0.215 | 1.222 | 1.658 | 0.005 | 0.062 | 0.057 | 473.615 | 0.153 |
| Generator Sets       | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 |
| Generator Sets       | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 |
| Generator Sets       | 50   | 0.440 | 3.758 | 3.481 | 0.007 | 0.093 | 0.093 | 568.300 | 0.039 |
| Generator Sets       | 120  | 0.243 | 3.338 | 2.185 | 0.006 | 0.087 | 0.087 | 568.299 | 0.021 |
| Generator Sets       | 175  | 0.184 | 2.930 | 1.297 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 |
| Generator Sets       | 250  | 0.147 | 1.000 | 1.020 | 0.006 | 0.028 | 0.028 | 568.299 | 0.013 |
| Generator Sets       | 500  | 0.144 | 0.981 | 0.945 | 0.005 | 0.027 | 0.027 | 568.300 | 0.013 |
| Generator Sets       | 750  | 0.145 | 0.981 | 0.964 | 0.005 | 0.027 | 0.027 | 568.299 | 0.013 |
| Generator Sets       | 9999 | 0.173 | 1.008 | 2.812 | 0.005 | 0.047 | 0.047 | 568.299 | 0.015 |
| Graders              | 50   | 1.864 | 7.125 | 5.043 | 0.005 | 0.522 | 0.480 | 493.532 | 0.160 |
| Graders              | 120  | 0.638 | 4.149 | 5.074 | 0.005 | 0.371 | 0.342 | 468.316 | 0.152 |
| Graders              | 175  | 0.329 | 3.418 | 2.774 | 0.005 | 0.152 | 0.140 | 478.508 | 0.155 |
| Graders              | 250  | 0.230 | 1.179 | 2.556 | 0.005 | 0.082 | 0.076 | 473.470 | 0.153 |
| Graders              | 500  | 0.280 | 1.315 | 2.265 | 0.005 | 0.088 | 0.081 | 470.753 | 0.152 |
| Graders              | 750  | 0.253 | 1.141 | 1.125 | 0.005 | 0.041 | 0.041 | 568.300 | 0.022 |
| Off-Highway Tractors | 120  | 0.276 | 3.669 | 2.707 | 0.005 | 0.144 | 0.132 | 476.921 | 0.154 |
| Off-Highway Tractors | 175  | 0.175 | 3.142 | 1.349 | 0.005 | 0.065 | 0.060 | 473.302 | 0.153 |
| Off-Highway Tractors | 250  | 0.155 | 1.130 | 1.116 | 0.005 | 0.040 | 0.037 | 470.861 | 0.152 |
| Off-Highway Tractors | 750  | 0.167 | 1.135 | 1.118 | 0.005 | 0.045 | 0.041 | 471.917 | 0.153 |
| Off-Highway Tractors | 1000 | 0.198 | 1.077 | 2.482 | 0.005 | 0.070 | 0.064 | 472.055 | 0.153 |
| Off-Highway Trucks   | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 |
| Off-Highway Trucks   | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 | 0.203 | 0.187 | 472.748 | 0.153 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 | 0.112 | 0.103 | 469.843 | 0.152 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 | 0.059 | 0.055 | 476.296 | 0.154 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 | 0.118 | 0.109 | 470.000 | 0.152 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 | 0.070 | 0.065 | 471.850 | 0.153 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 | 0.036 | 0.033 | 473.223 | 0.153 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 | 0.035 | 0.033 | 472.929 | 0.153 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 | 0.023 | 0.021 | 473.464 | 0.153 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 | 0.081 | 0.074 | 472.055 | 0.153 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 | 0.239 | 0.219 | 523.709 | 0.169 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 | 0.081 | 0.074 | 473.588 | 0.153 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 | 0.072 | 0.067 | 472.219 | 0.153 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 | 0.060 | 0.055 | 471.482 | 0.153 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 | 0.067 | 0.061 | 470.297 | 0.152 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 | 0.019 | 0.017 | 472.055 | 0.153 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 | 0.191 | 0.175 | 469.899 | 0.152 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 | 0.077 | 0.071 | 472.485 | 0.153 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 | 0.034 | 0.031 | 473.483 | 0.153 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 | 0.039 | 0.036 | 465.882 | 0.151 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 | 0.118 | 0.108 | 473.424 | 0.153 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 | 0.075 | 0.069 | 470.484 | 0.152 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 | 0.043 | 0.040 | 472.234 | 0.153 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 | 0.075 | 0.075 | 568.299 | 0.027 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 | 0.072 | 0.072 | 568.299 | 0.017 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 |

|                         |      |       |       |       |       |       |       |         |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 |
| Pumps                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.299 | 0.061 |
| Pumps                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 |
| Pumps                   | 50   | 0.485 | 3.943 | 3.528 | 0.007 | 0.099 | 0.099 | 568.299 | 0.043 |
| Pumps                   | 120  | 0.261 | 3.389 | 2.213 | 0.006 | 0.092 | 0.092 | 568.299 | 0.023 |
| Pumps                   | 175  | 0.199 | 2.974 | 1.318 | 0.006 | 0.056 | 0.056 | 568.300 | 0.018 |
| Pumps                   | 250  | 0.159 | 1.016 | 1.038 | 0.006 | 0.029 | 0.029 | 568.299 | 0.014 |
| Pumps                   | 500  | 0.156 | 0.992 | 0.958 | 0.005 | 0.028 | 0.028 | 568.300 | 0.014 |
| Pumps                   | 750  | 0.157 | 0.992 | 0.977 | 0.005 | 0.029 | 0.029 | 568.300 | 0.014 |
| Pumps                   | 9999 | 0.186 | 1.020 | 2.840 | 0.005 | 0.049 | 0.049 | 568.299 | 0.016 |
| Rollers                 | 15   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 |
| Rollers                 | 25   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 |
| Rollers                 | 50   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 |
| Rollers                 | 120  | 0.255 | 3.444 | 2.691 | 0.005 | 0.135 | 0.125 | 473.851 | 0.153 |
| Rollers                 | 175  | 0.127 | 2.909 | 1.101 | 0.005 | 0.049 | 0.046 | 471.970 | 0.153 |
| Rollers                 | 250  | 0.173 | 1.215 | 1.783 | 0.005 | 0.066 | 0.060 | 473.681 | 0.153 |
| Rollers                 | 500  | 0.212 | 1.968 | 2.200 | 0.005 | 0.091 | 0.083 | 477.573 | 0.155 |
| Rough Terrain Forklifts | 50   | 0.456 | 3.740 | 3.477 | 0.005 | 0.128 | 0.118 | 525.027 | 0.170 |
| Rough Terrain Forklifts | 120  | 0.137 | 3.240 | 1.821 | 0.005 | 0.051 | 0.047 | 473.037 | 0.153 |
| Rough Terrain Forklifts | 175  | 0.087 | 2.821 | 0.786 | 0.005 | 0.030 | 0.028 | 471.475 | 0.153 |
| Rough Terrain Forklifts | 250  | 0.123 | 1.001 | 1.489 | 0.005 | 0.035 | 0.033 | 472.927 | 0.153 |
| Rough Terrain Forklifts | 500  | 0.069 | 0.942 | 0.477 | 0.005 | 0.009 | 0.008 | 466.541 | 0.151 |
| Rubber Tired Dozers     | 175  | 0.461 | 3.612 | 4.229 | 0.005 | 0.231 | 0.212 | 474.103 | 0.153 |
| Rubber Tired Dozers     | 250  | 0.372 | 1.720 | 3.805 | 0.005 | 0.167 | 0.153 | 474.573 | 0.154 |
| Rubber Tired Dozers     | 500  | 0.367 | 2.959 | 3.370 | 0.005 | 0.151 | 0.139 | 479.092 | 0.155 |
| Rubber Tired Dozers     | 750  | 0.428 | 2.601 | 5.333 | 0.005 | 0.196 | 0.181 | 472.998 | 0.153 |
| Rubber Tired Dozers     | 1000 | 0.414 | 1.725 | 4.365 | 0.005 | 0.115 | 0.115 | 568.299 | 0.037 |
| Rubber Tired Loaders    | 25   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 |
| Rubber Tired Loaders    | 50   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 |
| Rubber Tired Loaders    | 120  | 0.352 | 3.791 | 2.970 | 0.005 | 0.179 | 0.165 | 466.898 | 0.151 |
| Rubber Tired Loaders    | 175  | 0.224 | 3.281 | 1.590 | 0.005 | 0.084 | 0.077 | 470.459 | 0.152 |

|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 | 0.048 | 0.045 | 469.871 | 0.152 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 | 0.053 | 0.048 | 469.143 | 0.152 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 | 0.064 | 0.059 | 465.052 | 0.150 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 | 0.052 | 0.048 | 472.456 | 0.153 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 | 0.405 | 0.372 | 482.363 | 0.156 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 | 0.137 | 0.126 | 478.948 | 0.155 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 | 0.125 | 0.115 | 469.446 | 0.152 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 | 0.081 | 0.074 | 472.539 | 0.153 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 | 0.064 | 0.059 | 472.115 | 0.153 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 | 0.098 | 0.098 | 568.299 | 0.047 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 | 0.089 | 0.089 | 568.299 | 0.025 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 | 0.055 | 0.055 | 568.299 | 0.019 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 | 0.035 | 0.035 | 686.695 | 0.019 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 | 0.057 | 0.052 | 472.630 | 0.153 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 | 0.082 | 0.075 | 536.140 | 0.173 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 | 0.124 | 0.114 | 476.766 | 0.154 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 | 0.094 | 0.087 | 471.040 | 0.152 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 | 0.055 | 0.051 | 477.110 | 0.154 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 | 0.051 | 0.047 | 470.283 | 0.152 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 | 0.027 | 0.025 | 470.551 | 0.152 |
| Sweepers/S crubbers       | 15   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 |
| Sweepers/S crubbers       | 25   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 |
| Sweepers/S crubbers       | 50   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 |
| Sweepers/S crubbers       | 120  | 0.303 | 3.664 | 2.817 | 0.005 | 0.160 | 0.147 | 474.116 | 0.153 |
| Sweepers/S crubbers       | 175  | 0.213 | 3.201 | 1.638 | 0.005 | 0.072 | 0.066 | 473.122 | 0.153 |
| Sweepers/S crubbers       | 250  | 0.170 | 1.140 | 1.616 | 0.005 | 0.051 | 0.047 | 470.126 | 0.152 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 |



|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 | 0.086 | 0.079 | 477.188 | 0.154 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 | 0.059 | 0.054 | 469.329 | 0.152 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 | 0.047 | 0.044 | 470.598 | 0.152 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 | 0.039 | 0.036 | 470.910 | 0.152 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 | 0.067 | 0.062 | 466.452 | 0.151 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 | 0.285 | 0.262 | 475.901 | 0.154 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 | 0.179 | 0.165 | 467.732 | 0.151 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 | 0.144 | 0.133 | 473.917 | 0.153 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 | 0.079 | 0.072 | 470.439 | 0.152 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 | 0.009 | 0.009 | 474.486 | 0.154 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.300 | 0.061 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 | 0.112 | 0.112 | 568.299 | 0.054 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 | 0.102 | 0.102 | 568.299 | 0.028 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 | 0.063 | 0.063 | 568.299 | 0.022 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 | 0.032 | 0.032 | 568.299 | 0.018 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 | 0.031 | 0.031 | 568.299 | 0.017 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 |

2029

|         |
|---------|
| g/hp/hr |
| N2O     |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |

| 2029             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    |
| Aerial Lifts     | 15    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   |
| Aerial Lifts     | 25    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   |
| Aerial Lifts     | 50    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   |
| Aerial Lifts     | 120   | 0.099   | 3.167   | 1.511   | 0.005   | 0.026   |
| Aerial Lifts     | 500   | 0.085   | 0.970   | 0.649   | 0.005   | 0.009   |
| Aerial Lifts     | 750   | 0.153   | 0.989   | 0.974   | 0.005   | 0.028   |
| Air Compressor s | 15    | 0.683   | 3.491   | 4.278   | 0.008   | 0.183   |
| Air Compressor s | 25    | 0.709   | 2.376   | 4.407   | 0.007   | 0.177   |
| Air Compressor s | 50    | 0.659   | 4.851   | 3.755   | 0.007   | 0.116   |
| Air Compressor s | 120   | 0.345   | 3.653   | 2.313   | 0.006   | 0.104   |
| Air Compressor s | 175   | 0.269   | 3.205   | 1.383   | 0.006   | 0.065   |
| Air Compressor s | 250   | 0.220   | 1.094   | 1.086   | 0.006   | 0.033   |
| Air Compressor s | 500   | 0.217   | 1.051   | 1.001   | 0.005   | 0.032   |
| Air Compressor s | 750   | 0.217   | 1.051   | 1.021   | 0.005   | 0.032   |
| Air Compressor s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   | 0.055   |
| Bore/Drill Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   |
| Bore/Drill Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   |
| Bore/Drill Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   |
| Bore/Drill Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   | 0.067   |
| Bore/Drill Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   | 0.039   |
| Bore/Drill Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   | 0.031   |
| Bore/Drill Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   | 0.028   |
| Bore/Drill Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   | 0.023   |
| Bore/Drill Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   | 0.019   |

|       |
|-------|
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                          |      |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 | 0.168 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 | 0.099 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 | 0.089 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 | 0.056 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 | 0.543 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 | 0.260 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 | 0.166 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 | 0.114 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 | 0.088 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 | 0.068 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 | 0.065 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 | 0.456 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 | 0.285 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 | 0.150 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 | 0.096 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 | 0.081 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 | 0.057 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 | 0.112 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 | 0.107 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 | 0.095 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 | 0.060 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 | 0.031 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 | 0.030 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 | 0.030 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 | 0.053 |



|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 | 0.203 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 | 0.112 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 | 0.059 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 | 0.118 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 | 0.070 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 | 0.036 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 | 0.035 |

|       |
|-------|
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 | 0.023 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 | 0.081 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 | 0.239 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 | 0.081 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 | 0.072 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 | 0.060 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 | 0.067 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 | 0.019 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 | 0.191 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 | 0.077 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 | 0.034 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 | 0.039 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 | 0.118 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 | 0.075 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 | 0.043 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 | 0.075 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 | 0.072 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 | 0.053 |



|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 | 0.048 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 | 0.053 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 | 0.064 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 | 0.052 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 | 0.405 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 | 0.137 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 | 0.125 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 | 0.081 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 | 0.064 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 | 0.098 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 | 0.089 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 | 0.055 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 | 0.035 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 | 0.057 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 | 0.082 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 | 0.124 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 | 0.094 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 | 0.055 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 | 0.051 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 | 0.027 |
| Sweepers/S crubbers       | 15   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 |
| Sweepers/S crubbers       | 25   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 |
| Sweepers/S crubbers       | 50   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 |
| Sweepers/S crubbers       | 120  | 0.303 | 3.664 | 2.817 | 0.005 | 0.160 |
| Sweepers/S crubbers       | 175  | 0.213 | 3.201 | 1.638 | 0.005 | 0.072 |
| Sweepers/S crubbers       | 250  | 0.170 | 1.140 | 1.616 | 0.005 | 0.051 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 |





2030



| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|
| PM2.5   | CO2     | CH4     | N2O     |
| 0.019   | 525.074 | 0.170   | 0.005   |
| 0.019   | 525.074 | 0.170   | 0.005   |
| 0.019   | 525.074 | 0.170   | 0.005   |
| 0.024   | 472.114 | 0.153   | 0.004   |
| 0.009   | 472.055 | 0.153   | 0.004   |
| 0.028   | 568.299 | 0.013   | 0.004   |
| 0.183   | 568.300 | 0.061   | 0.005   |
| 0.177   | 568.299 | 0.064   | 0.005   |
| 0.116   | 568.299 | 0.059   | 0.005   |
| 0.104   | 568.299 | 0.031   | 0.004   |
| 0.065   | 568.299 | 0.024   | 0.004   |
| 0.033   | 568.299 | 0.019   | 0.004   |
| 0.032   | 568.299 | 0.019   | 0.004   |
| 0.032   | 568.299 | 0.019   | 0.004   |
| 0.055   | 568.299 | 0.020   | 0.004   |
| 0.178   | 532.821 | 0.172   | 0.005   |
| 0.178   | 532.821 | 0.172   | 0.005   |
| 0.178   | 532.821 | 0.172   | 0.005   |
| 0.062   | 459.829 | 0.149   | 0.004   |
| 0.036   | 478.266 | 0.155   | 0.004   |
| 0.029   | 470.654 | 0.152   | 0.004   |
| 0.026   | 467.289 | 0.151   | 0.004   |
| 0.021   | 481.250 | 0.156   | 0.004   |
| 0.017   | 471.917 | 0.153   | 0.004   |

| 2030             |       | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      |
| Aerial Lifts     | 15    | 0.661   | 3.469   |
| Aerial Lifts     | 25    | 0.685   | 2.339   |
| Aerial Lifts     | 50    | 0.339   | 3.764   |
| Aerial Lifts     | 120   | 0.188   | 3.352   |
| Aerial Lifts     | 500   | 0.126   | 0.986   |
| Aerial Lifts     | 750   | 0.126   | 0.986   |
| Air Compressor s | 15    | 0.663   | 3.470   |
| Air Compressor s | 25    | 0.687   | 2.340   |
| Air Compressor s | 50    | 0.506   | 4.712   |
| Air Compressor s | 120   | 0.264   | 3.630   |
| Air Compressor s | 175   | 0.193   | 3.205   |
| Air Compressor s | 250   | 0.179   | 1.092   |
| Air Compressor s | 500   | 0.178   | 1.048   |
| Air Compressor s | 750   | 0.178   | 1.048   |
| Air Compressor s | 1000  | 0.182   | 1.049   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.029   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.038   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.168 | 568.299 | 0.062 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.099 | 568.299 | 0.047 | 0.005 |
| 0.089 | 568.300 | 0.025 | 0.004 |
| 0.056 | 568.300 | 0.019 | 0.004 |
| 0.499 | 517.872 | 0.168 | 0.005 |
| 0.240 | 469.533 | 0.152 | 0.004 |
| 0.153 | 474.748 | 0.154 | 0.004 |
| 0.105 | 472.980 | 0.153 | 0.004 |
| 0.081 | 471.967 | 0.153 | 0.004 |
| 0.062 | 470.276 | 0.152 | 0.004 |
| 0.060 | 472.055 | 0.153 | 0.004 |
| 0.420 | 516.128 | 0.167 | 0.005 |
| 0.262 | 476.134 | 0.154 | 0.004 |
| 0.138 | 471.592 | 0.153 | 0.004 |
| 0.088 | 471.622 | 0.153 | 0.004 |
| 0.074 | 474.007 | 0.153 | 0.004 |
| 0.052 | 472.408 | 0.153 | 0.004 |
| 0.103 | 475.490 | 0.154 | 0.004 |
| 0.107 | 568.299 | 0.059 | 0.005 |
| 0.095 | 568.299 | 0.031 | 0.004 |
| 0.060 | 568.299 | 0.024 | 0.004 |
| 0.031 | 568.299 | 0.020 | 0.004 |
| 0.030 | 568.299 | 0.020 | 0.004 |
| 0.030 | 568.299 | 0.020 | 0.004 |
| 0.053 | 568.299 | 0.023 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 50   | 0.409 | 4.199 |
| Concrete/Industrial Saws | 120  | 0.221 | 3.480 |
| Concrete/Industrial Saws | 175  | 0.163 | 3.074 |
| Cranes                   | 50   | 0.684 | 5.366 |
| Cranes                   | 120  | 0.343 | 3.812 |
| Cranes                   | 175  | 0.253 | 3.356 |
| Cranes                   | 250  | 0.224 | 1.147 |
| Cranes                   | 500  | 0.222 | 1.090 |
| Cranes                   | 750  | 0.222 | 1.090 |
| Cranes                   | 9999 | 0.245 | 1.108 |
| Crawler Tractors         | 50   | 0.833 | 5.605 |
| Crawler Tractors         | 120  | 0.405 | 3.871 |
| Crawler Tractors         | 175  | 0.296 | 3.397 |
| Crawler Tractors         | 250  | 0.262 | 1.207 |
| Crawler Tractors         | 500  | 0.257 | 1.200 |
| Crawler Tractors         | 750  | 0.257 | 1.200 |
| Crawler Tractors         | 1000 | 0.265 | 1.225 |
| Crushing/Proc. Equipment | 50   | 0.525 | 4.857 |
| Crushing/Proc. Equipment | 120  | 0.272 | 3.673 |
| Crushing/Proc. Equipment | 175  | 0.197 | 3.244 |
| Crushing/Proc. Equipment | 250  | 0.185 | 1.105 |
| Crushing/Proc. Equipment | 500  | 0.184 | 1.058 |
| Crushing/Proc. Equipment | 750  | 0.184 | 1.058 |
| Crushing/Proc. Equipment | 9999 | 0.196 | 1.059 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.099 | 525.777 | 0.170 | 0.005 |
| 0.099 | 525.777 | 0.170 | 0.005 |
| 0.078 | 466.738 | 0.151 | 0.004 |
| 0.052 | 472.496 | 0.153 | 0.004 |
| 0.029 | 472.560 | 0.153 | 0.004 |
| 0.024 | 470.292 | 0.152 | 0.004 |
| 0.035 | 468.558 | 0.152 | 0.004 |
| 0.164 | 525.483 | 0.170 | 0.005 |
| 0.128 | 471.529 | 0.153 | 0.004 |
| 0.078 | 472.106 | 0.153 | 0.004 |
| 0.052 | 473.326 | 0.153 | 0.004 |
| 0.057 | 473.615 | 0.153 | 0.004 |
| 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 568.299 | 0.062 | 0.005 |
| 0.093 | 568.300 | 0.039 | 0.005 |
| 0.087 | 568.299 | 0.021 | 0.004 |
| 0.053 | 568.299 | 0.016 | 0.004 |
| 0.028 | 568.299 | 0.013 | 0.004 |
| 0.027 | 568.300 | 0.013 | 0.004 |
| 0.027 | 568.299 | 0.013 | 0.004 |
| 0.047 | 568.299 | 0.015 | 0.004 |
| 0.480 | 493.532 | 0.160 | 0.005 |
| 0.342 | 468.316 | 0.152 | 0.004 |
| 0.140 | 478.508 | 0.155 | 0.004 |
| 0.076 | 473.470 | 0.153 | 0.004 |
| 0.081 | 470.753 | 0.152 | 0.004 |
| 0.041 | 568.300 | 0.022 | 0.004 |
| 0.132 | 476.921 | 0.154 | 0.004 |
| 0.060 | 473.302 | 0.153 | 0.004 |
| 0.037 | 470.861 | 0.152 | 0.004 |
| 0.041 | 471.917 | 0.153 | 0.004 |
| 0.064 | 472.055 | 0.153 | 0.004 |
| 0.060 | 470.004 | 0.152 | 0.004 |
| 0.040 | 469.126 | 0.152 | 0.004 |

|                      |      |       |       |
|----------------------|------|-------|-------|
| Dumpers/Trailers     | 25   | 0.685 | 2.340 |
| Excavators           | 25   | 0.685 | 2.339 |
| Excavators           | 50   | 0.602 | 5.309 |
| Excavators           | 120  | 0.301 | 3.806 |
| Excavators           | 175  | 0.213 | 3.362 |
| Excavators           | 250  | 0.203 | 1.145 |
| Excavators           | 500  | 0.202 | 1.088 |
| Excavators           | 750  | 0.202 | 1.088 |
| Forklifts            | 50   | 0.565 | 5.272 |
| Forklifts            | 120  | 0.283 | 3.799 |
| Forklifts            | 175  | 0.199 | 3.360 |
| Forklifts            | 250  | 0.195 | 1.144 |
| Forklifts            | 500  | 0.195 | 1.088 |
| Generator Sets       | 15   | 0.592 | 3.470 |
| Generator Sets       | 25   | 0.686 | 2.340 |
| Generator Sets       | 50   | 0.315 | 3.640 |
| Generator Sets       | 120  | 0.178 | 3.316 |
| Generator Sets       | 175  | 0.130 | 2.929 |
| Generator Sets       | 250  | 0.120 | 0.998 |
| Generator Sets       | 500  | 0.119 | 0.978 |
| Generator Sets       | 750  | 0.119 | 0.978 |
| Generator Sets       | 9999 | 0.128 | 0.979 |
| Graders              | 50   | 0.648 | 5.239 |
| Graders              | 120  | 0.323 | 3.775 |
| Graders              | 175  | 0.237 | 3.326 |
| Graders              | 250  | 0.216 | 1.148 |
| Graders              | 500  | 0.214 | 1.097 |
| Graders              | 750  | 0.214 | 1.097 |
| Off-Highway Tractors | 120  | 0.518 | 3.944 |
| Off-Highway Tractors | 175  | 0.373 | 3.435 |
| Off-Highway Tractors | 250  | 0.315 | 1.286 |
| Off-Highway Tractors | 750  | 0.304 | 1.351 |
| Off-Highway Tractors | 1000 | 0.318 | 1.409 |
| Off-Highway Trucks   | 175  | 0.229 | 3.425 |
| Off-Highway Trucks   | 250  | 0.217 | 1.166 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.035 | 474.970 | 0.154 | 0.004 |
| 0.061 | 476.314 | 0.154 | 0.004 |
| 0.052 | 473.369 | 0.153 | 0.004 |
| 0.246 | 528.954 | 0.171 | 0.005 |
| 0.246 | 528.954 | 0.171 | 0.005 |
| 0.246 | 528.954 | 0.171 | 0.005 |
| 0.187 | 472.748 | 0.153 | 0.004 |
| 0.103 | 469.843 | 0.152 | 0.004 |
| 0.055 | 476.296 | 0.154 | 0.004 |
| 0.125 | 526.176 | 0.170 | 0.005 |
| 0.125 | 526.176 | 0.170 | 0.005 |
| 0.125 | 526.176 | 0.170 | 0.005 |
| 0.109 | 470.000 | 0.152 | 0.004 |
| 0.065 | 471.850 | 0.153 | 0.004 |
| 0.033 | 473.223 | 0.153 | 0.004 |
| 0.033 | 472.929 | 0.153 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.216 | 1.104 |
| Off-Highway Trucks                 | 750  | 0.217 | 1.104 |
| Off-Highway Trucks                 | 1000 | 0.220 | 1.107 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 |
| Other Construction Equipment       | 50   | 0.429 | 4.390 |
| Other Construction Equipment       | 120  | 0.225 | 3.538 |
| Other Construction Equipment       | 175  | 0.161 | 3.127 |
| Other Construction Equipment       | 500  | 0.154 | 1.028 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 |
| Other General Industrial Equipment | 50   | 0.609 | 5.299 |
| Other General Industrial Equipment | 120  | 0.309 | 3.802 |
| Other General Industrial Equipment | 175  | 0.223 | 3.357 |
| Other General Industrial Equipment | 250  | 0.209 | 1.143 |
| Other General Industrial Equipment | 500  | 0.208 | 1.087 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.021 | 473.464 | 0.153 | 0.004 |
| 0.074 | 472.055 | 0.153 | 0.004 |
| 0.219 | 523.709 | 0.169 | 0.005 |
| 0.074 | 473.588 | 0.153 | 0.004 |
| 0.067 | 472.219 | 0.153 | 0.004 |
| 0.055 | 471.482 | 0.153 | 0.004 |
| 0.061 | 470.297 | 0.152 | 0.004 |
| 0.017 | 472.055 | 0.153 | 0.004 |
| 0.243 | 526.853 | 0.170 | 0.005 |
| 0.243 | 526.853 | 0.170 | 0.005 |
| 0.175 | 469.899 | 0.152 | 0.004 |
| 0.071 | 472.485 | 0.153 | 0.004 |
| 0.031 | 473.483 | 0.153 | 0.004 |
| 0.036 | 465.882 | 0.151 | 0.004 |
| 0.130 | 520.998 | 0.169 | 0.005 |
| 0.130 | 520.998 | 0.169 | 0.005 |
| 0.108 | 473.424 | 0.153 | 0.004 |
| 0.069 | 470.484 | 0.152 | 0.004 |
| 0.040 | 472.234 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 568.299 | 0.062 | 0.005 |
| 0.075 | 568.299 | 0.027 | 0.005 |
| 0.072 | 568.299 | 0.017 | 0.004 |
| 0.053 | 568.299 | 0.016 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.208 | 1.087 |
| Other General Industrial Equipment | 1000 | 0.212 | 1.088 |
| Other Material Handling Equipment  | 50   | 0.598 | 5.237 |
| Other Material Handling Equipment  | 120  | 0.304 | 3.784 |
| Other Material Handling Equipment  | 175  | 0.220 | 3.341 |
| Other Material Handling Equipment  | 250  | 0.206 | 1.138 |
| Other Material Handling Equipment  | 500  | 0.205 | 1.083 |
| Other Material Handling Equipment  | 9999 | 0.218 | 1.084 |
| Pavers                             | 25   | 0.685 | 2.339 |
| Pavers                             | 50   | 0.845 | 5.396 |
| Pavers                             | 120  | 0.408 | 3.800 |
| Pavers                             | 175  | 0.300 | 3.326 |
| Pavers                             | 250  | 0.259 | 1.192 |
| Pavers                             | 500  | 0.253 | 1.181 |
| Paving Equipment                   | 25   | 0.685 | 2.339 |
| Paving Equipment                   | 50   | 0.802 | 5.309 |
| Paving Equipment                   | 120  | 0.390 | 3.774 |
| Paving Equipment                   | 175  | 0.290 | 3.306 |
| Paving Equipment                   | 250  | 0.250 | 1.171 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.592 | 3.470 |
| Pressure Washers                   | 25   | 0.686 | 2.340 |
| Pressure Washers                   | 50   | 0.215 | 3.124 |
| Pressure Washers                   | 120  | 0.134 | 3.167 |
| Pressure Washers                   | 175  | 0.126 | 2.907 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.009 | 568.299 | 0.008 | 0.004 |
| 0.183 | 568.299 | 0.061 | 0.005 |
| 0.177 | 568.299 | 0.064 | 0.005 |
| 0.099 | 568.299 | 0.043 | 0.005 |
| 0.092 | 568.299 | 0.023 | 0.004 |
| 0.056 | 568.300 | 0.018 | 0.004 |
| 0.029 | 568.299 | 0.014 | 0.004 |
| 0.028 | 568.300 | 0.014 | 0.004 |
| 0.029 | 568.300 | 0.014 | 0.004 |
| 0.049 | 568.299 | 0.016 | 0.004 |
| 0.154 | 526.141 | 0.170 | 0.005 |
| 0.154 | 526.141 | 0.170 | 0.005 |
| 0.154 | 526.141 | 0.170 | 0.005 |
| 0.125 | 473.851 | 0.153 | 0.004 |
| 0.046 | 471.970 | 0.153 | 0.004 |
| 0.060 | 473.681 | 0.153 | 0.004 |
| 0.083 | 477.573 | 0.155 | 0.004 |
| 0.118 | 525.027 | 0.170 | 0.005 |
| 0.047 | 473.037 | 0.153 | 0.004 |
| 0.028 | 471.475 | 0.153 | 0.004 |
| 0.033 | 472.927 | 0.153 | 0.004 |
| 0.008 | 466.541 | 0.151 | 0.004 |
| 0.212 | 474.103 | 0.153 | 0.004 |
| 0.153 | 474.573 | 0.154 | 0.004 |
| 0.139 | 479.092 | 0.155 | 0.004 |
| 0.181 | 472.998 | 0.153 | 0.004 |
| 0.115 | 568.299 | 0.037 | 0.004 |
| 0.238 | 523.908 | 0.169 | 0.005 |
| 0.238 | 523.908 | 0.169 | 0.005 |
| 0.165 | 466.898 | 0.151 | 0.004 |
| 0.077 | 470.459 | 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 |
| Pumps                   | 15   | 0.663 | 3.470 |
| Pumps                   | 25   | 0.687 | 2.340 |
| Pumps                   | 50   | 0.348 | 3.814 |
| Pumps                   | 120  | 0.193 | 3.367 |
| Pumps                   | 175  | 0.142 | 2.973 |
| Pumps                   | 250  | 0.130 | 1.013 |
| Pumps                   | 500  | 0.129 | 0.989 |
| Pumps                   | 750  | 0.129 | 0.989 |
| Pumps                   | 9999 | 0.139 | 0.990 |
| Rollers                 | 15   | 0.661 | 3.469 |
| Rollers                 | 25   | 0.685 | 2.339 |
| Rollers                 | 50   | 0.587 | 4.784 |
| Rollers                 | 120  | 0.299 | 3.639 |
| Rollers                 | 175  | 0.223 | 3.203 |
| Rollers                 | 250  | 0.195 | 1.099 |
| Rollers                 | 500  | 0.193 | 1.056 |
| Rough Terrain Forklifts | 50   | 0.548 | 5.031 |
| Rough Terrain Forklifts | 120  | 0.279 | 3.725 |
| Rough Terrain Forklifts | 175  | 0.200 | 3.291 |
| Rough Terrain Forklifts | 250  | 0.191 | 1.121 |
| Rough Terrain Forklifts | 500  | 0.190 | 1.070 |
| Rubber Tired Dozers     | 175  | 0.398 | 3.496 |
| Rubber Tired Dozers     | 250  | 0.335 | 1.322 |
| Rubber Tired Dozers     | 500  | 0.322 | 1.401 |
| Rubber Tired Dozers     | 750  | 0.323 | 1.401 |
| Rubber Tired Dozers     | 1000 | 0.338 | 1.465 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 |
| Rubber Tired Loaders    | 50   | 0.634 | 5.181 |
| Rubber Tired Loaders    | 120  | 0.317 | 3.759 |
| Rubber Tired Loaders    | 175  | 0.232 | 3.312 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.045 | 469.871 | 0.152 | 0.004 |
| 0.048 | 469.143 | 0.152 | 0.004 |
| 0.059 | 465.052 | 0.150 | 0.004 |
| 0.048 | 472.456 | 0.153 | 0.004 |
| 0.372 | 482.363 | 0.156 | 0.004 |
| 0.126 | 478.948 | 0.155 | 0.004 |
| 0.115 | 469.446 | 0.152 | 0.004 |
| 0.074 | 472.539 | 0.153 | 0.004 |
| 0.059 | 472.115 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.098 | 568.299 | 0.047 | 0.005 |
| 0.089 | 568.299 | 0.025 | 0.004 |
| 0.055 | 568.299 | 0.019 | 0.004 |
| 0.035 | 686.695 | 0.019 | 0.004 |
| 0.077 | 527.861 | 0.171 | 0.005 |
| 0.077 | 527.861 | 0.171 | 0.005 |
| 0.052 | 472.630 | 0.153 | 0.004 |
| 0.075 | 536.140 | 0.173 | 0.005 |
| 0.114 | 476.766 | 0.154 | 0.004 |
| 0.087 | 471.040 | 0.152 | 0.004 |
| 0.051 | 477.110 | 0.154 | 0.004 |
| 0.047 | 470.283 | 0.152 | 0.004 |
| 0.025 | 470.551 | 0.152 | 0.004 |
| 0.176 | 525.328 | 0.170 | 0.005 |
| 0.176 | 525.328 | 0.170 | 0.005 |
| 0.176 | 525.328 | 0.170 | 0.005 |
| 0.147 | 474.116 | 0.153 | 0.004 |
| 0.066 | 473.122 | 0.153 | 0.004 |
| 0.047 | 470.126 | 0.152 | 0.004 |
| 0.133 | 513.803 | 0.166 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.138 |
| Rubber Tired Loaders      | 500  | 0.208 | 1.085 |
| Rubber Tired Loaders      | 750  | 0.208 | 1.085 |
| Rubber Tired Loaders      | 1000 | 0.214 | 1.099 |
| Scrapers                  | 120  | 0.410 | 3.866 |
| Scrapers                  | 175  | 0.301 | 3.389 |
| Scrapers                  | 250  | 0.264 | 1.206 |
| Scrapers                  | 500  | 0.259 | 1.184 |
| Scrapers                  | 750  | 0.259 | 1.184 |
| Signal Boards             | 15   | 0.661 | 3.470 |
| Signal Boards             | 50   | 0.393 | 4.099 |
| Signal Boards             | 120  | 0.213 | 3.451 |
| Signal Boards             | 175  | 0.157 | 3.048 |
| Signal Boards             | 250  | 0.176 | 1.255 |
| Skid Steer Loaders        | 25   | 0.685 | 2.340 |
| Skid Steer Loaders        | 50   | 0.411 | 4.386 |
| Skid Steer Loaders        | 120  | 0.214 | 3.538 |
| Surfacing Equipment       | 50   | 0.518 | 4.295 |
| Surfacing Equipment       | 120  | 0.264 | 3.492 |
| Surfacing Equipment       | 175  | 0.197 | 3.071 |
| Surfacing Equipment       | 250  | 0.172 | 1.064 |
| Surfacing Equipment       | 500  | 0.169 | 1.032 |
| Surfacing Equipment       | 750  | 0.169 | 1.032 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 |
| Sweepers/Scrubbers        | 50   | 0.509 | 4.947 |
| Sweepers/Scrubbers        | 120  | 0.261 | 3.703 |
| Sweepers/Scrubbers        | 175  | 0.187 | 3.275 |
| Sweepers/Scrubbers        | 250  | 0.182 | 1.116 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 |



|       |         |       |       |
|-------|---------|-------|-------|
| 0.133 | 513.803 | 0.166 | 0.005 |
| 0.079 | 477.188 | 0.154 | 0.004 |
| 0.054 | 469.329 | 0.152 | 0.004 |
| 0.044 | 470.598 | 0.152 | 0.004 |
| 0.036 | 470.910 | 0.152 | 0.004 |
| 0.062 | 466.452 | 0.151 | 0.004 |
| 0.150 | 527.160 | 0.171 | 0.005 |
| 0.150 | 527.160 | 0.171 | 0.005 |
| 0.150 | 527.160 | 0.171 | 0.005 |
| 0.262 | 475.901 | 0.154 | 0.004 |
| 0.165 | 467.732 | 0.151 | 0.004 |
| 0.133 | 473.917 | 0.153 | 0.004 |
| 0.072 | 470.439 | 0.152 | 0.004 |
| 0.009 | 474.486 | 0.154 | 0.004 |
| 0.183 | 568.300 | 0.061 | 0.005 |
| 0.177 | 568.299 | 0.064 | 0.005 |
| 0.112 | 568.299 | 0.054 | 0.005 |
| 0.102 | 568.299 | 0.028 | 0.004 |
| 0.063 | 568.299 | 0.022 | 0.004 |
| 0.032 | 568.299 | 0.018 | 0.004 |
| 0.031 | 568.299 | 0.017 | 0.004 |
| 0.060 | 470.004 | 0.152 | 0.004 |
| 0.040 | 469.126 | 0.152 | 0.004 |
| 0.035 | 474.970 | 0.154 | 0.004 |
| 0.061 | 476.314 | 0.154 | 0.004 |
| 0.052 | 473.369 | 0.153 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.539 | 4.966 |
| Tractors/Loaders/Backhoes | 120  | 0.272 | 3.705 |
| Tractors/Loaders/Backhoes | 175  | 0.193 | 3.273 |
| Tractors/Loaders/Backhoes | 250  | 0.183 | 1.115 |
| Tractors/Loaders/Backhoes | 500  | 0.182 | 1.066 |
| Tractors/Loaders/Backhoes | 750  | 0.182 | 1.066 |
| Trenchers                 | 15   | 0.661 | 3.469 |
| Trenchers                 | 25   | 0.685 | 2.339 |
| Trenchers                 | 50   | 0.851 | 5.208 |
| Trenchers                 | 120  | 0.409 | 3.743 |
| Trenchers                 | 175  | 0.300 | 3.273 |
| Trenchers                 | 250  | 0.256 | 1.188 |
| Trenchers                 | 500  | 0.249 | 1.209 |
| Trenchers                 | 750  | 0.249 | 1.209 |
| Welders                   | 15   | 0.663 | 3.470 |
| Welders                   | 25   | 0.687 | 2.340 |
| Welders                   | 50   | 0.449 | 4.387 |
| Welders                   | 120  | 0.239 | 3.535 |
| Welders                   | 175  | 0.176 | 3.121 |
| Welders                   | 250  | 0.162 | 1.063 |
| Welders                   | 500  | 0.161 | 1.027 |
| Water Trucks              | 175  | 0.229 | 3.425 |
| Water Trucks              | 250  | 0.217 | 1.166 |
| Water Trucks              | 500  | 0.216 | 1.104 |
| Water Trucks              | 750  | 0.217 | 1.104 |
| Water Trucks              | 1000 | 0.220 | 1.107 |





|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.393 | 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 1.676 | 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 0.525 | 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.433 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.437 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 3.330 | 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 1.555 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.391 | 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 0.341 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 3.107 | 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 1.645 | 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 0.601 | 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.504 | 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 0.476 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.482 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 2.483 | 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 3.530 | 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 1.903 | 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 0.815 | 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 0.684 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.647 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.654 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 2.959 | 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
| 1.916 | 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
| 1.715 | 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
| 1.590 | 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
| 3.569 | 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
| 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|                         |
|-------------------------|
| Dumpers/Te<br>nders     |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Forklifts               |
| Forklifts               |
| Forklifts               |
| Forklifts               |
| Forklifts               |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Graders                 |
| Graders                 |
| Graders                 |
| Graders                 |
| Graders                 |
| Graders                 |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Trucks   |
| Off-Highway<br>Trucks   |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.512 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 2.660 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 3.447 | 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 1.762 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.640 | 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 0.535 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.505 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 2.653 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.841 | 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 2.468 | 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 1.425 | 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 1.246 | 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 1.141 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.809 | 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 2.393 | 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 1.363 | 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 1.176 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 2.989 | 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 1.594 | 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 0.619 | 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |

|   |
|---|
| Other<br>General<br>Industrial<br>Equipment |
| Other<br>General<br>Industrial<br>Equipment |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Plate<br>Compactors                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 3.146 | 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 1.662 | 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 0.610 | 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 0.511 | 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.482 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.488 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 2.504 | 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.480 | 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 1.950 | 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 0.907 | 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 0.745 | 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 3.359 | 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 1.671 | 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 0.537 | 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.443 | 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 2.034 | 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 1.828 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 1.658 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 1.694 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 3.676 | 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.500 | 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 1.875 | 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 0.787 | 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|                         |
|-------------------------|
| Pressure Washers        |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.655 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.619 | 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 0.627 | 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 2.722 | 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 2.384 | 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 1.320 | 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 1.149 | 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 1.057 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 1.075 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.193 | 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 1.657 | 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 0.586 | 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 0.594 | 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.128 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 1.477 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 3.400 | 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 1.959 | 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 0.939 | 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 0.789 | 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 0.738 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.749 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.294 | 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 1.569 | 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 0.431 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|                           |
|---------------------------|
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Tractors/Loaders/Backhoes |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 3.299 | 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 1.624 | 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 0.485 | 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 0.418 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.403 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.407 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.835 | 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 2.559 | 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 1.529 | 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 1.348 | 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 1.231 | 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 1.254 | 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 3.273 | 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 1.707 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.628 | 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 0.525 | 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.495 | 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

|                           |
|---------------------------|
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |

|       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 50    | 0.339   | 3.764   | 3.135   | 0.007   | 0.040   | 0.040   | 568.300 | 0.030   | 0.005   |
| 120   | 0.188   | 3.352   | 1.657   | 0.006   | 0.036   | 0.036   | 568.299 | 0.017   | 0.004   |
| 500   | 0.126   | 0.986   | 0.479   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 750   | 0.126   | 0.986   | 0.485   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 15    | 0.663   | 3.470   | 4.164   | 0.008   | 0.166   | 0.166   | 568.299 | 0.059   | 0.005   |
| 25    | 0.687   | 2.340   | 4.347   | 0.007   | 0.165   | 0.165   | 568.299 | 0.061   | 0.005   |
| 50    | 0.506   | 4.712   | 3.340   | 0.007   | 0.046   | 0.046   | 568.299 | 0.045   | 0.005   |
| 120   | 0.264   | 3.630   | 1.729   | 0.006   | 0.041   | 0.041   | 568.299 | 0.023   | 0.004   |
| 175   | 0.193   | 3.205   | 0.633   | 0.006   | 0.027   | 0.027   | 568.299 | 0.017   | 0.004   |
| 250   | 0.179   | 1.092   | 0.529   | 0.006   | 0.018   | 0.018   | 568.299 | 0.016   | 0.004   |
| 500   | 0.178   | 1.048   | 0.499   | 0.005   | 0.017   | 0.017   | 568.299 | 0.016   | 0.004   |
| 750   | 0.178   | 1.048   | 0.505   | 0.005   | 0.017   | 0.017   | 568.300 | 0.016   | 0.004   |
| 1000  | 0.182   | 1.049   | 2.600   | 0.005   | 0.033   | 0.033   | 568.299 | 0.016   | 0.004   |
| 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 50    | 0.348   | 4.029   | 3.020   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 120   | 0.183   | 3.434   | 1.415   | 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 175   | 0.127   | 3.038   | 0.279   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 250   | 0.127   | 1.035   | 0.274   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 500   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 750   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1000  | 0.127   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.333 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.409 | 4.199 | 3.222 | 0.007 | 0.041 | 0.041 | 568.299 | 0.036 | 0.005 |
| 120  | 0.221 | 3.480 | 1.667 | 0.006 | 0.036 | 0.036 | 568.299 | 0.019 | 0.004 |
| 175  | 0.163 | 3.074 | 0.590 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 50   | 0.684 | 5.366 | 3.598 | 0.007 | 0.075 | 0.075 | 568.299 | 0.061 | 0.005 |
| 120  | 0.343 | 3.812 | 1.987 | 0.006 | 0.067 | 0.067 | 568.299 | 0.030 | 0.004 |
| 175  | 0.253 | 3.356 | 0.916 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 250  | 0.224 | 1.147 | 0.748 | 0.006 | 0.024 | 0.024 | 568.299 | 0.020 | 0.004 |
| 500  | 0.222 | 1.090 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.020 | 0.004 |
| 750  | 0.222 | 1.090 | 0.709 | 0.005 | 0.024 | 0.024 | 568.300 | 0.020 | 0.004 |
| 9999 | 0.245 | 1.108 | 2.800 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 50   | 0.833 | 5.605 | 3.808 | 0.007 | 0.116 | 0.116 | 568.299 | 0.075 | 0.005 |
| 120  | 0.405 | 3.871 | 2.341 | 0.006 | 0.105 | 0.105 | 568.299 | 0.036 | 0.004 |
| 175  | 0.296 | 3.397 | 1.266 | 0.006 | 0.065 | 0.065 | 568.299 | 0.026 | 0.004 |
| 250  | 0.262 | 1.207 | 1.104 | 0.006 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 500  | 0.257 | 1.200 | 1.016 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 750  | 0.257 | 1.200 | 1.033 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 1000 | 0.265 | 1.225 | 3.094 | 0.005 | 0.056 | 0.056 | 568.300 | 0.023 | 0.004 |
| 50   | 0.525 | 4.857 | 3.351 | 0.007 | 0.043 | 0.043 | 568.299 | 0.047 | 0.005 |
| 120  | 0.272 | 3.673 | 1.708 | 0.006 | 0.038 | 0.038 | 568.299 | 0.024 | 0.004 |
| 175  | 0.197 | 3.244 | 0.600 | 0.006 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 250  | 0.185 | 1.105 | 0.502 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 500  | 0.184 | 1.058 | 0.476 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 750  | 0.184 | 1.058 | 0.478 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 9999 | 0.196 | 1.059 | 2.590 | 0.005 | 0.032 | 0.032 | 568.299 | 0.017 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.602 | 5.309 | 3.393 | 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 120  | 0.301 | 3.806 | 1.676 | 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 175  | 0.213 | 3.362 | 0.525 | 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 250  | 0.203 | 1.145 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 500  | 0.202 | 1.088 | 0.433 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 750  | 0.202 | 1.088 | 0.437 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 50   | 0.565 | 5.272 | 3.330 | 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 120  | 0.283 | 3.799 | 1.555 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 175  | 0.199 | 3.360 | 0.391 | 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 250  | 0.195 | 1.144 | 0.341 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 500  | 0.195 | 1.088 | 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 50   | 0.315 | 3.640 | 3.107 | 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 120  | 0.178 | 3.316 | 1.645 | 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 175  | 0.130 | 2.929 | 0.601 | 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 250  | 0.120 | 0.998 | 0.504 | 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 500  | 0.119 | 0.978 | 0.476 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 750  | 0.119 | 0.978 | 0.482 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 9999 | 0.128 | 0.979 | 2.483 | 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 50   | 0.648 | 5.239 | 3.530 | 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 120  | 0.323 | 3.775 | 1.903 | 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 175  | 0.237 | 3.326 | 0.815 | 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 250  | 0.216 | 1.148 | 0.684 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 500  | 0.214 | 1.097 | 0.647 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 750  | 0.214 | 1.097 | 0.654 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 120  | 0.518 | 3.944 | 2.959 | 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
| 175  | 0.373 | 3.435 | 1.916 | 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
| 250  | 0.315 | 1.286 | 1.715 | 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
| 750  | 0.304 | 1.351 | 1.590 | 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
| 1000 | 0.318 | 1.409 | 3.569 | 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
| 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.429 | 4.390 | 3.190 | 0.007 | 0.030 | 0.030 | 568.299 | 0.038 | 0.005 |
| 120  | 0.225 | 3.538 | 1.576 | 0.006 | 0.027 | 0.027 | 568.300 | 0.020 | 0.004 |
| 175  | 0.161 | 3.127 | 0.459 | 0.006 | 0.019 | 0.019 | 568.299 | 0.014 | 0.004 |
| 500  | 0.154 | 1.028 | 0.391 | 0.005 | 0.014 | 0.014 | 568.300 | 0.013 | 0.004 |
| 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.609 | 5.299 | 3.460 | 0.007 | 0.048 | 0.048 | 568.299 | 0.054 | 0.005 |
| 120  | 0.309 | 3.802 | 1.766 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 175  | 0.223 | 3.357 | 0.641 | 0.006 | 0.028 | 0.028 | 568.299 | 0.020 | 0.004 |
| 250  | 0.209 | 1.143 | 0.536 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 500  | 0.208 | 1.087 | 0.506 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 750  | 0.208 | 1.087 | 0.512 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 1000 | 0.212 | 1.088 | 2.660 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 50   | 0.598 | 5.237 | 3.447 | 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 120  | 0.304 | 3.784 | 1.762 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 175  | 0.220 | 3.341 | 0.640 | 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 250  | 0.206 | 1.138 | 0.535 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 500  | 0.205 | 1.083 | 0.505 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 9999 | 0.218 | 1.084 | 2.653 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.845 | 5.396 | 3.841 | 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 120  | 0.408 | 3.800 | 2.468 | 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 175  | 0.300 | 3.326 | 1.425 | 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 250  | 0.259 | 1.192 | 1.246 | 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 500  | 0.253 | 1.181 | 1.141 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.802 | 5.309 | 3.809 | 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 120  | 0.390 | 3.774 | 2.393 | 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 175  | 0.290 | 3.306 | 1.363 | 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 250  | 0.250 | 1.171 | 1.176 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 50   | 0.215 | 3.124 | 2.989 | 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 120  | 0.134 | 3.167 | 1.594 | 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 175  | 0.126 | 2.907 | 0.619 | 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 50   | 0.348 | 3.814 | 3.146 | 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 120  | 0.193 | 3.367 | 1.662 | 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 175  | 0.142 | 2.973 | 0.610 | 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 250  | 0.130 | 1.013 | 0.511 | 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 500  | 0.129 | 0.989 | 0.482 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 750  | 0.129 | 0.989 | 0.488 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 9999 | 0.139 | 0.990 | 2.504 | 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.587 | 4.784 | 3.480 | 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 120  | 0.299 | 3.639 | 1.950 | 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 175  | 0.223 | 3.203 | 0.907 | 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 250  | 0.195 | 1.099 | 0.745 | 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 500  | 0.193 | 1.056 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 50   | 0.548 | 5.031 | 3.359 | 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 120  | 0.279 | 3.725 | 1.671 | 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 175  | 0.200 | 3.291 | 0.537 | 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 250  | 0.191 | 1.121 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 500  | 0.190 | 1.070 | 0.443 | 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 175  | 0.398 | 3.496 | 2.034 | 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 250  | 0.335 | 1.322 | 1.828 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 500  | 0.322 | 1.401 | 1.658 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 750  | 0.323 | 1.401 | 1.694 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 1000 | 0.338 | 1.465 | 3.676 | 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.634 | 5.181 | 3.500 | 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 120  | 0.317 | 3.759 | 1.875 | 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 175  | 0.232 | 3.312 | 0.787 | 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.210 | 1.138 | 0.655 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 500  | 0.208 | 1.085 | 0.619 | 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 750  | 0.208 | 1.085 | 0.627 | 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 1000 | 0.214 | 1.099 | 2.722 | 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 120  | 0.410 | 3.866 | 2.384 | 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 175  | 0.301 | 3.389 | 1.320 | 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 250  | 0.264 | 1.206 | 1.149 | 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 500  | 0.259 | 1.184 | 1.057 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 750  | 0.259 | 1.184 | 1.075 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 50   | 0.393 | 4.099 | 3.193 | 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 120  | 0.213 | 3.451 | 1.657 | 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 175  | 0.157 | 3.048 | 0.586 | 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 250  | 0.176 | 1.255 | 0.594 | 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 50   | 0.411 | 4.386 | 3.128 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 120  | 0.214 | 3.538 | 1.477 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 50   | 0.518 | 4.295 | 3.400 | 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 120  | 0.264 | 3.492 | 1.959 | 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 175  | 0.197 | 3.071 | 0.939 | 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 250  | 0.172 | 1.064 | 0.789 | 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 500  | 0.169 | 1.032 | 0.738 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 750  | 0.169 | 1.032 | 0.749 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.509 | 4.947 | 3.294 | 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 120  | 0.261 | 3.703 | 1.569 | 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 175  | 0.187 | 3.275 | 0.431 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 250  | 0.182 | 1.116 | 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |



|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 50   | 0.539 | 4.966 | 3.299 | 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 120  | 0.272 | 3.705 | 1.624 | 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 175  | 0.193 | 3.273 | 0.485 | 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 250  | 0.183 | 1.115 | 0.418 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 500  | 0.182 | 1.066 | 0.403 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 750  | 0.182 | 1.066 | 0.407 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.851 | 5.208 | 3.835 | 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 120  | 0.409 | 3.743 | 2.559 | 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 175  | 0.300 | 3.273 | 1.529 | 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 250  | 0.256 | 1.188 | 1.348 | 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 500  | 0.249 | 1.209 | 1.231 | 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 750  | 0.249 | 1.209 | 1.254 | 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 50   | 0.449 | 4.387 | 3.273 | 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 120  | 0.239 | 3.535 | 1.707 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 175  | 0.176 | 3.121 | 0.628 | 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 250  | 0.162 | 1.063 | 0.525 | 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 500  | 0.161 | 1.027 | 0.495 | 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

2032

| 2032             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   |
| Aerial Lifts     | 50    | 0.339   | 3.764   | 3.135   | 0.007   | 0.040   | 0.040   |
| Aerial Lifts     | 120   | 0.188   | 3.352   | 1.657   | 0.006   | 0.036   | 0.036   |
| Aerial Lifts     | 500   | 0.126   | 0.986   | 0.479   | 0.005   | 0.016   | 0.016   |
| Aerial Lifts     | 750   | 0.126   | 0.986   | 0.485   | 0.005   | 0.016   | 0.016   |
| Air Compressor s | 15    | 0.663   | 3.470   | 4.164   | 0.008   | 0.166   | 0.166   |
| Air Compressor s | 25    | 0.687   | 2.340   | 4.347   | 0.007   | 0.165   | 0.165   |
| Air Compressor s | 50    | 0.506   | 4.712   | 3.340   | 0.007   | 0.046   | 0.046   |
| Air Compressor s | 120   | 0.264   | 3.630   | 1.729   | 0.006   | 0.041   | 0.041   |
| Air Compressor s | 175   | 0.193   | 3.205   | 0.633   | 0.006   | 0.027   | 0.027   |
| Air Compressor s | 250   | 0.179   | 1.092   | 0.529   | 0.006   | 0.018   | 0.018   |
| Air Compressor s | 500   | 0.178   | 1.048   | 0.499   | 0.005   | 0.017   | 0.017   |
| Air Compressor s | 750   | 0.178   | 1.048   | 0.505   | 0.005   | 0.017   | 0.017   |
| Air Compressor s | 1000  | 0.182   | 1.049   | 2.600   | 0.005   | 0.033   | 0.033   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.029   | 3.020   | 0.007   | 0.013   | 0.013   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.415   | 0.006   | 0.012   | 0.012   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.038   | 0.279   | 0.006   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   | 0.274   | 0.006   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   |

|                          |      |       |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.333 | 0.007 | 0.162 | 0.162 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.409 | 4.199 | 3.222 | 0.007 | 0.041 | 0.041 |
| Concrete/Industrial Saws | 120  | 0.221 | 3.480 | 1.667 | 0.006 | 0.036 | 0.036 |
| Concrete/Industrial Saws | 175  | 0.163 | 3.074 | 0.590 | 0.006 | 0.025 | 0.025 |
| Cranes                   | 50   | 0.684 | 5.366 | 3.598 | 0.007 | 0.075 | 0.075 |
| Cranes                   | 120  | 0.343 | 3.812 | 1.987 | 0.006 | 0.067 | 0.067 |
| Cranes                   | 175  | 0.253 | 3.356 | 0.916 | 0.006 | 0.042 | 0.042 |
| Cranes                   | 250  | 0.224 | 1.147 | 0.748 | 0.006 | 0.024 | 0.024 |
| Cranes                   | 500  | 0.222 | 1.090 | 0.697 | 0.005 | 0.023 | 0.023 |
| Cranes                   | 750  | 0.222 | 1.090 | 0.709 | 0.005 | 0.024 | 0.024 |
| Cranes                   | 9999 | 0.245 | 1.108 | 2.800 | 0.005 | 0.043 | 0.043 |
| Crawler Tractors         | 50   | 0.833 | 5.605 | 3.808 | 0.007 | 0.116 | 0.116 |
| Crawler Tractors         | 120  | 0.405 | 3.871 | 2.341 | 0.006 | 0.105 | 0.105 |
| Crawler Tractors         | 175  | 0.296 | 3.397 | 1.266 | 0.006 | 0.065 | 0.065 |
| Crawler Tractors         | 250  | 0.262 | 1.207 | 1.104 | 0.006 | 0.040 | 0.040 |
| Crawler Tractors         | 500  | 0.257 | 1.200 | 1.016 | 0.005 | 0.038 | 0.038 |
| Crawler Tractors         | 750  | 0.257 | 1.200 | 1.033 | 0.005 | 0.038 | 0.038 |
| Crawler Tractors         | 1000 | 0.265 | 1.225 | 3.094 | 0.005 | 0.056 | 0.056 |
| Crushing/Proc. Equipment | 50   | 0.525 | 4.857 | 3.351 | 0.007 | 0.043 | 0.043 |
| Crushing/Proc. Equipment | 120  | 0.272 | 3.673 | 1.708 | 0.006 | 0.038 | 0.038 |
| Crushing/Proc. Equipment | 175  | 0.197 | 3.244 | 0.600 | 0.006 | 0.025 | 0.025 |
| Crushing/Proc. Equipment | 250  | 0.185 | 1.105 | 0.502 | 0.006 | 0.017 | 0.017 |
| Crushing/Proc. Equipment | 500  | 0.184 | 1.058 | 0.476 | 0.005 | 0.017 | 0.017 |
| Crushing/Proc. Equipment | 750  | 0.184 | 1.058 | 0.478 | 0.005 | 0.017 | 0.017 |
| Crushing/Proc. Equipment | 9999 | 0.196 | 1.059 | 2.590 | 0.005 | 0.032 | 0.032 |

|                      |      |       |       |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|
| Dumpers/Te nders     | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Excavators           | 50   | 0.602 | 5.309 | 3.393 | 0.007 | 0.038 | 0.038 |
| Excavators           | 120  | 0.301 | 3.806 | 1.676 | 0.006 | 0.034 | 0.034 |
| Excavators           | 175  | 0.213 | 3.362 | 0.525 | 0.006 | 0.023 | 0.023 |
| Excavators           | 250  | 0.203 | 1.145 | 0.452 | 0.006 | 0.016 | 0.016 |
| Excavators           | 500  | 0.202 | 1.088 | 0.433 | 0.005 | 0.016 | 0.016 |
| Excavators           | 750  | 0.202 | 1.088 | 0.437 | 0.005 | 0.016 | 0.016 |
| Forklifts            | 50   | 0.565 | 5.272 | 3.330 | 0.007 | 0.023 | 0.023 |
| Forklifts            | 120  | 0.283 | 3.799 | 1.555 | 0.006 | 0.021 | 0.021 |
| Forklifts            | 175  | 0.199 | 3.360 | 0.391 | 0.006 | 0.015 | 0.015 |
| Forklifts            | 250  | 0.195 | 1.144 | 0.341 | 0.006 | 0.012 | 0.012 |
| Forklifts            | 500  | 0.195 | 1.088 | 0.341 | 0.005 | 0.012 | 0.012 |
| Generator Sets       | 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Generator Sets       | 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Generator Sets       | 50   | 0.315 | 3.640 | 3.107 | 0.007 | 0.038 | 0.038 |
| Generator Sets       | 120  | 0.178 | 3.316 | 1.645 | 0.006 | 0.034 | 0.034 |
| Generator Sets       | 175  | 0.130 | 2.929 | 0.601 | 0.006 | 0.023 | 0.023 |
| Generator Sets       | 250  | 0.120 | 0.998 | 0.504 | 0.006 | 0.016 | 0.016 |
| Generator Sets       | 500  | 0.119 | 0.978 | 0.476 | 0.005 | 0.015 | 0.015 |
| Generator Sets       | 750  | 0.119 | 0.978 | 0.482 | 0.005 | 0.015 | 0.015 |
| Generator Sets       | 9999 | 0.128 | 0.979 | 2.483 | 0.005 | 0.029 | 0.029 |
| Graders              | 50   | 0.648 | 5.239 | 3.530 | 0.007 | 0.065 | 0.065 |
| Graders              | 120  | 0.323 | 3.775 | 1.903 | 0.006 | 0.058 | 0.058 |
| Graders              | 175  | 0.237 | 3.326 | 0.815 | 0.006 | 0.038 | 0.038 |
| Graders              | 250  | 0.216 | 1.148 | 0.684 | 0.006 | 0.024 | 0.024 |
| Graders              | 500  | 0.214 | 1.097 | 0.647 | 0.005 | 0.023 | 0.023 |
| Graders              | 750  | 0.214 | 1.097 | 0.654 | 0.005 | 0.023 | 0.023 |
| Off-Highway Tractors | 120  | 0.518 | 3.944 | 2.959 | 0.006 | 0.175 | 0.175 |
| Off-Highway Tractors | 175  | 0.373 | 3.435 | 1.916 | 0.006 | 0.104 | 0.104 |
| Off-Highway Tractors | 250  | 0.315 | 1.286 | 1.715 | 0.006 | 0.064 | 0.064 |
| Off-Highway Tractors | 750  | 0.304 | 1.351 | 1.590 | 0.005 | 0.060 | 0.060 |
| Off-Highway Tractors | 1000 | 0.318 | 1.409 | 3.569 | 0.005 | 0.078 | 0.078 |
| Off-Highway Trucks   | 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 |
| Off-Highway Trucks   | 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 |
| Off-Highway Trucks                 | 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 |
| Off-Highway Trucks                 | 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Other Construction Equipment       | 50   | 0.429 | 4.390 | 3.190 | 0.007 | 0.030 | 0.030 |
| Other Construction Equipment       | 120  | 0.225 | 3.538 | 1.576 | 0.006 | 0.027 | 0.027 |
| Other Construction Equipment       | 175  | 0.161 | 3.127 | 0.459 | 0.006 | 0.019 | 0.019 |
| Other Construction Equipment       | 500  | 0.154 | 1.028 | 0.391 | 0.005 | 0.014 | 0.014 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Other General Industrial Equipment | 50   | 0.609 | 5.299 | 3.460 | 0.007 | 0.048 | 0.048 |
| Other General Industrial Equipment | 120  | 0.309 | 3.802 | 1.766 | 0.006 | 0.043 | 0.043 |
| Other General Industrial Equipment | 175  | 0.223 | 3.357 | 0.641 | 0.006 | 0.028 | 0.028 |
| Other General Industrial Equipment | 250  | 0.209 | 1.143 | 0.536 | 0.006 | 0.018 | 0.018 |
| Other General Industrial Equipment | 500  | 0.208 | 1.087 | 0.506 | 0.005 | 0.018 | 0.018 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.208 | 1.087 | 0.512 | 0.005 | 0.018 | 0.018 |
| Other General Industrial Equipment | 1000 | 0.212 | 1.088 | 2.660 | 0.005 | 0.035 | 0.035 |
| Other Material Handling Equipment  | 50   | 0.598 | 5.237 | 3.447 | 0.007 | 0.048 | 0.048 |
| Other Material Handling Equipment  | 120  | 0.304 | 3.784 | 1.762 | 0.006 | 0.043 | 0.043 |
| Other Material Handling Equipment  | 175  | 0.220 | 3.341 | 0.640 | 0.006 | 0.028 | 0.028 |
| Other Material Handling Equipment  | 250  | 0.206 | 1.138 | 0.535 | 0.006 | 0.018 | 0.018 |
| Other Material Handling Equipment  | 500  | 0.205 | 1.083 | 0.505 | 0.005 | 0.018 | 0.018 |
| Other Material Handling Equipment  | 9999 | 0.218 | 1.084 | 2.653 | 0.005 | 0.035 | 0.035 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Pavers                             | 50   | 0.845 | 5.396 | 3.841 | 0.007 | 0.134 | 0.134 |
| Pavers                             | 120  | 0.408 | 3.800 | 2.468 | 0.006 | 0.121 | 0.121 |
| Pavers                             | 175  | 0.300 | 3.326 | 1.425 | 0.006 | 0.074 | 0.074 |
| Pavers                             | 250  | 0.259 | 1.192 | 1.246 | 0.006 | 0.045 | 0.045 |
| Pavers                             | 500  | 0.253 | 1.181 | 1.141 | 0.005 | 0.043 | 0.043 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Paving Equipment                   | 50   | 0.802 | 5.309 | 3.809 | 0.007 | 0.126 | 0.126 |
| Paving Equipment                   | 120  | 0.390 | 3.774 | 2.393 | 0.006 | 0.114 | 0.114 |
| Paving Equipment                   | 175  | 0.290 | 3.306 | 1.363 | 0.006 | 0.070 | 0.070 |
| Paving Equipment                   | 250  | 0.250 | 1.171 | 1.176 | 0.006 | 0.042 | 0.042 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Pressure Washers                   | 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Pressure Washers                   | 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Pressure Washers                   | 50   | 0.215 | 3.124 | 2.989 | 0.007 | 0.030 | 0.030 |
| Pressure Washers                   | 120  | 0.134 | 3.167 | 1.594 | 0.006 | 0.028 | 0.028 |
| Pressure Washers                   | 175  | 0.126 | 2.907 | 0.619 | 0.006 | 0.024 | 0.024 |

|                         |      |       |       |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 |
| Pumps                   | 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Pumps                   | 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Pumps                   | 50   | 0.348 | 3.814 | 3.146 | 0.007 | 0.040 | 0.040 |
| Pumps                   | 120  | 0.193 | 3.367 | 1.662 | 0.006 | 0.036 | 0.036 |
| Pumps                   | 175  | 0.142 | 2.973 | 0.610 | 0.006 | 0.024 | 0.024 |
| Pumps                   | 250  | 0.130 | 1.013 | 0.511 | 0.006 | 0.016 | 0.016 |
| Pumps                   | 500  | 0.129 | 0.989 | 0.482 | 0.005 | 0.016 | 0.016 |
| Pumps                   | 750  | 0.129 | 0.989 | 0.488 | 0.005 | 0.016 | 0.016 |
| Pumps                   | 9999 | 0.139 | 0.990 | 2.504 | 0.005 | 0.030 | 0.030 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Rollers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Rollers                 | 50   | 0.587 | 4.784 | 3.480 | 0.007 | 0.073 | 0.073 |
| Rollers                 | 120  | 0.299 | 3.639 | 1.950 | 0.006 | 0.066 | 0.066 |
| Rollers                 | 175  | 0.223 | 3.203 | 0.907 | 0.006 | 0.042 | 0.042 |
| Rollers                 | 250  | 0.195 | 1.099 | 0.745 | 0.006 | 0.024 | 0.024 |
| Rollers                 | 500  | 0.193 | 1.056 | 0.697 | 0.005 | 0.023 | 0.023 |
| Rough Terrain Forklifts | 50   | 0.548 | 5.031 | 3.359 | 0.007 | 0.039 | 0.039 |
| Rough Terrain Forklifts | 120  | 0.279 | 3.725 | 1.671 | 0.006 | 0.034 | 0.034 |
| Rough Terrain Forklifts | 175  | 0.200 | 3.291 | 0.537 | 0.006 | 0.023 | 0.023 |
| Rough Terrain Forklifts | 250  | 0.191 | 1.121 | 0.463 | 0.006 | 0.016 | 0.016 |
| Rough Terrain Forklifts | 500  | 0.190 | 1.070 | 0.443 | 0.005 | 0.016 | 0.016 |
| Rubber Tired Dozers     | 175  | 0.398 | 3.496 | 2.034 | 0.006 | 0.111 | 0.111 |
| Rubber Tired Dozers     | 250  | 0.335 | 1.322 | 1.828 | 0.006 | 0.069 | 0.069 |
| Rubber Tired Dozers     | 500  | 0.322 | 1.401 | 1.658 | 0.005 | 0.064 | 0.064 |
| Rubber Tired Dozers     | 750  | 0.323 | 1.401 | 1.694 | 0.005 | 0.064 | 0.064 |
| Rubber Tired Dozers     | 1000 | 0.338 | 1.465 | 3.676 | 0.005 | 0.082 | 0.082 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Rubber Tired Loaders    | 50   | 0.634 | 5.181 | 3.500 | 0.007 | 0.062 | 0.062 |
| Rubber Tired Loaders    | 120  | 0.317 | 3.759 | 1.875 | 0.006 | 0.056 | 0.056 |
| Rubber Tired Loaders    | 175  | 0.232 | 3.312 | 0.787 | 0.006 | 0.036 | 0.036 |

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.138 | 0.655 | 0.006 | 0.022 | 0.022 |
| Rubber Tired Loaders      | 500  | 0.208 | 1.085 | 0.619 | 0.005 | 0.021 | 0.021 |
| Rubber Tired Loaders      | 750  | 0.208 | 1.085 | 0.627 | 0.005 | 0.022 | 0.022 |
| Rubber Tired Loaders      | 1000 | 0.214 | 1.099 | 2.722 | 0.005 | 0.039 | 0.039 |
| Scrapers                  | 120  | 0.410 | 3.866 | 2.384 | 0.006 | 0.111 | 0.111 |
| Scrapers                  | 175  | 0.301 | 3.389 | 1.320 | 0.006 | 0.068 | 0.068 |
| Scrapers                  | 250  | 0.264 | 1.206 | 1.149 | 0.006 | 0.042 | 0.042 |
| Scrapers                  | 500  | 0.259 | 1.184 | 1.057 | 0.005 | 0.040 | 0.040 |
| Scrapers                  | 750  | 0.259 | 1.184 | 1.075 | 0.005 | 0.040 | 0.040 |
| Signal Boards             | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 |
| Signal Boards             | 50   | 0.393 | 4.099 | 3.193 | 0.007 | 0.040 | 0.040 |
| Signal Boards             | 120  | 0.213 | 3.451 | 1.657 | 0.006 | 0.035 | 0.035 |
| Signal Boards             | 175  | 0.157 | 3.048 | 0.586 | 0.006 | 0.024 | 0.024 |
| Signal Boards             | 250  | 0.176 | 1.255 | 0.594 | 0.007 | 0.019 | 0.019 |
| Skid Steer Loaders        | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 |
| Skid Steer Loaders        | 50   | 0.411 | 4.386 | 3.128 | 0.007 | 0.018 | 0.018 |
| Skid Steer Loaders        | 120  | 0.214 | 3.538 | 1.477 | 0.006 | 0.017 | 0.017 |
| Surfacing Equipment       | 50   | 0.518 | 4.295 | 3.400 | 0.007 | 0.075 | 0.075 |
| Surfacing Equipment       | 120  | 0.264 | 3.492 | 1.959 | 0.006 | 0.068 | 0.068 |
| Surfacing Equipment       | 175  | 0.197 | 3.071 | 0.939 | 0.006 | 0.043 | 0.043 |
| Surfacing Equipment       | 250  | 0.172 | 1.064 | 0.789 | 0.006 | 0.026 | 0.026 |
| Surfacing Equipment       | 500  | 0.169 | 1.032 | 0.738 | 0.005 | 0.025 | 0.025 |
| Surfacing Equipment       | 750  | 0.169 | 1.032 | 0.749 | 0.005 | 0.025 | 0.025 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 |
| Sweepers/Scrubbers        | 50   | 0.509 | 4.947 | 3.294 | 0.007 | 0.026 | 0.026 |
| Sweepers/Scrubbers        | 120  | 0.261 | 3.703 | 1.569 | 0.006 | 0.023 | 0.023 |
| Sweepers/Scrubbers        | 175  | 0.187 | 3.275 | 0.431 | 0.006 | 0.017 | 0.017 |
| Sweepers/Scrubbers        | 250  | 0.182 | 1.116 | 0.370 | 0.006 | 0.013 | 0.013 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |



|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.539 | 4.966 | 3.299 | 0.007 | 0.033 | 0.033 |
| Tractors/Loaders/Backhoes | 120  | 0.272 | 3.705 | 1.624 | 0.006 | 0.030 | 0.030 |
| Tractors/Loaders/Backhoes | 175  | 0.193 | 3.273 | 0.485 | 0.006 | 0.020 | 0.020 |
| Tractors/Loaders/Backhoes | 250  | 0.183 | 1.115 | 0.418 | 0.006 | 0.014 | 0.014 |
| Tractors/Loaders/Backhoes | 500  | 0.182 | 1.066 | 0.403 | 0.006 | 0.014 | 0.014 |
| Tractors/Loaders/Backhoes | 750  | 0.182 | 1.066 | 0.407 | 0.006 | 0.014 | 0.014 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Trenchers                 | 50   | 0.851 | 5.208 | 3.835 | 0.007 | 0.144 | 0.144 |
| Trenchers                 | 120  | 0.409 | 3.743 | 2.559 | 0.006 | 0.132 | 0.132 |
| Trenchers                 | 175  | 0.300 | 3.273 | 1.529 | 0.006 | 0.080 | 0.080 |
| Trenchers                 | 250  | 0.256 | 1.188 | 1.348 | 0.006 | 0.049 | 0.049 |
| Trenchers                 | 500  | 0.249 | 1.209 | 1.231 | 0.005 | 0.046 | 0.046 |
| Trenchers                 | 750  | 0.249 | 1.209 | 1.254 | 0.005 | 0.047 | 0.047 |
| Welders                   | 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Welders                   | 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Welders                   | 50   | 0.449 | 4.387 | 3.273 | 0.007 | 0.045 | 0.045 |
| Welders                   | 120  | 0.239 | 3.535 | 1.707 | 0.006 | 0.040 | 0.040 |
| Welders                   | 175  | 0.176 | 3.121 | 0.628 | 0.006 | 0.027 | 0.027 |
| Welders                   | 250  | 0.162 | 1.063 | 0.525 | 0.006 | 0.017 | 0.017 |
| Welders                   | 500  | 0.161 | 1.027 | 0.495 | 0.005 | 0.017 | 0.017 |
| Water Trucks              | 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 |
| Water Trucks              | 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 |
| Water Trucks              | 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 |
| Water Trucks              | 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 |
| Water Trucks              | 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 |

2033

| g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|
| CO2     | CH4     | N2O     |
| 568.299 | 0.059   | 0.005   |
| 568.299 | 0.061   | 0.005   |
| 568.300 | 0.030   | 0.005   |
| 568.299 | 0.017   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.059   | 0.005   |
| 568.299 | 0.061   | 0.005   |
| 568.299 | 0.045   | 0.005   |
| 568.299 | 0.023   | 0.004   |
| 568.299 | 0.017   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.300 | 0.016   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.059   | 0.005   |
| 568.299 | 0.061   | 0.005   |
| 568.299 | 0.031   | 0.005   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |

| 2033             |       | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   |
| Aerial Lifts     | 50    | 0.339   | 3.764   | 3.135   |
| Aerial Lifts     | 120   | 0.188   | 3.352   | 1.657   |
| Aerial Lifts     | 500   | 0.126   | 0.986   | 0.479   |
| Aerial Lifts     | 750   | 0.126   | 0.986   | 0.485   |
| Air Compressor s | 15    | 0.663   | 3.470   | 4.164   |
| Air Compressor s | 25    | 0.687   | 2.340   | 4.347   |
| Air Compressor s | 50    | 0.506   | 4.712   | 3.340   |
| Air Compressor s | 120   | 0.264   | 3.630   | 1.729   |
| Air Compressor s | 175   | 0.193   | 3.205   | 0.633   |
| Air Compressor s | 250   | 0.179   | 1.092   | 0.529   |
| Air Compressor s | 500   | 0.178   | 1.048   | 0.499   |
| Air Compressor s | 750   | 0.178   | 1.048   | 0.505   |
| Air Compressor s | 1000  | 0.182   | 1.049   | 2.600   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.029   | 3.020   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.415   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.038   | 0.279   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   | 0.274   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   | 0.274   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   | 0.274   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   | 2.372   |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.036 | 0.005 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.020 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.075 | 0.005 |
| 568.299 | 0.036 | 0.004 |
| 568.299 | 0.026 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.300 | 0.023 | 0.004 |
| 568.299 | 0.047 | 0.005 |
| 568.299 | 0.024 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.017 | 0.004 |

|                          |      |       |       |       |
|--------------------------|------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.333 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 |
| Concrete/Industrial Saws | 50   | 0.409 | 4.199 | 3.222 |
| Concrete/Industrial Saws | 120  | 0.221 | 3.480 | 1.667 |
| Concrete/Industrial Saws | 175  | 0.163 | 3.074 | 0.590 |
| Cranes                   | 50   | 0.684 | 5.366 | 3.598 |
| Cranes                   | 120  | 0.343 | 3.812 | 1.987 |
| Cranes                   | 175  | 0.253 | 3.356 | 0.916 |
| Cranes                   | 250  | 0.224 | 1.147 | 0.748 |
| Cranes                   | 500  | 0.222 | 1.090 | 0.697 |
| Cranes                   | 750  | 0.222 | 1.090 | 0.709 |
| Cranes                   | 9999 | 0.245 | 1.108 | 2.800 |
| Crawler Tractors         | 50   | 0.833 | 5.605 | 3.808 |
| Crawler Tractors         | 120  | 0.405 | 3.871 | 2.341 |
| Crawler Tractors         | 175  | 0.296 | 3.397 | 1.266 |
| Crawler Tractors         | 250  | 0.262 | 1.207 | 1.104 |
| Crawler Tractors         | 500  | 0.257 | 1.200 | 1.016 |
| Crawler Tractors         | 750  | 0.257 | 1.200 | 1.033 |
| Crawler Tractors         | 1000 | 0.265 | 1.225 | 3.094 |
| Crushing/Proc. Equipment | 50   | 0.525 | 4.857 | 3.351 |
| Crushing/Proc. Equipment | 120  | 0.272 | 3.673 | 1.708 |
| Crushing/Proc. Equipment | 175  | 0.197 | 3.244 | 0.600 |
| Crushing/Proc. Equipment | 250  | 0.185 | 1.105 | 0.502 |
| Crushing/Proc. Equipment | 500  | 0.184 | 1.058 | 0.476 |
| Crushing/Proc. Equipment | 750  | 0.184 | 1.058 | 0.478 |
| Crushing/Proc. Equipment | 9999 | 0.196 | 1.059 | 2.590 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.054 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.051 | 0.005 |
| 568.299 | 0.025 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.028 | 0.005 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.010 | 0.004 |
| 568.299 | 0.010 | 0.004 |
| 568.299 | 0.010 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.058 | 0.005 |
| 568.299 | 0.029 | 0.004 |
| 568.300 | 0.021 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.046 | 0.004 |
| 568.299 | 0.033 | 0.004 |
| 568.299 | 0.028 | 0.004 |
| 568.299 | 0.027 | 0.004 |
| 568.300 | 0.028 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.019 | 0.004 |

|                      |      |       |       |       |
|----------------------|------|-------|-------|-------|
| Dumpers/Truckers     | 25   | 0.685 | 2.340 | 4.332 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 |
| Excavators           | 50   | 0.602 | 5.309 | 3.393 |
| Excavators           | 120  | 0.301 | 3.806 | 1.676 |
| Excavators           | 175  | 0.213 | 3.362 | 0.525 |
| Excavators           | 250  | 0.203 | 1.145 | 0.452 |
| Excavators           | 500  | 0.202 | 1.088 | 0.433 |
| Excavators           | 750  | 0.202 | 1.088 | 0.437 |
| Forklifts            | 50   | 0.565 | 5.272 | 3.330 |
| Forklifts            | 120  | 0.283 | 3.799 | 1.555 |
| Forklifts            | 175  | 0.199 | 3.360 | 0.391 |
| Forklifts            | 250  | 0.195 | 1.144 | 0.341 |
| Forklifts            | 500  | 0.195 | 1.088 | 0.341 |
| Generator Sets       | 15   | 0.592 | 3.470 | 4.164 |
| Generator Sets       | 25   | 0.686 | 2.340 | 4.347 |
| Generator Sets       | 50   | 0.315 | 3.640 | 3.107 |
| Generator Sets       | 120  | 0.178 | 3.316 | 1.645 |
| Generator Sets       | 175  | 0.130 | 2.929 | 0.601 |
| Generator Sets       | 250  | 0.120 | 0.998 | 0.504 |
| Generator Sets       | 500  | 0.119 | 0.978 | 0.476 |
| Generator Sets       | 750  | 0.119 | 0.978 | 0.482 |
| Generator Sets       | 9999 | 0.128 | 0.979 | 2.483 |
| Graders              | 50   | 0.648 | 5.239 | 3.530 |
| Graders              | 120  | 0.323 | 3.775 | 1.903 |
| Graders              | 175  | 0.237 | 3.326 | 0.815 |
| Graders              | 250  | 0.216 | 1.148 | 0.684 |
| Graders              | 500  | 0.214 | 1.097 | 0.647 |
| Graders              | 750  | 0.214 | 1.097 | 0.654 |
| Off-Highway Tractors | 120  | 0.518 | 3.944 | 2.959 |
| Off-Highway Tractors | 175  | 0.373 | 3.435 | 1.916 |
| Off-Highway Tractors | 250  | 0.315 | 1.286 | 1.715 |
| Off-Highway Tractors | 750  | 0.304 | 1.351 | 1.590 |
| Off-Highway Tractors | 1000 | 0.318 | 1.409 | 3.569 |
| Off-Highway Trucks   | 175  | 0.229 | 3.425 | 0.563 |
| Off-Highway Trucks   | 250  | 0.217 | 1.166 | 0.481 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.300 | 0.019 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.038 | 0.005 |
| 568.300 | 0.020 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.300 | 0.013 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.054 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.216 | 1.104 | 0.458 |
| Off-Highway Trucks                 | 750  | 0.217 | 1.104 | 0.463 |
| Off-Highway Trucks                 | 1000 | 0.220 | 1.107 | 2.651 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 |
| Other Construction Equipment       | 50   | 0.429 | 4.390 | 3.190 |
| Other Construction Equipment       | 120  | 0.225 | 3.538 | 1.576 |
| Other Construction Equipment       | 175  | 0.161 | 3.127 | 0.459 |
| Other Construction Equipment       | 500  | 0.154 | 1.028 | 0.391 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 |
| Other General Industrial Equipment | 50   | 0.609 | 5.299 | 3.460 |
| Other General Industrial Equipment | 120  | 0.309 | 3.802 | 1.766 |
| Other General Industrial Equipment | 175  | 0.223 | 3.357 | 0.641 |
| Other General Industrial Equipment | 250  | 0.209 | 1.143 | 0.536 |
| Other General Industrial Equipment | 500  | 0.208 | 1.087 | 0.506 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.076 | 0.005 |
| 568.300 | 0.036 | 0.004 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.072 | 0.005 |
| 568.300 | 0.035 | 0.004 |
| 568.299 | 0.026 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.300 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.019 | 0.005 |
| 568.300 | 0.012 | 0.004 |
| 568.299 | 0.011 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.208 | 1.087 | 0.512 |
| Other General Industrial Equipment | 1000 | 0.212 | 1.088 | 2.660 |
| Other Material Handling Equipment  | 50   | 0.598 | 5.237 | 3.447 |
| Other Material Handling Equipment  | 120  | 0.304 | 3.784 | 1.762 |
| Other Material Handling Equipment  | 175  | 0.220 | 3.341 | 0.640 |
| Other Material Handling Equipment  | 250  | 0.206 | 1.138 | 0.535 |
| Other Material Handling Equipment  | 500  | 0.205 | 1.083 | 0.505 |
| Other Material Handling Equipment  | 9999 | 0.218 | 1.084 | 2.653 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 |
| Pavers                             | 50   | 0.845 | 5.396 | 3.841 |
| Pavers                             | 120  | 0.408 | 3.800 | 2.468 |
| Pavers                             | 175  | 0.300 | 3.326 | 1.425 |
| Pavers                             | 250  | 0.259 | 1.192 | 1.246 |
| Pavers                             | 500  | 0.253 | 1.181 | 1.141 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 |
| Paving Equipment                   | 50   | 0.802 | 5.309 | 3.809 |
| Paving Equipment                   | 120  | 0.390 | 3.774 | 2.393 |
| Paving Equipment                   | 175  | 0.290 | 3.306 | 1.363 |
| Paving Equipment                   | 250  | 0.250 | 1.171 | 1.176 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 |
| Pressure Washers                   | 15   | 0.592 | 3.470 | 4.164 |
| Pressure Washers                   | 25   | 0.686 | 2.340 | 4.347 |
| Pressure Washers                   | 50   | 0.215 | 3.124 | 2.989 |
| Pressure Washers                   | 120  | 0.134 | 3.167 | 1.594 |
| Pressure Washers                   | 175  | 0.126 | 2.907 | 0.619 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.008 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.300 | 0.061 | 0.005 |
| 568.299 | 0.031 | 0.005 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.012 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.012 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.049 | 0.005 |
| 568.299 | 0.025 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.300 | 0.017 | 0.004 |
| 568.299 | 0.035 | 0.004 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.300 | 0.057 | 0.005 |
| 568.299 | 0.028 | 0.004 |
| 568.299 | 0.020 | 0.004 |

|                         |      |       |       |       |
|-------------------------|------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 |
| Pumps                   | 15   | 0.663 | 3.470 | 4.164 |
| Pumps                   | 25   | 0.687 | 2.340 | 4.347 |
| Pumps                   | 50   | 0.348 | 3.814 | 3.146 |
| Pumps                   | 120  | 0.193 | 3.367 | 1.662 |
| Pumps                   | 175  | 0.142 | 2.973 | 0.610 |
| Pumps                   | 250  | 0.130 | 1.013 | 0.511 |
| Pumps                   | 500  | 0.129 | 0.989 | 0.482 |
| Pumps                   | 750  | 0.129 | 0.989 | 0.488 |
| Pumps                   | 9999 | 0.139 | 0.990 | 2.504 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 |
| Rollers                 | 25   | 0.685 | 2.339 | 4.332 |
| Rollers                 | 50   | 0.587 | 4.784 | 3.480 |
| Rollers                 | 120  | 0.299 | 3.639 | 1.950 |
| Rollers                 | 175  | 0.223 | 3.203 | 0.907 |
| Rollers                 | 250  | 0.195 | 1.099 | 0.745 |
| Rollers                 | 500  | 0.193 | 1.056 | 0.697 |
| Rough Terrain Forklifts | 50   | 0.548 | 5.031 | 3.359 |
| Rough Terrain Forklifts | 120  | 0.279 | 3.725 | 1.671 |
| Rough Terrain Forklifts | 175  | 0.200 | 3.291 | 0.537 |
| Rough Terrain Forklifts | 250  | 0.191 | 1.121 | 0.463 |
| Rough Terrain Forklifts | 500  | 0.190 | 1.070 | 0.443 |
| Rubber Tired Dozers     | 175  | 0.398 | 3.496 | 2.034 |
| Rubber Tired Dozers     | 250  | 0.335 | 1.322 | 1.828 |
| Rubber Tired Dozers     | 500  | 0.322 | 1.401 | 1.658 |
| Rubber Tired Dozers     | 750  | 0.323 | 1.401 | 1.694 |
| Rubber Tired Dozers     | 1000 | 0.338 | 1.465 | 3.676 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 |
| Rubber Tired Loaders    | 50   | 0.634 | 5.181 | 3.500 |
| Rubber Tired Loaders    | 120  | 0.317 | 3.759 | 1.875 |
| Rubber Tired Loaders    | 175  | 0.232 | 3.312 | 0.787 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.037 | 0.004 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.035 | 0.005 |
| 568.300 | 0.019 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 686.695 | 0.015 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.037 | 0.005 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.046 | 0.005 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.046 | 0.005 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.061 | 0.005 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.138 | 0.655 |
| Rubber Tired Loaders      | 500  | 0.208 | 1.085 | 0.619 |
| Rubber Tired Loaders      | 750  | 0.208 | 1.085 | 0.627 |
| Rubber Tired Loaders      | 1000 | 0.214 | 1.099 | 2.722 |
| Scrapers                  | 120  | 0.410 | 3.866 | 2.384 |
| Scrapers                  | 175  | 0.301 | 3.389 | 1.320 |
| Scrapers                  | 250  | 0.264 | 1.206 | 1.149 |
| Scrapers                  | 500  | 0.259 | 1.184 | 1.057 |
| Scrapers                  | 750  | 0.259 | 1.184 | 1.075 |
| Signal Boards             | 15   | 0.661 | 3.470 | 4.142 |
| Signal Boards             | 50   | 0.393 | 4.099 | 3.193 |
| Signal Boards             | 120  | 0.213 | 3.451 | 1.657 |
| Signal Boards             | 175  | 0.157 | 3.048 | 0.586 |
| Signal Boards             | 250  | 0.176 | 1.255 | 0.594 |
| Skid Steer Loaders        | 25   | 0.685 | 2.340 | 4.332 |
| Skid Steer Loaders        | 50   | 0.411 | 4.386 | 3.128 |
| Skid Steer Loaders        | 120  | 0.214 | 3.538 | 1.477 |
| Surfacing Equipment       | 50   | 0.518 | 4.295 | 3.400 |
| Surfacing Equipment       | 120  | 0.264 | 3.492 | 1.959 |
| Surfacing Equipment       | 175  | 0.197 | 3.071 | 0.939 |
| Surfacing Equipment       | 250  | 0.172 | 1.064 | 0.789 |
| Surfacing Equipment       | 500  | 0.169 | 1.032 | 0.738 |
| Surfacing Equipment       | 750  | 0.169 | 1.032 | 0.749 |
| Sweepers/S crubbers       | 15   | 0.589 | 3.470 | 4.142 |
| Sweepers/S crubbers       | 25   | 0.685 | 2.340 | 4.332 |
| Sweepers/S crubbers       | 50   | 0.509 | 4.947 | 3.294 |
| Sweepers/S crubbers       | 120  | 0.261 | 3.703 | 1.569 |
| Sweepers/S crubbers       | 175  | 0.187 | 3.275 | 0.431 |
| Sweepers/S crubbers       | 250  | 0.182 | 1.116 | 0.370 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 |



|         |       |       |
|---------|-------|-------|
| 568.299 | 0.048 | 0.005 |
| 568.299 | 0.024 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.076 | 0.005 |
| 568.299 | 0.036 | 0.004 |
| 568.300 | 0.027 | 0.004 |
| 568.300 | 0.023 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.040 | 0.005 |
| 568.299 | 0.021 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.300 | 0.019 | 0.004 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.539 | 4.966 | 3.299 |
| Tractors/Loaders/Backhoes | 120  | 0.272 | 3.705 | 1.624 |
| Tractors/Loaders/Backhoes | 175  | 0.193 | 3.273 | 0.485 |
| Tractors/Loaders/Backhoes | 250  | 0.183 | 1.115 | 0.418 |
| Tractors/Loaders/Backhoes | 500  | 0.182 | 1.066 | 0.403 |
| Tractors/Loaders/Backhoes | 750  | 0.182 | 1.066 | 0.407 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 |
| Trenchers                 | 50   | 0.851 | 5.208 | 3.835 |
| Trenchers                 | 120  | 0.409 | 3.743 | 2.559 |
| Trenchers                 | 175  | 0.300 | 3.273 | 1.529 |
| Trenchers                 | 250  | 0.256 | 1.188 | 1.348 |
| Trenchers                 | 500  | 0.249 | 1.209 | 1.231 |
| Trenchers                 | 750  | 0.249 | 1.209 | 1.254 |
| Welders                   | 15   | 0.663 | 3.470 | 4.164 |
| Welders                   | 25   | 0.687 | 2.340 | 4.347 |
| Welders                   | 50   | 0.449 | 4.387 | 3.273 |
| Welders                   | 120  | 0.239 | 3.535 | 1.707 |
| Welders                   | 175  | 0.176 | 3.121 | 0.628 |
| Welders                   | 250  | 0.162 | 1.063 | 0.525 |
| Welders                   | 500  | 0.161 | 1.027 | 0.495 |
| Water Trucks              | 175  | 0.229 | 3.425 | 0.563 |
| Water Trucks              | 250  | 0.217 | 1.166 | 0.481 |
| Water Trucks              | 500  | 0.216 | 1.104 | 0.458 |
| Water Trucks              | 750  | 0.217 | 1.104 | 0.463 |
| Water Trucks              | 1000 | 0.220 | 1.107 | 2.651 |

2034

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|
| SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 0.007   | 0.040   | 0.040   | 568.300 | 0.030   | 0.005   |
| 0.006   | 0.036   | 0.036   | 568.299 | 0.017   | 0.004   |
| 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.008   | 0.166   | 0.166   | 568.299 | 0.059   | 0.005   |
| 0.007   | 0.165   | 0.165   | 568.299 | 0.061   | 0.005   |
| 0.007   | 0.046   | 0.046   | 568.299 | 0.045   | 0.005   |
| 0.006   | 0.041   | 0.041   | 568.299 | 0.023   | 0.004   |
| 0.006   | 0.027   | 0.027   | 568.299 | 0.017   | 0.004   |
| 0.006   | 0.018   | 0.018   | 568.299 | 0.016   | 0.004   |
| 0.005   | 0.017   | 0.017   | 568.299 | 0.016   | 0.004   |
| 0.005   | 0.017   | 0.017   | 568.300 | 0.016   | 0.004   |
| 0.005   | 0.033   | 0.033   | 568.299 | 0.016   | 0.004   |
| 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

| 2034             |       |
|------------------|-------|
| Equipment        | MaxHP |
| Aerial Lifts     | 15    |
| Aerial Lifts     | 25    |
| Aerial Lifts     | 50    |
| Aerial Lifts     | 120   |
| Aerial Lifts     | 500   |
| Aerial Lifts     | 750   |
| Air Compressor s | 15    |
| Air Compressor s | 25    |
| Air Compressor s | 50    |
| Air Compressor s | 120   |
| Air Compressor s | 175   |
| Air Compressor s | 250   |
| Air Compressor s | 500   |
| Air Compressor s | 750   |
| Air Compressor s | 1000  |
| Bore/Drill Rigs  | 15    |
| Bore/Drill Rigs  | 25    |
| Bore/Drill Rigs  | 50    |
| Bore/Drill Rigs  | 120   |
| Bore/Drill Rigs  | 175   |
| Bore/Drill Rigs  | 250   |
| Bore/Drill Rigs  | 500   |
| Bore/Drill Rigs  | 750   |
| Bore/Drill Rigs  | 1000  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.041 | 0.041 | 568.299 | 0.036 | 0.005 |
| 0.006 | 0.036 | 0.036 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 0.007 | 0.075 | 0.075 | 568.299 | 0.061 | 0.005 |
| 0.006 | 0.067 | 0.067 | 568.299 | 0.030 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.020 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.020 | 0.004 |
| 0.005 | 0.024 | 0.024 | 568.300 | 0.020 | 0.004 |
| 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.007 | 0.116 | 0.116 | 568.299 | 0.075 | 0.005 |
| 0.006 | 0.105 | 0.105 | 568.299 | 0.036 | 0.004 |
| 0.006 | 0.065 | 0.065 | 568.299 | 0.026 | 0.004 |
| 0.006 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.056 | 0.056 | 568.300 | 0.023 | 0.004 |
| 0.007 | 0.043 | 0.043 | 568.299 | 0.047 | 0.005 |
| 0.006 | 0.038 | 0.038 | 568.299 | 0.024 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.005 | 0.032 | 0.032 | 568.299 | 0.017 | 0.004 |

|                          |      |
|--------------------------|------|
| Cement and Mortar Mixers | 15   |
| Cement and Mortar Mixers | 25   |
| Concrete/Industrial Saws | 25   |
| Concrete/Industrial Saws | 50   |
| Concrete/Industrial Saws | 120  |
| Concrete/Industrial Saws | 175  |
| Cranes                   | 50   |
| Cranes                   | 120  |
| Cranes                   | 175  |
| Cranes                   | 250  |
| Cranes                   | 500  |
| Cranes                   | 750  |
| Cranes                   | 9999 |
| Crawler Tractors         | 50   |
| Crawler Tractors         | 120  |
| Crawler Tractors         | 175  |
| Crawler Tractors         | 250  |
| Crawler Tractors         | 500  |
| Crawler Tractors         | 750  |
| Crawler Tractors         | 1000 |
| Crushing/Proc. Equipment | 50   |
| Crushing/Proc. Equipment | 120  |
| Crushing/Proc. Equipment | 175  |
| Crushing/Proc. Equipment | 250  |
| Crushing/Proc. Equipment | 500  |
| Crushing/Proc. Equipment | 750  |
| Crushing/Proc. Equipment | 9999 |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
| 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
| 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
| 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
| 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|                      |      |
|----------------------|------|
| Dumpers/Trucks       | 25   |
| Excavators           | 25   |
| Excavators           | 50   |
| Excavators           | 120  |
| Excavators           | 175  |
| Excavators           | 250  |
| Excavators           | 500  |
| Excavators           | 750  |
| Forklifts            | 50   |
| Forklifts            | 120  |
| Forklifts            | 175  |
| Forklifts            | 250  |
| Forklifts            | 500  |
| Generator Sets       | 15   |
| Generator Sets       | 25   |
| Generator Sets       | 50   |
| Generator Sets       | 120  |
| Generator Sets       | 175  |
| Generator Sets       | 250  |
| Generator Sets       | 500  |
| Generator Sets       | 750  |
| Generator Sets       | 9999 |
| Graders              | 50   |
| Graders              | 120  |
| Graders              | 175  |
| Graders              | 250  |
| Graders              | 500  |
| Graders              | 750  |
| Off-Highway Tractors | 120  |
| Off-Highway Tractors | 175  |
| Off-Highway Tractors | 250  |
| Off-Highway Tractors | 750  |
| Off-Highway Tractors | 1000 |
| Off-Highway Trucks   | 175  |
| Off-Highway Trucks   | 250  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.030 | 0.030 | 568.299 | 0.038 | 0.005 |
| 0.006 | 0.027 | 0.027 | 568.300 | 0.020 | 0.004 |
| 0.006 | 0.019 | 0.019 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.014 | 0.014 | 568.300 | 0.013 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.048 | 0.048 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.028 | 0.028 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Off-Highway Trucks                 | 500  |
| Off-Highway Trucks                 | 750  |
| Off-Highway Trucks                 | 1000 |
| Other Construction Equipment       | 15   |
| Other Construction Equipment       | 25   |
| Other Construction Equipment       | 50   |
| Other Construction Equipment       | 120  |
| Other Construction Equipment       | 175  |
| Other Construction Equipment       | 500  |
| Other General Industrial Equipment | 15   |
| Other General Industrial Equipment | 25   |
| Other General Industrial Equipment | 50   |
| Other General Industrial Equipment | 120  |
| Other General Industrial Equipment | 175  |
| Other General Industrial Equipment | 250  |
| Other General Industrial Equipment | 500  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Other General Industrial Equipment | 750  |
| Other General Industrial Equipment | 1000 |
| Other Material Handling Equipment  | 50   |
| Other Material Handling Equipment  | 120  |
| Other Material Handling Equipment  | 175  |
| Other Material Handling Equipment  | 250  |
| Other Material Handling Equipment  | 500  |
| Other Material Handling Equipment  | 9999 |
| Pavers                             | 25   |
| Pavers                             | 50   |
| Pavers                             | 120  |
| Pavers                             | 175  |
| Pavers                             | 250  |
| Pavers                             | 500  |
| Paving Equipment                   | 25   |
| Paving Equipment                   | 50   |
| Paving Equipment                   | 120  |
| Paving Equipment                   | 175  |
| Paving Equipment                   | 250  |
| Plate Compactors                   | 15   |
| Pressure Washers                   | 15   |
| Pressure Washers                   | 25   |
| Pressure Washers                   | 50   |
| Pressure Washers                   | 120  |
| Pressure Washers                   | 175  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|                         |      |
|-------------------------|------|
| Pressure Washers        | 250  |
| Pumps                   | 15   |
| Pumps                   | 25   |
| Pumps                   | 50   |
| Pumps                   | 120  |
| Pumps                   | 175  |
| Pumps                   | 250  |
| Pumps                   | 500  |
| Pumps                   | 750  |
| Pumps                   | 9999 |
| Rollers                 | 15   |
| Rollers                 | 25   |
| Rollers                 | 50   |
| Rollers                 | 120  |
| Rollers                 | 175  |
| Rollers                 | 250  |
| Rollers                 | 500  |
| Rough Terrain Forklifts | 50   |
| Rough Terrain Forklifts | 120  |
| Rough Terrain Forklifts | 175  |
| Rough Terrain Forklifts | 250  |
| Rough Terrain Forklifts | 500  |
| Rubber Tired Dozers     | 175  |
| Rubber Tired Dozers     | 250  |
| Rubber Tired Dozers     | 500  |
| Rubber Tired Dozers     | 750  |
| Rubber Tired Dozers     | 1000 |
| Rubber Tired Loaders    | 25   |
| Rubber Tired Loaders    | 50   |
| Rubber Tired Loaders    | 120  |
| Rubber Tired Loaders    | 175  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|                           |      |
|---------------------------|------|
| Rubber Tired Loaders      | 250  |
| Rubber Tired Loaders      | 500  |
| Rubber Tired Loaders      | 750  |
| Rubber Tired Loaders      | 1000 |
| Scrapers                  | 120  |
| Scrapers                  | 175  |
| Scrapers                  | 250  |
| Scrapers                  | 500  |
| Scrapers                  | 750  |
| Signal Boards             | 15   |
| Signal Boards             | 50   |
| Signal Boards             | 120  |
| Signal Boards             | 175  |
| Signal Boards             | 250  |
| Skid Steer Loaders        | 25   |
| Skid Steer Loaders        | 50   |
| Skid Steer Loaders        | 120  |
| Surfacing Equipment       | 50   |
| Surfacing Equipment       | 120  |
| Surfacing Equipment       | 175  |
| Surfacing Equipment       | 250  |
| Surfacing Equipment       | 500  |
| Surfacing Equipment       | 750  |
| Sweepers/S crubbers       | 15   |
| Sweepers/S crubbers       | 25   |
| Sweepers/S crubbers       | 50   |
| Sweepers/S crubbers       | 120  |
| Sweepers/S crubbers       | 175  |
| Sweepers/S crubbers       | 250  |
| Tractors/Loaders/Backhoes | 25   |



|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

|                           |      |
|---------------------------|------|
| Tractors/Loaders/Backhoes | 50   |
| Tractors/Loaders/Backhoes | 120  |
| Tractors/Loaders/Backhoes | 175  |
| Tractors/Loaders/Backhoes | 250  |
| Tractors/Loaders/Backhoes | 500  |
| Tractors/Loaders/Backhoes | 750  |
| Trenchers                 | 15   |
| Trenchers                 | 25   |
| Trenchers                 | 50   |
| Trenchers                 | 120  |
| Trenchers                 | 175  |
| Trenchers                 | 250  |
| Trenchers                 | 500  |
| Trenchers                 | 750  |
| Welders                   | 15   |
| Welders                   | 25   |
| Welders                   | 50   |
| Welders                   | 120  |
| Welders                   | 175  |
| Welders                   | 250  |
| Welders                   | 500  |
| Water Trucks              | 175  |
| Water Trucks              | 250  |
| Water Trucks              | 500  |
| Water Trucks              | 750  |
| Water Trucks              | 1000 |

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 0.339   | 3.764   | 3.135   | 0.007   | 0.040   | 0.040   | 568.300 | 0.030   | 0.005   |
| 0.188   | 3.352   | 1.657   | 0.006   | 0.036   | 0.036   | 568.299 | 0.017   | 0.004   |
| 0.126   | 0.986   | 0.479   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.126   | 0.986   | 0.485   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.663   | 3.470   | 4.164   | 0.008   | 0.166   | 0.166   | 568.299 | 0.059   | 0.005   |
| 0.687   | 2.340   | 4.347   | 0.007   | 0.165   | 0.165   | 568.299 | 0.061   | 0.005   |
| 0.506   | 4.712   | 3.340   | 0.007   | 0.046   | 0.046   | 568.299 | 0.045   | 0.005   |
| 0.264   | 3.630   | 1.729   | 0.006   | 0.041   | 0.041   | 568.299 | 0.023   | 0.004   |
| 0.193   | 3.205   | 0.633   | 0.006   | 0.027   | 0.027   | 568.299 | 0.017   | 0.004   |
| 0.179   | 1.092   | 0.529   | 0.006   | 0.018   | 0.018   | 568.299 | 0.016   | 0.004   |
| 0.178   | 1.048   | 0.499   | 0.005   | 0.017   | 0.017   | 568.299 | 0.016   | 0.004   |
| 0.178   | 1.048   | 0.505   | 0.005   | 0.017   | 0.017   | 568.300 | 0.016   | 0.004   |
| 0.182   | 1.049   | 2.600   | 0.005   | 0.033   | 0.033   | 568.299 | 0.016   | 0.004   |
| 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 0.348   | 4.029   | 3.020   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 0.183   | 3.434   | 1.415   | 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 0.127   | 3.038   | 0.279   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.035   | 0.274   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.333 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.409 | 4.199 | 3.222 | 0.007 | 0.041 | 0.041 | 568.299 | 0.036 | 0.005 |
| 0.221 | 3.480 | 1.667 | 0.006 | 0.036 | 0.036 | 568.299 | 0.019 | 0.004 |
| 0.163 | 3.074 | 0.590 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 0.684 | 5.366 | 3.598 | 0.007 | 0.075 | 0.075 | 568.299 | 0.061 | 0.005 |
| 0.343 | 3.812 | 1.987 | 0.006 | 0.067 | 0.067 | 568.299 | 0.030 | 0.004 |
| 0.253 | 3.356 | 0.916 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.224 | 1.147 | 0.748 | 0.006 | 0.024 | 0.024 | 568.299 | 0.020 | 0.004 |
| 0.222 | 1.090 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.020 | 0.004 |
| 0.222 | 1.090 | 0.709 | 0.005 | 0.024 | 0.024 | 568.300 | 0.020 | 0.004 |
| 0.245 | 1.108 | 2.800 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.833 | 5.605 | 3.808 | 0.007 | 0.116 | 0.116 | 568.299 | 0.075 | 0.005 |
| 0.405 | 3.871 | 2.341 | 0.006 | 0.105 | 0.105 | 568.299 | 0.036 | 0.004 |
| 0.296 | 3.397 | 1.266 | 0.006 | 0.065 | 0.065 | 568.299 | 0.026 | 0.004 |
| 0.262 | 1.207 | 1.104 | 0.006 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.257 | 1.200 | 1.016 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.257 | 1.200 | 1.033 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.265 | 1.225 | 3.094 | 0.005 | 0.056 | 0.056 | 568.300 | 0.023 | 0.004 |
| 0.525 | 4.857 | 3.351 | 0.007 | 0.043 | 0.043 | 568.299 | 0.047 | 0.005 |
| 0.272 | 3.673 | 1.708 | 0.006 | 0.038 | 0.038 | 568.299 | 0.024 | 0.004 |
| 0.197 | 3.244 | 0.600 | 0.006 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 0.185 | 1.105 | 0.502 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.184 | 1.058 | 0.476 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.184 | 1.058 | 0.478 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.196 | 1.059 | 2.590 | 0.005 | 0.032 | 0.032 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.602 | 5.309 | 3.393 | 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 0.301 | 3.806 | 1.676 | 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 0.213 | 3.362 | 0.525 | 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.203 | 1.145 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.202 | 1.088 | 0.433 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.202 | 1.088 | 0.437 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.565 | 5.272 | 3.330 | 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 0.283 | 3.799 | 1.555 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.199 | 3.360 | 0.391 | 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 0.195 | 1.144 | 0.341 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.195 | 1.088 | 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.315 | 3.640 | 3.107 | 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 0.178 | 3.316 | 1.645 | 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 0.130 | 2.929 | 0.601 | 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.120 | 0.998 | 0.504 | 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 0.119 | 0.978 | 0.476 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.119 | 0.978 | 0.482 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.128 | 0.979 | 2.483 | 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 0.648 | 5.239 | 3.530 | 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 0.323 | 3.775 | 1.903 | 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 0.237 | 3.326 | 0.815 | 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 0.216 | 1.148 | 0.684 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.214 | 1.097 | 0.647 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.214 | 1.097 | 0.654 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.518 | 3.944 | 2.959 | 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
| 0.373 | 3.435 | 1.916 | 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
| 0.315 | 1.286 | 1.715 | 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
| 0.304 | 1.351 | 1.590 | 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
| 0.318 | 1.409 | 3.569 | 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
| 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.429 | 4.390 | 3.190 | 0.007 | 0.030 | 0.030 | 568.299 | 0.038 | 0.005 |
| 0.225 | 3.538 | 1.576 | 0.006 | 0.027 | 0.027 | 568.300 | 0.020 | 0.004 |
| 0.161 | 3.127 | 0.459 | 0.006 | 0.019 | 0.019 | 568.299 | 0.014 | 0.004 |
| 0.154 | 1.028 | 0.391 | 0.005 | 0.014 | 0.014 | 568.300 | 0.013 | 0.004 |
| 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.609 | 5.299 | 3.460 | 0.007 | 0.048 | 0.048 | 568.299 | 0.054 | 0.005 |
| 0.309 | 3.802 | 1.766 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.223 | 3.357 | 0.641 | 0.006 | 0.028 | 0.028 | 568.299 | 0.020 | 0.004 |
| 0.209 | 1.143 | 0.536 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.208 | 1.087 | 0.506 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.208 | 1.087 | 0.512 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.212 | 1.088 | 2.660 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.598 | 5.237 | 3.447 | 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 0.304 | 3.784 | 1.762 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.220 | 3.341 | 0.640 | 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 0.206 | 1.138 | 0.535 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.205 | 1.083 | 0.505 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.218 | 1.084 | 2.653 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.845 | 5.396 | 3.841 | 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 0.408 | 3.800 | 2.468 | 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 0.300 | 3.326 | 1.425 | 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 0.259 | 1.192 | 1.246 | 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 0.253 | 1.181 | 1.141 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.802 | 5.309 | 3.809 | 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 0.390 | 3.774 | 2.393 | 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 0.290 | 3.306 | 1.363 | 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 0.250 | 1.171 | 1.176 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.215 | 3.124 | 2.989 | 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 0.134 | 3.167 | 1.594 | 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 0.126 | 2.907 | 0.619 | 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 0.348 | 3.814 | 3.146 | 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 0.193 | 3.367 | 1.662 | 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 0.142 | 2.973 | 0.610 | 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 0.130 | 1.013 | 0.511 | 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.129 | 0.989 | 0.482 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.129 | 0.989 | 0.488 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.139 | 0.990 | 2.504 | 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.587 | 4.784 | 3.480 | 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 0.299 | 3.639 | 1.950 | 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 0.223 | 3.203 | 0.907 | 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 0.195 | 1.099 | 0.745 | 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 0.193 | 1.056 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 0.548 | 5.031 | 3.359 | 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 0.279 | 3.725 | 1.671 | 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 0.200 | 3.291 | 0.537 | 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 0.191 | 1.121 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.190 | 1.070 | 0.443 | 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 0.398 | 3.496 | 2.034 | 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 0.335 | 1.322 | 1.828 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 0.322 | 1.401 | 1.658 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.323 | 1.401 | 1.694 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.338 | 1.465 | 3.676 | 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.634 | 5.181 | 3.500 | 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 0.317 | 3.759 | 1.875 | 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 0.232 | 3.312 | 0.787 | 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.210 | 1.138 | 0.655 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.208 | 1.085 | 0.619 | 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 0.208 | 1.085 | 0.627 | 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.214 | 1.099 | 2.722 | 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 0.410 | 3.866 | 2.384 | 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 0.301 | 3.389 | 1.320 | 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 0.264 | 1.206 | 1.149 | 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 0.259 | 1.184 | 1.057 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.259 | 1.184 | 1.075 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.393 | 4.099 | 3.193 | 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 0.213 | 3.451 | 1.657 | 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 0.157 | 3.048 | 0.586 | 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 0.176 | 1.255 | 0.594 | 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.411 | 4.386 | 3.128 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 0.214 | 3.538 | 1.477 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.518 | 4.295 | 3.400 | 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 0.264 | 3.492 | 1.959 | 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 0.197 | 3.071 | 0.939 | 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 0.172 | 1.064 | 0.789 | 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 0.169 | 1.032 | 0.738 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.169 | 1.032 | 0.749 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.509 | 4.947 | 3.294 | 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 0.261 | 3.703 | 1.569 | 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 0.187 | 3.275 | 0.431 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.182 | 1.116 | 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |



|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.539 | 4.966 | 3.299 | 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 0.272 | 3.705 | 1.624 | 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 0.193 | 3.273 | 0.485 | 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 0.183 | 1.115 | 0.418 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.182 | 1.066 | 0.403 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.182 | 1.066 | 0.407 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.851 | 5.208 | 3.835 | 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 0.409 | 3.743 | 2.559 | 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 0.300 | 3.273 | 1.529 | 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 0.256 | 1.188 | 1.348 | 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 0.249 | 1.209 | 1.231 | 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 0.249 | 1.209 | 1.254 | 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.449 | 4.387 | 3.273 | 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 0.239 | 3.535 | 1.707 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.176 | 3.121 | 0.628 | 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 0.162 | 1.063 | 0.525 | 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.161 | 1.027 | 0.495 | 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

| 2035             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   | 0.019   | 0.019   | 568.299 |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   | 0.017   | 0.017   | 568.299 |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   | 0.162   | 0.162   | 568.300 |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   | 0.023   | 0.023   | 568.299 |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   | 0.020   | 0.020   | 568.299 |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   | 0.015   | 0.015   | 568.300 |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   | 0.012   | 0.012   | 568.299 |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   | 0.012   | 0.012   | 568.299 |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   | 0.012   | 0.012   | 568.299 |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   | 0.026   | 0.026   | 568.299 |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   | 0.013   | 0.013   | 568.299 |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   | 0.012   | 0.012   | 568.300 |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 |

|                          |      |       |       |       |       |       |       |         |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 | 0.021 | 0.021 | 568.300 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 | 0.018 | 0.018 | 568.299 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 | 0.014 | 0.014 | 568.299 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 | 0.039 | 0.039 | 568.299 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 | 0.036 | 0.036 | 568.300 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 | 0.024 | 0.024 | 568.299 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 | 0.016 | 0.016 | 568.299 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 | 0.016 | 0.016 | 568.299 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 | 0.031 | 0.031 | 568.299 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 | 0.066 | 0.066 | 568.299 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 | 0.060 | 0.060 | 568.299 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 | 0.038 | 0.038 | 568.299 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 | 0.026 | 0.026 | 568.299 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 | 0.025 | 0.025 | 568.299 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 | 0.025 | 0.025 | 568.299 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 | 0.041 | 0.041 | 568.299 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 | 0.023 | 0.023 | 568.299 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 | 0.020 | 0.020 | 568.299 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 | 0.015 | 0.015 | 568.299 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 | 0.012 | 0.012 | 568.300 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 | 0.026 | 0.026 | 568.299 |

|                      |      |       |       |       |       |       |       |         |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Dumpers/Tractors     | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Excavators           | 50   | 0.572 | 5.287 | 3.323 | 0.007 | 0.024 | 0.024 | 568.299 |
| Excavators           | 120  | 0.284 | 3.802 | 1.551 | 0.006 | 0.021 | 0.021 | 568.299 |
| Excavators           | 175  | 0.197 | 3.363 | 0.365 | 0.006 | 0.015 | 0.015 | 568.299 |
| Excavators           | 250  | 0.195 | 1.145 | 0.342 | 0.006 | 0.013 | 0.013 | 568.300 |
| Excavators           | 500  | 0.195 | 1.089 | 0.337 | 0.005 | 0.013 | 0.013 | 568.299 |
| Excavators           | 750  | 0.195 | 1.088 | 0.338 | 0.005 | 0.013 | 0.013 | 568.299 |
| Forklifts            | 50   | 0.558 | 5.234 | 3.268 | 0.007 | 0.017 | 0.017 | 568.299 |
| Forklifts            | 120  | 0.275 | 3.787 | 1.495 | 0.006 | 0.016 | 0.016 | 568.299 |
| Forklifts            | 175  | 0.189 | 3.350 | 0.299 | 0.006 | 0.012 | 0.012 | 568.300 |
| Forklifts            | 250  | 0.188 | 1.141 | 0.290 | 0.006 | 0.011 | 0.011 | 568.300 |
| Forklifts            | 500  | 0.188 | 1.085 | 0.290 | 0.005 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 |
| Generator Sets       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Generator Sets       | 50   | 0.276 | 3.607 | 2.991 | 0.007 | 0.018 | 0.018 | 568.299 |
| Generator Sets       | 120  | 0.156 | 3.310 | 1.458 | 0.006 | 0.016 | 0.016 | 568.299 |
| Generator Sets       | 175  | 0.113 | 2.929 | 0.373 | 0.006 | 0.013 | 0.013 | 568.299 |
| Generator Sets       | 250  | 0.110 | 0.998 | 0.331 | 0.006 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 500  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 750  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 9999 | 0.114 | 0.978 | 2.362 | 0.005 | 0.022 | 0.022 | 568.299 |
| Graders              | 50   | 0.593 | 5.189 | 3.356 | 0.007 | 0.037 | 0.037 | 568.299 |
| Graders              | 120  | 0.293 | 3.767 | 1.661 | 0.006 | 0.034 | 0.034 | 568.299 |
| Graders              | 175  | 0.206 | 3.326 | 0.506 | 0.006 | 0.022 | 0.022 | 568.300 |
| Graders              | 250  | 0.196 | 1.137 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 |
| Graders              | 500  | 0.195 | 1.083 | 0.434 | 0.005 | 0.016 | 0.016 | 568.299 |
| Graders              | 750  | 0.195 | 1.083 | 0.438 | 0.005 | 0.016 | 0.016 | 568.299 |
| Off-Highway Tractors | 120  | 0.418 | 3.902 | 2.350 | 0.006 | 0.107 | 0.107 | 568.299 |
| Off-Highway Tractors | 175  | 0.301 | 3.421 | 1.252 | 0.006 | 0.065 | 0.065 | 568.299 |
| Off-Highway Tractors | 250  | 0.268 | 1.232 | 1.115 | 0.006 | 0.042 | 0.042 | 568.299 |
| Off-Highway Tractors | 750  | 0.262 | 1.238 | 1.045 | 0.005 | 0.040 | 0.040 | 568.299 |
| Off-Highway Tractors | 1000 | 0.269 | 1.268 | 3.116 | 0.005 | 0.056 | 0.056 | 568.299 |
| Off-Highway Trucks   | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 |
| Off-Highway Trucks   | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 | 0.018 | 0.018 | 568.299 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 | 0.017 | 0.017 | 568.299 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 | 0.013 | 0.013 | 568.299 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 | 0.011 | 0.011 | 568.299 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 | 0.025 | 0.025 | 568.299 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 | 0.022 | 0.022 | 568.300 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 | 0.016 | 0.016 | 568.300 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 | 0.013 | 0.013 | 568.299 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 | 0.028 | 0.028 | 568.299 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 | 0.025 | 0.025 | 568.299 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 | 0.022 | 0.022 | 568.299 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 | 0.016 | 0.016 | 568.299 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 | 0.013 | 0.013 | 568.299 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 | 0.013 | 0.013 | 568.299 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 | 0.027 | 0.027 | 568.299 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 | 0.076 | 0.076 | 568.299 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 | 0.069 | 0.069 | 568.299 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 | 0.043 | 0.043 | 568.299 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 | 0.027 | 0.027 | 568.300 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 | 0.026 | 0.026 | 568.299 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 | 0.070 | 0.070 | 568.300 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 | 0.064 | 0.064 | 568.299 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 | 0.040 | 0.040 | 568.299 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 | 0.024 | 0.024 | 568.299 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.300 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 | 0.015 | 0.015 | 568.299 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 | 0.014 | 0.014 | 568.299 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 | 0.013 | 0.013 | 568.299 |

|                         |      |       |       |       |       |       |       |         |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 |
| Pumps                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 |
| Pumps                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Pumps                   | 50   | 0.306 | 3.778 | 3.028 | 0.007 | 0.019 | 0.019 | 568.299 |
| Pumps                   | 120  | 0.170 | 3.360 | 1.470 | 0.006 | 0.017 | 0.017 | 568.299 |
| Pumps                   | 175  | 0.123 | 2.973 | 0.377 | 0.006 | 0.014 | 0.014 | 568.299 |
| Pumps                   | 250  | 0.119 | 1.012 | 0.335 | 0.006 | 0.011 | 0.011 | 568.299 |
| Pumps                   | 500  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 |
| Pumps                   | 750  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 |
| Pumps                   | 9999 | 0.124 | 0.989 | 2.380 | 0.005 | 0.023 | 0.023 | 568.299 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Rollers                 | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 |
| Rollers                 | 50   | 0.507 | 4.711 | 3.280 | 0.007 | 0.038 | 0.038 | 568.299 |
| Rollers                 | 120  | 0.258 | 3.629 | 1.650 | 0.006 | 0.035 | 0.035 | 568.299 |
| Rollers                 | 175  | 0.184 | 3.204 | 0.523 | 0.006 | 0.023 | 0.023 | 568.299 |
| Rollers                 | 250  | 0.173 | 1.091 | 0.465 | 0.006 | 0.016 | 0.016 | 568.299 |
| Rollers                 | 500  | 0.172 | 1.048 | 0.442 | 0.005 | 0.016 | 0.016 | 568.300 |
| Rough Terrain Forklifts | 50   | 0.521 | 5.011 | 3.267 | 0.007 | 0.022 | 0.022 | 568.299 |
| Rough Terrain Forklifts | 120  | 0.262 | 3.722 | 1.530 | 0.006 | 0.020 | 0.020 | 568.299 |
| Rough Terrain Forklifts | 175  | 0.184 | 3.292 | 0.364 | 0.006 | 0.015 | 0.015 | 568.299 |
| Rough Terrain Forklifts | 250  | 0.181 | 1.121 | 0.334 | 0.006 | 0.012 | 0.012 | 568.299 |
| Rough Terrain Forklifts | 500  | 0.181 | 1.071 | 0.331 | 0.005 | 0.012 | 0.012 | 568.300 |
| Rubber Tired Dozers     | 175  | 0.322 | 3.481 | 1.345 | 0.006 | 0.071 | 0.071 | 568.299 |
| Rubber Tired Dozers     | 250  | 0.286 | 1.262 | 1.203 | 0.006 | 0.046 | 0.046 | 568.299 |
| Rubber Tired Dozers     | 500  | 0.279 | 1.279 | 1.107 | 0.005 | 0.043 | 0.043 | 568.300 |
| Rubber Tired Dozers     | 750  | 0.279 | 1.279 | 1.126 | 0.005 | 0.043 | 0.043 | 568.299 |
| Rubber Tired Dozers     | 1000 | 0.287 | 1.312 | 3.204 | 0.005 | 0.060 | 0.060 | 568.299 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Rubber Tired Loaders    | 50   | 0.575 | 5.126 | 3.337 | 0.007 | 0.035 | 0.035 | 568.299 |
| Rubber Tired Loaders    | 120  | 0.286 | 3.751 | 1.639 | 0.006 | 0.033 | 0.033 | 568.299 |
| Rubber Tired Loaders    | 175  | 0.200 | 3.312 | 0.481 | 0.006 | 0.022 | 0.022 | 568.299 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 | 0.015 | 0.015 | 568.299 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 | 0.015 | 0.015 | 568.299 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 | 0.015 | 0.015 | 568.299 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 | 0.030 | 0.030 | 568.299 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 | 0.064 | 0.064 | 568.299 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 | 0.040 | 0.040 | 568.299 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 | 0.026 | 0.026 | 568.299 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 | 0.025 | 0.025 | 568.300 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 | 0.025 | 0.025 | 568.299 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 | 0.020 | 0.020 | 568.299 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 | 0.018 | 0.018 | 568.299 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 | 0.014 | 0.014 | 568.299 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 | 0.014 | 0.014 | 686.695 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 | 0.015 | 0.015 | 568.299 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 | 0.014 | 0.014 | 568.299 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 | 0.041 | 0.041 | 568.299 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 | 0.038 | 0.038 | 568.299 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 | 0.025 | 0.025 | 568.299 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 | 0.016 | 0.016 | 568.299 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 | 0.016 | 0.016 | 568.299 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 | 0.016 | 0.016 | 568.300 |
| Sweepers/S crubbers       | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Sweepers/S crubbers       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 |
| Sweepers/S crubbers       | 50   | 0.505 | 4.929 | 3.214 | 0.007 | 0.017 | 0.017 | 568.299 |
| Sweepers/S crubbers       | 120  | 0.253 | 3.698 | 1.486 | 0.006 | 0.016 | 0.016 | 568.299 |
| Sweepers/S crubbers       | 175  | 0.175 | 3.271 | 0.313 | 0.006 | 0.012 | 0.012 | 568.299 |
| Sweepers/S crubbers       | 250  | 0.173 | 1.114 | 0.294 | 0.006 | 0.011 | 0.011 | 568.299 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |



|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Tractors/Loaders/Backhoes | 50   | 0.515 | 4.949 | 3.244 | 0.007 | 0.022 | 0.022 | 568.299 |
| Tractors/Loaders/Backhoes | 120  | 0.258 | 3.703 | 1.521 | 0.006 | 0.020 | 0.020 | 568.299 |
| Tractors/Loaders/Backhoes | 175  | 0.179 | 3.275 | 0.348 | 0.006 | 0.015 | 0.015 | 568.299 |
| Tractors/Loaders/Backhoes | 250  | 0.177 | 1.115 | 0.331 | 0.006 | 0.012 | 0.012 | 568.299 |
| Tractors/Loaders/Backhoes | 500  | 0.177 | 1.066 | 0.326 | 0.006 | 0.012 | 0.012 | 568.299 |
| Tractors/Loaders/Backhoes | 750  | 0.177 | 1.066 | 0.327 | 0.006 | 0.012 | 0.012 | 568.299 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Trenchers                 | 50   | 0.681 | 5.055 | 3.548 | 0.007 | 0.084 | 0.084 | 568.299 |
| Trenchers                 | 120  | 0.332 | 3.713 | 2.049 | 0.006 | 0.076 | 0.076 | 568.300 |
| Trenchers                 | 175  | 0.241 | 3.264 | 0.966 | 0.006 | 0.048 | 0.048 | 568.299 |
| Trenchers                 | 250  | 0.216 | 1.149 | 0.847 | 0.006 | 0.031 | 0.031 | 568.299 |
| Trenchers                 | 500  | 0.213 | 1.126 | 0.790 | 0.005 | 0.029 | 0.029 | 568.299 |
| Trenchers                 | 750  | 0.213 | 1.126 | 0.801 | 0.005 | 0.029 | 0.029 | 568.300 |
| Welders                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 |
| Welders                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Welders                   | 50   | 0.406 | 4.349 | 3.147 | 0.007 | 0.022 | 0.022 | 568.299 |
| Welders                   | 120  | 0.214 | 3.528 | 1.509 | 0.006 | 0.019 | 0.019 | 568.299 |
| Welders                   | 175  | 0.153 | 3.121 | 0.387 | 0.006 | 0.015 | 0.015 | 568.299 |
| Welders                   | 250  | 0.149 | 1.063 | 0.343 | 0.006 | 0.012 | 0.012 | 568.299 |
| Welders                   | 500  | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000   |
| Water Trucks              | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 |
| Water Trucks              | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 |
| Water Trucks              | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Water Trucks              | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Water Trucks              | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 |

2036

| g/hp/hr | g/hp/hr |
|---------|---------|
| CH4     | N2O     |
| 0.059   | 0.005   |
| 0.061   | 0.005   |
| 0.026   | 0.005   |
| 0.014   | 0.004   |
| 0.010   | 0.004   |
| 0.010   | 0.004   |
|         |         |
| 0.059   | 0.005   |
|         |         |
| 0.061   | 0.005   |
|         |         |
| 0.041   | 0.005   |
|         |         |
| 0.021   | 0.004   |
|         |         |
| 0.015   | 0.004   |
|         |         |
| 0.014   | 0.004   |
|         |         |
| 0.014   | 0.004   |
|         |         |
| 0.014   | 0.004   |
|         |         |
| 0.015   | 0.004   |
|         |         |
| 0.059   | 0.005   |
|         |         |
| 0.061   | 0.005   |
|         |         |
| 0.031   | 0.005   |
|         |         |
| 0.016   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |

| 2036             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   |
| Air Compressor s |       |         |         |         |         |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   |

|       |       |
|-------|-------|
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.061 | 0.005 |
| 0.033 | 0.005 |
| 0.018 | 0.004 |
| 0.012 | 0.004 |
| 0.054 | 0.005 |
| 0.027 | 0.004 |
| 0.019 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.063 | 0.005 |
| 0.031 | 0.004 |
| 0.022 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.044 | 0.005 |
| 0.022 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.016 | 0.004 |

|                          |      |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 |

|       |       |
|-------|-------|
| 0.061 | 0.005 |
| 0.061 | 0.005 |
| 0.051 | 0.005 |
| 0.025 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.050 | 0.005 |
| 0.024 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.053 | 0.005 |
| 0.061 | 0.005 |
| 0.024 | 0.005 |
| 0.014 | 0.004 |
| 0.010 | 0.004 |
| 0.009 | 0.004 |
| 0.009 | 0.004 |
| 0.009 | 0.004 |
| 0.010 | 0.004 |
| 0.053 | 0.005 |
| 0.026 | 0.004 |
| 0.018 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.037 | 0.004 |
| 0.027 | 0.004 |
| 0.024 | 0.004 |
| 0.023 | 0.004 |
| 0.024 | 0.004 |
| 0.019 | 0.004 |
| 0.018 | 0.004 |

|                      |      |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Excavators           | 50   | 0.572 | 5.287 | 3.323 | 0.007 |
| Excavators           | 120  | 0.284 | 3.802 | 1.551 | 0.006 |
| Excavators           | 175  | 0.197 | 3.363 | 0.365 | 0.006 |
| Excavators           | 250  | 0.195 | 1.145 | 0.342 | 0.006 |
| Excavators           | 500  | 0.195 | 1.089 | 0.337 | 0.005 |
| Excavators           | 750  | 0.195 | 1.088 | 0.338 | 0.005 |
| Forklifts            | 50   | 0.558 | 5.234 | 3.268 | 0.007 |
| Forklifts            | 120  | 0.275 | 3.787 | 1.495 | 0.006 |
| Forklifts            | 175  | 0.189 | 3.350 | 0.299 | 0.006 |
| Forklifts            | 250  | 0.188 | 1.141 | 0.290 | 0.006 |
| Forklifts            | 500  | 0.188 | 1.085 | 0.290 | 0.005 |
| Generator Sets       | 15   | 0.589 | 3.470 | 4.143 | 0.008 |
| Generator Sets       | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Generator Sets       | 50   | 0.276 | 3.607 | 2.991 | 0.007 |
| Generator Sets       | 120  | 0.156 | 3.310 | 1.458 | 0.006 |
| Generator Sets       | 175  | 0.113 | 2.929 | 0.373 | 0.006 |
| Generator Sets       | 250  | 0.110 | 0.998 | 0.331 | 0.006 |
| Generator Sets       | 500  | 0.110 | 0.978 | 0.328 | 0.005 |
| Generator Sets       | 750  | 0.110 | 0.978 | 0.328 | 0.005 |
| Generator Sets       | 9999 | 0.114 | 0.978 | 2.362 | 0.005 |
| Graders              | 50   | 0.593 | 5.189 | 3.356 | 0.007 |
| Graders              | 120  | 0.293 | 3.767 | 1.661 | 0.006 |
| Graders              | 175  | 0.206 | 3.326 | 0.506 | 0.006 |
| Graders              | 250  | 0.196 | 1.137 | 0.452 | 0.006 |
| Graders              | 500  | 0.195 | 1.083 | 0.434 | 0.005 |
| Graders              | 750  | 0.195 | 1.083 | 0.438 | 0.005 |
| Off-Highway Tractors | 120  | 0.418 | 3.902 | 2.350 | 0.006 |
| Off-Highway Tractors | 175  | 0.301 | 3.421 | 1.252 | 0.006 |
| Off-Highway Tractors | 250  | 0.268 | 1.232 | 1.115 | 0.006 |
| Off-Highway Tractors | 750  | 0.262 | 1.238 | 1.045 | 0.005 |
| Off-Highway Tractors | 1000 | 0.269 | 1.268 | 3.116 | 0.005 |
| Off-Highway Trucks   | 175  | 0.211 | 3.425 | 0.380 | 0.006 |
| Off-Highway Trucks   | 250  | 0.208 | 1.167 | 0.353 | 0.006 |

|       |       |
|-------|-------|
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.037 | 0.005 |
| 0.019 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.053 | 0.005 |
| 0.061 | 0.005 |
| 0.050 | 0.005 |
| 0.025 | 0.004 |
| 0.018 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 |

|       |       |
|-------|-------|
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.049 | 0.005 |
| 0.025 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.061 | 0.005 |
| 0.062 | 0.005 |
| 0.030 | 0.004 |
| 0.022 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.061 | 0.005 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.016 | 0.005 |
| 0.010 | 0.004 |
| 0.009 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 |

|       |       |
|-------|-------|
| 0.008 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.027 | 0.005 |
| 0.015 | 0.004 |
| 0.011 | 0.004 |
| 0.010 | 0.004 |
| 0.010 | 0.004 |
| 0.010 | 0.004 |
| 0.011 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.045 | 0.005 |
| 0.023 | 0.004 |
| 0.016 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.047 | 0.005 |
| 0.023 | 0.004 |
| 0.016 | 0.004 |
| 0.016 | 0.004 |
| 0.016 | 0.004 |
| 0.029 | 0.004 |
| 0.025 | 0.004 |
| 0.025 | 0.004 |
| 0.025 | 0.004 |
| 0.025 | 0.004 |
| 0.061 | 0.005 |
| 0.051 | 0.005 |
| 0.025 | 0.004 |
| 0.018 | 0.004 |

|                         |      |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 |
| Pumps                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 |
| Pumps                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Pumps                   | 50   | 0.306 | 3.778 | 3.028 | 0.007 |
| Pumps                   | 120  | 0.170 | 3.360 | 1.470 | 0.006 |
| Pumps                   | 175  | 0.123 | 2.973 | 0.377 | 0.006 |
| Pumps                   | 250  | 0.119 | 1.012 | 0.335 | 0.006 |
| Pumps                   | 500  | 0.119 | 0.989 | 0.331 | 0.005 |
| Pumps                   | 750  | 0.119 | 0.989 | 0.331 | 0.005 |
| Pumps                   | 9999 | 0.124 | 0.989 | 2.380 | 0.005 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Rollers                 | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Rollers                 | 50   | 0.507 | 4.711 | 3.280 | 0.007 |
| Rollers                 | 120  | 0.258 | 3.629 | 1.650 | 0.006 |
| Rollers                 | 175  | 0.184 | 3.204 | 0.523 | 0.006 |
| Rollers                 | 250  | 0.173 | 1.091 | 0.465 | 0.006 |
| Rollers                 | 500  | 0.172 | 1.048 | 0.442 | 0.005 |
| Rough Terrain Forklifts | 50   | 0.521 | 5.011 | 3.267 | 0.007 |
| Rough Terrain Forklifts | 120  | 0.262 | 3.722 | 1.530 | 0.006 |
| Rough Terrain Forklifts | 175  | 0.184 | 3.292 | 0.364 | 0.006 |
| Rough Terrain Forklifts | 250  | 0.181 | 1.121 | 0.334 | 0.006 |
| Rough Terrain Forklifts | 500  | 0.181 | 1.071 | 0.331 | 0.005 |
| Rubber Tired Dozers     | 175  | 0.322 | 3.481 | 1.345 | 0.006 |
| Rubber Tired Dozers     | 250  | 0.286 | 1.262 | 1.203 | 0.006 |
| Rubber Tired Dozers     | 500  | 0.279 | 1.279 | 1.107 | 0.005 |
| Rubber Tired Dozers     | 750  | 0.279 | 1.279 | 1.126 | 0.005 |
| Rubber Tired Dozers     | 1000 | 0.287 | 1.312 | 3.204 | 0.005 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Rubber Tired Loaders    | 50   | 0.575 | 5.126 | 3.337 | 0.007 |
| Rubber Tired Loaders    | 120  | 0.286 | 3.751 | 1.639 | 0.006 |
| Rubber Tired Loaders    | 175  | 0.200 | 3.312 | 0.481 | 0.006 |

|       |       |
|-------|-------|
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.031 | 0.004 |
| 0.022 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.059 | 0.005 |
| 0.032 | 0.005 |
| 0.017 | 0.004 |
| 0.012 | 0.004 |
| 0.014 | 0.004 |
| 0.061 | 0.005 |
| 0.037 | 0.005 |
| 0.019 | 0.004 |
| 0.039 | 0.005 |
| 0.020 | 0.004 |
| 0.014 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.053 | 0.005 |
| 0.061 | 0.005 |
| 0.045 | 0.005 |
| 0.022 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.061 | 0.005 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 | 4.142 | 0.008 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Sweepers/Scrubbers        | 50   | 0.505 | 4.929 | 3.214 | 0.007 |
| Sweepers/Scrubbers        | 120  | 0.253 | 3.698 | 1.486 | 0.006 |
| Sweepers/Scrubbers        | 175  | 0.175 | 3.271 | 0.313 | 0.006 |
| Sweepers/Scrubbers        | 250  | 0.173 | 1.114 | 0.294 | 0.006 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 |



|       |       |
|-------|-------|
| 0.046 | 0.005 |
| 0.023 | 0.004 |
| 0.016 | 0.004 |
| 0.016 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.061 | 0.005 |
| 0.030 | 0.004 |
| 0.021 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.036 | 0.005 |
| 0.019 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.000 | 0.004 |
| 0.019 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.515 | 4.949 | 3.244 | 0.007 |
| Tractors/Loaders/Backhoes | 120  | 0.258 | 3.703 | 1.521 | 0.006 |
| Tractors/Loaders/Backhoes | 175  | 0.179 | 3.275 | 0.348 | 0.006 |
| Tractors/Loaders/Backhoes | 250  | 0.177 | 1.115 | 0.331 | 0.006 |
| Tractors/Loaders/Backhoes | 500  | 0.177 | 1.066 | 0.326 | 0.006 |
| Tractors/Loaders/Backhoes | 750  | 0.177 | 1.066 | 0.327 | 0.006 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Trenchers                 | 50   | 0.681 | 5.055 | 3.548 | 0.007 |
| Trenchers                 | 120  | 0.332 | 3.713 | 2.049 | 0.006 |
| Trenchers                 | 175  | 0.241 | 3.264 | 0.966 | 0.006 |
| Trenchers                 | 250  | 0.216 | 1.149 | 0.847 | 0.006 |
| Trenchers                 | 500  | 0.213 | 1.126 | 0.790 | 0.005 |
| Trenchers                 | 750  | 0.213 | 1.126 | 0.801 | 0.005 |
| Welders                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 |
| Welders                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Welders                   | 50   | 0.406 | 4.349 | 3.147 | 0.007 |
| Welders                   | 120  | 0.214 | 3.528 | 1.509 | 0.006 |
| Welders                   | 175  | 0.153 | 3.121 | 0.387 | 0.006 |
| Welders                   | 250  | 0.149 | 1.063 | 0.343 | 0.006 |
| Welders                   | 500  | 0.149 | 1.027 | 0.339 | 0.005 |
| Water Trucks              | 175  | 0.211 | 3.425 | 0.380 | 0.006 |
| Water Trucks              | 250  | 0.208 | 1.167 | 0.353 | 0.006 |
| Water Trucks              | 500  | 0.208 | 1.105 | 0.348 | 0.005 |
| Water Trucks              | 750  | 0.208 | 1.105 | 0.348 | 0.005 |
| Water Trucks              | 1000 | 0.209 | 1.105 | 2.565 | 0.005 |

2037

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|
| PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 0.019   | 0.019   | 568.299 | 0.026   | 0.005   |
| 0.017   | 0.017   | 568.299 | 0.014   | 0.004   |
| 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
| 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
|         |         |         |         |         |
| 0.162   | 0.162   | 568.300 | 0.059   | 0.005   |
|         |         |         |         |         |
| 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
|         |         |         |         |         |
| 0.023   | 0.023   | 568.299 | 0.041   | 0.005   |
|         |         |         |         |         |
| 0.020   | 0.020   | 568.299 | 0.021   | 0.004   |
|         |         |         |         |         |
| 0.015   | 0.015   | 568.300 | 0.015   | 0.004   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
|         |         |         |         |         |
| 0.026   | 0.026   | 568.299 | 0.015   | 0.004   |
|         |         |         |         |         |
| 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
|         |         |         |         |         |
| 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
|         |         |         |         |         |
| 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.300 | 0.016   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

| 2037             |       | g/hp/hr |
|------------------|-------|---------|
| Equipment        | MaxHP | ROG     |
| Aerial Lifts     | 15    | 0.661   |
| Aerial Lifts     | 25    | 0.685   |
| Aerial Lifts     | 50    | 0.297   |
| Aerial Lifts     | 120   | 0.166   |
| Aerial Lifts     | 500   | 0.116   |
| Aerial Lifts     | 750   | 0.116   |
|                  |       |         |
| Air Compressor s | 15    | 0.661   |
| Air Compressor s | 25    | 0.685   |
| Air Compressor s | 50    | 0.463   |
| Air Compressor s | 120   | 0.238   |
| Air Compressor s | 175   | 0.170   |
| Air Compressor s | 250   | 0.166   |
| Air Compressor s | 500   | 0.166   |
| Air Compressor s | 750   | 0.166   |
| Air Compressor s | 1000  | 0.167   |
| Bore/Drill Rigs  | 15    | 0.661   |
| Bore/Drill Rigs  | 25    | 0.685   |
| Bore/Drill Rigs  | 50    | 0.348   |
| Bore/Drill Rigs  | 120   | 0.183   |
| Bore/Drill Rigs  | 175   | 0.126   |
| Bore/Drill Rigs  | 250   | 0.126   |
| Bore/Drill Rigs  | 500   | 0.126   |
| Bore/Drill Rigs  | 750   | 0.126   |
| Bore/Drill Rigs  | 1000  | 0.126   |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.021 | 0.021 | 568.300 | 0.033 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 0.039 | 0.039 | 568.299 | 0.054 | 0.005 |
| 0.036 | 0.036 | 568.300 | 0.027 | 0.004 |
| 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.018 | 0.004 |
| 0.066 | 0.066 | 568.299 | 0.063 | 0.005 |
| 0.060 | 0.060 | 568.299 | 0.031 | 0.004 |
| 0.038 | 0.038 | 568.299 | 0.022 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.041 | 0.041 | 568.299 | 0.020 | 0.004 |
| 0.023 | 0.023 | 568.299 | 0.044 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.022 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.300 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.016 | 0.004 |

|                          |      |       |
|--------------------------|------|-------|
| Cement and Mortar Mixers | 15   | 0.661 |
| Cement and Mortar Mixers | 25   | 0.685 |
| Concrete/Industrial Saws | 25   | 0.685 |
| Concrete/Industrial Saws | 50   | 0.375 |
| Concrete/Industrial Saws | 120  | 0.200 |
| Concrete/Industrial Saws | 175  | 0.143 |
| Cranes                   | 50   | 0.600 |
| Cranes                   | 120  | 0.300 |
| Cranes                   | 175  | 0.212 |
| Cranes                   | 250  | 0.203 |
| Cranes                   | 500  | 0.202 |
| Cranes                   | 750  | 0.202 |
| Cranes                   | 9999 | 0.209 |
| Crawler Tractors         | 50   | 0.708 |
| Crawler Tractors         | 120  | 0.345 |
| Crawler Tractors         | 175  | 0.247 |
| Crawler Tractors         | 250  | 0.229 |
| Crawler Tractors         | 500  | 0.227 |
| Crawler Tractors         | 750  | 0.227 |
| Crawler Tractors         | 1000 | 0.231 |
| Crushing/Proc. Equipment | 50   | 0.487 |
| Crushing/Proc. Equipment | 120  | 0.249 |
| Crushing/Proc. Equipment | 175  | 0.176 |
| Crushing/Proc. Equipment | 250  | 0.172 |
| Crushing/Proc. Equipment | 500  | 0.172 |
| Crushing/Proc. Equipment | 750  | 0.172 |
| Crushing/Proc. Equipment | 9999 | 0.177 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.024 | 0.024 | 568.299 | 0.051 | 0.005 |
| 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.300 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.017 | 0.017 | 568.299 | 0.050 | 0.005 |
| 0.016 | 0.016 | 568.299 | 0.024 | 0.004 |
| 0.012 | 0.012 | 568.300 | 0.017 | 0.004 |
| 0.011 | 0.011 | 568.300 | 0.017 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.162 | 0.162 | 568.299 | 0.053 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.024 | 0.005 |
| 0.016 | 0.016 | 568.299 | 0.014 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.010 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.022 | 0.022 | 568.299 | 0.010 | 0.004 |
| 0.037 | 0.037 | 568.299 | 0.053 | 0.005 |
| 0.034 | 0.034 | 568.299 | 0.026 | 0.004 |
| 0.022 | 0.022 | 568.300 | 0.018 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.107 | 0.107 | 568.299 | 0.037 | 0.004 |
| 0.065 | 0.065 | 568.299 | 0.027 | 0.004 |
| 0.042 | 0.042 | 568.299 | 0.024 | 0.004 |
| 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.056 | 0.056 | 568.299 | 0.024 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |

|                      |      |       |
|----------------------|------|-------|
| Dumpers/Tractors     | 25   | 0.685 |
| Excavators           | 25   | 0.685 |
| Excavators           | 50   | 0.572 |
| Excavators           | 120  | 0.284 |
| Excavators           | 175  | 0.197 |
| Excavators           | 250  | 0.195 |
| Excavators           | 500  | 0.195 |
| Excavators           | 750  | 0.195 |
| Forklifts            | 50   | 0.558 |
| Forklifts            | 120  | 0.275 |
| Forklifts            | 175  | 0.189 |
| Forklifts            | 250  | 0.188 |
| Forklifts            | 500  | 0.188 |
| Generator Sets       | 15   | 0.589 |
| Generator Sets       | 25   | 0.685 |
| Generator Sets       | 50   | 0.276 |
| Generator Sets       | 120  | 0.156 |
| Generator Sets       | 175  | 0.113 |
| Generator Sets       | 250  | 0.110 |
| Generator Sets       | 500  | 0.110 |
| Generator Sets       | 750  | 0.110 |
| Generator Sets       | 9999 | 0.114 |
| Graders              | 50   | 0.593 |
| Graders              | 120  | 0.293 |
| Graders              | 175  | 0.206 |
| Graders              | 250  | 0.196 |
| Graders              | 500  | 0.195 |
| Graders              | 750  | 0.195 |
| Off-Highway Tractors | 120  | 0.418 |
| Off-Highway Tractors | 175  | 0.301 |
| Off-Highway Tractors | 250  | 0.268 |
| Off-Highway Tractors | 750  | 0.262 |
| Off-Highway Tractors | 1000 | 0.269 |
| Off-Highway Trucks   | 175  | 0.211 |
| Off-Highway Trucks   | 250  | 0.208 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.013 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.025 | 0.025 | 568.299 | 0.050 | 0.005 |
| 0.022 | 0.022 | 568.300 | 0.025 | 0.004 |
| 0.016 | 0.016 | 568.300 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Off-Highway Trucks                 | 500  | 0.208 |
| Off-Highway Trucks                 | 750  | 0.208 |
| Off-Highway Trucks                 | 1000 | 0.209 |
| Other Construction Equipment       | 15   | 0.661 |
| Other Construction Equipment       | 25   | 0.685 |
| Other Construction Equipment       | 50   | 0.410 |
| Other Construction Equipment       | 120  | 0.213 |
| Other Construction Equipment       | 175  | 0.150 |
| Other Construction Equipment       | 500  | 0.147 |
| Other General Industrial Equipment | 15   | 0.589 |
| Other General Industrial Equipment | 25   | 0.685 |
| Other General Industrial Equipment | 50   | 0.564 |
| Other General Industrial Equipment | 120  | 0.282 |
| Other General Industrial Equipment | 175  | 0.199 |
| Other General Industrial Equipment | 250  | 0.195 |
| Other General Industrial Equipment | 500  | 0.195 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.017 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.049 | 0.005 |
| 0.022 | 0.022 | 568.299 | 0.025 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.027 | 0.027 | 568.299 | 0.017 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.076 | 0.076 | 568.299 | 0.062 | 0.005 |
| 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.027 | 0.027 | 568.300 | 0.019 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.019 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.070 | 0.070 | 568.300 | 0.059 | 0.005 |
| 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.162 | 0.162 | 568.300 | 0.053 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.015 | 0.015 | 568.299 | 0.016 | 0.005 |
| 0.014 | 0.014 | 568.299 | 0.010 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.009 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Other General Industrial Equipment | 750  | 0.195 |
| Other General Industrial Equipment | 1000 | 0.196 |
| Other Material Handling Equipment  | 50   | 0.552 |
| Other Material Handling Equipment  | 120  | 0.277 |
| Other Material Handling Equipment  | 175  | 0.196 |
| Other Material Handling Equipment  | 250  | 0.192 |
| Other Material Handling Equipment  | 500  | 0.192 |
| Other Material Handling Equipment  | 9999 | 0.197 |
| Pavers                             | 25   | 0.685 |
| Pavers                             | 50   | 0.694 |
| Pavers                             | 120  | 0.338 |
| Pavers                             | 175  | 0.244 |
| Pavers                             | 250  | 0.221 |
| Pavers                             | 500  | 0.218 |
| Paving Equipment                   | 25   | 0.685 |
| Paving Equipment                   | 50   | 0.664 |
| Paving Equipment                   | 120  | 0.326 |
| Paving Equipment                   | 175  | 0.235 |
| Paving Equipment                   | 250  | 0.212 |
| Plate Compactors                   | 15   | 0.661 |
| Pressure Washers                   | 15   | 0.589 |
| Pressure Washers                   | 25   | 0.685 |
| Pressure Washers                   | 50   | 0.188 |
| Pressure Washers                   | 120  | 0.116 |
| Pressure Washers                   | 175  | 0.109 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.019 | 0.019 | 568.299 | 0.027 | 0.005 |
| 0.017 | 0.017 | 568.299 | 0.015 | 0.004 |
| 0.014 | 0.014 | 568.299 | 0.011 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 0.038 | 0.038 | 568.299 | 0.045 | 0.005 |
| 0.035 | 0.035 | 568.299 | 0.023 | 0.004 |
| 0.023 | 0.023 | 568.299 | 0.016 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.015 | 0.004 |
| 0.016 | 0.016 | 568.300 | 0.015 | 0.004 |
| 0.022 | 0.022 | 568.299 | 0.047 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.300 | 0.016 | 0.004 |
| 0.071 | 0.071 | 568.299 | 0.029 | 0.004 |
| 0.046 | 0.046 | 568.299 | 0.025 | 0.004 |
| 0.043 | 0.043 | 568.300 | 0.025 | 0.004 |
| 0.043 | 0.043 | 568.299 | 0.025 | 0.004 |
| 0.060 | 0.060 | 568.299 | 0.025 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.035 | 0.035 | 568.299 | 0.051 | 0.005 |
| 0.033 | 0.033 | 568.299 | 0.025 | 0.004 |
| 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |

|                         |      |       |
|-------------------------|------|-------|
| Pressure Washers        | 250  | 0.098 |
| Pumps                   | 15   | 0.661 |
| Pumps                   | 25   | 0.685 |
| Pumps                   | 50   | 0.306 |
| Pumps                   | 120  | 0.170 |
| Pumps                   | 175  | 0.123 |
| Pumps                   | 250  | 0.119 |
| Pumps                   | 500  | 0.119 |
| Pumps                   | 750  | 0.119 |
| Pumps                   | 9999 | 0.124 |
| Rollers                 | 15   | 0.661 |
| Rollers                 | 25   | 0.685 |
| Rollers                 | 50   | 0.507 |
| Rollers                 | 120  | 0.258 |
| Rollers                 | 175  | 0.184 |
| Rollers                 | 250  | 0.173 |
| Rollers                 | 500  | 0.172 |
| Rough Terrain Forklifts | 50   | 0.521 |
| Rough Terrain Forklifts | 120  | 0.262 |
| Rough Terrain Forklifts | 175  | 0.184 |
| Rough Terrain Forklifts | 250  | 0.181 |
| Rough Terrain Forklifts | 500  | 0.181 |
| Rubber Tired Dozers     | 175  | 0.322 |
| Rubber Tired Dozers     | 250  | 0.286 |
| Rubber Tired Dozers     | 500  | 0.279 |
| Rubber Tired Dozers     | 750  | 0.279 |
| Rubber Tired Dozers     | 1000 | 0.287 |
| Rubber Tired Loaders    | 25   | 0.685 |
| Rubber Tired Loaders    | 50   | 0.575 |
| Rubber Tired Loaders    | 120  | 0.286 |
| Rubber Tired Loaders    | 175  | 0.200 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.030 | 0.030 | 568.299 | 0.017 | 0.004 |
| 0.064 | 0.064 | 568.299 | 0.031 | 0.004 |
| 0.040 | 0.040 | 568.299 | 0.022 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.300 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.032 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.017 | 0.004 |
| 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 0.014 | 0.014 | 686.695 | 0.014 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.015 | 0.015 | 568.299 | 0.037 | 0.005 |
| 0.014 | 0.014 | 568.299 | 0.019 | 0.004 |
| 0.041 | 0.041 | 568.299 | 0.039 | 0.005 |
| 0.038 | 0.038 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 0.016 | 568.300 | 0.013 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 0.017 | 0.017 | 568.299 | 0.045 | 0.005 |
| 0.016 | 0.016 | 568.299 | 0.022 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|                           |      |       |
|---------------------------|------|-------|
| Rubber Tired Loaders      | 250  | 0.191 |
| Rubber Tired Loaders      | 500  | 0.191 |
| Rubber Tired Loaders      | 750  | 0.191 |
| Rubber Tired Loaders      | 1000 | 0.193 |
| Scrapers                  | 120  | 0.348 |
| Scrapers                  | 175  | 0.250 |
| Scrapers                  | 250  | 0.229 |
| Scrapers                  | 500  | 0.226 |
| Scrapers                  | 750  | 0.226 |
| Signal Boards             | 15   | 0.661 |
| Signal Boards             | 50   | 0.356 |
| Signal Boards             | 120  | 0.192 |
| Signal Boards             | 175  | 0.138 |
| Signal Boards             | 250  | 0.162 |
| Skid Steer Loaders        | 25   | 0.685 |
| Skid Steer Loaders        | 50   | 0.411 |
| Skid Steer Loaders        | 120  | 0.211 |
| Surfacing Equipment       | 50   | 0.439 |
| Surfacing Equipment       | 120  | 0.226 |
| Surfacing Equipment       | 175  | 0.162 |
| Surfacing Equipment       | 250  | 0.149 |
| Surfacing Equipment       | 500  | 0.148 |
| Surfacing Equipment       | 750  | 0.148 |
| Sweepers/Scrubbers        | 15   | 0.589 |
| Sweepers/Scrubbers        | 25   | 0.685 |
| Sweepers/Scrubbers        | 50   | 0.505 |
| Sweepers/Scrubbers        | 120  | 0.253 |
| Sweepers/Scrubbers        | 175  | 0.175 |
| Sweepers/Scrubbers        | 250  | 0.173 |
| Tractors/Loaders/Backhoes | 25   | 0.685 |



|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.022 | 0.022 | 568.299 | 0.046 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.084 | 0.084 | 568.299 | 0.061 | 0.005 |
| 0.076 | 0.076 | 568.300 | 0.030 | 0.004 |
| 0.048 | 0.048 | 568.299 | 0.021 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.019 | 0.004 |
| 0.029 | 0.029 | 568.299 | 0.019 | 0.004 |
| 0.029 | 0.029 | 568.300 | 0.019 | 0.004 |
| 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.022 | 0.022 | 568.299 | 0.036 | 0.005 |
| 0.019 | 0.019 | 568.299 | 0.019 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.013 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |

|                           |      |       |
|---------------------------|------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.515 |
| Tractors/Loaders/Backhoes | 120  | 0.258 |
| Tractors/Loaders/Backhoes | 175  | 0.179 |
| Tractors/Loaders/Backhoes | 250  | 0.177 |
| Tractors/Loaders/Backhoes | 500  | 0.177 |
| Tractors/Loaders/Backhoes | 750  | 0.177 |
| Trenchers                 | 15   | 0.661 |
| Trenchers                 | 25   | 0.685 |
| Trenchers                 | 50   | 0.681 |
| Trenchers                 | 120  | 0.332 |
| Trenchers                 | 175  | 0.241 |
| Trenchers                 | 250  | 0.216 |
| Trenchers                 | 500  | 0.213 |
| Trenchers                 | 750  | 0.213 |
| Welders                   | 15   | 0.661 |
| Welders                   | 25   | 0.685 |
| Welders                   | 50   | 0.406 |
| Welders                   | 120  | 0.214 |
| Welders                   | 175  | 0.153 |
| Welders                   | 250  | 0.149 |
| Welders                   | 500  | 0.149 |
| Water Trucks              | 175  | 0.211 |
| Water Trucks              | 250  | 0.208 |
| Water Trucks              | 500  | 0.208 |
| Water Trucks              | 750  | 0.208 |
| Water Trucks              | 1000 | 0.209 |

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|
| CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 3.726   | 3.017   | 0.007   | 0.019   | 0.019   | 568.299 | 0.026   | 0.005   |
| 3.345   | 1.466   | 0.006   | 0.017   | 0.017   | 568.299 | 0.014   | 0.004   |
| 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
| 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
| 3.469   | 4.143   | 0.008   | 0.162   | 0.162   | 568.300 | 0.059   | 0.005   |
| 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 4.674   | 3.215   | 0.007   | 0.023   | 0.023   | 568.299 | 0.041   | 0.005   |
| 3.623   | 1.530   | 0.006   | 0.020   | 0.020   | 568.299 | 0.021   | 0.004   |
| 3.205   | 0.391   | 0.006   | 0.015   | 0.015   | 568.300 | 0.015   | 0.004   |
| 1.091   | 0.347   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 1.048   | 0.343   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 1.048   | 0.344   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 1.048   | 2.473   | 0.005   | 0.026   | 0.026   | 568.299 | 0.015   | 0.004   |
| 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 4.030   | 3.019   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 3.434   | 1.411   | 0.006   | 0.012   | 0.012   | 568.300 | 0.016   | 0.004   |
| 3.039   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.035   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.174 | 3.107 | 0.007 | 0.021 | 0.021 | 568.300 | 0.033 | 0.005 |
| 3.476 | 1.491 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 3.075 | 0.374 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 5.292 | 3.401 | 0.007 | 0.039 | 0.039 | 568.299 | 0.054 | 0.005 |
| 3.801 | 1.676 | 0.006 | 0.036 | 0.036 | 568.300 | 0.027 | 0.004 |
| 3.357 | 0.519 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 1.143 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 1.087 | 0.441 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 1.087 | 0.446 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 1.089 | 2.618 | 0.005 | 0.031 | 0.031 | 568.299 | 0.018 | 0.004 |
| 5.493 | 3.558 | 0.007 | 0.066 | 0.066 | 568.299 | 0.063 | 0.005 |
| 3.850 | 1.922 | 0.006 | 0.060 | 0.060 | 568.299 | 0.031 | 0.004 |
| 3.391 | 0.794 | 0.006 | 0.038 | 0.038 | 568.299 | 0.022 | 0.004 |
| 1.182 | 0.695 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 1.145 | 0.657 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 1.145 | 0.664 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 1.159 | 2.792 | 0.005 | 0.041 | 0.041 | 568.299 | 0.020 | 0.004 |
| 4.819 | 3.237 | 0.007 | 0.023 | 0.023 | 568.299 | 0.044 | 0.005 |
| 3.665 | 1.531 | 0.006 | 0.020 | 0.020 | 568.299 | 0.022 | 0.004 |
| 3.242 | 0.382 | 0.006 | 0.015 | 0.015 | 568.299 | 0.015 | 0.004 |
| 1.104 | 0.342 | 0.006 | 0.012 | 0.012 | 568.300 | 0.015 | 0.004 |
| 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.058 | 2.482 | 0.005 | 0.026 | 0.026 | 568.299 | 0.016 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.287 | 3.323 | 0.007 | 0.024 | 0.024 | 568.299 | 0.051 | 0.005 |
| 3.802 | 1.551 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 3.363 | 0.365 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.145 | 0.342 | 0.006 | 0.013 | 0.013 | 568.300 | 0.017 | 0.004 |
| 1.089 | 0.337 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.088 | 0.338 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 5.234 | 3.268 | 0.007 | 0.017 | 0.017 | 568.299 | 0.050 | 0.005 |
| 3.787 | 1.495 | 0.006 | 0.016 | 0.016 | 568.299 | 0.024 | 0.004 |
| 3.350 | 0.299 | 0.006 | 0.012 | 0.012 | 568.300 | 0.017 | 0.004 |
| 1.141 | 0.290 | 0.006 | 0.011 | 0.011 | 568.300 | 0.017 | 0.004 |
| 1.085 | 0.290 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.053 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.607 | 2.991 | 0.007 | 0.018 | 0.018 | 568.299 | 0.024 | 0.005 |
| 3.310 | 1.458 | 0.006 | 0.016 | 0.016 | 568.299 | 0.014 | 0.004 |
| 2.929 | 0.373 | 0.006 | 0.013 | 0.013 | 568.299 | 0.010 | 0.004 |
| 0.998 | 0.331 | 0.006 | 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.978 | 2.362 | 0.005 | 0.022 | 0.022 | 568.299 | 0.010 | 0.004 |
| 5.189 | 3.356 | 0.007 | 0.037 | 0.037 | 568.299 | 0.053 | 0.005 |
| 3.767 | 1.661 | 0.006 | 0.034 | 0.034 | 568.299 | 0.026 | 0.004 |
| 3.326 | 0.506 | 0.006 | 0.022 | 0.022 | 568.300 | 0.018 | 0.004 |
| 1.137 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 1.083 | 0.434 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 1.083 | 0.438 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 3.902 | 2.350 | 0.006 | 0.107 | 0.107 | 568.299 | 0.037 | 0.004 |
| 3.421 | 1.252 | 0.006 | 0.065 | 0.065 | 568.299 | 0.027 | 0.004 |
| 1.232 | 1.115 | 0.006 | 0.042 | 0.042 | 568.299 | 0.024 | 0.004 |
| 1.238 | 1.045 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 1.268 | 3.116 | 0.005 | 0.056 | 0.056 | 568.299 | 0.024 | 0.004 |
| 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.377 | 3.124 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 3.536 | 1.474 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 3.128 | 0.334 | 0.006 | 0.013 | 0.013 | 568.299 | 0.013 | 0.004 |
| 1.029 | 0.311 | 0.005 | 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.255 | 3.334 | 0.007 | 0.025 | 0.025 | 568.299 | 0.050 | 0.005 |
| 3.794 | 1.567 | 0.006 | 0.022 | 0.022 | 568.300 | 0.025 | 0.004 |
| 3.355 | 0.399 | 0.006 | 0.016 | 0.016 | 568.300 | 0.018 | 0.004 |
| 1.143 | 0.355 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.087 | 2.532 | 0.005 | 0.028 | 0.028 | 568.299 | 0.017 | 0.004 |
| 5.189 | 3.321 | 0.007 | 0.025 | 0.025 | 568.299 | 0.049 | 0.005 |
| 3.774 | 1.563 | 0.006 | 0.022 | 0.022 | 568.299 | 0.025 | 0.004 |
| 3.338 | 0.398 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 1.137 | 0.354 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.082 | 0.350 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.082 | 2.525 | 0.005 | 0.027 | 0.027 | 568.299 | 0.017 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.260 | 3.555 | 0.007 | 0.076 | 0.076 | 568.299 | 0.062 | 0.005 |
| 3.774 | 1.986 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 3.319 | 0.889 | 0.006 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 1.157 | 0.772 | 0.006 | 0.027 | 0.027 | 568.300 | 0.019 | 0.004 |
| 1.111 | 0.722 | 0.005 | 0.026 | 0.026 | 568.299 | 0.019 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.181 | 3.511 | 0.007 | 0.070 | 0.070 | 568.300 | 0.059 | 0.005 |
| 3.753 | 1.928 | 0.006 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 3.303 | 0.832 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 1.140 | 0.714 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.300 | 0.053 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.101 | 2.882 | 0.007 | 0.015 | 0.015 | 568.299 | 0.016 | 0.005 |
| 3.161 | 1.421 | 0.006 | 0.014 | 0.014 | 568.299 | 0.010 | 0.004 |
| 2.907 | 0.382 | 0.006 | 0.013 | 0.013 | 568.299 | 0.009 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.778 | 3.028 | 0.007 | 0.019 | 0.019 | 568.299 | 0.027 | 0.005 |
| 3.360 | 1.470 | 0.006 | 0.017 | 0.017 | 568.299 | 0.015 | 0.004 |
| 2.973 | 0.377 | 0.006 | 0.014 | 0.014 | 568.299 | 0.011 | 0.004 |
| 1.012 | 0.335 | 0.006 | 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.989 | 2.380 | 0.005 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 4.711 | 3.280 | 0.007 | 0.038 | 0.038 | 568.299 | 0.045 | 0.005 |
| 3.629 | 1.650 | 0.006 | 0.035 | 0.035 | 568.299 | 0.023 | 0.004 |
| 3.204 | 0.523 | 0.006 | 0.023 | 0.023 | 568.299 | 0.016 | 0.004 |
| 1.091 | 0.465 | 0.006 | 0.016 | 0.016 | 568.299 | 0.015 | 0.004 |
| 1.048 | 0.442 | 0.005 | 0.016 | 0.016 | 568.300 | 0.015 | 0.004 |
| 5.011 | 3.267 | 0.007 | 0.022 | 0.022 | 568.299 | 0.047 | 0.005 |
| 3.722 | 1.530 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 3.292 | 0.364 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 1.121 | 0.334 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 1.071 | 0.331 | 0.005 | 0.012 | 0.012 | 568.300 | 0.016 | 0.004 |
| 3.481 | 1.345 | 0.006 | 0.071 | 0.071 | 568.299 | 0.029 | 0.004 |
| 1.262 | 1.203 | 0.006 | 0.046 | 0.046 | 568.299 | 0.025 | 0.004 |
| 1.279 | 1.107 | 0.005 | 0.043 | 0.043 | 568.300 | 0.025 | 0.004 |
| 1.279 | 1.126 | 0.005 | 0.043 | 0.043 | 568.299 | 0.025 | 0.004 |
| 1.312 | 3.204 | 0.005 | 0.060 | 0.060 | 568.299 | 0.025 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.126 | 3.337 | 0.007 | 0.035 | 0.035 | 568.299 | 0.051 | 0.005 |
| 3.751 | 1.639 | 0.006 | 0.033 | 0.033 | 568.299 | 0.025 | 0.004 |
| 3.312 | 0.481 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.129 | 0.434 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.076 | 0.416 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.076 | 0.421 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.082 | 2.584 | 0.005 | 0.030 | 0.030 | 568.299 | 0.017 | 0.004 |
| 3.842 | 1.943 | 0.006 | 0.064 | 0.064 | 568.299 | 0.031 | 0.004 |
| 3.382 | 0.824 | 0.006 | 0.040 | 0.040 | 568.299 | 0.022 | 0.004 |
| 1.175 | 0.717 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 1.123 | 0.674 | 0.005 | 0.025 | 0.025 | 568.300 | 0.020 | 0.004 |
| 1.123 | 0.682 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.067 | 3.082 | 0.007 | 0.020 | 0.020 | 568.299 | 0.032 | 0.005 |
| 3.445 | 1.482 | 0.006 | 0.018 | 0.018 | 568.299 | 0.017 | 0.004 |
| 3.048 | 0.372 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 1.254 | 0.401 | 0.007 | 0.014 | 0.014 | 686.695 | 0.014 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.390 | 3.097 | 0.007 | 0.015 | 0.015 | 568.299 | 0.037 | 0.005 |
| 3.540 | 1.442 | 0.006 | 0.014 | 0.014 | 568.299 | 0.019 | 0.004 |
| 4.221 | 3.193 | 0.007 | 0.041 | 0.041 | 568.299 | 0.039 | 0.005 |
| 3.482 | 1.659 | 0.006 | 0.038 | 0.038 | 568.299 | 0.020 | 0.004 |
| 3.072 | 0.567 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 1.050 | 0.497 | 0.006 | 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 1.018 | 0.471 | 0.005 | 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 1.018 | 0.477 | 0.005 | 0.016 | 0.016 | 568.300 | 0.013 | 0.004 |
| 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 4.929 | 3.214 | 0.007 | 0.017 | 0.017 | 568.299 | 0.045 | 0.005 |
| 3.698 | 1.486 | 0.006 | 0.016 | 0.016 | 568.299 | 0.022 | 0.004 |
| 3.271 | 0.313 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.114 | 0.294 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |



|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 4.949 | 3.244 | 0.007 | 0.022 | 0.022 | 568.299 | 0.046 | 0.005 |
| 3.703 | 1.521 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 3.275 | 0.348 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 1.115 | 0.331 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 1.066 | 0.326 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.066 | 0.327 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.055 | 3.548 | 0.007 | 0.084 | 0.084 | 568.299 | 0.061 | 0.005 |
| 3.713 | 2.049 | 0.006 | 0.076 | 0.076 | 568.300 | 0.030 | 0.004 |
| 3.264 | 0.966 | 0.006 | 0.048 | 0.048 | 568.299 | 0.021 | 0.004 |
| 1.149 | 0.847 | 0.006 | 0.031 | 0.031 | 568.299 | 0.019 | 0.004 |
| 1.126 | 0.790 | 0.005 | 0.029 | 0.029 | 568.299 | 0.019 | 0.004 |
| 1.126 | 0.801 | 0.005 | 0.029 | 0.029 | 568.300 | 0.019 | 0.004 |
| 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 4.349 | 3.147 | 0.007 | 0.022 | 0.022 | 568.299 | 0.036 | 0.005 |
| 3.528 | 1.509 | 0.006 | 0.019 | 0.019 | 568.299 | 0.019 | 0.004 |
| 3.121 | 0.387 | 0.006 | 0.015 | 0.015 | 568.299 | 0.013 | 0.004 |
| 1.063 | 0.343 | 0.006 | 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 1.027 | 0.339 | 0.005 | 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |

| 2038             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   | 0.019   | 0.019   | 568.299 | 0.026   |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   | 0.017   | 0.017   | 568.299 | 0.014   |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   | 0.162   | 0.162   | 568.300 | 0.059   |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   | 0.023   | 0.023   | 568.299 | 0.041   |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   | 0.020   | 0.020   | 568.299 | 0.021   |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   | 0.015   | 0.015   | 568.300 | 0.015   |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   | 0.026   | 0.026   | 568.299 | 0.015   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   | 0.012   | 0.012   | 568.300 | 0.016   |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   |

|                          |      |       |       |       |       |       |       |         |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 | 0.021 | 0.021 | 568.300 | 0.033 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 | 0.039 | 0.039 | 568.299 | 0.054 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 | 0.036 | 0.036 | 568.300 | 0.027 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 | 0.031 | 0.031 | 568.299 | 0.018 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 | 0.066 | 0.066 | 568.299 | 0.063 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 | 0.060 | 0.060 | 568.299 | 0.031 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 | 0.038 | 0.038 | 568.299 | 0.022 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 | 0.041 | 0.041 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 | 0.023 | 0.023 | 568.299 | 0.044 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 | 0.020 | 0.020 | 568.299 | 0.022 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 | 0.015 | 0.015 | 568.299 | 0.015 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 | 0.012 | 0.012 | 568.300 | 0.015 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 | 0.026 | 0.026 | 568.299 | 0.016 |

|                      |      |       |       |       |       |       |       |         |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Excavators           | 50   | 0.572 | 5.287 | 3.323 | 0.007 | 0.024 | 0.024 | 568.299 | 0.051 |
| Excavators           | 120  | 0.284 | 3.802 | 1.551 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 |
| Excavators           | 175  | 0.197 | 3.363 | 0.365 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 |
| Excavators           | 250  | 0.195 | 1.145 | 0.342 | 0.006 | 0.013 | 0.013 | 568.300 | 0.017 |
| Excavators           | 500  | 0.195 | 1.089 | 0.337 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Excavators           | 750  | 0.195 | 1.088 | 0.338 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Forklifts            | 50   | 0.558 | 5.234 | 3.268 | 0.007 | 0.017 | 0.017 | 568.299 | 0.050 |
| Forklifts            | 120  | 0.275 | 3.787 | 1.495 | 0.006 | 0.016 | 0.016 | 568.299 | 0.024 |
| Forklifts            | 175  | 0.189 | 3.350 | 0.299 | 0.006 | 0.012 | 0.012 | 568.300 | 0.017 |
| Forklifts            | 250  | 0.188 | 1.141 | 0.290 | 0.006 | 0.011 | 0.011 | 568.300 | 0.017 |
| Forklifts            | 500  | 0.188 | 1.085 | 0.290 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 |
| Generator Sets       | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.053 |
| Generator Sets       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Generator Sets       | 50   | 0.276 | 3.607 | 2.991 | 0.007 | 0.018 | 0.018 | 568.299 | 0.024 |
| Generator Sets       | 120  | 0.156 | 3.310 | 1.458 | 0.006 | 0.016 | 0.016 | 568.299 | 0.014 |
| Generator Sets       | 175  | 0.113 | 2.929 | 0.373 | 0.006 | 0.013 | 0.013 | 568.299 | 0.010 |
| Generator Sets       | 250  | 0.110 | 0.998 | 0.331 | 0.006 | 0.011 | 0.011 | 568.299 | 0.009 |
| Generator Sets       | 500  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 |
| Generator Sets       | 750  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 |
| Generator Sets       | 9999 | 0.114 | 0.978 | 2.362 | 0.005 | 0.022 | 0.022 | 568.299 | 0.010 |
| Graders              | 50   | 0.593 | 5.189 | 3.356 | 0.007 | 0.037 | 0.037 | 568.299 | 0.053 |
| Graders              | 120  | 0.293 | 3.767 | 1.661 | 0.006 | 0.034 | 0.034 | 568.299 | 0.026 |
| Graders              | 175  | 0.206 | 3.326 | 0.506 | 0.006 | 0.022 | 0.022 | 568.300 | 0.018 |
| Graders              | 250  | 0.196 | 1.137 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 |
| Graders              | 500  | 0.195 | 1.083 | 0.434 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 |
| Graders              | 750  | 0.195 | 1.083 | 0.438 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 |
| Off-Highway Tractors | 120  | 0.418 | 3.902 | 2.350 | 0.006 | 0.107 | 0.107 | 568.299 | 0.037 |
| Off-Highway Tractors | 175  | 0.301 | 3.421 | 1.252 | 0.006 | 0.065 | 0.065 | 568.299 | 0.027 |
| Off-Highway Tractors | 250  | 0.268 | 1.232 | 1.115 | 0.006 | 0.042 | 0.042 | 568.299 | 0.024 |
| Off-Highway Tractors | 750  | 0.262 | 1.238 | 1.045 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 |
| Off-Highway Tractors | 1000 | 0.269 | 1.268 | 3.116 | 0.005 | 0.056 | 0.056 | 568.299 | 0.024 |
| Off-Highway Trucks   | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 |
| Off-Highway Trucks   | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 | 0.013 | 0.013 | 568.299 | 0.013 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 | 0.011 | 0.011 | 568.299 | 0.013 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 | 0.025 | 0.025 | 568.299 | 0.050 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 | 0.022 | 0.022 | 568.300 | 0.025 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 | 0.016 | 0.016 | 568.300 | 0.018 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 | 0.028 | 0.028 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 | 0.025 | 0.025 | 568.299 | 0.049 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 | 0.022 | 0.022 | 568.299 | 0.025 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 | 0.027 | 0.027 | 568.299 | 0.017 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 | 0.076 | 0.076 | 568.299 | 0.062 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 | 0.043 | 0.043 | 568.299 | 0.022 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 | 0.027 | 0.027 | 568.300 | 0.019 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 | 0.026 | 0.026 | 568.299 | 0.019 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 | 0.070 | 0.070 | 568.300 | 0.059 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 | 0.064 | 0.064 | 568.299 | 0.029 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.300 | 0.053 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 | 0.015 | 0.015 | 568.299 | 0.016 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 | 0.014 | 0.014 | 568.299 | 0.010 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 | 0.013 | 0.013 | 568.299 | 0.009 |

|                         |      |       |       |       |       |       |       |         |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 |
| Pumps                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 |
| Pumps                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Pumps                   | 50   | 0.306 | 3.778 | 3.028 | 0.007 | 0.019 | 0.019 | 568.299 | 0.027 |
| Pumps                   | 120  | 0.170 | 3.360 | 1.470 | 0.006 | 0.017 | 0.017 | 568.299 | 0.015 |
| Pumps                   | 175  | 0.123 | 2.973 | 0.377 | 0.006 | 0.014 | 0.014 | 568.299 | 0.011 |
| Pumps                   | 250  | 0.119 | 1.012 | 0.335 | 0.006 | 0.011 | 0.011 | 568.299 | 0.010 |
| Pumps                   | 500  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 |
| Pumps                   | 750  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 |
| Pumps                   | 9999 | 0.124 | 0.989 | 2.380 | 0.005 | 0.023 | 0.023 | 568.299 | 0.011 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Rollers                 | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 |
| Rollers                 | 50   | 0.507 | 4.711 | 3.280 | 0.007 | 0.038 | 0.038 | 568.299 | 0.045 |
| Rollers                 | 120  | 0.258 | 3.629 | 1.650 | 0.006 | 0.035 | 0.035 | 568.299 | 0.023 |
| Rollers                 | 175  | 0.184 | 3.204 | 0.523 | 0.006 | 0.023 | 0.023 | 568.299 | 0.016 |
| Rollers                 | 250  | 0.173 | 1.091 | 0.465 | 0.006 | 0.016 | 0.016 | 568.299 | 0.015 |
| Rollers                 | 500  | 0.172 | 1.048 | 0.442 | 0.005 | 0.016 | 0.016 | 568.300 | 0.015 |
| Rough Terrain Forklifts | 50   | 0.521 | 5.011 | 3.267 | 0.007 | 0.022 | 0.022 | 568.299 | 0.047 |
| Rough Terrain Forklifts | 120  | 0.262 | 3.722 | 1.530 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 |
| Rough Terrain Forklifts | 175  | 0.184 | 3.292 | 0.364 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 |
| Rough Terrain Forklifts | 250  | 0.181 | 1.121 | 0.334 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 |
| Rough Terrain Forklifts | 500  | 0.181 | 1.071 | 0.331 | 0.005 | 0.012 | 0.012 | 568.300 | 0.016 |
| Rubber Tired Dozers     | 175  | 0.322 | 3.481 | 1.345 | 0.006 | 0.071 | 0.071 | 568.299 | 0.029 |
| Rubber Tired Dozers     | 250  | 0.286 | 1.262 | 1.203 | 0.006 | 0.046 | 0.046 | 568.299 | 0.025 |
| Rubber Tired Dozers     | 500  | 0.279 | 1.279 | 1.107 | 0.005 | 0.043 | 0.043 | 568.300 | 0.025 |
| Rubber Tired Dozers     | 750  | 0.279 | 1.279 | 1.126 | 0.005 | 0.043 | 0.043 | 568.299 | 0.025 |
| Rubber Tired Dozers     | 1000 | 0.287 | 1.312 | 3.204 | 0.005 | 0.060 | 0.060 | 568.299 | 0.025 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Rubber Tired Loaders    | 50   | 0.575 | 5.126 | 3.337 | 0.007 | 0.035 | 0.035 | 568.299 | 0.051 |
| Rubber Tired Loaders    | 120  | 0.286 | 3.751 | 1.639 | 0.006 | 0.033 | 0.033 | 568.299 | 0.025 |
| Rubber Tired Loaders    | 175  | 0.200 | 3.312 | 0.481 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 |

|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 | 0.030 | 0.030 | 568.299 | 0.017 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 | 0.064 | 0.064 | 568.299 | 0.031 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 | 0.040 | 0.040 | 568.299 | 0.022 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 | 0.025 | 0.025 | 568.300 | 0.020 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 | 0.020 | 0.020 | 568.299 | 0.032 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 | 0.018 | 0.018 | 568.299 | 0.017 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 | 0.014 | 0.014 | 686.695 | 0.014 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 | 0.015 | 0.015 | 568.299 | 0.037 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 | 0.014 | 0.014 | 568.299 | 0.019 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 | 0.041 | 0.041 | 568.299 | 0.039 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 | 0.038 | 0.038 | 568.299 | 0.020 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 | 0.016 | 0.016 | 568.299 | 0.013 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 | 0.016 | 0.016 | 568.299 | 0.013 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 | 0.016 | 0.016 | 568.300 | 0.013 |
| Sweepers/S crubbers       | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 |
| Sweepers/S crubbers       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 |
| Sweepers/S crubbers       | 50   | 0.505 | 4.929 | 3.214 | 0.007 | 0.017 | 0.017 | 568.299 | 0.045 |
| Sweepers/S crubbers       | 120  | 0.253 | 3.698 | 1.486 | 0.006 | 0.016 | 0.016 | 568.299 | 0.022 |
| Sweepers/S crubbers       | 175  | 0.175 | 3.271 | 0.313 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 |
| Sweepers/S crubbers       | 250  | 0.173 | 1.114 | 0.294 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |



|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.515 | 4.949 | 3.244 | 0.007 | 0.022 | 0.022 | 568.299 | 0.046 |
| Tractors/Loaders/Backhoes | 120  | 0.258 | 3.703 | 1.521 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 |
| Tractors/Loaders/Backhoes | 175  | 0.179 | 3.275 | 0.348 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 |
| Tractors/Loaders/Backhoes | 250  | 0.177 | 1.115 | 0.331 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 |
| Tractors/Loaders/Backhoes | 500  | 0.177 | 1.066 | 0.326 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 |
| Tractors/Loaders/Backhoes | 750  | 0.177 | 1.066 | 0.327 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Trenchers                 | 50   | 0.681 | 5.055 | 3.548 | 0.007 | 0.084 | 0.084 | 568.299 | 0.061 |
| Trenchers                 | 120  | 0.332 | 3.713 | 2.049 | 0.006 | 0.076 | 0.076 | 568.300 | 0.030 |
| Trenchers                 | 175  | 0.241 | 3.264 | 0.966 | 0.006 | 0.048 | 0.048 | 568.299 | 0.021 |
| Trenchers                 | 250  | 0.216 | 1.149 | 0.847 | 0.006 | 0.031 | 0.031 | 568.299 | 0.019 |
| Trenchers                 | 500  | 0.213 | 1.126 | 0.790 | 0.005 | 0.029 | 0.029 | 568.299 | 0.019 |
| Trenchers                 | 750  | 0.213 | 1.126 | 0.801 | 0.005 | 0.029 | 0.029 | 568.300 | 0.019 |
| Welders                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 |
| Welders                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Welders                   | 50   | 0.406 | 4.349 | 3.147 | 0.007 | 0.022 | 0.022 | 568.299 | 0.036 |
| Welders                   | 120  | 0.214 | 3.528 | 1.509 | 0.006 | 0.019 | 0.019 | 568.299 | 0.019 |
| Welders                   | 175  | 0.153 | 3.121 | 0.387 | 0.006 | 0.015 | 0.015 | 568.299 | 0.013 |
| Welders                   | 250  | 0.149 | 1.063 | 0.343 | 0.006 | 0.012 | 0.012 | 568.299 | 0.013 |
| Welders                   | 500  | 0.149 | 1.027 | 0.339 | 0.005 | 0.012 | 0.012 | 568.299 | 0.013 |
| Water Trucks              | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 |
| Water Trucks              | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 |
| Water Trucks              | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Water Trucks              | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Water Trucks              | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 |

2039

|         |
|---------|
| g/hp/hr |
| N2O     |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |

| 2039             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   | 0.019   |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   | 0.017   |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   | 0.162   |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   | 0.023   |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   | 0.020   |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   | 0.015   |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   | 0.012   |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   | 0.012   |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   | 0.012   |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   | 0.026   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   | 0.013   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   | 0.012   |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   | 0.010   |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   | 0.010   |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   | 0.021   |

|       |
|-------|
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                          |      |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 | 0.021 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 | 0.018 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 | 0.014 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 | 0.039 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 | 0.036 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 | 0.024 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 | 0.016 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 | 0.016 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 | 0.016 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 | 0.031 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 | 0.066 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 | 0.060 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 | 0.038 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 | 0.026 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 | 0.025 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 | 0.025 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 | 0.041 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 | 0.023 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 | 0.020 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 | 0.015 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 | 0.012 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 | 0.026 |



|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 | 0.018 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 | 0.017 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 | 0.013 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 | 0.011 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 | 0.025 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 | 0.022 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 | 0.016 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 | 0.013 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 |

|       |
|-------|
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 | 0.028 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 | 0.025 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 | 0.022 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 | 0.016 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 | 0.013 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 | 0.013 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 | 0.027 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 | 0.076 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 | 0.069 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 | 0.043 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 | 0.027 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 | 0.026 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 | 0.070 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 | 0.064 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 | 0.040 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 | 0.024 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 | 0.015 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 | 0.014 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 | 0.013 |



|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 | 0.015 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 | 0.015 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 | 0.015 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 | 0.030 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 | 0.064 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 | 0.040 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 | 0.026 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 | 0.025 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 | 0.025 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 | 0.020 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 | 0.018 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 | 0.014 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 | 0.014 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 | 0.015 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 | 0.014 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 | 0.041 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 | 0.038 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 | 0.025 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 | 0.016 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 | 0.016 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 | 0.016 |
| Sweepers/S crubbers       | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 |
| Sweepers/S crubbers       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 |
| Sweepers/S crubbers       | 50   | 0.505 | 4.929 | 3.214 | 0.007 | 0.017 |
| Sweepers/S crubbers       | 120  | 0.253 | 3.698 | 1.486 | 0.006 | 0.016 |
| Sweepers/S crubbers       | 175  | 0.175 | 3.271 | 0.313 | 0.006 | 0.012 |
| Sweepers/S crubbers       | 250  | 0.173 | 1.114 | 0.294 | 0.006 | 0.011 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |





2040

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|
| PM2.5   | CO2     | CH4     | N2O     |
| 0.161   | 568.299 | 0.059   | 0.005   |
| 0.161   | 568.299 | 0.061   | 0.005   |
| 0.019   | 568.299 | 0.026   | 0.005   |
| 0.017   | 568.299 | 0.014   | 0.004   |
| 0.011   | 568.299 | 0.010   | 0.004   |
| 0.011   | 568.299 | 0.010   | 0.004   |
| 0.162   | 568.300 | 0.059   | 0.005   |
| 0.162   | 568.299 | 0.061   | 0.005   |
| 0.023   | 568.299 | 0.041   | 0.005   |
| 0.020   | 568.299 | 0.021   | 0.004   |
| 0.015   | 568.300 | 0.015   | 0.004   |
| 0.012   | 568.299 | 0.014   | 0.004   |
| 0.012   | 568.299 | 0.014   | 0.004   |
| 0.012   | 568.299 | 0.014   | 0.004   |
| 0.026   | 568.299 | 0.015   | 0.004   |
| 0.161   | 568.299 | 0.059   | 0.005   |
| 0.161   | 568.299 | 0.061   | 0.005   |
| 0.013   | 568.299 | 0.031   | 0.005   |
| 0.012   | 568.300 | 0.016   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.021   | 568.299 | 0.011   | 0.004   |

| 2040             |       | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      |
| Aerial Lifts     | 15    | 0.661   | 3.469   |
| Aerial Lifts     | 25    | 0.685   | 2.339   |
| Aerial Lifts     | 50    | 0.295   | 3.723   |
| Aerial Lifts     | 120   | 0.161   | 3.344   |
| Aerial Lifts     | 500   | 0.112   | 0.986   |
| Aerial Lifts     | 750   | 0.112   | 0.986   |
| Air Compressor s | 15    | 0.661   | 3.469   |
| Air Compressor s | 25    | 0.685   | 2.339   |
| Air Compressor s | 50    | 0.458   | 4.659   |
| Air Compressor s | 120   | 0.232   | 3.619   |
| Air Compressor s | 175   | 0.161   | 3.201   |
| Air Compressor s | 250   | 0.160   | 1.090   |
| Air Compressor s | 500   | 0.160   | 1.047   |
| Air Compressor s | 750   | 0.160   | 1.047   |
| Air Compressor s | 1000  | 0.160   | 1.047   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.032   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.435   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.039   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.021 | 568.300 | 0.033 | 0.005 |
| 0.018 | 568.299 | 0.018 | 0.004 |
| 0.014 | 568.299 | 0.012 | 0.004 |
| 0.039 | 568.299 | 0.054 | 0.005 |
| 0.036 | 568.300 | 0.027 | 0.004 |
| 0.024 | 568.299 | 0.019 | 0.004 |
| 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 568.299 | 0.018 | 0.004 |
| 0.031 | 568.299 | 0.018 | 0.004 |
| 0.066 | 568.299 | 0.063 | 0.005 |
| 0.060 | 568.299 | 0.031 | 0.004 |
| 0.038 | 568.299 | 0.022 | 0.004 |
| 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.020 | 0.004 |
| 0.041 | 568.299 | 0.020 | 0.004 |
| 0.023 | 568.299 | 0.044 | 0.005 |
| 0.020 | 568.299 | 0.022 | 0.004 |
| 0.015 | 568.299 | 0.015 | 0.004 |
| 0.012 | 568.300 | 0.015 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.026 | 568.299 | 0.016 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.470 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 50   | 0.373 | 4.175 |
| Concrete/Industrial Saws | 120  | 0.195 | 3.477 |
| Concrete/Industrial Saws | 175  | 0.136 | 3.076 |
| Cranes                   | 50   | 0.567 | 5.268 |
| Cranes                   | 120  | 0.282 | 3.797 |
| Cranes                   | 175  | 0.197 | 3.358 |
| Cranes                   | 250  | 0.195 | 1.144 |
| Cranes                   | 500  | 0.195 | 1.087 |
| Cranes                   | 750  | 0.195 | 1.087 |
| Cranes                   | 9999 | 0.198 | 1.087 |
| Crawler Tractors         | 50   | 0.653 | 5.443 |
| Crawler Tractors         | 120  | 0.316 | 3.839 |
| Crawler Tractors         | 175  | 0.221 | 3.388 |
| Crawler Tractors         | 250  | 0.211 | 1.167 |
| Crawler Tractors         | 500  | 0.210 | 1.113 |
| Crawler Tractors         | 750  | 0.210 | 1.113 |
| Crawler Tractors         | 1000 | 0.213 | 1.122 |
| Crushing/Proc. Equipment | 50   | 0.488 | 4.833 |
| Crushing/Proc. Equipment | 120  | 0.245 | 3.670 |
| Crushing/Proc. Equipment | 175  | 0.170 | 3.246 |
| Crushing/Proc. Equipment | 250  | 0.168 | 1.106 |
| Crushing/Proc. Equipment | 500  | 0.168 | 1.059 |
| Crushing/Proc. Equipment | 750  | 0.169 | 1.059 |
| Crushing/Proc. Equipment | 9999 | 0.170 | 1.059 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.024 | 568.299 | 0.051 | 0.005 |
| 0.021 | 568.299 | 0.025 | 0.004 |
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.300 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.017 | 568.299 | 0.050 | 0.005 |
| 0.016 | 568.299 | 0.024 | 0.004 |
| 0.012 | 568.300 | 0.017 | 0.004 |
| 0.011 | 568.300 | 0.017 | 0.004 |
| 0.011 | 568.299 | 0.017 | 0.004 |
| 0.162 | 568.299 | 0.053 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.018 | 568.299 | 0.024 | 0.005 |
| 0.016 | 568.299 | 0.014 | 0.004 |
| 0.013 | 568.299 | 0.010 | 0.004 |
| 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 568.299 | 0.009 | 0.004 |
| 0.022 | 568.299 | 0.010 | 0.004 |
| 0.037 | 568.299 | 0.053 | 0.005 |
| 0.034 | 568.299 | 0.026 | 0.004 |
| 0.022 | 568.300 | 0.018 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.107 | 568.299 | 0.037 | 0.004 |
| 0.065 | 568.299 | 0.027 | 0.004 |
| 0.042 | 568.299 | 0.024 | 0.004 |
| 0.040 | 568.299 | 0.023 | 0.004 |
| 0.056 | 568.299 | 0.024 | 0.004 |
| 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |

|                      |      |       |       |
|----------------------|------|-------|-------|
| Dumpers/Trailers     | 25   | 0.685 | 2.339 |
| Excavators           | 25   | 0.685 | 2.339 |
| Excavators           | 50   | 0.567 | 5.283 |
| Excavators           | 120  | 0.279 | 3.802 |
| Excavators           | 175  | 0.193 | 3.363 |
| Excavators           | 250  | 0.192 | 1.145 |
| Excavators           | 500  | 0.192 | 1.089 |
| Excavators           | 750  | 0.192 | 1.089 |
| Forklifts            | 50   | 0.562 | 5.256 |
| Forklifts            | 120  | 0.276 | 3.794 |
| Forklifts            | 175  | 0.189 | 3.356 |
| Forklifts            | 250  | 0.189 | 1.143 |
| Forklifts            | 500  | 0.189 | 1.087 |
| Generator Sets       | 15   | 0.589 | 3.469 |
| Generator Sets       | 25   | 0.685 | 2.339 |
| Generator Sets       | 50   | 0.273 | 3.601 |
| Generator Sets       | 120  | 0.152 | 3.308 |
| Generator Sets       | 175  | 0.107 | 2.928 |
| Generator Sets       | 250  | 0.106 | 0.997 |
| Generator Sets       | 500  | 0.106 | 0.978 |
| Generator Sets       | 750  | 0.106 | 0.978 |
| Generator Sets       | 9999 | 0.107 | 0.978 |
| Graders              | 50   | 0.563 | 5.161 |
| Graders              | 120  | 0.278 | 3.764 |
| Graders              | 175  | 0.193 | 3.326 |
| Graders              | 250  | 0.188 | 1.133 |
| Graders              | 500  | 0.188 | 1.079 |
| Graders              | 750  | 0.188 | 1.079 |
| Off-Highway Tractors | 120  | 0.362 | 3.878 |
| Off-Highway Tractors | 175  | 0.257 | 3.412 |
| Off-Highway Tractors | 250  | 0.237 | 1.198 |
| Off-Highway Tractors | 750  | 0.234 | 1.164 |
| Off-Highway Tractors | 1000 | 0.238 | 1.183 |
| Off-Highway Trucks   | 175  | 0.205 | 3.426 |
| Off-Highway Trucks   | 250  | 0.204 | 1.167 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 568.299 | 0.018 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.018 | 568.299 | 0.037 | 0.005 |
| 0.017 | 568.299 | 0.019 | 0.004 |
| 0.013 | 568.299 | 0.013 | 0.004 |
| 0.011 | 568.299 | 0.013 | 0.004 |
| 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.025 | 568.299 | 0.050 | 0.005 |
| 0.022 | 568.300 | 0.025 | 0.004 |
| 0.016 | 568.300 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.204 | 1.105 |
| Off-Highway Trucks                 | 750  | 0.204 | 1.105 |
| Off-Highway Trucks                 | 1000 | 0.205 | 1.105 |
| Other Construction Equipment       | 15   | 0.661 | 3.470 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 |
| Other Construction Equipment       | 50   | 0.409 | 4.377 |
| Other Construction Equipment       | 120  | 0.210 | 3.536 |
| Other Construction Equipment       | 175  | 0.145 | 3.128 |
| Other Construction Equipment       | 500  | 0.145 | 1.029 |
| Other General Industrial Equipment | 15   | 0.589 | 3.470 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 |
| Other General Industrial Equipment | 50   | 0.562 | 5.257 |
| Other General Industrial Equipment | 120  | 0.277 | 3.794 |
| Other General Industrial Equipment | 175  | 0.191 | 3.356 |
| Other General Industrial Equipment | 250  | 0.190 | 1.143 |
| Other General Industrial Equipment | 500  | 0.190 | 1.087 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.028 | 568.299 | 0.017 | 0.004 |
| 0.025 | 568.299 | 0.049 | 0.005 |
| 0.022 | 568.299 | 0.025 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.027 | 568.299 | 0.017 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.076 | 568.299 | 0.062 | 0.005 |
| 0.069 | 568.299 | 0.030 | 0.004 |
| 0.043 | 568.299 | 0.022 | 0.004 |
| 0.027 | 568.300 | 0.019 | 0.004 |
| 0.026 | 568.299 | 0.019 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.070 | 568.300 | 0.059 | 0.005 |
| 0.064 | 568.299 | 0.029 | 0.004 |
| 0.040 | 568.299 | 0.021 | 0.004 |
| 0.024 | 568.299 | 0.019 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.162 | 568.300 | 0.053 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.015 | 568.299 | 0.016 | 0.005 |
| 0.014 | 568.299 | 0.010 | 0.004 |
| 0.013 | 568.299 | 0.009 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.190 | 1.087 |
| Other General Industrial Equipment | 1000 | 0.191 | 1.087 |
| Other Material Handling Equipment  | 50   | 0.551 | 5.191 |
| Other Material Handling Equipment  | 120  | 0.272 | 3.775 |
| Other Material Handling Equipment  | 175  | 0.188 | 3.339 |
| Other Material Handling Equipment  | 250  | 0.187 | 1.137 |
| Other Material Handling Equipment  | 500  | 0.187 | 1.082 |
| Other Material Handling Equipment  | 9999 | 0.189 | 1.082 |
| Pavers                             | 25   | 0.685 | 2.339 |
| Pavers                             | 50   | 0.618 | 5.189 |
| Pavers                             | 120  | 0.302 | 3.763 |
| Pavers                             | 175  | 0.213 | 3.319 |
| Pavers                             | 250  | 0.200 | 1.138 |
| Pavers                             | 500  | 0.198 | 1.085 |
| Paving Equipment                   | 25   | 0.685 | 2.339 |
| Paving Equipment                   | 50   | 0.589 | 5.111 |
| Paving Equipment                   | 120  | 0.291 | 3.744 |
| Paving Equipment                   | 175  | 0.205 | 3.304 |
| Paving Equipment                   | 250  | 0.193 | 1.127 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.589 | 3.469 |
| Pressure Washers                   | 25   | 0.685 | 2.339 |
| Pressure Washers                   | 50   | 0.186 | 3.098 |
| Pressure Washers                   | 120  | 0.113 | 3.160 |
| Pressure Washers                   | 175  | 0.103 | 2.907 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.009 | 568.299 | 0.008 | 0.004 |
| 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.019 | 568.299 | 0.027 | 0.005 |
| 0.017 | 568.299 | 0.015 | 0.004 |
| 0.014 | 568.299 | 0.011 | 0.004 |
| 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 568.299 | 0.010 | 0.004 |
| 0.023 | 568.299 | 0.011 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.300 | 0.061 | 0.005 |
| 0.038 | 568.299 | 0.045 | 0.005 |
| 0.035 | 568.299 | 0.023 | 0.004 |
| 0.023 | 568.299 | 0.016 | 0.004 |
| 0.016 | 568.299 | 0.015 | 0.004 |
| 0.016 | 568.300 | 0.015 | 0.004 |
| 0.022 | 568.299 | 0.047 | 0.005 |
| 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 568.300 | 0.016 | 0.004 |
| 0.071 | 568.299 | 0.029 | 0.004 |
| 0.046 | 568.299 | 0.025 | 0.004 |
| 0.043 | 568.300 | 0.025 | 0.004 |
| 0.043 | 568.299 | 0.025 | 0.004 |
| 0.060 | 568.299 | 0.025 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.035 | 568.299 | 0.051 | 0.005 |
| 0.033 | 568.299 | 0.025 | 0.004 |
| 0.022 | 568.299 | 0.018 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 |
| Pumps                   | 15   | 0.661 | 3.469 |
| Pumps                   | 25   | 0.685 | 2.339 |
| Pumps                   | 50   | 0.303 | 3.770 |
| Pumps                   | 120  | 0.165 | 3.358 |
| Pumps                   | 175  | 0.116 | 2.971 |
| Pumps                   | 250  | 0.114 | 1.012 |
| Pumps                   | 500  | 0.114 | 0.989 |
| Pumps                   | 750  | 0.114 | 0.989 |
| Pumps                   | 9999 | 0.116 | 0.989 |
| Rollers                 | 15   | 0.661 | 3.469 |
| Rollers                 | 25   | 0.685 | 2.339 |
| Rollers                 | 50   | 0.469 | 4.682 |
| Rollers                 | 120  | 0.240 | 3.625 |
| Rollers                 | 175  | 0.168 | 3.205 |
| Rollers                 | 250  | 0.165 | 1.092 |
| Rollers                 | 500  | 0.165 | 1.048 |
| Rough Terrain Forklifts | 50   | 0.519 | 5.010 |
| Rough Terrain Forklifts | 120  | 0.258 | 3.722 |
| Rough Terrain Forklifts | 175  | 0.178 | 3.292 |
| Rough Terrain Forklifts | 250  | 0.177 | 1.121 |
| Rough Terrain Forklifts | 500  | 0.177 | 1.071 |
| Rubber Tired Dozers     | 175  | 0.275 | 3.470 |
| Rubber Tired Dozers     | 250  | 0.253 | 1.225 |
| Rubber Tired Dozers     | 500  | 0.249 | 1.198 |
| Rubber Tired Dozers     | 750  | 0.250 | 1.198 |
| Rubber Tired Dozers     | 1000 | 0.254 | 1.218 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 |
| Rubber Tired Loaders    | 50   | 0.545 | 5.102 |
| Rubber Tired Loaders    | 120  | 0.271 | 3.748 |
| Rubber Tired Loaders    | 175  | 0.188 | 3.314 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.030 | 568.299 | 0.017 | 0.004 |
| 0.064 | 568.299 | 0.031 | 0.004 |
| 0.040 | 568.299 | 0.022 | 0.004 |
| 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.300 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.020 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.020 | 568.299 | 0.032 | 0.005 |
| 0.018 | 568.299 | 0.017 | 0.004 |
| 0.014 | 568.299 | 0.012 | 0.004 |
| 0.014 | 686.695 | 0.014 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.015 | 568.299 | 0.037 | 0.005 |
| 0.014 | 568.299 | 0.019 | 0.004 |
| 0.041 | 568.299 | 0.039 | 0.005 |
| 0.038 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.014 | 0.004 |
| 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 568.300 | 0.013 | 0.004 |
| 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 568.300 | 0.061 | 0.005 |
| 0.017 | 568.299 | 0.045 | 0.005 |
| 0.016 | 568.299 | 0.022 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.011 | 568.299 | 0.015 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.185 | 1.128 |
| Rubber Tired Loaders      | 500  | 0.185 | 1.076 |
| Rubber Tired Loaders      | 750  | 0.185 | 1.076 |
| Rubber Tired Loaders      | 1000 | 0.186 | 1.076 |
| Scrapers                  | 120  | 0.316 | 3.833 |
| Scrapers                  | 175  | 0.221 | 3.381 |
| Scrapers                  | 250  | 0.210 | 1.159 |
| Scrapers                  | 500  | 0.209 | 1.100 |
| Scrapers                  | 750  | 0.209 | 1.100 |
| Signal Boards             | 15   | 0.661 | 3.469 |
| Signal Boards             | 50   | 0.356 | 4.074 |
| Signal Boards             | 120  | 0.188 | 3.447 |
| Signal Boards             | 175  | 0.131 | 3.050 |
| Signal Boards             | 250  | 0.157 | 1.255 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 |
| Skid Steer Loaders        | 50   | 0.411 | 4.392 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 |
| Surfacing Equipment       | 50   | 0.395 | 4.183 |
| Surfacing Equipment       | 120  | 0.206 | 3.477 |
| Surfacing Equipment       | 175  | 0.146 | 3.073 |
| Surfacing Equipment       | 250  | 0.140 | 1.047 |
| Surfacing Equipment       | 500  | 0.140 | 1.015 |
| Surfacing Equipment       | 750  | 0.140 | 1.015 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 |
| Sweepers/Scrubbers        | 50   | 0.504 | 4.925 |
| Sweepers/Scrubbers        | 120  | 0.251 | 3.697 |
| Sweepers/Scrubbers        | 175  | 0.172 | 3.270 |
| Sweepers/Scrubbers        | 250  | 0.172 | 1.114 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 |



|       |         |       |       |
|-------|---------|-------|-------|
| 0.022 | 568.299 | 0.046 | 0.005 |
| 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.084 | 568.299 | 0.061 | 0.005 |
| 0.076 | 568.300 | 0.030 | 0.004 |
| 0.048 | 568.299 | 0.021 | 0.004 |
| 0.031 | 568.299 | 0.019 | 0.004 |
| 0.029 | 568.299 | 0.019 | 0.004 |
| 0.029 | 568.300 | 0.019 | 0.004 |
| 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.022 | 568.299 | 0.036 | 0.005 |
| 0.019 | 568.299 | 0.019 | 0.004 |
| 0.015 | 568.299 | 0.013 | 0.004 |
| 0.012 | 568.299 | 0.013 | 0.004 |
| 0.012 | 568.299 | 0.013 | 0.004 |
| 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 568.299 | 0.018 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.508 | 4.946 |
| Tractors/Loaders/Backhoes | 120  | 0.254 | 3.703 |
| Tractors/Loaders/Backhoes | 175  | 0.175 | 3.276 |
| Tractors/Loaders/Backhoes | 250  | 0.174 | 1.116 |
| Tractors/Loaders/Backhoes | 500  | 0.174 | 1.066 |
| Tractors/Loaders/Backhoes | 750  | 0.174 | 1.066 |
| Trenchers                 | 15   | 0.661 | 3.469 |
| Trenchers                 | 25   | 0.685 | 2.339 |
| Trenchers                 | 50   | 0.598 | 4.980 |
| Trenchers                 | 120  | 0.293 | 3.699 |
| Trenchers                 | 175  | 0.207 | 3.260 |
| Trenchers                 | 250  | 0.193 | 1.126 |
| Trenchers                 | 500  | 0.191 | 1.081 |
| Trenchers                 | 750  | 0.191 | 1.081 |
| Welders                   | 15   | 0.661 | 3.469 |
| Welders                   | 25   | 0.685 | 2.339 |
| Welders                   | 50   | 0.402 | 4.336 |
| Welders                   | 120  | 0.208 | 3.524 |
| Welders                   | 175  | 0.145 | 3.118 |
| Welders                   | 250  | 0.143 | 1.062 |
| Welders                   | 500  | 0.143 | 1.026 |
| Water Trucks              | 175  | 0.205 | 3.426 |
| Water Trucks              | 250  | 0.204 | 1.167 |
| Water Trucks              | 500  | 0.204 | 1.105 |
| Water Trucks              | 750  | 0.204 | 1.105 |
| Water Trucks              | 1000 | 0.205 | 1.105 |

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|
| NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 2.966   | 0.007   | 0.013   | 0.013   | 568.299 | 0.026   | 0.005   |
| 1.407   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 0.279   | 0.005   | 0.009   | 0.009   | 568.299 | 0.010   | 0.004   |
| 0.279   | 0.005   | 0.009   | 0.009   | 568.299 | 0.010   | 0.004   |
| 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 4.332   | 0.007   | 0.161   | 0.161   | 568.300 | 0.061   | 0.005   |
| 3.159   | 0.007   | 0.016   | 0.016   | 568.300 | 0.041   | 0.005   |
| 1.468   | 0.006   | 0.015   | 0.015   | 568.299 | 0.020   | 0.004   |
| 0.307   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 0.291   | 0.006   | 0.010   | 0.010   | 568.299 | 0.014   | 0.004   |
| 0.291   | 0.005   | 0.010   | 0.010   | 568.300 | 0.014   | 0.004   |
| 0.291   | 0.005   | 0.010   | 0.010   | 568.299 | 0.014   | 0.004   |
| 2.439   | 0.005   | 0.023   | 0.023   | 568.299 | 0.014   | 0.004   |
| 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 3.019   | 0.007   | 0.013   | 0.013   | 568.300 | 0.031   | 0.005   |
| 1.411   | 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.272   | 0.006   | 0.010   | 0.010   | 568.300 | 0.011   | 0.004   |
| 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.058 | 0.007 | 0.014 | 0.014 | 568.299 | 0.033 | 0.005 |
| 1.434 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.300 | 0.012 | 0.004 |
| 3.324 | 0.007 | 0.024 | 0.024 | 568.299 | 0.051 | 0.005 |
| 1.552 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.371 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.344 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.340 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.341 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 2.534 | 0.005 | 0.027 | 0.027 | 568.299 | 0.017 | 0.004 |
| 3.420 | 0.007 | 0.042 | 0.042 | 568.299 | 0.058 | 0.005 |
| 1.709 | 0.006 | 0.039 | 0.039 | 568.299 | 0.028 | 0.004 |
| 0.539 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.491 | 0.006 | 0.018 | 0.018 | 568.299 | 0.019 | 0.004 |
| 0.470 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.475 | 0.005 | 0.018 | 0.018 | 568.299 | 0.019 | 0.004 |
| 2.652 | 0.005 | 0.032 | 0.032 | 568.299 | 0.019 | 0.004 |
| 3.194 | 0.007 | 0.017 | 0.017 | 568.299 | 0.044 | 0.005 |
| 1.477 | 0.006 | 0.015 | 0.015 | 568.299 | 0.022 | 0.004 |
| 0.306 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.292 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.292 | 0.005 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.292 | 0.005 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 2.457 | 0.005 | 0.024 | 0.024 | 568.299 | 0.015 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 3.290 | 0.007 | 0.019 | 0.019 | 568.299 | 0.051 | 0.005 |
| 1.507 | 0.006 | 0.017 | 0.017 | 568.299 | 0.025 | 0.004 |
| 0.311 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.300 | 0.006 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.300 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.300 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 3.272 | 0.007 | 0.017 | 0.017 | 568.299 | 0.050 | 0.005 |
| 1.491 | 0.006 | 0.016 | 0.016 | 568.299 | 0.024 | 0.004 |
| 0.288 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.288 | 0.006 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.288 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.941 | 0.007 | 0.012 | 0.012 | 568.300 | 0.024 | 0.005 |
| 1.399 | 0.006 | 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 0.293 | 0.006 | 0.010 | 0.010 | 568.299 | 0.009 | 0.004 |
| 0.277 | 0.006 | 0.009 | 0.009 | 568.299 | 0.009 | 0.004 |
| 0.277 | 0.005 | 0.009 | 0.009 | 568.299 | 0.009 | 0.004 |
| 0.277 | 0.005 | 0.009 | 0.009 | 568.300 | 0.009 | 0.004 |
| 2.330 | 0.005 | 0.020 | 0.020 | 568.299 | 0.009 | 0.004 |
| 3.298 | 0.007 | 0.026 | 0.026 | 568.300 | 0.050 | 0.005 |
| 1.560 | 0.006 | 0.024 | 0.024 | 568.299 | 0.025 | 0.004 |
| 0.380 | 0.006 | 0.017 | 0.017 | 568.299 | 0.017 | 0.004 |
| 0.360 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.353 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.976 | 0.006 | 0.067 | 0.067 | 568.299 | 0.032 | 0.004 |
| 0.836 | 0.006 | 0.041 | 0.041 | 568.299 | 0.023 | 0.004 |
| 0.747 | 0.006 | 0.028 | 0.028 | 568.299 | 0.021 | 0.004 |
| 0.710 | 0.005 | 0.027 | 0.027 | 568.299 | 0.021 | 0.004 |
| 2.844 | 0.005 | 0.042 | 0.042 | 568.299 | 0.021 | 0.004 |
| 0.318 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.006 | 0.012 | 0.012 | 568.300 | 0.018 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 2.532 | 0.005 | 0.026 | 0.026 | 568.299 | 0.018 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.300 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.096 | 0.007 | 0.015 | 0.015 | 568.300 | 0.036 | 0.005 |
| 1.441 | 0.006 | 0.014 | 0.014 | 568.299 | 0.018 | 0.004 |
| 0.290 | 0.006 | 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 0.282 | 0.005 | 0.010 | 0.010 | 568.299 | 0.013 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.283 | 0.007 | 0.019 | 0.019 | 568.299 | 0.050 | 0.005 |
| 1.506 | 0.006 | 0.017 | 0.017 | 568.299 | 0.025 | 0.004 |
| 0.315 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.299 | 0.006 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.299 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.299 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 2.500 | 0.005 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 3.269 | 0.007 | 0.018 | 0.018 | 568.299 | 0.049 | 0.005 |
| 1.502 | 0.006 | 0.017 | 0.017 | 568.300 | 0.024 | 0.004 |
| 0.314 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.298 | 0.006 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 0.298 | 0.005 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 2.493 | 0.005 | 0.025 | 0.025 | 568.300 | 0.017 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.393 | 0.007 | 0.047 | 0.047 | 568.299 | 0.055 | 0.005 |
| 1.731 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.583 | 0.006 | 0.027 | 0.027 | 568.299 | 0.019 | 0.004 |
| 0.525 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.498 | 0.005 | 0.018 | 0.018 | 568.299 | 0.017 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.361 | 0.007 | 0.042 | 0.042 | 568.300 | 0.053 | 0.005 |
| 1.687 | 0.006 | 0.039 | 0.039 | 568.299 | 0.026 | 0.004 |
| 0.536 | 0.006 | 0.025 | 0.025 | 568.299 | 0.018 | 0.004 |
| 0.485 | 0.006 | 0.017 | 0.017 | 568.299 | 0.017 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.836 | 0.007 | 0.010 | 0.010 | 568.299 | 0.016 | 0.005 |
| 1.365 | 0.006 | 0.010 | 0.010 | 568.299 | 0.010 | 0.004 |
| 0.293 | 0.006 | 0.010 | 0.010 | 568.299 | 0.009 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.976 | 0.007 | 0.013 | 0.013 | 568.299 | 0.027 | 0.005 |
| 1.410 | 0.006 | 0.012 | 0.012 | 568.299 | 0.014 | 0.004 |
| 0.295 | 0.006 | 0.010 | 0.010 | 568.299 | 0.010 | 0.004 |
| 0.279 | 0.006 | 0.009 | 0.009 | 568.299 | 0.010 | 0.004 |
| 0.279 | 0.005 | 0.009 | 0.009 | 568.299 | 0.010 | 0.004 |
| 0.279 | 0.005 | 0.009 | 0.009 | 568.299 | 0.010 | 0.004 |
| 2.347 | 0.005 | 0.020 | 0.020 | 568.299 | 0.010 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.207 | 0.007 | 0.024 | 0.024 | 568.299 | 0.042 | 0.005 |
| 1.525 | 0.006 | 0.021 | 0.021 | 568.299 | 0.021 | 0.004 |
| 0.373 | 0.006 | 0.015 | 0.015 | 568.299 | 0.015 | 0.004 |
| 0.348 | 0.006 | 0.012 | 0.012 | 568.299 | 0.014 | 0.004 |
| 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.014 | 0.004 |
| 3.228 | 0.007 | 0.017 | 0.017 | 568.300 | 0.046 | 0.005 |
| 1.485 | 0.006 | 0.016 | 0.016 | 568.299 | 0.023 | 0.004 |
| 0.303 | 0.006 | 0.012 | 0.012 | 568.300 | 0.016 | 0.004 |
| 0.292 | 0.006 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 0.292 | 0.005 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 0.903 | 0.006 | 0.045 | 0.045 | 568.299 | 0.024 | 0.004 |
| 0.810 | 0.006 | 0.031 | 0.031 | 568.299 | 0.022 | 0.004 |
| 0.758 | 0.005 | 0.029 | 0.029 | 568.299 | 0.022 | 0.004 |
| 0.767 | 0.005 | 0.029 | 0.029 | 568.300 | 0.022 | 0.004 |
| 2.910 | 0.005 | 0.045 | 0.045 | 568.300 | 0.023 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.283 | 0.007 | 0.024 | 0.024 | 568.300 | 0.049 | 0.005 |
| 1.543 | 0.006 | 0.022 | 0.022 | 568.300 | 0.024 | 0.004 |
| 0.365 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.346 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.338 | 0.005 | 0.013 | 0.013 | 568.300 | 0.016 | 0.004 |
| 0.340 | 0.005 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 2.522 | 0.005 | 0.026 | 0.026 | 568.299 | 0.016 | 0.004 |
| 1.715 | 0.006 | 0.040 | 0.040 | 568.299 | 0.028 | 0.004 |
| 0.549 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 0.498 | 0.006 | 0.018 | 0.018 | 568.300 | 0.018 | 0.004 |
| 0.475 | 0.005 | 0.017 | 0.017 | 568.299 | 0.018 | 0.004 |
| 0.480 | 0.005 | 0.017 | 0.017 | 568.299 | 0.018 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.037 | 0.007 | 0.014 | 0.014 | 568.299 | 0.032 | 0.005 |
| 1.428 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.296 | 0.006 | 0.011 | 0.011 | 568.299 | 0.011 | 0.004 |
| 0.341 | 0.007 | 0.012 | 0.012 | 686.695 | 0.014 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.093 | 0.007 | 0.014 | 0.014 | 568.299 | 0.037 | 0.005 |
| 1.435 | 0.006 | 0.013 | 0.013 | 568.300 | 0.019 | 0.004 |
| 3.114 | 0.007 | 0.025 | 0.025 | 568.299 | 0.035 | 0.005 |
| 1.521 | 0.006 | 0.024 | 0.024 | 568.299 | 0.018 | 0.004 |
| 0.397 | 0.006 | 0.017 | 0.017 | 568.299 | 0.013 | 0.004 |
| 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.012 | 0.004 |
| 0.358 | 0.005 | 0.012 | 0.012 | 568.299 | 0.012 | 0.004 |
| 0.361 | 0.005 | 0.013 | 0.013 | 568.299 | 0.012 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.300 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.203 | 0.007 | 0.016 | 0.016 | 568.300 | 0.045 | 0.005 |
| 1.469 | 0.006 | 0.015 | 0.015 | 568.299 | 0.022 | 0.004 |
| 0.284 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.284 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 3.220 | 0.007 | 0.018 | 0.018 | 568.299 | 0.045 | 0.005 |
| 1.485 | 0.006 | 0.016 | 0.016 | 568.299 | 0.022 | 0.004 |
| 0.305 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.300 | 0.015 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.374 | 0.007 | 0.052 | 0.052 | 568.299 | 0.054 | 0.005 |
| 1.767 | 0.006 | 0.047 | 0.047 | 568.299 | 0.026 | 0.004 |
| 0.639 | 0.006 | 0.030 | 0.030 | 568.300 | 0.018 | 0.004 |
| 0.573 | 0.006 | 0.020 | 0.020 | 568.300 | 0.017 | 0.004 |
| 0.542 | 0.005 | 0.020 | 0.020 | 568.300 | 0.017 | 0.004 |
| 0.549 | 0.005 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.093 | 0.007 | 0.015 | 0.015 | 568.300 | 0.036 | 0.005 |
| 1.447 | 0.006 | 0.014 | 0.014 | 568.299 | 0.018 | 0.004 |
| 0.303 | 0.006 | 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 0.287 | 0.006 | 0.010 | 0.010 | 568.300 | 0.012 | 0.004 |
| 0.287 | 0.005 | 0.010 | 0.010 | 568.299 | 0.012 | 0.004 |
| 0.318 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.006 | 0.012 | 0.012 | 568.300 | 0.018 | 0.004 |
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 2.532 | 0.005 | 0.026 | 0.026 | 568.299 | 0.018 | 0.004 |

| Basic Conversions | Factor                                       | Value   | Units  | Source  |
|-------------------|--|---------|--------|---|
|                   | 1 pound equals                               | 453.592 | grams  |   |
|                   | 1 MT equals                                  | 1.102   | tons   |   |
|                   | Total # of days in a week                    | 7       | days   |   |
|                   | 1 kg equals                                  | 1,000   | grams  |   |
|                   | 1 Year equals                                | 365     | days   |   |
|                   | 1 ton equals                                 | 2,000   | pounds |   |
|                   | Global Warming Potential of CH <sub>4</sub>  | 25      | N/A    | <a href="http://www.arb.ca.gov/cc/inventory/backgr">http://www.arb.ca.gov/cc/inventory/backgr</a> |
|                   | Global Warming Potential of N <sub>2</sub> O | 298     | N/A    | <a href="http://www.arb.ca.gov/cc/inventory/backgr">http://www.arb.ca.gov/cc/inventory/backgr</a> |

[und/gwp.htm](#)

[und/gwp.htm](#)

## Welcome to the Road Construction Emissions Model, Version 9.0.0

### User Instructions

This spreadsheet system contains the following individual worksheets:

- 1 This worksheet of User Instructions
- 2 Updates
- 3 Emission Estimates
- 4 Data Entry
- 5 Non-default Off-road Equipment
- 6 EMFAC2017
- 7 On-road Mitigation EF
- 8 OFFROAD Convert
- 9 Off-road Tier 4 EF
- 10 OFFROAD HP & LF
- 11 OFFROAD EF
- 12 x-ref



The Emission Estimates worksheet calculates a project's emissions in pounds per day (and tons) by project phase and tons over the entire construction period.

The worksheet can be used to estimate emissions for both vehicle exhaust and fugitive dust. The methodology used to estimate fugitive dust emissions is a simplified methodology involving estimates of the maximum area (acreage) of land disturbed daily. Detailed fugitive dust emission estimates associated with individual materials handling operations and/or activity/vehicle types cannot be conducted with this version of the model.

The Emission Estimates worksheet cannot be modified directly, it is a protected worksheet. It can only be modified indirectly by entering information for the project in selected areas of the Data Entry worksheet.

The last seven of these worksheets - EMFAC2017, On-road Mitigation EF, OFFROAD Convert, Off-road Tier 4 EF, OFFROAD HP & LP, OFFROAD EF and x-ref - cannot be modified by the user. They are protected worksheets.

Even though all or portions of several worksheets are protected, the individual formulas used in the calculations can be seen by the user.

The Data Entry worksheet includes several areas that can be modified by the user.

User instructions in the Data Entry worksheet are highlighted in red.

On the Data Entry worksheet, the user has two options for entering project data: required data and optional data. Required data is entered in the data input section (yellow cells). That required data is then used by the worksheet to calculate default values for the project.

The user can override the default values (blue cells) calculated for a project and is encouraged to do so if project specific information is available. Due to the difficulty in developing reliable default values for road construction projects, the user is encouraged to enter as much site specific information as is available for the project being analyzed.

The Data Entry Worksheet also includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet.

When projects are discontinuous, the user must make adjustments to the spreadsheet manually, since the program cannot be setup to anticipate unexpected project delays.

#VALUE! <- This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bar!

Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.



<http://www.airquality.org>

Karen Huss



<http://www.ramboll.com/>

John Grant

## Road Construction Emissions Model, Version 9.0.0

### Updates Log

*Changes from previous version of Road Construction Emissions Model*

#### **(Version 8.1.0 to 9.0.0) (updated by SMAQMD 04/22/18 with assistance from Ramboll)**

- 1) Project length changed to include calendar years 2014 through 2040.
- 2) On-road vehicle emission factors have been updated to EMFAC2017 version 1.0.2.
- 3) Off-road emission rates updated to include calendar years 2014 through 2040.
- 4) Average Offroad HP by Equipment Type updated to be consistent with CalEEMod (version 2016.3.2)
- 5) Modified 'Data Entry' tab to calculate NOx start emissions from heavy duty trucks in "soil hauling", "asphalt hauling"

#### **(Version 7.1.5 to 8.1.0) (updated by SMAQMD 05/09/16 with assistance from Ramboll ENVIRON US Corporation)**

- 1) Project length changed to include calendar years 2014 through 2025.
- 2) Added a new project type: Type 4: Other Linear Project Type. Note that there are no default vehicle or equipment at
- 3) Emissions estimates were extended to include SOx, CH4, N2O and CO2e.
- 4) Updated off-road equipment emission factors and default average horsepower by equipment type to be consistent
- 5) On-road vehicle emission factors have been updated to EMFAC2014.
- 6) Revised pollutant order for consistency throughout the calculator.
- 7) Added flexibility for users to specify a non-default number of working days per month.
- 8) Modified soil hauling import and export quantity and haul truck capacity data requests to allow users to specify soil
- 9) Soil hauling emissions are now estimated separately for each construction phase.
- 10) Added a new feature to allow users to provide asphalt hauling quantities by phase in the "Data Entry" tab.
- 11) New component added where the user can specify construction start date and duration by phase.
- 12) The maximum daily emissions calculation was modified to sum emissions from overlapping construction phases.
- 13) Water truck activity can be specified and emissions estimated for the paving phase.
- 14) Mitigation options were added for on-road vehicles and off-road equipment. Emissions calculations include the eff
- 15) Model allows user to estimate emissions from non-default off-road equipment for all phases and for all project type equipment type for horsepower, number of equipment, load factor, hours of operation and emission factors in the "Nor
- 16) New table of total project emissions with units of tons/phase was added in the "Emission Estimates" tab.
- 17) Removed table of daily emissions in metric units from the "Emission Estimates" tab.
- 18) Removed unnecessary data from all tabs.

#### **(Version 7.1.4 to 7.1.5) (updated by SMAQMD 12/11/13 with assistance from ENVIRON Corporation)**

- 1) Grubbing and Land Clearing Phase calculation of active months in 2007, 2017, 2019 fixed.
- 2) Soil Hauling Emissions calculation to select override if it exists for round trips/day.
- 3) Worker Commute Emissions calculation of starting and hot soak emissions; drainage phase PM<sub>10</sub> emission rate.
- 4) Water Truck Emissions calculation to select number of months for Grubbing and Land Clearing Phase; maximum a

#### **(Version 6.3.2 to Version 7.1.0, 7.1.1, 7.1.2, 7.1.3 & 7.1.4) (updated by SMAQMD 8/2/13)**

- 1) EMFAC2011 emission factors added (previous EMFAC versions dropped).
- 2) OFFROAD2011 emission factors added (and fixed error).
- 3) OFFROAD2007 for categories not in OFFROAD2011 (and fixed error)
- 4) Project length changed to include calendar years 2009 through 2025.
- 5) Average Offroad HP by Equipment Type calculation updated and corrected
- 6) Load Factor Adjustment deactivated (default load factors already incorporated in ARB's calculation of emission fact
- 7) Crawler Tractor equipment added to model
- 8) Air Compressors ROG & Default Excavators calculation on Data Entry sheet corrected.
- 9) Default equipment list updated
- 10) Corrections to Worker Commute Emissions calculations



and "water truck" section

n)

activities available for the Project Type 4.

with CalEEMod (version 2013.2.2).

hauling activity by phase.

effects of mitigations if a mitigation option is selected by the user.  
es. Non-default off-road equipment specification must be included by  
"Non-default Off-road Equipment" tab.

increase/day after 2025.

itors)

Road Construction Emissions Model, Version 9.0.0

| Daily Emission Estimates for -> SR-49 Improvements (Option A) |               |              |               |                      |                        |                              |                       |                         |                               |               |               |               |               |                |
|---|---------------|--------------|---------------|----------------------|------------------------|------------------------------|-----------------------|-------------------------|-------------------------------|---------------|---------------|---------------|---------------|----------------|
| Project Phases (Pounds)                                       | ROG (lbs/day) | CO (lbs/day) | NOx (lbs/day) | Total PM10 (lbs/day) | Exhaust PM10 (lbs/day) | Fugitive Dust PM10 (lbs/day) | Total PM2.5 (lbs/day) | Exhaust PM2.5 (lbs/day) | Fugitive Dust PM2.5 (lbs/day) | SOx (lbs/day) | CO2 (lbs/day) | CH4 (lbs/day) | N2O (lbs/day) | CO2e (lbs/day) |
| Grubbing/Land Clearing  | 2.31          | 21.93        | 22.17         | 11.03                | 1.03                   | 10.00                        | 3.02                  | 0.94                    | 2.08                          | 0.05          | 5,027.79      | 0.69          | 0.22          | 5,110.89       |
| Grading/Excavation  | 2.77          | 23.15        | 29.54         | 11.26                | 1.26                   | 10.00                        | 3.17                  | 1.09                    | 2.08                          | 0.07          | 6,447.31      | 1.65          | 0.16          | 6,536.44       |
| Drainage/Utilities/Sub-Grade                                  | 1.81          | 18.14        | 16.92         | 10.81                | 0.81                   | 10.00                        | 2.82                  | 0.74                    | 2.08                          | 0.04          | 3,578.11      | 0.52          | 0.06          | 3,607.88       |
| Paving  | 0.99          | 12.79        | 10.59         | 0.54                 | 0.54                   | 0.00                         | 0.47                  | 0.47                    | 0.00                          | 0.03          | 2,533.89      | 0.56          | 0.11          | 2,582.13       |
| Maximum (pounds/day)  | 2.77          | 23.15        | 29.54         | 11.26                | 1.26                   | 10.00                        | 3.17                  | 1.09                    | 2.08                          | 0.07          | 6,447.31      | 1.65          | 0.22          | 6,536.44       |
| Total (tons/construction project)                             | 0.08          | 0.77         | 0.85          | 0.37                 | 0.04                   | 0.33                         | 0.10                  | 0.03                    | 0.07                          | 0.00          | 187.33        | 0.04          | 0.01          | 189.85         |

Notes: Project Start Year -> 2022  
 Project Length (months) -> 4  
 Total Project Area (acres) -> 2  
 Maximum Area Disturbed/Day (acres) -> 1  
 Water Truck Used? -> No

| Phase                        | Total Material Imported/Exported Volume (yd <sup>3</sup> /day) |         | Daily VMT (miles/day) |                 |                |             |
|------------------------------|--|---------|-----------------------|-----------------|----------------|-------------|
|                              | Soil   | Asphalt | Soil Hauling          | Asphalt Hauling | Worker Commute | Water Truck |
| Grubbing/Land Clearing       | 200  | 0       | 300                   | 0               | 200            | 0           |
| Grading/Excavation           | 100  | 0       | 150                   | 0               | 1,120          | 0           |
| Drainage/Utilities/Sub-Grade | 20   | 0       | 30                    | 0               | 720            | 0           |
| Paving                       | 0  | 100     | 0                     | 150             | 320            | 0           |

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.  
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.


| Total Emission Estimates by Phase for -> SR-49 Improvements (Option A) |                  |                 |                  |                         |                           |                                 |                          |                            |                                  |                  |                  |                  |                  |                 |
|--|------------------|-----------------|------------------|-------------------------|---------------------------|---------------------------------|--------------------------|----------------------------|----------------------------------|------------------|------------------|------------------|------------------|-----------------|
| Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)      | ROG (tons/phase) | CO (tons/phase) | NOx (tons/phase) | Total PM10 (tons/phase) | Exhaust PM10 (tons/phase) | Fugitive Dust PM10 (tons/phase) | Total PM2.5 (tons/phase) | Exhaust PM2.5 (tons/phase) | Fugitive Dust PM2.5 (tons/phase) | SOx (tons/phase) | CO2 (tons/phase) | CH4 (tons/phase) | N2O (tons/phase) | CO2e (MT/phase) |
| Grubbing/Land Clearing   | 0.01             | 0.12            | 0.12             | 0.06                    | 0.01                      | 0.06                            | 0.02                     | 0.01                       | 0.01                             | 0.00             | 27.65            | 0.00             | 0.00             | 25.50           |
| Grading/Excavation   | 0.05             | 0.38            | 0.49             | 0.19                    | 0.02                      | 0.17                            | 0.05                     | 0.02                       | 0.03                             | 0.00             | 106.38           | 0.03             | 0.00             | 97.84           |
| Drainage/Utilities/Sub-Grade   | 0.02             | 0.20            | 0.19             | 0.12                    | 0.01                      | 0.11                            | 0.03                     | 0.01                       | 0.02                             | 0.00             | 39.36            | 0.01             | 0.00             | 36.00           |
| Paving   | 0.01             | 0.07            | 0.06             | 0.00                    | 0.00                      | 0.00                            | 0.00                     | 0.00                       | 0.00                             | 0.00             | 13.94            | 0.00             | 0.00             | 12.88           |
| Maximum (tons/phase)   | 0.05             | 0.38            | 0.49             | 0.19                    | 0.02                      | 0.17                            | 0.05                     | 0.02                       | 0.03                             | 0.00             | 106.38           | 0.03             | 0.00             | 97.84           |
| Total (tons/construction project)                                      | 0.08             | 0.77            | 0.85             | 0.37                    | 0.04                      | 0.33                            | 0.10                     | 0.03                       | 0.07                             | 0.00             | 187.33           | 0.04             | 0.01             | 172.23          |

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.  
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.  
 The CO2e emissions are reported as metric tons per phase.



**Road Construction Emissions Model  
Data Entry Worksheet**

Version 9.0.0



Note: Required data input sections have a yellow background.  
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.  
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types.  
Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

**Input Type**

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

|  |                               |  |
|--|-------------------------------|--|
| Project Name   | SR-49 Improvements (Option A) |  |
| Construction Start Year  | 2022                          | Enter a Year between 2014 and 2040 (inclusive)   |
| Project Type   | 3                             | 1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway<br>2) Road Widening : Project to add a new lane to an existing roadway<br>3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane<br>4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction |
| Project Construction Time  | 3.50                          | months   |
| Working Days per Month   | 22.00                         | days (assume 22 if unknown)  |
| Predominant Soil/Site Type: Enter 1, 2, or 3<br><span style="font-size: x-small; color: red;">(for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)</span> | 2                             | 1) Sand Gravel : Use for quaternary deposits (Delta/West County)<br>2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta)<br>3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)   |
| Project Length   | 0.50                          | miles  |
| Total Project Area   | 2.25                          | acres  |
| Maximum Area Disturbed/Day   | 0.50                          | acres  |
| Water Trucks Used?   | 2                             | 1. Yes<br>2. No  |

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

[http://www.conservation.ca.gov/cgs/information/geologic\\_mapping/Pages/googlemaps.aspx#regionalseries](http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries)

**Material Hauling Quantity Input**

| Material Type | Phase                        | Haul Truck Capacity (yd <sup>3</sup> ) (assume 20 if unknown) | Import Volume (yd <sup>3</sup> /day) | Export Volume (yd <sup>3</sup> /day) |
|---------------|------------------------------|---|--------------------------------------|--------------------------------------|
| Soil          | Grubbing/Land Clearing       | 20.00   | 100.00                               | 100.00                               |
|               | Grading/Excavation           | 20.00   | 50.00                                | 50.00                                |
|               | Drainage/Utilities/Sub-Grade | 20.00   | 10.00                                | 10.00                                |
|               | Paving                       | 20.00   | 0.00                                 | 0.00                                 |
| Asphalt       | Grubbing/Land Clearing       | 20.00   | 0.00                                 | 0.00                                 |
|               | Grading/Excavation           | 20.00   | 0.00                                 | 0.00                                 |
|               | Drainage/Utilities/Sub-Grade | 20.00   | 0.00                                 | 0.00                                 |
|               | Paving                       | 20.00   | 100.00                               | 0.00                                 |

**Mitigation Options**

|   |               |  |
|---|---------------|--|
| On-road Fleet Emissions Mitigation      | No Mitigation |  |
| Off-road Equipment Emissions Mitigation | No Mitigation | Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer<br>Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAGMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure ( <a href="http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation">http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation</a> ).<br>Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard |

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

| Construction Periods         | User Override of Construction Months | Program Calculated Months | User Override of Phase Starting Date | Program Default Phase Starting Date |
|------------------------------|--------------------------------------|---------------------------|--------------------------------------|-------------------------------------|
| Grubbing/Land Clearing       | 0.50                                 | 0.35                      |                                      | 1/1/2022                            |
| Grading/Excavation           | 1.50                                 | 1.58                      |                                      | 1/17/2022                           |
| Drainage/Utilities/Sub-Grade | 1.00                                 | 1.05                      |                                      | 3/4/2022                            |
| Paving                       | 0.50                                 | 0.53                      |                                      | 4/4/2022                            |
| <b>Totals (Months)</b>       |                                      | 4                         |                                      |                                     |

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

| Soil Hauling Emissions                                | User Override of Miles/Round Trip | Program Estimate of Miles/Round Trip | User Override of Truck Round Trips/Day | Default Values Round Trips/Day | Calculated Daily VMT |            |            |            |            |             |
|---|-----------------------------------|--------------------------------------|--|--------------------------------|----------------------|------------|------------|------------|------------|-------------|
| <b>User Input</b>                                     |                                   |                                      |  |                                |                      |            |            |            |            |             |
| Miles/round trip: Grubbing/Land Clearing              |                                   | 30.00                                |  | 10                             | 300.00               |            |            |            |            |             |
| Miles/round trip: Grading/Excavation                  |                                   | 30.00                                |  | 5                              | 150.00               |            |            |            |            |             |
| Miles/round trip: Drainage/Utilities/Sub-Grade        |                                   | 30.00                                |  | 1                              | 30.00                |            |            |            |            |             |
| Miles/round trip: Paving                              |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| <b>Emission Rates</b>                                 | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Grubbing/Land Clearing (grams/mile)                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grading/Excavation (grams/mile)                       | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Draining/Utilities/Sub-Grade (grams/mile)             | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Paving (grams/mile)                                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grubbing/Land Clearing (grams/trip)                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Grading/Excavation (grams/trip)                       | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Draining/Utilities/Sub-Grade (grams/trip)             | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Paving (grams/trip)                                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| <b>Hauling Emissions</b>                              | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Pounds per day - Grubbing/Land Clearing               | 0.12                              | 0.44                                 | 3.20                                   | 0.09                           | 0.05                 | 0.01       | 1,186.37   | 0.01       | 0.19       | 1,242.08    |
| Tons per const. Period - Grubbing/Land Clearing       | 0.00                              | 0.00                                 | 0.02                                   | 0.00                           | 0.00                 | 0.00       | 6.53       | 0.00       | 0.00       | 6.83        |
| Pounds per day - Grading/Excavation                   | 0.06                              | 0.22                                 | 1.60                                   | 0.05                           | 0.03                 | 0.01       | 593.19     | 0.00       | 0.09       | 621.04      |
| Tons per const. Period - Grading/Excavation           | 0.00                              | 0.00                                 | 0.03                                   | 0.00                           | 0.00                 | 0.00       | 9.79       | 0.00       | 0.00       | 10.25       |
| Pounds per day - Drainage/Utilities/Sub-Grade         | 0.01                              | 0.04                                 | 0.32                                   | 0.01                           | 0.01                 | 0.00       | 118.64     | 0.00       | 0.02       | 124.21      |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 1.31       | 0.00       | 0.00       | 1.37        |
| Pounds per day - Paving                               | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Paving                       | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Total tons per construction project                   | 0.00                              | 0.01                                 | 0.05                                   | 0.00                           | 0.00                 | 0.00       | 17.62      | 0.00       | 0.00       | 18.44       |

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

| Asphalt Hauling Emissions                             | User Override of Miles/Round Trip | Program Estimate of Miles/Round Trip | User Override of Truck Round Trips/Day | Default Values Round Trips/Day | Calculated Daily VMT |            |            |            |            |             |
|---|-----------------------------------|--------------------------------------|--|--------------------------------|----------------------|------------|------------|------------|------------|-------------|
| <b>User Input</b>                                     |                                   |                                      |  |                                |                      |            |            |            |            |             |
| Miles/round trip: Grubbing/Land Clearing              |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| Miles/round trip: Grading/Excavation                  |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| Miles/round trip: Drainage/Utilities/Sub-Grade        |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| Miles/round trip: Paving                              |                                   | 30.00                                |  | 5                              | 150.00               |            |            |            |            |             |
| <b>Emission Rates</b>                                 | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Grubbing/Land Clearing (grams/mile)                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grading/Excavation (grams/mile)                       | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Draining/Utilities/Sub-Grade (grams/mile)             | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Paving (grams/mile)                                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grubbing/Land Clearing (grams/trip)                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Grading/Excavation (grams/trip)                       | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Draining/Utilities/Sub-Grade (grams/trip)             | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Paving (grams/trip)                                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| <b>Emissions</b>                                      | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Pounds per day - Grubbing/Land Clearing               | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Grubbing/Land Clearing       | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Pounds per day - Grading/Excavation                   | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Grading/Excavation           | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Pounds per day - Drainage/Utilities/Sub-Grade         | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Pounds per day - Paving                               | 0.06                              | 0.22                                 | 1.60                                   | 0.05                           | 0.03                 | 0.01       | 593.19     | 0.00       | 0.09       | 621.04      |
| Tons per const. Period - Paving                       | 0.00                              | 0.00                                 | 0.01                                   | 0.00                           | 0.00                 | 0.00       | 3.26       | 0.00       | 0.00       | 3.42        |
| Total tons per construction project                   | 0.00                              | 0.00                                 | 0.01                                   | 0.00                           | 0.00                 | 0.00       | 3.26       | 0.00       | 0.00       | 3.42        |

Note: Worker commute default values can be overridden in cells D121 through D126.

| <b>Worker Commute Emissions</b>                       |  | User Override of Worker Commute Default Values | Default Values |             |            |       |      |        |      |      |        |  |
|---|--|--|----------------|-------------|------------|-------|------|--------|------|------|--------|--|
| <b>User Input</b>                                     |  |  |                | Calculated  | Calculated |       |      |        |      |      |        |  |
|   |  |  |                | Daily Trips | Daily VMT  |       |      |        |      |      |        |  |
| Miles/ one-way trip                                   |  |  | 20             |             |            |       |      |        |      |      |        |  |
| One-way trips/day                                     |  |  | 2              |             |            |       |      |        |      |      |        |  |
| No. of employees: Grubbing/Land Clearing              |  |  | 5              | 10          | 200.00     |       |      |        |      |      |        |  |
| No. of employees: Grading/Excavation                  |  |  | 28             | 56          | 1,120.00   |       |      |        |      |      |        |  |
| No. of employees: Drainage/Utilities/Sub-Grade        |  |  | 18             | 36          | 720.00     |       |      |        |      |      |        |  |
| No. of employees: Paving                              |  |  | 8              | 16          | 320.00     |       |      |        |      |      |        |  |
| <b>Emission Rates</b>                                 |  | ROG  | CO             | NOx         | PM10       | PM2.5 | SOx  | CO2    | CH4  | N2O  | CO2e   |  |
| Grubbing/Land Clearing (grams/mile)                   |  | 0.02   | 1.00           | 0.08        | 0.05       | 0.02  | 0.00 | 328.72 | 0.00 | 0.01 | 330.96 |  |
| Grading/Excavation (grams/mile)                       |  | 0.02   | 1.00           | 0.08        | 0.05       | 0.02  | 0.00 | 328.72 | 0.00 | 0.01 | 330.96 |  |
| Draining/Utilities/Sub-Grade (grams/mile)             |  | 0.02   | 1.00           | 0.08        | 0.05       | 0.02  | 0.00 | 328.72 | 0.00 | 0.01 | 330.96 |  |
| Paving (grams/mile)                                   |  | 0.02   | 1.00           | 0.08        | 0.05       | 0.02  | 0.00 | 328.72 | 0.00 | 0.01 | 330.96 |  |
| Grubbing/Land Clearing (grams/trip)                   |  | 1.11   | 2.85           | 0.32        | 0.00       | 0.00  | 0.00 | 70.54  | 0.08 | 0.03 | 82.43  |  |
| Grading/Excavation (grams/trip)                       |  | 1.11   | 2.85           | 0.32        | 0.00       | 0.00  | 0.00 | 70.54  | 0.08 | 0.03 | 82.43  |  |
| Draining/Utilities/Sub-Grade (grams/trip)             |  | 1.11   | 2.85           | 0.32        | 0.00       | 0.00  | 0.00 | 70.54  | 0.08 | 0.03 | 82.43  |  |
| Paving (grams/trip)                                   |  | 1.11   | 2.85           | 0.32        | 0.00       | 0.00  | 0.00 | 70.54  | 0.08 | 0.03 | 82.43  |  |
| <b>Emissions</b>                                      |  | ROG  | CO             | NOx         | PM10       | PM2.5 | SOx  | CO2    | CH4  | N2O  | CO2e   |  |
| Pounds per day - Grubbing/Land Clearing               |  | 0.03   | 0.50           | 0.04        | 0.02       | 0.01  | 0.00 | 146.50 | 0.00 | 0.00 | 147.74 |  |
| Tons per const. Period - Grubbing/Land Clearing       |  | 0.00   | 0.00           | 0.00        | 0.00       | 0.00  | 0.00 | 0.81   | 0.00 | 0.00 | 0.81   |  |
| Pounds per day - Grading/Excavation                   |  | 0.18   | 2.82           | 0.25        | 0.11       | 0.05  | 0.01 | 820.38 | 0.02 | 0.02 | 827.37 |  |
| Tons per const. Period - Grading/Excavation           |  | 0.00   | 0.05           | 0.00        | 0.00       | 0.00  | 0.00 | 13.54  | 0.00 | 0.00 | 13.65  |  |
| Pounds per day - Drainage/Utilities/Sub-Grade         |  | 0.12   | 1.81           | 0.16        | 0.07       | 0.03  | 0.01 | 527.39 | 0.01 | 0.01 | 531.88 |  |
| Tons per const. Period - Drainage/Utilities/Sub-Grade |  | 0.00   | 0.02           | 0.00        | 0.00       | 0.00  | 0.00 | 5.80   | 0.00 | 0.00 | 5.85   |  |
| Pounds per day - Paving                               |  | 0.05   | 0.81           | 0.07        | 0.03       | 0.01  | 0.00 | 234.39 | 0.01 | 0.01 | 236.39 |  |
| Tons per const. Period - Paving                       |  | 0.00   | 0.00           | 0.00        | 0.00       | 0.00  | 0.00 | 1.29   | 0.00 | 0.00 | 1.30   |  |
| Total tons per construction project                   |  | 0.00   | 0.07           | 0.01        | 0.00       | 0.00  | 0.00 | 21.43  | 0.00 | 0.00 | 21.62  |  |

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

| <b>Water Truck Emissions</b>                          |  | User Override of Default # Water Trucks | Program Estimate of Number of Water Trucks | User Override of Truck Round Trips/Vehicle/Day | Default Values Round Trips/Vehicle/Day | Calculated Trips/day | User Override of Miles/Round Trip | Default Values Miles/Round Trip | Calculated Daily VMT |      |          |
|---|--|---|--|--|--|----------------------|-----------------------------------|---------------------------------|----------------------|------|----------|
| Grubbing/Land Clearing - Exhaust                      |  |   | 0  |  | 5                                      | 0                    |                                   | 8.00                            | 0.00                 |      |          |
| Grading/Excavation - Exhaust                          |  |   | 0  |  | 5                                      | 0                    |                                   | 8.00                            | 0.00                 |      |          |
| Drainage/Utilities/Subgrade                           |  |   | 0  |  | 5                                      | 0                    |                                   | 8.00                            | 0.00                 |      |          |
| Paving  |  |   | 0  |  | 5                                      | 0                    |                                   | 8.00                            | 0.00                 |      |          |
| <b>Emission Rates</b>                                 |  | ROG                                     | CO   | NOx  | PM10                                   | PM2.5                | SOx                               | CO2                             | CH4                  | N2O  | CO2e     |
| Grubbing/Land Clearing (grams/mile)                   |  | 0.18                                    | 0.66                                       | 4.71   | 0.14                                   | 0.08                 | 0.02                              | 1,793.76                        | 0.01                 | 0.28 | 1,877.99 |
| Grading/Excavation (grams/mile)                       |  | 0.18                                    | 0.66                                       | 4.71   | 0.14                                   | 0.08                 | 0.02                              | 1,793.76                        | 0.01                 | 0.28 | 1,877.99 |
| Draining/Utilities/Sub-Grade (grams/mile)             |  | 0.18                                    | 0.66                                       | 4.71   | 0.14                                   | 0.08                 | 0.02                              | 1,793.76                        | 0.01                 | 0.28 | 1,877.99 |
| Paving (grams/mile)                                   |  | 0.18                                    | 0.66                                       | 4.71   | 0.14                                   | 0.08                 | 0.02                              | 1,793.76                        | 0.01                 | 0.28 | 1,877.99 |
| Grubbing/Land Clearing (grams/trip)                   |  | 0.00                                    | 0.00                                       | 3.99   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Grading/Excavation (grams/trip)                       |  | 0.00                                    | 0.00                                       | 3.99   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Draining/Utilities/Sub-Grade (grams/trip)             |  | 0.00                                    | 0.00                                       | 3.99   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Paving (grams/trip)                                   |  | 0.00                                    | 0.00                                       | 3.99   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| <b>Emissions</b>                                      |  | ROG                                     | CO   | NOx  | PM10                                   | PM2.5                | SOx                               | CO2                             | CH4                  | N2O  | CO2e     |
| Pounds per day - Grubbing/Land Clearing               |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Tons per const. Period - Grubbing/Land Clearing       |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Pounds per day - Grading/Excavation                   |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Tons per const. Period - Grading/Excavation           |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Pounds per day - Drainage/Utilities/Sub-Grade         |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Tons per const. Period - Drainage/Utilities/Sub-Grade |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Pounds per day - Paving                               |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Tons per const. Period - Paving                       |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |
| Total tons per construction project                   |  | 0.00                                    | 0.00                                       | 0.00   | 0.00                                   | 0.00                 | 0.00                              | 0.00                            | 0.00                 | 0.00 | 0.00     |

Note: Fugitive dust default values can be overridden in cells D183 through D185.

| <b>Fugitive Dust</b>                        |  | User Override of Max Acreage Disturbed/Day | Default Maximum Acreage/Day | PM10 pounds/day | PM10 tons/per period | PM2.5 pounds/day | PM2.5 tons/per period |
|---|--|--|-----------------------------|-----------------|----------------------|------------------|-----------------------|
| Fugitive Dust - Grubbing/Land Clearing      |  |  | 0.50                        | 10.00           | 0.06                 | 2.08             | 0.01                  |
| Fugitive Dust - Grading/Excavation          |  |  | 0.50                        | 10.00           | 0.17                 | 2.08             | 0.03                  |
| Fugitive Dust - Drainage/Utilities/Subgrade |  |  | 0.50                        | 10.00           | 0.11                 | 2.08             | 0.02                  |

| Off-Road Equipment Emissions   |                        |  |                                  |                    |                                 |            |            |            |            |            |            |            |  |
|--|------------------------|--|----------------------------------|--------------------|---------------------------------|------------|------------|------------|------------|------------|------------|------------|--|
| Grubbing/Land Clearing   |                        | Default<br>Number of Vehicles  | Override of<br>Mitigation Option | Default            | ROG                             | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |  |
| Override of Default Number of Vehicles   | Program-estimate       | Default Equipment Tier (applicable only<br>when "Tier 4 Mitigation" Option Selected) |                                  | Equipment Tier     | Type                            | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |  |
| 2.00   |                        |  |                                  | Model Default Tier | Aerial Lifts                    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Air Compressors                 | 0.55       | 4.84       | 3.76       | 0.22       | 0.22       | 0.01       | 750.53     |  |
|  |                        |  |                                  | Model Default Tier | Bore/Drill Rigs                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Cement and Mortar Mixers        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 2.00   |                        |  |                                  | Model Default Tier | Concrete/Industrial Saws        | 0.72       | 7.33       | 5.60       | 0.30       | 0.30       | 0.01       | 1,185.33   |  |
|  |                        |  |                                  | Model Default Tier | Cranes                          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  | 1                      |  |                                  | Model Default Tier | Crawler Tractors                | 0.49       | 2.31       | 6.01       | 0.23       | 0.21       | 0.01       | 759.03     |  |
|  |                        |  |                                  | Model Default Tier | Crushing/Proc. Equipment        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  | 2                      |  |                                  | Model Default Tier | Excavators                      | 0.40       | 6.51       | 3.55       | 0.17       | 0.16       | 0.01       | 1,000.03   |  |
|  |                        |  |                                  | Model Default Tier | Forklifts                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Generator Sets                  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Graders                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Off-Highway Tractors            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Off-Highway Trucks              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Other Construction Equipment    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Other General Industrial Equipm | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Other Material Handling Equipm  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Pavers                          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Paving Equipment                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Plate Compactors                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Pressure Washers                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Pumps                           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Rollers                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Rough Terrain Forklifts         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Rubber Tired Dozers             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Rubber Tired Loaders            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Scrapers                        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00   | 1                      |  |                                  | Model Default Tier | Signal Boards                   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Skid Steer Loaders              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Surfacing Equipment             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Sweepers/Scrubbers              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Tractors/Loaders/Backhoes       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Trenchers                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |  |                                  | Model Default Tier | Welders                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| User-Defined Off-road Equipment  |                        |  |                                  |                    | ROG                             | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |  |
| If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab |                        |  |                                  |                    | pounds/day                      | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |  |
| Number of Vehicles   | Equipment Tier         | Type   | ROG                              | CO                 | NOx                             | PM10       | PM2.5      | SOx        | CO2        | CH4        |            |            |  |
| 0.00   | N/A                    |  | 0                                | 0.00               | 0.00                            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00   | N/A                    |  | 0                                | 0.00               | 0.00                            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00   | N/A                    |  | 0                                | 0.00               | 0.00                            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00   | N/A                    |  | 0                                | 0.00               | 0.00                            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00   | N/A                    |  | 0                                | 0.00               | 0.00                            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00   | N/A                    |  | 0                                | 0.00               | 0.00                            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00   | N/A                    |  | 0                                | 0.00               | 0.00                            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00   | N/A                    |  | 0                                | 0.00               | 0.00                            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
|  | Grubbing/Land Clearing | pounds per day   | 2.16                             | 20.99              | 18.92                           | 0.92       | 0.88       | 0.04       | 3,694.92   | 0.68       |            |            |  |
|  | Grubbing/Land Clearing | tons per phase   | 0.01                             | 0.12               | 0.10                            | 0.01       | 0.00       | 0.00       | 20.32      | 0.00       |            |            |  |

| Grading/Excavation                     | Default            |   | Mitigation Option  |                                 | ROG            | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |            |      |
|--|--------------------|---|--------------------|---------------------------------|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------|
|  | Number of Vehicles | Override of   | Default            | Default                         |                |            |            |            |            |            |            |            |            |      |
| Override of Default Number of Vehicles | Program-estimate   | Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected) |                    | Equipment Tier                  | Type           | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |            |      |
|  |                    |   | Model Default Tier | Aerial Lifts                    |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Air Compressors                 |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    |   | Model Default Tier | Bore/Drill Rigs                 |                | 0.22       | 2.04       | 2.27       | 0.07       | 0.07       | 0.01       | 913.56     |            |      |
|  |                    |   | Model Default Tier | Cement and Mortar Mixers        |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Concrete/Industrial Saws        |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  | 1                  |   | Model Default Tier | Cranes                          |                | 0.37       | 1.89       | 4.18       | 0.17       | 0.16       | 0.01       | 558.83     |            |      |
| 1.00                                   |                    | 2   | Model Default Tier | Crawler Tractors                |                | 0.49       | 2.31       | 6.01       | 0.23       | 0.21       | 0.01       | 759.03     |            |      |
|  |                    |   | Model Default Tier | Crushing/Proc. Equipment        |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 2.00                                   |                    | 4   | Model Default Tier | Excavators                      |                | 0.40       | 6.51       | 3.55       | 0.17       | 0.16       | 0.01       | 1,000.03   |            |      |
|  |                    |   | Model Default Tier | Forklifts                       |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Generator Sets                  |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    | 2   | Model Default Tier | Graders                         |                | 0.41       | 1.72       | 5.26       | 0.17       | 0.15       | 0.01       | 641.28     |            |      |
|  |                    |   | Model Default Tier | Off-Highway Tractors            |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Off-Highway Trucks              |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Other Construction Equipment    |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Other General Industrial Equipm |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Other Material Handling Equipm  |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Pavers                          |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Paving Equipment                |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Plate Compactors                |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Pressure Washers                |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Pumps                           |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    | 3   | Model Default Tier | Rollers                         |                | 0.17       | 1.86       | 1.73       | 0.10       | 0.09       | 0.00       | 254.10     |            |      |
|  |                    |   | Model Default Tier | Rough Terrain Forklifts         |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Rubber Tired Dozers             |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    | 3   | Model Default Tier | Rubber Tired Loaders            |                | 0.29       | 1.53       | 3.02       | 0.10       | 0.09       | 0.01       | 605.66     |            |      |
| 0.00                                   |                    | 4   | Model Default Tier | Scrapers                        |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 0.00                                   |                    | 1   | Model Default Tier | Signal Boards                   |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Skid Steer Loaders              |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Surfacing Equipment             |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Sweepers/Scrubbers              |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    | 2   | Model Default Tier | Tractors/Loaders/Backhoes       |                | 0.16       | 2.24       | 1.68       | 0.09       | 0.08       | 0.00       | 301.24     |            |      |
|  |                    |   | Model Default Tier | Trenchers                       |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Welders                         |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| <b>User-Defined Off-road Equipment</b> |                    |   |                    |                                 |                | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |      |
| Number of Vehicles                     |                    |   |                    |                                 | Equipment Tier | Type       | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| Grading/Excavation                     |                    |   |                    |                                 | pounds per day |            | 2.53       | 20.11      | 27.70      | 1.10       | 1.01       | 0.05       | 5,033.74   | 1.63 |
| Grading/Excavation                     |                    |   |                    |                                 | tons per phase |            | 0.04       | 0.33       | 0.46       | 0.02       | 0.02       | 0.00       | 83.06      | 0.03 |

| Drainage/Utilities/Subgrade            | Default  |                              | Mitigation Option   |                                 | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |
|--|--|------------------------------|---|---------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
|  | Number of Vehicles   |                              | Override of   | Default                         |            |            |            |            |            |            |            |            |
|  | Override of Default Number of Vehicles   | Program-estimate             | Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected) | Equipment Tier                  |            |            |            |            |            |            |            |            |
|  |  |                              | Model Default Tier  | Aerial Lifts                    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  | 1                            | Model Default Tier  | Air Compressors                 | 0.27       | 2.42       | 1.88       | 0.11       | 0.11       | 0.00       | 375.26     | 0.02       |
|  |  |                              | Model Default Tier  | Bore/Drill Rigs                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Cement and Mortar Mixers        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Concrete/Industrial Saws        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Cranes                          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Crawler Tractors                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Crushing/Proc. Equipment        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Excavators                      | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Forklifts                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  | 1                            | Model Default Tier  | Generator Sets                  | 0.33       | 3.68       | 2.93       | 0.15       | 0.15       | 0.01       | 623.04     | 0.03       |
| 1.00                                   |  | 2                            | Model Default Tier  | Graders                         | 0.41       | 1.72       | 5.26       | 0.17       | 0.15       | 0.01       | 641.28     | 0.21       |
|  |  |                              | Model Default Tier  | Off-Highway Tractors            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Off-Highway Trucks              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Other Construction Equipment    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Other General Industrial Equipm | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Other Material Handling Equipm  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Pavers                          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Paving Equipment                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  | 1                            | Model Default Tier  | Plate Compactors                | 0.04       | 0.21       | 0.25       | 0.01       | 0.01       | 0.00       | 34.48      | 0.00       |
|  |  |                              | Model Default Tier  | Pressure Washers                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  | 1                            | Model Default Tier  | Pumps                           | 0.35       | 3.73       | 2.97       | 0.16       | 0.16       | 0.01       | 623.04     | 0.03       |
|  |  |                              | Model Default Tier  | Rollers                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  | 1                            | Model Default Tier  | Rough Terrain Forklifts         | 0.11       | 2.29       | 1.48       | 0.05       | 0.05       | 0.00       | 333.75     | 0.11       |
|  |  |                              | Model Default Tier  | Rubber Tired Dozers             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Rubber Tired Loaders            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00                                   |  | 4                            | Model Default Tier  | Scrapers                        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00                                   |  | 1                            | Model Default Tier  | Signal Boards                   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Skid Steer Loaders              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Surfacing Equipment             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Sweepers/Scrubbers              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 1.00                                   |  | 2                            | Model Default Tier  | Tractors/Loaders/Backhoes       | 0.16       | 2.24       | 1.68       | 0.09       | 0.08       | 0.00       | 301.24     | 0.10       |
|  |  |                              | Model Default Tier  | Trenchers                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  |                              | Model Default Tier  | Welders                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| <b>User-Defined Off-road Equipment</b> | If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab |                              |   |                                 | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |
|  | Number of Vehicles   |                              | Equipment Tier  | Type                            | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |
|  | 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |  | Drainage/Utilities/Sub-Grade |   | pounds per day                  | 1.69       | 16.28      | 16.44      | 0.73       | 0.71       | 0.03       | 2,932.09   | 0.50       |
|  |  | Drainage/Utilities/Sub-Grade |   | tons per phase                  | 0.02       | 0.18       | 0.18       | 0.01       | 0.01       | 0.00       | 32.25      | 0.01       |

| Paving   | Default            |                  | Mitigation Option   |                                 | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |
|--|--------------------|------------------|---|---------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
|  | Number of Vehicles | Override of      | Default   | Default                         |            |            |            |            |            |            |            |            |
| Override of Default Number of Vehicles                                 |                    | Program-estimate | Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected) |                                 | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |
|  |                    |                  | Equipment Tier  | Type                            |            |            |            |            |            |            |            |            |
|  |                    |                  | Model Default Tier  | Aerial Lifts                    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Air Compressors                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Bore/Drill Rigs                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Cement and Mortar Mixers        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Concrete/Industrial Saws        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Cranes                          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Crawler Tractors                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Crushing/Proc. Equipment        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Excavators                      | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Forklifts                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Generator Sets                  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Graders                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Off-Highway Tractors            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Off-Highway Trucks              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Other Construction Equipment    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Other General Industrial Equipm | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Other Material Handling Equipm  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    | 1                | Model Default Tier  | Pavers                          | 0.21       | 2.88       | 2.10       | 0.10       | 0.09       | 0.00       | 455.26     | 0.15       |
|  |                    | 1                | Model Default Tier  | Paving Equipment                | 0.18       | 2.55       | 1.74       | 0.08       | 0.08       | 0.00       | 394.47     | 0.13       |
|  |                    |                  | Model Default Tier  | Plate Compactors                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Pressure Washers                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Pumps                           | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    | 1                | Model Default Tier  | Rollers                         | 0.17       | 1.86       | 1.73       | 0.10       | 0.09       | 0.00       | 254.10     | 0.08       |
|  |                    |                  | Model Default Tier  | Rough Terrain Forklifts         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Rubber Tired Dozers             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Rubber Tired Loaders            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Scrapers                        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 0.00               | 1                | Model Default Tier  | Signal Boards                   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Skid Steer Loaders              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Surfacing Equipment             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Sweepers/Scrubbers              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    | 2                | Model Default Tier  | Tractors/Loaders/Backhoes       | 0.33       | 4.48       | 3.35       | 0.18       | 0.17       | 0.01       | 602.48     | 0.19       |
|  |                    |                  | Model Default Tier  | Trenchers                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                    |                  | Model Default Tier  | Welders                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| <b>User-Defined Off-road Equipment</b>                                 |                    |                  |   |                                 | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |
| Number of Vehicles   |                    |                  |   |                                 | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |
| Equipment Tier   |                    |                  |   |                                 |            |            |            |            |            |            |            |            |
| Type   |                    |                  |   |                                 |            |            |            |            |            |            |            |            |
| 0.00   |                    |                  | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                    |                  | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                    |                  | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                    |                  | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                    |                  | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                    |                  | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | Paving             |                  |   | pounds per day                  | 0.88       | 11.77      | 8.91       | 0.46       | 0.43       | 0.02       | 1,706.31   | 0.55       |
|  | Paving             |                  |   | tons per phase                  | 0.00       | 0.06       | 0.05       | 0.00       | 0.00       | 0.00       | 9.38       | 0.00       |
| <b>Total Emissions all Phases (tons per construction period) =&gt;</b> |                    |                  |   |                                 | 0.08       | 0.69       | 0.79       | 0.03       | 0.03       | 0.00       | 145.02     | 0.04       |





| N2O        | CO2e       |
|------------|------------|
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 923.43     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 564.85     |
| 0.01       | 767.22     |
| 0.00       | 0.00       |
| 0.01       | 1,010.81   |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 648.19     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 256.84     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 612.20     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 304.48     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| N2O        | CO2e       |
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.05       | 5,088.03   |
| 0.00       | 83.95      |

| N2O        | CO2e       |
|------------|------------|
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 376.72     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 625.17     |
| 0.01       | 648.19     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 34.65      |
| 0.00       | 0.00       |
| 0.00       | 625.23     |
| 0.00       | 0.00       |
| 0.00       | 337.35     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 304.48     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| N2O        | CO2e       |
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.02       | 2,951.79   |
| 0.00       | 32.47      |

| N2O        | CO2e       |
|------------|------------|
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 460.17     |
| 0.00       | 398.73     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 256.84     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 608.96     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.02       | 1,724.69   |
| 0.00       | 9.49       |
| 0.00       | 146.37     |

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

| Equipment                          | User Override of<br>Horsepower | Default Values<br>Horsepower | User Override of<br>Hours/day | Default Values<br>Hours/day |
|------------------------------------|--------------------------------|------------------------------|-------------------------------|-----------------------------|
| Aerial Lifts                       |                                | 63                           |                               | 8                           |
| Air Compressors                    |                                | 78                           |                               | 8                           |
| Bore/Drill Rigs                    |                                | 221                          |                               | 8                           |
| Cement and Mortar Mixers           |                                | 9                            |                               | 8                           |
| Concrete/Industrial Saws           |                                | 81                           |                               | 8                           |
| Cranes                             |                                | 231                          |                               | 8                           |
| Crawler Tractors                   |                                | 212                          |                               | 8                           |
| Crushing/Proc. Equipment           |                                | 85                           |                               | 8                           |
| Excavators                         |                                | 158                          |                               | 8                           |
| Forklifts                          |                                | 89                           |                               | 8                           |
| Generator Sets                     |                                | 84                           |                               | 8                           |
| Graders                            |                                | 187                          |                               | 8                           |
| Off-Highway Tractors               |                                | 124                          |                               | 8                           |
| Off-Highway Trucks                 |                                | 402                          |                               | 8                           |
| Other Construction Equipment       |                                | 172                          |                               | 8                           |
| Other General Industrial Equipment |                                | 88                           |                               | 8                           |
| Other Material Handling Equipment  |                                | 168                          |                               | 8                           |
| Pavers                             |                                | 130                          |                               | 8                           |
| Paving Equipment                   |                                | 132                          |                               | 8                           |
| Plate Compactors                   |                                | 8                            |                               | 8                           |
| Pressure Washers                   |                                | 13                           |                               | 8                           |
| Pumps                              |                                | 84                           |                               | 8                           |
| Rollers                            |                                | 80                           |                               | 8                           |
| Rough Terrain Forklifts            |                                | 100                          |                               | 8                           |
| Rubber Tired Dozers                |                                | 247                          |                               | 8                           |
| Rubber Tired Loaders               |                                | 203                          |                               | 8                           |
| Scrapers                           |                                | 367                          |                               | 8                           |
| Signal Boards                      |                                | 6                            |                               | 8                           |
| Skid Steer Loaders                 |                                | 65                           |                               | 8                           |
| Surfacing Equipment                |                                | 263                          |                               | 8                           |
| Sweepers/Scrubbers                 |                                | 64                           |                               | 8                           |
| Tractors/Loaders/Backhoes          |                                | 97                           |                               | 8                           |
| Trenchers                          |                                | 78                           |                               | 8                           |
| Welders                            |                                | 46                           |                               | 8                           |

END OF DATA ENTRY SHEET







| Year  | ROG    | Weighted - Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted - Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx    |
|-------|--------|---------------------|--------------------|---------------------|-------------------|--------|---------------------|--------------------|---------------------|-------------------|--------|
| 2014  | 0.0704 | -                   | -                  | -                   | -                 | 2.5553 | -                   | -                  | -                   | -                 | 0.2855 |
| 2015  | 0.0597 | -                   | -                  | -                   | -                 | 2.2699 | -                   | -                  | -                   | -                 | 0.2490 |
| 2016  | 0.0491 | -                   | -                  | -                   | -                 | 1.9702 | -                   | -                  | -                   | -                 | 0.2095 |
| 2017  | 0.0405 | -                   | -                  | -                   | -                 | 1.7329 | -                   | -                  | -                   | -                 | 0.1791 |
| 2018  | 0.0335 | -                   | -                  | -                   | -                 | 1.5296 | -                   | -                  | -                   | -                 | 0.1530 |
| 2019  | 0.0279 | -                   | -                  | -                   | -                 | 1.3662 | -                   | -                  | -                   | -                 | 0.1307 |
| 2020  | 0.0236 | -                   | -                  | -                   | -                 | 1.2220 | -                   | -                  | -                   | -                 | 0.1123 |
| 2021  | 0.0204 | -                   | -                  | -                   | -                 | 1.1018 | -                   | -                  | -                   | -                 | 0.0968 |
| 2022  | 0.0178 | 0.0178              | 0.0178             | 0.0178              | 0.0178            | 1.0001 | 1.0001              | 1.0001             | 1.0001              | 1.0001            | 0.0838 |
| 2023  | 0.0154 | -                   | -                  | -                   | -                 | 0.9126 | -                   | -                  | -                   | -                 | 0.0726 |
| 2024  | 0.0134 | -                   | -                  | -                   | -                 | 0.8386 | -                   | -                  | -                   | -                 | 0.0632 |
| 2025  | 0.0117 | -                   | -                  | -                   | -                 | 0.7754 | -                   | -                  | -                   | -                 | 0.0554 |
| 2026  | 0.0103 | -                   | -                  | -                   | -                 | 0.7225 | -                   | -                  | -                   | -                 | 0.0491 |
| 2027  | 0.0091 | -                   | -                  | -                   | -                 | 0.6774 | -                   | -                  | -                   | -                 | 0.0437 |
| 2028  | 0.0081 | -                   | -                  | -                   | -                 | 0.6398 | -                   | -                  | -                   | -                 | 0.0393 |
| 2029  | 0.0072 | -                   | -                  | -                   | -                 | 0.6075 | -                   | -                  | -                   | -                 | 0.0355 |
| 2030  | 0.0065 | -                   | -                  | -                   | -                 | 0.5801 | -                   | -                  | -                   | -                 | 0.0324 |
| 2031  | 0.0059 | -                   | -                  | -                   | -                 | 0.5565 | -                   | -                  | -                   | -                 | 0.0297 |
| 2032  | 0.0053 | -                   | -                  | -                   | -                 | 0.5366 | -                   | -                  | -                   | -                 | 0.0275 |
| 2033  | 0.0048 | -                   | -                  | -                   | -                 | 0.5196 | -                   | -                  | -                   | -                 | 0.0257 |
| 2034  | 0.0044 | -                   | -                  | -                   | -                 | 0.5049 | -                   | -                  | -                   | -                 | 0.0242 |
| 2035  | 0.0041 | -                   | -                  | -                   | -                 | 0.4922 | -                   | -                  | -                   | -                 | 0.0229 |
| 2036  | 0.0037 | -                   | -                  | -                   | -                 | 0.4811 | -                   | -                  | -                   | -                 | 0.0219 |
| 2037  | 0.0035 | -                   | -                  | -                   | -                 | 0.4719 | -                   | -                  | -                   | -                 | 0.0211 |
| 2038  | 0.0033 | -                   | -                  | -                   | -                 | 0.4637 | -                   | -                  | -                   | -                 | 0.0203 |
| 2039  | 0.0030 | -                   | -                  | -                   | -                 | 0.4566 | -                   | -                  | -                   | -                 | 0.0197 |
| 2040  | 0.0029 | -                   | -                  | -                   | -                 | 0.4506 | -                   | -                  | -                   | -                 | 0.0191 |
| 2041  | 0.0027 |                     |                    |                     |                   | 0.4452 |                     |                    |                     |                   | 0.0187 |
| 2042  | 0.0026 |                     |                    |                     |                   | 0.4404 |                     |                    |                     |                   | 0.0183 |
| 2043  | 0.0025 |                     |                    |                     |                   | 0.4367 |                     |                    |                     |                   | 0.0180 |
| 2044  | 0.0024 |                     |                    |                     |                   | 0.4339 |                     |                    |                     |                   | 0.0178 |
| 2045  | 0.0023 |                     |                    |                     |                   | 0.4317 |                     |                    |                     |                   | 0.0177 |
| 2046  | 0.0023 |                     |                    |                     |                   | 0.4300 |                     |                    |                     |                   | 0.0176 |
| 2047  | 0.0023 |                     |                    |                     |                   | 0.4286 |                     |                    |                     |                   | 0.0175 |
| 2048  | 0.0023 |                     |                    |                     |                   | 0.4274 |                     |                    |                     |                   | 0.0174 |
| 2049  | 0.0022 |                     |                    |                     |                   | 0.4268 |                     |                    |                     |                   | 0.0174 |
| 2050  | 0.0022 |                     |                    |                     |                   | 0.4264 |                     |                    |                     |                   | 0.0174 |
| Total |        | 0.0178              | 0.0178             | 0.0178              | 0.0178            |        | 1.0001              | 1.0001             | 1.0001              | 1.0001            |        |



**Heavy-Heavy Duty Diesel Truck**

Water Truck Commute Emissions (EMFAC2017 - web 1.0.2, T7 Single Unit Construction Truck)

| Year | ROG    | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx     |
|------|--------|-------------------|--------------------|---------------------|-------------------|--------|-------------------|--------------------|---------------------|-------------------|---------|
| 2014 | 1.8521 | -                 | -                  | -                   | -                 | 4.0026 | -                 | -                  | -                   | -                 | 15.4709 |
| 2015 | 1.5946 | -                 | -                  | -                   | -                 | 3.4621 | -                 | -                  | -                   | -                 | 13.7491 |
| 2016 | 1.2921 | -                 | -                  | -                   | -                 | 2.8379 | -                 | -                  | -                   | -                 | 11.7429 |
| 2017 | 1.0636 | -                 | -                  | -                   | -                 | 2.3588 | -                 | -                  | -                   | -                 | 10.5229 |
| 2018 | 0.9069 | -                 | -                  | -                   | -                 | 2.0416 | -                 | -                  | -                   | -                 | 9.6970  |
| 2019 | 0.7863 | -                 | -                  | -                   | -                 | 1.7985 | -                 | -                  | -                   | -                 | 9.0623  |
| 2020 | 0.5270 | -                 | -                  | -                   | -                 | 1.2976 | -                 | -                  | -                   | -                 | 7.5546  |
| 2021 | 0.4260 | -                 | -                  | -                   | -                 | 1.1373 | -                 | -                  | -                   | -                 | 6.4922  |
| 2022 | 0.1785 | 0.1785            | 0.1785             | 0.1785              | 0.1785            | 0.6644 | 0.6644            | 0.6644             | 0.6644              | 0.6644            | 4.7102  |
| 2023 | 0.0441 | -                 | -                  | -                   | -                 | 0.4262 | -                 | -                  | -                   | -                 | 3.5373  |
| 2024 | 0.0423 | -                 | -                  | -                   | -                 | 0.4266 | -                 | -                  | -                   | -                 | 3.4943  |
| 2025 | 0.0406 | -                 | -                  | -                   | -                 | 0.4273 | -                 | -                  | -                   | -                 | 3.4600  |
| 2026 | 0.0391 | -                 | -                  | -                   | -                 | 0.4279 | -                 | -                  | -                   | -                 | 3.4290  |
| 2027 | 0.0378 | -                 | -                  | -                   | -                 | 0.4281 | -                 | -                  | -                   | -                 | 3.4003  |
| 2028 | 0.0367 | -                 | -                  | -                   | -                 | 0.4288 | -                 | -                  | -                   | -                 | 3.3809  |
| 2029 | 0.0359 | -                 | -                  | -                   | -                 | 0.4297 | -                 | -                  | -                   | -                 | 3.3699  |
| 2030 | 0.0351 | -                 | -                  | -                   | -                 | 0.4306 | -                 | -                  | -                   | -                 | 3.3633  |
| 2031 | 0.0345 | -                 | -                  | -                   | -                 | 0.4315 | -                 | -                  | -                   | -                 | 3.3580  |
| 2032 | 0.0339 | -                 | -                  | -                   | -                 | 0.4322 | -                 | -                  | -                   | -                 | 3.3517  |
| 2033 | 0.0334 | -                 | -                  | -                   | -                 | 0.4325 | -                 | -                  | -                   | -                 | 3.3446  |
| 2034 | 0.0330 | -                 | -                  | -                   | -                 | 0.4325 | -                 | -                  | -                   | -                 | 3.3345  |
| 2035 | 0.0326 | -                 | -                  | -                   | -                 | 0.4321 | -                 | -                  | -                   | -                 | 3.3228  |
| 2036 | 0.0323 | -                 | -                  | -                   | -                 | 0.4320 | -                 | -                  | -                   | -                 | 3.3141  |
| 2037 | 0.0321 | -                 | -                  | -                   | -                 | 0.4317 | -                 | -                  | -                   | -                 | 3.3050  |
| 2038 | 0.0319 | -                 | -                  | -                   | -                 | 0.4314 | -                 | -                  | -                   | -                 | 3.2967  |
| 2039 | 0.0317 | -                 | -                  | -                   | -                 | 0.4312 | -                 | -                  | -                   | -                 | 3.2899  |
| 2040 | 0.0315 | -                 | -                  | -                   | -                 | 0.4308 | -                 | -                  | -                   | -                 | 3.2821  |
| 2041 | 0.0314 | -                 | -                  | -                   | -                 | 0.4305 | -                 | -                  | -                   | -                 | 3.2754  |
| 2042 | 0.0313 | -                 | -                  | -                   | -                 | 0.4302 | -                 | -                  | -                   | -                 | 3.2703  |
| 2043 | 0.0312 | -                 | -                  | -                   | -                 | 0.4300 | -                 | -                  | -                   | -                 | 3.2653  |
| 2044 | 0.0311 | -                 | -                  | -                   | -                 | 0.4298 | -                 | -                  | -                   | -                 | 3.2610  |
| 2045 | 0.0310 | -                 | -                  | -                   | -                 | 0.4296 | -                 | -                  | -                   | -                 | 3.2578  |
| 2046 | 0.0309 | -                 | -                  | -                   | -                 | 0.4295 | -                 | -                  | -                   | -                 | 3.2551  |
| 2047 | 0.0309 | -                 | -                  | -                   | -                 | 0.4294 | -                 | -                  | -                   | -                 | 3.2533  |
| 2048 | 0.0309 | -                 | -                  | -                   | -                 | 0.4293 | -                 | -                  | -                   | -                 | 3.2519  |
| 2049 | 0.0309 | -                 | -                  | -                   | -                 | 0.4292 | -                 | -                  | -                   | -                 | 3.2510  |

|       |        |        |        |        |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2050  | 0.0308 |        |        |        |        | 0.4292 |        |        |        |        | 3.2504 |
| Total |        | 0.1785 | 0.1785 | 0.1785 | 0.1785 |        | 0.6644 | 0.6644 | 0.6644 | 0.6644 |        |

| Year  | ROG    | Weighted - Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted - Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx    |
|-------|--------|---------------------|--------------------|---------------------|-------------------|--------|---------------------|--------------------|---------------------|-------------------|--------|
| 2014  | 0.0055 | -                   | -                  | -                   | -                 | 0.5214 | -                   | -                  | -                   | -                 | 0.0236 |
| 2015  | 0.0055 | -                   | -                  | -                   | -                 | 0.5173 | -                   | -                  | -                   | -                 | 0.0237 |
| 2016  | 0.0055 | -                   | -                  | -                   | -                 | 0.5163 | -                   | -                  | -                   | -                 | 0.0238 |
| 2017  | 0.0056 | -                   | -                  | -                   | -                 | 0.5153 | -                   | -                  | -                   | -                 | 0.0239 |
| 2018  | 0.0056 | -                   | -                  | -                   | -                 | 0.5147 | -                   | -                  | -                   | -                 | 0.0239 |
| 2019  | 0.0055 | -                   | -                  | -                   | -                 | 0.5170 | -                   | -                  | -                   | -                 | 0.0236 |
| 2020  | 0.0054 | -                   | -                  | -                   | -                 | 0.5158 | -                   | -                  | -                   | -                 | 0.0232 |
| 2021  | 0.0052 | -                   | -                  | -                   | -                 | 0.5136 | -                   | -                  | -                   | -                 | 0.0226 |
| 2022  | 0.0051 | 0.0051              | 0.0051             | 0.0051              | 0.0051            | 0.5106 | 0.5106              | 0.5106             | 0.5106              | 0.5106            | 0.0220 |
| 2023  | 0.0049 | -                   | -                  | -                   | -                 | 0.5066 | -                   | -                  | -                   | -                 | 0.0213 |
| 2024  | 0.0047 | -                   | -                  | -                   | -                 | 0.5012 | -                   | -                  | -                   | -                 | 0.0205 |
| 2025  | 0.0044 | -                   | -                  | -                   | -                 | 0.4942 | -                   | -                  | -                   | -                 | 0.0199 |
| 2026  | 0.0042 | -                   | -                  | -                   | -                 | 0.4875 | -                   | -                  | -                   | -                 | 0.0193 |
| 2027  | 0.0040 | -                   | -                  | -                   | -                 | 0.4813 | -                   | -                  | -                   | -                 | 0.0188 |
| 2028  | 0.0038 | -                   | -                  | -                   | -                 | 0.4755 | -                   | -                  | -                   | -                 | 0.0184 |
| 2029  | 0.0036 | -                   | -                  | -                   | -                 | 0.4701 | -                   | -                  | -                   | -                 | 0.0181 |
| 2030  | 0.0035 | -                   | -                  | -                   | -                 | 0.4650 | -                   | -                  | -                   | -                 | 0.0178 |
| 2031  | 0.0033 | -                   | -                  | -                   | -                 | 0.4603 | -                   | -                  | -                   | -                 | 0.0175 |
| 2032  | 0.0032 | -                   | -                  | -                   | -                 | 0.4560 | -                   | -                  | -                   | -                 | 0.0174 |
| 2033  | 0.0030 | -                   | -                  | -                   | -                 | 0.4521 | -                   | -                  | -                   | -                 | 0.0172 |
| 2034  | 0.0029 | -                   | -                  | -                   | -                 | 0.4485 | -                   | -                  | -                   | -                 | 0.0171 |
| 2035  | 0.0028 | -                   | -                  | -                   | -                 | 0.4452 | -                   | -                  | -                   | -                 | 0.0171 |
| 2036  | 0.0027 | -                   | -                  | -                   | -                 | 0.4423 | -                   | -                  | -                   | -                 | 0.0170 |
| 2037  | 0.0026 | -                   | -                  | -                   | -                 | 0.4397 | -                   | -                  | -                   | -                 | 0.0170 |
| 2038  | 0.0026 | -                   | -                  | -                   | -                 | 0.4375 | -                   | -                  | -                   | -                 | 0.0171 |
| 2039  | 0.0025 | -                   | -                  | -                   | -                 | 0.4355 | -                   | -                  | -                   | -                 | 0.0171 |
| 2040  | 0.0024 | -                   | -                  | -                   | -                 | 0.4338 | -                   | -                  | -                   | -                 | 0.0171 |
| 2041  | 0.0024 |                     |                    |                     |                   | 0.4323 |                     |                    |                     |                   | 0.0171 |
| 2042  | 0.0024 |                     |                    |                     |                   | 0.4310 |                     |                    |                     |                   | 0.0172 |
| 2043  | 0.0023 |                     |                    |                     |                   | 0.4300 |                     |                    |                     |                   | 0.0172 |
| 2044  | 0.0023 |                     |                    |                     |                   | 0.4291 |                     |                    |                     |                   | 0.0173 |
| 2045  | 0.0023 |                     |                    |                     |                   | 0.4283 |                     |                    |                     |                   | 0.0173 |
| 2046  | 0.0023 |                     |                    |                     |                   | 0.4277 |                     |                    |                     |                   | 0.0173 |
| 2047  | 0.0023 |                     |                    |                     |                   | 0.4272 |                     |                    |                     |                   | 0.0174 |
| 2048  | 0.0022 |                     |                    |                     |                   | 0.4268 |                     |                    |                     |                   | 0.0174 |
| 2049  | 0.0022 |                     |                    |                     |                   | 0.4265 |                     |                    |                     |                   | 0.0174 |
| 2050  | 0.0022 |                     |                    |                     |                   | 0.4262 |                     |                    |                     |                   | 0.0174 |
| Total |        | 0.0051              | 0.0051             | 0.0051              | 0.0051            |        | 0.5106              | 0.5106             | 0.5106              | 0.5106            |        |

**Heavy-Heavy Duty Diesel Truck**

Water Truck Commute Emissions (EMFAC2017 - web 1.0.2, T7 Single Unit Construction Truck)

| Year | ROG    | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx    |
|------|--------|-------------------|--------------------|---------------------|-------------------|--------|-------------------|--------------------|---------------------|-------------------|--------|
| 2014 | 0.0583 | -                 | -                  | -                   | -                 | 0.4129 | -                 | -                  | -                   | -                 | 2.9101 |
| 2015 | 0.0529 | -                 | -                  | -                   | -                 | 0.4082 | -                 | -                  | -                   | -                 | 2.8491 |
| 2016 | 0.0508 | -                 | -                  | -                   | -                 | 0.4094 | -                 | -                  | -                   | -                 | 2.8549 |
| 2017 | 0.0476 | -                 | -                  | -                   | -                 | 0.4102 | -                 | -                  | -                   | -                 | 2.8769 |
| 2018 | 0.0457 | -                 | -                  | -                   | -                 | 0.4130 | -                 | -                  | -                   | -                 | 2.9175 |
| 2019 | 0.0444 | -                 | -                  | -                   | -                 | 0.4157 | -                 | -                  | -                   | -                 | 2.9546 |
| 2020 | 0.0425 | -                 | -                  | -                   | -                 | 0.4199 | -                 | -                  | -                   | -                 | 3.0272 |
| 2021 | 0.0418 | -                 | -                  | -                   | -                 | 0.4228 | -                 | -                  | -                   | -                 | 3.0635 |
| 2022 | 0.0402 | 0.0402            | 0.0402             | 0.0402              | 0.0402            | 0.4233 | 0.4233            | 0.4233             | 0.4233              | 0.4233            | 3.0792 |
| 2023 | 0.0291 | -                 | -                  | -                   | -                 | 0.4046 | -                 | -                  | -                   | -                 | 2.9826 |
| 2024 | 0.0294 | -                 | -                  | -                   | -                 | 0.4082 | -                 | -                  | -                   | -                 | 3.0228 |
| 2025 | 0.0296 | -                 | -                  | -                   | -                 | 0.4118 | -                 | -                  | -                   | -                 | 3.0634 |
| 2026 | 0.0298 | -                 | -                  | -                   | -                 | 0.4149 | -                 | -                  | -                   | -                 | 3.0980 |
| 2027 | 0.0300 | -                 | -                  | -                   | -                 | 0.4172 | -                 | -                  | -                   | -                 | 3.1232 |
| 2028 | 0.0302 | -                 | -                  | -                   | -                 | 0.4197 | -                 | -                  | -                   | -                 | 3.1503 |
| 2029 | 0.0303 | -                 | -                  | -                   | -                 | 0.4221 | -                 | -                  | -                   | -                 | 3.1777 |
| 2030 | 0.0305 | -                 | -                  | -                   | -                 | 0.4243 | -                 | -                  | -                   | -                 | 3.2028 |
| 2031 | 0.0306 | -                 | -                  | -                   | -                 | 0.4263 | -                 | -                  | -                   | -                 | 3.2255 |
| 2032 | 0.0307 | -                 | -                  | -                   | -                 | 0.4279 | -                 | -                  | -                   | -                 | 3.2430 |
| 2033 | 0.0308 | -                 | -                  | -                   | -                 | 0.4291 | -                 | -                  | -                   | -                 | 3.2559 |
| 2034 | 0.0309 | -                 | -                  | -                   | -                 | 0.4297 | -                 | -                  | -                   | -                 | 3.2619 |
| 2035 | 0.0309 | -                 | -                  | -                   | -                 | 0.4299 | -                 | -                  | -                   | -                 | 3.2635 |
| 2036 | 0.0309 | -                 | -                  | -                   | -                 | 0.4301 | -                 | -                  | -                   | -                 | 3.2652 |
| 2037 | 0.0309 | -                 | -                  | -                   | -                 | 0.4302 | -                 | -                  | -                   | -                 | 3.2648 |
| 2038 | 0.0309 | -                 | -                  | -                   | -                 | 0.4301 | -                 | -                  | -                   | -                 | 3.2639 |
| 2039 | 0.0309 | -                 | -                  | -                   | -                 | 0.4301 | -                 | -                  | -                   | -                 | 3.2635 |
| 2040 | 0.0309 | -                 | -                  | -                   | -                 | 0.4300 | -                 | -                  | -                   | -                 | 3.2612 |
| 2041 | 0.0309 |                   |                    |                     |                   | 0.4298 |                   |                    |                     |                   | 3.2588 |
| 2042 | 0.0309 |                   |                    |                     |                   | 0.4297 |                   |                    |                     |                   | 3.2571 |
| 2043 | 0.0308 |                   |                    |                     |                   | 0.4295 |                   |                    |                     |                   | 3.2551 |
| 2044 | 0.0308 |                   |                    |                     |                   | 0.4294 |                   |                    |                     |                   | 3.2535 |
| 2045 | 0.0308 |                   |                    |                     |                   | 0.4294 |                   |                    |                     |                   | 3.2526 |
| 2046 | 0.0308 |                   |                    |                     |                   | 0.4293 |                   |                    |                     |                   | 3.2514 |
| 2047 | 0.0308 |                   |                    |                     |                   | 0.4292 |                   |                    |                     |                   | 3.2507 |
| 2048 | 0.0308 |                   |                    |                     |                   | 0.4292 |                   |                    |                     |                   | 3.2500 |
| 2049 | 0.0308 |                   |                    |                     |                   | 0.4291 |                   |                    |                     |                   | 3.2496 |

|       |        |        |        |        |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2050  | 0.0308 |        |        |        |        | 0.4291 |        |        |        |        | 3.2496 |
| Total |        | 0.0402 | 0.0402 | 0.0402 | 0.0402 |        | 0.4233 | 0.4233 | 0.4233 | 0.4233 |        |

|    | B                    | C      | D          | E          | F          | G          | H      | I          | J          | K          | L          | M      |
|----|----------------------|--------|------------|------------|------------|------------|--------|------------|------------|------------|------------|--------|
| 5  | Emissions (g/bhp-hr) |        | ROG        | ROG        | ROG        | ROG        |        | CO         | CO         | CO         | CO         |        |
| 6  | Aerial Lifts         |        | Weighted - | Weighted - | Weighted - | Weighted - |        | Weighted - | Weighted - | Weighted - | Weighted - |        |
| 7  |                      | ROG    | Grubbing   | Grading    | Drainage   | Paving     | CO     | Grubbing   | Grading    | Drainage   | Paving     | NOx    |
| 8  | 2014                 | 0.2023 | -          | -          | -          | -          | 3.2195 | -          | -          | -          | -          | 3.3728 |
| 9  | 2015                 | 0.1906 | -          | -          | -          | -          | 3.2178 | -          | -          | -          | -          | 3.1134 |
| 10 | 2016                 | 0.1655 | -          | -          | -          | -          | 3.2010 | -          | -          | -          | -          | 2.7222 |
| 11 | 2017                 | 0.1427 | -          | -          | -          | -          | 3.1843 | -          | -          | -          | -          | 2.3637 |
| 12 | 2018                 | 0.1219 | -          | -          | -          | -          | 3.1669 | -          | -          | -          | -          | 2.0636 |
| 13 | 2019                 | 0.1182 | -          | -          | -          | -          | 3.1725 | -          | -          | -          | -          | 1.9766 |
| 14 | 2020                 | 0.1149 | -          | -          | -          | -          | 3.1768 | -          | -          | -          | -          | 1.8686 |
| 15 | 2021                 | 0.1088 | -          | -          | -          | -          | 3.1762 | -          | -          | -          | -          | 1.7437 |
| 16 | 2022                 | 0.1047 | 0.1047     | 0.1047     | 0.1047     | 0.1047     | 3.1760 | 3.1760     | 3.1760     | 3.1760     | 3.1760     | 1.6266 |
| 17 | 2023                 | 0.1005 | -          | -          | -          | -          | 3.1703 | -          | -          | -          | -          | 1.5481 |
| 18 | 2024                 | 0.1005 | -          | -          | -          | -          | 3.1726 | -          | -          | -          | -          | 1.5279 |
| 19 | 2025                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 20 | 2026                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 21 | 2027                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 22 | 2028                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 23 | 2029                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 24 | 2030                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 25 | 2031                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 26 | 2032                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 27 | 2033                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 28 | 2034                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 29 | 2035                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 30 | 2036                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 31 | 2037                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 32 | 2038                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 33 | 2039                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 34 | 2040                 | 0.1610 | -          | -          | -          | -          | 3.3440 | -          | -          | -          | -          | 1.4070 |
| 35 | Aerial Lifts Total   |        | 0.1047     | 0.1047     | 0.1047     | 0.1047     |        | 3.1760     | 3.1760     | 3.1760     | 3.1760     |        |

|    | N          | O         | P          | Q          | R      | S          | T          | U          | V          |
|----|------------|-----------|------------|------------|--------|------------|------------|------------|------------|
| 5  | NOx        | NOx       | NOx        | NOx        |        | PM10       | PM10       | PM10       | PM10       |
| 6  | Weighted   | Weighted  | Weighted   | Weighted - |        | Weighted - | Weighted - | Weighted - | Weighted - |
| 7  | - Grubbing | - Grading | - Drainage | Paving     | PM10   | Grubbing   | Grading    | Drainage   | Paving     |
| 8  | -          | -         | -          | -          | 0.1608 | -          | -          | -          | -          |
| 9  | -          | -         | -          | -          | 0.1431 | -          | -          | -          | -          |
| 10 | -          | -         | -          | -          | 0.1119 | -          | -          | -          | -          |
| 11 | -          | -         | -          | -          | 0.0834 | -          | -          | -          | -          |
| 12 | -          | -         | -          | -          | 0.0571 | -          | -          | -          | -          |
| 13 | -          | -         | -          | -          | 0.0485 | -          | -          | -          | -          |
| 14 | -          | -         | -          | -          | 0.0416 | -          | -          | -          | -          |
| 15 | -          | -         | -          | -          | 0.0333 | -          | -          | -          | -          |
| 16 | 1.6266     | 1.6266    | 1.6266     | 1.6266     | 0.0302 | 0.0302     | 0.0302     | 0.0302     | 0.0302     |
| 17 | -          | -         | -          | -          | 0.0267 | -          | -          | -          | -          |
| 18 | -          | -         | -          | -          | 0.0265 | -          | -          | -          | -          |
| 19 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 20 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 21 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 22 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 23 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 24 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 25 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 26 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 27 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 28 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 29 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 30 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 31 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 32 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 33 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 34 | -          | -         | -          | -          | 0.0120 | -          | -          | -          | -          |
| 35 | 1.6266     | 1.6266    | 1.6266     | 1.6266     |        | 0.0302     | 0.0302     | 0.0302     | 0.0302     |

### Off-road Equipment Tier 4 Emission Factors

| HP Bin |         | Emission Factor (g/bhp-hr) |      |      |      |       |
|--------|---------|----------------------------|------|------|------|-------|
| Low HP | High HP | ROG                        | CO   | NOx  | PM10 | PM2.5 |
| 0      | 11      | 0.30                       | 6.00 | 5.32 | 0.30 | 0.28  |
| 11     | 25      | 0.30                       | 4.90 | 5.32 | 0.30 | 0.28  |
| 25     | 50      | 0.19                       | 4.10 | 3.33 | 0.02 | 0.02  |
| 50     | 75      | 0.19                       | 3.70 | 3.33 | 0.02 | 0.02  |
| 75     | 100     | 0.15                       | 3.70 | 0.30 | 0.02 | 0.01  |
| 100    | 175     | 0.15                       | 3.70 | 0.30 | 0.02 | 0.01  |
| 175    | 300     | 0.15                       | 2.60 | 0.30 | 0.02 | 0.01  |
| 300    | 600     | 0.15                       | 2.60 | 0.30 | 0.02 | 0.01  |
| 600    | 750     | 0.15                       | 2.60 | 0.30 | 0.02 | 0.01  |
| 750    | 1200    | 0.15                       | 2.60 | 2.60 | 0.03 | 0.03  |
| 1200   | 9999    | 0.15                       | 2.60 | 2.60 | 0.03 | 0.03  |

92  
95  
1.07

**Note:**

1. Tier 4 Emission Factors are converted from EPA Non-road Diesel Engine Standards. Available at [www.epa.gov](http://www.epa.gov)
2. Assume PM2.5 is 92% of PM10.



% of PM2.5 in PM10 (from CEIDARS)

% of NOx in NMHC+NOx (from [http://www.arb.ca.gov/msprog/moyer/guidelines/2005\\_Carl\\_Moyer\\_Guidelir](http://www.arb.ca.gov/msprog/moyer/guidelines/2005_Carl_Moyer_Guidelir)  
VOC/NMHC

[www.arb.ca.gov/msprog/ordiesel/documents/Off-Road\\_Diesel\\_Std.xls](http://www.arb.ca.gov/msprog/ordiesel/documents/Off-Road_Diesel_Std.xls)

nes\_Part4.pdf)

**Default Horsepower and Load Factor**

| <b>OFFROAD Equipment Type</b>      | <b>Horsepower</b> | <b>Load Factor</b> |
|------------------------------------|-------------------|--------------------|
| Aerial Lifts                       | 63                | 0.31               |
| Air Compressors                    | 78                | 0.48               |
| Bore/Drill Rigs                    | 221               | 0.5                |
| Cement and Mortar Mixers           | 9                 | 0.56               |
| Concrete/Industrial Saws           | 81                | 0.73               |
| Cranes                             | 231               | 0.29               |
| Crawler Tractors                   | 212               | 0.43               |
| Crushing/Proc. Equipment           | 85                | 0.78               |
| Excavators                         | 158               | 0.38               |
| Forklifts                          | 89                | 0.2                |
| Generator Sets                     | 84                | 0.74               |
| Graders                            | 187               | 0.41               |
| Off-Highway Tractors               | 124               | 0.44               |
| Off-Highway Trucks                 | 402               | 0.38               |
| Other Construction Equipment       | 172               | 0.42               |
| Other General Industrial Equipment | 88                | 0.34               |
| Other Material Handling Equipment  | 168               | 0.4                |
| Pavers                             | 130               | 0.42               |
| Paving Equipment                   | 132               | 0.36               |
| Plate Compactors                   | 8                 | 0.43               |
| Pressure Washers                   | 13                | 0.3                |
| Pumps                              | 84                | 0.74               |
| Rollers                            | 80                | 0.38               |
| Rough Terrain Forklifts            | 100               | 0.4                |
| Rubber Tired Dozers                | 247               | 0.4                |
| Rubber Tired Loaders               | 203               | 0.36               |
| Scrapers                           | 367               | 0.48               |
| Signal Boards                      | 6                 | 0.82               |
| Skid Steer Loaders                 | 65                | 0.37               |
| Surfacing Equipment                | 263               | 0.3                |
| Sweepers/Scrubbers                 | 64                | 0.46               |
| Tractors/Loaders/Backhoes          | 97                | 0.37               |
| Trenchers                          | 78                | 0.5                |
| Welders                            | 46                | 0.45               |
|                                    |                   |                    |

Default Horsepower and Load Factor from CalEEMod2016 Appendix D: Table 3.3











































## Sacramento Valley Air Basin Fleet Average Emission Factors (Diesel)

|      |
|------|
| 2014 |
|------|

|  |
|--|
|  |
|--|

| 2014            |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-----------------|-------|---------|---------|---------|---------|
| Equipment       | MaxHP | ROG     | CO      | NOX     | SOX     |
| Aerial Lifts    | 15    | 0.261   | 3.233   | 4.096   | 0.005   |
| Aerial Lifts    | 25    | 0.261   | 3.233   | 4.096   | 0.005   |
| Aerial Lifts    | 50    | 0.261   | 3.233   | 4.096   | 0.005   |
| Aerial Lifts    | 120   | 0.202   | 3.220   | 3.373   | 0.005   |
| Aerial Lifts    | 500   | 0.236   | 0.983   | 4.602   | 0.005   |
| Aerial Lifts    | 750   | 0.299   | 1.178   | 3.761   | 0.005   |
| Air Compressors |       |         |         |         |         |
|                 | 15    | 0.891   | 3.723   | 5.445   | 0.008   |
| Air Compressors |       |         |         |         |         |
|                 | 25    | 0.960   | 2.780   | 5.000   | 0.007   |
| Air Compressors |       |         |         |         |         |
|                 | 50    | 2.076   | 6.181   | 5.421   | 0.007   |
| Air Compressors |       |         |         |         |         |
|                 | 120   | 0.901   | 3.880   | 5.608   | 0.006   |
| Air Compressors |       |         |         |         |         |
|                 | 175   | 0.621   | 3.227   | 4.973   | 0.006   |
| Air Compressors |       |         |         |         |         |
|                 | 250   | 0.405   | 1.237   | 4.399   | 0.006   |
| Air Compressors |       |         |         |         |         |
|                 | 500   | 0.373   | 1.249   | 3.855   | 0.005   |
| Air Compressors |       |         |         |         |         |
|                 | 750   | 0.378   | 1.249   | 3.991   | 0.005   |
| Air Compressors |       |         |         |         |         |
|                 | 1000  | 0.445   | 1.493   | 5.512   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 15    | 0.834   | 4.691   | 5.332   | 0.006   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 25    | 0.834   | 4.691   | 5.332   | 0.006   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 50    | 0.834   | 4.691   | 5.332   | 0.006   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 120   | 0.319   | 3.327   | 4.195   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 175   | 0.308   | 3.040   | 4.066   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 250   | 0.217   | 1.174   | 3.525   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 500   | 0.202   | 1.239   | 3.186   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 750   | 0.157   | 1.087   | 2.373   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 1000  | 0.105   | 0.951   | 2.984   | 0.005   |

|                          |      |       |       |        |       |
|--------------------------|------|-------|-------|--------|-------|
| Cement and Mortar Mixers | 15   | 0.666 | 3.469 | 4.191  | 0.008 |
| Cement and Mortar Mixers | 25   | 0.837 | 2.570 | 4.793  | 0.007 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332  | 0.007 |
| Concrete/Industrial Saws | 50   | 1.626 | 5.313 | 5.172  | 0.007 |
| Concrete/Industrial Saws | 120  | 0.749 | 3.675 | 5.160  | 0.006 |
| Concrete/Industrial Saws | 175  | 0.517 | 3.080 | 4.531  | 0.006 |
| Cranes                   | 50   | 2.115 | 7.126 | 6.093  | 0.005 |
| Cranes                   | 120  | 1.245 | 4.923 | 10.302 | 0.005 |
| Cranes                   | 175  | 0.793 | 3.932 | 8.471  | 0.005 |
| Cranes                   | 250  | 0.661 | 2.726 | 7.860  | 0.005 |
| Cranes                   | 500  | 0.483 | 4.177 | 6.264  | 0.005 |
| Cranes                   | 750  | 0.280 | 1.635 | 4.327  | 0.005 |
| Cranes                   | 9999 | 0.120 | 0.948 | 2.281  | 0.005 |
| Crawler Tractors         | 50   | 2.521 | 8.047 | 6.396  | 0.005 |
| Crawler Tractors         | 120  | 0.884 | 4.168 | 7.524  | 0.005 |
| Crawler Tractors         | 175  | 0.629 | 3.459 | 6.875  | 0.005 |
| Crawler Tractors         | 250  | 0.454 | 1.838 | 6.238  | 0.005 |
| Crawler Tractors         | 500  | 0.412 | 2.911 | 5.616  | 0.005 |
| Crawler Tractors         | 750  | 0.347 | 1.675 | 4.895  | 0.005 |
| Crawler Tractors         | 1000 | 0.475 | 2.080 | 7.426  | 0.005 |
| Crushing/Proc. Equipment | 50   | 2.012 | 6.212 | 5.399  | 0.007 |
| Crushing/Proc. Equipment | 120  | 0.877 | 3.898 | 5.468  | 0.006 |
| Crushing/Proc. Equipment | 175  | 0.612 | 3.256 | 4.823  | 0.006 |
| Crushing/Proc. Equipment | 250  | 0.405 | 1.228 | 4.239  | 0.006 |
| Crushing/Proc. Equipment | 500  | 0.377 | 1.230 | 3.702  | 0.005 |
| Crushing/Proc. Equipment | 750  | 0.378 | 1.218 | 3.844  | 0.005 |
| Crushing/Proc. Equipment | 9999 | 0.456 | 1.460 | 5.391  | 0.005 |



|                      |      |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|
| Dumpers/Tenders      | 25   | 0.705 | 2.364 | 4.433 | 0.007 |
| Excavators           | 25   | 0.825 | 4.844 | 4.965 | 0.005 |
| Excavators           | 50   | 0.825 | 4.844 | 4.965 | 0.005 |
| Excavators           | 120  | 0.513 | 3.663 | 5.131 | 0.005 |
| Excavators           | 175  | 0.390 | 3.154 | 4.657 | 0.005 |
| Excavators           | 250  | 0.294 | 1.346 | 4.374 | 0.005 |
| Excavators           | 500  | 0.233 | 1.327 | 3.353 | 0.005 |
| Excavators           | 750  | 0.239 | 1.347 | 3.541 | 0.005 |
| Forklifts            | 50   | 2.114 | 7.321 | 6.006 | 0.005 |
| Forklifts            | 120  | 0.795 | 4.079 | 6.848 | 0.005 |
| Forklifts            | 175  | 0.578 | 3.521 | 6.352 | 0.005 |
| Forklifts            | 250  | 0.615 | 2.501 | 7.276 | 0.005 |
| Forklifts            | 500  | 0.541 | 4.252 | 6.353 | 0.005 |
| Generator Sets       | 15   | 0.783 | 3.723 | 5.369 | 0.008 |
| Generator Sets       | 25   | 0.821 | 2.780 | 5.000 | 0.007 |
| Generator Sets       | 50   | 1.427 | 4.683 | 5.048 | 0.007 |
| Generator Sets       | 120  | 0.721 | 3.532 | 5.147 | 0.006 |
| Generator Sets       | 175  | 0.486 | 2.945 | 4.565 | 0.006 |
| Generator Sets       | 250  | 0.311 | 1.130 | 4.025 | 0.006 |
| Generator Sets       | 500  | 0.279 | 1.157 | 3.603 | 0.005 |
| Generator Sets       | 750  | 0.289 | 1.157 | 3.724 | 0.005 |
| Generator Sets       | 9999 | 0.389 | 1.377 | 5.150 | 0.005 |
| Graders              | 50   | 3.094 | 9.065 | 6.550 | 0.005 |
| Graders              | 120  | 1.269 | 4.920 | 9.986 | 0.005 |
| Graders              | 175  | 0.847 | 3.951 | 8.702 | 0.005 |
| Graders              | 250  | 0.390 | 1.462 | 5.740 | 0.005 |
| Graders              | 500  | 0.314 | 1.791 | 3.714 | 0.005 |
| Graders              | 750  | 0.437 | 1.483 | 3.876 | 0.005 |
| Off-Highway Tractors | 120  | 0.698 | 3.972 | 6.281 | 0.005 |
| Off-Highway Tractors | 175  | 0.424 | 3.265 | 5.025 | 0.005 |
| Off-Highway Tractors | 250  | 0.405 | 1.628 | 5.661 | 0.005 |
| Off-Highway Tractors | 750  | 0.267 | 1.334 | 4.007 | 0.005 |
| Off-Highway Tractors | 1000 | 0.085 | 0.947 | 2.279 | 0.005 |
| Off-Highway Trucks   | 175  | 0.513 | 3.473 | 5.219 | 0.005 |
| Off-Highway Trucks   | 250  | 0.483 | 1.932 | 5.441 | 0.005 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.393 | 2.075 | 4.686 | 0.005 |
| Off-Highway Trucks                 | 750  | 0.485 | 2.953 | 5.578 | 0.005 |
| Off-Highway Trucks                 | 1000 | 0.415 | 1.779 | 6.365 | 0.005 |
| Other Construction Equipment       | 15   | 1.301 | 5.602 | 5.565 | 0.005 |
| Other Construction Equipment       | 25   | 1.301 | 5.602 | 5.565 | 0.005 |
| Other Construction Equipment       | 50   | 1.301 | 5.602 | 5.565 | 0.005 |
| Other Construction Equipment       | 120  | 0.729 | 3.906 | 6.633 | 0.005 |
| Other Construction Equipment       | 175  | 0.567 | 3.385 | 6.372 | 0.005 |
| Other Construction Equipment       | 500  | 0.330 | 2.476 | 4.561 | 0.005 |
| Other General Industrial Equipment | 15   | 1.521 | 6.288 | 5.584 | 0.005 |
| Other General Industrial Equipment | 25   | 1.521 | 6.288 | 5.584 | 0.005 |
| Other General Industrial Equipment | 50   | 1.521 | 6.288 | 5.584 | 0.005 |
| Other General Industrial Equipment | 120  | 0.789 | 4.090 | 6.723 | 0.005 |
| Other General Industrial Equipment | 175  | 0.523 | 3.469 | 5.792 | 0.005 |
| Other General Industrial Equipment | 250  | 0.488 | 2.054 | 6.153 | 0.005 |
| Other General Industrial Equipment | 500  | 0.355 | 2.499 | 4.565 | 0.005 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.256 | 1.489 | 3.622 | 0.005 |
| Other General Industrial Equipment | 1000 | 0.346 | 1.080 | 6.379 | 0.005 |
| Other Material Handling Equipment  | 50   | 1.695 | 6.590 | 5.751 | 0.005 |
| Other Material Handling Equipment  | 120  | 0.558 | 3.779 | 5.372 | 0.005 |
| Other Material Handling Equipment  | 175  | 0.528 | 3.431 | 5.798 | 0.005 |
| Other Material Handling Equipment  | 250  | 0.475 | 1.936 | 6.173 | 0.005 |
| Other Material Handling Equipment  | 500  | 0.331 | 1.927 | 4.357 | 0.005 |
| Other Material Handling Equipment  | 9999 | 0.141 | 0.978 | 3.436 | 0.005 |
| Pavers                             | 25   | 1.898 | 6.381 | 5.717 | 0.005 |
| Pavers                             | 50   | 1.898 | 6.381 | 5.717 | 0.005 |
| Pavers                             | 120  | 0.683 | 3.773 | 6.199 | 0.005 |
| Pavers                             | 175  | 0.502 | 3.115 | 5.736 | 0.005 |
| Pavers                             | 250  | 0.208 | 1.023 | 4.140 | 0.005 |
| Pavers                             | 500  | 0.180 | 1.005 | 3.047 | 0.005 |
| Paving Equipment                   | 25   | 1.053 | 4.952 | 5.184 | 0.005 |
| Paving Equipment                   | 50   | 1.053 | 4.952 | 5.184 | 0.005 |
| Paving Equipment                   | 120  | 0.677 | 3.837 | 6.370 | 0.005 |
| Paving Equipment                   | 175  | 0.415 | 3.097 | 5.216 | 0.005 |
| Paving Equipment                   | 250  | 0.310 | 1.370 | 4.782 | 0.005 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Pressure Washers                   | 15   | 0.783 | 3.723 | 5.369 | 0.008 |
| Pressure Washers                   | 25   | 0.821 | 2.780 | 5.000 | 0.007 |
| Pressure Washers                   | 50   | 1.096 | 3.951 | 4.873 | 0.007 |
| Pressure Washers                   | 120  | 0.634 | 3.367 | 4.912 | 0.006 |
| Pressure Washers                   | 175  | 0.469 | 2.923 | 4.513 | 0.006 |

|                         |      |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.137 | 0.986 | 1.047 | 0.006 |
| Pumps                   | 15   | 0.891 | 3.723 | 5.445 | 0.008 |
| Pumps                   | 25   | 0.960 | 2.780 | 5.000 | 0.007 |
| Pumps                   | 50   | 1.538 | 4.929 | 5.107 | 0.007 |
| Pumps                   | 120  | 0.751 | 3.587 | 5.226 | 0.006 |
| Pumps                   | 175  | 0.508 | 2.989 | 4.635 | 0.006 |
| Pumps                   | 250  | 0.326 | 1.149 | 4.090 | 0.006 |
| Pumps                   | 500  | 0.294 | 1.181 | 3.648 | 0.005 |
| Pumps                   | 750  | 0.303 | 1.181 | 3.770 | 0.005 |
| Pumps                   | 9999 | 0.399 | 1.406 | 5.210 | 0.005 |
| Rollers                 | 15   | 1.308 | 5.243 | 5.393 | 0.005 |
| Rollers                 | 25   | 1.308 | 5.243 | 5.393 | 0.005 |
| Rollers                 | 50   | 1.308 | 5.243 | 5.393 | 0.005 |
| Rollers                 | 120  | 0.695 | 3.809 | 6.390 | 0.005 |
| Rollers                 | 175  | 0.368 | 2.998 | 4.724 | 0.005 |
| Rollers                 | 250  | 0.381 | 1.760 | 5.403 | 0.005 |
| Rollers                 | 500  | 0.378 | 3.318 | 5.183 | 0.005 |
| Rough Terrain Forklifts | 50   | 1.182 | 4.887 | 5.226 | 0.005 |
| Rough Terrain Forklifts | 120  | 0.351 | 3.367 | 4.467 | 0.005 |
| Rough Terrain Forklifts | 175  | 0.221 | 2.852 | 3.594 | 0.005 |
| Rough Terrain Forklifts | 250  | 0.186 | 1.212 | 2.984 | 0.005 |
| Rough Terrain Forklifts | 500  | 0.170 | 0.954 | 3.500 | 0.005 |
| Rubber Tired Dozers     | 175  | 0.961 | 4.226 | 9.834 | 0.005 |
| Rubber Tired Dozers     | 250  | 0.721 | 2.712 | 7.972 | 0.005 |
| Rubber Tired Dozers     | 500  | 0.707 | 6.165 | 8.058 | 0.005 |
| Rubber Tired Dozers     | 750  | 0.513 | 2.756 | 7.147 | 0.005 |
| Rubber Tired Dozers     | 1000 | 0.691 | 3.096 | 6.849 | 0.005 |
| Rubber Tired Loaders    | 25   | 2.115 | 7.770 | 6.103 | 0.005 |
| Rubber Tired Loaders    | 50   | 2.115 | 7.770 | 6.103 | 0.005 |
| Rubber Tired Loaders    | 120  | 0.868 | 4.268 | 7.129 | 0.005 |
| Rubber Tired Loaders    | 175  | 0.605 | 3.585 | 6.272 | 0.005 |

|                               |      |       |       |       |       |
|-------------------------------|------|-------|-------|-------|-------|
| Rubber Tired Loaders          | 250  | 0.407 | 1.486 | 5.495 | 0.005 |
| Rubber Tired Loaders          | 500  | 0.421 | 2.407 | 5.194 | 0.005 |
| Rubber Tired Loaders          | 750  | 0.406 | 1.946 | 4.810 | 0.005 |
| Rubber Tired Loaders          | 1000 | 0.414 | 1.457 | 6.692 | 0.005 |
| Scrapers                      | 120  | 0.719 | 4.100 | 7.065 | 0.005 |
| Scrapers                      | 175  | 0.718 | 3.807 | 7.907 | 0.005 |
| Scrapers                      | 250  | 0.742 | 3.061 | 8.815 | 0.005 |
| Scrapers                      | 500  | 0.479 | 3.898 | 6.233 | 0.005 |
| Scrapers                      | 750  | 0.369 | 2.846 | 5.012 | 0.005 |
| Signal Boards                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Signal Boards                 | 50   | 1.625 | 5.231 | 5.139 | 0.007 |
| Signal Boards                 | 120  | 0.759 | 3.658 | 5.186 | 0.006 |
| Signal Boards                 | 175  | 0.520 | 3.058 | 4.582 | 0.006 |
| Signal Boards                 | 250  | 0.408 | 1.402 | 4.857 | 0.007 |
| Skid Steer Loaders            | 25   | 0.664 | 4.016 | 4.541 | 0.005 |
| Skid Steer Loaders            | 50   | 0.664 | 4.016 | 4.541 | 0.005 |
| Skid Steer Loaders            | 120  | 0.304 | 3.338 | 4.013 | 0.005 |
| Surfacing Equipment           | 50   | 1.141 | 4.877 | 5.425 | 0.006 |
| Surfacing Equipment           | 120  | 0.559 | 3.580 | 5.520 | 0.005 |
| Surfacing Equipment           | 175  | 0.472 | 3.012 | 5.711 | 0.005 |
| Surfacing Equipment           | 250  | 0.306 | 1.434 | 5.102 | 0.005 |
| Surfacing Equipment           | 500  | 0.237 | 1.501 | 3.895 | 0.005 |
| Surfacing Equipment           | 750  | 0.174 | 1.020 | 3.284 | 0.005 |
| Sweepers/Scrubbers            | 15   | 1.767 | 6.592 | 5.752 | 0.005 |
| Sweepers/Scrubbers            | 25   | 1.767 | 6.592 | 5.752 | 0.005 |
| Sweepers/Scrubbers            | 50   | 1.767 | 6.592 | 5.752 | 0.005 |
| Sweepers/Scrubbers            | 120  | 0.833 | 4.071 | 6.934 | 0.005 |
| Sweepers/Scrubbers            | 175  | 0.875 | 4.042 | 9.108 | 0.005 |
| Sweepers/Scrubbers            | 250  | 0.505 | 2.066 | 6.704 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 25   | 1.336 | 5.772 | 5.369 | 0.005 |

|                               |      |       |       |       |       |
|-------------------------------|------|-------|-------|-------|-------|
| Tractors/Loaders/Bac<br>khoes | 50   | 1.336 | 5.772 | 5.369 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 120  | 0.582 | 3.827 | 5.581 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 175  | 0.423 | 3.239 | 4.938 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 250  | 0.327 | 1.376 | 4.922 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 500  | 0.312 | 1.878 | 4.488 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 750  | 0.305 | 1.833 | 4.243 | 0.005 |
| Trenchers                     | 15   | 1.268 | 5.293 | 5.455 | 0.005 |
| Trenchers                     | 25   | 1.268 | 5.293 | 5.455 | 0.005 |
| Trenchers                     | 50   | 1.268 | 5.293 | 5.455 | 0.005 |
| Trenchers                     | 120  | 0.818 | 3.999 | 7.217 | 0.005 |
| Trenchers                     | 175  | 0.693 | 3.668 | 7.699 | 0.005 |
| Trenchers                     | 250  | 0.497 | 2.070 | 6.484 | 0.005 |
| Trenchers                     | 500  | 0.306 | 2.035 | 4.370 | 0.005 |
| Trenchers                     | 750  | 0.118 | 0.964 | 1.825 | 0.005 |
| Welders                       | 15   | 0.891 | 3.723 | 5.445 | 0.008 |
| Welders                       | 25   | 0.960 | 2.780 | 5.000 | 0.007 |
| Welders                       | 50   | 1.900 | 5.749 | 5.308 | 0.007 |
| Welders                       | 120  | 0.849 | 3.774 | 5.481 | 0.006 |
| Welders                       | 175  | 0.581 | 3.141 | 4.862 | 0.006 |
| Welders                       | 250  | 0.376 | 1.207 | 4.297 | 0.006 |
| Welders                       | 500  | 0.343 | 1.227 | 3.788 | 0.005 |
| Water Trucks                  | 175  | 0.513 | 3.473 | 5.219 | 0.005 |
| Water Trucks                  | 250  | 0.483 | 1.932 | 5.441 | 0.005 |
| Water Trucks                  | 500  | 0.393 | 2.075 | 4.686 | 0.005 |
| Water Trucks                  | 750  | 0.485 | 2.953 | 5.578 | 0.005 |
| Water Trucks                  | 1000 | 0.415 | 1.779 | 6.365 | 0.005 |

2015

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|
| PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.158   | 0.145   | 574.665 | 0.170   | 0.005   |
| 0.158   | 0.145   | 574.665 | 0.170   | 0.005   |
| 0.158   | 0.145   | 574.665 | 0.170   | 0.005   |
| 0.161   | 0.148   | 516.703 | 0.153   | 0.004   |
| 0.101   | 0.093   | 516.638 | 0.153   | 0.004   |
| 0.109   | 0.109   | 568.299 | 0.027   | 0.004   |
|         |         |         |         |         |
| 0.341   | 0.341   | 568.300 | 0.080   | 0.005   |
|         |         |         |         |         |
| 0.291   | 0.291   | 568.299 | 0.086   | 0.005   |
|         |         |         |         |         |
| 0.505   | 0.505   | 568.299 | 0.187   | 0.005   |
|         |         |         |         |         |
| 0.495   | 0.495   | 568.299 | 0.081   | 0.004   |
|         |         |         |         |         |
| 0.272   | 0.272   | 568.299 | 0.056   | 0.004   |
|         |         |         |         |         |
| 0.134   | 0.134   | 568.299 | 0.036   | 0.004   |
|         |         |         |         |         |
| 0.125   | 0.125   | 568.299 | 0.033   | 0.004   |
|         |         |         |         |         |
| 0.128   | 0.128   | 568.299 | 0.034   | 0.004   |
|         |         |         |         |         |
| 0.157   | 0.157   | 568.300 | 0.040   | 0.004   |
|         |         |         |         |         |
| 0.382   | 0.351   | 591.442 | 0.175   | 0.005   |
|         |         |         |         |         |
| 0.382   | 0.351   | 591.442 | 0.175   | 0.005   |
|         |         |         |         |         |
| 0.382   | 0.351   | 591.442 | 0.175   | 0.005   |
|         |         |         |         |         |
| 0.249   | 0.229   | 501.365 | 0.148   | 0.004   |
|         |         |         |         |         |
| 0.186   | 0.171   | 524.052 | 0.155   | 0.004   |
|         |         |         |         |         |
| 0.105   | 0.097   | 512.336 | 0.151   | 0.004   |
|         |         |         |         |         |
| 0.101   | 0.093   | 506.154 | 0.150   | 0.004   |
|         |         |         |         |         |
| 0.081   | 0.074   | 525.240 | 0.155   | 0.004   |
|         |         |         |         |         |
| 0.058   | 0.054   | 516.600 | 0.153   | 0.004   |

| 2015            |       | g/hp/hr |
|-----------------|-------|---------|
| Equipment       | MaxHP | ROG     |
| Aerial Lifts    | 15    | 0.248   |
| Aerial Lifts    | 25    | 0.248   |
| Aerial Lifts    | 50    | 0.248   |
| Aerial Lifts    | 120   | 0.191   |
| Aerial Lifts    | 500   | 0.239   |
| Aerial Lifts    | 750   | 0.278   |
| Air Compressors |       |         |
| Air Compressors | 15    | 0.840   |
| Air Compressors | 25    | 0.894   |
| Air Compressors | 50    | 1.868   |
| Air Compressors | 120   | 0.821   |
| Air Compressors | 175   | 0.571   |
| Air Compressors | 250   | 0.381   |
| Air Compressors | 500   | 0.354   |
| Air Compressors | 750   | 0.358   |
| Air Compressors | 1000  | 0.409   |
| Bore/Drill Rigs | 15    | 0.847   |
| Bore/Drill Rigs | 25    | 0.847   |
| Bore/Drill Rigs | 50    | 0.847   |
| Bore/Drill Rigs | 120   | 0.318   |
| Bore/Drill Rigs | 175   | 0.302   |
| Bore/Drill Rigs | 250   | 0.213   |
| Bore/Drill Rigs | 500   | 0.199   |
| Bore/Drill Rigs | 750   | 0.162   |
| Bore/Drill Rigs | 1000  | 0.109   |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.177 | 0.177 | 568.299 | 0.060 | 0.005 |
| 0.253 | 0.253 | 568.299 | 0.075 | 0.005 |
| 0.164 | 0.164 | 568.299 | 0.061 | 0.005 |
| 0.424 | 0.424 | 568.299 | 0.146 | 0.005 |
| 0.412 | 0.412 | 568.299 | 0.067 | 0.004 |
| 0.228 | 0.228 | 568.299 | 0.046 | 0.004 |
| 0.607 | 0.559 | 567.006 | 0.168 | 0.005 |
| 0.765 | 0.704 | 514.029 | 0.152 | 0.004 |
| 0.457 | 0.421 | 519.511 | 0.154 | 0.004 |
| 0.360 | 0.331 | 517.683 | 0.153 | 0.004 |
| 0.260 | 0.239 | 516.578 | 0.153 | 0.004 |
| 0.151 | 0.139 | 515.607 | 0.152 | 0.004 |
| 0.054 | 0.050 | 516.638 | 0.153 | 0.004 |
| 0.743 | 0.684 | 564.564 | 0.167 | 0.005 |
| 0.629 | 0.578 | 522.119 | 0.154 | 0.004 |
| 0.374 | 0.344 | 516.404 | 0.153 | 0.004 |
| 0.241 | 0.222 | 518.036 | 0.153 | 0.004 |
| 0.217 | 0.200 | 520.515 | 0.154 | 0.004 |
| 0.179 | 0.164 | 517.861 | 0.153 | 0.004 |
| 0.218 | 0.201 | 520.005 | 0.154 | 0.004 |
| 0.494 | 0.494 | 568.299 | 0.181 | 0.005 |
| 0.481 | 0.481 | 568.299 | 0.079 | 0.004 |
| 0.265 | 0.265 | 568.299 | 0.055 | 0.004 |
| 0.130 | 0.130 | 568.299 | 0.036 | 0.004 |
| 0.121 | 0.121 | 568.299 | 0.034 | 0.004 |
| 0.123 | 0.123 | 568.299 | 0.034 | 0.004 |
| 0.155 | 0.155 | 568.299 | 0.041 | 0.004 |

|                          |      |       |
|--------------------------|------|-------|
| Cement and Mortar Mixers | 15   | 0.663 |
| Cement and Mortar Mixers | 25   | 0.811 |
| Concrete/Industrial Saws | 25   | 0.685 |
| Concrete/Industrial Saws | 50   | 1.470 |
| Concrete/Industrial Saws | 120  | 0.683 |
| Concrete/Industrial Saws | 175  | 0.475 |
| Cranes                   | 50   | 2.087 |
| Cranes                   | 120  | 1.214 |
| Cranes                   | 175  | 0.782 |
| Cranes                   | 250  | 0.642 |
| Cranes                   | 500  | 0.475 |
| Cranes                   | 750  | 0.286 |
| Cranes                   | 9999 | 0.131 |
| Crawler Tractors         | 50   | 2.513 |
| Crawler Tractors         | 120  | 0.885 |
| Crawler Tractors         | 175  | 0.632 |
| Crawler Tractors         | 250  | 0.451 |
| Crawler Tractors         | 500  | 0.408 |
| Crawler Tractors         | 750  | 0.351 |
| Crawler Tractors         | 1000 | 0.479 |
| Crushing/Proc. Equipment | 50   | 1.796 |
| Crushing/Proc. Equipment | 120  | 0.797 |
| Crushing/Proc. Equipment | 175  | 0.562 |
| Crushing/Proc. Equipment | 250  | 0.382 |
| Crushing/Proc. Equipment | 500  | 0.358 |
| Crushing/Proc. Equipment | 750  | 0.358 |
| Crushing/Proc. Equipment | 9999 | 0.422 |



|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.200 | 0.200 | 568.300 | 0.063 | 0.005 |
| 0.380 | 0.350 | 575.267 | 0.170 | 0.005 |
| 0.380 | 0.350 | 575.267 | 0.170 | 0.005 |
| 0.382 | 0.352 | 511.306 | 0.151 | 0.004 |
| 0.229 | 0.211 | 516.907 | 0.153 | 0.004 |
| 0.139 | 0.128 | 517.323 | 0.153 | 0.004 |
| 0.108 | 0.099 | 515.215 | 0.152 | 0.004 |
| 0.114 | 0.105 | 511.945 | 0.151 | 0.004 |
| 0.656 | 0.604 | 575.112 | 0.170 | 0.005 |
| 0.574 | 0.528 | 516.062 | 0.153 | 0.004 |
| 0.345 | 0.318 | 516.694 | 0.153 | 0.004 |
| 0.330 | 0.304 | 518.028 | 0.153 | 0.004 |
| 0.289 | 0.266 | 518.345 | 0.153 | 0.004 |
| 0.298 | 0.298 | 568.299 | 0.070 | 0.005 |
| 0.272 | 0.272 | 568.299 | 0.074 | 0.005 |
| 0.389 | 0.389 | 568.299 | 0.128 | 0.005 |
| 0.385 | 0.385 | 568.299 | 0.065 | 0.004 |
| 0.212 | 0.212 | 568.299 | 0.043 | 0.004 |
| 0.111 | 0.111 | 568.300 | 0.028 | 0.004 |
| 0.104 | 0.104 | 568.299 | 0.025 | 0.004 |
| 0.106 | 0.106 | 568.299 | 0.026 | 0.004 |
| 0.138 | 0.138 | 568.299 | 0.035 | 0.004 |
| 0.867 | 0.798 | 539.122 | 0.159 | 0.005 |
| 0.832 | 0.765 | 515.382 | 0.152 | 0.004 |
| 0.488 | 0.449 | 527.834 | 0.156 | 0.004 |
| 0.185 | 0.171 | 522.330 | 0.154 | 0.004 |
| 0.143 | 0.131 | 517.377 | 0.153 | 0.004 |
| 0.138 | 0.138 | 568.299 | 0.039 | 0.004 |
| 0.513 | 0.472 | 520.824 | 0.154 | 0.004 |
| 0.258 | 0.237 | 518.164 | 0.153 | 0.004 |
| 0.203 | 0.187 | 514.370 | 0.152 | 0.004 |
| 0.133 | 0.122 | 516.904 | 0.153 | 0.004 |
| 0.054 | 0.050 | 516.638 | 0.153 | 0.004 |
| 0.292 | 0.269 | 514.057 | 0.152 | 0.004 |
| 0.236 | 0.217 | 512.833 | 0.152 | 0.004 |

|                      |      |       |
|----------------------|------|-------|
| Dumpers/Tenders      | 25   | 0.696 |
| Excavators           | 25   | 0.833 |
| Excavators           | 50   | 0.833 |
| Excavators           | 120  | 0.507 |
| Excavators           | 175  | 0.384 |
| Excavators           | 250  | 0.289 |
| Excavators           | 500  | 0.232 |
| Excavators           | 750  | 0.242 |
| Forklifts            | 50   | 2.073 |
| Forklifts            | 120  | 0.768 |
| Forklifts            | 175  | 0.566 |
| Forklifts            | 250  | 0.565 |
| Forklifts            | 500  | 0.454 |
| Generator Sets       | 15   | 0.747 |
| Generator Sets       | 25   | 0.793 |
| Generator Sets       | 50   | 1.281 |
| Generator Sets       | 120  | 0.651 |
| Generator Sets       | 175  | 0.440 |
| Generator Sets       | 250  | 0.287 |
| Generator Sets       | 500  | 0.258 |
| Generator Sets       | 750  | 0.267 |
| Generator Sets       | 9999 | 0.351 |
| Graders              | 50   | 3.119 |
| Graders              | 120  | 1.239 |
| Graders              | 175  | 0.844 |
| Graders              | 250  | 0.396 |
| Graders              | 500  | 0.326 |
| Graders              | 750  | 0.414 |
| Off-Highway Tractors | 120  | 0.674 |
| Off-Highway Tractors | 175  | 0.402 |
| Off-Highway Tractors | 250  | 0.400 |
| Off-Highway Tractors | 750  | 0.262 |
| Off-Highway Tractors | 1000 | 0.096 |
| Off-Highway Trucks   | 175  | 0.508 |
| Off-Highway Trucks   | 250  | 0.473 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.180 | 0.165 | 521.057 | 0.154 | 0.004 |
| 0.231 | 0.212 | 521.230 | 0.154 | 0.004 |
| 0.187 | 0.172 | 516.939 | 0.153 | 0.004 |
| 0.502 | 0.462 | 578.959 | 0.171 | 0.005 |
| 0.502 | 0.462 | 578.959 | 0.171 | 0.005 |
| 0.502 | 0.462 | 578.959 | 0.171 | 0.005 |
| 0.518 | 0.476 | 515.285 | 0.152 | 0.004 |
| 0.333 | 0.307 | 514.552 | 0.152 | 0.004 |
| 0.168 | 0.155 | 520.944 | 0.154 | 0.004 |
| 0.544 | 0.500 | 575.871 | 0.170 | 0.005 |
| 0.544 | 0.500 | 575.871 | 0.170 | 0.005 |
| 0.544 | 0.500 | 575.871 | 0.170 | 0.005 |
| 0.574 | 0.528 | 514.389 | 0.152 | 0.004 |
| 0.312 | 0.287 | 516.414 | 0.153 | 0.004 |
| 0.255 | 0.234 | 517.916 | 0.153 | 0.004 |
| 0.172 | 0.159 | 517.595 | 0.153 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Off-Highway Trucks                 | 500  | 0.385 |
| Off-Highway Trucks                 | 750  | 0.452 |
| Off-Highway Trucks                 | 1000 | 0.411 |
| Other Construction Equipment       | 15   | 1.309 |
| Other Construction Equipment       | 25   | 1.309 |
| Other Construction Equipment       | 50   | 1.309 |
| Other Construction Equipment       | 120  | 0.723 |
| Other Construction Equipment       | 175  | 0.557 |
| Other Construction Equipment       | 500  | 0.324 |
| Other General Industrial Equipment | 15   | 1.495 |
| Other General Industrial Equipment | 25   | 1.495 |
| Other General Industrial Equipment | 50   | 1.495 |
| Other General Industrial Equipment | 120  | 0.761 |
| Other General Industrial Equipment | 175  | 0.495 |
| Other General Industrial Equipment | 250  | 0.452 |
| Other General Industrial Equipment | 500  | 0.353 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.115 | 0.106 | 518.180 | 0.153 | 0.004 |
| 0.167 | 0.153 | 516.638 | 0.153 | 0.004 |
| 0.575 | 0.529 | 573.170 | 0.169 | 0.005 |
| 0.412 | 0.379 | 518.316 | 0.153 | 0.004 |
| 0.313 | 0.288 | 516.818 | 0.153 | 0.004 |
| 0.242 | 0.223 | 516.011 | 0.153 | 0.004 |
| 0.169 | 0.155 | 514.714 | 0.152 | 0.004 |
| 0.067 | 0.061 | 516.638 | 0.153 | 0.004 |
| 0.595 | 0.547 | 577.016 | 0.171 | 0.005 |
| 0.595 | 0.547 | 577.016 | 0.171 | 0.005 |
| 0.483 | 0.444 | 514.377 | 0.152 | 0.004 |
| 0.287 | 0.264 | 516.745 | 0.153 | 0.004 |
| 0.105 | 0.097 | 518.723 | 0.153 | 0.004 |
| 0.101 | 0.093 | 512.191 | 0.151 | 0.004 |
| 0.437 | 0.402 | 569.482 | 0.168 | 0.005 |
| 0.437 | 0.402 | 569.482 | 0.168 | 0.005 |
| 0.486 | 0.447 | 518.076 | 0.153 | 0.004 |
| 0.249 | 0.229 | 515.034 | 0.152 | 0.004 |
| 0.158 | 0.146 | 516.900 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.298 | 0.298 | 568.299 | 0.070 | 0.005 |
| 0.272 | 0.272 | 568.299 | 0.074 | 0.005 |
| 0.332 | 0.332 | 568.299 | 0.098 | 0.005 |
| 0.332 | 0.332 | 568.299 | 0.057 | 0.004 |
| 0.206 | 0.206 | 568.299 | 0.042 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Other General Industrial Equipment | 750  | 0.251 |
| Other General Industrial Equipment | 1000 | 0.355 |
| Other Material Handling Equipment  | 50   | 1.733 |
| Other Material Handling Equipment  | 120  | 0.528 |
| Other Material Handling Equipment  | 175  | 0.525 |
| Other Material Handling Equipment  | 250  | 0.423 |
| Other Material Handling Equipment  | 500  | 0.333 |
| Other Material Handling Equipment  | 9999 | 0.148 |
| Pavers                             | 25   | 1.853 |
| Pavers                             | 50   | 1.853 |
| Pavers                             | 120  | 0.680 |
| Pavers                             | 175  | 0.489 |
| Pavers                             | 250  | 0.214 |
| Pavers                             | 500  | 0.176 |
| Paving Equipment                   | 25   | 0.981 |
| Paving Equipment                   | 50   | 0.981 |
| Paving Equipment                   | 120  | 0.661 |
| Paving Equipment                   | 175  | 0.411 |
| Paving Equipment                   | 250  | 0.315 |
| Plate Compactors                   | 15   | 0.661 |
| Pressure Washers                   | 15   | 0.747 |
| Pressure Washers                   | 25   | 0.793 |
| Pressure Washers                   | 50   | 0.976 |
| Pressure Washers                   | 120  | 0.567 |
| Pressure Washers                   | 175  | 0.427 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 0.341 | 0.341 | 568.299 | 0.080 | 0.005 |
| 0.291 | 0.291 | 568.299 | 0.086 | 0.005 |
| 0.409 | 0.409 | 568.299 | 0.138 | 0.005 |
| 0.403 | 0.403 | 568.299 | 0.067 | 0.004 |
| 0.222 | 0.222 | 568.299 | 0.045 | 0.004 |
| 0.115 | 0.115 | 568.299 | 0.029 | 0.004 |
| 0.108 | 0.108 | 568.299 | 0.026 | 0.004 |
| 0.110 | 0.110 | 568.299 | 0.027 | 0.004 |
| 0.141 | 0.141 | 568.299 | 0.036 | 0.004 |
| 0.484 | 0.445 | 575.795 | 0.170 | 0.005 |
| 0.484 | 0.445 | 575.795 | 0.170 | 0.005 |
| 0.484 | 0.445 | 575.795 | 0.170 | 0.005 |
| 0.476 | 0.438 | 518.787 | 0.153 | 0.004 |
| 0.219 | 0.202 | 516.591 | 0.153 | 0.004 |
| 0.191 | 0.176 | 517.811 | 0.153 | 0.004 |
| 0.202 | 0.185 | 522.052 | 0.154 | 0.004 |
| 0.436 | 0.401 | 575.353 | 0.170 | 0.005 |
| 0.261 | 0.240 | 517.260 | 0.153 | 0.004 |
| 0.140 | 0.128 | 516.091 | 0.153 | 0.004 |
| 0.087 | 0.080 | 517.766 | 0.153 | 0.004 |
| 0.076 | 0.070 | 511.657 | 0.151 | 0.004 |
| 0.563 | 0.518 | 518.335 | 0.153 | 0.004 |
| 0.393 | 0.361 | 520.011 | 0.154 | 0.004 |
| 0.376 | 0.346 | 524.676 | 0.155 | 0.004 |
| 0.258 | 0.237 | 517.790 | 0.153 | 0.004 |
| 0.236 | 0.236 | 568.300 | 0.062 | 0.004 |
| 0.676 | 0.622 | 573.522 | 0.170 | 0.005 |
| 0.676 | 0.622 | 573.522 | 0.170 | 0.005 |
| 0.619 | 0.569 | 510.010 | 0.151 | 0.004 |
| 0.350 | 0.322 | 515.769 | 0.152 | 0.004 |

|                         |      |       |
|-------------------------|------|-------|
| Pressure Washers        | 250  | 0.121 |
| Pumps                   | 15   | 0.840 |
| Pumps                   | 25   | 0.894 |
| Pumps                   | 50   | 1.384 |
| Pumps                   | 120  | 0.679 |
| Pumps                   | 175  | 0.461 |
| Pumps                   | 250  | 0.302 |
| Pumps                   | 500  | 0.273 |
| Pumps                   | 750  | 0.281 |
| Pumps                   | 9999 | 0.363 |
| Rollers                 | 15   | 1.311 |
| Rollers                 | 25   | 1.311 |
| Rollers                 | 50   | 1.311 |
| Rollers                 | 120  | 0.683 |
| Rollers                 | 175  | 0.364 |
| Rollers                 | 250  | 0.347 |
| Rollers                 | 500  | 0.371 |
| Rough Terrain Forklifts | 50   | 1.189 |
| Rough Terrain Forklifts | 120  | 0.338 |
| Rough Terrain Forklifts | 175  | 0.217 |
| Rough Terrain Forklifts | 250  | 0.140 |
| Rough Terrain Forklifts | 500  | 0.174 |
| Rubber Tired Dozers     | 175  | 0.965 |
| Rubber Tired Dozers     | 250  | 0.728 |
| Rubber Tired Dozers     | 500  | 0.708 |
| Rubber Tired Dozers     | 750  | 0.518 |
| Rubber Tired Dozers     | 1000 | 0.661 |
| Rubber Tired Loaders    | 25   | 2.108 |
| Rubber Tired Loaders    | 50   | 2.108 |
| Rubber Tired Loaders    | 120  | 0.856 |
| Rubber Tired Loaders    | 175  | 0.595 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.187 | 0.172 | 514.217 | 0.152 | 0.004 |
| 0.196 | 0.180 | 512.510 | 0.152 | 0.004 |
| 0.190 | 0.175 | 499.695 | 0.148 | 0.004 |
| 0.195 | 0.179 | 515.307 | 0.152 | 0.004 |
| 0.526 | 0.484 | 529.945 | 0.157 | 0.004 |
| 0.419 | 0.385 | 524.171 | 0.155 | 0.004 |
| 0.403 | 0.371 | 512.853 | 0.152 | 0.004 |
| 0.251 | 0.231 | 517.361 | 0.153 | 0.004 |
| 0.190 | 0.174 | 517.394 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.422 | 0.422 | 568.299 | 0.146 | 0.005 |
| 0.414 | 0.414 | 568.299 | 0.068 | 0.004 |
| 0.228 | 0.228 | 568.299 | 0.046 | 0.004 |
| 0.141 | 0.141 | 686.695 | 0.036 | 0.004 |
| 0.286 | 0.263 | 577.076 | 0.171 | 0.005 |
| 0.286 | 0.263 | 577.076 | 0.171 | 0.005 |
| 0.235 | 0.216 | 517.062 | 0.153 | 0.004 |
| 0.434 | 0.400 | 582.725 | 0.172 | 0.005 |
| 0.391 | 0.360 | 516.338 | 0.153 | 0.004 |
| 0.273 | 0.251 | 515.820 | 0.152 | 0.004 |
| 0.149 | 0.137 | 521.452 | 0.154 | 0.004 |
| 0.126 | 0.116 | 513.616 | 0.152 | 0.004 |
| 0.103 | 0.095 | 516.321 | 0.153 | 0.004 |
| 0.603 | 0.555 | 574.943 | 0.170 | 0.005 |
| 0.603 | 0.555 | 574.943 | 0.170 | 0.005 |
| 0.603 | 0.555 | 574.943 | 0.170 | 0.005 |
| 0.610 | 0.562 | 518.893 | 0.153 | 0.004 |
| 0.503 | 0.463 | 517.806 | 0.153 | 0.004 |
| 0.265 | 0.244 | 514.527 | 0.152 | 0.004 |
| 0.488 | 0.449 | 564.042 | 0.167 | 0.005 |

|                           |      |       |
|---------------------------|------|-------|
| Rubber Tired Loaders      | 250  | 0.406 |
| Rubber Tired Loaders      | 500  | 0.415 |
| Rubber Tired Loaders      | 750  | 0.395 |
| Rubber Tired Loaders      | 1000 | 0.420 |
| Scrapers                  | 120  | 0.731 |
| Scrapers                  | 175  | 0.714 |
| Scrapers                  | 250  | 0.730 |
| Scrapers                  | 500  | 0.472 |
| Scrapers                  | 750  | 0.360 |
| Signal Boards             | 15   | 0.661 |
| Signal Boards             | 50   | 1.461 |
| Signal Boards             | 120  | 0.687 |
| Signal Boards             | 175  | 0.474 |
| Signal Boards             | 250  | 0.380 |
| Skid Steer Loaders        | 25   | 0.639 |
| Skid Steer Loaders        | 50   | 0.639 |
| Skid Steer Loaders        | 120  | 0.294 |
| Surfacing Equipment       | 50   | 1.028 |
| Surfacing Equipment       | 120  | 0.548 |
| Surfacing Equipment       | 175  | 0.477 |
| Surfacing Equipment       | 250  | 0.310 |
| Surfacing Equipment       | 500  | 0.241 |
| Surfacing Equipment       | 750  | 0.178 |
| Sweepers/Scrubbers        | 15   | 1.808 |
| Sweepers/Scrubbers        | 25   | 1.808 |
| Sweepers/Scrubbers        | 50   | 1.808 |
| Sweepers/Scrubbers        | 120  | 0.833 |
| Sweepers/Scrubbers        | 175  | 0.839 |
| Sweepers/Scrubbers        | 250  | 0.513 |
| Tractors/Loaders/Backhoes | 25   | 1.307 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.488 | 0.449 | 564.042 | 0.167 | 0.005 |
| 0.438 | 0.403 | 523.017 | 0.155 | 0.004 |
| 0.248 | 0.229 | 513.890 | 0.152 | 0.004 |
| 0.159 | 0.146 | 515.175 | 0.152 | 0.004 |
| 0.152 | 0.140 | 517.124 | 0.153 | 0.004 |
| 0.154 | 0.141 | 511.337 | 0.151 | 0.004 |
| 0.501 | 0.461 | 577.728 | 0.171 | 0.005 |
| 0.501 | 0.461 | 577.728 | 0.171 | 0.005 |
| 0.501 | 0.461 | 577.728 | 0.171 | 0.005 |
| 0.563 | 0.518 | 520.766 | 0.154 | 0.004 |
| 0.395 | 0.364 | 512.148 | 0.151 | 0.004 |
| 0.258 | 0.237 | 517.719 | 0.153 | 0.004 |
| 0.161 | 0.148 | 513.744 | 0.152 | 0.004 |
| 0.061 | 0.056 | 519.658 | 0.154 | 0.004 |
| 0.341 | 0.341 | 568.300 | 0.080 | 0.005 |
| 0.291 | 0.291 | 568.299 | 0.086 | 0.005 |
| 0.473 | 0.473 | 568.300 | 0.171 | 0.005 |
| 0.464 | 0.464 | 568.299 | 0.076 | 0.004 |
| 0.255 | 0.255 | 568.299 | 0.052 | 0.004 |
| 0.128 | 0.128 | 568.299 | 0.034 | 0.004 |
| 0.119 | 0.119 | 568.299 | 0.031 | 0.004 |
| 0.292 | 0.269 | 514.057 | 0.152 | 0.004 |
| 0.236 | 0.217 | 512.833 | 0.152 | 0.004 |
| 0.180 | 0.165 | 521.057 | 0.154 | 0.004 |
| 0.231 | 0.212 | 521.230 | 0.154 | 0.004 |
| 0.187 | 0.172 | 516.939 | 0.153 | 0.004 |

|                           |      |       |
|---------------------------|------|-------|
| Tractors/Loaders/Backhoes | 50   | 1.307 |
| Tractors/Loaders/Backhoes | 120  | 0.569 |
| Tractors/Loaders/Backhoes | 175  | 0.421 |
| Tractors/Loaders/Backhoes | 250  | 0.326 |
| Tractors/Loaders/Backhoes | 500  | 0.312 |
| Tractors/Loaders/Backhoes | 750  | 0.308 |
| Trenchers                 | 15   | 1.259 |
| Trenchers                 | 25   | 1.259 |
| Trenchers                 | 50   | 1.259 |
| Trenchers                 | 120  | 0.817 |
| Trenchers                 | 175  | 0.697 |
| Trenchers                 | 250  | 0.502 |
| Trenchers                 | 500  | 0.311 |
| Trenchers                 | 750  | 0.114 |
| Welders                   | 15   | 0.840 |
| Welders                   | 25   | 0.894 |
| Welders                   | 50   | 1.715 |
| Welders                   | 120  | 0.772 |
| Welders                   | 175  | 0.532 |
| Welders                   | 250  | 0.352 |
| Welders                   | 500  | 0.324 |
| Water Trucks              | 175  | 0.508 |
| Water Trucks              | 250  | 0.473 |
| Water Trucks              | 500  | 0.385 |
| Water Trucks              | 750  | 0.452 |
| Water Trucks              | 1000 | 0.411 |

2016

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|
| CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 3.233   | 3.933   | 0.005   | 0.136   | 0.125   | 568.831 | 0.170   | 0.005   |
| 3.233   | 3.933   | 0.005   | 0.136   | 0.125   | 568.831 | 0.170   | 0.005   |
| 3.233   | 3.933   | 0.005   | 0.136   | 0.125   | 568.831 | 0.170   | 0.005   |
| 3.218   | 3.113   | 0.005   | 0.143   | 0.132   | 511.457 | 0.153   | 0.004   |
| 0.988   | 4.621   | 0.005   | 0.102   | 0.094   | 511.392 | 0.153   | 0.004   |
| 1.130   | 3.380   | 0.005   | 0.098   | 0.098   | 568.299 | 0.025   | 0.004   |
| 3.658   | 5.196   | 0.008   | 0.311   | 0.311   | 568.299 | 0.075   | 0.005   |
| 2.666   | 4.890   | 0.007   | 0.270   | 0.270   | 568.299 | 0.080   | 0.005   |
| 5.968   | 5.223   | 0.007   | 0.459   | 0.459   | 568.299 | 0.168   | 0.005   |
| 3.840   | 5.190   | 0.006   | 0.446   | 0.446   | 568.299 | 0.074   | 0.004   |
| 3.218   | 4.504   | 0.006   | 0.245   | 0.245   | 568.299 | 0.051   | 0.004   |
| 1.207   | 3.967   | 0.006   | 0.121   | 0.121   | 568.299 | 0.034   | 0.004   |
| 1.198   | 3.455   | 0.005   | 0.113   | 0.113   | 568.300 | 0.032   | 0.004   |
| 1.198   | 3.586   | 0.005   | 0.116   | 0.116   | 568.299 | 0.032   | 0.004   |
| 1.370   | 5.157   | 0.005   | 0.142   | 0.142   | 568.299 | 0.036   | 0.004   |
| 4.735   | 5.303   | 0.006   | 0.379   | 0.349   | 585.171 | 0.175   | 0.005   |
| 4.735   | 5.303   | 0.006   | 0.379   | 0.349   | 585.171 | 0.175   | 0.005   |
| 4.735   | 5.303   | 0.006   | 0.379   | 0.349   | 585.171 | 0.175   | 0.005   |
| 3.335   | 4.028   | 0.005   | 0.239   | 0.220   | 496.949 | 0.148   | 0.004   |
| 3.035   | 3.904   | 0.005   | 0.176   | 0.162   | 517.207 | 0.154   | 0.004   |
| 1.178   | 3.325   | 0.005   | 0.100   | 0.092   | 506.505 | 0.151   | 0.004   |
| 1.256   | 3.003   | 0.005   | 0.096   | 0.088   | 499.902 | 0.149   | 0.004   |
| 1.105   | 2.376   | 0.005   | 0.081   | 0.074   | 520.473 | 0.155   | 0.004   |
| 0.956   | 2.994   | 0.005   | 0.059   | 0.054   | 511.253 | 0.153   | 0.004   |

|       |        |       |       |       |         |       |       |
|-------|--------|-------|-------|-------|---------|-------|-------|
| 3.469 | 4.168  | 0.008 | 0.171 | 0.171 | 568.300 | 0.059 | 0.005 |
| 2.531 | 4.712  | 0.007 | 0.240 | 0.240 | 568.299 | 0.073 | 0.005 |
| 2.339 | 4.332  | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 5.165 | 4.989  | 0.007 | 0.386 | 0.386 | 568.299 | 0.132 | 0.005 |
| 3.647 | 4.789  | 0.006 | 0.372 | 0.372 | 568.300 | 0.061 | 0.004 |
| 3.077 | 4.112  | 0.006 | 0.207 | 0.207 | 568.299 | 0.042 | 0.004 |
| 7.125 | 6.075  | 0.005 | 0.601 | 0.553 | 561.224 | 0.168 | 0.005 |
| 4.884 | 10.060 | 0.005 | 0.747 | 0.687 | 508.837 | 0.152 | 0.004 |
| 3.918 | 8.325  | 0.005 | 0.450 | 0.414 | 514.260 | 0.154 | 0.004 |
| 2.653 | 7.622  | 0.005 | 0.348 | 0.320 | 512.448 | 0.153 | 0.004 |
| 4.110 | 6.124  | 0.005 | 0.253 | 0.233 | 511.197 | 0.153 | 0.004 |
| 1.643 | 4.312  | 0.005 | 0.152 | 0.140 | 510.334 | 0.152 | 0.004 |
| 0.957 | 2.295  | 0.005 | 0.055 | 0.051 | 511.392 | 0.153 | 0.004 |
| 8.076 | 6.377  | 0.005 | 0.741 | 0.682 | 558.888 | 0.167 | 0.005 |
| 4.189 | 7.494  | 0.005 | 0.630 | 0.580 | 516.843 | 0.154 | 0.004 |
| 3.479 | 6.849  | 0.005 | 0.376 | 0.346 | 511.306 | 0.153 | 0.004 |
| 1.816 | 6.143  | 0.005 | 0.237 | 0.218 | 512.897 | 0.153 | 0.004 |
| 2.845 | 5.483  | 0.005 | 0.212 | 0.195 | 515.373 | 0.154 | 0.004 |
| 1.664 | 4.883  | 0.005 | 0.179 | 0.165 | 512.540 | 0.153 | 0.004 |
| 2.088 | 7.463  | 0.005 | 0.220 | 0.202 | 514.830 | 0.154 | 0.004 |
| 5.996 | 5.195  | 0.007 | 0.446 | 0.446 | 568.299 | 0.162 | 0.005 |
| 3.859 | 5.040  | 0.006 | 0.430 | 0.430 | 568.299 | 0.071 | 0.004 |
| 3.247 | 4.343  | 0.006 | 0.237 | 0.237 | 568.299 | 0.050 | 0.004 |
| 1.201 | 3.801  | 0.006 | 0.117 | 0.117 | 568.299 | 0.034 | 0.004 |
| 1.184 | 3.304  | 0.005 | 0.109 | 0.109 | 568.299 | 0.032 | 0.004 |
| 1.176 | 3.422  | 0.005 | 0.111 | 0.111 | 568.299 | 0.032 | 0.004 |
| 1.343 | 5.019  | 0.005 | 0.140 | 0.140 | 568.299 | 0.038 | 0.004 |



|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.350 | 4.402 | 0.007 | 0.187 | 0.187 | 568.299 | 0.062 | 0.005 |
| 4.925 | 4.918 | 0.005 | 0.375 | 0.345 | 569.512 | 0.170 | 0.005 |
| 4.925 | 4.918 | 0.005 | 0.375 | 0.345 | 569.512 | 0.170 | 0.005 |
| 3.679 | 5.019 | 0.005 | 0.374 | 0.344 | 506.173 | 0.151 | 0.004 |
| 3.168 | 4.481 | 0.005 | 0.221 | 0.204 | 511.687 | 0.153 | 0.004 |
| 1.331 | 4.182 | 0.005 | 0.133 | 0.122 | 512.056 | 0.153 | 0.004 |
| 1.317 | 3.214 | 0.005 | 0.104 | 0.096 | 509.868 | 0.152 | 0.004 |
| 1.354 | 3.473 | 0.005 | 0.113 | 0.104 | 506.682 | 0.151 | 0.004 |
| 7.300 | 5.931 | 0.005 | 0.643 | 0.591 | 569.274 | 0.170 | 0.005 |
| 4.063 | 6.601 | 0.005 | 0.555 | 0.510 | 510.823 | 0.153 | 0.004 |
| 3.520 | 6.135 | 0.005 | 0.335 | 0.308 | 511.448 | 0.153 | 0.004 |
| 2.325 | 6.697 | 0.005 | 0.298 | 0.274 | 512.769 | 0.153 | 0.004 |
| 3.300 | 5.332 | 0.005 | 0.237 | 0.218 | 513.083 | 0.153 | 0.004 |
| 3.658 | 5.141 | 0.008 | 0.280 | 0.280 | 568.299 | 0.067 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.256 | 0.256 | 568.299 | 0.071 | 0.005 |
| 4.538 | 4.858 | 0.007 | 0.353 | 0.353 | 568.299 | 0.115 | 0.005 |
| 3.499 | 4.769 | 0.006 | 0.347 | 0.347 | 568.299 | 0.058 | 0.004 |
| 2.938 | 4.138 | 0.006 | 0.191 | 0.191 | 568.299 | 0.039 | 0.004 |
| 1.104 | 3.633 | 0.006 | 0.100 | 0.100 | 568.300 | 0.025 | 0.004 |
| 1.114 | 3.231 | 0.005 | 0.094 | 0.094 | 568.299 | 0.023 | 0.004 |
| 1.114 | 3.347 | 0.005 | 0.096 | 0.096 | 568.299 | 0.024 | 0.004 |
| 1.269 | 4.822 | 0.005 | 0.124 | 0.124 | 568.299 | 0.031 | 0.004 |
| 9.144 | 6.570 | 0.005 | 0.874 | 0.804 | 533.681 | 0.159 | 0.005 |
| 4.884 | 9.738 | 0.005 | 0.813 | 0.748 | 509.597 | 0.152 | 0.004 |
| 3.958 | 8.637 | 0.005 | 0.486 | 0.447 | 522.218 | 0.156 | 0.004 |
| 1.466 | 5.728 | 0.005 | 0.186 | 0.171 | 517.128 | 0.154 | 0.004 |
| 1.791 | 3.721 | 0.005 | 0.144 | 0.133 | 512.098 | 0.153 | 0.004 |
| 1.420 | 3.501 | 0.005 | 0.124 | 0.124 | 568.299 | 0.037 | 0.004 |
| 3.965 | 6.067 | 0.005 | 0.494 | 0.455 | 515.320 | 0.154 | 0.004 |
| 3.264 | 4.724 | 0.005 | 0.239 | 0.220 | 512.608 | 0.153 | 0.004 |
| 1.605 | 5.528 | 0.005 | 0.199 | 0.183 | 509.190 | 0.152 | 0.004 |
| 1.172 | 3.874 | 0.005 | 0.126 | 0.116 | 511.081 | 0.153 | 0.004 |
| 0.960 | 2.300 | 0.005 | 0.056 | 0.051 | 511.392 | 0.153 | 0.004 |
| 3.489 | 5.104 | 0.005 | 0.284 | 0.262 | 508.701 | 0.152 | 0.004 |
| 1.900 | 5.242 | 0.005 | 0.227 | 0.209 | 507.809 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.037 | 4.528 | 0.005 | 0.173 | 0.159 | 515.842 | 0.154 | 0.004 |
| 2.620 | 5.124 | 0.005 | 0.209 | 0.192 | 514.644 | 0.154 | 0.004 |
| 1.772 | 6.280 | 0.005 | 0.185 | 0.170 | 511.137 | 0.153 | 0.004 |
| 5.681 | 5.564 | 0.005 | 0.503 | 0.463 | 573.020 | 0.171 | 0.005 |
| 5.681 | 5.564 | 0.005 | 0.503 | 0.463 | 573.020 | 0.171 | 0.005 |
| 5.681 | 5.564 | 0.005 | 0.503 | 0.463 | 573.020 | 0.171 | 0.005 |
| 3.916 | 6.536 | 0.005 | 0.512 | 0.471 | 510.171 | 0.152 | 0.004 |
| 3.382 | 6.231 | 0.005 | 0.326 | 0.300 | 509.307 | 0.152 | 0.004 |
| 2.407 | 4.415 | 0.005 | 0.163 | 0.150 | 515.195 | 0.154 | 0.004 |
| 6.325 | 5.524 | 0.005 | 0.532 | 0.490 | 570.024 | 0.170 | 0.005 |
| 6.325 | 5.524 | 0.005 | 0.532 | 0.490 | 570.024 | 0.170 | 0.005 |
| 6.325 | 5.524 | 0.005 | 0.532 | 0.490 | 570.024 | 0.170 | 0.005 |
| 4.081 | 6.502 | 0.005 | 0.553 | 0.509 | 509.166 | 0.152 | 0.004 |
| 3.454 | 5.397 | 0.005 | 0.294 | 0.270 | 511.171 | 0.153 | 0.004 |
| 1.926 | 5.643 | 0.005 | 0.230 | 0.211 | 512.658 | 0.153 | 0.004 |
| 2.436 | 4.425 | 0.005 | 0.167 | 0.154 | 512.340 | 0.153 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.491 | 3.365 | 0.005 | 0.109 | 0.100 | 512.919 | 0.153 | 0.004 |
| 1.094 | 6.448 | 0.005 | 0.171 | 0.158 | 511.392 | 0.153 | 0.004 |
| 6.756 | 5.799 | 0.005 | 0.586 | 0.539 | 567.351 | 0.169 | 0.005 |
| 3.758 | 4.983 | 0.005 | 0.383 | 0.352 | 513.054 | 0.153 | 0.004 |
| 3.433 | 5.645 | 0.005 | 0.306 | 0.282 | 511.571 | 0.153 | 0.004 |
| 1.742 | 5.532 | 0.005 | 0.207 | 0.191 | 510.772 | 0.153 | 0.004 |
| 1.918 | 4.272 | 0.005 | 0.166 | 0.152 | 509.489 | 0.152 | 0.004 |
| 0.984 | 3.458 | 0.005 | 0.068 | 0.063 | 511.392 | 0.153 | 0.004 |
| 6.340 | 5.637 | 0.005 | 0.579 | 0.533 | 571.086 | 0.171 | 0.005 |
| 6.340 | 5.637 | 0.005 | 0.579 | 0.533 | 571.086 | 0.171 | 0.005 |
| 3.788 | 6.141 | 0.005 | 0.479 | 0.441 | 509.377 | 0.152 | 0.004 |
| 3.115 | 5.537 | 0.005 | 0.277 | 0.255 | 511.646 | 0.153 | 0.004 |
| 1.031 | 4.161 | 0.005 | 0.107 | 0.098 | 513.468 | 0.153 | 0.004 |
| 0.978 | 2.917 | 0.005 | 0.097 | 0.089 | 506.097 | 0.151 | 0.004 |
| 4.869 | 5.028 | 0.005 | 0.407 | 0.374 | 563.553 | 0.168 | 0.005 |
| 4.869 | 5.028 | 0.005 | 0.407 | 0.374 | 563.553 | 0.168 | 0.005 |
| 3.833 | 6.145 | 0.005 | 0.471 | 0.433 | 513.167 | 0.153 | 0.004 |
| 3.104 | 4.966 | 0.005 | 0.242 | 0.223 | 509.894 | 0.152 | 0.004 |
| 1.379 | 4.772 | 0.005 | 0.159 | 0.146 | 511.654 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.657 | 5.141 | 0.008 | 0.280 | 0.280 | 568.299 | 0.067 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.256 | 0.256 | 568.299 | 0.071 | 0.005 |
| 3.833 | 4.685 | 0.007 | 0.300 | 0.300 | 568.299 | 0.088 | 0.005 |
| 3.336 | 4.551 | 0.006 | 0.297 | 0.297 | 568.299 | 0.051 | 0.004 |
| 2.917 | 4.115 | 0.006 | 0.187 | 0.187 | 568.299 | 0.038 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.986 | 0.690 | 0.006 | 0.010 | 0.010 | 568.299 | 0.010 | 0.004 |
| 3.658 | 5.196 | 0.008 | 0.311 | 0.311 | 568.299 | 0.075 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.270 | 0.270 | 568.299 | 0.080 | 0.005 |
| 4.775 | 4.916 | 0.007 | 0.371 | 0.371 | 568.300 | 0.124 | 0.005 |
| 3.554 | 4.842 | 0.006 | 0.364 | 0.364 | 568.300 | 0.061 | 0.004 |
| 2.983 | 4.202 | 0.006 | 0.200 | 0.200 | 568.299 | 0.041 | 0.004 |
| 1.122 | 3.693 | 0.006 | 0.104 | 0.104 | 568.299 | 0.027 | 0.004 |
| 1.134 | 3.272 | 0.005 | 0.097 | 0.097 | 568.299 | 0.024 | 0.004 |
| 1.134 | 3.389 | 0.005 | 0.099 | 0.099 | 568.299 | 0.025 | 0.004 |
| 1.293 | 4.878 | 0.005 | 0.127 | 0.127 | 568.299 | 0.032 | 0.004 |
| 5.290 | 5.365 | 0.005 | 0.481 | 0.443 | 569.921 | 0.170 | 0.005 |
| 5.290 | 5.365 | 0.005 | 0.481 | 0.443 | 569.921 | 0.170 | 0.005 |
| 5.290 | 5.365 | 0.005 | 0.481 | 0.443 | 569.921 | 0.170 | 0.005 |
| 3.809 | 6.272 | 0.005 | 0.467 | 0.430 | 513.505 | 0.153 | 0.004 |
| 3.006 | 4.630 | 0.005 | 0.216 | 0.198 | 511.394 | 0.153 | 0.004 |
| 1.650 | 4.932 | 0.005 | 0.171 | 0.157 | 512.823 | 0.153 | 0.004 |
| 3.245 | 5.031 | 0.005 | 0.195 | 0.179 | 517.285 | 0.154 | 0.004 |
| 4.933 | 5.190 | 0.005 | 0.431 | 0.397 | 569.488 | 0.170 | 0.005 |
| 3.366 | 4.280 | 0.005 | 0.247 | 0.228 | 512.086 | 0.153 | 0.004 |
| 2.859 | 3.420 | 0.005 | 0.133 | 0.122 | 510.854 | 0.153 | 0.004 |
| 1.012 | 2.463 | 0.005 | 0.058 | 0.054 | 512.164 | 0.153 | 0.004 |
| 0.958 | 3.521 | 0.005 | 0.077 | 0.071 | 506.435 | 0.151 | 0.004 |
| 4.238 | 9.844 | 0.005 | 0.564 | 0.519 | 513.055 | 0.153 | 0.004 |
| 2.720 | 7.984 | 0.005 | 0.394 | 0.362 | 514.736 | 0.154 | 0.004 |
| 6.102 | 7.997 | 0.005 | 0.373 | 0.343 | 519.147 | 0.155 | 0.004 |
| 2.761 | 7.158 | 0.005 | 0.259 | 0.238 | 512.525 | 0.153 | 0.004 |
| 2.901 | 6.556 | 0.005 | 0.222 | 0.222 | 568.299 | 0.059 | 0.004 |
| 7.834 | 6.112 | 0.005 | 0.675 | 0.621 | 567.672 | 0.170 | 0.005 |
| 7.834 | 6.112 | 0.005 | 0.675 | 0.621 | 567.672 | 0.170 | 0.005 |
| 4.274 | 7.012 | 0.005 | 0.606 | 0.558 | 505.023 | 0.151 | 0.004 |
| 3.588 | 6.097 | 0.005 | 0.341 | 0.313 | 510.468 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.480 | 5.369 | 0.005 | 0.183 | 0.169 | 508.913 | 0.152 | 0.004 |
| 2.332 | 5.020 | 0.005 | 0.190 | 0.174 | 506.372 | 0.151 | 0.004 |
| 1.789 | 4.556 | 0.005 | 0.179 | 0.165 | 495.310 | 0.148 | 0.004 |
| 1.462 | 6.713 | 0.005 | 0.197 | 0.181 | 510.045 | 0.152 | 0.004 |
| 4.137 | 7.105 | 0.005 | 0.535 | 0.492 | 524.560 | 0.157 | 0.004 |
| 3.809 | 7.765 | 0.005 | 0.415 | 0.382 | 518.829 | 0.155 | 0.004 |
| 3.008 | 8.663 | 0.005 | 0.395 | 0.364 | 507.570 | 0.152 | 0.004 |
| 3.788 | 6.086 | 0.005 | 0.246 | 0.226 | 511.947 | 0.153 | 0.004 |
| 2.685 | 4.839 | 0.005 | 0.182 | 0.167 | 512.084 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 5.068 | 4.943 | 0.007 | 0.382 | 0.382 | 568.299 | 0.131 | 0.005 |
| 3.624 | 4.791 | 0.006 | 0.371 | 0.371 | 568.299 | 0.062 | 0.004 |
| 3.052 | 4.136 | 0.006 | 0.205 | 0.205 | 568.299 | 0.042 | 0.004 |
| 1.371 | 4.365 | 0.007 | 0.127 | 0.127 | 686.695 | 0.034 | 0.004 |
| 4.004 | 4.436 | 0.005 | 0.267 | 0.246 | 571.420 | 0.171 | 0.005 |
| 4.004 | 4.436 | 0.005 | 0.267 | 0.246 | 571.420 | 0.171 | 0.005 |
| 3.338 | 3.811 | 0.005 | 0.220 | 0.203 | 511.595 | 0.153 | 0.004 |
| 4.692 | 5.255 | 0.006 | 0.402 | 0.370 | 576.771 | 0.172 | 0.005 |
| 3.575 | 5.374 | 0.005 | 0.378 | 0.348 | 510.142 | 0.152 | 0.004 |
| 3.027 | 5.733 | 0.005 | 0.276 | 0.254 | 510.548 | 0.152 | 0.004 |
| 1.442 | 5.112 | 0.005 | 0.151 | 0.139 | 516.058 | 0.154 | 0.004 |
| 1.513 | 3.900 | 0.005 | 0.127 | 0.116 | 508.399 | 0.152 | 0.004 |
| 1.024 | 3.287 | 0.005 | 0.104 | 0.096 | 511.116 | 0.153 | 0.004 |
| 6.754 | 5.772 | 0.005 | 0.611 | 0.562 | 569.106 | 0.170 | 0.005 |
| 6.754 | 5.772 | 0.005 | 0.611 | 0.562 | 569.106 | 0.170 | 0.005 |
| 6.754 | 5.772 | 0.005 | 0.611 | 0.562 | 569.106 | 0.170 | 0.005 |
| 4.097 | 6.886 | 0.005 | 0.610 | 0.561 | 513.625 | 0.153 | 0.004 |
| 3.982 | 8.697 | 0.005 | 0.479 | 0.441 | 512.549 | 0.153 | 0.004 |
| 2.078 | 6.745 | 0.005 | 0.268 | 0.246 | 509.304 | 0.152 | 0.004 |
| 5.791 | 5.320 | 0.005 | 0.477 | 0.439 | 558.709 | 0.167 | 0.005 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 5.791 | 5.320 | 0.005 | 0.477 | 0.439 | 558.709 | 0.167 | 0.005 |
| 3.832 | 5.422 | 0.005 | 0.424 | 0.390 | 517.365 | 0.155 | 0.004 |
| 3.256 | 4.836 | 0.005 | 0.244 | 0.225 | 508.682 | 0.152 | 0.004 |
| 1.374 | 4.783 | 0.005 | 0.155 | 0.143 | 509.627 | 0.152 | 0.004 |
| 1.884 | 4.348 | 0.005 | 0.149 | 0.137 | 511.869 | 0.153 | 0.004 |
| 1.823 | 4.185 | 0.005 | 0.152 | 0.140 | 506.147 | 0.151 | 0.004 |
| 5.323 | 5.406 | 0.005 | 0.493 | 0.454 | 571.667 | 0.171 | 0.005 |
| 5.323 | 5.406 | 0.005 | 0.493 | 0.454 | 571.667 | 0.171 | 0.005 |
| 5.323 | 5.406 | 0.005 | 0.493 | 0.454 | 571.667 | 0.171 | 0.005 |
| 4.014 | 7.179 | 0.005 | 0.562 | 0.517 | 515.396 | 0.154 | 0.004 |
| 3.684 | 7.674 | 0.005 | 0.396 | 0.364 | 506.943 | 0.151 | 0.004 |
| 2.080 | 6.510 | 0.005 | 0.260 | 0.239 | 512.433 | 0.153 | 0.004 |
| 2.051 | 4.383 | 0.005 | 0.163 | 0.150 | 508.330 | 0.152 | 0.004 |
| 0.965 | 1.623 | 0.005 | 0.053 | 0.049 | 514.400 | 0.154 | 0.004 |
| 3.658 | 5.196 | 0.008 | 0.311 | 0.311 | 568.299 | 0.075 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.270 | 0.270 | 568.299 | 0.080 | 0.005 |
| 5.562 | 5.113 | 0.007 | 0.430 | 0.430 | 568.300 | 0.154 | 0.005 |
| 3.738 | 5.077 | 0.006 | 0.419 | 0.419 | 568.299 | 0.069 | 0.004 |
| 3.133 | 4.408 | 0.006 | 0.230 | 0.230 | 568.299 | 0.048 | 0.004 |
| 1.178 | 3.880 | 0.006 | 0.116 | 0.116 | 568.299 | 0.031 | 0.004 |
| 1.176 | 3.398 | 0.005 | 0.108 | 0.108 | 568.299 | 0.029 | 0.004 |
| 3.489 | 5.104 | 0.005 | 0.284 | 0.262 | 508.701 | 0.152 | 0.004 |
| 1.900 | 5.242 | 0.005 | 0.227 | 0.209 | 507.809 | 0.152 | 0.004 |
| 2.037 | 4.528 | 0.005 | 0.173 | 0.159 | 515.842 | 0.154 | 0.004 |
| 2.620 | 5.124 | 0.005 | 0.209 | 0.192 | 514.644 | 0.154 | 0.004 |
| 1.772 | 6.280 | 0.005 | 0.185 | 0.170 | 511.137 | 0.153 | 0.004 |

| 2016             |              | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|--------------|---------|---------|---------|---------|---------|---------|---------|
| <b>Equipment</b> | <b>MaxHP</b> | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     |
| Aerial Lifts     | 15           | 0.228   | 3.197   | 3.676   | 0.005   | 0.105   | 0.096   | 562.996 |
| Aerial Lifts     | 25           | 0.228   | 3.197   | 3.676   | 0.005   | 0.105   | 0.096   | 562.996 |
| Aerial Lifts     | 50           | 0.228   | 3.197   | 3.676   | 0.005   | 0.105   | 0.096   | 562.996 |
| Aerial Lifts     | 120          | 0.166   | 3.201   | 2.722   | 0.005   | 0.112   | 0.103   | 506.211 |
| Aerial Lifts     | 500          | 0.243   | 0.992   | 4.639   | 0.005   | 0.103   | 0.095   | 506.147 |
| Aerial Lifts     | 750          | 0.257   | 1.089   | 3.015   | 0.005   | 0.088   | 0.088   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 15           | 0.809   | 3.622   | 5.023   | 0.008   | 0.289   | 0.289   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 25           | 0.855   | 2.604   | 4.803   | 0.007   | 0.255   | 0.255   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 50           | 1.670   | 5.779   | 5.042   | 0.007   | 0.415   | 0.415   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 120          | 0.744   | 3.804   | 4.790   | 0.006   | 0.397   | 0.397   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 175          | 0.522   | 3.211   | 4.052   | 0.006   | 0.219   | 0.219   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 250          | 0.359   | 1.182   | 3.553   | 0.006   | 0.109   | 0.109   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 500          | 0.337   | 1.155   | 3.080   | 0.005   | 0.102   | 0.102   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 750          | 0.340   | 1.155   | 3.201   | 0.005   | 0.104   | 0.104   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 1000         | 0.383   | 1.295   | 4.854   | 0.005   | 0.131   | 0.131   | 568.299 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 15           | 0.869   | 4.797   | 5.298   | 0.006   | 0.383   | 0.352   | 579.326 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 25           | 0.869   | 4.797   | 5.298   | 0.006   | 0.383   | 0.352   | 579.326 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 50           | 0.869   | 4.797   | 5.298   | 0.006   | 0.383   | 0.352   | 579.326 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 120          | 0.307   | 3.326   | 3.821   | 0.005   | 0.221   | 0.204   | 491.655 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 175          | 0.286   | 3.023   | 3.616   | 0.005   | 0.162   | 0.149   | 511.433 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 250          | 0.193   | 1.133   | 2.902   | 0.005   | 0.085   | 0.078   | 502.128 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 500          | 0.171   | 1.133   | 2.510   | 0.005   | 0.077   | 0.071   | 494.761 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 750          | 0.153   | 1.120   | 2.166   | 0.005   | 0.072   | 0.066   | 514.883 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 1000         | 0.115   | 0.964   | 3.008   | 0.005   | 0.059   | 0.055   | 506.000 |

|                          |      |       |       |       |       |       |       |         |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Cement and Mortar Mixers | 15   | 0.662 | 3.469 | 4.153 | 0.008 | 0.167 | 0.167 | 568.300 |
| Cement and Mortar Mixers | 25   | 0.788 | 2.496 | 4.636 | 0.007 | 0.227 | 0.227 | 568.299 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 50   | 1.322 | 5.029 | 4.818 | 0.007 | 0.350 | 0.350 | 568.300 |
| Concrete/Industrial Saws | 120  | 0.620 | 3.620 | 4.432 | 0.006 | 0.333 | 0.333 | 568.300 |
| Concrete/Industrial Saws | 175  | 0.435 | 3.074 | 3.708 | 0.006 | 0.186 | 0.186 | 568.299 |
| Cranes                   | 50   | 2.130 | 7.268 | 6.110 | 0.005 | 0.610 | 0.561 | 555.441 |
| Cranes                   | 120  | 1.154 | 4.797 | 9.608 | 0.005 | 0.710 | 0.653 | 503.599 |
| Cranes                   | 175  | 0.744 | 3.862 | 7.887 | 0.005 | 0.427 | 0.393 | 508.952 |
| Cranes                   | 250  | 0.623 | 2.582 | 7.381 | 0.005 | 0.335 | 0.308 | 507.155 |
| Cranes                   | 500  | 0.443 | 3.834 | 5.649 | 0.005 | 0.233 | 0.215 | 506.088 |
| Cranes                   | 750  | 0.292 | 1.650 | 4.314 | 0.005 | 0.153 | 0.141 | 505.070 |
| Cranes                   | 9999 | 0.142 | 0.966 | 2.309 | 0.005 | 0.057 | 0.052 | 506.147 |
| Crawler Tractors         | 50   | 2.519 | 8.104 | 6.317 | 0.005 | 0.733 | 0.674 | 553.214 |
| Crawler Tractors         | 120  | 0.869 | 4.185 | 7.346 | 0.005 | 0.619 | 0.570 | 511.268 |
| Crawler Tractors         | 175  | 0.624 | 3.482 | 6.721 | 0.005 | 0.371 | 0.341 | 506.034 |
| Crawler Tractors         | 250  | 0.449 | 1.803 | 6.047 | 0.005 | 0.233 | 0.215 | 507.355 |
| Crawler Tractors         | 500  | 0.398 | 2.744 | 5.279 | 0.005 | 0.205 | 0.188 | 510.339 |
| Crawler Tractors         | 750  | 0.346 | 1.621 | 4.724 | 0.005 | 0.174 | 0.160 | 507.253 |
| Crawler Tractors         | 1000 | 0.483 | 2.094 | 7.499 | 0.005 | 0.222 | 0.204 | 509.667 |
| Crushing/Proc. Equipment | 50   | 1.593 | 5.801 | 5.006 | 0.007 | 0.399 | 0.399 | 568.299 |
| Crushing/Proc. Equipment | 120  | 0.720 | 3.823 | 4.631 | 0.006 | 0.379 | 0.379 | 568.299 |
| Crushing/Proc. Equipment | 175  | 0.513 | 3.241 | 3.883 | 0.006 | 0.210 | 0.210 | 568.299 |
| Crushing/Proc. Equipment | 250  | 0.360 | 1.178 | 3.381 | 0.006 | 0.105 | 0.105 | 568.299 |
| Crushing/Proc. Equipment | 500  | 0.340 | 1.146 | 2.928 | 0.005 | 0.098 | 0.098 | 568.299 |
| Crushing/Proc. Equipment | 750  | 0.339 | 1.140 | 3.021 | 0.005 | 0.099 | 0.099 | 568.299 |
| Crushing/Proc. Equipment | 9999 | 0.397 | 1.274 | 4.700 | 0.005 | 0.127 | 0.127 | 568.299 |



|                      |      |       |       |       |       |       |       |         |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Dumpers/Tenders      | 25   | 0.690 | 2.342 | 4.378 | 0.007 | 0.175 | 0.175 | 568.299 |
| Excavators           | 25   | 0.815 | 4.942 | 4.824 | 0.005 | 0.359 | 0.330 | 563.803 |
| Excavators           | 50   | 0.815 | 4.942 | 4.824 | 0.005 | 0.359 | 0.330 | 563.803 |
| Excavators           | 120  | 0.476 | 3.661 | 4.708 | 0.005 | 0.344 | 0.317 | 500.966 |
| Excavators           | 175  | 0.358 | 3.158 | 4.081 | 0.005 | 0.201 | 0.185 | 506.495 |
| Excavators           | 250  | 0.262 | 1.277 | 3.667 | 0.005 | 0.116 | 0.107 | 506.544 |
| Excavators           | 500  | 0.213 | 1.233 | 2.815 | 0.005 | 0.091 | 0.083 | 504.290 |
| Excavators           | 750  | 0.242 | 1.349 | 3.358 | 0.005 | 0.110 | 0.101 | 501.660 |
| Forklifts            | 50   | 1.864 | 6.935 | 5.662 | 0.005 | 0.583 | 0.537 | 563.435 |
| Forklifts            | 120  | 0.723 | 4.023 | 6.222 | 0.005 | 0.520 | 0.479 | 505.583 |
| Forklifts            | 175  | 0.530 | 3.473 | 5.675 | 0.005 | 0.310 | 0.285 | 506.203 |
| Forklifts            | 250  | 0.539 | 2.226 | 6.353 | 0.005 | 0.280 | 0.258 | 507.510 |
| Forklifts            | 500  | 0.353 | 2.572 | 4.042 | 0.005 | 0.174 | 0.160 | 507.821 |
| Generator Sets       | 15   | 0.720 | 3.622 | 4.978 | 0.008 | 0.264 | 0.264 | 568.299 |
| Generator Sets       | 25   | 0.773 | 2.604 | 4.803 | 0.007 | 0.244 | 0.244 | 568.299 |
| Generator Sets       | 50   | 1.146 | 4.410 | 4.685 | 0.007 | 0.318 | 0.318 | 568.299 |
| Generator Sets       | 120  | 0.583 | 3.469 | 4.410 | 0.006 | 0.309 | 0.309 | 568.299 |
| Generator Sets       | 175  | 0.396 | 2.934 | 3.731 | 0.006 | 0.170 | 0.170 | 568.299 |
| Generator Sets       | 250  | 0.265 | 1.081 | 3.259 | 0.006 | 0.090 | 0.090 | 568.299 |
| Generator Sets       | 500  | 0.239 | 1.077 | 2.882 | 0.005 | 0.084 | 0.084 | 568.299 |
| Generator Sets       | 750  | 0.247 | 1.077 | 2.989 | 0.005 | 0.086 | 0.086 | 568.300 |
| Generator Sets       | 9999 | 0.324 | 1.204 | 4.542 | 0.005 | 0.113 | 0.113 | 568.299 |
| Graders              | 50   | 3.085 | 9.106 | 6.520 | 0.005 | 0.864 | 0.795 | 528.244 |
| Graders              | 120  | 1.193 | 4.829 | 9.415 | 0.005 | 0.780 | 0.718 | 503.161 |
| Graders              | 175  | 0.810 | 3.916 | 8.250 | 0.005 | 0.464 | 0.426 | 516.131 |
| Graders              | 250  | 0.398 | 1.459 | 5.663 | 0.005 | 0.184 | 0.169 | 511.696 |
| Graders              | 500  | 0.334 | 1.774 | 3.686 | 0.005 | 0.144 | 0.133 | 506.506 |
| Graders              | 750  | 0.393 | 1.367 | 3.154 | 0.005 | 0.112 | 0.112 | 568.299 |
| Off-Highway Tractors | 120  | 0.625 | 3.925 | 5.647 | 0.005 | 0.454 | 0.418 | 509.447 |
| Off-Highway Tractors | 175  | 0.391 | 3.278 | 4.511 | 0.005 | 0.229 | 0.211 | 507.629 |
| Off-Highway Tractors | 250  | 0.359 | 1.472 | 4.930 | 0.005 | 0.171 | 0.157 | 504.123 |
| Off-Highway Tractors | 750  | 0.252 | 1.143 | 3.573 | 0.005 | 0.117 | 0.108 | 505.762 |
| Off-Highway Tractors | 1000 | 0.107 | 0.973 | 2.320 | 0.005 | 0.057 | 0.053 | 506.147 |
| Off-Highway Trucks   | 175  | 0.473 | 3.459 | 4.647 | 0.005 | 0.258 | 0.237 | 503.552 |
| Off-Highway Trucks   | 250  | 0.446 | 1.824 | 4.826 | 0.005 | 0.208 | 0.191 | 502.473 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Off-Highway Trucks                 | 500  | 0.351 | 1.885 | 4.048 | 0.005 | 0.153 | 0.141 | 509.860 |
| Off-Highway Trucks                 | 750  | 0.418 | 2.436 | 4.642 | 0.005 | 0.187 | 0.172 | 508.392 |
| Off-Highway Trucks                 | 1000 | 0.393 | 1.707 | 6.035 | 0.005 | 0.175 | 0.161 | 505.722 |
| Other Construction Equipment       | 15   | 1.281 | 5.677 | 5.499 | 0.005 | 0.492 | 0.453 | 566.978 |
| Other Construction Equipment       | 25   | 1.281 | 5.677 | 5.499 | 0.005 | 0.492 | 0.453 | 566.978 |
| Other Construction Equipment       | 50   | 1.281 | 5.677 | 5.499 | 0.005 | 0.492 | 0.453 | 566.978 |
| Other Construction Equipment       | 120  | 0.703 | 3.909 | 6.325 | 0.005 | 0.496 | 0.456 | 505.349 |
| Other Construction Equipment       | 175  | 0.524 | 3.357 | 5.818 | 0.005 | 0.306 | 0.282 | 503.964 |
| Other Construction Equipment       | 500  | 0.308 | 2.285 | 4.090 | 0.005 | 0.151 | 0.139 | 509.706 |
| Other General Industrial Equipment | 15   | 1.421 | 6.259 | 5.407 | 0.005 | 0.507 | 0.466 | 564.178 |
| Other General Industrial Equipment | 25   | 1.421 | 6.259 | 5.407 | 0.005 | 0.507 | 0.466 | 564.178 |
| Other General Industrial Equipment | 50   | 1.421 | 6.259 | 5.407 | 0.005 | 0.507 | 0.466 | 564.178 |
| Other General Industrial Equipment | 120  | 0.716 | 4.045 | 6.144 | 0.005 | 0.518 | 0.476 | 503.944 |
| Other General Industrial Equipment | 175  | 0.470 | 3.437 | 5.055 | 0.005 | 0.276 | 0.254 | 505.928 |
| Other General Industrial Equipment | 250  | 0.437 | 1.867 | 5.407 | 0.005 | 0.217 | 0.200 | 507.400 |
| Other General Industrial Equipment | 500  | 0.342 | 2.367 | 4.150 | 0.005 | 0.159 | 0.146 | 507.085 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Other General Industrial Equipment | 750  | 0.243 | 1.491 | 3.102 | 0.005 | 0.100 | 0.092 | 507.658 |
| Other General Industrial Equipment | 1000 | 0.242 | 1.045 | 4.746 | 0.005 | 0.112 | 0.103 | 506.147 |
| Other Material Handling Equipment  | 50   | 1.765 | 6.892 | 5.802 | 0.005 | 0.593 | 0.546 | 561.532 |
| Other Material Handling Equipment  | 120  | 0.514 | 3.766 | 4.798 | 0.005 | 0.367 | 0.338 | 507.792 |
| Other Material Handling Equipment  | 175  | 0.489 | 3.418 | 5.212 | 0.005 | 0.280 | 0.257 | 506.324 |
| Other Material Handling Equipment  | 250  | 0.398 | 1.643 | 5.196 | 0.005 | 0.189 | 0.174 | 505.534 |
| Other Material Handling Equipment  | 500  | 0.323 | 1.871 | 4.053 | 0.005 | 0.156 | 0.143 | 504.263 |
| Other Material Handling Equipment  | 9999 | 0.159 | 0.997 | 3.489 | 0.005 | 0.070 | 0.065 | 506.147 |
| Pavers                             | 25   | 1.827 | 6.340 | 5.579 | 0.005 | 0.569 | 0.523 | 565.234 |
| Pavers                             | 50   | 1.827 | 6.340 | 5.579 | 0.005 | 0.569 | 0.523 | 565.234 |
| Pavers                             | 120  | 0.650 | 3.769 | 5.886 | 0.005 | 0.457 | 0.420 | 503.780 |
| Pavers                             | 175  | 0.433 | 3.080 | 4.874 | 0.005 | 0.242 | 0.223 | 506.540 |
| Pavers                             | 250  | 0.214 | 1.036 | 4.024 | 0.005 | 0.104 | 0.096 | 508.070 |
| Pavers                             | 500  | 0.180 | 0.983 | 2.885 | 0.005 | 0.096 | 0.089 | 500.936 |
| Paving Equipment                   | 25   | 0.991 | 4.937 | 4.985 | 0.005 | 0.404 | 0.371 | 557.706 |
| Paving Equipment                   | 50   | 0.991 | 4.937 | 4.985 | 0.005 | 0.404 | 0.371 | 557.706 |
| Paving Equipment                   | 120  | 0.623 | 3.796 | 5.733 | 0.005 | 0.438 | 0.403 | 507.910 |
| Paving Equipment                   | 175  | 0.372 | 3.081 | 4.322 | 0.005 | 0.215 | 0.197 | 504.820 |
| Paving Equipment                   | 250  | 0.297 | 1.331 | 4.428 | 0.005 | 0.148 | 0.136 | 506.197 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Pressure Washers                   | 15   | 0.720 | 3.622 | 4.978 | 0.008 | 0.264 | 0.264 | 568.299 |
| Pressure Washers                   | 25   | 0.773 | 2.604 | 4.803 | 0.007 | 0.244 | 0.244 | 568.299 |
| Pressure Washers                   | 50   | 0.865 | 3.729 | 4.515 | 0.007 | 0.269 | 0.269 | 568.299 |
| Pressure Washers                   | 120  | 0.504 | 3.308 | 4.209 | 0.006 | 0.264 | 0.264 | 568.299 |
| Pressure Washers                   | 175  | 0.386 | 2.913 | 3.726 | 0.006 | 0.168 | 0.168 | 568.299 |

|                         |      |       |       |       |       |       |       |         |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Pressure Washers        | 250  | 0.107 | 0.986 | 0.399 | 0.006 | 0.009 | 0.009 | 568.299 |
| Pumps                   | 15   | 0.809 | 3.622 | 5.023 | 0.008 | 0.289 | 0.289 | 568.299 |
| Pumps                   | 25   | 0.855 | 2.604 | 4.803 | 0.007 | 0.255 | 0.255 | 568.299 |
| Pumps                   | 50   | 1.240 | 4.640 | 4.742 | 0.007 | 0.335 | 0.335 | 568.299 |
| Pumps                   | 120  | 0.610 | 3.523 | 4.478 | 0.006 | 0.325 | 0.325 | 568.299 |
| Pumps                   | 175  | 0.417 | 2.978 | 3.789 | 0.006 | 0.179 | 0.179 | 568.299 |
| Pumps                   | 250  | 0.280 | 1.099 | 3.313 | 0.006 | 0.094 | 0.094 | 568.299 |
| Pumps                   | 500  | 0.254 | 1.093 | 2.919 | 0.005 | 0.088 | 0.088 | 568.299 |
| Pumps                   | 750  | 0.262 | 1.093 | 3.028 | 0.005 | 0.089 | 0.089 | 568.299 |
| Pumps                   | 9999 | 0.335 | 1.223 | 4.596 | 0.005 | 0.116 | 0.116 | 568.300 |
| Rollers                 | 15   | 1.259 | 5.231 | 5.236 | 0.005 | 0.459 | 0.423 | 563.972 |
| Rollers                 | 25   | 1.259 | 5.231 | 5.236 | 0.005 | 0.459 | 0.423 | 563.972 |
| Rollers                 | 50   | 1.259 | 5.231 | 5.236 | 0.005 | 0.459 | 0.423 | 563.972 |
| Rollers                 | 120  | 0.628 | 3.755 | 5.806 | 0.005 | 0.428 | 0.393 | 508.199 |
| Rollers                 | 175  | 0.338 | 2.993 | 4.239 | 0.005 | 0.197 | 0.181 | 505.904 |
| Rollers                 | 250  | 0.308 | 1.507 | 4.395 | 0.005 | 0.150 | 0.138 | 507.694 |
| Rollers                 | 500  | 0.334 | 2.956 | 4.456 | 0.005 | 0.173 | 0.159 | 513.415 |
| Rough Terrain Forklifts | 50   | 1.159 | 4.918 | 5.099 | 0.005 | 0.415 | 0.382 | 563.360 |
| Rough Terrain Forklifts | 120  | 0.302 | 3.342 | 3.840 | 0.005 | 0.213 | 0.196 | 507.066 |
| Rough Terrain Forklifts | 175  | 0.209 | 2.865 | 3.209 | 0.005 | 0.124 | 0.115 | 505.596 |
| Rough Terrain Forklifts | 250  | 0.144 | 1.018 | 2.468 | 0.005 | 0.059 | 0.054 | 506.896 |
| Rough Terrain Forklifts | 500  | 0.178 | 0.962 | 3.542 | 0.005 | 0.078 | 0.072 | 501.213 |
| Rubber Tired Dozers     | 175  | 0.968 | 4.249 | 9.853 | 0.005 | 0.566 | 0.521 | 507.774 |
| Rubber Tired Dozers     | 250  | 0.736 | 2.729 | 7.995 | 0.005 | 0.395 | 0.364 | 509.462 |
| Rubber Tired Dozers     | 500  | 0.688 | 5.828 | 7.710 | 0.005 | 0.359 | 0.330 | 513.311 |
| Rubber Tired Dozers     | 750  | 0.523 | 2.765 | 7.168 | 0.005 | 0.260 | 0.239 | 507.260 |
| Rubber Tired Dozers     | 1000 | 0.631 | 2.723 | 6.277 | 0.005 | 0.208 | 0.208 | 568.300 |
| Rubber Tired Loaders    | 25   | 2.055 | 7.791 | 6.053 | 0.005 | 0.660 | 0.607 | 561.903 |
| Rubber Tired Loaders    | 50   | 2.055 | 7.791 | 6.053 | 0.005 | 0.660 | 0.607 | 561.903 |
| Rubber Tired Loaders    | 120  | 0.803 | 4.212 | 6.583 | 0.005 | 0.565 | 0.520 | 499.594 |
| Rubber Tired Loaders    | 175  | 0.565 | 3.562 | 5.726 | 0.005 | 0.319 | 0.294 | 505.131 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Rubber Tired Loaders      | 250  | 0.393 | 1.452 | 5.115 | 0.005 | 0.175 | 0.161 | 503.654 |
| Rubber Tired Loaders      | 500  | 0.391 | 2.155 | 4.627 | 0.005 | 0.174 | 0.160 | 500.431 |
| Rubber Tired Loaders      | 750  | 0.373 | 1.703 | 4.172 | 0.005 | 0.164 | 0.151 | 491.918 |
| Rubber Tired Loaders      | 1000 | 0.425 | 1.464 | 6.724 | 0.005 | 0.198 | 0.182 | 504.780 |
| Scrapers                  | 120  | 0.742 | 4.173 | 7.143 | 0.005 | 0.543 | 0.500 | 519.167 |
| Scrapers                  | 175  | 0.688 | 3.781 | 7.384 | 0.005 | 0.397 | 0.365 | 513.436 |
| Scrapers                  | 250  | 0.684 | 2.840 | 8.109 | 0.005 | 0.367 | 0.338 | 502.255 |
| Scrapers                  | 500  | 0.452 | 3.606 | 5.757 | 0.005 | 0.232 | 0.214 | 506.350 |
| Scrapers                  | 750  | 0.340 | 2.482 | 4.484 | 0.005 | 0.168 | 0.154 | 506.638 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Signal Boards             | 50   | 1.306 | 4.921 | 4.761 | 0.007 | 0.343 | 0.343 | 568.299 |
| Signal Boards             | 120  | 0.618 | 3.594 | 4.414 | 0.006 | 0.330 | 0.330 | 568.299 |
| Signal Boards             | 175  | 0.430 | 3.047 | 3.708 | 0.006 | 0.183 | 0.183 | 568.299 |
| Signal Boards             | 250  | 0.354 | 1.344 | 3.894 | 0.007 | 0.114 | 0.114 | 686.695 |
| Skid Steer Loaders        | 25   | 0.599 | 3.957 | 4.268 | 0.005 | 0.241 | 0.221 | 565.228 |
| Skid Steer Loaders        | 50   | 0.599 | 3.957 | 4.268 | 0.005 | 0.241 | 0.221 | 565.228 |
| Skid Steer Loaders        | 120  | 0.273 | 3.328 | 3.534 | 0.005 | 0.197 | 0.182 | 506.297 |
| Surfacing Equipment       | 50   | 1.045 | 4.763 | 5.273 | 0.006 | 0.406 | 0.374 | 570.815 |
| Surfacing Equipment       | 120  | 0.522 | 3.550 | 5.051 | 0.005 | 0.349 | 0.321 | 505.087 |
| Surfacing Equipment       | 175  | 0.458 | 3.006 | 5.458 | 0.005 | 0.265 | 0.244 | 504.558 |
| Surfacing Equipment       | 250  | 0.307 | 1.429 | 5.048 | 0.005 | 0.148 | 0.137 | 510.706 |
| Surfacing Equipment       | 500  | 0.217 | 1.425 | 3.468 | 0.005 | 0.111 | 0.102 | 502.471 |
| Surfacing Equipment       | 750  | 0.162 | 1.000 | 2.880 | 0.005 | 0.093 | 0.085 | 506.967 |
| Sweepers/Scrubbers        | 15   | 1.781 | 6.785 | 5.726 | 0.005 | 0.603 | 0.555 | 563.269 |
| Sweepers/Scrubbers        | 25   | 1.781 | 6.785 | 5.726 | 0.005 | 0.603 | 0.555 | 563.269 |
| Sweepers/Scrubbers        | 50   | 1.781 | 6.785 | 5.726 | 0.005 | 0.603 | 0.555 | 563.269 |
| Sweepers/Scrubbers        | 120  | 0.783 | 4.059 | 6.454 | 0.005 | 0.571 | 0.525 | 508.357 |
| Sweepers/Scrubbers        | 175  | 0.746 | 3.839 | 7.787 | 0.005 | 0.419 | 0.385 | 507.292 |
| Sweepers/Scrubbers        | 250  | 0.521 | 2.089 | 6.782 | 0.005 | 0.270 | 0.248 | 504.080 |
| Tractors/Loaders/Backhoes | 25   | 1.250 | 5.741 | 5.214 | 0.005 | 0.455 | 0.418 | 553.400 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Tractors/Loaders/Backhoes | 50   | 1.250 | 5.741 | 5.214 | 0.005 | 0.455 | 0.418 | 553.400 |
| Tractors/Loaders/Backhoes | 120  | 0.538 | 3.811 | 5.142 | 0.005 | 0.396 | 0.364 | 511.346 |
| Tractors/Loaders/Backhoes | 175  | 0.389 | 3.232 | 4.379 | 0.005 | 0.222 | 0.204 | 502.629 |
| Tractors/Loaders/Backhoes | 250  | 0.311 | 1.347 | 4.426 | 0.005 | 0.145 | 0.133 | 504.401 |
| Tractors/Loaders/Backhoes | 500  | 0.284 | 1.786 | 3.787 | 0.005 | 0.131 | 0.121 | 505.270 |
| Tractors/Loaders/Backhoes | 750  | 0.300 | 1.674 | 4.022 | 0.005 | 0.144 | 0.133 | 500.955 |
| Trenchers                 | 15   | 1.219 | 5.285 | 5.298 | 0.005 | 0.475 | 0.437 | 565.994 |
| Trenchers                 | 25   | 1.219 | 5.285 | 5.298 | 0.005 | 0.475 | 0.437 | 565.994 |
| Trenchers                 | 50   | 1.219 | 5.285 | 5.298 | 0.005 | 0.475 | 0.437 | 565.994 |
| Trenchers                 | 120  | 0.788 | 3.988 | 6.902 | 0.005 | 0.541 | 0.498 | 509.903 |
| Trenchers                 | 175  | 0.583 | 3.507 | 6.503 | 0.005 | 0.328 | 0.302 | 501.781 |
| Trenchers                 | 250  | 0.487 | 2.030 | 6.312 | 0.005 | 0.251 | 0.231 | 507.145 |
| Trenchers                 | 500  | 0.296 | 1.966 | 4.099 | 0.005 | 0.150 | 0.138 | 504.410 |
| Trenchers                 | 750  | 0.120 | 0.971 | 1.630 | 0.005 | 0.054 | 0.050 | 509.143 |
| Welders                   | 15   | 0.809 | 3.622 | 5.023 | 0.008 | 0.289 | 0.289 | 568.299 |
| Welders                   | 25   | 0.855 | 2.604 | 4.803 | 0.007 | 0.255 | 0.255 | 568.299 |
| Welders                   | 50   | 1.540 | 5.395 | 4.936 | 0.007 | 0.389 | 0.389 | 568.299 |
| Welders                   | 120  | 0.699 | 3.705 | 4.692 | 0.006 | 0.375 | 0.375 | 568.300 |
| Welders                   | 175  | 0.486 | 3.128 | 3.973 | 0.006 | 0.206 | 0.206 | 568.299 |
| Welders                   | 250  | 0.330 | 1.153 | 3.481 | 0.006 | 0.104 | 0.104 | 568.299 |
| Welders                   | 500  | 0.306 | 1.134 | 3.032 | 0.005 | 0.097 | 0.097 | 568.299 |
| Water Trucks              | 175  | 0.473 | 3.459 | 4.647 | 0.005 | 0.258 | 0.237 | 503.552 |
| Water Trucks              | 250  | 0.446 | 1.824 | 4.826 | 0.005 | 0.208 | 0.191 | 502.473 |
| Water Trucks              | 500  | 0.351 | 1.885 | 4.048 | 0.005 | 0.153 | 0.141 | 509.860 |
| Water Trucks              | 750  | 0.418 | 2.436 | 4.642 | 0.005 | 0.187 | 0.172 | 508.392 |
| Water Trucks              | 1000 | 0.393 | 1.707 | 6.035 | 0.005 | 0.175 | 0.161 | 505.722 |

2017

| g/hp/hr | g/hp/hr |
|---------|---------|
| CH4     | N2O     |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.153   | 0.004   |
| 0.153   | 0.004   |
| 0.023   | 0.004   |
| 0.073   | 0.005   |
| 0.077   | 0.005   |
| 0.150   | 0.005   |
| 0.067   | 0.004   |
| 0.047   | 0.004   |
| 0.032   | 0.004   |
| 0.030   | 0.004   |
| 0.030   | 0.004   |
| 0.034   | 0.004   |
| 0.175   | 0.005   |
| 0.175   | 0.005   |
| 0.175   | 0.005   |
| 0.148   | 0.004   |
| 0.154   | 0.004   |
| 0.152   | 0.004   |
| 0.149   | 0.004   |
| 0.155   | 0.004   |
| 0.153   | 0.004   |

| 2017            |       | g/hp/hr | g/hp/hr |
|-----------------|-------|---------|---------|
| Equipment       | MaxHP | ROG     | CO      |
| Aerial Lifts    | 15    | 0.209   | 3.169   |
| Aerial Lifts    | 25    | 0.209   | 3.169   |
| Aerial Lifts    | 50    | 0.209   | 3.169   |
| Aerial Lifts    | 120   | 0.143   | 3.184   |
| Aerial Lifts    | 500   | 0.246   | 0.997   |
| Aerial Lifts    | 750   | 0.239   | 1.059   |
| Air Compressors |       |         |         |
|                 | 15    | 0.786   | 3.599   |
| Air Compressors |       |         |         |
|                 | 25    | 0.830   | 2.564   |
| Air Compressors |       |         |         |
|                 | 50    | 1.481   | 5.604   |
| Air Compressors |       |         |         |
|                 | 120   | 0.671   | 3.772   |
| Air Compressors |       |         |         |
|                 | 175   | 0.477   | 3.207   |
| Air Compressors |       |         |         |
|                 | 250   | 0.339   | 1.162   |
| Air Compressors |       |         |         |
|                 | 500   | 0.321   | 1.123   |
| Air Compressors |       |         |         |
|                 | 750   | 0.323   | 1.123   |
| Air Compressors |       |         |         |
|                 | 1000  | 0.362   | 1.246   |
| Bore/Drill Rigs |       |         |         |
|                 | 15    | 0.804   | 4.652   |
| Bore/Drill Rigs |       |         |         |
|                 | 25    | 0.804   | 4.652   |
| Bore/Drill Rigs |       |         |         |
|                 | 50    | 0.804   | 4.652   |
| Bore/Drill Rigs |       |         |         |
|                 | 120   | 0.298   | 3.331   |
| Bore/Drill Rigs |       |         |         |
|                 | 175   | 0.245   | 3.001   |
| Bore/Drill Rigs |       |         |         |
|                 | 250   | 0.174   | 1.102   |
| Bore/Drill Rigs |       |         |         |
|                 | 500   | 0.166   | 1.119   |
| Bore/Drill Rigs |       |         |         |
|                 | 750   | 0.155   | 1.137   |
| Bore/Drill Rigs |       |         |         |
|                 | 1000  | 0.121   | 0.971   |

|       |       |
|-------|-------|
| 0.059 | 0.005 |
| 0.071 | 0.005 |
| 0.061 | 0.005 |
| 0.119 | 0.005 |
| 0.055 | 0.004 |
| 0.039 | 0.004 |
| 0.168 | 0.005 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.167 | 0.005 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.143 | 0.005 |
| 0.065 | 0.004 |
| 0.046 | 0.004 |
| 0.032 | 0.004 |
| 0.030 | 0.004 |
| 0.030 | 0.004 |
| 0.035 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 |
| Cement and Mortar Mixers | 25   | 0.767 | 2.466 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.340 |
| Concrete/Industrial Saws | 50   | 1.175 | 4.894 |
| Concrete/Industrial Saws | 120  | 0.557 | 3.595 |
| Concrete/Industrial Saws | 175  | 0.395 | 3.073 |
| Cranes                   | 50   | 2.173 | 7.408 |
| Cranes                   | 120  | 1.097 | 4.710 |
| Cranes                   | 175  | 0.696 | 3.787 |
| Cranes                   | 250  | 0.561 | 2.385 |
| Cranes                   | 500  | 0.410 | 3.547 |
| Cranes                   | 750  | 0.287 | 1.633 |
| Cranes                   | 9999 | 0.152 | 0.974 |
| Crawler Tractors         | 50   | 2.459 | 8.006 |
| Crawler Tractors         | 120  | 0.849 | 4.176 |
| Crawler Tractors         | 175  | 0.614 | 3.483 |
| Crawler Tractors         | 250  | 0.430 | 1.742 |
| Crawler Tractors         | 500  | 0.385 | 2.635 |
| Crawler Tractors         | 750  | 0.324 | 1.522 |
| Crawler Tractors         | 1000 | 0.486 | 2.100 |
| Crushing/Proc. Equipment | 50   | 1.402 | 5.623 |
| Crushing/Proc. Equipment | 120  | 0.647 | 3.791 |
| Crushing/Proc. Equipment | 175  | 0.468 | 3.236 |
| Crushing/Proc. Equipment | 250  | 0.340 | 1.160 |
| Crushing/Proc. Equipment | 500  | 0.324 | 1.118 |
| Crushing/Proc. Equipment | 750  | 0.323 | 1.114 |
| Crushing/Proc. Equipment | 9999 | 0.378 | 1.231 |



|       |       |
|-------|-------|
| 0.062 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.065 | 0.005 |
| 0.069 | 0.005 |
| 0.103 | 0.005 |
| 0.052 | 0.004 |
| 0.035 | 0.004 |
| 0.023 | 0.004 |
| 0.021 | 0.004 |
| 0.022 | 0.004 |
| 0.029 | 0.004 |
| 0.159 | 0.005 |
| 0.152 | 0.004 |
| 0.156 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.035 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |

|                      |      |       |       |
|----------------------|------|-------|-------|
| Dumpers/Tenders      | 25   | 0.687 | 2.340 |
| Excavators           | 25   | 0.771 | 4.889 |
| Excavators           | 50   | 0.771 | 4.889 |
| Excavators           | 120  | 0.440 | 3.639 |
| Excavators           | 175  | 0.334 | 3.151 |
| Excavators           | 250  | 0.247 | 1.249 |
| Excavators           | 500  | 0.200 | 1.199 |
| Excavators           | 750  | 0.210 | 1.228 |
| Forklifts            | 50   | 1.703 | 6.673 |
| Forklifts            | 120  | 0.672 | 3.979 |
| Forklifts            | 175  | 0.508 | 3.452 |
| Forklifts            | 250  | 0.496 | 2.092 |
| Forklifts            | 500  | 0.338 | 2.508 |
| Generator Sets       | 15   | 0.699 | 3.599 |
| Generator Sets       | 25   | 0.757 | 2.564 |
| Generator Sets       | 50   | 1.017 | 4.292 |
| Generator Sets       | 120  | 0.520 | 3.442 |
| Generator Sets       | 175  | 0.356 | 2.931 |
| Generator Sets       | 250  | 0.245 | 1.063 |
| Generator Sets       | 500  | 0.224 | 1.048 |
| Generator Sets       | 750  | 0.230 | 1.048 |
| Generator Sets       | 9999 | 0.301 | 1.161 |
| Graders              | 50   | 3.007 | 8.978 |
| Graders              | 120  | 1.164 | 4.810 |
| Graders              | 175  | 0.757 | 3.845 |
| Graders              | 250  | 0.396 | 1.449 |
| Graders              | 500  | 0.334 | 1.707 |
| Graders              | 750  | 0.372 | 1.323 |
| Off-Highway Tractors | 120  | 0.586 | 3.901 |
| Off-Highway Tractors | 175  | 0.356 | 3.259 |
| Off-Highway Tractors | 250  | 0.328 | 1.403 |
| Off-Highway Tractors | 750  | 0.248 | 1.145 |
| Off-Highway Tractors | 1000 | 0.118 | 0.985 |
| Off-Highway Trucks   | 175  | 0.441 | 3.436 |
| Off-Highway Trucks   | 250  | 0.417 | 1.753 |

|       |       |
|-------|-------|
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.325 | 1.748 |
| Off-Highway Trucks                 | 750  | 0.394 | 2.356 |
| Off-Highway Trucks                 | 1000 | 0.362 | 1.546 |
| Other Construction Equipment       | 15   | 1.244 | 5.655 |
| Other Construction Equipment       | 25   | 1.244 | 5.655 |
| Other Construction Equipment       | 50   | 1.244 | 5.655 |
| Other Construction Equipment       | 120  | 0.676 | 3.885 |
| Other Construction Equipment       | 175  | 0.500 | 3.338 |
| Other Construction Equipment       | 500  | 0.290 | 2.121 |
| Other General Industrial Equipment | 15   | 1.349 | 6.179 |
| Other General Industrial Equipment | 25   | 1.349 | 6.179 |
| Other General Industrial Equipment | 50   | 1.349 | 6.179 |
| Other General Industrial Equipment | 120  | 0.660 | 3.998 |
| Other General Industrial Equipment | 175  | 0.437 | 3.399 |
| Other General Industrial Equipment | 250  | 0.411 | 1.780 |
| Other General Industrial Equipment | 500  | 0.334 | 2.365 |

|       |       |
|-------|-------|
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.169 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.168 | 0.005 |
| 0.168 | 0.005 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.065 | 0.005 |
| 0.069 | 0.005 |
| 0.078 | 0.005 |
| 0.045 | 0.004 |
| 0.034 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.219 | 1.480 |
| Other General Industrial Equipment | 1000 | 0.251 | 1.057 |
| Other Material Handling Equipment  | 50   | 1.615 | 6.635 |
| Other Material Handling Equipment  | 120  | 0.488 | 3.758 |
| Other Material Handling Equipment  | 175  | 0.427 | 3.351 |
| Other Material Handling Equipment  | 250  | 0.359 | 1.512 |
| Other Material Handling Equipment  | 500  | 0.325 | 1.863 |
| Other Material Handling Equipment  | 9999 | 0.169 | 1.010 |
| Pavers                             | 25   | 1.731 | 6.199 |
| Pavers                             | 50   | 1.731 | 6.199 |
| Pavers                             | 120  | 0.625 | 3.759 |
| Pavers                             | 175  | 0.389 | 3.063 |
| Pavers                             | 250  | 0.208 | 1.037 |
| Pavers                             | 500  | 0.168 | 0.979 |
| Paving Equipment                   | 25   | 0.926 | 4.804 |
| Paving Equipment                   | 50   | 0.926 | 4.804 |
| Paving Equipment                   | 120  | 0.563 | 3.741 |
| Paving Equipment                   | 175  | 0.343 | 3.073 |
| Paving Equipment                   | 250  | 0.288 | 1.333 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.699 | 3.599 |
| Pressure Washers                   | 25   | 0.757 | 2.564 |
| Pressure Washers                   | 50   | 0.760 | 3.632 |
| Pressure Washers                   | 120  | 0.444 | 3.283 |
| Pressure Washers                   | 175  | 0.346 | 2.910 |

|       |       |
|-------|-------|
| 0.009 | 0.004 |
| 0.073 | 0.005 |
| 0.077 | 0.005 |
| 0.111 | 0.005 |
| 0.055 | 0.004 |
| 0.037 | 0.004 |
| 0.025 | 0.004 |
| 0.022 | 0.004 |
| 0.023 | 0.004 |
| 0.030 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.155 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.155 | 0.004 |
| 0.153 | 0.004 |
| 0.057 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.151 | 0.004 |
| 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.102 | 0.986 |
| Pumps                   | 15   | 0.786 | 3.599 |
| Pumps                   | 25   | 0.830 | 2.564 |
| Pumps                   | 50   | 1.104 | 4.514 |
| Pumps                   | 120  | 0.546 | 3.495 |
| Pumps                   | 175  | 0.376 | 2.975 |
| Pumps                   | 250  | 0.260 | 1.080 |
| Pumps                   | 500  | 0.239 | 1.062 |
| Pumps                   | 750  | 0.244 | 1.062 |
| Pumps                   | 9999 | 0.313 | 1.177 |
| Rollers                 | 15   | 1.198 | 5.147 |
| Rollers                 | 25   | 1.198 | 5.147 |
| Rollers                 | 50   | 1.198 | 5.147 |
| Rollers                 | 120  | 0.580 | 3.713 |
| Rollers                 | 175  | 0.314 | 2.981 |
| Rollers                 | 250  | 0.274 | 1.408 |
| Rollers                 | 500  | 0.297 | 2.685 |
| Rough Terrain Forklifts | 50   | 1.108 | 4.833 |
| Rough Terrain Forklifts | 120  | 0.271 | 3.318 |
| Rough Terrain Forklifts | 175  | 0.194 | 2.866 |
| Rough Terrain Forklifts | 250  | 0.148 | 1.024 |
| Rough Terrain Forklifts | 500  | 0.182 | 0.966 |
| Rubber Tired Dozers     | 175  | 0.903 | 4.149 |
| Rubber Tired Dozers     | 250  | 0.707 | 2.655 |
| Rubber Tired Dozers     | 500  | 0.662 | 5.526 |
| Rubber Tired Dozers     | 750  | 0.526 | 2.767 |
| Rubber Tired Dozers     | 1000 | 0.602 | 2.560 |
| Rubber Tired Loaders    | 25   | 1.957 | 7.660 |
| Rubber Tired Loaders    | 50   | 1.957 | 7.660 |
| Rubber Tired Loaders    | 120  | 0.757 | 4.171 |
| Rubber Tired Loaders    | 175  | 0.522 | 3.518 |

|       |       |
|-------|-------|
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.148 | 0.004 |
| 0.152 | 0.004 |
| 0.157 | 0.004 |
| 0.155 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.117 | 0.005 |
| 0.055 | 0.004 |
| 0.038 | 0.004 |
| 0.031 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.153 | 0.004 |
| 0.172 | 0.005 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.167 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.373 | 1.417 |
| Rubber Tired Loaders      | 500  | 0.369 | 2.060 |
| Rubber Tired Loaders      | 750  | 0.367 | 1.700 |
| Rubber Tired Loaders      | 1000 | 0.415 | 1.456 |
| Scrapers                  | 120  | 0.754 | 4.207 |
| Scrapers                  | 175  | 0.629 | 3.705 |
| Scrapers                  | 250  | 0.627 | 2.647 |
| Scrapers                  | 500  | 0.425 | 3.337 |
| Scrapers                  | 750  | 0.325 | 2.295 |
| Signal Boards             | 15   | 0.661 | 3.469 |
| Signal Boards             | 50   | 1.158 | 4.785 |
| Signal Boards             | 120  | 0.553 | 3.566 |
| Signal Boards             | 175  | 0.388 | 3.044 |
| Signal Boards             | 250  | 0.330 | 1.323 |
| Skid Steer Loaders        | 25   | 0.568 | 3.919 |
| Skid Steer Loaders        | 50   | 0.568 | 3.919 |
| Skid Steer Loaders        | 120  | 0.255 | 3.319 |
| Surfacing Equipment       | 50   | 0.928 | 4.603 |
| Surfacing Equipment       | 120  | 0.508 | 3.556 |
| Surfacing Equipment       | 175  | 0.455 | 3.003 |
| Surfacing Equipment       | 250  | 0.274 | 1.343 |
| Surfacing Equipment       | 500  | 0.204 | 1.396 |
| Surfacing Equipment       | 750  | 0.160 | 1.003 |
| Sweepers/Scrubbers        | 15   | 1.712 | 6.719 |
| Sweepers/Scrubbers        | 25   | 1.712 | 6.719 |
| Sweepers/Scrubbers        | 50   | 1.712 | 6.719 |
| Sweepers/Scrubbers        | 120  | 0.721 | 4.010 |
| Sweepers/Scrubbers        | 175  | 0.711 | 3.784 |
| Sweepers/Scrubbers        | 250  | 0.513 | 2.090 |
| Tractors/Loaders/Backhoes | 25   | 1.194 | 5.689 |

|       |       |
|-------|-------|
| 0.167 | 0.005 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.154 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.073 | 0.005 |
| 0.077 | 0.005 |
| 0.138 | 0.005 |
| 0.063 | 0.004 |
| 0.043 | 0.004 |
| 0.029 | 0.004 |
| 0.027 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 1.194 | 5.689 |
| Tractors/Loaders/Backhoes | 120  | 0.501 | 3.782 |
| Tractors/Loaders/Backhoes | 175  | 0.354 | 3.200 |
| Tractors/Loaders/Backhoes | 250  | 0.291 | 1.304 |
| Tractors/Loaders/Backhoes | 500  | 0.272 | 1.739 |
| Tractors/Loaders/Backhoes | 750  | 0.296 | 1.646 |
| Trenchers                 | 15   | 1.149 | 5.197 |
| Trenchers                 | 25   | 1.149 | 5.197 |
| Trenchers                 | 50   | 1.149 | 5.197 |
| Trenchers                 | 120  | 0.762 | 3.968 |
| Trenchers                 | 175  | 0.536 | 3.434 |
| Trenchers                 | 250  | 0.486 | 2.037 |
| Trenchers                 | 500  | 0.265 | 1.966 |
| Trenchers                 | 750  | 0.114 | 0.972 |
| Welders                   | 15   | 0.786 | 3.599 |
| Welders                   | 25   | 0.830 | 2.564 |
| Welders                   | 50   | 1.372 | 5.239 |
| Welders                   | 120  | 0.630 | 3.675 |
| Welders                   | 175  | 0.442 | 3.124 |
| Welders                   | 250  | 0.310 | 1.133 |
| Welders                   | 500  | 0.290 | 1.102 |
| Water Trucks              | 175  | 0.441 | 3.436 |
| Water Trucks              | 250  | 0.417 | 1.753 |
| Water Trucks              | 500  | 0.325 | 1.748 |
| Water Trucks              | 750  | 0.394 | 2.356 |
| Water Trucks              | 1000 | 0.362 | 1.546 |







|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.362 | 0.007 | 0.171 | 0.171 | 568.299 | 0.062 | 0.005 |
| 4.678 | 0.005 | 0.332 | 0.305 | 554.910 | 0.170 | 0.005 |
| 4.678 | 0.005 | 0.332 | 0.305 | 554.910 | 0.170 | 0.005 |
| 4.380 | 0.005 | 0.310 | 0.286 | 493.409 | 0.151 | 0.004 |
| 3.700 | 0.005 | 0.182 | 0.168 | 498.522 | 0.153 | 0.004 |
| 3.319 | 0.005 | 0.105 | 0.097 | 498.436 | 0.153 | 0.004 |
| 2.507 | 0.005 | 0.081 | 0.075 | 496.810 | 0.152 | 0.004 |
| 2.719 | 0.005 | 0.090 | 0.083 | 494.550 | 0.152 | 0.004 |
| 5.450 | 0.005 | 0.536 | 0.493 | 554.677 | 0.170 | 0.005 |
| 5.818 | 0.005 | 0.480 | 0.442 | 497.725 | 0.153 | 0.004 |
| 5.362 | 0.005 | 0.294 | 0.270 | 498.334 | 0.153 | 0.004 |
| 5.751 | 0.005 | 0.252 | 0.232 | 499.621 | 0.153 | 0.004 |
| 3.780 | 0.005 | 0.161 | 0.148 | 499.927 | 0.153 | 0.004 |
| 4.847 | 0.008 | 0.250 | 0.250 | 568.299 | 0.063 | 0.005 |
| 4.729 | 0.007 | 0.233 | 0.233 | 568.299 | 0.068 | 0.005 |
| 4.522 | 0.007 | 0.285 | 0.285 | 568.299 | 0.091 | 0.005 |
| 4.072 | 0.006 | 0.274 | 0.274 | 568.299 | 0.046 | 0.004 |
| 3.347 | 0.006 | 0.151 | 0.151 | 568.299 | 0.032 | 0.004 |
| 2.910 | 0.006 | 0.081 | 0.081 | 568.299 | 0.022 | 0.004 |
| 2.579 | 0.005 | 0.076 | 0.076 | 568.299 | 0.020 | 0.004 |
| 2.660 | 0.005 | 0.077 | 0.077 | 568.299 | 0.020 | 0.004 |
| 4.293 | 0.005 | 0.104 | 0.104 | 568.299 | 0.027 | 0.004 |
| 6.423 | 0.005 | 0.843 | 0.776 | 520.075 | 0.159 | 0.005 |
| 9.191 | 0.005 | 0.759 | 0.698 | 495.919 | 0.152 | 0.004 |
| 7.663 | 0.005 | 0.430 | 0.396 | 506.748 | 0.155 | 0.004 |
| 5.525 | 0.005 | 0.180 | 0.166 | 503.802 | 0.154 | 0.004 |
| 3.557 | 0.005 | 0.139 | 0.128 | 498.600 | 0.153 | 0.004 |
| 2.835 | 0.005 | 0.100 | 0.100 | 568.299 | 0.033 | 0.004 |
| 5.317 | 0.005 | 0.423 | 0.389 | 501.245 | 0.154 | 0.004 |
| 4.026 | 0.005 | 0.205 | 0.189 | 499.245 | 0.153 | 0.004 |
| 4.382 | 0.005 | 0.151 | 0.139 | 496.498 | 0.152 | 0.004 |
| 3.324 | 0.005 | 0.112 | 0.103 | 497.618 | 0.153 | 0.004 |
| 2.340 | 0.005 | 0.059 | 0.054 | 498.280 | 0.153 | 0.004 |
| 4.236 | 0.005 | 0.233 | 0.215 | 495.924 | 0.152 | 0.004 |
| 4.368 | 0.005 | 0.189 | 0.174 | 494.794 | 0.152 | 0.004 |

|                      |
|----------------------|
| Dumpers/Trailers     |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Trucks   |
| Off-Highway Trucks   |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 2.592 | 0.005 | 0.086 | 0.079 | 499.767 | 0.153 | 0.004 |
| 4.787 | 0.005 | 0.115 | 0.105 | 498.280 | 0.153 | 0.004 |
| 5.574 | 0.005 | 0.546 | 0.502 | 552.804 | 0.169 | 0.005 |
| 4.561 | 0.005 | 0.341 | 0.314 | 499.899 | 0.153 | 0.004 |
| 4.488 | 0.005 | 0.238 | 0.219 | 498.454 | 0.153 | 0.004 |
| 4.705 | 0.005 | 0.163 | 0.150 | 497.676 | 0.153 | 0.004 |
| 3.971 | 0.005 | 0.154 | 0.141 | 496.425 | 0.152 | 0.004 |
| 3.520 | 0.005 | 0.072 | 0.067 | 498.280 | 0.153 | 0.004 |
| 5.437 | 0.005 | 0.540 | 0.497 | 556.453 | 0.171 | 0.005 |
| 5.437 | 0.005 | 0.540 | 0.497 | 556.453 | 0.171 | 0.005 |
| 5.692 | 0.005 | 0.437 | 0.402 | 495.925 | 0.152 | 0.004 |
| 4.353 | 0.005 | 0.214 | 0.197 | 498.967 | 0.153 | 0.004 |
| 3.809 | 0.005 | 0.100 | 0.092 | 499.562 | 0.153 | 0.004 |
| 2.487 | 0.005 | 0.087 | 0.081 | 491.784 | 0.151 | 0.004 |
| 4.728 | 0.005 | 0.359 | 0.331 | 548.648 | 0.168 | 0.005 |
| 4.728 | 0.005 | 0.359 | 0.331 | 548.648 | 0.168 | 0.005 |
| 5.207 | 0.005 | 0.391 | 0.359 | 500.165 | 0.153 | 0.004 |
| 3.896 | 0.005 | 0.195 | 0.179 | 497.148 | 0.152 | 0.004 |
| 4.121 | 0.005 | 0.142 | 0.130 | 498.732 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.847 | 0.008 | 0.250 | 0.250 | 568.299 | 0.063 | 0.005 |
| 4.729 | 0.007 | 0.233 | 0.233 | 568.299 | 0.068 | 0.005 |
| 4.355 | 0.007 | 0.240 | 0.240 | 568.299 | 0.068 | 0.005 |
| 3.888 | 0.006 | 0.233 | 0.233 | 568.300 | 0.040 | 0.004 |
| 3.349 | 0.006 | 0.149 | 0.149 | 568.299 | 0.031 | 0.004 |

|   |
|---|
| Other<br>General<br>Industrial<br>Equipment |
| Other<br>General<br>Industrial<br>Equipment |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Plate<br>Compactors                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.317 | 0.006 | 0.009 | 0.009 | 568.299 | 0.009 | 0.004 |
| 4.887 | 0.008 | 0.272 | 0.272 | 568.299 | 0.070 | 0.005 |
| 4.729 | 0.007 | 0.243 | 0.243 | 568.299 | 0.074 | 0.005 |
| 4.578 | 0.007 | 0.301 | 0.301 | 568.299 | 0.099 | 0.005 |
| 4.134 | 0.006 | 0.287 | 0.287 | 568.299 | 0.049 | 0.004 |
| 3.400 | 0.006 | 0.159 | 0.159 | 568.299 | 0.033 | 0.004 |
| 2.958 | 0.006 | 0.084 | 0.084 | 568.299 | 0.023 | 0.004 |
| 2.613 | 0.005 | 0.079 | 0.079 | 568.299 | 0.021 | 0.004 |
| 2.695 | 0.005 | 0.080 | 0.080 | 568.299 | 0.022 | 0.004 |
| 4.343 | 0.005 | 0.106 | 0.106 | 568.299 | 0.028 | 0.004 |
| 5.098 | 0.005 | 0.436 | 0.401 | 555.020 | 0.170 | 0.005 |
| 5.098 | 0.005 | 0.436 | 0.401 | 555.020 | 0.170 | 0.005 |
| 5.098 | 0.005 | 0.436 | 0.401 | 555.020 | 0.170 | 0.005 |
| 5.411 | 0.005 | 0.392 | 0.361 | 500.153 | 0.153 | 0.004 |
| 3.874 | 0.005 | 0.180 | 0.166 | 497.909 | 0.153 | 0.004 |
| 3.921 | 0.005 | 0.129 | 0.119 | 499.702 | 0.153 | 0.004 |
| 3.840 | 0.005 | 0.150 | 0.138 | 505.832 | 0.155 | 0.004 |
| 4.903 | 0.005 | 0.382 | 0.352 | 554.623 | 0.170 | 0.005 |
| 3.418 | 0.005 | 0.182 | 0.167 | 499.168 | 0.153 | 0.004 |
| 2.902 | 0.005 | 0.112 | 0.103 | 497.777 | 0.153 | 0.004 |
| 2.474 | 0.005 | 0.059 | 0.054 | 499.001 | 0.153 | 0.004 |
| 3.568 | 0.005 | 0.079 | 0.073 | 493.336 | 0.151 | 0.004 |
| 9.129 | 0.005 | 0.525 | 0.483 | 499.410 | 0.153 | 0.004 |
| 7.671 | 0.005 | 0.376 | 0.345 | 501.548 | 0.154 | 0.004 |
| 7.333 | 0.005 | 0.341 | 0.313 | 505.849 | 0.155 | 0.004 |
| 7.172 | 0.005 | 0.260 | 0.239 | 499.367 | 0.153 | 0.004 |
| 6.013 | 0.005 | 0.195 | 0.195 | 568.299 | 0.054 | 0.004 |
| 5.954 | 0.005 | 0.633 | 0.582 | 553.583 | 0.170 | 0.005 |
| 5.954 | 0.005 | 0.633 | 0.582 | 553.583 | 0.170 | 0.005 |
| 6.236 | 0.005 | 0.530 | 0.487 | 491.853 | 0.151 | 0.004 |
| 5.195 | 0.005 | 0.290 | 0.266 | 497.353 | 0.152 | 0.004 |

|                         |
|-------------------------|
| Pressure Washers        |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.755 | 0.005 | 0.162 | 0.149 | 495.950 | 0.152 | 0.004 |
| 4.253 | 0.005 | 0.160 | 0.148 | 492.276 | 0.151 | 0.004 |
| 4.050 | 0.005 | 0.160 | 0.147 | 484.366 | 0.148 | 0.004 |
| 6.553 | 0.005 | 0.192 | 0.177 | 496.897 | 0.152 | 0.004 |
| 7.179 | 0.005 | 0.551 | 0.507 | 511.112 | 0.157 | 0.004 |
| 6.671 | 0.005 | 0.359 | 0.331 | 505.331 | 0.155 | 0.004 |
| 7.399 | 0.005 | 0.333 | 0.306 | 494.523 | 0.152 | 0.004 |
| 5.340 | 0.005 | 0.214 | 0.197 | 498.457 | 0.153 | 0.004 |
| 4.216 | 0.005 | 0.156 | 0.143 | 498.693 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.590 | 0.007 | 0.306 | 0.306 | 568.299 | 0.104 | 0.005 |
| 4.059 | 0.006 | 0.290 | 0.290 | 568.299 | 0.049 | 0.004 |
| 3.305 | 0.006 | 0.161 | 0.161 | 568.299 | 0.035 | 0.004 |
| 3.452 | 0.007 | 0.101 | 0.101 | 686.695 | 0.029 | 0.004 |
| 4.113 | 0.005 | 0.218 | 0.200 | 556.714 | 0.171 | 0.005 |
| 4.113 | 0.005 | 0.218 | 0.200 | 556.714 | 0.171 | 0.005 |
| 3.286 | 0.005 | 0.177 | 0.163 | 498.326 | 0.153 | 0.004 |
| 5.064 | 0.006 | 0.365 | 0.336 | 564.477 | 0.173 | 0.005 |
| 4.942 | 0.005 | 0.337 | 0.310 | 498.360 | 0.153 | 0.004 |
| 5.393 | 0.005 | 0.264 | 0.243 | 496.274 | 0.152 | 0.004 |
| 4.468 | 0.005 | 0.129 | 0.119 | 501.847 | 0.154 | 0.004 |
| 3.106 | 0.005 | 0.103 | 0.094 | 496.885 | 0.152 | 0.004 |
| 2.770 | 0.005 | 0.090 | 0.083 | 499.712 | 0.153 | 0.004 |
| 5.626 | 0.005 | 0.582 | 0.535 | 554.513 | 0.170 | 0.005 |
| 5.626 | 0.005 | 0.582 | 0.535 | 554.513 | 0.170 | 0.005 |
| 5.626 | 0.005 | 0.582 | 0.535 | 554.513 | 0.170 | 0.005 |
| 6.020 | 0.005 | 0.520 | 0.479 | 500.456 | 0.153 | 0.004 |
| 7.424 | 0.005 | 0.395 | 0.363 | 499.407 | 0.153 | 0.004 |
| 6.509 | 0.005 | 0.264 | 0.243 | 496.244 | 0.152 | 0.004 |
| 5.110 | 0.005 | 0.433 | 0.399 | 544.929 | 0.167 | 0.005 |

|                           |
|---------------------------|
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Tractors/Loaders/Backhoes |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 5.110 | 0.005 | 0.433 | 0.399 | 544.929 | 0.167 | 0.005 |
| 4.809 | 0.005 | 0.362 | 0.333 | 502.795 | 0.154 | 0.004 |
| 3.879 | 0.005 | 0.197 | 0.182 | 493.912 | 0.151 | 0.004 |
| 4.041 | 0.005 | 0.132 | 0.121 | 496.845 | 0.152 | 0.004 |
| 3.490 | 0.005 | 0.122 | 0.112 | 497.113 | 0.152 | 0.004 |
| 3.862 | 0.005 | 0.139 | 0.128 | 492.953 | 0.151 | 0.004 |
| 5.166 | 0.005 | 0.449 | 0.413 | 557.460 | 0.171 | 0.005 |
| 5.166 | 0.005 | 0.449 | 0.413 | 557.460 | 0.171 | 0.005 |
| 5.166 | 0.005 | 0.449 | 0.413 | 557.460 | 0.171 | 0.005 |
| 6.679 | 0.005 | 0.523 | 0.481 | 501.992 | 0.154 | 0.004 |
| 5.927 | 0.005 | 0.300 | 0.276 | 493.764 | 0.151 | 0.004 |
| 6.194 | 0.005 | 0.250 | 0.230 | 499.228 | 0.153 | 0.004 |
| 3.442 | 0.005 | 0.129 | 0.119 | 497.020 | 0.152 | 0.004 |
| 1.430 | 0.005 | 0.046 | 0.042 | 501.183 | 0.154 | 0.004 |
| 4.887 | 0.008 | 0.272 | 0.272 | 568.299 | 0.070 | 0.005 |
| 4.729 | 0.007 | 0.243 | 0.243 | 568.299 | 0.074 | 0.005 |
| 4.768 | 0.007 | 0.350 | 0.350 | 568.299 | 0.123 | 0.005 |
| 4.328 | 0.006 | 0.332 | 0.332 | 568.299 | 0.056 | 0.004 |
| 3.562 | 0.006 | 0.183 | 0.183 | 568.299 | 0.039 | 0.004 |
| 3.105 | 0.006 | 0.094 | 0.094 | 568.299 | 0.028 | 0.004 |
| 2.713 | 0.005 | 0.088 | 0.088 | 568.299 | 0.026 | 0.004 |
| 4.236 | 0.005 | 0.233 | 0.215 | 495.924 | 0.152 | 0.004 |
| 4.368 | 0.005 | 0.189 | 0.174 | 494.794 | 0.152 | 0.004 |
| 3.668 | 0.005 | 0.136 | 0.125 | 501.437 | 0.154 | 0.004 |
| 4.257 | 0.005 | 0.170 | 0.157 | 500.199 | 0.153 | 0.004 |
| 5.653 | 0.005 | 0.159 | 0.146 | 497.115 | 0.152 | 0.004 |

|                           |
|---------------------------|
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |

|       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 15    | 0.182   | 3.116   | 3.210   | 0.005   | 0.054   | 0.050   | 545.494 | 0.170   | 0.005   |
| 25    | 0.182   | 3.116   | 3.210   | 0.005   | 0.054   | 0.050   | 545.494 | 0.170   | 0.005   |
| 50    | 0.182   | 3.116   | 3.210   | 0.005   | 0.054   | 0.050   | 545.494 | 0.170   | 0.005   |
| 120   | 0.122   | 3.167   | 2.064   | 0.005   | 0.057   | 0.053   | 490.474 | 0.153   | 0.004   |
| 500   | 0.062   | 0.937   | 0.634   | 0.005   | 0.009   | 0.008   | 490.412 | 0.153   | 0.004   |
| 750   | 0.225   | 1.037   | 2.385   | 0.005   | 0.071   | 0.071   | 568.299 | 0.020   | 0.004   |
| 15    | 0.766   | 3.580   | 4.762   | 0.008   | 0.256   | 0.256   | 568.299 | 0.069   | 0.005   |
| 25    | 0.807   | 2.531   | 4.661   | 0.007   | 0.232   | 0.232   | 568.300 | 0.072   | 0.005   |
| 50    | 1.300   | 5.439   | 4.707   | 0.007   | 0.329   | 0.329   | 568.299 | 0.117   | 0.005   |
| 120   | 0.603   | 3.744   | 4.050   | 0.006   | 0.304   | 0.304   | 568.300 | 0.054   | 0.004   |
| 175   | 0.435   | 3.205   | 3.228   | 0.006   | 0.170   | 0.170   | 568.299 | 0.039   | 0.004   |
| 250   | 0.321   | 1.146   | 2.797   | 0.006   | 0.087   | 0.087   | 568.300 | 0.029   | 0.004   |
| 500   | 0.307   | 1.101   | 2.465   | 0.005   | 0.083   | 0.083   | 568.299 | 0.027   | 0.004   |
| 750   | 0.309   | 1.101   | 2.533   | 0.005   | 0.084   | 0.084   | 568.299 | 0.027   | 0.004   |
| 1000  | 0.343   | 1.210   | 4.325   | 0.005   | 0.111   | 0.111   | 568.299 | 0.030   | 0.004   |
| 15    | 0.767   | 4.569   | 4.869   | 0.006   | 0.329   | 0.303   | 554.204 | 0.173   | 0.005   |
| 25    | 0.767   | 4.569   | 4.869   | 0.006   | 0.329   | 0.303   | 554.204 | 0.173   | 0.005   |
| 50    | 0.767   | 4.569   | 4.869   | 0.006   | 0.329   | 0.303   | 554.204 | 0.173   | 0.005   |
| 120   | 0.269   | 3.323   | 3.400   | 0.005   | 0.184   | 0.170   | 479.672 | 0.149   | 0.004   |
| 175   | 0.203   | 2.961   | 2.357   | 0.005   | 0.103   | 0.095   | 495.073 | 0.154   | 0.004   |
| 250   | 0.155   | 1.073   | 2.153   | 0.005   | 0.061   | 0.056   | 484.561 | 0.151   | 0.004   |
| 500   | 0.135   | 1.032   | 1.746   | 0.005   | 0.052   | 0.048   | 485.689 | 0.151   | 0.004   |
| 750   | 0.126   | 1.006   | 1.679   | 0.005   | 0.055   | 0.050   | 489.730 | 0.153   | 0.004   |
| 1000  | 0.125   | 0.978   | 3.032   | 0.005   | 0.060   | 0.056   | 490.243 | 0.153   | 0.004   |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.163 | 0.163 | 568.299 | 0.059 | 0.005 |
| 25   | 0.749 | 2.440 | 4.504 | 0.007 | 0.205 | 0.205 | 568.299 | 0.067 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 1.032 | 4.766 | 4.492 | 0.007 | 0.277 | 0.277 | 568.299 | 0.093 | 0.005 |
| 120  | 0.498 | 3.571 | 3.754 | 0.006 | 0.256 | 0.256 | 568.299 | 0.044 | 0.004 |
| 175  | 0.359 | 3.072 | 2.945 | 0.006 | 0.145 | 0.145 | 568.299 | 0.032 | 0.004 |
| 50   | 2.072 | 7.247 | 6.004 | 0.005 | 0.624 | 0.574 | 538.122 | 0.168 | 0.005 |
| 120  | 0.932 | 4.452 | 7.931 | 0.005 | 0.583 | 0.536 | 488.117 | 0.152 | 0.004 |
| 175  | 0.621 | 3.666 | 6.557 | 0.005 | 0.351 | 0.323 | 493.045 | 0.154 | 0.004 |
| 250  | 0.483 | 2.134 | 5.773 | 0.005 | 0.250 | 0.230 | 491.407 | 0.153 | 0.004 |
| 500  | 0.370 | 3.187 | 4.634 | 0.005 | 0.187 | 0.172 | 490.891 | 0.153 | 0.004 |
| 750  | 0.271 | 1.613 | 3.769 | 0.005 | 0.137 | 0.126 | 489.054 | 0.152 | 0.004 |
| 9999 | 0.162 | 0.983 | 2.335 | 0.005 | 0.059 | 0.054 | 490.412 | 0.153 | 0.004 |
| 50   | 2.446 | 8.009 | 6.163 | 0.005 | 0.704 | 0.648 | 536.141 | 0.167 | 0.005 |
| 120  | 0.798 | 4.123 | 6.723 | 0.005 | 0.566 | 0.521 | 494.922 | 0.154 | 0.004 |
| 175  | 0.555 | 3.421 | 5.859 | 0.005 | 0.326 | 0.299 | 490.000 | 0.153 | 0.004 |
| 250  | 0.398 | 1.654 | 5.290 | 0.005 | 0.200 | 0.184 | 491.606 | 0.153 | 0.004 |
| 500  | 0.344 | 2.382 | 4.373 | 0.005 | 0.169 | 0.156 | 493.510 | 0.154 | 0.004 |
| 750  | 0.296 | 1.445 | 3.834 | 0.005 | 0.142 | 0.130 | 491.266 | 0.153 | 0.004 |
| 1000 | 0.489 | 2.105 | 7.564 | 0.005 | 0.225 | 0.207 | 494.105 | 0.154 | 0.004 |
| 50   | 1.225 | 5.461 | 4.657 | 0.007 | 0.310 | 0.310 | 568.299 | 0.110 | 0.005 |
| 120  | 0.580 | 3.763 | 3.881 | 0.006 | 0.284 | 0.284 | 568.299 | 0.052 | 0.004 |
| 175  | 0.427 | 3.234 | 3.049 | 0.006 | 0.161 | 0.161 | 568.299 | 0.038 | 0.004 |
| 250  | 0.322 | 1.146 | 2.622 | 0.006 | 0.083 | 0.083 | 568.299 | 0.029 | 0.004 |
| 500  | 0.309 | 1.099 | 2.312 | 0.005 | 0.079 | 0.079 | 568.299 | 0.027 | 0.004 |
| 750  | 0.308 | 1.097 | 2.358 | 0.005 | 0.079 | 0.079 | 568.299 | 0.027 | 0.004 |
| 9999 | 0.361 | 1.198 | 4.168 | 0.005 | 0.107 | 0.107 | 568.299 | 0.032 | 0.004 |



|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 25   | 0.686 | 2.339 | 4.350 | 0.007 | 0.169 | 0.169 | 568.299 | 0.061 | 0.005 |
| 25   | 0.687 | 4.700 | 4.395 | 0.005 | 0.284 | 0.261 | 545.347 | 0.170 | 0.005 |
| 50   | 0.687 | 4.700 | 4.395 | 0.005 | 0.284 | 0.261 | 545.347 | 0.170 | 0.005 |
| 120  | 0.368 | 3.562 | 3.764 | 0.005 | 0.251 | 0.230 | 486.056 | 0.151 | 0.004 |
| 175  | 0.273 | 3.093 | 2.924 | 0.005 | 0.142 | 0.130 | 490.673 | 0.153 | 0.004 |
| 250  | 0.202 | 1.152 | 2.594 | 0.005 | 0.079 | 0.073 | 490.257 | 0.153 | 0.004 |
| 500  | 0.175 | 1.140 | 2.050 | 0.005 | 0.066 | 0.061 | 489.103 | 0.152 | 0.004 |
| 750  | 0.189 | 1.224 | 2.266 | 0.005 | 0.076 | 0.070 | 487.653 | 0.152 | 0.004 |
| 50   | 1.393 | 6.103 | 5.052 | 0.005 | 0.447 | 0.411 | 545.919 | 0.170 | 0.005 |
| 120  | 0.567 | 3.858 | 5.015 | 0.005 | 0.400 | 0.368 | 489.866 | 0.153 | 0.004 |
| 175  | 0.427 | 3.336 | 4.430 | 0.005 | 0.241 | 0.222 | 490.466 | 0.153 | 0.004 |
| 250  | 0.425 | 1.835 | 4.938 | 0.005 | 0.207 | 0.191 | 491.733 | 0.153 | 0.004 |
| 500  | 0.282 | 1.878 | 3.019 | 0.005 | 0.125 | 0.115 | 492.034 | 0.153 | 0.004 |
| 15   | 0.679 | 3.580 | 4.728 | 0.008 | 0.237 | 0.237 | 568.299 | 0.061 | 0.005 |
| 25   | 0.744 | 2.531 | 4.661 | 0.007 | 0.224 | 0.224 | 568.299 | 0.067 | 0.005 |
| 50   | 0.895 | 4.182 | 4.366 | 0.007 | 0.253 | 0.253 | 568.299 | 0.080 | 0.005 |
| 120  | 0.461 | 3.418 | 3.752 | 0.006 | 0.239 | 0.239 | 568.299 | 0.041 | 0.004 |
| 175  | 0.319 | 2.930 | 2.989 | 0.006 | 0.133 | 0.133 | 568.299 | 0.028 | 0.004 |
| 250  | 0.226 | 1.048 | 2.582 | 0.006 | 0.072 | 0.072 | 568.299 | 0.020 | 0.004 |
| 500  | 0.211 | 1.028 | 2.310 | 0.005 | 0.069 | 0.069 | 568.299 | 0.019 | 0.004 |
| 750  | 0.215 | 1.028 | 2.370 | 0.005 | 0.070 | 0.070 | 568.299 | 0.019 | 0.004 |
| 9999 | 0.280 | 1.128 | 4.058 | 0.005 | 0.095 | 0.095 | 568.299 | 0.025 | 0.004 |
| 50   | 2.809 | 8.626 | 6.180 | 0.005 | 0.790 | 0.726 | 511.910 | 0.159 | 0.005 |
| 120  | 1.075 | 4.697 | 8.520 | 0.005 | 0.697 | 0.641 | 487.698 | 0.152 | 0.004 |
| 175  | 0.661 | 3.710 | 6.605 | 0.005 | 0.371 | 0.342 | 497.377 | 0.155 | 0.004 |
| 250  | 0.384 | 1.416 | 5.271 | 0.005 | 0.171 | 0.158 | 495.431 | 0.154 | 0.004 |
| 500  | 0.324 | 1.564 | 3.345 | 0.005 | 0.130 | 0.119 | 490.576 | 0.153 | 0.004 |
| 750  | 0.353 | 1.286 | 2.543 | 0.005 | 0.090 | 0.090 | 568.299 | 0.031 | 0.004 |
| 120  | 0.522 | 3.832 | 4.787 | 0.005 | 0.373 | 0.343 | 492.871 | 0.153 | 0.004 |
| 175  | 0.315 | 3.219 | 3.498 | 0.005 | 0.176 | 0.162 | 491.313 | 0.153 | 0.004 |
| 250  | 0.272 | 1.295 | 3.454 | 0.005 | 0.119 | 0.109 | 488.677 | 0.152 | 0.004 |
| 750  | 0.196 | 1.119 | 2.166 | 0.005 | 0.081 | 0.074 | 490.182 | 0.153 | 0.004 |
| 1000 | 0.129 | 0.998 | 2.359 | 0.005 | 0.060 | 0.055 | 490.412 | 0.153 | 0.004 |
| 175  | 0.383 | 3.383 | 3.543 | 0.005 | 0.192 | 0.177 | 488.044 | 0.152 | 0.004 |
| 250  | 0.341 | 1.543 | 3.451 | 0.005 | 0.141 | 0.130 | 487.635 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 500  | 0.287 | 1.560 | 3.090 | 0.005 | 0.113 | 0.104 | 493.506 | 0.154 | 0.004 |
| 750  | 0.348 | 2.176 | 3.691 | 0.005 | 0.143 | 0.132 | 492.114 | 0.153 | 0.004 |
| 1000 | 0.297 | 1.357 | 4.858 | 0.005 | 0.127 | 0.116 | 487.790 | 0.152 | 0.004 |
| 15   | 1.169 | 5.541 | 5.272 | 0.005 | 0.449 | 0.413 | 548.939 | 0.171 | 0.005 |
| 25   | 1.169 | 5.541 | 5.272 | 0.005 | 0.449 | 0.413 | 548.939 | 0.171 | 0.005 |
| 50   | 1.169 | 5.541 | 5.272 | 0.005 | 0.449 | 0.413 | 548.939 | 0.171 | 0.005 |
| 120  | 0.598 | 3.799 | 5.441 | 0.005 | 0.417 | 0.383 | 490.018 | 0.153 | 0.004 |
| 175  | 0.436 | 3.263 | 4.755 | 0.005 | 0.250 | 0.230 | 487.986 | 0.152 | 0.004 |
| 500  | 0.251 | 1.813 | 3.167 | 0.005 | 0.115 | 0.105 | 493.360 | 0.154 | 0.004 |
| 15   | 1.154 | 5.827 | 4.979 | 0.005 | 0.414 | 0.381 | 546.639 | 0.170 | 0.005 |
| 25   | 1.154 | 5.827 | 4.979 | 0.005 | 0.414 | 0.381 | 546.639 | 0.170 | 0.005 |
| 50   | 1.154 | 5.827 | 4.979 | 0.005 | 0.414 | 0.381 | 546.639 | 0.170 | 0.005 |
| 120  | 0.557 | 3.876 | 4.955 | 0.005 | 0.392 | 0.360 | 488.278 | 0.152 | 0.004 |
| 175  | 0.318 | 3.237 | 3.237 | 0.005 | 0.172 | 0.158 | 490.200 | 0.153 | 0.004 |
| 250  | 0.303 | 1.455 | 3.648 | 0.005 | 0.135 | 0.124 | 491.626 | 0.153 | 0.004 |
| 500  | 0.254 | 1.583 | 2.907 | 0.005 | 0.104 | 0.095 | 491.321 | 0.153 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 750  | 0.217 | 1.483 | 2.419 | 0.005 | 0.083 | 0.076 | 491.876 | 0.153 | 0.004 |
| 1000 | 0.257 | 1.066 | 4.810 | 0.005 | 0.116 | 0.107 | 490.412 | 0.153 | 0.004 |
| 50   | 1.289 | 6.061 | 5.182 | 0.005 | 0.457 | 0.420 | 544.075 | 0.169 | 0.005 |
| 120  | 0.407 | 3.675 | 3.944 | 0.005 | 0.271 | 0.249 | 492.006 | 0.153 | 0.004 |
| 175  | 0.327 | 3.218 | 3.332 | 0.005 | 0.173 | 0.159 | 490.583 | 0.153 | 0.004 |
| 250  | 0.316 | 1.388 | 4.092 | 0.005 | 0.135 | 0.124 | 489.817 | 0.153 | 0.004 |
| 500  | 0.296 | 1.633 | 3.524 | 0.005 | 0.134 | 0.123 | 488.587 | 0.152 | 0.004 |
| 9999 | 0.180 | 1.023 | 3.551 | 0.005 | 0.074 | 0.068 | 490.412 | 0.153 | 0.004 |
| 25   | 1.539 | 5.849 | 5.121 | 0.005 | 0.478 | 0.440 | 547.079 | 0.170 | 0.005 |
| 50   | 1.539 | 5.849 | 5.121 | 0.005 | 0.478 | 0.440 | 547.079 | 0.170 | 0.005 |
| 120  | 0.536 | 3.660 | 5.019 | 0.005 | 0.375 | 0.345 | 488.181 | 0.152 | 0.004 |
| 175  | 0.339 | 3.039 | 3.747 | 0.005 | 0.183 | 0.168 | 491.322 | 0.153 | 0.004 |
| 250  | 0.198 | 1.034 | 3.474 | 0.005 | 0.092 | 0.085 | 491.543 | 0.153 | 0.004 |
| 500  | 0.164 | 0.981 | 2.320 | 0.005 | 0.083 | 0.076 | 484.277 | 0.151 | 0.004 |
| 25   | 0.737 | 4.416 | 4.312 | 0.005 | 0.286 | 0.263 | 540.612 | 0.168 | 0.005 |
| 50   | 0.737 | 4.416 | 4.312 | 0.005 | 0.286 | 0.263 | 540.612 | 0.168 | 0.005 |
| 120  | 0.449 | 3.607 | 4.270 | 0.005 | 0.302 | 0.278 | 492.118 | 0.153 | 0.004 |
| 175  | 0.284 | 3.026 | 3.172 | 0.005 | 0.155 | 0.143 | 489.202 | 0.152 | 0.004 |
| 250  | 0.258 | 1.281 | 3.587 | 0.005 | 0.123 | 0.113 | 490.683 | 0.153 | 0.004 |
| 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.300 | 0.059 | 0.005 |
| 15   | 0.679 | 3.580 | 4.728 | 0.008 | 0.237 | 0.237 | 568.299 | 0.061 | 0.005 |
| 25   | 0.744 | 2.531 | 4.661 | 0.007 | 0.224 | 0.224 | 568.299 | 0.067 | 0.005 |
| 50   | 0.661 | 3.542 | 4.202 | 0.007 | 0.212 | 0.212 | 568.299 | 0.059 | 0.005 |
| 120  | 0.388 | 3.260 | 3.584 | 0.006 | 0.203 | 0.203 | 568.299 | 0.035 | 0.004 |
| 175  | 0.309 | 2.908 | 2.989 | 0.006 | 0.132 | 0.132 | 568.299 | 0.027 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.099 | 0.986 | 0.277 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 15   | 0.766 | 3.580 | 4.762 | 0.008 | 0.256 | 0.256 | 568.299 | 0.069 | 0.005 |
| 25   | 0.807 | 2.531 | 4.661 | 0.007 | 0.232 | 0.232 | 568.299 | 0.072 | 0.005 |
| 50   | 0.973 | 4.397 | 4.422 | 0.007 | 0.267 | 0.267 | 568.299 | 0.087 | 0.005 |
| 120  | 0.485 | 3.471 | 3.808 | 0.006 | 0.252 | 0.252 | 568.299 | 0.043 | 0.004 |
| 175  | 0.338 | 2.974 | 3.035 | 0.006 | 0.140 | 0.140 | 568.299 | 0.030 | 0.004 |
| 250  | 0.242 | 1.065 | 2.624 | 0.006 | 0.075 | 0.075 | 568.299 | 0.021 | 0.004 |
| 500  | 0.226 | 1.041 | 2.340 | 0.005 | 0.071 | 0.071 | 568.299 | 0.020 | 0.004 |
| 750  | 0.230 | 1.041 | 2.401 | 0.005 | 0.072 | 0.072 | 568.299 | 0.020 | 0.004 |
| 9999 | 0.293 | 1.144 | 4.105 | 0.005 | 0.098 | 0.098 | 568.299 | 0.026 | 0.004 |
| 15   | 1.064 | 4.923 | 4.842 | 0.005 | 0.387 | 0.356 | 546.291 | 0.170 | 0.005 |
| 25   | 1.064 | 4.923 | 4.842 | 0.005 | 0.387 | 0.356 | 546.291 | 0.170 | 0.005 |
| 50   | 1.064 | 4.923 | 4.842 | 0.005 | 0.387 | 0.356 | 546.291 | 0.170 | 0.005 |
| 120  | 0.481 | 3.610 | 4.650 | 0.005 | 0.320 | 0.294 | 492.212 | 0.153 | 0.004 |
| 175  | 0.265 | 2.949 | 3.181 | 0.005 | 0.147 | 0.136 | 490.181 | 0.153 | 0.004 |
| 250  | 0.211 | 1.243 | 2.995 | 0.005 | 0.094 | 0.086 | 491.664 | 0.153 | 0.004 |
| 500  | 0.245 | 2.231 | 3.098 | 0.005 | 0.119 | 0.110 | 497.996 | 0.155 | 0.004 |
| 50   | 1.070 | 4.768 | 4.735 | 0.005 | 0.359 | 0.330 | 545.869 | 0.170 | 0.005 |
| 120  | 0.222 | 3.270 | 2.845 | 0.005 | 0.136 | 0.125 | 491.211 | 0.153 | 0.004 |
| 175  | 0.164 | 2.842 | 2.342 | 0.005 | 0.088 | 0.081 | 489.987 | 0.153 | 0.004 |
| 250  | 0.152 | 1.029 | 2.487 | 0.005 | 0.060 | 0.055 | 491.100 | 0.153 | 0.004 |
| 500  | 0.145 | 0.958 | 2.701 | 0.005 | 0.060 | 0.055 | 485.954 | 0.151 | 0.004 |
| 175  | 0.802 | 3.990 | 8.021 | 0.005 | 0.461 | 0.424 | 491.492 | 0.153 | 0.004 |
| 250  | 0.669 | 2.512 | 7.208 | 0.005 | 0.350 | 0.322 | 493.634 | 0.154 | 0.004 |
| 500  | 0.598 | 4.982 | 6.502 | 0.005 | 0.300 | 0.276 | 498.186 | 0.155 | 0.004 |
| 750  | 0.506 | 2.759 | 6.727 | 0.005 | 0.248 | 0.228 | 491.473 | 0.153 | 0.004 |
| 1000 | 0.574 | 2.413 | 5.764 | 0.005 | 0.183 | 0.183 | 568.299 | 0.051 | 0.004 |
| 25   | 1.765 | 7.299 | 5.679 | 0.005 | 0.576 | 0.530 | 545.053 | 0.170 | 0.005 |
| 50   | 1.765 | 7.299 | 5.679 | 0.005 | 0.576 | 0.530 | 545.053 | 0.170 | 0.005 |
| 120  | 0.655 | 4.047 | 5.470 | 0.005 | 0.452 | 0.416 | 484.093 | 0.151 | 0.004 |
| 175  | 0.448 | 3.423 | 4.368 | 0.005 | 0.242 | 0.223 | 489.511 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.334 | 1.346 | 4.131 | 0.005 | 0.140 | 0.129 | 487.902 | 0.152 | 0.004 |
| 500  | 0.334 | 1.868 | 3.726 | 0.005 | 0.140 | 0.128 | 484.571 | 0.151 | 0.004 |
| 750  | 0.331 | 1.555 | 3.544 | 0.005 | 0.140 | 0.129 | 476.566 | 0.148 | 0.004 |
| 1000 | 0.336 | 1.213 | 5.673 | 0.005 | 0.154 | 0.142 | 488.404 | 0.152 | 0.004 |
| 120  | 0.740 | 4.204 | 7.036 | 0.005 | 0.543 | 0.499 | 502.829 | 0.157 | 0.004 |
| 175  | 0.539 | 3.568 | 5.641 | 0.005 | 0.303 | 0.279 | 497.340 | 0.155 | 0.004 |
| 250  | 0.557 | 2.407 | 6.563 | 0.005 | 0.290 | 0.267 | 486.991 | 0.152 | 0.004 |
| 500  | 0.369 | 2.828 | 4.568 | 0.005 | 0.180 | 0.166 | 490.773 | 0.153 | 0.004 |
| 750  | 0.294 | 1.965 | 3.746 | 0.005 | 0.135 | 0.124 | 490.578 | 0.153 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 50   | 1.018 | 4.657 | 4.427 | 0.007 | 0.270 | 0.270 | 568.299 | 0.091 | 0.005 |
| 120  | 0.492 | 3.541 | 3.723 | 0.006 | 0.252 | 0.252 | 568.299 | 0.044 | 0.004 |
| 175  | 0.351 | 3.043 | 2.930 | 0.006 | 0.141 | 0.141 | 568.299 | 0.031 | 0.004 |
| 250  | 0.309 | 1.306 | 3.040 | 0.007 | 0.090 | 0.090 | 686.695 | 0.027 | 0.004 |
| 25   | 0.487 | 3.787 | 3.890 | 0.005 | 0.178 | 0.164 | 547.558 | 0.171 | 0.005 |
| 50   | 0.487 | 3.787 | 3.890 | 0.005 | 0.178 | 0.164 | 547.558 | 0.171 | 0.005 |
| 120  | 0.216 | 3.282 | 2.860 | 0.005 | 0.140 | 0.129 | 490.094 | 0.153 | 0.004 |
| 50   | 0.779 | 4.353 | 4.820 | 0.006 | 0.320 | 0.294 | 555.736 | 0.173 | 0.005 |
| 120  | 0.414 | 3.489 | 4.284 | 0.005 | 0.269 | 0.247 | 491.317 | 0.153 | 0.004 |
| 175  | 0.375 | 2.976 | 4.475 | 0.005 | 0.215 | 0.198 | 488.441 | 0.152 | 0.004 |
| 250  | 0.241 | 1.234 | 3.989 | 0.005 | 0.113 | 0.104 | 494.139 | 0.154 | 0.004 |
| 500  | 0.157 | 1.226 | 2.204 | 0.005 | 0.076 | 0.070 | 487.872 | 0.152 | 0.004 |
| 750  | 0.143 | 0.993 | 2.269 | 0.005 | 0.078 | 0.072 | 488.860 | 0.152 | 0.004 |
| 15   | 1.545 | 6.444 | 5.399 | 0.005 | 0.531 | 0.488 | 545.758 | 0.170 | 0.005 |
| 25   | 1.545 | 6.444 | 5.399 | 0.005 | 0.531 | 0.488 | 545.758 | 0.170 | 0.005 |
| 50   | 1.545 | 6.444 | 5.399 | 0.005 | 0.531 | 0.488 | 545.758 | 0.170 | 0.005 |
| 120  | 0.600 | 3.882 | 5.136 | 0.005 | 0.428 | 0.394 | 492.554 | 0.153 | 0.004 |
| 175  | 0.589 | 3.588 | 6.071 | 0.005 | 0.320 | 0.294 | 491.521 | 0.153 | 0.004 |
| 250  | 0.350 | 1.605 | 4.302 | 0.005 | 0.169 | 0.156 | 488.409 | 0.152 | 0.004 |
| 25   | 0.992 | 5.310 | 4.764 | 0.005 | 0.363 | 0.334 | 536.112 | 0.167 | 0.005 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 50   | 0.992 | 5.310 | 4.764 | 0.005 | 0.363 | 0.334 | 536.112 | 0.167 | 0.005 |
| 120  | 0.420 | 3.692 | 4.154 | 0.005 | 0.294 | 0.271 | 494.124 | 0.154 | 0.004 |
| 175  | 0.297 | 3.137 | 3.168 | 0.005 | 0.160 | 0.147 | 485.775 | 0.151 | 0.004 |
| 250  | 0.259 | 1.242 | 3.460 | 0.005 | 0.112 | 0.103 | 489.456 | 0.152 | 0.004 |
| 500  | 0.222 | 1.445 | 2.669 | 0.005 | 0.092 | 0.085 | 486.294 | 0.151 | 0.004 |
| 750  | 0.271 | 1.601 | 3.402 | 0.005 | 0.124 | 0.114 | 485.010 | 0.151 | 0.004 |
| 15   | 1.039 | 5.018 | 4.960 | 0.005 | 0.409 | 0.377 | 548.361 | 0.171 | 0.005 |
| 25   | 1.039 | 5.018 | 4.960 | 0.005 | 0.409 | 0.377 | 548.361 | 0.171 | 0.005 |
| 50   | 1.039 | 5.018 | 4.960 | 0.005 | 0.409 | 0.377 | 548.361 | 0.171 | 0.005 |
| 120  | 0.658 | 3.855 | 5.915 | 0.005 | 0.450 | 0.414 | 493.715 | 0.154 | 0.004 |
| 175  | 0.470 | 3.331 | 5.127 | 0.005 | 0.261 | 0.240 | 485.925 | 0.151 | 0.004 |
| 250  | 0.419 | 1.849 | 5.296 | 0.005 | 0.212 | 0.195 | 491.565 | 0.153 | 0.004 |
| 500  | 0.256 | 1.974 | 3.211 | 0.005 | 0.121 | 0.112 | 489.628 | 0.152 | 0.004 |
| 750  | 0.094 | 0.966 | 1.025 | 0.005 | 0.029 | 0.026 | 494.643 | 0.154 | 0.004 |
| 15   | 0.766 | 3.580 | 4.762 | 0.008 | 0.256 | 0.256 | 568.300 | 0.069 | 0.005 |
| 25   | 0.807 | 2.531 | 4.661 | 0.007 | 0.232 | 0.232 | 568.299 | 0.072 | 0.005 |
| 50   | 1.210 | 5.092 | 4.607 | 0.007 | 0.311 | 0.311 | 568.299 | 0.109 | 0.005 |
| 120  | 0.564 | 3.648 | 3.980 | 0.006 | 0.290 | 0.290 | 568.299 | 0.050 | 0.004 |
| 175  | 0.402 | 3.123 | 3.176 | 0.006 | 0.162 | 0.162 | 568.299 | 0.036 | 0.004 |
| 250  | 0.292 | 1.118 | 2.751 | 0.006 | 0.084 | 0.084 | 568.299 | 0.026 | 0.004 |
| 500  | 0.277 | 1.080 | 2.430 | 0.005 | 0.080 | 0.080 | 568.299 | 0.025 | 0.004 |
| 175  | 0.383 | 3.383 | 3.543 | 0.005 | 0.192 | 0.177 | 488.044 | 0.152 | 0.004 |
| 250  | 0.341 | 1.543 | 3.451 | 0.005 | 0.141 | 0.130 | 487.635 | 0.152 | 0.004 |
| 500  | 0.287 | 1.560 | 3.090 | 0.005 | 0.113 | 0.104 | 493.506 | 0.154 | 0.004 |
| 750  | 0.348 | 2.176 | 3.691 | 0.005 | 0.143 | 0.132 | 492.114 | 0.153 | 0.004 |
| 1000 | 0.297 | 1.357 | 4.858 | 0.005 | 0.127 | 0.116 | 487.790 | 0.152 | 0.004 |

2019

| 2019            |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-----------------|-------|---------|---------|---------|---------|---------|
| Equipment       | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    |
| Aerial Lifts    | 15    | 0.172   | 3.115   | 3.079   | 0.005   | 0.042   |
| Aerial Lifts    | 25    | 0.172   | 3.115   | 3.079   | 0.005   | 0.042   |
| Aerial Lifts    | 50    | 0.172   | 3.115   | 3.079   | 0.005   | 0.042   |
| Aerial Lifts    | 120   | 0.118   | 3.173   | 1.977   | 0.005   | 0.049   |
| Aerial Lifts    | 500   | 0.066   | 0.941   | 0.636   | 0.005   | 0.009   |
| Aerial Lifts    | 750   | 0.212   | 1.023   | 2.117   | 0.005   | 0.064   |
| Air Compressors |       |         |         |         |         |         |
|                 | 15    | 0.748   | 3.562   | 4.647   | 0.008   | 0.241   |
| Air Compressors |       |         |         |         |         |         |
|                 | 25    | 0.787   | 2.501   | 4.596   | 0.007   | 0.222   |
| Air Compressors |       |         |         |         |         |         |
|                 | 50    | 1.129   | 5.283   | 4.546   | 0.007   | 0.287   |
| Air Compressors |       |         |         |         |         |         |
|                 | 120   | 0.538   | 3.718   | 3.706   | 0.006   | 0.260   |
| Air Compressors |       |         |         |         |         |         |
|                 | 175   | 0.401   | 3.204   | 2.874   | 0.006   | 0.150   |
| Air Compressors |       |         |         |         |         |         |
|                 | 250   | 0.304   | 1.132   | 2.469   | 0.006   | 0.078   |
| Air Compressors |       |         |         |         |         |         |
|                 | 500   | 0.293   | 1.086   | 2.193   | 0.005   | 0.075   |
| Air Compressors |       |         |         |         |         |         |
|                 | 750   | 0.294   | 1.086   | 2.247   | 0.005   | 0.076   |
| Air Compressors |       |         |         |         |         |         |
|                 | 1000  | 0.324   | 1.182   | 4.073   | 0.005   | 0.102   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 15    | 0.722   | 4.497   | 4.718   | 0.006   | 0.303   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 25    | 0.722   | 4.497   | 4.718   | 0.006   | 0.303   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 50    | 0.722   | 4.497   | 4.718   | 0.006   | 0.303   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 120   | 0.267   | 3.332   | 3.321   | 0.005   | 0.180   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 175   | 0.181   | 2.956   | 2.018   | 0.005   | 0.088   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 250   | 0.143   | 1.061   | 1.894   | 0.005   | 0.054   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 500   | 0.129   | 1.034   | 1.551   | 0.005   | 0.048   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 750   | 0.117   | 0.971   | 1.449   | 0.005   | 0.048   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 1000  | 0.129   | 0.983   | 3.041   | 0.005   | 0.061   |

|                          |      |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.162 |
| Cement and Mortar Mixers | 25   | 0.735 | 2.417 | 4.469 | 0.007 | 0.196 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.899 | 4.645 | 4.338 | 0.007 | 0.242 |
| Concrete/Industrial Saws | 120  | 0.443 | 3.550 | 3.441 | 0.006 | 0.220 |
| Concrete/Industrial Saws | 175  | 0.330 | 3.072 | 2.618 | 0.006 | 0.128 |
| Cranes                   | 50   | 2.045 | 7.245 | 5.952 | 0.005 | 0.615 |
| Cranes                   | 120  | 0.803 | 4.265 | 6.958 | 0.005 | 0.501 |
| Cranes                   | 175  | 0.568 | 3.598 | 5.949 | 0.005 | 0.318 |
| Cranes                   | 250  | 0.427 | 1.941 | 5.084 | 0.005 | 0.216 |
| Cranes                   | 500  | 0.349 | 2.969 | 4.297 | 0.005 | 0.173 |
| Cranes                   | 750  | 0.252 | 1.446 | 3.428 | 0.005 | 0.124 |
| Cranes                   | 9999 | 0.172 | 0.991 | 2.349 | 0.005 | 0.060 |
| Crawler Tractors         | 50   | 2.225 | 7.589 | 5.855 | 0.005 | 0.640 |
| Crawler Tractors         | 120  | 0.757 | 4.088 | 6.393 | 0.005 | 0.535 |
| Crawler Tractors         | 175  | 0.517 | 3.379 | 5.382 | 0.005 | 0.300 |
| Crawler Tractors         | 250  | 0.380 | 1.604 | 4.972 | 0.005 | 0.188 |
| Crawler Tractors         | 500  | 0.319 | 2.219 | 3.934 | 0.005 | 0.153 |
| Crawler Tractors         | 750  | 0.266 | 1.356 | 3.343 | 0.005 | 0.123 |
| Crawler Tractors         | 1000 | 0.460 | 2.020 | 7.212 | 0.005 | 0.211 |
| Crushing/Proc. Equipment | 50   | 1.064 | 5.316 | 4.495 | 0.007 | 0.269 |
| Crushing/Proc. Equipment | 120  | 0.519 | 3.739 | 3.544 | 0.006 | 0.241 |
| Crushing/Proc. Equipment | 175  | 0.394 | 3.233 | 2.700 | 0.006 | 0.141 |
| Crushing/Proc. Equipment | 250  | 0.304 | 1.134 | 2.300 | 0.006 | 0.074 |
| Crushing/Proc. Equipment | 500  | 0.295 | 1.087 | 2.046 | 0.005 | 0.071 |
| Crushing/Proc. Equipment | 750  | 0.294 | 1.085 | 2.085 | 0.005 | 0.071 |
| Crushing/Proc. Equipment | 9999 | 0.345 | 1.173 | 3.927 | 0.005 | 0.098 |



|                      |      |       |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|-------|
| Dumpers/Tenders      | 25   | 0.686 | 2.339 | 4.341 | 0.007 | 0.167 |
| Excavators           | 25   | 0.637 | 4.597 | 4.199 | 0.005 | 0.250 |
| Excavators           | 50   | 0.637 | 4.597 | 4.199 | 0.005 | 0.250 |
| Excavators           | 120  | 0.325 | 3.524 | 3.369 | 0.005 | 0.211 |
| Excavators           | 175  | 0.246 | 3.082 | 2.533 | 0.005 | 0.122 |
| Excavators           | 250  | 0.186 | 1.127 | 2.242 | 0.005 | 0.068 |
| Excavators           | 500  | 0.162 | 1.114 | 1.780 | 0.005 | 0.058 |
| Excavators           | 750  | 0.176 | 1.173 | 1.987 | 0.005 | 0.067 |
| Forklifts            | 50   | 1.244 | 5.880 | 4.862 | 0.005 | 0.401 |
| Forklifts            | 120  | 0.510 | 3.804 | 4.550 | 0.005 | 0.353 |
| Forklifts            | 175  | 0.382 | 3.288 | 3.865 | 0.005 | 0.210 |
| Forklifts            | 250  | 0.374 | 1.677 | 4.250 | 0.005 | 0.175 |
| Forklifts            | 500  | 0.268 | 1.814 | 2.751 | 0.005 | 0.112 |
| Generator Sets       | 15   | 0.662 | 3.562 | 4.617 | 0.008 | 0.224 |
| Generator Sets       | 25   | 0.731 | 2.501 | 4.596 | 0.007 | 0.214 |
| Generator Sets       | 50   | 0.779 | 4.076 | 4.215 | 0.007 | 0.222 |
| Generator Sets       | 120  | 0.405 | 3.396 | 3.446 | 0.006 | 0.206 |
| Generator Sets       | 175  | 0.290 | 2.929 | 2.669 | 0.006 | 0.118 |
| Generator Sets       | 250  | 0.211 | 1.036 | 2.285 | 0.006 | 0.064 |
| Generator Sets       | 500  | 0.199 | 1.015 | 2.056 | 0.005 | 0.062 |
| Generator Sets       | 750  | 0.202 | 1.015 | 2.104 | 0.005 | 0.062 |
| Generator Sets       | 9999 | 0.261 | 1.103 | 3.829 | 0.005 | 0.087 |
| Graders              | 50   | 2.616 | 8.279 | 5.945 | 0.005 | 0.737 |
| Graders              | 120  | 1.032 | 4.642 | 8.159 | 0.005 | 0.665 |
| Graders              | 175  | 0.609 | 3.656 | 6.014 | 0.005 | 0.337 |
| Graders              | 250  | 0.360 | 1.359 | 4.866 | 0.005 | 0.156 |
| Graders              | 500  | 0.323 | 1.528 | 3.218 | 0.005 | 0.124 |
| Graders              | 750  | 0.335 | 1.255 | 2.276 | 0.005 | 0.080 |
| Off-Highway Tractors | 120  | 0.473 | 3.795 | 4.421 | 0.005 | 0.331 |
| Off-Highway Tractors | 175  | 0.294 | 3.219 | 3.208 | 0.005 | 0.159 |
| Off-Highway Tractors | 250  | 0.239 | 1.218 | 2.914 | 0.005 | 0.098 |
| Off-Highway Tractors | 750  | 0.205 | 1.129 | 2.177 | 0.005 | 0.082 |
| Off-Highway Tractors | 1000 | 0.140 | 1.010 | 2.378 | 0.005 | 0.062 |
| Off-Highway Trucks   | 175  | 0.323 | 3.326 | 2.825 | 0.005 | 0.149 |
| Off-Highway Trucks   | 250  | 0.307 | 1.461 | 2.985 | 0.005 | 0.119 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.264 | 1.483 | 2.669 | 0.005 | 0.097 |
| Off-Highway Trucks                 | 750  | 0.327 | 2.041 | 3.320 | 0.005 | 0.129 |
| Off-Highway Trucks                 | 1000 | 0.295 | 1.356 | 4.765 | 0.005 | 0.124 |
| Other Construction Equipment       | 15   | 1.152 | 5.541 | 5.203 | 0.005 | 0.437 |
| Other Construction Equipment       | 25   | 1.152 | 5.541 | 5.203 | 0.005 | 0.437 |
| Other Construction Equipment       | 50   | 1.152 | 5.541 | 5.203 | 0.005 | 0.437 |
| Other Construction Equipment       | 120  | 0.550 | 3.754 | 5.048 | 0.005 | 0.379 |
| Other Construction Equipment       | 175  | 0.412 | 3.256 | 4.433 | 0.005 | 0.234 |
| Other Construction Equipment       | 500  | 0.234 | 1.667 | 2.855 | 0.005 | 0.103 |
| Other General Industrial Equipment | 15   | 1.042 | 5.662 | 4.807 | 0.005 | 0.374 |
| Other General Industrial Equipment | 25   | 1.042 | 5.662 | 4.807 | 0.005 | 0.374 |
| Other General Industrial Equipment | 50   | 1.042 | 5.662 | 4.807 | 0.005 | 0.374 |
| Other General Industrial Equipment | 120  | 0.500 | 3.821 | 4.497 | 0.005 | 0.343 |
| Other General Industrial Equipment | 175  | 0.302 | 3.241 | 2.999 | 0.005 | 0.157 |
| Other General Industrial Equipment | 250  | 0.259 | 1.299 | 3.020 | 0.005 | 0.106 |
| Other General Industrial Equipment | 500  | 0.239 | 1.561 | 2.575 | 0.005 | 0.092 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.199 | 1.474 | 2.115 | 0.005 | 0.076 |
| Other General Industrial Equipment | 1000 | 0.264 | 1.076 | 4.834 | 0.005 | 0.117 |
| Other Material Handling Equipment  | 50   | 1.275 | 6.139 | 5.179 | 0.005 | 0.452 |
| Other Material Handling Equipment  | 120  | 0.360 | 3.636 | 3.566 | 0.005 | 0.231 |
| Other Material Handling Equipment  | 175  | 0.280 | 3.185 | 2.774 | 0.005 | 0.139 |
| Other Material Handling Equipment  | 250  | 0.300 | 1.341 | 3.817 | 0.005 | 0.123 |
| Other Material Handling Equipment  | 500  | 0.291 | 1.620 | 3.371 | 0.005 | 0.128 |
| Other Material Handling Equipment  | 9999 | 0.190 | 1.036 | 3.583 | 0.005 | 0.076 |
| Pavers                             | 25   | 1.418 | 5.657 | 4.916 | 0.005 | 0.436 |
| Pavers                             | 50   | 1.418 | 5.657 | 4.916 | 0.005 | 0.436 |
| Pavers                             | 120  | 0.496 | 3.622 | 4.670 | 0.005 | 0.346 |
| Pavers                             | 175  | 0.299 | 3.013 | 3.245 | 0.005 | 0.159 |
| Pavers                             | 250  | 0.187 | 1.032 | 3.111 | 0.005 | 0.084 |
| Pavers                             | 500  | 0.167 | 0.986 | 2.270 | 0.005 | 0.081 |
| Paving Equipment                   | 25   | 0.705 | 4.408 | 4.238 | 0.005 | 0.270 |
| Paving Equipment                   | 50   | 0.705 | 4.408 | 4.238 | 0.005 | 0.270 |
| Paving Equipment                   | 120  | 0.425 | 3.598 | 4.042 | 0.005 | 0.281 |
| Paving Equipment                   | 175  | 0.254 | 3.011 | 2.692 | 0.005 | 0.134 |
| Paving Equipment                   | 250  | 0.241 | 1.244 | 3.251 | 0.005 | 0.112 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Pressure Washers                   | 15   | 0.662 | 3.562 | 4.617 | 0.008 | 0.224 |
| Pressure Washers                   | 25   | 0.731 | 2.501 | 4.596 | 0.007 | 0.214 |
| Pressure Washers                   | 50   | 0.569 | 3.457 | 4.053 | 0.007 | 0.184 |
| Pressure Washers                   | 120  | 0.337 | 3.240 | 3.295 | 0.006 | 0.174 |
| Pressure Washers                   | 175  | 0.280 | 2.907 | 2.670 | 0.006 | 0.117 |

|                         |      |       |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 |
| Pumps                   | 15   | 0.748 | 3.562 | 4.647 | 0.008 | 0.241 |
| Pumps                   | 25   | 0.787 | 2.501 | 4.596 | 0.007 | 0.222 |
| Pumps                   | 50   | 0.849 | 4.284 | 4.269 | 0.007 | 0.235 |
| Pumps                   | 120  | 0.429 | 3.449 | 3.497 | 0.006 | 0.217 |
| Pumps                   | 175  | 0.309 | 2.974 | 2.711 | 0.006 | 0.124 |
| Pumps                   | 250  | 0.226 | 1.052 | 2.323 | 0.006 | 0.067 |
| Pumps                   | 500  | 0.214 | 1.027 | 2.084 | 0.005 | 0.064 |
| Pumps                   | 750  | 0.217 | 1.027 | 2.133 | 0.005 | 0.065 |
| Pumps                   | 9999 | 0.273 | 1.118 | 3.873 | 0.005 | 0.089 |
| Rollers                 | 15   | 0.972 | 4.778 | 4.645 | 0.005 | 0.349 |
| Rollers                 | 25   | 0.972 | 4.778 | 4.645 | 0.005 | 0.349 |
| Rollers                 | 50   | 0.972 | 4.778 | 4.645 | 0.005 | 0.349 |
| Rollers                 | 120  | 0.423 | 3.557 | 4.179 | 0.005 | 0.275 |
| Rollers                 | 175  | 0.231 | 2.933 | 2.699 | 0.005 | 0.124 |
| Rollers                 | 250  | 0.211 | 1.249 | 2.883 | 0.005 | 0.092 |
| Rollers                 | 500  | 0.234 | 2.101 | 2.908 | 0.005 | 0.111 |
| Rough Terrain Forklifts | 50   | 1.009 | 4.674 | 4.557 | 0.005 | 0.328 |
| Rough Terrain Forklifts | 120  | 0.202 | 3.258 | 2.622 | 0.005 | 0.117 |
| Rough Terrain Forklifts | 175  | 0.149 | 2.841 | 2.058 | 0.005 | 0.075 |
| Rough Terrain Forklifts | 250  | 0.109 | 0.974 | 1.639 | 0.005 | 0.036 |
| Rough Terrain Forklifts | 500  | 0.116 | 0.950 | 1.961 | 0.005 | 0.043 |
| Rubber Tired Dozers     | 175  | 0.759 | 3.949 | 7.520 | 0.005 | 0.433 |
| Rubber Tired Dozers     | 250  | 0.651 | 2.459 | 6.929 | 0.005 | 0.338 |
| Rubber Tired Dozers     | 500  | 0.572 | 4.743 | 6.143 | 0.005 | 0.283 |
| Rubber Tired Dozers     | 750  | 0.455 | 2.598 | 6.122 | 0.005 | 0.218 |
| Rubber Tired Dozers     | 1000 | 0.547 | 2.281 | 5.528 | 0.005 | 0.171 |
| Rubber Tired Loaders    | 25   | 1.602 | 6.978 | 5.432 | 0.005 | 0.518 |
| Rubber Tired Loaders    | 50   | 1.602 | 6.978 | 5.432 | 0.005 | 0.518 |
| Rubber Tired Loaders    | 120  | 0.595 | 3.979 | 5.006 | 0.005 | 0.402 |
| Rubber Tired Loaders    | 175  | 0.405 | 3.381 | 3.859 | 0.005 | 0.213 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.309 | 1.302 | 3.745 | 0.005 | 0.126 |
| Rubber Tired Loaders      | 500  | 0.306 | 1.725 | 3.288 | 0.005 | 0.123 |
| Rubber Tired Loaders      | 750  | 0.293 | 1.452 | 3.019 | 0.005 | 0.118 |
| Rubber Tired Loaders      | 1000 | 0.323 | 1.208 | 5.459 | 0.005 | 0.146 |
| Scrapers                  | 120  | 0.718 | 4.197 | 6.841 | 0.005 | 0.526 |
| Scrapers                  | 175  | 0.510 | 3.533 | 5.264 | 0.005 | 0.283 |
| Scrapers                  | 250  | 0.501 | 2.233 | 5.831 | 0.005 | 0.257 |
| Scrapers                  | 500  | 0.343 | 2.595 | 4.156 | 0.005 | 0.163 |
| Scrapers                  | 750  | 0.277 | 1.829 | 3.431 | 0.005 | 0.123 |
| Signal Boards             | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 |
| Signal Boards             | 50   | 0.887 | 4.538 | 4.272 | 0.007 | 0.236 |
| Signal Boards             | 120  | 0.437 | 3.519 | 3.410 | 0.006 | 0.216 |
| Signal Boards             | 175  | 0.321 | 3.043 | 2.601 | 0.006 | 0.125 |
| Signal Boards             | 250  | 0.291 | 1.292 | 2.676 | 0.007 | 0.080 |
| Skid Steer Loaders        | 25   | 0.446 | 3.740 | 3.750 | 0.005 | 0.154 |
| Skid Steer Loaders        | 50   | 0.446 | 3.740 | 3.750 | 0.005 | 0.154 |
| Skid Steer Loaders        | 120  | 0.199 | 3.277 | 2.656 | 0.005 | 0.122 |
| Surfacing Equipment       | 50   | 0.643 | 4.100 | 4.420 | 0.006 | 0.250 |
| Surfacing Equipment       | 120  | 0.355 | 3.449 | 3.823 | 0.005 | 0.226 |
| Surfacing Equipment       | 175  | 0.357 | 2.972 | 4.239 | 0.005 | 0.204 |
| Surfacing Equipment       | 250  | 0.217 | 1.216 | 3.400 | 0.005 | 0.101 |
| Surfacing Equipment       | 500  | 0.146 | 1.214 | 1.899 | 0.005 | 0.068 |
| Surfacing Equipment       | 750  | 0.142 | 0.994 | 2.179 | 0.005 | 0.076 |
| Sweepers/Scrubbers        | 15   | 1.431 | 6.268 | 5.225 | 0.005 | 0.491 |
| Sweepers/Scrubbers        | 25   | 1.431 | 6.268 | 5.225 | 0.005 | 0.491 |
| Sweepers/Scrubbers        | 50   | 1.431 | 6.268 | 5.225 | 0.005 | 0.491 |
| Sweepers/Scrubbers        | 120  | 0.550 | 3.846 | 4.773 | 0.005 | 0.387 |
| Sweepers/Scrubbers        | 175  | 0.523 | 3.449 | 5.301 | 0.005 | 0.277 |
| Sweepers/Scrubbers        | 250  | 0.235 | 1.230 | 2.866 | 0.005 | 0.099 |
| Tractors/Loaders/Backhoes | 25   | 0.920 | 5.203 | 4.609 | 0.005 | 0.330 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.920 | 5.203 | 4.609 | 0.005 | 0.330 |
| Tractors/Loaders/Backhoes | 120  | 0.368 | 3.638 | 3.693 | 0.005 | 0.247 |
| Tractors/Loaders/Backhoes | 175  | 0.270 | 3.122 | 2.784 | 0.005 | 0.140 |
| Tractors/Loaders/Backhoes | 250  | 0.245 | 1.220 | 3.147 | 0.005 | 0.102 |
| Tractors/Loaders/Backhoes | 500  | 0.206 | 1.389 | 2.345 | 0.005 | 0.082 |
| Tractors/Loaders/Backhoes | 750  | 0.262 | 1.603 | 3.120 | 0.005 | 0.117 |
| Trenchers                 | 15   | 0.955 | 4.892 | 4.785 | 0.005 | 0.377 |
| Trenchers                 | 25   | 0.955 | 4.892 | 4.785 | 0.005 | 0.377 |
| Trenchers                 | 50   | 0.955 | 4.892 | 4.785 | 0.005 | 0.377 |
| Trenchers                 | 120  | 0.631 | 3.837 | 5.695 | 0.005 | 0.431 |
| Trenchers                 | 175  | 0.460 | 3.342 | 4.960 | 0.005 | 0.255 |
| Trenchers                 | 250  | 0.405 | 1.810 | 5.047 | 0.005 | 0.203 |
| Trenchers                 | 500  | 0.254 | 1.987 | 3.128 | 0.005 | 0.118 |
| Trenchers                 | 750  | 0.078 | 0.956 | 0.707 | 0.005 | 0.015 |
| Welders                   | 15   | 0.748 | 3.562 | 4.647 | 0.008 | 0.241 |
| Welders                   | 25   | 0.787 | 2.501 | 4.596 | 0.007 | 0.222 |
| Welders                   | 50   | 1.055 | 4.950 | 4.449 | 0.007 | 0.273 |
| Welders                   | 120  | 0.503 | 3.623 | 3.648 | 0.006 | 0.250 |
| Welders                   | 175  | 0.370 | 3.122 | 2.832 | 0.006 | 0.143 |
| Welders                   | 250  | 0.276 | 1.104 | 2.432 | 0.006 | 0.075 |
| Welders                   | 500  | 0.264 | 1.065 | 2.163 | 0.005 | 0.072 |
| Water Trucks              | 175  | 0.323 | 3.326 | 2.825 | 0.005 | 0.149 |
| Water Trucks              | 250  | 0.307 | 1.461 | 2.985 | 0.005 | 0.119 |
| Water Trucks              | 500  | 0.264 | 1.483 | 2.669 | 0.005 | 0.097 |
| Water Trucks              | 750  | 0.327 | 2.041 | 3.320 | 0.005 | 0.129 |
| Water Trucks              | 1000 | 0.295 | 1.356 | 4.765 | 0.005 | 0.124 |

2020

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|
| PM2.5   | CO2     | CH4     | N2O     |
| 0.038   | 536.743 | 0.170   | 0.005   |
| 0.038   | 536.743 | 0.170   | 0.005   |
| 0.038   | 536.743 | 0.170   | 0.005   |
| 0.045   | 482.606 | 0.153   | 0.004   |
| 0.008   | 482.545 | 0.153   | 0.004   |
| 0.064   | 568.299 | 0.019   | 0.004   |
| 0.241   | 568.299 | 0.067   | 0.005   |
| 0.222   | 568.299 | 0.071   | 0.005   |
| 0.287   | 568.299 | 0.101   | 0.005   |
| 0.260   | 568.299 | 0.048   | 0.004   |
| 0.150   | 568.299 | 0.036   | 0.004   |
| 0.078   | 568.299 | 0.027   | 0.004   |
| 0.075   | 568.299 | 0.026   | 0.004   |
| 0.076   | 568.299 | 0.026   | 0.004   |
| 0.102   | 568.299 | 0.029   | 0.004   |
| 0.278   | 545.293 | 0.173   | 0.005   |
| 0.278   | 545.293 | 0.173   | 0.005   |
| 0.278   | 545.293 | 0.173   | 0.005   |
| 0.166   | 472.453 | 0.150   | 0.004   |
| 0.081   | 487.355 | 0.154   | 0.004   |
| 0.049   | 475.790 | 0.151   | 0.004   |
| 0.044   | 477.046 | 0.151   | 0.004   |
| 0.044   | 481.836 | 0.152   | 0.004   |
| 0.056   | 482.359 | 0.153   | 0.004   |

| 2020             |       | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      |
| Aerial Lifts     | 15    | 0.168   | 3.099   |
| Aerial Lifts     | 25    | 0.168   | 3.099   |
| Aerial Lifts     | 50    | 0.168   | 3.099   |
| Aerial Lifts     | 120   | 0.115   | 3.177   |
| Aerial Lifts     | 500   | 0.069   | 0.946   |
| Aerial Lifts     | 750   | 0.200   | 1.013   |
| Air Compressor s | 15    | 0.731   | 3.546   |
| Air Compressor s | 25    | 0.769   | 2.473   |
| Air Compressor s | 50    | 1.001   | 5.164   |
| Air Compressor s | 120   | 0.489   | 3.698   |
| Air Compressor s | 175   | 0.374   | 3.203   |
| Air Compressor s | 250   | 0.288   | 1.121   |
| Air Compressor s | 500   | 0.279   | 1.076   |
| Air Compressor s | 750   | 0.280   | 1.076   |
| Air Compressor s | 1000  | 0.306   | 1.158   |
| Bore/Drill Rigs  | 15    | 0.716   | 4.510   |
| Bore/Drill Rigs  | 25    | 0.716   | 4.510   |
| Bore/Drill Rigs  | 50    | 0.716   | 4.510   |
| Bore/Drill Rigs  | 120   | 0.246   | 3.323   |
| Bore/Drill Rigs  | 175   | 0.174   | 2.969   |
| Bore/Drill Rigs  | 250   | 0.142   | 1.068   |
| Bore/Drill Rigs  | 500   | 0.125   | 1.013   |
| Bore/Drill Rigs  | 750   | 0.109   | 0.974   |
| Bore/Drill Rigs  | 1000  | 0.133   | 0.988   |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.162 | 568.299 | 0.059 | 0.005 |
| 0.196 | 568.299 | 0.066 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.242 | 568.299 | 0.081 | 0.005 |
| 0.220 | 568.300 | 0.040 | 0.004 |
| 0.128 | 568.299 | 0.029 | 0.004 |
| 0.566 | 529.463 | 0.168 | 0.005 |
| 0.460 | 480.325 | 0.152 | 0.004 |
| 0.292 | 485.182 | 0.154 | 0.004 |
| 0.198 | 483.462 | 0.153 | 0.004 |
| 0.159 | 483.142 | 0.153 | 0.004 |
| 0.114 | 481.119 | 0.152 | 0.004 |
| 0.055 | 482.545 | 0.153 | 0.004 |
| 0.589 | 525.977 | 0.166 | 0.005 |
| 0.492 | 486.991 | 0.154 | 0.004 |
| 0.276 | 481.622 | 0.152 | 0.004 |
| 0.173 | 483.449 | 0.153 | 0.004 |
| 0.141 | 485.865 | 0.154 | 0.004 |
| 0.113 | 483.388 | 0.153 | 0.004 |
| 0.194 | 486.255 | 0.154 | 0.004 |
| 0.269 | 568.299 | 0.096 | 0.005 |
| 0.241 | 568.299 | 0.046 | 0.004 |
| 0.141 | 568.299 | 0.035 | 0.004 |
| 0.074 | 568.299 | 0.027 | 0.004 |
| 0.071 | 568.299 | 0.026 | 0.004 |
| 0.071 | 568.299 | 0.026 | 0.004 |
| 0.098 | 568.299 | 0.031 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.470 |
| Cement and Mortar Mixers | 25   | 0.723 | 2.397 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 50   | 0.798 | 4.552 |
| Concrete/Industrial Saws | 120  | 0.401 | 3.535 |
| Concrete/Industrial Saws | 175  | 0.306 | 3.072 |
| Cranes                   | 50   | 2.084 | 7.376 |
| Cranes                   | 120  | 0.732 | 4.171 |
| Cranes                   | 175  | 0.537 | 3.562 |
| Cranes                   | 250  | 0.384 | 1.790 |
| Cranes                   | 500  | 0.321 | 2.660 |
| Cranes                   | 750  | 0.242 | 1.444 |
| Cranes                   | 9999 | 0.182 | 0.999 |
| Crawler Tractors         | 50   | 2.053 | 7.300 |
| Crawler Tractors         | 120  | 0.715 | 4.044 |
| Crawler Tractors         | 175  | 0.476 | 3.340 |
| Crawler Tractors         | 250  | 0.360 | 1.555 |
| Crawler Tractors         | 500  | 0.301 | 2.088 |
| Crawler Tractors         | 750  | 0.256 | 1.310 |
| Crawler Tractors         | 1000 | 0.463 | 2.028 |
| Crushing/Proc. Equipment | 50   | 0.947 | 5.211 |
| Crushing/Proc. Equipment | 120  | 0.473 | 3.722 |
| Crushing/Proc. Equipment | 175  | 0.367 | 3.234 |
| Crushing/Proc. Equipment | 250  | 0.289 | 1.125 |
| Crushing/Proc. Equipment | 500  | 0.281 | 1.078 |
| Crushing/Proc. Equipment | 750  | 0.281 | 1.077 |
| Crushing/Proc. Equipment | 9999 | 0.329 | 1.153 |



|       |         |       |       |
|-------|---------|-------|-------|
| 0.167 | 568.299 | 0.061 | 0.005 |
| 0.230 | 536.913 | 0.170 | 0.005 |
| 0.230 | 536.913 | 0.170 | 0.005 |
| 0.194 | 478.245 | 0.151 | 0.004 |
| 0.112 | 482.684 | 0.153 | 0.004 |
| 0.063 | 482.250 | 0.153 | 0.004 |
| 0.053 | 481.236 | 0.152 | 0.004 |
| 0.062 | 479.288 | 0.152 | 0.004 |
| 0.369 | 537.161 | 0.170 | 0.005 |
| 0.324 | 482.007 | 0.153 | 0.004 |
| 0.193 | 482.598 | 0.153 | 0.004 |
| 0.161 | 483.844 | 0.153 | 0.004 |
| 0.103 | 484.140 | 0.153 | 0.004 |
| 0.224 | 568.299 | 0.059 | 0.005 |
| 0.214 | 568.299 | 0.066 | 0.005 |
| 0.222 | 568.299 | 0.070 | 0.005 |
| 0.206 | 568.299 | 0.036 | 0.004 |
| 0.118 | 568.299 | 0.026 | 0.004 |
| 0.064 | 568.299 | 0.019 | 0.004 |
| 0.062 | 568.299 | 0.018 | 0.004 |
| 0.062 | 568.299 | 0.018 | 0.004 |
| 0.087 | 568.299 | 0.023 | 0.004 |
| 0.678 | 503.751 | 0.159 | 0.005 |
| 0.612 | 479.901 | 0.152 | 0.004 |
| 0.310 | 489.042 | 0.155 | 0.004 |
| 0.144 | 486.329 | 0.154 | 0.004 |
| 0.115 | 482.588 | 0.153 | 0.004 |
| 0.080 | 568.299 | 0.030 | 0.004 |
| 0.305 | 484.269 | 0.153 | 0.004 |
| 0.146 | 483.431 | 0.153 | 0.004 |
| 0.090 | 481.275 | 0.152 | 0.004 |
| 0.075 | 482.309 | 0.153 | 0.004 |
| 0.057 | 482.545 | 0.153 | 0.004 |
| 0.138 | 480.362 | 0.152 | 0.004 |
| 0.110 | 480.170 | 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Dumpers/Te<br>nders     | 25   | 0.685 | 2.339 |
| Excavators              | 25   | 0.593 | 4.500 |
| Excavators              | 50   | 0.593 | 4.500 |
| Excavators              | 120  | 0.299 | 3.505 |
| Excavators              | 175  | 0.231 | 3.086 |
| Excavators              | 250  | 0.177 | 1.118 |
| Excavators              | 500  | 0.153 | 1.102 |
| Excavators              | 750  | 0.170 | 1.145 |
| Forklifts               | 50   | 1.124 | 5.706 |
| Forklifts               | 120  | 0.459 | 3.760 |
| Forklifts               | 175  | 0.338 | 3.249 |
| Forklifts               | 250  | 0.293 | 1.442 |
| Forklifts               | 500  | 0.251 | 1.478 |
| Generator<br>Sets       | 15   | 0.646 | 3.546 |
| Generator<br>Sets       | 25   | 0.721 | 2.473 |
| Generator<br>Sets       | 50   | 0.691 | 3.995 |
| Generator<br>Sets       | 120  | 0.364 | 3.380 |
| Generator<br>Sets       | 175  | 0.267 | 2.930 |
| Generator<br>Sets       | 250  | 0.198 | 1.026 |
| Generator<br>Sets       | 500  | 0.188 | 1.005 |
| Generator<br>Sets       | 750  | 0.191 | 1.005 |
| Generator<br>Sets       | 9999 | 0.242 | 1.082 |
| Graders                 | 50   | 2.516 | 8.134 |
| Graders                 | 120  | 0.976 | 4.561 |
| Graders                 | 175  | 0.567 | 3.621 |
| Graders                 | 250  | 0.352 | 1.342 |
| Graders                 | 500  | 0.322 | 1.526 |
| Graders                 | 750  | 0.319 | 1.229 |
| Off-Highway<br>Tractors | 120  | 0.448 | 3.788 |
| Off-Highway<br>Tractors | 175  | 0.271 | 3.215 |
| Off-Highway<br>Tractors | 250  | 0.221 | 1.181 |
| Off-Highway<br>Tractors | 750  | 0.201 | 1.131 |
| Off-Highway<br>Tractors | 1000 | 0.150 | 1.022 |
| Off-Highway<br>Trucks   | 175  | 0.310 | 3.339 |
| Off-Highway<br>Trucks   | 250  | 0.275 | 1.391 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.089 | 485.383 | 0.154 | 0.004 |
| 0.118 | 483.218 | 0.153 | 0.004 |
| 0.114 | 480.348 | 0.152 | 0.004 |
| 0.402 | 539.735 | 0.171 | 0.005 |
| 0.402 | 539.735 | 0.171 | 0.005 |
| 0.402 | 539.735 | 0.171 | 0.005 |
| 0.349 | 482.218 | 0.153 | 0.004 |
| 0.215 | 480.452 | 0.152 | 0.004 |
| 0.094 | 485.413 | 0.154 | 0.004 |
| 0.344 | 537.869 | 0.170 | 0.005 |
| 0.344 | 537.869 | 0.170 | 0.005 |
| 0.344 | 537.869 | 0.170 | 0.005 |
| 0.316 | 480.444 | 0.152 | 0.004 |
| 0.144 | 482.336 | 0.153 | 0.004 |
| 0.097 | 483.739 | 0.153 | 0.004 |
| 0.085 | 483.439 | 0.153 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.246 | 1.414 |
| Off-Highway Trucks                 | 750  | 0.312 | 2.027 |
| Off-Highway Trucks                 | 1000 | 0.303 | 1.372 |
| Other Construction Equipment       | 15   | 1.072 | 5.404 |
| Other Construction Equipment       | 25   | 1.072 | 5.404 |
| Other Construction Equipment       | 50   | 1.072 | 5.404 |
| Other Construction Equipment       | 120  | 0.519 | 3.732 |
| Other Construction Equipment       | 175  | 0.388 | 3.235 |
| Other Construction Equipment       | 500  | 0.224 | 1.634 |
| Other General Industrial Equipment | 15   | 0.946 | 5.504 |
| Other General Industrial Equipment | 25   | 0.946 | 5.504 |
| Other General Industrial Equipment | 50   | 0.946 | 5.504 |
| Other General Industrial Equipment | 120  | 0.446 | 3.771 |
| Other General Industrial Equipment | 175  | 0.268 | 3.229 |
| Other General Industrial Equipment | 250  | 0.237 | 1.239 |
| Other General Industrial Equipment | 500  | 0.208 | 1.344 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.070 | 483.985 | 0.153 | 0.004 |
| 0.108 | 482.545 | 0.153 | 0.004 |
| 0.416 | 535.347 | 0.169 | 0.005 |
| 0.212 | 484.113 | 0.153 | 0.004 |
| 0.128 | 482.713 | 0.153 | 0.004 |
| 0.113 | 481.959 | 0.153 | 0.004 |
| 0.118 | 480.748 | 0.152 | 0.004 |
| 0.070 | 482.545 | 0.153 | 0.004 |
| 0.401 | 538.325 | 0.170 | 0.005 |
| 0.401 | 538.325 | 0.170 | 0.005 |
| 0.318 | 480.251 | 0.152 | 0.004 |
| 0.146 | 483.394 | 0.153 | 0.004 |
| 0.077 | 483.574 | 0.153 | 0.004 |
| 0.075 | 476.971 | 0.151 | 0.004 |
| 0.248 | 531.861 | 0.168 | 0.005 |
| 0.248 | 531.861 | 0.168 | 0.005 |
| 0.258 | 484.387 | 0.153 | 0.004 |
| 0.123 | 481.225 | 0.152 | 0.004 |
| 0.103 | 482.644 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.224 | 568.299 | 0.059 | 0.005 |
| 0.214 | 568.299 | 0.066 | 0.005 |
| 0.184 | 568.299 | 0.051 | 0.005 |
| 0.174 | 568.299 | 0.030 | 0.004 |
| 0.117 | 568.299 | 0.025 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.175 | 1.462 |
| Other General Industrial Equipment | 1000 | 0.271 | 1.085 |
| Other Material Handling Equipment  | 50   | 1.245 | 6.167 |
| Other Material Handling Equipment  | 120  | 0.307 | 3.589 |
| Other Material Handling Equipment  | 175  | 0.252 | 3.171 |
| Other Material Handling Equipment  | 250  | 0.291 | 1.319 |
| Other Material Handling Equipment  | 500  | 0.283 | 1.523 |
| Other Material Handling Equipment  | 9999 | 0.200 | 1.049 |
| Pavers                             | 25   | 1.318 | 5.523 |
| Pavers                             | 50   | 1.318 | 5.523 |
| Pavers                             | 120  | 0.470 | 3.604 |
| Pavers                             | 175  | 0.273 | 3.010 |
| Pavers                             | 250  | 0.176 | 1.028 |
| Pavers                             | 500  | 0.165 | 0.987 |
| Paving Equipment                   | 25   | 0.621 | 4.223 |
| Paving Equipment                   | 50   | 0.621 | 4.223 |
| Paving Equipment                   | 120  | 0.397 | 3.582 |
| Paving Equipment                   | 175  | 0.248 | 3.024 |
| Paving Equipment                   | 250  | 0.244 | 1.252 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.646 | 3.546 |
| Pressure Washers                   | 25   | 0.721 | 2.473 |
| Pressure Washers                   | 50   | 0.499 | 3.393 |
| Pressure Washers                   | 120  | 0.298 | 3.225 |
| Pressure Washers                   | 175  | 0.258 | 2.907 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.009 | 568.299 | 0.008 | 0.004 |
| 0.241 | 568.300 | 0.067 | 0.005 |
| 0.222 | 568.300 | 0.071 | 0.005 |
| 0.235 | 568.299 | 0.076 | 0.005 |
| 0.217 | 568.299 | 0.038 | 0.004 |
| 0.124 | 568.299 | 0.027 | 0.004 |
| 0.067 | 568.299 | 0.020 | 0.004 |
| 0.064 | 568.300 | 0.019 | 0.004 |
| 0.065 | 568.299 | 0.019 | 0.004 |
| 0.089 | 568.299 | 0.024 | 0.004 |
| 0.321 | 537.546 | 0.170 | 0.005 |
| 0.321 | 537.546 | 0.170 | 0.005 |
| 0.321 | 537.546 | 0.170 | 0.005 |
| 0.253 | 484.336 | 0.153 | 0.004 |
| 0.114 | 482.453 | 0.153 | 0.004 |
| 0.084 | 483.777 | 0.153 | 0.004 |
| 0.102 | 489.977 | 0.155 | 0.004 |
|       |         |       |       |
| 0.302 | 537.329 | 0.170 | 0.005 |
|       |         |       |       |
| 0.108 | 483.311 | 0.153 | 0.004 |
|       |         |       |       |
| 0.069 | 482.119 | 0.153 | 0.004 |
|       |         |       |       |
| 0.034 | 483.088 | 0.153 | 0.004 |
|       |         |       |       |
| 0.040 | 477.254 | 0.151 | 0.004 |
|       |         |       |       |
| 0.398 | 483.559 | 0.153 | 0.004 |
|       |         |       |       |
| 0.311 | 485.172 | 0.154 | 0.004 |
|       |         |       |       |
| 0.260 | 490.383 | 0.155 | 0.004 |
|       |         |       |       |
| 0.201 | 483.579 | 0.153 | 0.004 |
|       |         |       |       |
| 0.171 | 568.299 | 0.049 | 0.004 |
|       |         |       |       |
| 0.476 | 536.225 | 0.170 | 0.005 |
|       |         |       |       |
| 0.476 | 536.225 | 0.170 | 0.005 |
|       |         |       |       |
| 0.370 | 475.864 | 0.151 | 0.004 |
|       |         |       |       |
| 0.196 | 481.736 | 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 |
| Pumps                   | 15   | 0.731 | 3.546 |
| Pumps                   | 25   | 0.769 | 2.473 |
| Pumps                   | 50   | 0.755 | 4.197 |
| Pumps                   | 120  | 0.386 | 3.432 |
| Pumps                   | 175  | 0.285 | 2.974 |
| Pumps                   | 250  | 0.212 | 1.042 |
| Pumps                   | 500  | 0.203 | 1.017 |
| Pumps                   | 750  | 0.205 | 1.017 |
| Pumps                   | 9999 | 0.255 | 1.096 |
| Rollers                 | 15   | 0.926 | 4.725 |
| Rollers                 | 25   | 0.926 | 4.725 |
| Rollers                 | 50   | 0.926 | 4.725 |
| Rollers                 | 120  | 0.388 | 3.531 |
| Rollers                 | 175  | 0.215 | 2.933 |
| Rollers                 | 250  | 0.209 | 1.253 |
| Rollers                 | 500  | 0.235 | 2.113 |
|                         |      |       |       |
| Rough Terrain Forklifts | 50   | 0.999 | 4.686 |
|                         |      |       |       |
| Rough Terrain Forklifts | 120  | 0.189 | 3.256 |
|                         |      |       |       |
| Rough Terrain Forklifts | 175  | 0.143 | 2.845 |
|                         |      |       |       |
| Rough Terrain Forklifts | 250  | 0.112 | 0.978 |
|                         |      |       |       |
| Rough Terrain Forklifts | 500  | 0.089 | 0.942 |
|                         |      |       |       |
| Rubber Tired Dozers     | 175  | 0.726 | 3.893 |
|                         |      |       |       |
| Rubber Tired Dozers     | 250  | 0.620 | 2.371 |
|                         |      |       |       |
| Rubber Tired Dozers     | 500  | 0.535 | 4.411 |
|                         |      |       |       |
| Rubber Tired Dozers     | 750  | 0.457 | 2.601 |
|                         |      |       |       |
| Rubber Tired Dozers     | 1000 | 0.522 | 2.164 |
|                         |      |       |       |
| Rubber Tired Loaders    | 25   | 1.481 | 6.768 |
|                         |      |       |       |
| Rubber Tired Loaders    | 50   | 1.481 | 6.768 |
|                         |      |       |       |
| Rubber Tired Loaders    | 120  | 0.556 | 3.948 |
|                         |      |       |       |
| Rubber Tired Loaders    | 175  | 0.379 | 3.368 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.116 | 480.100 | 0.152 | 0.004 |
| 0.113 | 477.042 | 0.151 | 0.004 |
| 0.109 | 471.187 | 0.149 | 0.004 |
| 0.135 | 480.523 | 0.152 | 0.004 |
| 0.483 | 494.100 | 0.156 | 0.004 |
| 0.261 | 489.255 | 0.155 | 0.004 |
| 0.236 | 479.032 | 0.152 | 0.004 |
| 0.150 | 482.732 | 0.153 | 0.004 |
| 0.113 | 482.596 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.236 | 568.300 | 0.080 | 0.005 |
| 0.216 | 568.299 | 0.039 | 0.004 |
| 0.125 | 568.299 | 0.029 | 0.004 |
| 0.080 | 686.695 | 0.026 | 0.004 |
| 0.141 | 539.267 | 0.171 | 0.005 |
| 0.141 | 539.267 | 0.171 | 0.005 |
| 0.112 | 482.384 | 0.153 | 0.004 |
| 0.230 | 547.046 | 0.173 | 0.005 |
| 0.208 | 484.076 | 0.153 | 0.004 |
| 0.187 | 479.672 | 0.152 | 0.004 |
| 0.093 | 486.842 | 0.154 | 0.004 |
| 0.063 | 481.897 | 0.153 | 0.004 |
| 0.070 | 480.166 | 0.152 | 0.004 |
| 0.452 | 537.002 | 0.170 | 0.005 |
| 0.452 | 537.002 | 0.170 | 0.005 |
| 0.452 | 537.002 | 0.170 | 0.005 |
| 0.356 | 484.652 | 0.153 | 0.004 |
| 0.255 | 483.636 | 0.153 | 0.004 |
| 0.091 | 480.574 | 0.152 | 0.004 |
| 0.304 | 527.684 | 0.167 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.290 | 1.269 |
| Rubber Tired Loaders      | 500  | 0.289 | 1.630 |
| Rubber Tired Loaders      | 750  | 0.277 | 1.400 |
| Rubber Tired Loaders      | 1000 | 0.312 | 1.204 |
| Scrapers                  | 120  | 0.701 | 4.198 |
| Scrapers                  | 175  | 0.478 | 3.501 |
| Scrapers                  | 250  | 0.446 | 2.065 |
| Scrapers                  | 500  | 0.320 | 2.401 |
| Scrapers                  | 750  | 0.262 | 1.725 |
| Signal Boards             | 15   | 0.661 | 3.469 |
| Signal Boards             | 50   | 0.788 | 4.448 |
| Signal Boards             | 120  | 0.395 | 3.504 |
| Signal Boards             | 175  | 0.298 | 3.043 |
| Signal Boards             | 250  | 0.274 | 1.281 |
| Skid Steer Loaders        | 25   | 0.439 | 3.764 |
| Skid Steer Loaders        | 50   | 0.439 | 3.764 |
| Skid Steer Loaders        | 120  | 0.188 | 3.277 |
| Surfacing Equipment       | 50   | 0.536 | 3.934 |
| Surfacing Equipment       | 120  | 0.330 | 3.439 |
| Surfacing Equipment       | 175  | 0.308 | 2.931 |
| Surfacing Equipment       | 250  | 0.212 | 1.218 |
| Surfacing Equipment       | 500  | 0.146 | 1.219 |
| Surfacing Equipment       | 750  | 0.142 | 0.996 |
| Sweepers/Scrubbers        | 15   | 1.344 | 6.155 |
| Sweepers/Scrubbers        | 25   | 1.344 | 6.155 |
| Sweepers/Scrubbers        | 50   | 1.344 | 6.155 |
| Sweepers/Scrubbers        | 120  | 0.520 | 3.828 |
| Sweepers/Scrubbers        | 175  | 0.462 | 3.359 |
| Sweepers/Scrubbers        | 250  | 0.207 | 1.137 |
| Tractors/Loaders/Backhoes | 25   | 0.830 | 5.035 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.304 | 527.684 | 0.167 | 0.005 |
| 0.227 | 485.855 | 0.154 | 0.004 |
| 0.129 | 477.915 | 0.151 | 0.004 |
| 0.094 | 481.421 | 0.152 | 0.004 |
| 0.075 | 479.083 | 0.152 | 0.004 |
| 0.107 | 478.922 | 0.152 | 0.004 |
| 0.347 | 539.104 | 0.171 | 0.005 |
| 0.347 | 539.104 | 0.171 | 0.005 |
| 0.347 | 539.104 | 0.171 | 0.005 |
| 0.396 | 485.364 | 0.154 | 0.004 |
| 0.234 | 478.129 | 0.151 | 0.004 |
| 0.187 | 484.117 | 0.153 | 0.004 |
| 0.109 | 482.165 | 0.153 | 0.004 |
| 0.014 | 484.542 | 0.153 | 0.004 |
| 0.241 | 568.299 | 0.067 | 0.005 |
| 0.222 | 568.299 | 0.071 | 0.005 |
| 0.273 | 568.299 | 0.095 | 0.005 |
| 0.250 | 568.299 | 0.045 | 0.004 |
| 0.143 | 568.300 | 0.033 | 0.004 |
| 0.075 | 568.299 | 0.024 | 0.004 |
| 0.072 | 568.300 | 0.023 | 0.004 |
| 0.138 | 480.362 | 0.152 | 0.004 |
| 0.110 | 480.170 | 0.152 | 0.004 |
| 0.089 | 485.383 | 0.154 | 0.004 |
| 0.118 | 483.218 | 0.153 | 0.004 |
| 0.114 | 480.348 | 0.152 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.830 | 5.035 |
| Tractors/Loaders/Backhoes | 120  | 0.331 | 3.601 |
| Tractors/Loaders/Backhoes | 175  | 0.246 | 3.105 |
| Tractors/Loaders/Backhoes | 250  | 0.225 | 1.196 |
| Tractors/Loaders/Backhoes | 500  | 0.194 | 1.358 |
| Tractors/Loaders/Backhoes | 750  | 0.268 | 1.610 |
| Trenchers                 | 15   | 0.905 | 4.833 |
| Trenchers                 | 25   | 0.905 | 4.833 |
| Trenchers                 | 50   | 0.905 | 4.833 |
| Trenchers                 | 120  | 0.610 | 3.833 |
| Trenchers                 | 175  | 0.421 | 3.330 |
| Trenchers                 | 250  | 0.392 | 1.774 |
| Trenchers                 | 500  | 0.233 | 1.859 |
| Trenchers                 | 750  | 0.070 | 0.950 |
| Welders                   | 15   | 0.731 | 3.546 |
| Welders                   | 25   | 0.769 | 2.473 |
| Welders                   | 50   | 0.937 | 4.840 |
| Welders                   | 120  | 0.455 | 3.605 |
| Welders                   | 175  | 0.344 | 3.122 |
| Welders                   | 250  | 0.261 | 1.093 |
| Welders                   | 500  | 0.252 | 1.055 |
| Water Trucks              | 175  | 0.310 | 3.339 |
| Water Trucks              | 250  | 0.275 | 1.391 |
| Water Trucks              | 500  | 0.246 | 1.414 |
| Water Trucks              | 750  | 0.312 | 2.027 |
| Water Trucks              | 1000 | 0.303 | 1.372 |







|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.336 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 4.031 | 0.005 | 0.222 | 0.204 | 525.368 | 0.170 | 0.005 |
| 4.031 | 0.005 | 0.222 | 0.204 | 525.368 | 0.170 | 0.005 |
| 3.090 | 0.005 | 0.185 | 0.170 | 468.055 | 0.151 | 0.004 |
| 2.278 | 0.005 | 0.110 | 0.102 | 472.289 | 0.153 | 0.004 |
| 2.027 | 0.005 | 0.061 | 0.057 | 471.883 | 0.153 | 0.004 |
| 1.572 | 0.005 | 0.052 | 0.048 | 470.296 | 0.152 | 0.004 |
| 1.797 | 0.005 | 0.061 | 0.056 | 468.871 | 0.152 | 0.004 |
| 4.686 | 0.005 | 0.360 | 0.331 | 525.483 | 0.170 | 0.005 |
| 4.133 | 0.005 | 0.308 | 0.283 | 471.529 | 0.153 | 0.004 |
| 3.320 | 0.005 | 0.180 | 0.165 | 472.106 | 0.153 | 0.004 |
| 3.241 | 0.005 | 0.126 | 0.116 | 473.326 | 0.153 | 0.004 |
| 2.440 | 0.005 | 0.097 | 0.089 | 473.615 | 0.153 | 0.004 |
| 4.516 | 0.008 | 0.212 | 0.212 | 568.299 | 0.058 | 0.005 |
| 4.538 | 0.007 | 0.205 | 0.205 | 568.299 | 0.065 | 0.005 |
| 4.075 | 0.007 | 0.194 | 0.194 | 568.299 | 0.062 | 0.005 |
| 3.173 | 0.006 | 0.179 | 0.179 | 568.299 | 0.032 | 0.004 |
| 2.380 | 0.006 | 0.105 | 0.105 | 568.299 | 0.024 | 0.004 |
| 2.016 | 0.006 | 0.057 | 0.057 | 568.299 | 0.017 | 0.004 |
| 1.816 | 0.005 | 0.055 | 0.055 | 568.299 | 0.017 | 0.004 |
| 1.858 | 0.005 | 0.056 | 0.056 | 568.299 | 0.017 | 0.004 |
| 3.608 | 0.005 | 0.079 | 0.079 | 568.300 | 0.021 | 0.004 |
| 5.825 | 0.005 | 0.709 | 0.652 | 492.862 | 0.159 | 0.005 |
| 7.725 | 0.005 | 0.622 | 0.572 | 469.337 | 0.152 | 0.004 |
| 5.530 | 0.005 | 0.309 | 0.284 | 478.040 | 0.155 | 0.004 |
| 4.678 | 0.005 | 0.150 | 0.138 | 475.304 | 0.154 | 0.004 |
| 3.107 | 0.005 | 0.121 | 0.111 | 471.980 | 0.153 | 0.004 |
| 2.031 | 0.005 | 0.072 | 0.072 | 568.299 | 0.028 | 0.004 |
| 4.183 | 0.005 | 0.307 | 0.283 | 474.148 | 0.153 | 0.004 |
| 2.890 | 0.005 | 0.140 | 0.129 | 472.917 | 0.153 | 0.004 |
| 2.575 | 0.005 | 0.086 | 0.079 | 470.943 | 0.152 | 0.004 |
| 2.047 | 0.005 | 0.076 | 0.070 | 471.815 | 0.153 | 0.004 |
| 2.396 | 0.005 | 0.063 | 0.058 | 472.055 | 0.153 | 0.004 |
| 2.628 | 0.005 | 0.137 | 0.126 | 470.097 | 0.152 | 0.004 |
| 2.507 | 0.005 | 0.098 | 0.090 | 470.168 | 0.152 | 0.004 |

|                      |
|----------------------|
| Dumpers/Trailers     |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Trucks   |
| Off-Highway Trucks   |





|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 4.542 | 0.008 | 0.227 | 0.227 | 568.299 | 0.066 | 0.005 |
| 4.538 | 0.007 | 0.212 | 0.212 | 568.299 | 0.069 | 0.005 |
| 4.128 | 0.007 | 0.206 | 0.206 | 568.299 | 0.068 | 0.005 |
| 3.219 | 0.006 | 0.189 | 0.189 | 568.299 | 0.034 | 0.004 |
| 2.418 | 0.006 | 0.111 | 0.111 | 568.299 | 0.025 | 0.004 |
| 2.050 | 0.006 | 0.060 | 0.060 | 568.299 | 0.019 | 0.004 |
| 1.841 | 0.005 | 0.057 | 0.057 | 568.300 | 0.018 | 0.004 |
| 1.884 | 0.005 | 0.058 | 0.058 | 568.299 | 0.018 | 0.004 |
| 3.649 | 0.005 | 0.081 | 0.081 | 568.300 | 0.023 | 0.004 |
| 4.534 | 0.005 | 0.329 | 0.303 | 525.880 | 0.170 | 0.005 |
| 4.534 | 0.005 | 0.329 | 0.303 | 525.880 | 0.170 | 0.005 |
| 4.534 | 0.005 | 0.329 | 0.303 | 525.880 | 0.170 | 0.005 |
| 3.882 | 0.005 | 0.248 | 0.228 | 473.859 | 0.153 | 0.004 |
| 2.452 | 0.005 | 0.113 | 0.104 | 471.918 | 0.153 | 0.004 |
| 2.751 | 0.005 | 0.089 | 0.082 | 473.367 | 0.153 | 0.004 |
| 2.828 | 0.005 | 0.109 | 0.101 | 479.325 | 0.155 | 0.004 |
| 4.495 | 0.005 | 0.316 | 0.291 | 525.622 | 0.170 | 0.005 |
| 2.452 | 0.005 | 0.103 | 0.094 | 472.984 | 0.153 | 0.004 |
| 1.869 | 0.005 | 0.068 | 0.063 | 471.715 | 0.153 | 0.004 |
| 1.609 | 0.005 | 0.037 | 0.034 | 472.567 | 0.153 | 0.004 |
| 1.302 | 0.005 | 0.028 | 0.026 | 465.771 | 0.151 | 0.004 |
| 7.185 | 0.005 | 0.411 | 0.378 | 473.012 | 0.153 | 0.004 |
| 6.503 | 0.005 | 0.319 | 0.293 | 474.793 | 0.154 | 0.004 |
| 5.641 | 0.005 | 0.259 | 0.238 | 479.757 | 0.155 | 0.004 |
| 6.123 | 0.005 | 0.218 | 0.201 | 473.056 | 0.153 | 0.004 |
| 5.306 | 0.005 | 0.160 | 0.160 | 568.299 | 0.047 | 0.004 |
| 5.254 | 0.005 | 0.474 | 0.436 | 524.697 | 0.170 | 0.005 |
| 5.254 | 0.005 | 0.474 | 0.436 | 524.697 | 0.170 | 0.005 |
| 4.686 | 0.005 | 0.367 | 0.338 | 465.674 | 0.151 | 0.004 |
| 3.517 | 0.005 | 0.194 | 0.178 | 471.214 | 0.152 | 0.004 |

|                         |
|-------------------------|
| Pressure Washers        |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 3.421 | 0.005 | 0.114 | 0.105 | 469.513 | 0.152 | 0.004 |
| 3.017 | 0.005 | 0.112 | 0.103 | 466.783 | 0.151 | 0.004 |
| 2.767 | 0.005 | 0.108 | 0.099 | 462.193 | 0.150 | 0.004 |
| 5.253 | 0.005 | 0.139 | 0.127 | 469.935 | 0.152 | 0.004 |
| 6.677 | 0.005 | 0.510 | 0.469 | 483.745 | 0.157 | 0.004 |
| 4.869 | 0.005 | 0.262 | 0.241 | 478.608 | 0.155 | 0.004 |
| 5.089 | 0.005 | 0.223 | 0.205 | 468.988 | 0.152 | 0.004 |
| 3.783 | 0.005 | 0.148 | 0.136 | 472.175 | 0.153 | 0.004 |
| 3.126 | 0.005 | 0.113 | 0.104 | 471.778 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.132 | 0.007 | 0.206 | 0.206 | 568.299 | 0.071 | 0.005 |
| 3.134 | 0.006 | 0.187 | 0.187 | 568.299 | 0.035 | 0.004 |
| 2.309 | 0.006 | 0.110 | 0.110 | 568.299 | 0.026 | 0.004 |
| 2.350 | 0.007 | 0.071 | 0.071 | 686.695 | 0.024 | 0.004 |
| 3.691 | 0.005 | 0.145 | 0.133 | 527.758 | 0.171 | 0.005 |
| 3.691 | 0.005 | 0.145 | 0.133 | 527.758 | 0.171 | 0.005 |
| 2.505 | 0.005 | 0.108 | 0.100 | 471.908 | 0.153 | 0.004 |
| 4.239 | 0.006 | 0.216 | 0.199 | 535.528 | 0.173 | 0.005 |
| 3.612 | 0.005 | 0.206 | 0.190 | 473.819 | 0.153 | 0.004 |
| 3.672 | 0.005 | 0.175 | 0.161 | 469.208 | 0.152 | 0.004 |
| 3.222 | 0.005 | 0.097 | 0.089 | 476.426 | 0.154 | 0.004 |
| 1.838 | 0.005 | 0.067 | 0.062 | 471.633 | 0.153 | 0.004 |
| 2.094 | 0.005 | 0.074 | 0.068 | 469.625 | 0.152 | 0.004 |
| 5.095 | 0.005 | 0.463 | 0.426 | 525.328 | 0.170 | 0.005 |
| 5.095 | 0.005 | 0.463 | 0.426 | 525.328 | 0.170 | 0.005 |
| 5.095 | 0.005 | 0.463 | 0.426 | 525.328 | 0.170 | 0.005 |
| 4.482 | 0.005 | 0.360 | 0.331 | 474.116 | 0.153 | 0.004 |
| 4.608 | 0.005 | 0.237 | 0.218 | 473.122 | 0.153 | 0.004 |
| 2.486 | 0.005 | 0.079 | 0.073 | 470.126 | 0.152 | 0.004 |
| 4.398 | 0.005 | 0.288 | 0.265 | 515.874 | 0.167 | 0.005 |

|                           |
|---------------------------|
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Tractors/Loaders/Backhoes |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.398 | 0.005 | 0.288 | 0.265 | 515.874 | 0.167 | 0.005 |
| 3.326 | 0.005 | 0.210 | 0.194 | 475.154 | 0.154 | 0.004 |
| 2.415 | 0.005 | 0.122 | 0.112 | 467.513 | 0.151 | 0.004 |
| 2.738 | 0.005 | 0.090 | 0.083 | 470.500 | 0.152 | 0.004 |
| 2.080 | 0.005 | 0.073 | 0.067 | 468.245 | 0.151 | 0.004 |
| 3.119 | 0.005 | 0.117 | 0.108 | 468.660 | 0.152 | 0.004 |
| 4.677 | 0.005 | 0.356 | 0.328 | 527.096 | 0.171 | 0.005 |
| 4.677 | 0.005 | 0.356 | 0.328 | 527.096 | 0.171 | 0.005 |
| 4.677 | 0.005 | 0.356 | 0.328 | 527.096 | 0.171 | 0.005 |
| 5.520 | 0.005 | 0.413 | 0.380 | 475.127 | 0.154 | 0.004 |
| 4.460 | 0.005 | 0.228 | 0.210 | 467.735 | 0.151 | 0.004 |
| 4.809 | 0.005 | 0.195 | 0.179 | 473.595 | 0.153 | 0.004 |
| 2.775 | 0.005 | 0.105 | 0.097 | 470.637 | 0.152 | 0.004 |
| 0.560 | 0.005 | 0.009 | 0.008 | 472.656 | 0.153 | 0.004 |
| 4.542 | 0.008 | 0.227 | 0.227 | 568.299 | 0.066 | 0.005 |
| 4.538 | 0.007 | 0.212 | 0.212 | 568.299 | 0.069 | 0.005 |
| 4.304 | 0.007 | 0.238 | 0.238 | 568.299 | 0.084 | 0.005 |
| 3.351 | 0.006 | 0.216 | 0.216 | 568.299 | 0.041 | 0.004 |
| 2.523 | 0.006 | 0.127 | 0.127 | 568.299 | 0.031 | 0.004 |
| 2.143 | 0.006 | 0.066 | 0.066 | 568.299 | 0.023 | 0.004 |
| 1.910 | 0.005 | 0.064 | 0.064 | 568.299 | 0.022 | 0.004 |
| 2.628 | 0.005 | 0.137 | 0.126 | 470.097 | 0.152 | 0.004 |
| 2.507 | 0.005 | 0.098 | 0.090 | 470.168 | 0.152 | 0.004 |
| 2.347 | 0.005 | 0.086 | 0.079 | 474.579 | 0.154 | 0.004 |
| 3.058 | 0.005 | 0.120 | 0.110 | 472.750 | 0.153 | 0.004 |
| 4.794 | 0.005 | 0.125 | 0.115 | 469.889 | 0.152 | 0.004 |

|                           |
|---------------------------|
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |

|       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 15    | 0.165   | 3.114   | 2.922   | 0.005   | 0.027   | 0.024   | 525.074 | 0.170   | 0.005   |
| 25    | 0.165   | 3.114   | 2.922   | 0.005   | 0.027   | 0.024   | 525.074 | 0.170   | 0.005   |
| 50    | 0.165   | 3.114   | 2.922   | 0.005   | 0.027   | 0.024   | 525.074 | 0.170   | 0.005   |
| 120   | 0.109   | 3.176   | 1.744   | 0.005   | 0.033   | 0.031   | 472.114 | 0.153   | 0.004   |
| 500   | 0.072   | 0.951   | 0.640   | 0.005   | 0.009   | 0.008   | 472.055 | 0.153   | 0.004   |
| 750   | 0.187   | 1.004   | 1.610   | 0.005   | 0.050   | 0.050   | 568.299 | 0.016   | 0.004   |
| 15    | 0.717   | 3.531   | 4.462   | 0.008   | 0.214   | 0.214   | 568.299 | 0.064   | 0.005   |
| 25    | 0.752   | 2.446   | 4.497   | 0.007   | 0.201   | 0.201   | 568.299 | 0.067   | 0.005   |
| 50    | 0.887   | 5.021   | 4.221   | 0.007   | 0.212   | 0.212   | 568.299 | 0.080   | 0.005   |
| 120   | 0.442   | 3.670   | 3.083   | 0.006   | 0.190   | 0.190   | 568.299 | 0.039   | 0.004   |
| 175   | 0.343   | 3.192   | 2.218   | 0.006   | 0.115   | 0.115   | 568.299 | 0.030   | 0.004   |
| 250   | 0.268   | 1.108   | 1.859   | 0.006   | 0.060   | 0.060   | 568.299 | 0.024   | 0.004   |
| 500   | 0.261   | 1.064   | 1.663   | 0.005   | 0.058   | 0.058   | 568.299 | 0.023   | 0.004   |
| 750   | 0.262   | 1.064   | 1.699   | 0.005   | 0.058   | 0.058   | 568.299 | 0.023   | 0.004   |
| 1000  | 0.284   | 1.134   | 3.565   | 0.005   | 0.082   | 0.082   | 568.300 | 0.025   | 0.004   |
| 15    | 0.711   | 4.548   | 4.634   | 0.006   | 0.291   | 0.268   | 535.378 | 0.173   | 0.005   |
| 25    | 0.711   | 4.548   | 4.634   | 0.006   | 0.291   | 0.268   | 535.378 | 0.173   | 0.005   |
| 50    | 0.711   | 4.548   | 4.634   | 0.006   | 0.291   | 0.268   | 535.378 | 0.173   | 0.005   |
| 120   | 0.217   | 3.306   | 2.737   | 0.005   | 0.131   | 0.121   | 464.973 | 0.150   | 0.004   |
| 175   | 0.154   | 2.961   | 1.598   | 0.005   | 0.070   | 0.064   | 477.048 | 0.154   | 0.004   |
| 250   | 0.133   | 1.064   | 1.551   | 0.005   | 0.047   | 0.043   | 467.992 | 0.151   | 0.004   |
| 500   | 0.117   | 1.015   | 1.221   | 0.005   | 0.041   | 0.038   | 469.816 | 0.152   | 0.004   |
| 750   | 0.098   | 0.972   | 0.955   | 0.005   | 0.033   | 0.031   | 474.079 | 0.153   | 0.004   |
| 1000  | 0.136   | 0.993   | 3.058   | 0.005   | 0.061   | 0.057   | 471.816 | 0.153   | 0.004   |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.712 | 2.381 | 4.419 | 0.007 | 0.180 | 0.180 | 568.299 | 0.064 | 0.005 |
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.722 | 4.481 | 4.063 | 0.007 | 0.184 | 0.184 | 568.300 | 0.065 | 0.005 |
| 120  | 0.369 | 3.523 | 2.913 | 0.006 | 0.166 | 0.166 | 568.299 | 0.033 | 0.004 |
| 175  | 0.286 | 3.072 | 2.055 | 0.006 | 0.101 | 0.101 | 568.299 | 0.025 | 0.004 |
| 50   | 2.115 | 7.489 | 6.014 | 0.005 | 0.631 | 0.581 | 517.900 | 0.168 | 0.005 |
| 120  | 0.651 | 4.065 | 5.731 | 0.005 | 0.398 | 0.366 | 469.887 | 0.152 | 0.004 |
| 175  | 0.498 | 3.516 | 5.113 | 0.005 | 0.273 | 0.251 | 474.546 | 0.154 | 0.004 |
| 250  | 0.350 | 1.678 | 4.104 | 0.005 | 0.167 | 0.153 | 472.906 | 0.153 | 0.004 |
| 500  | 0.295 | 2.448 | 3.443 | 0.005 | 0.139 | 0.127 | 472.455 | 0.153 | 0.004 |
| 750  | 0.228 | 1.440 | 2.727 | 0.005 | 0.107 | 0.098 | 470.550 | 0.152 | 0.004 |
| 9999 | 0.192 | 1.008 | 2.374 | 0.005 | 0.061 | 0.057 | 472.055 | 0.153 | 0.004 |
| 50   | 2.064 | 7.349 | 5.615 | 0.005 | 0.591 | 0.543 | 516.108 | 0.167 | 0.005 |
| 120  | 0.673 | 4.005 | 5.657 | 0.005 | 0.466 | 0.429 | 476.437 | 0.154 | 0.004 |
| 175  | 0.436 | 3.310 | 4.395 | 0.005 | 0.245 | 0.225 | 471.421 | 0.153 | 0.004 |
| 250  | 0.343 | 1.515 | 4.334 | 0.005 | 0.163 | 0.150 | 472.925 | 0.153 | 0.004 |
| 500  | 0.283 | 2.024 | 3.276 | 0.005 | 0.129 | 0.119 | 474.484 | 0.154 | 0.004 |
| 750  | 0.239 | 1.270 | 2.825 | 0.005 | 0.104 | 0.096 | 473.094 | 0.153 | 0.004 |
| 1000 | 0.399 | 1.896 | 6.399 | 0.005 | 0.182 | 0.167 | 471.822 | 0.153 | 0.004 |
| 50   | 0.862 | 5.136 | 4.211 | 0.007 | 0.201 | 0.201 | 568.299 | 0.077 | 0.005 |
| 120  | 0.438 | 3.711 | 2.989 | 0.006 | 0.178 | 0.178 | 568.299 | 0.039 | 0.004 |
| 175  | 0.344 | 3.235 | 2.114 | 0.006 | 0.109 | 0.109 | 568.299 | 0.031 | 0.004 |
| 250  | 0.274 | 1.119 | 1.756 | 0.006 | 0.057 | 0.057 | 568.299 | 0.024 | 0.004 |
| 500  | 0.268 | 1.072 | 1.574 | 0.005 | 0.055 | 0.055 | 568.300 | 0.024 | 0.004 |
| 750  | 0.268 | 1.072 | 1.606 | 0.005 | 0.055 | 0.055 | 568.299 | 0.024 | 0.004 |
| 9999 | 0.314 | 1.136 | 3.487 | 0.005 | 0.080 | 0.080 | 568.299 | 0.028 | 0.004 |



|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 25   | 0.685 | 2.339 | 4.333 | 0.007 | 0.163 | 0.163 | 568.299 | 0.061 | 0.005 |
| 25   | 0.562 | 4.461 | 3.919 | 0.005 | 0.202 | 0.186 | 525.377 | 0.170 | 0.005 |
| 50   | 0.562 | 4.461 | 3.919 | 0.005 | 0.202 | 0.186 | 525.377 | 0.170 | 0.005 |
| 120  | 0.275 | 3.492 | 2.849 | 0.005 | 0.161 | 0.148 | 467.791 | 0.151 | 0.004 |
| 175  | 0.216 | 3.090 | 2.034 | 0.005 | 0.099 | 0.091 | 472.359 | 0.153 | 0.004 |
| 250  | 0.163 | 1.103 | 1.706 | 0.005 | 0.052 | 0.048 | 471.793 | 0.153 | 0.004 |
| 500  | 0.143 | 1.088 | 1.332 | 0.005 | 0.045 | 0.041 | 469.616 | 0.152 | 0.004 |
| 750  | 0.165 | 1.150 | 1.619 | 0.005 | 0.056 | 0.052 | 469.547 | 0.152 | 0.004 |
| 50   | 1.002 | 5.535 | 4.520 | 0.005 | 0.318 | 0.292 | 525.483 | 0.170 | 0.005 |
| 120  | 0.412 | 3.720 | 3.756 | 0.005 | 0.267 | 0.245 | 471.529 | 0.153 | 0.004 |
| 175  | 0.308 | 3.231 | 2.921 | 0.005 | 0.158 | 0.145 | 472.106 | 0.153 | 0.004 |
| 250  | 0.249 | 1.337 | 2.582 | 0.005 | 0.099 | 0.091 | 473.326 | 0.153 | 0.004 |
| 500  | 0.254 | 1.485 | 2.303 | 0.005 | 0.094 | 0.086 | 473.615 | 0.153 | 0.004 |
| 15   | 0.634 | 3.531 | 4.441 | 0.008 | 0.201 | 0.201 | 568.299 | 0.057 | 0.005 |
| 25   | 0.712 | 2.446 | 4.497 | 0.007 | 0.196 | 0.196 | 568.299 | 0.064 | 0.005 |
| 50   | 0.613 | 3.905 | 3.916 | 0.007 | 0.165 | 0.165 | 568.299 | 0.055 | 0.005 |
| 120  | 0.326 | 3.361 | 2.888 | 0.006 | 0.153 | 0.153 | 568.299 | 0.029 | 0.004 |
| 175  | 0.243 | 2.925 | 2.068 | 0.006 | 0.091 | 0.091 | 568.299 | 0.021 | 0.004 |
| 250  | 0.183 | 1.016 | 1.730 | 0.006 | 0.049 | 0.049 | 568.299 | 0.016 | 0.004 |
| 500  | 0.175 | 0.996 | 1.562 | 0.005 | 0.048 | 0.048 | 568.299 | 0.015 | 0.004 |
| 750  | 0.177 | 0.996 | 1.596 | 0.005 | 0.048 | 0.048 | 568.299 | 0.016 | 0.004 |
| 9999 | 0.220 | 1.060 | 3.372 | 0.005 | 0.070 | 0.070 | 568.300 | 0.019 | 0.004 |
| 50   | 2.235 | 7.626 | 5.485 | 0.005 | 0.631 | 0.581 | 492.935 | 0.159 | 0.005 |
| 120  | 0.901 | 4.452 | 7.125 | 0.005 | 0.570 | 0.524 | 469.070 | 0.152 | 0.004 |
| 175  | 0.505 | 3.559 | 4.839 | 0.005 | 0.270 | 0.248 | 478.529 | 0.155 | 0.004 |
| 250  | 0.335 | 1.307 | 4.381 | 0.005 | 0.139 | 0.128 | 474.539 | 0.154 | 0.004 |
| 500  | 0.322 | 1.460 | 3.013 | 0.005 | 0.117 | 0.108 | 471.898 | 0.153 | 0.004 |
| 750  | 0.303 | 1.207 | 1.808 | 0.005 | 0.064 | 0.064 | 568.299 | 0.027 | 0.004 |
| 120  | 0.395 | 3.743 | 3.773 | 0.005 | 0.261 | 0.240 | 474.516 | 0.154 | 0.004 |
| 175  | 0.259 | 3.220 | 2.660 | 0.005 | 0.129 | 0.118 | 472.924 | 0.153 | 0.004 |
| 250  | 0.200 | 1.162 | 2.113 | 0.005 | 0.072 | 0.067 | 471.003 | 0.152 | 0.004 |
| 750  | 0.181 | 1.122 | 1.715 | 0.005 | 0.063 | 0.058 | 471.806 | 0.153 | 0.004 |
| 1000 | 0.160 | 1.033 | 2.414 | 0.005 | 0.064 | 0.059 | 472.055 | 0.153 | 0.004 |
| 175  | 0.278 | 3.324 | 2.246 | 0.005 | 0.113 | 0.104 | 470.290 | 0.152 | 0.004 |
| 250  | 0.249 | 1.348 | 2.109 | 0.005 | 0.082 | 0.076 | 470.193 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 500  | 0.225 | 1.338 | 1.954 | 0.005 | 0.072 | 0.066 | 474.542 | 0.154 | 0.004 |
| 750  | 0.293 | 1.935 | 2.668 | 0.005 | 0.106 | 0.098 | 472.991 | 0.153 | 0.004 |
| 1000 | 0.256 | 1.252 | 4.158 | 0.005 | 0.099 | 0.091 | 471.055 | 0.152 | 0.004 |
| 15   | 1.010 | 5.307 | 4.902 | 0.005 | 0.382 | 0.351 | 527.783 | 0.171 | 0.005 |
| 25   | 1.010 | 5.307 | 4.902 | 0.005 | 0.382 | 0.351 | 527.783 | 0.171 | 0.005 |
| 50   | 1.010 | 5.307 | 4.902 | 0.005 | 0.382 | 0.351 | 527.783 | 0.171 | 0.005 |
| 120  | 0.482 | 3.703 | 4.456 | 0.005 | 0.323 | 0.298 | 472.275 | 0.153 | 0.004 |
| 175  | 0.330 | 3.183 | 3.438 | 0.005 | 0.180 | 0.165 | 469.764 | 0.152 | 0.004 |
| 500  | 0.215 | 1.599 | 2.428 | 0.005 | 0.090 | 0.083 | 475.212 | 0.154 | 0.004 |
| 15   | 0.831 | 5.314 | 4.425 | 0.005 | 0.289 | 0.266 | 526.176 | 0.170 | 0.005 |
| 25   | 0.831 | 5.314 | 4.425 | 0.005 | 0.289 | 0.266 | 526.176 | 0.170 | 0.005 |
| 50   | 0.831 | 5.314 | 4.425 | 0.005 | 0.289 | 0.266 | 526.176 | 0.170 | 0.005 |
| 120  | 0.404 | 3.740 | 3.718 | 0.005 | 0.256 | 0.235 | 470.000 | 0.152 | 0.004 |
| 175  | 0.254 | 3.234 | 2.347 | 0.005 | 0.121 | 0.111 | 471.850 | 0.153 | 0.004 |
| 250  | 0.204 | 1.171 | 2.094 | 0.005 | 0.070 | 0.064 | 473.223 | 0.153 | 0.004 |
| 500  | 0.195 | 1.330 | 1.796 | 0.005 | 0.064 | 0.059 | 472.929 | 0.153 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 750  | 0.166 | 1.463 | 1.387 | 0.005 | 0.054 | 0.050 | 473.464 | 0.153 | 0.004 |
| 1000 | 0.276 | 1.093 | 4.876 | 0.005 | 0.120 | 0.110 | 472.055 | 0.153 | 0.004 |
| 50   | 1.108 | 5.960 | 4.966 | 0.005 | 0.396 | 0.364 | 523.709 | 0.169 | 0.005 |
| 120  | 0.294 | 3.602 | 2.956 | 0.005 | 0.166 | 0.152 | 473.588 | 0.153 | 0.004 |
| 175  | 0.249 | 3.196 | 2.246 | 0.005 | 0.114 | 0.105 | 472.219 | 0.153 | 0.004 |
| 250  | 0.269 | 1.309 | 3.082 | 0.005 | 0.102 | 0.094 | 471.482 | 0.153 | 0.004 |
| 500  | 0.254 | 1.442 | 2.602 | 0.005 | 0.101 | 0.093 | 470.297 | 0.152 | 0.004 |
| 9999 | 0.073 | 0.972 | 2.318 | 0.005 | 0.020 | 0.018 | 472.055 | 0.153 | 0.004 |
| 25   | 1.208 | 5.302 | 4.602 | 0.005 | 0.370 | 0.340 | 526.515 | 0.170 | 0.005 |
| 50   | 1.208 | 5.302 | 4.602 | 0.005 | 0.370 | 0.340 | 526.515 | 0.170 | 0.005 |
| 120  | 0.420 | 3.563 | 4.026 | 0.005 | 0.285 | 0.263 | 469.774 | 0.152 | 0.004 |
| 175  | 0.256 | 3.016 | 2.695 | 0.005 | 0.130 | 0.120 | 472.555 | 0.153 | 0.004 |
| 250  | 0.166 | 1.024 | 2.484 | 0.005 | 0.070 | 0.064 | 472.477 | 0.153 | 0.004 |
| 500  | 0.164 | 0.988 | 2.053 | 0.005 | 0.074 | 0.068 | 465.591 | 0.151 | 0.004 |
| 25   | 0.587 | 4.211 | 3.882 | 0.005 | 0.200 | 0.184 | 520.397 | 0.168 | 0.005 |
| 50   | 0.587 | 4.211 | 3.882 | 0.005 | 0.200 | 0.184 | 520.397 | 0.168 | 0.005 |
| 120  | 0.355 | 3.554 | 3.451 | 0.005 | 0.219 | 0.202 | 473.221 | 0.153 | 0.004 |
| 175  | 0.229 | 3.032 | 2.315 | 0.005 | 0.114 | 0.105 | 470.650 | 0.152 | 0.004 |
| 250  | 0.211 | 1.209 | 2.582 | 0.005 | 0.092 | 0.085 | 472.151 | 0.153 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 15   | 0.634 | 3.531 | 4.441 | 0.008 | 0.201 | 0.201 | 568.299 | 0.057 | 0.005 |
| 25   | 0.712 | 2.446 | 4.497 | 0.007 | 0.196 | 0.196 | 568.299 | 0.064 | 0.005 |
| 50   | 0.439 | 3.329 | 3.765 | 0.007 | 0.136 | 0.136 | 568.299 | 0.039 | 0.005 |
| 120  | 0.264 | 3.210 | 2.766 | 0.006 | 0.129 | 0.129 | 568.299 | 0.023 | 0.004 |
| 175  | 0.238 | 2.907 | 2.118 | 0.006 | 0.093 | 0.093 | 568.299 | 0.021 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 15   | 0.717 | 3.531 | 4.462 | 0.008 | 0.214 | 0.214 | 568.299 | 0.064 | 0.005 |
| 25   | 0.752 | 2.446 | 4.497 | 0.007 | 0.201 | 0.201 | 568.299 | 0.067 | 0.005 |
| 50   | 0.671 | 4.099 | 3.966 | 0.007 | 0.175 | 0.175 | 568.299 | 0.060 | 0.005 |
| 120  | 0.347 | 3.412 | 2.928 | 0.006 | 0.162 | 0.162 | 568.300 | 0.031 | 0.004 |
| 175  | 0.260 | 2.968 | 2.101 | 0.006 | 0.096 | 0.096 | 568.299 | 0.023 | 0.004 |
| 250  | 0.197 | 1.031 | 1.759 | 0.006 | 0.052 | 0.052 | 568.299 | 0.017 | 0.004 |
| 500  | 0.189 | 1.007 | 1.584 | 0.005 | 0.050 | 0.050 | 568.299 | 0.017 | 0.004 |
| 750  | 0.191 | 1.007 | 1.618 | 0.005 | 0.050 | 0.050 | 568.299 | 0.017 | 0.004 |
| 9999 | 0.233 | 1.074 | 3.409 | 0.005 | 0.072 | 0.072 | 568.300 | 0.021 | 0.004 |
| 15   | 0.848 | 4.597 | 4.351 | 0.005 | 0.294 | 0.270 | 525.791 | 0.170 | 0.005 |
| 25   | 0.848 | 4.597 | 4.351 | 0.005 | 0.294 | 0.270 | 525.791 | 0.170 | 0.005 |
| 50   | 0.848 | 4.597 | 4.351 | 0.005 | 0.294 | 0.270 | 525.791 | 0.170 | 0.005 |
| 120  | 0.353 | 3.507 | 3.589 | 0.005 | 0.219 | 0.202 | 473.901 | 0.153 | 0.004 |
| 175  | 0.193 | 2.926 | 2.117 | 0.005 | 0.097 | 0.090 | 471.980 | 0.153 | 0.004 |
| 250  | 0.197 | 1.228 | 2.493 | 0.005 | 0.081 | 0.075 | 473.470 | 0.153 | 0.004 |
| 500  | 0.221 | 1.950 | 2.589 | 0.005 | 0.100 | 0.092 | 479.329 | 0.155 | 0.004 |
| 50   | 0.969 | 4.657 | 4.411 | 0.005 | 0.304 | 0.280 | 525.384 | 0.170 | 0.005 |
| 120  | 0.175 | 3.252 | 2.285 | 0.005 | 0.089 | 0.082 | 473.110 | 0.153 | 0.004 |
| 175  | 0.130 | 2.845 | 1.617 | 0.005 | 0.060 | 0.055 | 471.758 | 0.153 | 0.004 |
| 250  | 0.115 | 0.984 | 1.612 | 0.005 | 0.037 | 0.034 | 472.547 | 0.153 | 0.004 |
| 500  | 0.092 | 0.946 | 1.302 | 0.005 | 0.028 | 0.026 | 465.744 | 0.151 | 0.004 |
| 175  | 0.691 | 3.848 | 6.790 | 0.005 | 0.386 | 0.356 | 472.975 | 0.153 | 0.004 |
| 250  | 0.601 | 2.317 | 6.296 | 0.005 | 0.306 | 0.281 | 474.798 | 0.154 | 0.004 |
| 500  | 0.492 | 4.041 | 5.081 | 0.005 | 0.232 | 0.214 | 478.987 | 0.155 | 0.004 |
| 750  | 0.458 | 2.604 | 6.123 | 0.005 | 0.218 | 0.201 | 473.046 | 0.153 | 0.004 |
| 1000 | 0.497 | 2.057 | 5.095 | 0.005 | 0.150 | 0.150 | 568.299 | 0.044 | 0.004 |
| 25   | 1.326 | 6.449 | 4.974 | 0.005 | 0.409 | 0.377 | 524.551 | 0.170 | 0.005 |
| 50   | 1.326 | 6.449 | 4.974 | 0.005 | 0.409 | 0.377 | 524.551 | 0.170 | 0.005 |
| 120  | 0.498 | 3.892 | 4.215 | 0.005 | 0.316 | 0.291 | 466.421 | 0.151 | 0.004 |
| 175  | 0.346 | 3.354 | 3.119 | 0.005 | 0.171 | 0.157 | 471.080 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.266 | 1.240 | 2.998 | 0.005 | 0.100 | 0.092 | 469.564 | 0.152 | 0.004 |
| 500  | 0.264 | 1.529 | 2.610 | 0.005 | 0.097 | 0.090 | 467.928 | 0.151 | 0.004 |
| 750  | 0.271 | 1.397 | 2.641 | 0.005 | 0.102 | 0.094 | 462.055 | 0.149 | 0.004 |
| 1000 | 0.294 | 1.206 | 4.975 | 0.005 | 0.128 | 0.118 | 471.258 | 0.152 | 0.004 |
| 120  | 0.704 | 4.218 | 6.659 | 0.005 | 0.512 | 0.471 | 483.713 | 0.156 | 0.004 |
| 175  | 0.432 | 3.456 | 4.341 | 0.005 | 0.232 | 0.213 | 478.654 | 0.155 | 0.004 |
| 250  | 0.391 | 1.884 | 4.367 | 0.005 | 0.189 | 0.174 | 469.126 | 0.152 | 0.004 |
| 500  | 0.299 | 2.255 | 3.445 | 0.005 | 0.134 | 0.123 | 472.464 | 0.153 | 0.004 |
| 750  | 0.250 | 1.658 | 2.887 | 0.005 | 0.105 | 0.097 | 471.786 | 0.153 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 50   | 0.714 | 4.380 | 4.002 | 0.007 | 0.179 | 0.179 | 568.299 | 0.064 | 0.005 |
| 120  | 0.363 | 3.493 | 2.889 | 0.006 | 0.162 | 0.162 | 568.299 | 0.032 | 0.004 |
| 175  | 0.278 | 3.043 | 2.043 | 0.006 | 0.098 | 0.098 | 568.299 | 0.025 | 0.004 |
| 250  | 0.260 | 1.273 | 2.053 | 0.007 | 0.063 | 0.063 | 686.695 | 0.023 | 0.004 |
| 25   | 0.409 | 3.732 | 3.573 | 0.005 | 0.126 | 0.116 | 527.450 | 0.171 | 0.005 |
| 50   | 0.409 | 3.732 | 3.573 | 0.005 | 0.126 | 0.116 | 527.450 | 0.171 | 0.005 |
| 120  | 0.178 | 3.277 | 2.366 | 0.005 | 0.096 | 0.089 | 471.977 | 0.153 | 0.004 |
| 50   | 0.507 | 3.932 | 4.189 | 0.006 | 0.204 | 0.188 | 535.784 | 0.173 | 0.005 |
| 120  | 0.312 | 3.436 | 3.461 | 0.005 | 0.191 | 0.175 | 474.091 | 0.153 | 0.004 |
| 175  | 0.258 | 2.919 | 3.099 | 0.005 | 0.145 | 0.134 | 469.169 | 0.152 | 0.004 |
| 250  | 0.207 | 1.219 | 2.994 | 0.005 | 0.092 | 0.085 | 476.802 | 0.154 | 0.004 |
| 500  | 0.141 | 1.202 | 1.753 | 0.005 | 0.064 | 0.058 | 471.748 | 0.153 | 0.004 |
| 750  | 0.125 | 0.992 | 1.597 | 0.005 | 0.062 | 0.057 | 470.409 | 0.152 | 0.004 |
| 15   | 1.219 | 5.900 | 4.849 | 0.005 | 0.412 | 0.379 | 525.328 | 0.170 | 0.005 |
| 25   | 1.219 | 5.900 | 4.849 | 0.005 | 0.412 | 0.379 | 525.328 | 0.170 | 0.005 |
| 50   | 1.219 | 5.900 | 4.849 | 0.005 | 0.412 | 0.379 | 525.328 | 0.170 | 0.005 |
| 120  | 0.440 | 3.757 | 3.962 | 0.005 | 0.291 | 0.268 | 474.116 | 0.153 | 0.004 |
| 175  | 0.385 | 3.247 | 3.707 | 0.005 | 0.187 | 0.172 | 473.122 | 0.153 | 0.004 |
| 250  | 0.164 | 1.108 | 1.758 | 0.005 | 0.055 | 0.051 | 470.126 | 0.152 | 0.004 |
| 25   | 0.756 | 4.902 | 4.226 | 0.005 | 0.255 | 0.234 | 515.121 | 0.167 | 0.005 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 50   | 0.756 | 4.902 | 4.226 | 0.005 | 0.255 | 0.234 | 515.121 | 0.167 | 0.005 |
| 120  | 0.296 | 3.571 | 2.995 | 0.005 | 0.177 | 0.163 | 475.362 | 0.154 | 0.004 |
| 175  | 0.221 | 3.091 | 2.062 | 0.005 | 0.104 | 0.096 | 467.529 | 0.151 | 0.004 |
| 250  | 0.209 | 1.186 | 2.369 | 0.005 | 0.080 | 0.074 | 470.572 | 0.152 | 0.004 |
| 500  | 0.179 | 1.341 | 1.776 | 0.005 | 0.064 | 0.059 | 469.303 | 0.152 | 0.004 |
| 750  | 0.247 | 1.433 | 2.754 | 0.005 | 0.104 | 0.096 | 466.456 | 0.151 | 0.004 |
| 15   | 0.809 | 4.666 | 4.459 | 0.005 | 0.313 | 0.288 | 527.017 | 0.170 | 0.005 |
| 25   | 0.809 | 4.666 | 4.459 | 0.005 | 0.313 | 0.288 | 527.017 | 0.170 | 0.005 |
| 50   | 0.809 | 4.666 | 4.459 | 0.005 | 0.313 | 0.288 | 527.017 | 0.170 | 0.005 |
| 120  | 0.556 | 3.789 | 5.106 | 0.005 | 0.371 | 0.341 | 475.287 | 0.154 | 0.004 |
| 175  | 0.407 | 3.304 | 4.272 | 0.005 | 0.219 | 0.201 | 467.734 | 0.151 | 0.004 |
| 250  | 0.356 | 1.668 | 4.360 | 0.005 | 0.172 | 0.158 | 473.854 | 0.153 | 0.004 |
| 500  | 0.221 | 1.865 | 2.491 | 0.005 | 0.100 | 0.092 | 470.701 | 0.152 | 0.004 |
| 750  | 0.066 | 0.947 | 0.475 | 0.005 | 0.009 | 0.008 | 472.529 | 0.153 | 0.004 |
| 15   | 0.717 | 3.531 | 4.462 | 0.008 | 0.214 | 0.214 | 568.299 | 0.064 | 0.005 |
| 25   | 0.752 | 2.446 | 4.497 | 0.007 | 0.201 | 0.201 | 568.299 | 0.067 | 0.005 |
| 50   | 0.829 | 4.708 | 4.133 | 0.007 | 0.203 | 0.203 | 568.299 | 0.074 | 0.005 |
| 120  | 0.411 | 3.579 | 3.042 | 0.006 | 0.184 | 0.184 | 568.299 | 0.037 | 0.004 |
| 175  | 0.315 | 3.112 | 2.189 | 0.006 | 0.110 | 0.110 | 568.299 | 0.028 | 0.004 |
| 250  | 0.243 | 1.081 | 1.836 | 0.006 | 0.057 | 0.057 | 568.299 | 0.021 | 0.004 |
| 500  | 0.236 | 1.044 | 1.642 | 0.005 | 0.055 | 0.055 | 568.299 | 0.021 | 0.004 |
| 175  | 0.278 | 3.324 | 2.246 | 0.005 | 0.113 | 0.104 | 470.290 | 0.152 | 0.004 |
| 250  | 0.249 | 1.348 | 2.109 | 0.005 | 0.082 | 0.076 | 470.193 | 0.152 | 0.004 |
| 500  | 0.225 | 1.338 | 1.954 | 0.005 | 0.072 | 0.066 | 474.542 | 0.154 | 0.004 |
| 750  | 0.293 | 1.935 | 2.668 | 0.005 | 0.106 | 0.098 | 472.991 | 0.153 | 0.004 |
| 1000 | 0.256 | 1.252 | 4.158 | 0.005 | 0.099 | 0.091 | 471.055 | 0.152 | 0.004 |

2022

| 2022             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   |
| Aerial Lifts     | 15    | 0.162   | 3.112   | 2.907   | 0.005   | 0.024   | 0.022   |
| Aerial Lifts     | 25    | 0.162   | 3.112   | 2.907   | 0.005   | 0.024   | 0.022   |
| Aerial Lifts     | 50    | 0.162   | 3.112   | 2.907   | 0.005   | 0.024   | 0.022   |
| Aerial Lifts     | 120   | 0.105   | 3.176   | 1.627   | 0.005   | 0.030   | 0.028   |
| Aerial Lifts     | 500   | 0.075   | 0.956   | 0.642   | 0.005   | 0.009   | 0.008   |
| Aerial Lifts     | 750   | 0.177   | 0.998   | 1.424   | 0.005   | 0.044   | 0.044   |
| Air Compressor s | 15    | 0.707   | 3.519   | 4.408   | 0.008   | 0.203   | 0.203   |
| Air Compressor s | 25    | 0.739   | 2.426   | 4.470   | 0.007   | 0.193   | 0.193   |
| Air Compressor s | 50    | 0.814   | 4.959   | 4.093   | 0.007   | 0.183   | 0.183   |
| Air Compressor s | 120   | 0.413   | 3.662   | 2.844   | 0.006   | 0.165   | 0.165   |
| Air Compressor s | 175   | 0.322   | 3.194   | 1.959   | 0.006   | 0.101   | 0.101   |
| Air Compressor s | 250   | 0.255   | 1.102   | 1.617   | 0.006   | 0.052   | 0.052   |
| Air Compressor s | 500   | 0.249   | 1.059   | 1.472   | 0.005   | 0.051   | 0.051   |
| Air Compressor s | 750   | 0.250   | 1.059   | 1.502   | 0.005   | 0.051   | 0.051   |
| Air Compressor s | 1000  | 0.269   | 1.117   | 3.378   | 0.005   | 0.075   | 0.075   |
| Bore/Drill Rigs  | 15    | 0.631   | 4.334   | 4.285   | 0.006   | 0.241   | 0.221   |
| Bore/Drill Rigs  | 25    | 0.631   | 4.334   | 4.285   | 0.006   | 0.241   | 0.221   |
| Bore/Drill Rigs  | 50    | 0.631   | 4.334   | 4.285   | 0.006   | 0.241   | 0.221   |
| Bore/Drill Rigs  | 120   | 0.191   | 3.260   | 2.425   | 0.005   | 0.107   | 0.099   |
| Bore/Drill Rigs  | 175   | 0.137   | 2.954   | 1.288   | 0.005   | 0.057   | 0.052   |
| Bore/Drill Rigs  | 250   | 0.115   | 1.047   | 1.163   | 0.005   | 0.037   | 0.034   |
| Bore/Drill Rigs  | 500   | 0.108   | 1.002   | 1.035   | 0.005   | 0.035   | 0.032   |
| Bore/Drill Rigs  | 750   | 0.091   | 0.975   | 0.773   | 0.005   | 0.028   | 0.026   |
| Bore/Drill Rigs  | 1000  | 0.057   | 0.945   | 2.278   | 0.005   | 0.018   | 0.017   |

|                          |      |       |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.704 | 2.367 | 4.399 | 0.007 | 0.175 | 0.175 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.660 | 4.422 | 3.936 | 0.007 | 0.158 | 0.158 |
| Concrete/Industrial Saws | 120  | 0.343 | 3.514 | 2.686 | 0.006 | 0.144 | 0.144 |
| Concrete/Industrial Saws | 175  | 0.267 | 3.072 | 1.806 | 0.006 | 0.089 | 0.089 |
| Cranes                   | 50   | 2.028 | 7.368 | 5.899 | 0.005 | 0.603 | 0.555 |
| Cranes                   | 120  | 0.578 | 3.972 | 5.149 | 0.005 | 0.346 | 0.318 |
| Cranes                   | 175  | 0.457 | 3.475 | 4.617 | 0.005 | 0.246 | 0.227 |
| Cranes                   | 250  | 0.316 | 1.602 | 3.541 | 0.005 | 0.147 | 0.135 |
| Cranes                   | 500  | 0.261 | 2.212 | 2.894 | 0.005 | 0.117 | 0.108 |
| Cranes                   | 750  | 0.200 | 1.283 | 2.251 | 0.005 | 0.089 | 0.082 |
| Cranes                   | 9999 | 0.201 | 1.015 | 2.386 | 0.005 | 0.062 | 0.057 |
| Crawler Tractors         | 50   | 1.899 | 7.041 | 5.380 | 0.005 | 0.539 | 0.496 |
| Crawler Tractors         | 120  | 0.600 | 3.925 | 5.101 | 0.005 | 0.408 | 0.375 |
| Crawler Tractors         | 175  | 0.389 | 3.264 | 3.827 | 0.005 | 0.214 | 0.197 |
| Crawler Tractors         | 250  | 0.306 | 1.440 | 3.737 | 0.005 | 0.141 | 0.130 |
| Crawler Tractors         | 500  | 0.254 | 1.916 | 2.744 | 0.005 | 0.111 | 0.102 |
| Crawler Tractors         | 750  | 0.198 | 1.186 | 2.126 | 0.005 | 0.079 | 0.073 |
| Crawler Tractors         | 1000 | 0.357 | 1.732 | 5.923 | 0.005 | 0.162 | 0.149 |
| Crushing/Proc. Equipment | 50   | 0.795 | 5.081 | 4.083 | 0.007 | 0.172 | 0.172 |
| Crushing/Proc. Equipment | 120  | 0.410 | 3.704 | 2.758 | 0.006 | 0.154 | 0.154 |
| Crushing/Proc. Equipment | 175  | 0.323 | 3.237 | 1.861 | 0.006 | 0.095 | 0.095 |
| Crushing/Proc. Equipment | 250  | 0.260 | 1.114 | 1.521 | 0.006 | 0.050 | 0.050 |
| Crushing/Proc. Equipment | 500  | 0.255 | 1.067 | 1.389 | 0.005 | 0.048 | 0.048 |
| Crushing/Proc. Equipment | 750  | 0.256 | 1.067 | 1.416 | 0.005 | 0.048 | 0.048 |
| Crushing/Proc. Equipment | 9999 | 0.300 | 1.121 | 3.310 | 0.005 | 0.073 | 0.073 |



|                      |      |       |       |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|
| Dumpers/Tractors     | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.162 | 0.162 |
| Excavators           | 25   | 0.478 | 4.273 | 3.700 | 0.005 | 0.160 | 0.147 |
| Excavators           | 50   | 0.478 | 4.273 | 3.700 | 0.005 | 0.160 | 0.147 |
| Excavators           | 120  | 0.252 | 3.473 | 2.606 | 0.005 | 0.138 | 0.127 |
| Excavators           | 175  | 0.191 | 3.074 | 1.678 | 0.005 | 0.081 | 0.075 |
| Excavators           | 250  | 0.148 | 1.092 | 1.386 | 0.005 | 0.044 | 0.040 |
| Excavators           | 500  | 0.128 | 1.061 | 1.040 | 0.005 | 0.035 | 0.032 |
| Excavators           | 750  | 0.150 | 1.144 | 1.287 | 0.005 | 0.047 | 0.043 |
| Forklifts            | 50   | 0.859 | 5.304 | 4.312 | 0.005 | 0.270 | 0.248 |
| Forklifts            | 120  | 0.362 | 3.675 | 3.360 | 0.005 | 0.223 | 0.205 |
| Forklifts            | 175  | 0.273 | 3.197 | 2.480 | 0.005 | 0.132 | 0.122 |
| Forklifts            | 250  | 0.236 | 1.317 | 2.319 | 0.005 | 0.090 | 0.083 |
| Forklifts            | 500  | 0.232 | 1.219 | 1.991 | 0.005 | 0.077 | 0.071 |
| Generator Sets       | 15   | 0.626 | 3.519 | 4.390 | 0.008 | 0.193 | 0.193 |
| Generator Sets       | 25   | 0.706 | 2.426 | 4.470 | 0.007 | 0.188 | 0.188 |
| Generator Sets       | 50   | 0.560 | 3.858 | 3.796 | 0.007 | 0.143 | 0.143 |
| Generator Sets       | 120  | 0.301 | 3.353 | 2.671 | 0.006 | 0.134 | 0.134 |
| Generator Sets       | 175  | 0.226 | 2.926 | 1.830 | 0.006 | 0.081 | 0.081 |
| Generator Sets       | 250  | 0.173 | 1.010 | 1.508 | 0.006 | 0.043 | 0.043 |
| Generator Sets       | 500  | 0.166 | 0.990 | 1.384 | 0.005 | 0.042 | 0.042 |
| Generator Sets       | 750  | 0.168 | 0.990 | 1.412 | 0.005 | 0.043 | 0.043 |
| Generator Sets       | 9999 | 0.206 | 1.045 | 3.202 | 0.005 | 0.063 | 0.063 |
| Graders              | 50   | 2.106 | 7.428 | 5.332 | 0.005 | 0.595 | 0.547 |
| Graders              | 120  | 0.796 | 4.330 | 6.360 | 0.005 | 0.493 | 0.453 |
| Graders              | 175  | 0.440 | 3.493 | 4.125 | 0.005 | 0.229 | 0.211 |
| Graders              | 250  | 0.307 | 1.273 | 3.888 | 0.005 | 0.124 | 0.114 |
| Graders              | 500  | 0.311 | 1.390 | 2.802 | 0.005 | 0.108 | 0.100 |
| Graders              | 750  | 0.289 | 1.187 | 1.606 | 0.005 | 0.057 | 0.057 |
| Off-Highway Tractors | 120  | 0.348 | 3.710 | 3.400 | 0.005 | 0.219 | 0.202 |
| Off-Highway Tractors | 175  | 0.231 | 3.186 | 2.239 | 0.005 | 0.107 | 0.099 |
| Off-Highway Tractors | 250  | 0.180 | 1.143 | 1.732 | 0.005 | 0.060 | 0.055 |
| Off-Highway Tractors | 750  | 0.171 | 1.121 | 1.433 | 0.005 | 0.055 | 0.050 |
| Off-Highway Tractors | 1000 | 0.170 | 1.044 | 2.432 | 0.005 | 0.066 | 0.060 |
| Off-Highway Trucks   | 175  | 0.241 | 3.284 | 1.811 | 0.005 | 0.088 | 0.081 |
| Off-Highway Trucks   | 250  | 0.215 | 1.279 | 1.618 | 0.005 | 0.064 | 0.059 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.196 | 1.247 | 1.490 | 0.005 | 0.054 | 0.050 |
| Off-Highway Trucks                 | 750  | 0.263 | 1.746 | 2.268 | 0.005 | 0.088 | 0.081 |
| Off-Highway Trucks                 | 1000 | 0.234 | 1.214 | 3.842 | 0.005 | 0.086 | 0.079 |
| Other Construction Equipment       | 15   | 0.920 | 5.167 | 4.741 | 0.005 | 0.348 | 0.320 |
| Other Construction Equipment       | 25   | 0.920 | 5.167 | 4.741 | 0.005 | 0.348 | 0.320 |
| Other Construction Equipment       | 50   | 0.920 | 5.167 | 4.741 | 0.005 | 0.348 | 0.320 |
| Other Construction Equipment       | 120  | 0.440 | 3.666 | 4.098 | 0.005 | 0.288 | 0.265 |
| Other Construction Equipment       | 175  | 0.295 | 3.155 | 2.994 | 0.005 | 0.156 | 0.144 |
| Other Construction Equipment       | 500  | 0.188 | 1.438 | 1.975 | 0.005 | 0.074 | 0.068 |
| Other General Industrial Equipment | 15   | 0.702 | 5.076 | 4.197 | 0.005 | 0.238 | 0.219 |
| Other General Industrial Equipment | 25   | 0.702 | 5.076 | 4.197 | 0.005 | 0.238 | 0.219 |
| Other General Industrial Equipment | 50   | 0.702 | 5.076 | 4.197 | 0.005 | 0.238 | 0.219 |
| Other General Industrial Equipment | 120  | 0.339 | 3.668 | 3.200 | 0.005 | 0.199 | 0.183 |
| Other General Industrial Equipment | 175  | 0.244 | 3.233 | 2.150 | 0.005 | 0.111 | 0.102 |
| Other General Industrial Equipment | 250  | 0.187 | 1.138 | 1.759 | 0.005 | 0.057 | 0.052 |
| Other General Industrial Equipment | 500  | 0.175 | 1.171 | 1.433 | 0.005 | 0.050 | 0.046 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.149 | 1.457 | 1.062 | 0.005 | 0.046 | 0.042 |
| Other General Industrial Equipment | 1000 | 0.187 | 1.039 | 3.942 | 0.005 | 0.079 | 0.073 |
| Other Material Handling Equipment  | 50   | 1.103 | 5.984 | 4.920 | 0.005 | 0.385 | 0.354 |
| Other Material Handling Equipment  | 120  | 0.247 | 3.557 | 2.567 | 0.005 | 0.121 | 0.111 |
| Other Material Handling Equipment  | 175  | 0.226 | 3.176 | 1.894 | 0.005 | 0.103 | 0.095 |
| Other Material Handling Equipment  | 250  | 0.229 | 1.239 | 2.425 | 0.005 | 0.083 | 0.076 |
| Other Material Handling Equipment  | 500  | 0.226 | 1.346 | 2.063 | 0.005 | 0.083 | 0.077 |
| Other Material Handling Equipment  | 9999 | 0.076 | 0.978 | 2.328 | 0.005 | 0.020 | 0.018 |
| Pavers                             | 25   | 1.092 | 5.114 | 4.421 | 0.005 | 0.330 | 0.303 |
| Pavers                             | 50   | 1.092 | 5.114 | 4.421 | 0.005 | 0.330 | 0.303 |
| Pavers                             | 120  | 0.373 | 3.525 | 3.659 | 0.005 | 0.248 | 0.228 |
| Pavers                             | 175  | 0.215 | 2.995 | 2.180 | 0.005 | 0.104 | 0.095 |
| Pavers                             | 250  | 0.140 | 1.012 | 1.900 | 0.005 | 0.055 | 0.050 |
| Pavers                             | 500  | 0.150 | 0.982 | 1.810 | 0.005 | 0.063 | 0.058 |
| Paving Equipment                   | 25   | 0.572 | 4.244 | 3.836 | 0.005 | 0.188 | 0.173 |
| Paving Equipment                   | 50   | 0.572 | 4.244 | 3.836 | 0.005 | 0.188 | 0.173 |
| Paving Equipment                   | 120  | 0.296 | 3.501 | 3.000 | 0.005 | 0.171 | 0.157 |
| Paving Equipment                   | 175  | 0.213 | 3.038 | 2.073 | 0.005 | 0.101 | 0.093 |
| Paving Equipment                   | 250  | 0.196 | 1.204 | 2.228 | 0.005 | 0.083 | 0.076 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Pressure Washers                   | 15   | 0.626 | 3.519 | 4.390 | 0.008 | 0.193 | 0.193 |
| Pressure Washers                   | 25   | 0.706 | 2.426 | 4.470 | 0.007 | 0.188 | 0.188 |
| Pressure Washers                   | 50   | 0.398 | 3.291 | 3.649 | 0.007 | 0.117 | 0.117 |
| Pressure Washers                   | 120  | 0.241 | 3.202 | 2.560 | 0.006 | 0.112 | 0.112 |
| Pressure Washers                   | 175  | 0.221 | 2.907 | 1.871 | 0.006 | 0.082 | 0.082 |

|                         |      |       |       |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 |
| Pumps                   | 15   | 0.707 | 3.519 | 4.408 | 0.008 | 0.203 | 0.203 |
| Pumps                   | 25   | 0.739 | 2.426 | 4.470 | 0.007 | 0.193 | 0.193 |
| Pumps                   | 50   | 0.614 | 4.048 | 3.846 | 0.007 | 0.152 | 0.152 |
| Pumps                   | 120  | 0.321 | 3.404 | 2.708 | 0.006 | 0.142 | 0.142 |
| Pumps                   | 175  | 0.242 | 2.969 | 1.860 | 0.006 | 0.085 | 0.085 |
| Pumps                   | 250  | 0.186 | 1.025 | 1.534 | 0.006 | 0.045 | 0.045 |
| Pumps                   | 500  | 0.180 | 1.001 | 1.404 | 0.005 | 0.044 | 0.044 |
| Pumps                   | 750  | 0.181 | 1.001 | 1.432 | 0.005 | 0.044 | 0.044 |
| Pumps                   | 9999 | 0.219 | 1.058 | 3.236 | 0.005 | 0.065 | 0.065 |
| Rollers                 | 15   | 0.738 | 4.402 | 4.128 | 0.005 | 0.250 | 0.230 |
| Rollers                 | 25   | 0.738 | 4.402 | 4.128 | 0.005 | 0.250 | 0.230 |
| Rollers                 | 50   | 0.738 | 4.402 | 4.128 | 0.005 | 0.250 | 0.230 |
| Rollers                 | 120  | 0.310 | 3.470 | 3.219 | 0.005 | 0.186 | 0.171 |
| Rollers                 | 175  | 0.164 | 2.913 | 1.714 | 0.005 | 0.079 | 0.072 |
| Rollers                 | 250  | 0.187 | 1.228 | 2.212 | 0.005 | 0.077 | 0.071 |
| Rollers                 | 500  | 0.218 | 1.955 | 2.463 | 0.005 | 0.097 | 0.089 |
| Rough Terrain Forklifts | 50   | 0.789 | 4.304 | 4.041 | 0.005 | 0.238 | 0.219 |
| Rough Terrain Forklifts | 120  | 0.159 | 3.244 | 2.098 | 0.005 | 0.073 | 0.067 |
| Rough Terrain Forklifts | 175  | 0.120 | 2.844 | 1.405 | 0.005 | 0.051 | 0.047 |
| Rough Terrain Forklifts | 250  | 0.119 | 0.989 | 1.617 | 0.005 | 0.037 | 0.034 |
| Rough Terrain Forklifts | 500  | 0.068 | 0.937 | 0.558 | 0.005 | 0.009 | 0.008 |
| Rubber Tired Dozers     | 175  | 0.600 | 3.752 | 5.808 | 0.005 | 0.326 | 0.300 |
| Rubber Tired Dozers     | 250  | 0.480 | 2.056 | 5.046 | 0.005 | 0.240 | 0.220 |
| Rubber Tired Dozers     | 500  | 0.475 | 3.895 | 4.808 | 0.005 | 0.220 | 0.202 |
| Rubber Tired Dozers     | 750  | 0.460 | 2.607 | 6.122 | 0.005 | 0.218 | 0.201 |
| Rubber Tired Dozers     | 1000 | 0.475 | 1.961 | 4.896 | 0.005 | 0.140 | 0.140 |
| Rubber Tired Loaders    | 25   | 1.179 | 6.204 | 4.748 | 0.005 | 0.354 | 0.326 |
| Rubber Tired Loaders    | 50   | 1.179 | 6.204 | 4.748 | 0.005 | 0.354 | 0.326 |
| Rubber Tired Loaders    | 120  | 0.440 | 3.839 | 3.768 | 0.005 | 0.267 | 0.245 |
| Rubber Tired Loaders    | 175  | 0.295 | 3.302 | 2.518 | 0.005 | 0.136 | 0.125 |

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.226 | 1.188 | 2.347 | 0.005 | 0.079 | 0.072 |
| Rubber Tired Loaders      | 500  | 0.237 | 1.441 | 2.175 | 0.005 | 0.081 | 0.075 |
| Rubber Tired Loaders      | 750  | 0.233 | 1.315 | 2.097 | 0.005 | 0.080 | 0.074 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.162 | 3.617 | 0.005 | 0.075 | 0.069 |
| Scrapers                  | 120  | 0.681 | 4.205 | 6.455 | 0.005 | 0.494 | 0.454 |
| Scrapers                  | 175  | 0.390 | 3.417 | 3.833 | 0.005 | 0.204 | 0.187 |
| Scrapers                  | 250  | 0.341 | 1.743 | 3.669 | 0.005 | 0.160 | 0.147 |
| Scrapers                  | 500  | 0.264 | 2.052 | 2.879 | 0.005 | 0.112 | 0.103 |
| Scrapers                  | 750  | 0.224 | 1.508 | 2.475 | 0.005 | 0.090 | 0.083 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Signal Boards             | 50   | 0.655 | 4.325 | 3.880 | 0.007 | 0.154 | 0.154 |
| Signal Boards             | 120  | 0.337 | 3.484 | 2.668 | 0.006 | 0.141 | 0.141 |
| Signal Boards             | 175  | 0.260 | 3.044 | 1.801 | 0.006 | 0.086 | 0.086 |
| Signal Boards             | 250  | 0.247 | 1.266 | 1.782 | 0.007 | 0.055 | 0.055 |
| Skid Steer Loaders        | 25   | 0.365 | 3.656 | 3.433 | 0.005 | 0.103 | 0.095 |
| Skid Steer Loaders        | 50   | 0.365 | 3.656 | 3.433 | 0.005 | 0.103 | 0.095 |
| Skid Steer Loaders        | 120  | 0.164 | 3.270 | 2.189 | 0.005 | 0.081 | 0.075 |
| Surfacing Equipment       | 50   | 0.428 | 3.772 | 3.911 | 0.006 | 0.154 | 0.142 |
| Surfacing Equipment       | 120  | 0.293 | 3.409 | 3.250 | 0.005 | 0.175 | 0.161 |
| Surfacing Equipment       | 175  | 0.239 | 2.910 | 2.701 | 0.005 | 0.130 | 0.120 |
| Surfacing Equipment       | 250  | 0.196 | 1.217 | 2.667 | 0.005 | 0.085 | 0.078 |
| Surfacing Equipment       | 500  | 0.132 | 1.160 | 1.557 | 0.005 | 0.057 | 0.053 |
| Surfacing Equipment       | 750  | 0.115 | 0.988 | 1.355 | 0.005 | 0.052 | 0.048 |
| Sweepers/Scrubbers        | 15   | 1.008 | 5.451 | 4.490 | 0.005 | 0.335 | 0.308 |
| Sweepers/Scrubbers        | 25   | 1.008 | 5.451 | 4.490 | 0.005 | 0.335 | 0.308 |
| Sweepers/Scrubbers        | 50   | 1.008 | 5.451 | 4.490 | 0.005 | 0.335 | 0.308 |
| Sweepers/Scrubbers        | 120  | 0.372 | 3.692 | 3.472 | 0.005 | 0.232 | 0.214 |
| Sweepers/Scrubbers        | 175  | 0.321 | 3.222 | 3.002 | 0.005 | 0.145 | 0.133 |
| Sweepers/Scrubbers        | 250  | 0.152 | 1.101 | 1.605 | 0.005 | 0.050 | 0.046 |
| Tractors/Loaders/Backhoes | 25   | 0.688 | 4.760 | 4.030 | 0.005 | 0.218 | 0.200 |

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.688 | 4.760 | 4.030 | 0.005 | 0.218 | 0.200 |
| Tractors/Loaders/Backhoes | 120  | 0.260 | 3.536 | 2.647 | 0.005 | 0.142 | 0.131 |
| Tractors/Loaders/Backhoes | 175  | 0.200 | 3.079 | 1.753 | 0.005 | 0.089 | 0.082 |
| Tractors/Loaders/Backhoes | 250  | 0.187 | 1.162 | 1.943 | 0.005 | 0.067 | 0.062 |
| Tractors/Loaders/Backhoes | 500  | 0.160 | 1.280 | 1.437 | 0.005 | 0.053 | 0.049 |
| Tractors/Loaders/Backhoes | 750  | 0.232 | 1.353 | 2.453 | 0.005 | 0.094 | 0.087 |
| Trenchers                 | 15   | 0.722 | 4.518 | 4.269 | 0.005 | 0.275 | 0.253 |
| Trenchers                 | 25   | 0.722 | 4.518 | 4.269 | 0.005 | 0.275 | 0.253 |
| Trenchers                 | 50   | 0.722 | 4.518 | 4.269 | 0.005 | 0.275 | 0.253 |
| Trenchers                 | 120  | 0.529 | 3.778 | 4.913 | 0.005 | 0.348 | 0.320 |
| Trenchers                 | 175  | 0.396 | 3.313 | 4.103 | 0.005 | 0.212 | 0.195 |
| Trenchers                 | 250  | 0.335 | 1.663 | 3.853 | 0.005 | 0.161 | 0.148 |
| Trenchers                 | 500  | 0.212 | 1.872 | 2.212 | 0.005 | 0.094 | 0.086 |
| Trenchers                 | 750  | 0.057 | 0.945 | 0.301 | 0.005 | 0.009 | 0.008 |
| Welders                   | 15   | 0.707 | 3.519 | 4.408 | 0.008 | 0.203 | 0.203 |
| Welders                   | 25   | 0.739 | 2.426 | 4.470 | 0.007 | 0.193 | 0.193 |
| Welders                   | 50   | 0.758 | 4.645 | 4.007 | 0.007 | 0.175 | 0.175 |
| Welders                   | 120  | 0.382 | 3.570 | 2.808 | 0.006 | 0.160 | 0.160 |
| Welders                   | 175  | 0.295 | 3.113 | 1.935 | 0.006 | 0.097 | 0.097 |
| Welders                   | 250  | 0.231 | 1.074 | 1.598 | 0.006 | 0.050 | 0.050 |
| Welders                   | 500  | 0.225 | 1.038 | 1.454 | 0.005 | 0.049 | 0.049 |
| Water Trucks              | 175  | 0.241 | 3.284 | 1.811 | 0.005 | 0.088 | 0.081 |
| Water Trucks              | 250  | 0.215 | 1.279 | 1.618 | 0.005 | 0.064 | 0.059 |
| Water Trucks              | 500  | 0.196 | 1.247 | 1.490 | 0.005 | 0.054 | 0.050 |
| Water Trucks              | 750  | 0.263 | 1.746 | 2.268 | 0.005 | 0.088 | 0.081 |
| Water Trucks              | 1000 | 0.234 | 1.214 | 3.842 | 0.005 | 0.086 | 0.079 |

2023

| g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|
| CO2     | CH4     | N2O     |
| 525.074 | 0.170   | 0.005   |
| 525.074 | 0.170   | 0.005   |
| 525.074 | 0.170   | 0.005   |
| 472.114 | 0.153   | 0.004   |
| 472.055 | 0.153   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.063   | 0.005   |
| 568.299 | 0.066   | 0.005   |
| 568.299 | 0.073   | 0.005   |
| 568.299 | 0.037   | 0.004   |
| 568.299 | 0.029   | 0.004   |
| 568.300 | 0.023   | 0.004   |
| 568.299 | 0.022   | 0.004   |
| 568.299 | 0.022   | 0.004   |
| 568.300 | 0.024   | 0.004   |
| 529.870 | 0.171   | 0.005   |
| 529.870 | 0.171   | 0.005   |
| 529.870 | 0.171   | 0.005   |
| 462.267 | 0.150   | 0.004   |
| 477.372 | 0.154   | 0.004   |
| 468.760 | 0.152   | 0.004   |
| 467.192 | 0.151   | 0.004   |
| 477.141 | 0.154   | 0.004   |
| 472.921 | 0.153   | 0.004   |

| 2023             |       | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     |
| Aerial Lifts     | 15    | 0.163   | 3.122   | 2.897   |
| Aerial Lifts     | 25    | 0.163   | 3.122   | 2.897   |
| Aerial Lifts     | 50    | 0.163   | 3.122   | 2.897   |
| Aerial Lifts     | 120   | 0.101   | 3.170   | 1.548   |
| Aerial Lifts     | 500   | 0.079   | 0.961   | 0.645   |
| Aerial Lifts     | 750   | 0.169   | 0.995   | 1.265   |
| Air Compressor s | 15    | 0.698   | 3.508   | 4.359   |
| Air Compressor s | 25    | 0.728   | 2.407   | 4.447   |
| Air Compressor s | 50    | 0.753   | 4.913   | 3.975   |
| Air Compressor s | 120   | 0.387   | 3.657   | 2.631   |
| Air Compressor s | 175   | 0.303   | 3.197   | 1.748   |
| Air Compressor s | 250   | 0.243   | 1.099   | 1.420   |
| Air Compressor s | 500   | 0.238   | 1.055   | 1.305   |
| Air Compressor s | 750   | 0.239   | 1.055   | 1.331   |
| Air Compressor s | 1000  | 0.256   | 1.102   | 3.221   |
| Bore/Drill Rigs  | 15    | 0.606   | 4.311   | 4.208   |
| Bore/Drill Rigs  | 25    | 0.606   | 4.311   | 4.208   |
| Bore/Drill Rigs  | 50    | 0.606   | 4.311   | 4.208   |
| Bore/Drill Rigs  | 120   | 0.187   | 3.258   | 2.357   |
| Bore/Drill Rigs  | 175   | 0.125   | 2.969   | 1.078   |
| Bore/Drill Rigs  | 250   | 0.110   | 1.043   | 1.047   |
| Bore/Drill Rigs  | 500   | 0.101   | 0.989   | 0.898   |
| Bore/Drill Rigs  | 750   | 0.091   | 0.982   | 0.717   |
| Bore/Drill Rigs  | 1000  | 0.053   | 0.936   | 2.262   |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.063 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.300 | 0.059 | 0.005 |
| 568.299 | 0.031 | 0.004 |
| 568.300 | 0.024 | 0.004 |
| 517.872 | 0.168 | 0.005 |
| 469.993 | 0.152 | 0.004 |
| 474.589 | 0.154 | 0.004 |
| 472.983 | 0.153 | 0.004 |
| 472.181 | 0.153 | 0.004 |
| 470.476 | 0.152 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 516.148 | 0.167 | 0.005 |
| 476.022 | 0.154 | 0.004 |
| 471.567 | 0.153 | 0.004 |
| 472.098 | 0.153 | 0.004 |
| 474.412 | 0.153 | 0.004 |
| 472.876 | 0.153 | 0.004 |
| 470.701 | 0.152 | 0.004 |
| 568.299 | 0.071 | 0.005 |
| 568.299 | 0.037 | 0.004 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.027 | 0.004 |

|                          |      |       |       |       |
|--------------------------|------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 |
| Cement and Mortar Mixers | 25   | 0.697 | 2.356 | 4.382 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.340 | 4.332 |
| Concrete/Industrial Saws | 50   | 0.606 | 4.372 | 3.815 |
| Concrete/Industrial Saws | 120  | 0.320 | 3.507 | 2.478 |
| Concrete/Industrial Saws | 175  | 0.250 | 3.072 | 1.599 |
| Cranes                   | 50   | 2.047 | 7.453 | 5.923 |
| Cranes                   | 120  | 0.552 | 3.944 | 4.875 |
| Cranes                   | 175  | 0.423 | 3.443 | 4.222 |
| Cranes                   | 250  | 0.297 | 1.553 | 3.229 |
| Cranes                   | 500  | 0.236 | 2.010 | 2.511 |
| Cranes                   | 750  | 0.195 | 1.282 | 2.073 |
| Cranes                   | 9999 | 0.211 | 1.023 | 2.399 |
| Crawler Tractors         | 50   | 1.873 | 7.027 | 5.325 |
| Crawler Tractors         | 120  | 0.558 | 3.889 | 4.762 |
| Crawler Tractors         | 175  | 0.347 | 3.235 | 3.330 |
| Crawler Tractors         | 250  | 0.276 | 1.395 | 3.187 |
| Crawler Tractors         | 500  | 0.241 | 1.852 | 2.476 |
| Crawler Tractors         | 750  | 0.184 | 1.159 | 1.867 |
| Crawler Tractors         | 1000 | 0.268 | 1.610 | 4.770 |
| Crushing/Proc. Equipment | 50   | 0.739 | 5.039 | 3.962 |
| Crushing/Proc. Equipment | 120  | 0.385 | 3.700 | 2.552 |
| Crushing/Proc. Equipment | 175  | 0.304 | 3.240 | 1.654 |
| Crushing/Proc. Equipment | 250  | 0.248 | 1.111 | 1.330 |
| Crushing/Proc. Equipment | 500  | 0.244 | 1.064 | 1.227 |
| Crushing/Proc. Equipment | 750  | 0.244 | 1.065 | 1.251 |
| Crushing/Proc. Equipment | 9999 | 0.287 | 1.107 | 3.160 |



|         |       |       |
|---------|-------|-------|
| 568.299 | 0.061 | 0.005 |
| 525.447 | 0.170 | 0.005 |
| 525.447 | 0.170 | 0.005 |
| 467.626 | 0.151 | 0.004 |
| 472.192 | 0.153 | 0.004 |
| 472.041 | 0.153 | 0.004 |
| 469.711 | 0.152 | 0.004 |
| 469.289 | 0.152 | 0.004 |
| 525.483 | 0.170 | 0.005 |
| 471.529 | 0.153 | 0.004 |
| 472.106 | 0.153 | 0.004 |
| 473.326 | 0.153 | 0.004 |
| 473.615 | 0.153 | 0.004 |
| 568.299 | 0.056 | 0.005 |
| 568.299 | 0.063 | 0.005 |
| 568.299 | 0.050 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 493.025 | 0.160 | 0.005 |
| 469.630 | 0.152 | 0.004 |
| 478.566 | 0.155 | 0.004 |
| 474.239 | 0.153 | 0.004 |
| 471.928 | 0.153 | 0.004 |
| 568.299 | 0.026 | 0.004 |
| 475.234 | 0.154 | 0.004 |
| 472.811 | 0.153 | 0.004 |
| 471.131 | 0.152 | 0.004 |
| 471.939 | 0.153 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 470.181 | 0.152 | 0.004 |
| 469.615 | 0.152 | 0.004 |

|                      |      |       |       |       |
|----------------------|------|-------|-------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 |
| Excavators           | 25   | 0.450 | 4.234 | 3.594 |
| Excavators           | 50   | 0.450 | 4.234 | 3.594 |
| Excavators           | 120  | 0.230 | 3.454 | 2.381 |
| Excavators           | 175  | 0.178 | 3.076 | 1.462 |
| Excavators           | 250  | 0.142 | 1.090 | 1.209 |
| Excavators           | 500  | 0.122 | 1.051 | 0.893 |
| Excavators           | 750  | 0.144 | 1.132 | 1.159 |
| Forklifts            | 50   | 0.766 | 5.166 | 4.152 |
| Forklifts            | 120  | 0.327 | 3.647 | 3.057 |
| Forklifts            | 175  | 0.244 | 3.180 | 2.112 |
| Forklifts            | 250  | 0.204 | 1.235 | 1.807 |
| Forklifts            | 500  | 0.220 | 1.216 | 1.788 |
| Generator Sets       | 15   | 0.618 | 3.508 | 4.345 |
| Generator Sets       | 25   | 0.701 | 2.407 | 4.447 |
| Generator Sets       | 50   | 0.514 | 3.819 | 3.685 |
| Generator Sets       | 120  | 0.279 | 3.347 | 2.477 |
| Generator Sets       | 175  | 0.211 | 2.927 | 1.635 |
| Generator Sets       | 250  | 0.164 | 1.006 | 1.328 |
| Generator Sets       | 500  | 0.158 | 0.986 | 1.228 |
| Generator Sets       | 750  | 0.160 | 0.986 | 1.253 |
| Generator Sets       | 9999 | 0.194 | 1.031 | 3.058 |
| Graders              | 50   | 1.947 | 7.191 | 5.148 |
| Graders              | 120  | 0.719 | 4.228 | 5.740 |
| Graders              | 175  | 0.390 | 3.450 | 3.548 |
| Graders              | 250  | 0.284 | 1.252 | 3.441 |
| Graders              | 500  | 0.309 | 1.385 | 2.705 |
| Graders              | 750  | 0.276 | 1.170 | 1.425 |
| Off-Highway Tractors | 120  | 0.316 | 3.687 | 3.095 |
| Off-Highway Tractors | 175  | 0.201 | 3.143 | 1.785 |
| Off-Highway Tractors | 250  | 0.171 | 1.138 | 1.491 |
| Off-Highway Tractors | 750  | 0.168 | 1.124 | 1.289 |
| Off-Highway Tractors | 1000 | 0.180 | 1.055 | 2.449 |
| Off-Highway Trucks   | 175  | 0.236 | 3.304 | 1.683 |
| Off-Highway Trucks   | 250  | 0.207 | 1.273 | 1.456 |

|         |       |       |
|---------|-------|-------|
| 474.714 | 0.154 | 0.004 |
| 473.977 | 0.153 | 0.004 |
| 472.344 | 0.153 | 0.004 |
| 529.183 | 0.171 | 0.005 |
| 529.183 | 0.171 | 0.005 |
| 529.183 | 0.171 | 0.005 |
| 472.318 | 0.153 | 0.004 |
| 469.613 | 0.152 | 0.004 |
| 475.998 | 0.154 | 0.004 |
| 526.176 | 0.170 | 0.005 |
| 526.176 | 0.170 | 0.005 |
| 526.176 | 0.170 | 0.005 |
| 470.000 | 0.152 | 0.004 |
| 471.850 | 0.153 | 0.004 |
| 473.223 | 0.153 | 0.004 |
| 472.929 | 0.153 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.187 | 1.221 | 1.324 |
| Off-Highway Trucks                 | 750  | 0.263 | 1.719 | 2.182 |
| Off-Highway Trucks                 | 1000 | 0.214 | 1.194 | 3.544 |
| Other Construction Equipment       | 15   | 0.866 | 5.074 | 4.594 |
| Other Construction Equipment       | 25   | 0.866 | 5.074 | 4.594 |
| Other Construction Equipment       | 50   | 0.866 | 5.074 | 4.594 |
| Other Construction Equipment       | 120  | 0.406 | 3.632 | 3.790 |
| Other Construction Equipment       | 175  | 0.274 | 3.142 | 2.698 |
| Other Construction Equipment       | 500  | 0.180 | 1.396 | 1.812 |
| Other General Industrial Equipment | 15   | 0.603 | 4.883 | 3.993 |
| Other General Industrial Equipment | 25   | 0.603 | 4.883 | 3.993 |
| Other General Industrial Equipment | 50   | 0.603 | 4.883 | 3.993 |
| Other General Industrial Equipment | 120  | 0.308 | 3.647 | 2.924 |
| Other General Industrial Equipment | 175  | 0.201 | 3.175 | 1.609 |
| Other General Industrial Equipment | 250  | 0.181 | 1.140 | 1.530 |
| Other General Industrial Equipment | 500  | 0.164 | 1.121 | 1.256 |

|         |       |       |
|---------|-------|-------|
| 473.464 | 0.153 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 523.709 | 0.169 | 0.005 |
| 473.588 | 0.153 | 0.004 |
| 472.219 | 0.153 | 0.004 |
| 471.482 | 0.153 | 0.004 |
| 470.297 | 0.152 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 526.896 | 0.170 | 0.005 |
| 526.896 | 0.170 | 0.005 |
| 470.185 | 0.152 | 0.004 |
| 472.760 | 0.153 | 0.004 |
| 472.372 | 0.153 | 0.004 |
| 466.004 | 0.151 | 0.004 |
| 520.659 | 0.168 | 0.005 |
| 520.659 | 0.168 | 0.005 |
| 473.448 | 0.153 | 0.004 |
| 470.665 | 0.152 | 0.004 |
| 472.169 | 0.153 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.056 | 0.005 |
| 568.299 | 0.063 | 0.005 |
| 568.300 | 0.035 | 0.005 |
| 568.299 | 0.021 | 0.004 |
| 568.299 | 0.019 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.111 | 1.105 | 0.626 |
| Other General Industrial Equipment | 1000 | 0.193 | 1.049 | 3.956 |
| Other Material Handling Equipment  | 50   | 1.011 | 5.757 | 4.684 |
| Other Material Handling Equipment  | 120  | 0.225 | 3.515 | 2.298 |
| Other Material Handling Equipment  | 175  | 0.217 | 3.171 | 1.769 |
| Other Material Handling Equipment  | 250  | 0.207 | 1.209 | 2.004 |
| Other Material Handling Equipment  | 500  | 0.218 | 1.344 | 1.870 |
| Other Material Handling Equipment  | 9999 | 0.054 | 0.939 | 2.268 |
| Pavers                             | 25   | 1.007 | 5.007 | 4.285 |
| Pavers                             | 50   | 1.007 | 5.007 | 4.285 |
| Pavers                             | 120  | 0.349 | 3.507 | 3.427 |
| Pavers                             | 175  | 0.199 | 2.994 | 1.955 |
| Pavers                             | 250  | 0.130 | 1.010 | 1.611 |
| Pavers                             | 500  | 0.152 | 0.987 | 1.771 |
| Paving Equipment                   | 25   | 0.541 | 4.241 | 3.774 |
| Paving Equipment                   | 50   | 0.541 | 4.241 | 3.774 |
| Paving Equipment                   | 120  | 0.278 | 3.503 | 2.837 |
| Paving Equipment                   | 175  | 0.204 | 3.051 | 1.913 |
| Paving Equipment                   | 250  | 0.175 | 1.165 | 1.885 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 |
| Pressure Washers                   | 15   | 0.618 | 3.508 | 4.345 |
| Pressure Washers                   | 25   | 0.701 | 2.407 | 4.447 |
| Pressure Washers                   | 50   | 0.363 | 3.260 | 3.541 |
| Pressure Washers                   | 120  | 0.222 | 3.196 | 2.377 |
| Pressure Washers                   | 175  | 0.205 | 2.907 | 1.665 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.008 | 0.004 |
| 568.299 | 0.063 | 0.005 |
| 568.299 | 0.066 | 0.005 |
| 568.299 | 0.055 | 0.005 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.021 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.300 | 0.016 | 0.004 |
| 568.300 | 0.016 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 525.691 | 0.170 | 0.005 |
| 525.691 | 0.170 | 0.005 |
| 525.691 | 0.170 | 0.005 |
| 473.929 | 0.153 | 0.004 |
| 471.948 | 0.153 | 0.004 |
| 473.514 | 0.153 | 0.004 |
| 478.982 | 0.155 | 0.004 |
|         |       |       |
| 525.015 | 0.170 | 0.005 |
|         |       |       |
| 473.089 | 0.153 | 0.004 |
|         |       |       |
| 471.677 | 0.153 | 0.004 |
|         |       |       |
| 472.541 | 0.153 | 0.004 |
|         |       |       |
| 466.560 | 0.151 | 0.004 |
|         |       |       |
| 473.912 | 0.153 | 0.004 |
|         |       |       |
| 474.617 | 0.154 | 0.004 |
|         |       |       |
| 479.311 | 0.155 | 0.004 |
|         |       |       |
| 473.035 | 0.153 | 0.004 |
|         |       |       |
| 568.299 | 0.042 | 0.004 |
|         |       |       |
| 524.791 | 0.170 | 0.005 |
|         |       |       |
| 524.791 | 0.170 | 0.005 |
|         |       |       |
| 466.494 | 0.151 | 0.004 |
|         |       |       |
| 470.927 | 0.152 | 0.004 |

|                         |      |       |       |       |
|-------------------------|------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 |
| Pumps                   | 15   | 0.698 | 3.508 | 4.359 |
| Pumps                   | 25   | 0.728 | 2.407 | 4.447 |
| Pumps                   | 50   | 0.565 | 4.007 | 3.734 |
| Pumps                   | 120  | 0.299 | 3.398 | 2.511 |
| Pumps                   | 175  | 0.227 | 2.971 | 1.662 |
| Pumps                   | 250  | 0.177 | 1.021 | 1.351 |
| Pumps                   | 500  | 0.171 | 0.998 | 1.246 |
| Pumps                   | 750  | 0.173 | 0.998 | 1.271 |
| Pumps                   | 9999 | 0.207 | 1.043 | 3.090 |
| Rollers                 | 15   | 0.661 | 4.252 | 3.921 |
| Rollers                 | 25   | 0.661 | 4.252 | 3.921 |
| Rollers                 | 50   | 0.661 | 4.252 | 3.921 |
| Rollers                 | 120  | 0.287 | 3.455 | 3.003 |
| Rollers                 | 175  | 0.150 | 2.909 | 1.483 |
| Rollers                 | 250  | 0.188 | 1.234 | 2.173 |
| Rollers                 | 500  | 0.211 | 1.956 | 2.290 |
| Rough Terrain Forklifts | 50   | 0.690 | 4.125 | 3.853 |
| Rough Terrain Forklifts | 120  | 0.150 | 3.242 | 1.984 |
| Rough Terrain Forklifts | 175  | 0.111 | 2.843 | 1.218 |
| Rough Terrain Forklifts | 250  | 0.116 | 0.990 | 1.474 |
| Rough Terrain Forklifts | 500  | 0.069 | 0.938 | 0.558 |
| Rubber Tired Dozers     | 175  | 0.588 | 3.766 | 5.656 |
| Rubber Tired Dozers     | 250  | 0.393 | 1.783 | 4.090 |
| Rubber Tired Dozers     | 500  | 0.447 | 3.686 | 4.408 |
| Rubber Tired Dozers     | 750  | 0.423 | 2.591 | 5.334 |
| Rubber Tired Dozers     | 1000 | 0.453 | 1.874 | 4.709 |
| Rubber Tired Loaders    | 25   | 1.049 | 5.972 | 4.521 |
| Rubber Tired Loaders    | 50   | 1.049 | 5.972 | 4.521 |
| Rubber Tired Loaders    | 120  | 0.412 | 3.827 | 3.512 |
| Rubber Tired Loaders    | 175  | 0.269 | 3.292 | 2.196 |

|         |       |       |
|---------|-------|-------|
| 469.904 | 0.152 | 0.004 |
| 468.129 | 0.151 | 0.004 |
| 463.819 | 0.150 | 0.004 |
| 472.858 | 0.153 | 0.004 |
| 483.448 | 0.156 | 0.004 |
| 478.741 | 0.155 | 0.004 |
| 469.269 | 0.152 | 0.004 |
| 473.230 | 0.153 | 0.004 |
| 471.279 | 0.152 | 0.004 |
| 568.300 | 0.059 | 0.005 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 686.695 | 0.022 | 0.004 |
| 527.273 | 0.171 | 0.005 |
| 527.273 | 0.171 | 0.005 |
| 472.432 | 0.153 | 0.004 |
| 535.836 | 0.173 | 0.005 |
| 473.636 | 0.153 | 0.004 |
| 469.126 | 0.152 | 0.004 |
| 476.951 | 0.154 | 0.004 |
| 470.525 | 0.152 | 0.004 |
| 470.400 | 0.152 | 0.004 |
| 525.328 | 0.170 | 0.005 |
| 525.328 | 0.170 | 0.005 |
| 525.328 | 0.170 | 0.005 |
| 474.116 | 0.153 | 0.004 |
| 473.122 | 0.153 | 0.004 |
| 470.126 | 0.152 | 0.004 |
| 514.461 | 0.166 | 0.005 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.171 | 2.060 |
| Rubber Tired Loaders      | 500  | 0.217 | 1.384 | 1.866 |
| Rubber Tired Loaders      | 750  | 0.227 | 1.323 | 1.927 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.174 | 3.528 |
| Scrapers                  | 120  | 0.630 | 4.144 | 6.026 |
| Scrapers                  | 175  | 0.361 | 3.395 | 3.479 |
| Scrapers                  | 250  | 0.317 | 1.678 | 3.284 |
| Scrapers                  | 500  | 0.253 | 1.975 | 2.666 |
| Scrapers                  | 750  | 0.222 | 1.513 | 2.386 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 |
| Signal Boards             | 50   | 0.603 | 4.282 | 3.767 |
| Signal Boards             | 120  | 0.315 | 3.478 | 2.472 |
| Signal Boards             | 175  | 0.244 | 3.045 | 1.602 |
| Signal Boards             | 250  | 0.235 | 1.263 | 1.562 |
| Skid Steer Loaders        | 25   | 0.353 | 3.654 | 3.371 |
| Skid Steer Loaders        | 50   | 0.353 | 3.654 | 3.371 |
| Skid Steer Loaders        | 120  | 0.153 | 3.266 | 2.039 |
| Surfacing Equipment       | 50   | 0.437 | 3.832 | 3.924 |
| Surfacing Equipment       | 120  | 0.270 | 3.396 | 3.058 |
| Surfacing Equipment       | 175  | 0.224 | 2.914 | 2.455 |
| Surfacing Equipment       | 250  | 0.192 | 1.219 | 2.502 |
| Surfacing Equipment       | 500  | 0.132 | 1.163 | 1.476 |
| Surfacing Equipment       | 750  | 0.100 | 0.985 | 1.081 |
| Sweepers/Scrubbers        | 15   | 0.759 | 4.971 | 4.127 |
| Sweepers/Scrubbers        | 25   | 0.759 | 4.971 | 4.127 |
| Sweepers/Scrubbers        | 50   | 0.759 | 4.971 | 4.127 |
| Sweepers/Scrubbers        | 120  | 0.351 | 3.695 | 3.285 |
| Sweepers/Scrubbers        | 175  | 0.292 | 3.223 | 2.609 |
| Sweepers/Scrubbers        | 250  | 0.159 | 1.114 | 1.610 |
| Tractors/Loaders/Backhoes | 25   | 0.621 | 4.629 | 3.857 |

|         |       |       |
|---------|-------|-------|
| 514.461 | 0.166 | 0.005 |
| 475.898 | 0.154 | 0.004 |
| 467.800 | 0.151 | 0.004 |
| 470.124 | 0.152 | 0.004 |
| 469.256 | 0.152 | 0.004 |
| 466.633 | 0.151 | 0.004 |
| 527.026 | 0.171 | 0.005 |
| 527.026 | 0.171 | 0.005 |
| 527.026 | 0.171 | 0.005 |
| 475.326 | 0.154 | 0.004 |
| 467.734 | 0.151 | 0.004 |
| 473.851 | 0.153 | 0.004 |
| 470.585 | 0.152 | 0.004 |
| 474.289 | 0.153 | 0.004 |
| 568.300 | 0.063 | 0.005 |
| 568.299 | 0.066 | 0.005 |
| 568.299 | 0.068 | 0.005 |
| 568.299 | 0.034 | 0.004 |
| 568.300 | 0.026 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.020 | 0.004 |
| 470.181 | 0.152 | 0.004 |
| 469.615 | 0.152 | 0.004 |
| 474.714 | 0.154 | 0.004 |
| 473.977 | 0.153 | 0.004 |
| 472.344 | 0.153 | 0.004 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.621 | 4.629 | 3.857 |
| Tractors/Loaders/Backhoes | 120  | 0.239 | 3.525 | 2.426 |
| Tractors/Loaders/Backhoes | 175  | 0.184 | 3.078 | 1.521 |
| Tractors/Loaders/Backhoes | 250  | 0.169 | 1.148 | 1.588 |
| Tractors/Loaders/Backhoes | 500  | 0.152 | 1.279 | 1.247 |
| Tractors/Loaders/Backhoes | 750  | 0.234 | 1.361 | 2.419 |
| Trenchers                 | 15   | 0.642 | 4.302 | 3.959 |
| Trenchers                 | 25   | 0.642 | 4.302 | 3.959 |
| Trenchers                 | 50   | 0.642 | 4.302 | 3.959 |
| Trenchers                 | 120  | 0.504 | 3.768 | 4.700 |
| Trenchers                 | 175  | 0.359 | 3.291 | 3.657 |
| Trenchers                 | 250  | 0.328 | 1.639 | 3.737 |
| Trenchers                 | 500  | 0.199 | 1.723 | 2.005 |
| Trenchers                 | 750  | 0.060 | 0.951 | 0.303 |
| Welders                   | 15   | 0.698 | 3.508 | 4.359 |
| Welders                   | 25   | 0.728 | 2.407 | 4.447 |
| Welders                   | 50   | 0.697 | 4.596 | 3.891 |
| Welders                   | 120  | 0.357 | 3.564 | 2.599 |
| Welders                   | 175  | 0.277 | 3.115 | 1.726 |
| Welders                   | 250  | 0.000 | 1.071 | 1.404 |
| Welders                   | 500  | 0.215 | 1.034 | 1.289 |
| Water Trucks              | 175  | 0.236 | 3.304 | 1.683 |
| Water Trucks              | 250  | 0.207 | 1.273 | 1.456 |
| Water Trucks              | 500  | 0.187 | 1.221 | 1.324 |
| Water Trucks              | 750  | 0.263 | 1.719 | 2.182 |
| Water Trucks              | 1000 | 0.214 | 1.194 | 3.544 |

2024

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|
| SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.005   | 0.023   | 0.021   | 525.074 | 0.170   | 0.005   |
| 0.005   | 0.023   | 0.021   | 525.074 | 0.170   | 0.005   |
| 0.005   | 0.023   | 0.021   | 525.074 | 0.170   | 0.005   |
| 0.005   | 0.027   | 0.025   | 472.114 | 0.153   | 0.004   |
| 0.005   | 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.005   | 0.038   | 0.038   | 568.299 | 0.015   | 0.004   |
| 0.008   | 0.194   | 0.194   | 568.299 | 0.063   | 0.005   |
| 0.007   | 0.186   | 0.186   | 568.299 | 0.065   | 0.005   |
| 0.007   | 0.156   | 0.156   | 568.299 | 0.067   | 0.005   |
| 0.006   | 0.143   | 0.143   | 568.299 | 0.034   | 0.004   |
| 0.006   | 0.089   | 0.089   | 568.299 | 0.027   | 0.004   |
| 0.006   | 0.045   | 0.045   | 568.299 | 0.021   | 0.004   |
| 0.005   | 0.044   | 0.044   | 568.299 | 0.021   | 0.004   |
| 0.005   | 0.044   | 0.044   | 568.299 | 0.021   | 0.004   |
| 0.005   | 0.068   | 0.068   | 568.299 | 0.023   | 0.004   |
| 0.006   | 0.226   | 0.208   | 531.986 | 0.172   | 0.005   |
| 0.006   | 0.226   | 0.208   | 531.986 | 0.172   | 0.005   |
| 0.006   | 0.226   | 0.208   | 531.986 | 0.172   | 0.005   |
| 0.005   | 0.102   | 0.093   | 461.214 | 0.149   | 0.004   |
| 0.005   | 0.048   | 0.044   | 479.647 | 0.155   | 0.004   |
| 0.005   | 0.034   | 0.031   | 469.706 | 0.152   | 0.004   |
| 0.005   | 0.030   | 0.028   | 464.041 | 0.150   | 0.004   |
| 0.005   | 0.026   | 0.024   | 479.220 | 0.155   | 0.004   |
| 0.005   | 0.018   | 0.016   | 472.020 | 0.153   | 0.004   |

| 2024             |       |
|------------------|-------|
| Equipment        | MaxHP |
| Aerial Lifts     | 15    |
| Aerial Lifts     | 25    |
| Aerial Lifts     | 50    |
| Aerial Lifts     | 120   |
| Aerial Lifts     | 500   |
| Aerial Lifts     | 750   |
| Air Compressor s | 15    |
| Air Compressor s | 25    |
| Air Compressor s | 50    |
| Air Compressor s | 120   |
| Air Compressor s | 175   |
| Air Compressor s | 250   |
| Air Compressor s | 500   |
| Air Compressor s | 750   |
| Air Compressor s | 1000  |
| Bore/Drill Rigs  | 15    |
| Bore/Drill Rigs  | 25    |
| Bore/Drill Rigs  | 50    |
| Bore/Drill Rigs  | 120   |
| Bore/Drill Rigs  | 175   |
| Bore/Drill Rigs  | 250   |
| Bore/Drill Rigs  | 500   |
| Bore/Drill Rigs  | 750   |
| Bore/Drill Rigs  | 1000  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.172 | 0.172 | 568.299 | 0.062 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.134 | 0.134 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.123 | 0.123 | 568.300 | 0.028 | 0.004 |
| 0.006 | 0.077 | 0.077 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.608 | 0.559 | 517.872 | 0.168 | 0.005 |
| 0.005 | 0.323 | 0.297 | 469.889 | 0.152 | 0.004 |
| 0.005 | 0.224 | 0.206 | 474.595 | 0.154 | 0.004 |
| 0.005 | 0.135 | 0.124 | 472.974 | 0.153 | 0.004 |
| 0.005 | 0.102 | 0.093 | 472.294 | 0.153 | 0.004 |
| 0.005 | 0.084 | 0.077 | 470.251 | 0.152 | 0.004 |
| 0.005 | 0.063 | 0.058 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.526 | 0.484 | 516.159 | 0.167 | 0.005 |
| 0.005 | 0.373 | 0.343 | 476.158 | 0.154 | 0.004 |
| 0.005 | 0.185 | 0.170 | 471.781 | 0.153 | 0.004 |
| 0.005 | 0.124 | 0.114 | 471.624 | 0.153 | 0.004 |
| 0.005 | 0.102 | 0.094 | 474.613 | 0.154 | 0.004 |
| 0.005 | 0.069 | 0.064 | 472.530 | 0.153 | 0.004 |
| 0.005 | 0.118 | 0.109 | 473.666 | 0.153 | 0.004 |
| 0.007 | 0.146 | 0.146 | 568.299 | 0.066 | 0.005 |
| 0.006 | 0.132 | 0.132 | 568.299 | 0.034 | 0.004 |
| 0.006 | 0.083 | 0.083 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.042 | 0.042 | 568.300 | 0.022 | 0.004 |
| 0.005 | 0.066 | 0.066 | 568.299 | 0.025 | 0.004 |

|                          |      |
|--------------------------|------|
| Cement and Mortar Mixers | 15   |
| Cement and Mortar Mixers | 25   |
| Concrete/Industrial Saws | 25   |
| Concrete/Industrial Saws | 50   |
| Concrete/Industrial Saws | 120  |
| Concrete/Industrial Saws | 175  |
| Cranes                   | 50   |
| Cranes                   | 120  |
| Cranes                   | 175  |
| Cranes                   | 250  |
| Cranes                   | 500  |
| Cranes                   | 750  |
| Cranes                   | 9999 |
| Crawler Tractors         | 50   |
| Crawler Tractors         | 120  |
| Crawler Tractors         | 175  |
| Crawler Tractors         | 250  |
| Crawler Tractors         | 500  |
| Crawler Tractors         | 750  |
| Crawler Tractors         | 1000 |
| Crushing/Proc. Equipment | 50   |
| Crushing/Proc. Equipment | 120  |
| Crushing/Proc. Equipment | 175  |
| Crushing/Proc. Equipment | 250  |
| Crushing/Proc. Equipment | 500  |
| Crushing/Proc. Equipment | 750  |
| Crushing/Proc. Equipment | 9999 |



|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.005 | 0.139 | 0.128 | 525.429 | 0.170 | 0.005 |
| 0.005 | 0.139 | 0.128 | 525.429 | 0.170 | 0.005 |
| 0.005 | 0.116 | 0.107 | 467.157 | 0.151 | 0.004 |
| 0.005 | 0.072 | 0.066 | 472.277 | 0.153 | 0.004 |
| 0.005 | 0.039 | 0.036 | 472.213 | 0.153 | 0.004 |
| 0.005 | 0.030 | 0.028 | 469.889 | 0.152 | 0.004 |
| 0.005 | 0.043 | 0.040 | 468.683 | 0.152 | 0.004 |
| 0.005 | 0.232 | 0.213 | 525.483 | 0.170 | 0.005 |
| 0.005 | 0.189 | 0.174 | 471.529 | 0.153 | 0.004 |
| 0.005 | 0.111 | 0.102 | 472.106 | 0.153 | 0.004 |
| 0.005 | 0.069 | 0.063 | 473.326 | 0.153 | 0.004 |
| 0.005 | 0.069 | 0.063 | 473.615 | 0.153 | 0.004 |
| 0.008 | 0.186 | 0.186 | 568.299 | 0.055 | 0.005 |
| 0.007 | 0.182 | 0.182 | 568.299 | 0.063 | 0.005 |
| 0.007 | 0.124 | 0.124 | 568.299 | 0.046 | 0.005 |
| 0.006 | 0.117 | 0.117 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.071 | 0.071 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.038 | 0.038 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.037 | 0.037 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.037 | 0.037 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.058 | 0.058 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.549 | 0.505 | 494.020 | 0.160 | 0.005 |
| 0.005 | 0.436 | 0.401 | 469.286 | 0.152 | 0.004 |
| 0.005 | 0.195 | 0.180 | 478.463 | 0.155 | 0.004 |
| 0.005 | 0.112 | 0.103 | 473.926 | 0.153 | 0.004 |
| 0.005 | 0.105 | 0.097 | 471.031 | 0.152 | 0.004 |
| 0.005 | 0.051 | 0.051 | 568.300 | 0.024 | 0.004 |
| 0.005 | 0.187 | 0.172 | 476.087 | 0.154 | 0.004 |
| 0.005 | 0.085 | 0.079 | 472.996 | 0.153 | 0.004 |
| 0.005 | 0.053 | 0.049 | 470.845 | 0.152 | 0.004 |
| 0.005 | 0.051 | 0.047 | 471.932 | 0.153 | 0.004 |
| 0.005 | 0.067 | 0.062 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.081 | 0.074 | 470.292 | 0.152 | 0.004 |
| 0.005 | 0.059 | 0.054 | 469.446 | 0.152 | 0.004 |

|                      |      |
|----------------------|------|
| Dumpers/Trailers     | 25   |
| Excavators           | 25   |
| Excavators           | 50   |
| Excavators           | 120  |
| Excavators           | 175  |
| Excavators           | 250  |
| Excavators           | 500  |
| Excavators           | 750  |
| Forklifts            | 50   |
| Forklifts            | 120  |
| Forklifts            | 175  |
| Forklifts            | 250  |
| Forklifts            | 500  |
| Generator Sets       | 15   |
| Generator Sets       | 25   |
| Generator Sets       | 50   |
| Generator Sets       | 120  |
| Generator Sets       | 175  |
| Generator Sets       | 250  |
| Generator Sets       | 500  |
| Generator Sets       | 750  |
| Generator Sets       | 9999 |
| Graders              | 50   |
| Graders              | 120  |
| Graders              | 175  |
| Graders              | 250  |
| Graders              | 500  |
| Graders              | 750  |
| Off-Highway Tractors | 120  |
| Off-Highway Tractors | 175  |
| Off-Highway Tractors | 250  |
| Off-Highway Tractors | 750  |
| Off-Highway Tractors | 1000 |
| Off-Highway Trucks   | 175  |
| Off-Highway Trucks   | 250  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.048 | 0.044 | 475.049 | 0.154 | 0.004 |
| 0.005 | 0.084 | 0.078 | 473.767 | 0.153 | 0.004 |
| 0.005 | 0.074 | 0.068 | 472.857 | 0.153 | 0.004 |
| 0.006 | 0.322 | 0.296 | 529.339 | 0.171 | 0.005 |
| 0.006 | 0.322 | 0.296 | 529.339 | 0.171 | 0.005 |
| 0.006 | 0.322 | 0.296 | 529.339 | 0.171 | 0.005 |
| 0.005 | 0.259 | 0.238 | 471.990 | 0.153 | 0.004 |
| 0.005 | 0.141 | 0.129 | 469.558 | 0.152 | 0.004 |
| 0.005 | 0.069 | 0.063 | 476.185 | 0.154 | 0.004 |
| 0.005 | 0.194 | 0.179 | 526.176 | 0.170 | 0.005 |
| 0.005 | 0.194 | 0.179 | 526.176 | 0.170 | 0.005 |
| 0.005 | 0.194 | 0.179 | 526.176 | 0.170 | 0.005 |
| 0.005 | 0.169 | 0.155 | 470.000 | 0.152 | 0.004 |
| 0.005 | 0.080 | 0.074 | 471.850 | 0.153 | 0.004 |
| 0.005 | 0.051 | 0.047 | 473.223 | 0.153 | 0.004 |
| 0.005 | 0.043 | 0.040 | 472.929 | 0.153 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Off-Highway Trucks                 | 500  |
| Off-Highway Trucks                 | 750  |
| Off-Highway Trucks                 | 1000 |
| Other Construction Equipment       | 15   |
| Other Construction Equipment       | 25   |
| Other Construction Equipment       | 50   |
| Other Construction Equipment       | 120  |
| Other Construction Equipment       | 175  |
| Other Construction Equipment       | 500  |
| Other General Industrial Equipment | 15   |
| Other General Industrial Equipment | 25   |
| Other General Industrial Equipment | 50   |
| Other General Industrial Equipment | 120  |
| Other General Industrial Equipment | 175  |
| Other General Industrial Equipment | 250  |
| Other General Industrial Equipment | 500  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 0.005 | 0.080 | 0.073 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.340 | 0.313 | 523.709 | 0.169 | 0.005 |
| 0.005 | 0.104 | 0.095 | 473.588 | 0.153 | 0.004 |
| 0.005 | 0.096 | 0.088 | 472.219 | 0.153 | 0.004 |
| 0.005 | 0.069 | 0.064 | 471.482 | 0.153 | 0.004 |
| 0.005 | 0.078 | 0.072 | 470.297 | 0.152 | 0.004 |
| 0.005 | 0.018 | 0.017 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.299 | 0.275 | 526.860 | 0.170 | 0.005 |
| 0.005 | 0.299 | 0.275 | 526.860 | 0.170 | 0.005 |
| 0.005 | 0.226 | 0.208 | 470.084 | 0.152 | 0.004 |
| 0.005 | 0.092 | 0.085 | 472.718 | 0.153 | 0.004 |
| 0.005 | 0.047 | 0.043 | 472.605 | 0.153 | 0.004 |
| 0.005 | 0.062 | 0.057 | 466.004 | 0.151 | 0.004 |
| 0.005 | 0.173 | 0.159 | 521.114 | 0.169 | 0.005 |
| 0.005 | 0.173 | 0.159 | 521.114 | 0.169 | 0.005 |
| 0.005 | 0.153 | 0.140 | 473.427 | 0.153 | 0.004 |
| 0.005 | 0.093 | 0.086 | 470.663 | 0.152 | 0.004 |
| 0.005 | 0.070 | 0.065 | 472.169 | 0.153 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.008 | 0.186 | 0.186 | 568.299 | 0.055 | 0.005 |
| 0.007 | 0.182 | 0.182 | 568.299 | 0.063 | 0.005 |
| 0.007 | 0.101 | 0.101 | 568.299 | 0.032 | 0.005 |
| 0.006 | 0.097 | 0.097 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.072 | 0.072 | 568.299 | 0.018 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Other General Industrial Equipment | 750  |
| Other General Industrial Equipment | 1000 |
| Other Material Handling Equipment  | 50   |
| Other Material Handling Equipment  | 120  |
| Other Material Handling Equipment  | 175  |
| Other Material Handling Equipment  | 250  |
| Other Material Handling Equipment  | 500  |
| Other Material Handling Equipment  | 9999 |
| Pavers                             | 25   |
| Pavers                             | 50   |
| Pavers                             | 120  |
| Pavers                             | 175  |
| Pavers                             | 250  |
| Pavers                             | 500  |
| Paving Equipment                   | 25   |
| Paving Equipment                   | 50   |
| Paving Equipment                   | 120  |
| Paving Equipment                   | 175  |
| Paving Equipment                   | 250  |
| Plate Compactors                   | 15   |
| Pressure Washers                   | 15   |
| Pressure Washers                   | 25   |
| Pressure Washers                   | 50   |
| Pressure Washers                   | 120  |
| Pressure Washers                   | 175  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.008 | 0.194 | 0.194 | 568.299 | 0.063 | 0.005 |
| 0.007 | 0.186 | 0.186 | 568.299 | 0.065 | 0.005 |
| 0.007 | 0.131 | 0.131 | 568.299 | 0.051 | 0.005 |
| 0.006 | 0.123 | 0.123 | 568.299 | 0.026 | 0.004 |
| 0.006 | 0.075 | 0.075 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.040 | 0.040 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.038 | 0.038 | 568.300 | 0.015 | 0.004 |
| 0.005 | 0.039 | 0.039 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.059 | 0.059 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.212 | 0.195 | 525.862 | 0.170 | 0.005 |
| 0.005 | 0.212 | 0.195 | 525.862 | 0.170 | 0.005 |
| 0.005 | 0.212 | 0.195 | 525.862 | 0.170 | 0.005 |
| 0.005 | 0.165 | 0.152 | 473.936 | 0.153 | 0.004 |
| 0.005 | 0.068 | 0.062 | 471.935 | 0.153 | 0.004 |
| 0.005 | 0.076 | 0.070 | 473.516 | 0.153 | 0.004 |
| 0.005 | 0.093 | 0.085 | 478.303 | 0.155 | 0.004 |
| 0.005 | 0.204 | 0.187 | 524.802 | 0.170 | 0.005 |
| 0.005 | 0.064 | 0.059 | 473.158 | 0.153 | 0.004 |
| 0.005 | 0.044 | 0.040 | 471.622 | 0.153 | 0.004 |
| 0.005 | 0.034 | 0.032 | 472.778 | 0.153 | 0.004 |
| 0.005 | 0.009 | 0.008 | 466.554 | 0.151 | 0.004 |
| 0.005 | 0.316 | 0.291 | 473.901 | 0.153 | 0.004 |
| 0.005 | 0.184 | 0.169 | 474.597 | 0.154 | 0.004 |
| 0.005 | 0.202 | 0.185 | 479.468 | 0.155 | 0.004 |
| 0.005 | 0.196 | 0.180 | 473.023 | 0.153 | 0.004 |
| 0.005 | 0.131 | 0.131 | 568.299 | 0.040 | 0.004 |
| 0.005 | 0.304 | 0.279 | 524.304 | 0.170 | 0.005 |
| 0.005 | 0.304 | 0.279 | 524.304 | 0.170 | 0.005 |
| 0.005 | 0.239 | 0.219 | 466.558 | 0.151 | 0.004 |
| 0.005 | 0.118 | 0.108 | 470.660 | 0.152 | 0.004 |

|                         |      |
|-------------------------|------|
| Pressure Washers        | 250  |
| Pumps                   | 15   |
| Pumps                   | 25   |
| Pumps                   | 50   |
| Pumps                   | 120  |
| Pumps                   | 175  |
| Pumps                   | 250  |
| Pumps                   | 500  |
| Pumps                   | 750  |
| Pumps                   | 9999 |
| Rollers                 | 15   |
| Rollers                 | 25   |
| Rollers                 | 50   |
| Rollers                 | 120  |
| Rollers                 | 175  |
| Rollers                 | 250  |
| Rollers                 | 500  |
| Rough Terrain Forklifts | 50   |
| Rough Terrain Forklifts | 120  |
| Rough Terrain Forklifts | 175  |
| Rough Terrain Forklifts | 250  |
| Rough Terrain Forklifts | 500  |
| Rubber Tired Dozers     | 175  |
| Rubber Tired Dozers     | 250  |
| Rubber Tired Dozers     | 500  |
| Rubber Tired Dozers     | 750  |
| Rubber Tired Dozers     | 1000 |
| Rubber Tired Loaders    | 25   |
| Rubber Tired Loaders    | 50   |
| Rubber Tired Loaders    | 120  |
| Rubber Tired Loaders    | 175  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.069 | 0.064 | 469.824 | 0.152 | 0.004 |
| 0.005 | 0.069 | 0.064 | 468.466 | 0.152 | 0.004 |
| 0.005 | 0.075 | 0.069 | 464.555 | 0.150 | 0.004 |
| 0.005 | 0.071 | 0.065 | 472.303 | 0.153 | 0.004 |
| 0.005 | 0.458 | 0.421 | 483.030 | 0.156 | 0.004 |
| 0.005 | 0.184 | 0.169 | 478.681 | 0.155 | 0.004 |
| 0.005 | 0.144 | 0.133 | 469.560 | 0.152 | 0.004 |
| 0.005 | 0.105 | 0.096 | 473.177 | 0.153 | 0.004 |
| 0.005 | 0.087 | 0.080 | 471.295 | 0.152 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.132 | 0.132 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.122 | 0.122 | 568.299 | 0.028 | 0.004 |
| 0.006 | 0.075 | 0.075 | 568.299 | 0.022 | 0.004 |
| 0.007 | 0.048 | 0.048 | 686.695 | 0.021 | 0.004 |
| 0.005 | 0.093 | 0.086 | 527.423 | 0.171 | 0.005 |
| 0.005 | 0.093 | 0.086 | 527.423 | 0.171 | 0.005 |
| 0.005 | 0.069 | 0.063 | 472.656 | 0.153 | 0.004 |
| 0.006 | 0.156 | 0.143 | 535.930 | 0.173 | 0.005 |
| 0.005 | 0.157 | 0.144 | 474.470 | 0.154 | 0.004 |
| 0.005 | 0.119 | 0.110 | 470.014 | 0.152 | 0.004 |
| 0.005 | 0.082 | 0.075 | 476.961 | 0.154 | 0.004 |
| 0.005 | 0.056 | 0.051 | 470.375 | 0.152 | 0.004 |
| 0.005 | 0.040 | 0.037 | 472.447 | 0.153 | 0.004 |
| 0.005 | 0.249 | 0.229 | 525.328 | 0.170 | 0.005 |
| 0.005 | 0.249 | 0.229 | 525.328 | 0.170 | 0.005 |
| 0.005 | 0.249 | 0.229 | 525.328 | 0.170 | 0.005 |
| 0.005 | 0.210 | 0.193 | 474.116 | 0.153 | 0.004 |
| 0.005 | 0.126 | 0.116 | 473.122 | 0.153 | 0.004 |
| 0.005 | 0.050 | 0.046 | 470.126 | 0.152 | 0.004 |
| 0.005 | 0.185 | 0.170 | 513.796 | 0.166 | 0.005 |

|                           |      |
|---------------------------|------|
| Rubber Tired Loaders      | 250  |
| Rubber Tired Loaders      | 500  |
| Rubber Tired Loaders      | 750  |
| Rubber Tired Loaders      | 1000 |
| Scrapers                  | 120  |
| Scrapers                  | 175  |
| Scrapers                  | 250  |
| Scrapers                  | 500  |
| Scrapers                  | 750  |
| Signal Boards             | 15   |
| Signal Boards             | 50   |
| Signal Boards             | 120  |
| Signal Boards             | 175  |
| Signal Boards             | 250  |
| Skid Steer Loaders        | 25   |
| Skid Steer Loaders        | 50   |
| Skid Steer Loaders        | 120  |
| Surfacing Equipment       | 50   |
| Surfacing Equipment       | 120  |
| Surfacing Equipment       | 175  |
| Surfacing Equipment       | 250  |
| Surfacing Equipment       | 500  |
| Surfacing Equipment       | 750  |
| Sweepers/S crubbers       | 15   |
| Sweepers/S crubbers       | 25   |
| Sweepers/S crubbers       | 50   |
| Sweepers/S crubbers       | 120  |
| Sweepers/S crubbers       | 175  |
| Sweepers/S crubbers       | 250  |
| Tractors/Loaders/Backhoes | 25   |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.185 | 0.170 | 513.796 | 0.166 | 0.005 |
| 0.005 | 0.120 | 0.110 | 476.431 | 0.154 | 0.004 |
| 0.005 | 0.077 | 0.070 | 468.821 | 0.152 | 0.004 |
| 0.005 | 0.058 | 0.053 | 469.752 | 0.152 | 0.004 |
| 0.005 | 0.047 | 0.043 | 469.465 | 0.152 | 0.004 |
| 0.005 | 0.095 | 0.087 | 466.676 | 0.151 | 0.004 |
| 0.005 | 0.220 | 0.202 | 527.095 | 0.171 | 0.005 |
| 0.005 | 0.220 | 0.202 | 527.095 | 0.171 | 0.005 |
| 0.005 | 0.220 | 0.202 | 527.095 | 0.171 | 0.005 |
| 0.005 | 0.326 | 0.300 | 475.690 | 0.154 | 0.004 |
| 0.005 | 0.186 | 0.171 | 467.733 | 0.151 | 0.004 |
| 0.005 | 0.155 | 0.143 | 473.849 | 0.153 | 0.004 |
| 0.005 | 0.085 | 0.078 | 471.613 | 0.153 | 0.004 |
| 0.005 | 0.009 | 0.008 | 474.471 | 0.154 | 0.004 |
| 0.008 | 0.194 | 0.194 | 568.300 | 0.063 | 0.005 |
| 0.007 | 0.186 | 0.186 | 568.299 | 0.065 | 0.005 |
| 0.007 | 0.151 | 0.151 | 568.299 | 0.062 | 0.005 |
| 0.006 | 0.139 | 0.139 | 568.299 | 0.032 | 0.004 |
| 0.006 | 0.085 | 0.085 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.044 | 0.044 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.042 | 0.042 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.081 | 0.074 | 470.292 | 0.152 | 0.004 |
| 0.005 | 0.059 | 0.054 | 469.446 | 0.152 | 0.004 |
| 0.005 | 0.048 | 0.044 | 475.049 | 0.154 | 0.004 |
| 0.005 | 0.084 | 0.078 | 473.767 | 0.153 | 0.004 |
| 0.005 | 0.074 | 0.068 | 472.857 | 0.153 | 0.004 |

|                           |      |
|---------------------------|------|
| Tractors/Loaders/Backhoes | 50   |
| Tractors/Loaders/Backhoes | 120  |
| Tractors/Loaders/Backhoes | 175  |
| Tractors/Loaders/Backhoes | 250  |
| Tractors/Loaders/Backhoes | 500  |
| Tractors/Loaders/Backhoes | 750  |
| Trenchers                 | 15   |
| Trenchers                 | 25   |
| Trenchers                 | 50   |
| Trenchers                 | 120  |
| Trenchers                 | 175  |
| Trenchers                 | 250  |
| Trenchers                 | 500  |
| Trenchers                 | 750  |
| Welders                   | 15   |
| Welders                   | 25   |
| Welders                   | 50   |
| Welders                   | 120  |
| Welders                   | 175  |
| Welders                   | 250  |
| Welders                   | 500  |
| Water Trucks              | 175  |
| Water Trucks              | 250  |
| Water Trucks              | 500  |
| Water Trucks              | 750  |
| Water Trucks              | 1000 |

2025

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.159   | 3.113   | 2.888   | 0.005   | 0.022   | 0.020   | 525.074 | 0.170   | 0.005   |
| 0.159   | 3.113   | 2.888   | 0.005   | 0.022   | 0.020   | 525.074 | 0.170   | 0.005   |
| 0.159   | 3.113   | 2.888   | 0.005   | 0.022   | 0.020   | 525.074 | 0.170   | 0.005   |
| 0.101   | 3.173   | 1.528   | 0.005   | 0.027   | 0.024   | 472.114 | 0.153   | 0.004   |
| 0.082   | 0.966   | 0.647   | 0.005   | 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.161   | 0.991   | 1.115   | 0.005   | 0.033   | 0.033   | 568.299 | 0.014   | 0.004   |
| 0.690   | 3.499   | 4.316   | 0.008   | 0.188   | 0.188   | 568.300 | 0.062   | 0.005   |
| 0.718   | 2.390   | 4.426   | 0.007   | 0.181   | 0.181   | 568.300 | 0.064   | 0.005   |
| 0.702   | 4.880   | 3.864   | 0.007   | 0.135   | 0.135   | 568.299 | 0.063   | 0.005   |
| 0.365   | 3.655   | 2.461   | 0.006   | 0.123   | 0.123   | 568.299 | 0.032   | 0.004   |
| 0.286   | 3.202   | 1.561   | 0.006   | 0.077   | 0.077   | 568.299 | 0.025   | 0.004   |
| 0.232   | 1.096   | 1.247   | 0.006   | 0.039   | 0.039   | 568.299 | 0.020   | 0.004   |
| 0.228   | 1.053   | 1.148   | 0.005   | 0.038   | 0.038   | 568.299 | 0.020   | 0.004   |
| 0.228   | 1.053   | 1.171   | 0.005   | 0.038   | 0.038   | 568.299 | 0.020   | 0.004   |
| 0.243   | 1.090   | 3.082   | 0.005   | 0.061   | 0.061   | 568.299 | 0.021   | 0.004   |
| 0.609   | 4.331   | 4.159   | 0.006   | 0.219   | 0.202   | 529.866 | 0.171   | 0.005   |
| 0.609   | 4.331   | 4.159   | 0.006   | 0.219   | 0.202   | 529.866 | 0.171   | 0.005   |
| 0.609   | 4.331   | 4.159   | 0.006   | 0.219   | 0.202   | 529.866 | 0.171   | 0.005   |
| 0.177   | 3.251   | 2.216   | 0.005   | 0.090   | 0.083   | 461.208 | 0.149   | 0.004   |
| 0.125   | 2.978   | 1.029   | 0.005   | 0.046   | 0.043   | 478.944 | 0.155   | 0.004   |
| 0.108   | 1.046   | 0.975   | 0.005   | 0.032   | 0.030   | 470.712 | 0.152   | 0.004   |
| 0.103   | 0.994   | 0.861   | 0.005   | 0.029   | 0.027   | 464.480 | 0.150   | 0.004   |
| 0.089   | 0.985   | 0.671   | 0.005   | 0.026   | 0.024   | 480.225 | 0.155   | 0.004   |
| 0.057   | 0.943   | 2.273   | 0.005   | 0.018   | 0.017   | 471.926 | 0.153   | 0.004   |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.693 | 2.349 | 4.369 | 0.007 | 0.170 | 0.170 | 568.299 | 0.062 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.561 | 4.330 | 3.701 | 0.007 | 0.115 | 0.115 | 568.300 | 0.050 | 0.005 |
| 0.300 | 3.500 | 2.315 | 0.006 | 0.106 | 0.106 | 568.299 | 0.027 | 0.004 |
| 0.235 | 3.072 | 1.418 | 0.006 | 0.067 | 0.067 | 568.299 | 0.021 | 0.004 |
| 1.937 | 7.269 | 5.788 | 0.005 | 0.577 | 0.531 | 517.872 | 0.168 | 0.005 |
| 0.524 | 3.906 | 4.619 | 0.005 | 0.301 | 0.277 | 469.903 | 0.152 | 0.004 |
| 0.381 | 3.389 | 3.703 | 0.005 | 0.196 | 0.181 | 474.636 | 0.154 | 0.004 |
| 0.281 | 1.502 | 2.966 | 0.005 | 0.123 | 0.114 | 472.964 | 0.153 | 0.004 |
| 0.231 | 1.933 | 2.383 | 0.005 | 0.096 | 0.089 | 472.066 | 0.153 | 0.004 |
| 0.191 | 1.283 | 1.900 | 0.005 | 0.080 | 0.073 | 470.331 | 0.152 | 0.004 |
| 0.220 | 1.031 | 2.411 | 0.005 | 0.064 | 0.059 | 472.055 | 0.153 | 0.004 |
| 1.756 | 6.685 | 4.975 | 0.005 | 0.466 | 0.429 | 515.466 | 0.167 | 0.005 |
| 0.513 | 3.852 | 4.409 | 0.005 | 0.335 | 0.309 | 476.234 | 0.154 | 0.004 |
| 0.326 | 3.227 | 3.041 | 0.005 | 0.170 | 0.157 | 471.829 | 0.153 | 0.004 |
| 0.264 | 1.370 | 2.953 | 0.005 | 0.115 | 0.106 | 471.860 | 0.153 | 0.004 |
| 0.228 | 1.780 | 2.244 | 0.005 | 0.093 | 0.085 | 474.025 | 0.153 | 0.004 |
| 0.181 | 1.159 | 1.767 | 0.005 | 0.066 | 0.061 | 472.283 | 0.153 | 0.004 |
| 0.263 | 1.588 | 4.689 | 0.005 | 0.115 | 0.106 | 474.645 | 0.154 | 0.004 |
| 0.694 | 5.008 | 3.850 | 0.007 | 0.125 | 0.125 | 568.299 | 0.062 | 0.005 |
| 0.364 | 3.697 | 2.389 | 0.006 | 0.112 | 0.112 | 568.299 | 0.032 | 0.004 |
| 0.287 | 3.243 | 1.472 | 0.006 | 0.071 | 0.071 | 568.299 | 0.025 | 0.004 |
| 0.236 | 1.109 | 1.165 | 0.006 | 0.036 | 0.036 | 568.299 | 0.021 | 0.004 |
| 0.232 | 1.062 | 1.077 | 0.005 | 0.035 | 0.035 | 568.299 | 0.021 | 0.004 |
| 0.233 | 1.063 | 1.098 | 0.005 | 0.036 | 0.036 | 568.299 | 0.021 | 0.004 |
| 0.274 | 1.096 | 3.029 | 0.005 | 0.059 | 0.059 | 568.299 | 0.024 | 0.004 |



|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.417 | 4.205 | 3.508 | 0.005 | 0.120 | 0.110 | 525.979 | 0.170 | 0.005 |
| 0.417 | 4.205 | 3.508 | 0.005 | 0.120 | 0.110 | 525.979 | 0.170 | 0.005 |
| 0.217 | 3.453 | 2.248 | 0.005 | 0.102 | 0.094 | 467.384 | 0.151 | 0.004 |
| 0.170 | 3.083 | 1.325 | 0.005 | 0.065 | 0.060 | 472.428 | 0.153 | 0.004 |
| 0.139 | 1.090 | 1.108 | 0.005 | 0.036 | 0.033 | 472.442 | 0.153 | 0.004 |
| 0.121 | 1.054 | 0.831 | 0.005 | 0.029 | 0.026 | 469.711 | 0.152 | 0.004 |
| 0.142 | 1.134 | 1.105 | 0.005 | 0.041 | 0.037 | 468.652 | 0.152 | 0.004 |
| 0.692 | 5.089 | 4.039 | 0.005 | 0.203 | 0.187 | 525.483 | 0.170 | 0.005 |
| 0.300 | 3.629 | 2.814 | 0.005 | 0.163 | 0.150 | 471.529 | 0.153 | 0.004 |
| 0.224 | 3.174 | 1.861 | 0.005 | 0.096 | 0.088 | 472.106 | 0.153 | 0.004 |
| 0.196 | 1.218 | 1.625 | 0.005 | 0.061 | 0.057 | 473.326 | 0.153 | 0.004 |
| 0.218 | 1.219 | 1.723 | 0.005 | 0.065 | 0.060 | 473.615 | 0.153 | 0.004 |
| 0.612 | 3.499 | 4.305 | 0.008 | 0.181 | 0.181 | 568.299 | 0.055 | 0.005 |
| 0.697 | 2.390 | 4.426 | 0.007 | 0.178 | 0.178 | 568.299 | 0.062 | 0.005 |
| 0.475 | 3.787 | 3.582 | 0.007 | 0.107 | 0.107 | 568.299 | 0.042 | 0.005 |
| 0.260 | 3.342 | 2.321 | 0.006 | 0.101 | 0.101 | 568.299 | 0.023 | 0.004 |
| 0.197 | 2.929 | 1.462 | 0.006 | 0.062 | 0.062 | 568.299 | 0.017 | 0.004 |
| 0.155 | 1.003 | 1.169 | 0.006 | 0.033 | 0.033 | 568.299 | 0.014 | 0.004 |
| 0.151 | 0.983 | 1.082 | 0.005 | 0.032 | 0.032 | 568.300 | 0.013 | 0.004 |
| 0.152 | 0.983 | 1.104 | 0.005 | 0.032 | 0.032 | 568.299 | 0.013 | 0.004 |
| 0.183 | 1.018 | 2.929 | 0.005 | 0.052 | 0.052 | 568.300 | 0.016 | 0.004 |
| 1.850 | 7.051 | 5.028 | 0.005 | 0.520 | 0.479 | 493.791 | 0.160 | 0.005 |
| 0.683 | 4.200 | 5.434 | 0.005 | 0.408 | 0.375 | 469.821 | 0.152 | 0.004 |
| 0.364 | 3.432 | 3.202 | 0.005 | 0.177 | 0.163 | 478.497 | 0.155 | 0.004 |
| 0.262 | 1.225 | 3.073 | 0.005 | 0.100 | 0.092 | 473.669 | 0.153 | 0.004 |
| 0.293 | 1.356 | 2.432 | 0.005 | 0.095 | 0.088 | 470.266 | 0.152 | 0.004 |
| 0.264 | 1.155 | 1.265 | 0.005 | 0.046 | 0.046 | 568.300 | 0.023 | 0.004 |
| 0.302 | 3.691 | 2.949 | 0.005 | 0.171 | 0.157 | 476.371 | 0.154 | 0.004 |
| 0.183 | 3.133 | 1.496 | 0.005 | 0.072 | 0.066 | 473.097 | 0.153 | 0.004 |
| 0.169 | 1.135 | 1.377 | 0.005 | 0.049 | 0.045 | 470.689 | 0.152 | 0.004 |
| 0.169 | 1.130 | 1.235 | 0.005 | 0.048 | 0.044 | 471.925 | 0.153 | 0.004 |
| 0.189 | 1.066 | 2.466 | 0.005 | 0.068 | 0.063 | 472.055 | 0.153 | 0.004 |
| 0.224 | 3.325 | 1.494 | 0.005 | 0.070 | 0.064 | 470.264 | 0.152 | 0.004 |
| 0.202 | 1.259 | 1.355 | 0.005 | 0.054 | 0.050 | 469.113 | 0.152 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.185 | 1.206 | 1.235 | 0.005 | 0.045 | 0.041 | 475.220 | 0.154 | 0.004 |
| 0.259 | 1.650 | 2.085 | 0.005 | 0.079 | 0.073 | 473.839 | 0.153 | 0.004 |
| 0.209 | 1.200 | 3.439 | 0.005 | 0.069 | 0.064 | 473.097 | 0.153 | 0.004 |
| 0.828 | 5.032 | 4.510 | 0.006 | 0.305 | 0.281 | 529.209 | 0.171 | 0.005 |
| 0.828 | 5.032 | 4.510 | 0.006 | 0.305 | 0.281 | 529.209 | 0.171 | 0.005 |
| 0.828 | 5.032 | 4.510 | 0.006 | 0.305 | 0.281 | 529.209 | 0.171 | 0.005 |
| 0.382 | 3.620 | 3.582 | 0.005 | 0.237 | 0.218 | 472.125 | 0.153 | 0.004 |
| 0.261 | 3.150 | 2.520 | 0.005 | 0.130 | 0.120 | 469.545 | 0.152 | 0.004 |
| 0.175 | 1.382 | 1.677 | 0.005 | 0.064 | 0.059 | 476.484 | 0.154 | 0.004 |
| 0.546 | 4.780 | 3.859 | 0.005 | 0.165 | 0.152 | 526.176 | 0.170 | 0.005 |
| 0.546 | 4.780 | 3.859 | 0.005 | 0.165 | 0.152 | 526.176 | 0.170 | 0.005 |
| 0.546 | 4.780 | 3.859 | 0.005 | 0.165 | 0.152 | 526.176 | 0.170 | 0.005 |
| 0.287 | 3.639 | 2.708 | 0.005 | 0.146 | 0.134 | 470.000 | 0.152 | 0.004 |
| 0.191 | 3.185 | 1.448 | 0.005 | 0.073 | 0.067 | 471.850 | 0.153 | 0.004 |
| 0.173 | 1.141 | 1.319 | 0.005 | 0.046 | 0.042 | 473.223 | 0.153 | 0.004 |
| 0.158 | 1.110 | 1.153 | 0.005 | 0.040 | 0.036 | 472.929 | 0.153 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.115 | 1.112 | 0.628 | 0.005 | 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 0.198 | 1.058 | 3.971 | 0.005 | 0.080 | 0.074 | 472.055 | 0.153 | 0.004 |
| 0.943 | 5.669 | 4.579 | 0.005 | 0.314 | 0.289 | 523.709 | 0.169 | 0.005 |
| 0.220 | 3.510 | 2.222 | 0.005 | 0.096 | 0.089 | 473.588 | 0.153 | 0.004 |
| 0.208 | 3.181 | 1.639 | 0.005 | 0.088 | 0.081 | 472.219 | 0.153 | 0.004 |
| 0.210 | 1.218 | 1.986 | 0.005 | 0.068 | 0.063 | 471.482 | 0.153 | 0.004 |
| 0.212 | 1.262 | 1.756 | 0.005 | 0.072 | 0.066 | 470.297 | 0.152 | 0.004 |
| 0.058 | 0.946 | 2.278 | 0.005 | 0.018 | 0.017 | 472.055 | 0.153 | 0.004 |
| 0.950 | 4.956 | 4.203 | 0.005 | 0.279 | 0.257 | 526.857 | 0.170 | 0.005 |
| 0.950 | 4.956 | 4.203 | 0.005 | 0.279 | 0.257 | 526.857 | 0.170 | 0.005 |
| 0.337 | 3.508 | 3.277 | 0.005 | 0.213 | 0.196 | 470.226 | 0.152 | 0.004 |
| 0.191 | 3.004 | 1.809 | 0.005 | 0.085 | 0.078 | 472.661 | 0.153 | 0.004 |
| 0.119 | 1.009 | 1.343 | 0.005 | 0.041 | 0.038 | 473.236 | 0.153 | 0.004 |
| 0.143 | 0.986 | 1.548 | 0.005 | 0.054 | 0.049 | 467.171 | 0.151 | 0.004 |
| 0.523 | 4.275 | 3.743 | 0.005 | 0.164 | 0.151 | 521.058 | 0.169 | 0.005 |
| 0.523 | 4.275 | 3.743 | 0.005 | 0.164 | 0.151 | 521.058 | 0.169 | 0.005 |
| 0.262 | 3.503 | 2.673 | 0.005 | 0.135 | 0.125 | 473.175 | 0.153 | 0.004 |
| 0.197 | 3.066 | 1.785 | 0.005 | 0.086 | 0.079 | 470.661 | 0.152 | 0.004 |
| 0.138 | 1.114 | 1.296 | 0.005 | 0.048 | 0.044 | 472.212 | 0.153 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.612 | 3.499 | 4.305 | 0.008 | 0.181 | 0.181 | 568.299 | 0.055 | 0.005 |
| 0.697 | 2.390 | 4.426 | 0.007 | 0.178 | 0.178 | 568.299 | 0.062 | 0.005 |
| 0.333 | 3.233 | 3.441 | 0.007 | 0.087 | 0.087 | 568.299 | 0.030 | 0.005 |
| 0.204 | 3.191 | 2.229 | 0.006 | 0.084 | 0.084 | 568.299 | 0.018 | 0.004 |
| 0.191 | 2.907 | 1.482 | 0.006 | 0.062 | 0.062 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.690 | 3.499 | 4.316 | 0.008 | 0.188 | 0.188 | 568.299 | 0.062 | 0.005 |
| 0.718 | 2.390 | 4.426 | 0.007 | 0.181 | 0.181 | 568.299 | 0.064 | 0.005 |
| 0.523 | 3.974 | 3.630 | 0.007 | 0.114 | 0.114 | 568.299 | 0.047 | 0.005 |
| 0.279 | 3.393 | 2.352 | 0.006 | 0.107 | 0.107 | 568.299 | 0.025 | 0.004 |
| 0.213 | 2.973 | 1.486 | 0.006 | 0.065 | 0.065 | 568.299 | 0.019 | 0.004 |
| 0.168 | 1.018 | 1.189 | 0.006 | 0.034 | 0.034 | 568.300 | 0.015 | 0.004 |
| 0.164 | 0.994 | 1.098 | 0.005 | 0.033 | 0.033 | 568.299 | 0.014 | 0.004 |
| 0.164 | 0.994 | 1.120 | 0.005 | 0.034 | 0.034 | 568.299 | 0.014 | 0.004 |
| 0.196 | 1.031 | 2.960 | 0.005 | 0.054 | 0.054 | 568.299 | 0.017 | 0.004 |
| 0.621 | 4.207 | 3.824 | 0.005 | 0.193 | 0.177 | 525.957 | 0.170 | 0.005 |
| 0.621 | 4.207 | 3.824 | 0.005 | 0.193 | 0.177 | 525.957 | 0.170 | 0.005 |
| 0.621 | 4.207 | 3.824 | 0.005 | 0.193 | 0.177 | 525.957 | 0.170 | 0.005 |
| 0.272 | 3.451 | 2.843 | 0.005 | 0.151 | 0.138 | 474.007 | 0.153 | 0.004 |
| 0.141 | 2.914 | 1.324 | 0.005 | 0.061 | 0.056 | 472.012 | 0.153 | 0.004 |
| 0.179 | 1.214 | 1.977 | 0.005 | 0.070 | 0.064 | 473.512 | 0.153 | 0.004 |
| 0.210 | 1.961 | 2.216 | 0.005 | 0.090 | 0.083 | 477.900 | 0.155 | 0.004 |
| 0.570 | 3.918 | 3.653 | 0.005 | 0.166 | 0.152 | 524.924 | 0.170 | 0.005 |
| 0.145 | 3.245 | 1.914 | 0.005 | 0.058 | 0.054 | 473.063 | 0.153 | 0.004 |
| 0.103 | 2.834 | 1.044 | 0.005 | 0.039 | 0.036 | 471.535 | 0.153 | 0.004 |
| 0.119 | 0.995 | 1.480 | 0.005 | 0.035 | 0.032 | 472.853 | 0.153 | 0.004 |
| 0.066 | 0.937 | 0.476 | 0.005 | 0.009 | 0.008 | 466.548 | 0.151 | 0.004 |
| 0.532 | 3.696 | 5.014 | 0.005 | 0.279 | 0.257 | 473.515 | 0.153 | 0.004 |
| 0.399 | 1.797 | 4.090 | 0.005 | 0.184 | 0.170 | 474.585 | 0.154 | 0.004 |
| 0.417 | 3.457 | 4.030 | 0.005 | 0.182 | 0.168 | 479.394 | 0.155 | 0.004 |
| 0.425 | 2.596 | 5.334 | 0.005 | 0.196 | 0.180 | 473.011 | 0.153 | 0.004 |
| 0.433 | 1.796 | 4.532 | 0.005 | 0.123 | 0.123 | 568.299 | 0.039 | 0.004 |
| 1.009 | 5.987 | 4.468 | 0.005 | 0.286 | 0.263 | 524.230 | 0.170 | 0.005 |
| 1.009 | 5.987 | 4.468 | 0.005 | 0.286 | 0.263 | 524.230 | 0.170 | 0.005 |
| 0.397 | 3.832 | 3.339 | 0.005 | 0.221 | 0.203 | 466.808 | 0.151 | 0.004 |
| 0.246 | 3.288 | 1.884 | 0.005 | 0.101 | 0.092 | 470.357 | 0.152 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.197 | 1.161 | 1.806 | 0.005 | 0.060 | 0.056 | 469.788 | 0.152 | 0.004 |
| 0.209 | 1.352 | 1.702 | 0.005 | 0.063 | 0.058 | 468.513 | 0.152 | 0.004 |
| 0.226 | 1.333 | 1.881 | 0.005 | 0.072 | 0.066 | 464.866 | 0.150 | 0.004 |
| 0.201 | 1.191 | 3.544 | 0.005 | 0.071 | 0.066 | 472.345 | 0.153 | 0.004 |
| 0.575 | 4.095 | 5.632 | 0.005 | 0.414 | 0.381 | 482.701 | 0.156 | 0.004 |
| 0.336 | 3.372 | 3.156 | 0.005 | 0.167 | 0.153 | 478.809 | 0.155 | 0.004 |
| 0.301 | 1.627 | 3.014 | 0.005 | 0.133 | 0.123 | 469.352 | 0.152 | 0.004 |
| 0.245 | 1.921 | 2.477 | 0.005 | 0.098 | 0.090 | 472.846 | 0.153 | 0.004 |
| 0.213 | 1.461 | 2.187 | 0.005 | 0.081 | 0.074 | 471.429 | 0.153 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.559 | 4.247 | 3.662 | 0.007 | 0.114 | 0.114 | 568.299 | 0.050 | 0.005 |
| 0.296 | 3.474 | 2.315 | 0.006 | 0.105 | 0.105 | 568.299 | 0.026 | 0.004 |
| 0.229 | 3.047 | 1.427 | 0.006 | 0.065 | 0.065 | 568.299 | 0.020 | 0.004 |
| 0.224 | 1.259 | 1.370 | 0.007 | 0.041 | 0.041 | 686.695 | 0.020 | 0.004 |
| 0.350 | 3.671 | 3.346 | 0.005 | 0.089 | 0.082 | 527.801 | 0.171 | 0.005 |
| 0.350 | 3.671 | 3.346 | 0.005 | 0.089 | 0.082 | 527.801 | 0.171 | 0.005 |
| 0.147 | 3.264 | 1.948 | 0.005 | 0.063 | 0.058 | 472.847 | 0.153 | 0.004 |
| 0.333 | 3.662 | 3.721 | 0.006 | 0.116 | 0.107 | 536.030 | 0.173 | 0.005 |
| 0.251 | 3.389 | 2.883 | 0.005 | 0.142 | 0.131 | 475.381 | 0.154 | 0.004 |
| 0.228 | 2.930 | 2.464 | 0.005 | 0.120 | 0.111 | 470.077 | 0.152 | 0.004 |
| 0.176 | 1.183 | 2.236 | 0.005 | 0.071 | 0.065 | 477.096 | 0.154 | 0.004 |
| 0.134 | 1.168 | 1.478 | 0.005 | 0.056 | 0.051 | 470.252 | 0.152 | 0.004 |
| 0.094 | 0.985 | 0.947 | 0.005 | 0.035 | 0.032 | 472.983 | 0.153 | 0.004 |
| 0.746 | 5.003 | 4.079 | 0.005 | 0.239 | 0.219 | 525.328 | 0.170 | 0.005 |
| 0.746 | 5.003 | 4.079 | 0.005 | 0.239 | 0.219 | 525.328 | 0.170 | 0.005 |
| 0.746 | 5.003 | 4.079 | 0.005 | 0.239 | 0.219 | 525.328 | 0.170 | 0.005 |
| 0.332 | 3.693 | 3.098 | 0.005 | 0.189 | 0.173 | 474.116 | 0.153 | 0.004 |
| 0.266 | 3.234 | 2.253 | 0.005 | 0.107 | 0.099 | 473.122 | 0.153 | 0.004 |
| 0.164 | 1.127 | 1.614 | 0.005 | 0.051 | 0.047 | 470.126 | 0.152 | 0.004 |
| 0.590 | 4.609 | 3.768 | 0.005 | 0.166 | 0.153 | 513.852 | 0.166 | 0.005 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.590 | 4.609 | 3.768 | 0.005 | 0.166 | 0.153 | 513.852 | 0.166 | 0.005 |
| 0.227 | 3.532 | 2.288 | 0.005 | 0.105 | 0.097 | 476.731 | 0.154 | 0.004 |
| 0.176 | 3.089 | 1.376 | 0.005 | 0.069 | 0.063 | 469.403 | 0.152 | 0.004 |
| 0.168 | 1.151 | 1.491 | 0.005 | 0.055 | 0.050 | 469.914 | 0.152 | 0.004 |
| 0.150 | 1.277 | 1.163 | 0.005 | 0.044 | 0.041 | 470.084 | 0.152 | 0.004 |
| 0.221 | 1.311 | 2.215 | 0.005 | 0.085 | 0.079 | 466.638 | 0.151 | 0.004 |
| 0.601 | 4.233 | 3.834 | 0.005 | 0.197 | 0.181 | 527.022 | 0.170 | 0.005 |
| 0.601 | 4.233 | 3.834 | 0.005 | 0.197 | 0.181 | 527.022 | 0.170 | 0.005 |
| 0.601 | 4.233 | 3.834 | 0.005 | 0.197 | 0.181 | 527.022 | 0.170 | 0.005 |
| 0.494 | 3.769 | 4.593 | 0.005 | 0.318 | 0.292 | 475.632 | 0.154 | 0.004 |
| 0.364 | 3.311 | 3.667 | 0.005 | 0.187 | 0.172 | 467.733 | 0.151 | 0.004 |
| 0.312 | 1.598 | 3.483 | 0.005 | 0.146 | 0.134 | 473.846 | 0.153 | 0.004 |
| 0.192 | 1.668 | 1.859 | 0.005 | 0.080 | 0.074 | 469.994 | 0.152 | 0.004 |
| 0.064 | 0.958 | 0.304 | 0.005 | 0.009 | 0.008 | 474.478 | 0.154 | 0.004 |
| 0.690 | 3.499 | 4.316 | 0.008 | 0.188 | 0.188 | 568.299 | 0.062 | 0.005 |
| 0.718 | 2.390 | 4.426 | 0.007 | 0.181 | 0.181 | 568.299 | 0.064 | 0.005 |
| 0.646 | 4.557 | 3.782 | 0.007 | 0.130 | 0.130 | 568.299 | 0.058 | 0.005 |
| 0.336 | 3.560 | 2.430 | 0.006 | 0.120 | 0.120 | 568.299 | 0.030 | 0.004 |
| 0.261 | 3.118 | 1.541 | 0.006 | 0.074 | 0.074 | 568.299 | 0.023 | 0.004 |
| 0.210 | 1.068 | 1.234 | 0.006 | 0.038 | 0.038 | 568.299 | 0.018 | 0.004 |
| 0.206 | 1.032 | 1.135 | 0.005 | 0.037 | 0.037 | 568.299 | 0.018 | 0.004 |
| 0.224 | 3.325 | 1.494 | 0.005 | 0.070 | 0.064 | 470.264 | 0.152 | 0.004 |
| 0.202 | 1.259 | 1.355 | 0.005 | 0.054 | 0.050 | 469.113 | 0.152 | 0.004 |
| 0.185 | 1.206 | 1.235 | 0.005 | 0.045 | 0.041 | 475.220 | 0.154 | 0.004 |
| 0.259 | 1.650 | 2.085 | 0.005 | 0.079 | 0.073 | 473.839 | 0.153 | 0.004 |
| 0.209 | 1.200 | 3.439 | 0.005 | 0.069 | 0.064 | 473.097 | 0.153 | 0.004 |

| 2025             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     |
| Aerial Lifts     | 15    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 |
| Aerial Lifts     | 25    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 |
| Aerial Lifts     | 50    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 |
| Aerial Lifts     | 120   | 0.099   | 3.167   | 1.511   | 0.005   | 0.026   | 0.024   | 472.114 |
| Aerial Lifts     | 500   | 0.085   | 0.970   | 0.649   | 0.005   | 0.009   | 0.009   | 472.055 |
| Aerial Lifts     | 750   | 0.153   | 0.989   | 0.974   | 0.005   | 0.028   | 0.028   | 568.299 |
| Air Compressor s | 15    | 0.683   | 3.491   | 4.278   | 0.008   | 0.183   | 0.183   | 568.300 |
| Air Compressor s | 25    | 0.709   | 2.376   | 4.407   | 0.007   | 0.177   | 0.177   | 568.299 |
| Air Compressor s | 50    | 0.659   | 4.851   | 3.755   | 0.007   | 0.116   | 0.116   | 568.299 |
| Air Compressor s | 120   | 0.345   | 3.653   | 2.313   | 0.006   | 0.104   | 0.104   | 568.299 |
| Air Compressor s | 175   | 0.269   | 3.205   | 1.383   | 0.006   | 0.065   | 0.065   | 568.299 |
| Air Compressor s | 250   | 0.220   | 1.094   | 1.086   | 0.006   | 0.033   | 0.033   | 568.299 |
| Air Compressor s | 500   | 0.217   | 1.051   | 1.001   | 0.005   | 0.032   | 0.032   | 568.299 |
| Air Compressor s | 750   | 0.217   | 1.051   | 1.021   | 0.005   | 0.032   | 0.032   | 568.299 |
| Air Compressor s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   | 0.055   | 0.055   | 568.299 |
| Bore/Drill Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 |
| Bore/Drill Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 |
| Bore/Drill Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 |
| Bore/Drill Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   | 0.067   | 0.062   | 459.829 |
| Bore/Drill Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   | 0.039   | 0.036   | 478.266 |
| Bore/Drill Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   | 0.031   | 0.029   | 470.654 |
| Bore/Drill Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   | 0.028   | 0.026   | 467.289 |
| Bore/Drill Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   | 0.023   | 0.021   | 481.250 |
| Bore/Drill Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   | 0.019   | 0.017   | 471.917 |

|                          |      |       |       |       |       |       |       |         |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 | 0.168 | 0.168 | 568.299 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 | 0.099 | 0.099 | 568.299 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 | 0.089 | 0.089 | 568.300 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 | 0.056 | 0.056 | 568.300 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 | 0.543 | 0.499 | 517.872 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 | 0.260 | 0.240 | 469.533 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 | 0.166 | 0.153 | 474.748 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 | 0.114 | 0.105 | 472.980 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 | 0.088 | 0.081 | 471.967 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 | 0.068 | 0.062 | 470.276 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 | 0.065 | 0.060 | 472.055 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 | 0.456 | 0.420 | 516.128 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 | 0.285 | 0.262 | 476.134 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 | 0.150 | 0.138 | 471.592 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 | 0.096 | 0.088 | 471.622 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 | 0.081 | 0.074 | 474.007 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 | 0.057 | 0.052 | 472.408 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 | 0.112 | 0.103 | 475.490 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 | 0.107 | 0.107 | 568.299 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 | 0.095 | 0.095 | 568.299 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 | 0.060 | 0.060 | 568.299 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 | 0.031 | 0.031 | 568.299 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 | 0.030 | 0.030 | 568.299 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 | 0.030 | 0.030 | 568.299 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 | 0.053 | 0.053 | 568.299 |



|                      |      |       |       |       |       |       |       |         |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Dumpers/Tractors     | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Excavators           | 25   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 |
| Excavators           | 50   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 |
| Excavators           | 120  | 0.201 | 3.439 | 2.082 | 0.005 | 0.085 | 0.078 | 466.738 |
| Excavators           | 175  | 0.158 | 3.078 | 1.154 | 0.005 | 0.057 | 0.052 | 472.496 |
| Excavators           | 250  | 0.131 | 1.081 | 0.962 | 0.005 | 0.032 | 0.029 | 472.560 |
| Excavators           | 500  | 0.115 | 1.051 | 0.726 | 0.005 | 0.026 | 0.024 | 470.292 |
| Excavators           | 750  | 0.139 | 1.135 | 1.026 | 0.005 | 0.038 | 0.035 | 468.558 |
| Forklifts            | 50   | 0.636 | 5.029 | 3.932 | 0.005 | 0.178 | 0.164 | 525.483 |
| Forklifts            | 120  | 0.277 | 3.611 | 2.607 | 0.005 | 0.140 | 0.128 | 471.529 |
| Forklifts            | 175  | 0.209 | 3.170 | 1.653 | 0.005 | 0.084 | 0.078 | 472.106 |
| Forklifts            | 250  | 0.191 | 1.214 | 1.466 | 0.005 | 0.056 | 0.052 | 473.326 |
| Forklifts            | 500  | 0.215 | 1.222 | 1.658 | 0.005 | 0.062 | 0.057 | 473.615 |
| Generator Sets       | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 |
| Generator Sets       | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 |
| Generator Sets       | 50   | 0.440 | 3.758 | 3.481 | 0.007 | 0.093 | 0.093 | 568.300 |
| Generator Sets       | 120  | 0.243 | 3.338 | 2.185 | 0.006 | 0.087 | 0.087 | 568.299 |
| Generator Sets       | 175  | 0.184 | 2.930 | 1.297 | 0.006 | 0.053 | 0.053 | 568.299 |
| Generator Sets       | 250  | 0.147 | 1.000 | 1.020 | 0.006 | 0.028 | 0.028 | 568.299 |
| Generator Sets       | 500  | 0.144 | 0.981 | 0.945 | 0.005 | 0.027 | 0.027 | 568.300 |
| Generator Sets       | 750  | 0.145 | 0.981 | 0.964 | 0.005 | 0.027 | 0.027 | 568.299 |
| Generator Sets       | 9999 | 0.173 | 1.008 | 2.812 | 0.005 | 0.047 | 0.047 | 568.299 |
| Graders              | 50   | 1.864 | 7.125 | 5.043 | 0.005 | 0.522 | 0.480 | 493.532 |
| Graders              | 120  | 0.638 | 4.149 | 5.074 | 0.005 | 0.371 | 0.342 | 468.316 |
| Graders              | 175  | 0.329 | 3.418 | 2.774 | 0.005 | 0.152 | 0.140 | 478.508 |
| Graders              | 250  | 0.230 | 1.179 | 2.556 | 0.005 | 0.082 | 0.076 | 473.470 |
| Graders              | 500  | 0.280 | 1.315 | 2.265 | 0.005 | 0.088 | 0.081 | 470.753 |
| Graders              | 750  | 0.253 | 1.141 | 1.125 | 0.005 | 0.041 | 0.041 | 568.300 |
| Off-Highway Tractors | 120  | 0.276 | 3.669 | 2.707 | 0.005 | 0.144 | 0.132 | 476.921 |
| Off-Highway Tractors | 175  | 0.175 | 3.142 | 1.349 | 0.005 | 0.065 | 0.060 | 473.302 |
| Off-Highway Tractors | 250  | 0.155 | 1.130 | 1.116 | 0.005 | 0.040 | 0.037 | 470.861 |
| Off-Highway Tractors | 750  | 0.167 | 1.135 | 1.118 | 0.005 | 0.045 | 0.041 | 471.917 |
| Off-Highway Tractors | 1000 | 0.198 | 1.077 | 2.482 | 0.005 | 0.070 | 0.064 | 472.055 |
| Off-Highway Trucks   | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 |
| Off-Highway Trucks   | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 | 0.203 | 0.187 | 472.748 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 | 0.112 | 0.103 | 469.843 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 | 0.059 | 0.055 | 476.296 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 | 0.118 | 0.109 | 470.000 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 | 0.070 | 0.065 | 471.850 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 | 0.036 | 0.033 | 473.223 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 | 0.035 | 0.033 | 472.929 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 | 0.023 | 0.021 | 473.464 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 | 0.081 | 0.074 | 472.055 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 | 0.239 | 0.219 | 523.709 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 | 0.081 | 0.074 | 473.588 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 | 0.072 | 0.067 | 472.219 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 | 0.060 | 0.055 | 471.482 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 | 0.067 | 0.061 | 470.297 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 | 0.019 | 0.017 | 472.055 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 | 0.191 | 0.175 | 469.899 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 | 0.077 | 0.071 | 472.485 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 | 0.034 | 0.031 | 473.483 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 | 0.039 | 0.036 | 465.882 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 | 0.118 | 0.108 | 473.424 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 | 0.075 | 0.069 | 470.484 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 | 0.043 | 0.040 | 472.234 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 | 0.075 | 0.075 | 568.299 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 | 0.072 | 0.072 | 568.299 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 | 0.053 | 0.053 | 568.299 |

|                         |      |       |       |       |       |       |       |         |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 |
| Pumps                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.299 |
| Pumps                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 |
| Pumps                   | 50   | 0.485 | 3.943 | 3.528 | 0.007 | 0.099 | 0.099 | 568.299 |
| Pumps                   | 120  | 0.261 | 3.389 | 2.213 | 0.006 | 0.092 | 0.092 | 568.299 |
| Pumps                   | 175  | 0.199 | 2.974 | 1.318 | 0.006 | 0.056 | 0.056 | 568.300 |
| Pumps                   | 250  | 0.159 | 1.016 | 1.038 | 0.006 | 0.029 | 0.029 | 568.299 |
| Pumps                   | 500  | 0.156 | 0.992 | 0.958 | 0.005 | 0.028 | 0.028 | 568.300 |
| Pumps                   | 750  | 0.157 | 0.992 | 0.977 | 0.005 | 0.029 | 0.029 | 568.300 |
| Pumps                   | 9999 | 0.186 | 1.020 | 2.840 | 0.005 | 0.049 | 0.049 | 568.299 |
| Rollers                 | 15   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 |
| Rollers                 | 25   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 |
| Rollers                 | 50   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 |
| Rollers                 | 120  | 0.255 | 3.444 | 2.691 | 0.005 | 0.135 | 0.125 | 473.851 |
| Rollers                 | 175  | 0.127 | 2.909 | 1.101 | 0.005 | 0.049 | 0.046 | 471.970 |
| Rollers                 | 250  | 0.173 | 1.215 | 1.783 | 0.005 | 0.066 | 0.060 | 473.681 |
| Rollers                 | 500  | 0.212 | 1.968 | 2.200 | 0.005 | 0.091 | 0.083 | 477.573 |
| Rough Terrain Forklifts | 50   | 0.456 | 3.740 | 3.477 | 0.005 | 0.128 | 0.118 | 525.027 |
| Rough Terrain Forklifts | 120  | 0.137 | 3.240 | 1.821 | 0.005 | 0.051 | 0.047 | 473.037 |
| Rough Terrain Forklifts | 175  | 0.087 | 2.821 | 0.786 | 0.005 | 0.030 | 0.028 | 471.475 |
| Rough Terrain Forklifts | 250  | 0.123 | 1.001 | 1.489 | 0.005 | 0.035 | 0.033 | 472.927 |
| Rough Terrain Forklifts | 500  | 0.069 | 0.942 | 0.477 | 0.005 | 0.009 | 0.008 | 466.541 |
| Rubber Tired Dozers     | 175  | 0.461 | 3.612 | 4.229 | 0.005 | 0.231 | 0.212 | 474.103 |
| Rubber Tired Dozers     | 250  | 0.372 | 1.720 | 3.805 | 0.005 | 0.167 | 0.153 | 474.573 |
| Rubber Tired Dozers     | 500  | 0.367 | 2.959 | 3.370 | 0.005 | 0.151 | 0.139 | 479.092 |
| Rubber Tired Dozers     | 750  | 0.428 | 2.601 | 5.333 | 0.005 | 0.196 | 0.181 | 472.998 |
| Rubber Tired Dozers     | 1000 | 0.414 | 1.725 | 4.365 | 0.005 | 0.115 | 0.115 | 568.299 |
| Rubber Tired Loaders    | 25   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 |
| Rubber Tired Loaders    | 50   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 |
| Rubber Tired Loaders    | 120  | 0.352 | 3.791 | 2.970 | 0.005 | 0.179 | 0.165 | 466.898 |
| Rubber Tired Loaders    | 175  | 0.224 | 3.281 | 1.590 | 0.005 | 0.084 | 0.077 | 470.459 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 | 0.048 | 0.045 | 469.871 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 | 0.053 | 0.048 | 469.143 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 | 0.064 | 0.059 | 465.052 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 | 0.052 | 0.048 | 472.456 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 | 0.405 | 0.372 | 482.363 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 | 0.137 | 0.126 | 478.948 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 | 0.125 | 0.115 | 469.446 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 | 0.081 | 0.074 | 472.539 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 | 0.064 | 0.059 | 472.115 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 | 0.098 | 0.098 | 568.299 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 | 0.089 | 0.089 | 568.299 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 | 0.055 | 0.055 | 568.299 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 | 0.035 | 0.035 | 686.695 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 | 0.057 | 0.052 | 472.630 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 | 0.082 | 0.075 | 536.140 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 | 0.124 | 0.114 | 476.766 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 | 0.094 | 0.087 | 471.040 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 | 0.055 | 0.051 | 477.110 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 | 0.051 | 0.047 | 470.283 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 | 0.027 | 0.025 | 470.551 |
| Sweepers/Scrubbers        | 15   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 |
| Sweepers/Scrubbers        | 25   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 |
| Sweepers/Scrubbers        | 50   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 |
| Sweepers/Scrubbers        | 120  | 0.303 | 3.664 | 2.817 | 0.005 | 0.160 | 0.147 | 474.116 |
| Sweepers/Scrubbers        | 175  | 0.213 | 3.201 | 1.638 | 0.005 | 0.072 | 0.066 | 473.122 |
| Sweepers/Scrubbers        | 250  | 0.170 | 1.140 | 1.616 | 0.005 | 0.051 | 0.047 | 470.126 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 | 0.086 | 0.079 | 477.188 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 | 0.059 | 0.054 | 469.329 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 | 0.047 | 0.044 | 470.598 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 | 0.039 | 0.036 | 470.910 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 | 0.067 | 0.062 | 466.452 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 | 0.285 | 0.262 | 475.901 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 | 0.179 | 0.165 | 467.732 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 | 0.144 | 0.133 | 473.917 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 | 0.079 | 0.072 | 470.439 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 | 0.009 | 0.009 | 474.486 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.300 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 | 0.112 | 0.112 | 568.299 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 | 0.102 | 0.102 | 568.299 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 | 0.063 | 0.063 | 568.299 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 | 0.032 | 0.032 | 568.299 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 | 0.031 | 0.031 | 568.299 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 |

2026

| g/hp/hr | g/hp/hr |
|---------|---------|
| CH4     | N2O     |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.153   | 0.004   |
| 0.153   | 0.004   |
| 0.013   | 0.004   |
| 0.061   | 0.005   |
| 0.064   | 0.005   |
| 0.059   | 0.005   |
| 0.031   | 0.004   |
| 0.024   | 0.004   |
| 0.019   | 0.004   |
| 0.019   | 0.004   |
| 0.019   | 0.004   |
| 0.020   | 0.004   |
| 0.172   | 0.005   |
| 0.172   | 0.005   |
| 0.172   | 0.005   |
| 0.149   | 0.004   |
| 0.155   | 0.004   |
| 0.152   | 0.004   |
| 0.151   | 0.004   |
| 0.156   | 0.004   |
| 0.153   | 0.004   |

| 2026             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     |
| Aerial Lifts     | 15    | 0.154   | 3.088   | 2.879   | 0.005   |
| Aerial Lifts     | 25    | 0.154   | 3.088   | 2.879   | 0.005   |
| Aerial Lifts     | 50    | 0.154   | 3.088   | 2.879   | 0.005   |
| Aerial Lifts     | 120   | 0.099   | 3.167   | 1.511   | 0.005   |
| Aerial Lifts     | 500   | 0.085   | 0.970   | 0.649   | 0.005   |
| Aerial Lifts     | 750   | 0.153   | 0.989   | 0.974   | 0.005   |
| Air Compressor s | 15    | 0.683   | 3.491   | 4.278   | 0.008   |
| Air Compressor s | 25    | 0.709   | 2.376   | 4.407   | 0.007   |
| Air Compressor s | 50    | 0.659   | 4.851   | 3.755   | 0.007   |
| Air Compressor s | 120   | 0.345   | 3.653   | 2.313   | 0.006   |
| Air Compressor s | 175   | 0.269   | 3.205   | 1.383   | 0.006   |
| Air Compressor s | 250   | 0.220   | 1.094   | 1.086   | 0.006   |
| Air Compressor s | 500   | 0.217   | 1.051   | 1.001   | 0.005   |
| Air Compressor s | 750   | 0.217   | 1.051   | 1.021   | 0.005   |
| Air Compressor s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   |
| Bore/Drill Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   |
| Bore/Drill Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   |
| Bore/Drill Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   |
| Bore/Drill Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   |
| Bore/Drill Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   |
| Bore/Drill Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   |
| Bore/Drill Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   |
| Bore/Drill Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   |
| Bore/Drill Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   |

|       |       |
|-------|-------|
| 0.059 | 0.005 |
| 0.062 | 0.005 |
| 0.061 | 0.005 |
| 0.047 | 0.005 |
| 0.025 | 0.004 |
| 0.019 | 0.004 |
| 0.168 | 0.005 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.167 | 0.005 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.059 | 0.005 |
| 0.031 | 0.004 |
| 0.024 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.023 | 0.004 |

|                          |      |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 |



|       |       |
|-------|-------|
| 0.061 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.054 | 0.005 |
| 0.062 | 0.005 |
| 0.039 | 0.005 |
| 0.021 | 0.004 |
| 0.016 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.015 | 0.004 |
| 0.160 | 0.005 |
| 0.152 | 0.004 |
| 0.155 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.022 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |

|                      |      |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Excavators           | 25   | 0.403 | 4.219 | 3.453 | 0.005 |
| Excavators           | 50   | 0.403 | 4.219 | 3.453 | 0.005 |
| Excavators           | 120  | 0.201 | 3.439 | 2.082 | 0.005 |
| Excavators           | 175  | 0.158 | 3.078 | 1.154 | 0.005 |
| Excavators           | 250  | 0.131 | 1.081 | 0.962 | 0.005 |
| Excavators           | 500  | 0.115 | 1.051 | 0.726 | 0.005 |
| Excavators           | 750  | 0.139 | 1.135 | 1.026 | 0.005 |
| Forklifts            | 50   | 0.636 | 5.029 | 3.932 | 0.005 |
| Forklifts            | 120  | 0.277 | 3.611 | 2.607 | 0.005 |
| Forklifts            | 175  | 0.209 | 3.170 | 1.653 | 0.005 |
| Forklifts            | 250  | 0.191 | 1.214 | 1.466 | 0.005 |
| Forklifts            | 500  | 0.215 | 1.222 | 1.658 | 0.005 |
| Generator Sets       | 15   | 0.607 | 3.491 | 4.269 | 0.008 |
| Generator Sets       | 25   | 0.694 | 2.376 | 4.407 | 0.007 |
| Generator Sets       | 50   | 0.440 | 3.758 | 3.481 | 0.007 |
| Generator Sets       | 120  | 0.243 | 3.338 | 2.185 | 0.006 |
| Generator Sets       | 175  | 0.184 | 2.930 | 1.297 | 0.006 |
| Generator Sets       | 250  | 0.147 | 1.000 | 1.020 | 0.006 |
| Generator Sets       | 500  | 0.144 | 0.981 | 0.945 | 0.005 |
| Generator Sets       | 750  | 0.145 | 0.981 | 0.964 | 0.005 |
| Generator Sets       | 9999 | 0.173 | 1.008 | 2.812 | 0.005 |
| Graders              | 50   | 1.864 | 7.125 | 5.043 | 0.005 |
| Graders              | 120  | 0.638 | 4.149 | 5.074 | 0.005 |
| Graders              | 175  | 0.329 | 3.418 | 2.774 | 0.005 |
| Graders              | 250  | 0.230 | 1.179 | 2.556 | 0.005 |
| Graders              | 500  | 0.280 | 1.315 | 2.265 | 0.005 |
| Graders              | 750  | 0.253 | 1.141 | 1.125 | 0.005 |
| Off-Highway Tractors | 120  | 0.276 | 3.669 | 2.707 | 0.005 |
| Off-Highway Tractors | 175  | 0.175 | 3.142 | 1.349 | 0.005 |
| Off-Highway Tractors | 250  | 0.155 | 1.130 | 1.116 | 0.005 |
| Off-Highway Tractors | 750  | 0.167 | 1.135 | 1.118 | 0.005 |
| Off-Highway Tractors | 1000 | 0.198 | 1.077 | 2.482 | 0.005 |
| Off-Highway Trucks   | 175  | 0.214 | 3.328 | 1.335 | 0.005 |
| Off-Highway Trucks   | 250  | 0.185 | 1.213 | 1.129 | 0.005 |

|       |       |
|-------|-------|
| 0.154 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 |

|       |       |
|-------|-------|
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.169 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.169 | 0.005 |
| 0.169 | 0.005 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.054 | 0.005 |
| 0.062 | 0.005 |
| 0.027 | 0.005 |
| 0.017 | 0.004 |
| 0.016 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 |

|       |       |
|-------|-------|
| 0.008 | 0.004 |
| 0.061 | 0.005 |
| 0.064 | 0.005 |
| 0.043 | 0.005 |
| 0.023 | 0.004 |
| 0.018 | 0.004 |
| 0.014 | 0.004 |
| 0.014 | 0.004 |
| 0.014 | 0.004 |
| 0.016 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.155 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.155 | 0.004 |
| 0.153 | 0.004 |
| 0.037 | 0.004 |
| 0.169 | 0.005 |
| 0.169 | 0.005 |
| 0.151 | 0.004 |
| 0.152 | 0.004 |

|                         |      |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 |
| Pumps                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 |
| Pumps                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 |
| Pumps                   | 50   | 0.485 | 3.943 | 3.528 | 0.007 |
| Pumps                   | 120  | 0.261 | 3.389 | 2.213 | 0.006 |
| Pumps                   | 175  | 0.199 | 2.974 | 1.318 | 0.006 |
| Pumps                   | 250  | 0.159 | 1.016 | 1.038 | 0.006 |
| Pumps                   | 500  | 0.156 | 0.992 | 0.958 | 0.005 |
| Pumps                   | 750  | 0.157 | 0.992 | 0.977 | 0.005 |
| Pumps                   | 9999 | 0.186 | 1.020 | 2.840 | 0.005 |
| Rollers                 | 15   | 0.569 | 4.125 | 3.689 | 0.005 |
| Rollers                 | 25   | 0.569 | 4.125 | 3.689 | 0.005 |
| Rollers                 | 50   | 0.569 | 4.125 | 3.689 | 0.005 |
| Rollers                 | 120  | 0.255 | 3.444 | 2.691 | 0.005 |
| Rollers                 | 175  | 0.127 | 2.909 | 1.101 | 0.005 |
| Rollers                 | 250  | 0.173 | 1.215 | 1.783 | 0.005 |
| Rollers                 | 500  | 0.212 | 1.968 | 2.200 | 0.005 |
| Rough Terrain Forklifts | 50   | 0.456 | 3.740 | 3.477 | 0.005 |
| Rough Terrain Forklifts | 120  | 0.137 | 3.240 | 1.821 | 0.005 |
| Rough Terrain Forklifts | 175  | 0.087 | 2.821 | 0.786 | 0.005 |
| Rough Terrain Forklifts | 250  | 0.123 | 1.001 | 1.489 | 0.005 |
| Rough Terrain Forklifts | 500  | 0.069 | 0.942 | 0.477 | 0.005 |
| Rubber Tired Dozers     | 175  | 0.461 | 3.612 | 4.229 | 0.005 |
| Rubber Tired Dozers     | 250  | 0.372 | 1.720 | 3.805 | 0.005 |
| Rubber Tired Dozers     | 500  | 0.367 | 2.959 | 3.370 | 0.005 |
| Rubber Tired Dozers     | 750  | 0.428 | 2.601 | 5.333 | 0.005 |
| Rubber Tired Dozers     | 1000 | 0.414 | 1.725 | 4.365 | 0.005 |
| Rubber Tired Loaders    | 25   | 0.960 | 5.941 | 4.348 | 0.005 |
| Rubber Tired Loaders    | 50   | 0.960 | 5.941 | 4.348 | 0.005 |
| Rubber Tired Loaders    | 120  | 0.352 | 3.791 | 2.970 | 0.005 |
| Rubber Tired Loaders    | 175  | 0.224 | 3.281 | 1.590 | 0.005 |

|       |       |
|-------|-------|
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.150 | 0.004 |
| 0.153 | 0.004 |
| 0.156 | 0.004 |
| 0.155 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.047 | 0.005 |
| 0.025 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.153 | 0.004 |
| 0.173 | 0.005 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.166 | 0.005 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 |
| Sweepers/Scrubbers        | 15   | 0.622 | 4.768 | 3.856 | 0.005 |
| Sweepers/Scrubbers        | 25   | 0.622 | 4.768 | 3.856 | 0.005 |
| Sweepers/Scrubbers        | 50   | 0.622 | 4.768 | 3.856 | 0.005 |
| Sweepers/Scrubbers        | 120  | 0.303 | 3.664 | 2.817 | 0.005 |
| Sweepers/Scrubbers        | 175  | 0.213 | 3.201 | 1.638 | 0.005 |
| Sweepers/Scrubbers        | 250  | 0.170 | 1.140 | 1.616 | 0.005 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 |

|       |       |
|-------|-------|
| 0.166 | 0.005 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.154 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.061 | 0.005 |
| 0.064 | 0.005 |
| 0.054 | 0.005 |
| 0.028 | 0.004 |
| 0.022 | 0.004 |
| 0.018 | 0.004 |
| 0.017 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 |

2027

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|
| PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 0.026   | 0.024   | 472.114 | 0.153   | 0.004   |
| 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.028   | 0.028   | 568.299 | 0.013   | 0.004   |
|         |         |         |         |         |
| 0.183   | 0.183   | 568.300 | 0.061   | 0.005   |
|         |         |         |         |         |
| 0.177   | 0.177   | 568.299 | 0.064   | 0.005   |
|         |         |         |         |         |
| 0.116   | 0.116   | 568.299 | 0.059   | 0.005   |
|         |         |         |         |         |
| 0.104   | 0.104   | 568.299 | 0.031   | 0.004   |
|         |         |         |         |         |
| 0.065   | 0.065   | 568.299 | 0.024   | 0.004   |
|         |         |         |         |         |
| 0.033   | 0.033   | 568.299 | 0.019   | 0.004   |
|         |         |         |         |         |
| 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
|         |         |         |         |         |
| 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
|         |         |         |         |         |
| 0.055   | 0.055   | 568.299 | 0.020   | 0.004   |
|         |         |         |         |         |
| 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
|         |         |         |         |         |
| 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
|         |         |         |         |         |
| 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
|         |         |         |         |         |
| 0.067   | 0.062   | 459.829 | 0.149   | 0.004   |
|         |         |         |         |         |
| 0.039   | 0.036   | 478.266 | 0.155   | 0.004   |
|         |         |         |         |         |
| 0.031   | 0.029   | 470.654 | 0.152   | 0.004   |
|         |         |         |         |         |
| 0.028   | 0.026   | 467.289 | 0.151   | 0.004   |
|         |         |         |         |         |
| 0.023   | 0.021   | 481.250 | 0.156   | 0.004   |
|         |         |         |         |         |
| 0.019   | 0.017   | 471.917 | 0.153   | 0.004   |

| 2027             |       | g/hp/hr |
|------------------|-------|---------|
| Equipment        | MaxHP | ROG     |
| Aerial Lifts     | 15    | 0.154   |
| Aerial Lifts     | 25    | 0.154   |
| Aerial Lifts     | 50    | 0.154   |
| Aerial Lifts     | 120   | 0.099   |
| Aerial Lifts     | 500   | 0.085   |
| Aerial Lifts     | 750   | 0.153   |
| Air Compressor s |       |         |
| Air Compressor s | 15    | 0.683   |
| Air Compressor s | 25    | 0.709   |
| Air Compressor s | 50    | 0.659   |
| Air Compressor s | 120   | 0.345   |
| Air Compressor s | 175   | 0.269   |
| Air Compressor s | 250   | 0.220   |
| Air Compressor s | 500   | 0.217   |
| Air Compressor s | 750   | 0.217   |
| Air Compressor s | 1000  | 0.231   |
| Bore/Drill Rigs  | 15    | 0.591   |
| Bore/Drill Rigs  | 25    | 0.591   |
| Bore/Drill Rigs  | 50    | 0.591   |
| Bore/Drill Rigs  | 120   | 0.155   |
| Bore/Drill Rigs  | 175   | 0.114   |
| Bore/Drill Rigs  | 250   | 0.107   |
| Bore/Drill Rigs  | 500   | 0.102   |
| Bore/Drill Rigs  | 750   | 0.085   |
| Bore/Drill Rigs  | 1000  | 0.062   |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.168 | 0.168 | 568.299 | 0.062 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.099 | 0.099 | 568.299 | 0.047 | 0.005 |
| 0.089 | 0.089 | 568.300 | 0.025 | 0.004 |
| 0.056 | 0.056 | 568.300 | 0.019 | 0.004 |
| 0.543 | 0.499 | 517.872 | 0.168 | 0.005 |
| 0.260 | 0.240 | 469.533 | 0.152 | 0.004 |
| 0.166 | 0.153 | 474.748 | 0.154 | 0.004 |
| 0.114 | 0.105 | 472.980 | 0.153 | 0.004 |
| 0.088 | 0.081 | 471.967 | 0.153 | 0.004 |
| 0.068 | 0.062 | 470.276 | 0.152 | 0.004 |
| 0.065 | 0.060 | 472.055 | 0.153 | 0.004 |
| 0.456 | 0.420 | 516.128 | 0.167 | 0.005 |
| 0.285 | 0.262 | 476.134 | 0.154 | 0.004 |
| 0.150 | 0.138 | 471.592 | 0.153 | 0.004 |
| 0.096 | 0.088 | 471.622 | 0.153 | 0.004 |
| 0.081 | 0.074 | 474.007 | 0.153 | 0.004 |
| 0.057 | 0.052 | 472.408 | 0.153 | 0.004 |
| 0.112 | 0.103 | 475.490 | 0.154 | 0.004 |
| 0.107 | 0.107 | 568.299 | 0.059 | 0.005 |
| 0.095 | 0.095 | 568.299 | 0.031 | 0.004 |
| 0.060 | 0.060 | 568.299 | 0.024 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.020 | 0.004 |
| 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 0.053 | 0.053 | 568.299 | 0.023 | 0.004 |

|                          |      |       |
|--------------------------|------|-------|
| Cement and Mortar Mixers | 15   | 0.661 |
| Cement and Mortar Mixers | 25   | 0.689 |
| Concrete/Industrial Saws | 25   | 0.685 |
| Concrete/Industrial Saws | 50   | 0.525 |
| Concrete/Industrial Saws | 120  | 0.283 |
| Concrete/Industrial Saws | 175  | 0.220 |
| Cranes                   | 50   | 1.811 |
| Cranes                   | 120  | 0.463 |
| Cranes                   | 175  | 0.334 |
| Cranes                   | 250  | 0.265 |
| Cranes                   | 500  | 0.218 |
| Cranes                   | 750  | 0.172 |
| Cranes                   | 9999 | 0.229 |
| Crawler Tractors         | 50   | 1.744 |
| Crawler Tractors         | 120  | 0.454 |
| Crawler Tractors         | 175  | 0.298 |
| Crawler Tractors         | 250  | 0.232 |
| Crawler Tractors         | 500  | 0.208 |
| Crawler Tractors         | 750  | 0.167 |
| Crawler Tractors         | 1000 | 0.260 |
| Crushing/Proc. Equipment | 50   | 0.656 |
| Crushing/Proc. Equipment | 120  | 0.345 |
| Crushing/Proc. Equipment | 175  | 0.270 |
| Crushing/Proc. Equipment | 250  | 0.224 |
| Crushing/Proc. Equipment | 500  | 0.221 |
| Crushing/Proc. Equipment | 750  | 0.222 |
| Crushing/Proc. Equipment | 9999 | 0.261 |



|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 0.085 | 0.078 | 466.738 | 0.151 | 0.004 |
| 0.057 | 0.052 | 472.496 | 0.153 | 0.004 |
| 0.032 | 0.029 | 472.560 | 0.153 | 0.004 |
| 0.026 | 0.024 | 470.292 | 0.152 | 0.004 |
| 0.038 | 0.035 | 468.558 | 0.152 | 0.004 |
| 0.178 | 0.164 | 525.483 | 0.170 | 0.005 |
| 0.140 | 0.128 | 471.529 | 0.153 | 0.004 |
| 0.084 | 0.078 | 472.106 | 0.153 | 0.004 |
| 0.056 | 0.052 | 473.326 | 0.153 | 0.004 |
| 0.062 | 0.057 | 473.615 | 0.153 | 0.004 |
| 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 0.093 | 0.093 | 568.300 | 0.039 | 0.005 |
| 0.087 | 0.087 | 568.299 | 0.021 | 0.004 |
| 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.013 | 0.004 |
| 0.027 | 0.027 | 568.300 | 0.013 | 0.004 |
| 0.027 | 0.027 | 568.299 | 0.013 | 0.004 |
| 0.047 | 0.047 | 568.299 | 0.015 | 0.004 |
| 0.522 | 0.480 | 493.532 | 0.160 | 0.005 |
| 0.371 | 0.342 | 468.316 | 0.152 | 0.004 |
| 0.152 | 0.140 | 478.508 | 0.155 | 0.004 |
| 0.082 | 0.076 | 473.470 | 0.153 | 0.004 |
| 0.088 | 0.081 | 470.753 | 0.152 | 0.004 |
| 0.041 | 0.041 | 568.300 | 0.022 | 0.004 |
| 0.144 | 0.132 | 476.921 | 0.154 | 0.004 |
| 0.065 | 0.060 | 473.302 | 0.153 | 0.004 |
| 0.040 | 0.037 | 470.861 | 0.152 | 0.004 |
| 0.045 | 0.041 | 471.917 | 0.153 | 0.004 |
| 0.070 | 0.064 | 472.055 | 0.153 | 0.004 |
| 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |

|                      |      |       |
|----------------------|------|-------|
| Dumpers/Tractors     | 25   | 0.685 |
| Excavators           | 25   | 0.403 |
| Excavators           | 50   | 0.403 |
| Excavators           | 120  | 0.201 |
| Excavators           | 175  | 0.158 |
| Excavators           | 250  | 0.131 |
| Excavators           | 500  | 0.115 |
| Excavators           | 750  | 0.139 |
| Forklifts            | 50   | 0.636 |
| Forklifts            | 120  | 0.277 |
| Forklifts            | 175  | 0.209 |
| Forklifts            | 250  | 0.191 |
| Forklifts            | 500  | 0.215 |
| Generator Sets       | 15   | 0.607 |
| Generator Sets       | 25   | 0.694 |
| Generator Sets       | 50   | 0.440 |
| Generator Sets       | 120  | 0.243 |
| Generator Sets       | 175  | 0.184 |
| Generator Sets       | 250  | 0.147 |
| Generator Sets       | 500  | 0.144 |
| Generator Sets       | 750  | 0.145 |
| Generator Sets       | 9999 | 0.173 |
| Graders              | 50   | 1.864 |
| Graders              | 120  | 0.638 |
| Graders              | 175  | 0.329 |
| Graders              | 250  | 0.230 |
| Graders              | 500  | 0.280 |
| Graders              | 750  | 0.253 |
| Off-Highway Tractors | 120  | 0.276 |
| Off-Highway Tractors | 175  | 0.175 |
| Off-Highway Tractors | 250  | 0.155 |
| Off-Highway Tractors | 750  | 0.167 |
| Off-Highway Tractors | 1000 | 0.198 |
| Off-Highway Trucks   | 175  | 0.214 |
| Off-Highway Trucks   | 250  | 0.185 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |
| 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 0.203 | 0.187 | 472.748 | 0.153 | 0.004 |
| 0.112 | 0.103 | 469.843 | 0.152 | 0.004 |
| 0.059 | 0.055 | 476.296 | 0.154 | 0.004 |
| 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 0.118 | 0.109 | 470.000 | 0.152 | 0.004 |
| 0.070 | 0.065 | 471.850 | 0.153 | 0.004 |
| 0.036 | 0.033 | 473.223 | 0.153 | 0.004 |
| 0.035 | 0.033 | 472.929 | 0.153 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Off-Highway Trucks                 | 500  | 0.177 |
| Off-Highway Trucks                 | 750  | 0.235 |
| Off-Highway Trucks                 | 1000 | 0.187 |
| Other Construction Equipment       | 15   | 0.757 |
| Other Construction Equipment       | 25   | 0.757 |
| Other Construction Equipment       | 50   | 0.757 |
| Other Construction Equipment       | 120  | 0.341 |
| Other Construction Equipment       | 175  | 0.235 |
| Other Construction Equipment       | 500  | 0.168 |
| Other General Industrial Equipment | 15   | 0.492 |
| Other General Industrial Equipment | 25   | 0.492 |
| Other General Industrial Equipment | 50   | 0.492 |
| Other General Industrial Equipment | 120  | 0.258 |
| Other General Industrial Equipment | 175  | 0.189 |
| Other General Industrial Equipment | 250  | 0.155 |
| Other General Industrial Equipment | 500  | 0.152 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 0.081 | 0.074 | 472.055 | 0.153 | 0.004 |
| 0.239 | 0.219 | 523.709 | 0.169 | 0.005 |
| 0.081 | 0.074 | 473.588 | 0.153 | 0.004 |
| 0.072 | 0.067 | 472.219 | 0.153 | 0.004 |
| 0.060 | 0.055 | 471.482 | 0.153 | 0.004 |
| 0.067 | 0.061 | 470.297 | 0.152 | 0.004 |
| 0.019 | 0.017 | 472.055 | 0.153 | 0.004 |
| 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 0.191 | 0.175 | 469.899 | 0.152 | 0.004 |
| 0.077 | 0.071 | 472.485 | 0.153 | 0.004 |
| 0.034 | 0.031 | 473.483 | 0.153 | 0.004 |
| 0.039 | 0.036 | 465.882 | 0.151 | 0.004 |
| 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 0.118 | 0.108 | 473.424 | 0.153 | 0.004 |
| 0.075 | 0.069 | 470.484 | 0.152 | 0.004 |
| 0.043 | 0.040 | 472.234 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 0.075 | 0.075 | 568.299 | 0.027 | 0.005 |
| 0.072 | 0.072 | 568.299 | 0.017 | 0.004 |
| 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Other General Industrial Equipment | 750  | 0.117 |
| Other General Industrial Equipment | 1000 | 0.203 |
| Other Material Handling Equipment  | 50   | 0.744 |
| Other Material Handling Equipment  | 120  | 0.203 |
| Other Material Handling Equipment  | 175  | 0.189 |
| Other Material Handling Equipment  | 250  | 0.200 |
| Other Material Handling Equipment  | 500  | 0.204 |
| Other Material Handling Equipment  | 9999 | 0.065 |
| Pavers                             | 25   | 0.918 |
| Pavers                             | 50   | 0.918 |
| Pavers                             | 120  | 0.314 |
| Pavers                             | 175  | 0.181 |
| Pavers                             | 250  | 0.107 |
| Pavers                             | 500  | 0.115 |
| Paving Equipment                   | 25   | 0.476 |
| Paving Equipment                   | 50   | 0.476 |
| Paving Equipment                   | 120  | 0.242 |
| Paving Equipment                   | 175  | 0.175 |
| Paving Equipment                   | 250  | 0.133 |
| Plate Compactors                   | 15   | 0.661 |
| Pressure Washers                   | 15   | 0.607 |
| Pressure Washers                   | 25   | 0.694 |
| Pressure Washers                   | 50   | 0.306 |
| Pressure Washers                   | 120  | 0.189 |
| Pressure Washers                   | 175  | 0.178 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.183 | 0.183 | 568.299 | 0.061 | 0.005 |
| 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 0.099 | 0.099 | 568.299 | 0.043 | 0.005 |
| 0.092 | 0.092 | 568.299 | 0.023 | 0.004 |
| 0.056 | 0.056 | 568.300 | 0.018 | 0.004 |
| 0.029 | 0.029 | 568.299 | 0.014 | 0.004 |
| 0.028 | 0.028 | 568.300 | 0.014 | 0.004 |
| 0.029 | 0.029 | 568.300 | 0.014 | 0.004 |
| 0.049 | 0.049 | 568.299 | 0.016 | 0.004 |
| 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 0.135 | 0.125 | 473.851 | 0.153 | 0.004 |
| 0.049 | 0.046 | 471.970 | 0.153 | 0.004 |
| 0.066 | 0.060 | 473.681 | 0.153 | 0.004 |
| 0.091 | 0.083 | 477.573 | 0.155 | 0.004 |
| 0.128 | 0.118 | 525.027 | 0.170 | 0.005 |
| 0.051 | 0.047 | 473.037 | 0.153 | 0.004 |
| 0.030 | 0.028 | 471.475 | 0.153 | 0.004 |
| 0.035 | 0.033 | 472.927 | 0.153 | 0.004 |
| 0.009 | 0.008 | 466.541 | 0.151 | 0.004 |
| 0.231 | 0.212 | 474.103 | 0.153 | 0.004 |
| 0.167 | 0.153 | 474.573 | 0.154 | 0.004 |
| 0.151 | 0.139 | 479.092 | 0.155 | 0.004 |
| 0.196 | 0.181 | 472.998 | 0.153 | 0.004 |
| 0.115 | 0.115 | 568.299 | 0.037 | 0.004 |
| 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 0.179 | 0.165 | 466.898 | 0.151 | 0.004 |
| 0.084 | 0.077 | 470.459 | 0.152 | 0.004 |

|                         |      |       |
|-------------------------|------|-------|
| Pressure Washers        | 250  | 0.098 |
| Pumps                   | 15   | 0.683 |
| Pumps                   | 25   | 0.709 |
| Pumps                   | 50   | 0.485 |
| Pumps                   | 120  | 0.261 |
| Pumps                   | 175  | 0.199 |
| Pumps                   | 250  | 0.159 |
| Pumps                   | 500  | 0.156 |
| Pumps                   | 750  | 0.157 |
| Pumps                   | 9999 | 0.186 |
| Rollers                 | 15   | 0.569 |
| Rollers                 | 25   | 0.569 |
| Rollers                 | 50   | 0.569 |
| Rollers                 | 120  | 0.255 |
| Rollers                 | 175  | 0.127 |
| Rollers                 | 250  | 0.173 |
| Rollers                 | 500  | 0.212 |
| Rough Terrain Forklifts | 50   | 0.456 |
| Rough Terrain Forklifts | 120  | 0.137 |
| Rough Terrain Forklifts | 175  | 0.087 |
| Rough Terrain Forklifts | 250  | 0.123 |
| Rough Terrain Forklifts | 500  | 0.069 |
| Rubber Tired Dozers     | 175  | 0.461 |
| Rubber Tired Dozers     | 250  | 0.372 |
| Rubber Tired Dozers     | 500  | 0.367 |
| Rubber Tired Dozers     | 750  | 0.428 |
| Rubber Tired Dozers     | 1000 | 0.414 |
| Rubber Tired Loaders    | 25   | 0.960 |
| Rubber Tired Loaders    | 50   | 0.960 |
| Rubber Tired Loaders    | 120  | 0.352 |
| Rubber Tired Loaders    | 175  | 0.224 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.048 | 0.045 | 469.871 | 0.152 | 0.004 |
| 0.053 | 0.048 | 469.143 | 0.152 | 0.004 |
| 0.064 | 0.059 | 465.052 | 0.150 | 0.004 |
| 0.052 | 0.048 | 472.456 | 0.153 | 0.004 |
| 0.405 | 0.372 | 482.363 | 0.156 | 0.004 |
| 0.137 | 0.126 | 478.948 | 0.155 | 0.004 |
| 0.125 | 0.115 | 469.446 | 0.152 | 0.004 |
| 0.081 | 0.074 | 472.539 | 0.153 | 0.004 |
| 0.064 | 0.059 | 472.115 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.098 | 0.098 | 568.299 | 0.047 | 0.005 |
| 0.089 | 0.089 | 568.299 | 0.025 | 0.004 |
| 0.055 | 0.055 | 568.299 | 0.019 | 0.004 |
| 0.035 | 0.035 | 686.695 | 0.019 | 0.004 |
| 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 0.057 | 0.052 | 472.630 | 0.153 | 0.004 |
| 0.082 | 0.075 | 536.140 | 0.173 | 0.005 |
| 0.124 | 0.114 | 476.766 | 0.154 | 0.004 |
| 0.094 | 0.087 | 471.040 | 0.152 | 0.004 |
| 0.055 | 0.051 | 477.110 | 0.154 | 0.004 |
| 0.051 | 0.047 | 470.283 | 0.152 | 0.004 |
| 0.027 | 0.025 | 470.551 | 0.152 | 0.004 |
| 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 0.160 | 0.147 | 474.116 | 0.153 | 0.004 |
| 0.072 | 0.066 | 473.122 | 0.153 | 0.004 |
| 0.051 | 0.047 | 470.126 | 0.152 | 0.004 |
| 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |

|                           |      |       |
|---------------------------|------|-------|
| Rubber Tired Loaders      | 250  | 0.177 |
| Rubber Tired Loaders      | 500  | 0.193 |
| Rubber Tired Loaders      | 750  | 0.212 |
| Rubber Tired Loaders      | 1000 | 0.166 |
| Scrapers                  | 120  | 0.566 |
| Scrapers                  | 175  | 0.290 |
| Scrapers                  | 250  | 0.291 |
| Scrapers                  | 500  | 0.216 |
| Scrapers                  | 750  | 0.184 |
| Signal Boards             | 15   | 0.661 |
| Signal Boards             | 50   | 0.522 |
| Signal Boards             | 120  | 0.278 |
| Signal Boards             | 175  | 0.215 |
| Signal Boards             | 250  | 0.213 |
| Skid Steer Loaders        | 25   | 0.341 |
| Skid Steer Loaders        | 50   | 0.341 |
| Skid Steer Loaders        | 120  | 0.140 |
| Surfacing Equipment       | 50   | 0.235 |
| Surfacing Equipment       | 120  | 0.232 |
| Surfacing Equipment       | 175  | 0.187 |
| Surfacing Equipment       | 250  | 0.148 |
| Surfacing Equipment       | 500  | 0.128 |
| Surfacing Equipment       | 750  | 0.085 |
| Sweepers/S crubbers       | 15   | 0.622 |
| Sweepers/S crubbers       | 25   | 0.622 |
| Sweepers/S crubbers       | 50   | 0.622 |
| Sweepers/S crubbers       | 120  | 0.303 |
| Sweepers/S crubbers       | 175  | 0.213 |
| Sweepers/S crubbers       | 250  | 0.170 |
| Tractors/Loaders/Backhoes | 25   | 0.550 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |
| 0.086 | 0.079 | 477.188 | 0.154 | 0.004 |
| 0.059 | 0.054 | 469.329 | 0.152 | 0.004 |
| 0.047 | 0.044 | 470.598 | 0.152 | 0.004 |
| 0.039 | 0.036 | 470.910 | 0.152 | 0.004 |
| 0.067 | 0.062 | 466.452 | 0.151 | 0.004 |
| 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 0.285 | 0.262 | 475.901 | 0.154 | 0.004 |
| 0.179 | 0.165 | 467.732 | 0.151 | 0.004 |
| 0.144 | 0.133 | 473.917 | 0.153 | 0.004 |
| 0.079 | 0.072 | 470.439 | 0.152 | 0.004 |
| 0.009 | 0.009 | 474.486 | 0.154 | 0.004 |
| 0.183 | 0.183 | 568.300 | 0.061 | 0.005 |
| 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 0.112 | 0.112 | 568.299 | 0.054 | 0.005 |
| 0.102 | 0.102 | 568.299 | 0.028 | 0.004 |
| 0.063 | 0.063 | 568.299 | 0.022 | 0.004 |
| 0.032 | 0.032 | 568.299 | 0.018 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.017 | 0.004 |
| 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |
| 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |

|                           |      |       |
|---------------------------|------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 |
| Tractors/Loaders/Backhoes | 120  | 0.209 |
| Tractors/Loaders/Backhoes | 175  | 0.162 |
| Tractors/Loaders/Backhoes | 250  | 0.154 |
| Tractors/Loaders/Backhoes | 500  | 0.144 |
| Tractors/Loaders/Backhoes | 750  | 0.187 |
| Trenchers                 | 15   | 0.542 |
| Trenchers                 | 25   | 0.542 |
| Trenchers                 | 50   | 0.542 |
| Trenchers                 | 120  | 0.457 |
| Trenchers                 | 175  | 0.358 |
| Trenchers                 | 250  | 0.307 |
| Trenchers                 | 500  | 0.191 |
| Trenchers                 | 750  | 0.067 |
| Welders                   | 15   | 0.683 |
| Welders                   | 25   | 0.709 |
| Welders                   | 50   | 0.602 |
| Welders                   | 120  | 0.316 |
| Welders                   | 175  | 0.245 |
| Welders                   | 250  | 0.199 |
| Welders                   | 500  | 0.196 |
| Water Trucks              | 175  | 0.214 |
| Water Trucks              | 250  | 0.185 |
| Water Trucks              | 500  | 0.177 |
| Water Trucks              | 750  | 0.235 |
| Water Trucks              | 1000 | 0.187 |

2028

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|
| CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 3.167   | 1.511   | 0.005   | 0.026   | 0.024   | 472.114 | 0.153   | 0.004   |
| 0.970   | 0.649   | 0.005   | 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.989   | 0.974   | 0.005   | 0.028   | 0.028   | 568.299 | 0.013   | 0.004   |
| 3.491   | 4.278   | 0.008   | 0.183   | 0.183   | 568.300 | 0.061   | 0.005   |
| 2.376   | 4.407   | 0.007   | 0.177   | 0.177   | 568.299 | 0.064   | 0.005   |
| 4.851   | 3.755   | 0.007   | 0.116   | 0.116   | 568.299 | 0.059   | 0.005   |
| 3.653   | 2.313   | 0.006   | 0.104   | 0.104   | 568.299 | 0.031   | 0.004   |
| 3.205   | 1.383   | 0.006   | 0.065   | 0.065   | 568.299 | 0.024   | 0.004   |
| 1.094   | 1.086   | 0.006   | 0.033   | 0.033   | 568.299 | 0.019   | 0.004   |
| 1.051   | 1.001   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
| 1.051   | 1.021   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
| 1.079   | 2.954   | 0.005   | 0.055   | 0.055   | 568.299 | 0.020   | 0.004   |
| 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 3.218   | 1.964   | 0.005   | 0.067   | 0.062   | 459.829 | 0.149   | 0.004   |
| 2.974   | 0.888   | 0.005   | 0.039   | 0.036   | 478.266 | 0.155   | 0.004   |
| 1.045   | 0.957   | 0.005   | 0.031   | 0.029   | 470.654 | 0.152   | 0.004   |
| 0.997   | 0.823   | 0.005   | 0.028   | 0.026   | 467.289 | 0.151   | 0.004   |
| 0.983   | 0.596   | 0.005   | 0.023   | 0.021   | 481.250 | 0.156   | 0.004   |
| 0.953   | 2.289   | 0.005   | 0.019   | 0.017   | 471.917 | 0.153   | 0.004   |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.344 | 4.357 | 0.007 | 0.168 | 0.168 | 568.299 | 0.062 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.297 | 3.592 | 0.007 | 0.099 | 0.099 | 568.299 | 0.047 | 0.005 |
| 3.495 | 2.176 | 0.006 | 0.089 | 0.089 | 568.300 | 0.025 | 0.004 |
| 3.073 | 1.249 | 0.006 | 0.056 | 0.056 | 568.300 | 0.019 | 0.004 |
| 7.072 | 5.636 | 0.005 | 0.543 | 0.499 | 517.872 | 0.168 | 0.005 |
| 3.831 | 4.135 | 0.005 | 0.260 | 0.240 | 469.533 | 0.152 | 0.004 |
| 3.335 | 3.160 | 0.005 | 0.166 | 0.153 | 474.748 | 0.154 | 0.004 |
| 1.470 | 2.681 | 0.005 | 0.114 | 0.105 | 472.980 | 0.153 | 0.004 |
| 1.834 | 2.154 | 0.005 | 0.088 | 0.081 | 471.967 | 0.153 | 0.004 |
| 1.274 | 1.638 | 0.005 | 0.068 | 0.062 | 470.276 | 0.152 | 0.004 |
| 1.038 | 2.422 | 0.005 | 0.065 | 0.060 | 472.055 | 0.153 | 0.004 |
| 6.686 | 4.936 | 0.005 | 0.456 | 0.420 | 516.128 | 0.167 | 0.005 |
| 3.788 | 3.961 | 0.005 | 0.285 | 0.262 | 476.134 | 0.154 | 0.004 |
| 3.209 | 2.688 | 0.005 | 0.150 | 0.138 | 471.592 | 0.153 | 0.004 |
| 1.308 | 2.462 | 0.005 | 0.096 | 0.088 | 471.622 | 0.153 | 0.004 |
| 1.717 | 1.920 | 0.005 | 0.081 | 0.074 | 474.007 | 0.153 | 0.004 |
| 1.122 | 1.545 | 0.005 | 0.057 | 0.052 | 472.408 | 0.153 | 0.004 |
| 1.593 | 4.598 | 0.005 | 0.112 | 0.103 | 475.490 | 0.154 | 0.004 |
| 4.982 | 3.742 | 0.007 | 0.107 | 0.107 | 568.299 | 0.059 | 0.005 |
| 3.694 | 2.248 | 0.006 | 0.095 | 0.095 | 568.299 | 0.031 | 0.004 |
| 3.246 | 1.301 | 0.006 | 0.060 | 0.060 | 568.299 | 0.024 | 0.004 |
| 1.108 | 1.012 | 0.006 | 0.031 | 0.031 | 568.299 | 0.020 | 0.004 |
| 1.061 | 0.937 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 1.061 | 0.955 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 1.087 | 2.910 | 0.005 | 0.053 | 0.053 | 568.299 | 0.023 | 0.004 |



|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 3.439 | 2.082 | 0.005 | 0.085 | 0.078 | 466.738 | 0.151 | 0.004 |
| 3.078 | 1.154 | 0.005 | 0.057 | 0.052 | 472.496 | 0.153 | 0.004 |
| 1.081 | 0.962 | 0.005 | 0.032 | 0.029 | 472.560 | 0.153 | 0.004 |
| 1.051 | 0.726 | 0.005 | 0.026 | 0.024 | 470.292 | 0.152 | 0.004 |
| 1.135 | 1.026 | 0.005 | 0.038 | 0.035 | 468.558 | 0.152 | 0.004 |
| 5.029 | 3.932 | 0.005 | 0.178 | 0.164 | 525.483 | 0.170 | 0.005 |
| 3.611 | 2.607 | 0.005 | 0.140 | 0.128 | 471.529 | 0.153 | 0.004 |
| 3.170 | 1.653 | 0.005 | 0.084 | 0.078 | 472.106 | 0.153 | 0.004 |
| 1.214 | 1.466 | 0.005 | 0.056 | 0.052 | 473.326 | 0.153 | 0.004 |
| 1.222 | 1.658 | 0.005 | 0.062 | 0.057 | 473.615 | 0.153 | 0.004 |
| 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 3.758 | 3.481 | 0.007 | 0.093 | 0.093 | 568.300 | 0.039 | 0.005 |
| 3.338 | 2.185 | 0.006 | 0.087 | 0.087 | 568.299 | 0.021 | 0.004 |
| 2.930 | 1.297 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |
| 1.000 | 1.020 | 0.006 | 0.028 | 0.028 | 568.299 | 0.013 | 0.004 |
| 0.981 | 0.945 | 0.005 | 0.027 | 0.027 | 568.300 | 0.013 | 0.004 |
| 0.981 | 0.964 | 0.005 | 0.027 | 0.027 | 568.299 | 0.013 | 0.004 |
| 1.008 | 2.812 | 0.005 | 0.047 | 0.047 | 568.299 | 0.015 | 0.004 |
| 7.125 | 5.043 | 0.005 | 0.522 | 0.480 | 493.532 | 0.160 | 0.005 |
| 4.149 | 5.074 | 0.005 | 0.371 | 0.342 | 468.316 | 0.152 | 0.004 |
| 3.418 | 2.774 | 0.005 | 0.152 | 0.140 | 478.508 | 0.155 | 0.004 |
| 1.179 | 2.556 | 0.005 | 0.082 | 0.076 | 473.470 | 0.153 | 0.004 |
| 1.315 | 2.265 | 0.005 | 0.088 | 0.081 | 470.753 | 0.152 | 0.004 |
| 1.141 | 1.125 | 0.005 | 0.041 | 0.041 | 568.300 | 0.022 | 0.004 |
| 3.669 | 2.707 | 0.005 | 0.144 | 0.132 | 476.921 | 0.154 | 0.004 |
| 3.142 | 1.349 | 0.005 | 0.065 | 0.060 | 473.302 | 0.153 | 0.004 |
| 1.130 | 1.116 | 0.005 | 0.040 | 0.037 | 470.861 | 0.152 | 0.004 |
| 1.135 | 1.118 | 0.005 | 0.045 | 0.041 | 471.917 | 0.153 | 0.004 |
| 1.077 | 2.482 | 0.005 | 0.070 | 0.064 | 472.055 | 0.153 | 0.004 |
| 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |
| 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 3.584 | 3.252 | 0.005 | 0.203 | 0.187 | 472.748 | 0.153 | 0.004 |
| 3.136 | 2.167 | 0.005 | 0.112 | 0.103 | 469.843 | 0.152 | 0.004 |
| 1.358 | 1.552 | 0.005 | 0.059 | 0.055 | 476.296 | 0.154 | 0.004 |
| 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 3.612 | 2.439 | 0.005 | 0.118 | 0.109 | 470.000 | 0.152 | 0.004 |
| 3.204 | 1.364 | 0.005 | 0.070 | 0.065 | 471.850 | 0.153 | 0.004 |
| 1.132 | 1.028 | 0.005 | 0.036 | 0.033 | 473.223 | 0.153 | 0.004 |
| 1.109 | 1.053 | 0.005 | 0.035 | 0.033 | 472.929 | 0.153 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.115 | 0.629 | 0.005 | 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 1.067 | 3.985 | 0.005 | 0.081 | 0.074 | 472.055 | 0.153 | 0.004 |
| 5.248 | 4.233 | 0.005 | 0.239 | 0.219 | 523.709 | 0.169 | 0.005 |
| 3.497 | 2.055 | 0.005 | 0.081 | 0.074 | 473.588 | 0.153 | 0.004 |
| 3.168 | 1.396 | 0.005 | 0.072 | 0.067 | 472.219 | 0.153 | 0.004 |
| 1.197 | 1.774 | 0.005 | 0.060 | 0.055 | 471.482 | 0.153 | 0.004 |
| 1.260 | 1.601 | 0.005 | 0.067 | 0.061 | 470.297 | 0.152 | 0.004 |
| 0.959 | 2.298 | 0.005 | 0.019 | 0.017 | 472.055 | 0.153 | 0.004 |
| 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 3.493 | 3.068 | 0.005 | 0.191 | 0.175 | 469.899 | 0.152 | 0.004 |
| 3.007 | 1.644 | 0.005 | 0.077 | 0.071 | 472.485 | 0.153 | 0.004 |
| 1.004 | 1.035 | 0.005 | 0.034 | 0.031 | 473.483 | 0.153 | 0.004 |
| 0.969 | 1.134 | 0.005 | 0.039 | 0.036 | 465.882 | 0.151 | 0.004 |
| 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 3.483 | 2.496 | 0.005 | 0.118 | 0.108 | 473.424 | 0.153 | 0.004 |
| 3.038 | 1.509 | 0.005 | 0.075 | 0.069 | 470.484 | 0.152 | 0.004 |
| 1.117 | 1.110 | 0.005 | 0.043 | 0.040 | 472.234 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 3.210 | 3.344 | 0.007 | 0.075 | 0.075 | 568.299 | 0.027 | 0.005 |
| 3.186 | 2.100 | 0.006 | 0.072 | 0.072 | 568.299 | 0.017 | 0.004 |
| 2.907 | 1.310 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.299 | 0.061 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 3.943 | 3.528 | 0.007 | 0.099 | 0.099 | 568.299 | 0.043 | 0.005 |
| 3.389 | 2.213 | 0.006 | 0.092 | 0.092 | 568.299 | 0.023 | 0.004 |
| 2.974 | 1.318 | 0.006 | 0.056 | 0.056 | 568.300 | 0.018 | 0.004 |
| 1.016 | 1.038 | 0.006 | 0.029 | 0.029 | 568.299 | 0.014 | 0.004 |
| 0.992 | 0.958 | 0.005 | 0.028 | 0.028 | 568.300 | 0.014 | 0.004 |
| 0.992 | 0.977 | 0.005 | 0.029 | 0.029 | 568.300 | 0.014 | 0.004 |
| 1.020 | 2.840 | 0.005 | 0.049 | 0.049 | 568.299 | 0.016 | 0.004 |
| 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 3.444 | 2.691 | 0.005 | 0.135 | 0.125 | 473.851 | 0.153 | 0.004 |
| 2.909 | 1.101 | 0.005 | 0.049 | 0.046 | 471.970 | 0.153 | 0.004 |
| 1.215 | 1.783 | 0.005 | 0.066 | 0.060 | 473.681 | 0.153 | 0.004 |
| 1.968 | 2.200 | 0.005 | 0.091 | 0.083 | 477.573 | 0.155 | 0.004 |
| 3.740 | 3.477 | 0.005 | 0.128 | 0.118 | 525.027 | 0.170 | 0.005 |
| 3.240 | 1.821 | 0.005 | 0.051 | 0.047 | 473.037 | 0.153 | 0.004 |
| 2.821 | 0.786 | 0.005 | 0.030 | 0.028 | 471.475 | 0.153 | 0.004 |
| 1.001 | 1.489 | 0.005 | 0.035 | 0.033 | 472.927 | 0.153 | 0.004 |
| 0.942 | 0.477 | 0.005 | 0.009 | 0.008 | 466.541 | 0.151 | 0.004 |
| 3.612 | 4.229 | 0.005 | 0.231 | 0.212 | 474.103 | 0.153 | 0.004 |
| 1.720 | 3.805 | 0.005 | 0.167 | 0.153 | 474.573 | 0.154 | 0.004 |
| 2.959 | 3.370 | 0.005 | 0.151 | 0.139 | 479.092 | 0.155 | 0.004 |
| 2.601 | 5.333 | 0.005 | 0.196 | 0.181 | 472.998 | 0.153 | 0.004 |
| 1.725 | 4.365 | 0.005 | 0.115 | 0.115 | 568.299 | 0.037 | 0.004 |
| 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 3.791 | 2.970 | 0.005 | 0.179 | 0.165 | 466.898 | 0.151 | 0.004 |
| 3.281 | 1.590 | 0.005 | 0.084 | 0.077 | 470.459 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.142 | 1.442 | 0.005 | 0.048 | 0.045 | 469.871 | 0.152 | 0.004 |
| 1.276 | 1.433 | 0.005 | 0.053 | 0.048 | 469.143 | 0.152 | 0.004 |
| 1.333 | 1.654 | 0.005 | 0.064 | 0.059 | 465.052 | 0.150 | 0.004 |
| 1.122 | 3.089 | 0.005 | 0.052 | 0.048 | 472.456 | 0.153 | 0.004 |
| 4.094 | 5.503 | 0.005 | 0.405 | 0.372 | 482.363 | 0.156 | 0.004 |
| 3.321 | 2.631 | 0.005 | 0.137 | 0.126 | 478.948 | 0.155 | 0.004 |
| 1.602 | 2.803 | 0.005 | 0.125 | 0.115 | 469.446 | 0.152 | 0.004 |
| 1.732 | 2.051 | 0.005 | 0.081 | 0.074 | 472.539 | 0.153 | 0.004 |
| 1.338 | 1.713 | 0.005 | 0.064 | 0.059 | 472.115 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.217 | 3.561 | 0.007 | 0.098 | 0.098 | 568.299 | 0.047 | 0.005 |
| 3.470 | 2.179 | 0.006 | 0.089 | 0.089 | 568.299 | 0.025 | 0.004 |
| 3.049 | 1.262 | 0.006 | 0.055 | 0.055 | 568.299 | 0.019 | 0.004 |
| 1.257 | 1.192 | 0.007 | 0.035 | 0.035 | 686.695 | 0.019 | 0.004 |
| 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 3.252 | 1.867 | 0.005 | 0.057 | 0.052 | 472.630 | 0.153 | 0.004 |
| 3.537 | 3.576 | 0.006 | 0.082 | 0.075 | 536.140 | 0.173 | 0.005 |
| 3.385 | 2.659 | 0.005 | 0.124 | 0.114 | 476.766 | 0.154 | 0.004 |
| 2.926 | 1.999 | 0.005 | 0.094 | 0.087 | 471.040 | 0.152 | 0.004 |
| 1.143 | 1.747 | 0.005 | 0.055 | 0.051 | 477.110 | 0.154 | 0.004 |
| 1.169 | 1.327 | 0.005 | 0.051 | 0.047 | 470.283 | 0.152 | 0.004 |
| 0.978 | 0.768 | 0.005 | 0.027 | 0.025 | 470.551 | 0.152 | 0.004 |
| 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 3.664 | 2.817 | 0.005 | 0.160 | 0.147 | 474.116 | 0.153 | 0.004 |
| 3.201 | 1.638 | 0.005 | 0.072 | 0.066 | 473.122 | 0.153 | 0.004 |
| 1.140 | 1.616 | 0.005 | 0.051 | 0.047 | 470.126 | 0.152 | 0.004 |
| 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |
| 3.522 | 2.109 | 0.005 | 0.086 | 0.079 | 477.188 | 0.154 | 0.004 |
| 3.083 | 1.180 | 0.005 | 0.059 | 0.054 | 469.329 | 0.152 | 0.004 |
| 1.146 | 1.235 | 0.005 | 0.047 | 0.044 | 470.598 | 0.152 | 0.004 |
| 1.234 | 1.046 | 0.005 | 0.039 | 0.036 | 470.910 | 0.152 | 0.004 |
| 1.261 | 1.649 | 0.005 | 0.067 | 0.062 | 466.452 | 0.151 | 0.004 |
| 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 3.734 | 4.279 | 0.005 | 0.285 | 0.262 | 475.901 | 0.154 | 0.004 |
| 3.309 | 3.549 | 0.005 | 0.179 | 0.165 | 467.732 | 0.151 | 0.004 |
| 1.601 | 3.315 | 0.005 | 0.144 | 0.133 | 473.917 | 0.153 | 0.004 |
| 1.676 | 1.826 | 0.005 | 0.079 | 0.072 | 470.439 | 0.152 | 0.004 |
| 0.962 | 0.305 | 0.005 | 0.009 | 0.009 | 474.486 | 0.154 | 0.004 |
| 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.300 | 0.061 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 4.524 | 3.676 | 0.007 | 0.112 | 0.112 | 568.299 | 0.054 | 0.005 |
| 3.557 | 2.283 | 0.006 | 0.102 | 0.102 | 568.299 | 0.028 | 0.004 |
| 3.121 | 1.365 | 0.006 | 0.063 | 0.063 | 568.299 | 0.022 | 0.004 |
| 1.065 | 1.075 | 0.006 | 0.032 | 0.032 | 568.299 | 0.018 | 0.004 |
| 1.029 | 0.990 | 0.005 | 0.031 | 0.031 | 568.299 | 0.017 | 0.004 |
| 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |
| 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |

| 2028                |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| Equipment           | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     |
| Aerial Lifts        | 15    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   |
| Aerial Lifts        | 25    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   |
| Aerial Lifts        | 50    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   |
| Aerial Lifts        | 120   | 0.099   | 3.167   | 1.511   | 0.005   | 0.026   | 0.024   | 472.114 | 0.153   |
| Aerial Lifts        | 500   | 0.085   | 0.970   | 0.649   | 0.005   | 0.009   | 0.009   | 472.055 | 0.153   |
| Aerial Lifts        | 750   | 0.153   | 0.989   | 0.974   | 0.005   | 0.028   | 0.028   | 568.299 | 0.013   |
| Air Compressor<br>s | 15    | 0.683   | 3.491   | 4.278   | 0.008   | 0.183   | 0.183   | 568.300 | 0.061   |
| Air Compressor<br>s | 25    | 0.709   | 2.376   | 4.407   | 0.007   | 0.177   | 0.177   | 568.299 | 0.064   |
| Air Compressor<br>s | 50    | 0.659   | 4.851   | 3.755   | 0.007   | 0.116   | 0.116   | 568.299 | 0.059   |
| Air Compressor<br>s | 120   | 0.345   | 3.653   | 2.313   | 0.006   | 0.104   | 0.104   | 568.299 | 0.031   |
| Air Compressor<br>s | 175   | 0.269   | 3.205   | 1.383   | 0.006   | 0.065   | 0.065   | 568.299 | 0.024   |
| Air Compressor<br>s | 250   | 0.220   | 1.094   | 1.086   | 0.006   | 0.033   | 0.033   | 568.299 | 0.019   |
| Air Compressor<br>s | 500   | 0.217   | 1.051   | 1.001   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   |
| Air Compressor<br>s | 750   | 0.217   | 1.051   | 1.021   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   |
| Air Compressor<br>s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   | 0.055   | 0.055   | 568.299 | 0.020   |
| Bore/Drill<br>Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   |
| Bore/Drill<br>Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   |
| Bore/Drill<br>Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   |
| Bore/Drill<br>Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   | 0.067   | 0.062   | 459.829 | 0.149   |
| Bore/Drill<br>Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   | 0.039   | 0.036   | 478.266 | 0.155   |
| Bore/Drill<br>Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   | 0.031   | 0.029   | 470.654 | 0.152   |
| Bore/Drill<br>Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   | 0.028   | 0.026   | 467.289 | 0.151   |
| Bore/Drill<br>Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   | 0.023   | 0.021   | 481.250 | 0.156   |
| Bore/Drill<br>Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   | 0.019   | 0.017   | 471.917 | 0.153   |

|                          |      |       |       |       |       |       |       |         |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 | 0.168 | 0.168 | 568.299 | 0.062 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 | 0.099 | 0.099 | 568.299 | 0.047 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 | 0.089 | 0.089 | 568.300 | 0.025 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 | 0.056 | 0.056 | 568.300 | 0.019 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 | 0.543 | 0.499 | 517.872 | 0.168 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 | 0.260 | 0.240 | 469.533 | 0.152 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 | 0.166 | 0.153 | 474.748 | 0.154 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 | 0.114 | 0.105 | 472.980 | 0.153 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 | 0.088 | 0.081 | 471.967 | 0.153 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 | 0.068 | 0.062 | 470.276 | 0.152 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 | 0.065 | 0.060 | 472.055 | 0.153 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 | 0.456 | 0.420 | 516.128 | 0.167 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 | 0.285 | 0.262 | 476.134 | 0.154 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 | 0.150 | 0.138 | 471.592 | 0.153 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 | 0.096 | 0.088 | 471.622 | 0.153 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 | 0.081 | 0.074 | 474.007 | 0.153 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 | 0.057 | 0.052 | 472.408 | 0.153 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 | 0.112 | 0.103 | 475.490 | 0.154 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 | 0.107 | 0.107 | 568.299 | 0.059 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 | 0.095 | 0.095 | 568.299 | 0.031 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 | 0.060 | 0.060 | 568.299 | 0.024 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 | 0.031 | 0.031 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 | 0.053 | 0.053 | 568.299 | 0.023 |



|                      |      |       |       |       |       |       |       |         |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Dumpers/Tractors     | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Excavators           | 25   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 |
| Excavators           | 50   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 |
| Excavators           | 120  | 0.201 | 3.439 | 2.082 | 0.005 | 0.085 | 0.078 | 466.738 | 0.151 |
| Excavators           | 175  | 0.158 | 3.078 | 1.154 | 0.005 | 0.057 | 0.052 | 472.496 | 0.153 |
| Excavators           | 250  | 0.131 | 1.081 | 0.962 | 0.005 | 0.032 | 0.029 | 472.560 | 0.153 |
| Excavators           | 500  | 0.115 | 1.051 | 0.726 | 0.005 | 0.026 | 0.024 | 470.292 | 0.152 |
| Excavators           | 750  | 0.139 | 1.135 | 1.026 | 0.005 | 0.038 | 0.035 | 468.558 | 0.152 |
| Forklifts            | 50   | 0.636 | 5.029 | 3.932 | 0.005 | 0.178 | 0.164 | 525.483 | 0.170 |
| Forklifts            | 120  | 0.277 | 3.611 | 2.607 | 0.005 | 0.140 | 0.128 | 471.529 | 0.153 |
| Forklifts            | 175  | 0.209 | 3.170 | 1.653 | 0.005 | 0.084 | 0.078 | 472.106 | 0.153 |
| Forklifts            | 250  | 0.191 | 1.214 | 1.466 | 0.005 | 0.056 | 0.052 | 473.326 | 0.153 |
| Forklifts            | 500  | 0.215 | 1.222 | 1.658 | 0.005 | 0.062 | 0.057 | 473.615 | 0.153 |
| Generator Sets       | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 |
| Generator Sets       | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 |
| Generator Sets       | 50   | 0.440 | 3.758 | 3.481 | 0.007 | 0.093 | 0.093 | 568.300 | 0.039 |
| Generator Sets       | 120  | 0.243 | 3.338 | 2.185 | 0.006 | 0.087 | 0.087 | 568.299 | 0.021 |
| Generator Sets       | 175  | 0.184 | 2.930 | 1.297 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 |
| Generator Sets       | 250  | 0.147 | 1.000 | 1.020 | 0.006 | 0.028 | 0.028 | 568.299 | 0.013 |
| Generator Sets       | 500  | 0.144 | 0.981 | 0.945 | 0.005 | 0.027 | 0.027 | 568.300 | 0.013 |
| Generator Sets       | 750  | 0.145 | 0.981 | 0.964 | 0.005 | 0.027 | 0.027 | 568.299 | 0.013 |
| Generator Sets       | 9999 | 0.173 | 1.008 | 2.812 | 0.005 | 0.047 | 0.047 | 568.299 | 0.015 |
| Graders              | 50   | 1.864 | 7.125 | 5.043 | 0.005 | 0.522 | 0.480 | 493.532 | 0.160 |
| Graders              | 120  | 0.638 | 4.149 | 5.074 | 0.005 | 0.371 | 0.342 | 468.316 | 0.152 |
| Graders              | 175  | 0.329 | 3.418 | 2.774 | 0.005 | 0.152 | 0.140 | 478.508 | 0.155 |
| Graders              | 250  | 0.230 | 1.179 | 2.556 | 0.005 | 0.082 | 0.076 | 473.470 | 0.153 |
| Graders              | 500  | 0.280 | 1.315 | 2.265 | 0.005 | 0.088 | 0.081 | 470.753 | 0.152 |
| Graders              | 750  | 0.253 | 1.141 | 1.125 | 0.005 | 0.041 | 0.041 | 568.300 | 0.022 |
| Off-Highway Tractors | 120  | 0.276 | 3.669 | 2.707 | 0.005 | 0.144 | 0.132 | 476.921 | 0.154 |
| Off-Highway Tractors | 175  | 0.175 | 3.142 | 1.349 | 0.005 | 0.065 | 0.060 | 473.302 | 0.153 |
| Off-Highway Tractors | 250  | 0.155 | 1.130 | 1.116 | 0.005 | 0.040 | 0.037 | 470.861 | 0.152 |
| Off-Highway Tractors | 750  | 0.167 | 1.135 | 1.118 | 0.005 | 0.045 | 0.041 | 471.917 | 0.153 |
| Off-Highway Tractors | 1000 | 0.198 | 1.077 | 2.482 | 0.005 | 0.070 | 0.064 | 472.055 | 0.153 |
| Off-Highway Trucks   | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 |
| Off-Highway Trucks   | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 | 0.203 | 0.187 | 472.748 | 0.153 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 | 0.112 | 0.103 | 469.843 | 0.152 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 | 0.059 | 0.055 | 476.296 | 0.154 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 | 0.118 | 0.109 | 470.000 | 0.152 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 | 0.070 | 0.065 | 471.850 | 0.153 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 | 0.036 | 0.033 | 473.223 | 0.153 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 | 0.035 | 0.033 | 472.929 | 0.153 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 | 0.023 | 0.021 | 473.464 | 0.153 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 | 0.081 | 0.074 | 472.055 | 0.153 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 | 0.239 | 0.219 | 523.709 | 0.169 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 | 0.081 | 0.074 | 473.588 | 0.153 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 | 0.072 | 0.067 | 472.219 | 0.153 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 | 0.060 | 0.055 | 471.482 | 0.153 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 | 0.067 | 0.061 | 470.297 | 0.152 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 | 0.019 | 0.017 | 472.055 | 0.153 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 | 0.191 | 0.175 | 469.899 | 0.152 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 | 0.077 | 0.071 | 472.485 | 0.153 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 | 0.034 | 0.031 | 473.483 | 0.153 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 | 0.039 | 0.036 | 465.882 | 0.151 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 | 0.118 | 0.108 | 473.424 | 0.153 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 | 0.075 | 0.069 | 470.484 | 0.152 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 | 0.043 | 0.040 | 472.234 | 0.153 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 | 0.075 | 0.075 | 568.299 | 0.027 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 | 0.072 | 0.072 | 568.299 | 0.017 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 |

|                         |      |       |       |       |       |       |       |         |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 |
| Pumps                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.299 | 0.061 |
| Pumps                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 |
| Pumps                   | 50   | 0.485 | 3.943 | 3.528 | 0.007 | 0.099 | 0.099 | 568.299 | 0.043 |
| Pumps                   | 120  | 0.261 | 3.389 | 2.213 | 0.006 | 0.092 | 0.092 | 568.299 | 0.023 |
| Pumps                   | 175  | 0.199 | 2.974 | 1.318 | 0.006 | 0.056 | 0.056 | 568.300 | 0.018 |
| Pumps                   | 250  | 0.159 | 1.016 | 1.038 | 0.006 | 0.029 | 0.029 | 568.299 | 0.014 |
| Pumps                   | 500  | 0.156 | 0.992 | 0.958 | 0.005 | 0.028 | 0.028 | 568.300 | 0.014 |
| Pumps                   | 750  | 0.157 | 0.992 | 0.977 | 0.005 | 0.029 | 0.029 | 568.300 | 0.014 |
| Pumps                   | 9999 | 0.186 | 1.020 | 2.840 | 0.005 | 0.049 | 0.049 | 568.299 | 0.016 |
| Rollers                 | 15   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 |
| Rollers                 | 25   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 |
| Rollers                 | 50   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 |
| Rollers                 | 120  | 0.255 | 3.444 | 2.691 | 0.005 | 0.135 | 0.125 | 473.851 | 0.153 |
| Rollers                 | 175  | 0.127 | 2.909 | 1.101 | 0.005 | 0.049 | 0.046 | 471.970 | 0.153 |
| Rollers                 | 250  | 0.173 | 1.215 | 1.783 | 0.005 | 0.066 | 0.060 | 473.681 | 0.153 |
| Rollers                 | 500  | 0.212 | 1.968 | 2.200 | 0.005 | 0.091 | 0.083 | 477.573 | 0.155 |
| Rough Terrain Forklifts | 50   | 0.456 | 3.740 | 3.477 | 0.005 | 0.128 | 0.118 | 525.027 | 0.170 |
| Rough Terrain Forklifts | 120  | 0.137 | 3.240 | 1.821 | 0.005 | 0.051 | 0.047 | 473.037 | 0.153 |
| Rough Terrain Forklifts | 175  | 0.087 | 2.821 | 0.786 | 0.005 | 0.030 | 0.028 | 471.475 | 0.153 |
| Rough Terrain Forklifts | 250  | 0.123 | 1.001 | 1.489 | 0.005 | 0.035 | 0.033 | 472.927 | 0.153 |
| Rough Terrain Forklifts | 500  | 0.069 | 0.942 | 0.477 | 0.005 | 0.009 | 0.008 | 466.541 | 0.151 |
| Rubber Tired Dozers     | 175  | 0.461 | 3.612 | 4.229 | 0.005 | 0.231 | 0.212 | 474.103 | 0.153 |
| Rubber Tired Dozers     | 250  | 0.372 | 1.720 | 3.805 | 0.005 | 0.167 | 0.153 | 474.573 | 0.154 |
| Rubber Tired Dozers     | 500  | 0.367 | 2.959 | 3.370 | 0.005 | 0.151 | 0.139 | 479.092 | 0.155 |
| Rubber Tired Dozers     | 750  | 0.428 | 2.601 | 5.333 | 0.005 | 0.196 | 0.181 | 472.998 | 0.153 |
| Rubber Tired Dozers     | 1000 | 0.414 | 1.725 | 4.365 | 0.005 | 0.115 | 0.115 | 568.299 | 0.037 |
| Rubber Tired Loaders    | 25   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 |
| Rubber Tired Loaders    | 50   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 |
| Rubber Tired Loaders    | 120  | 0.352 | 3.791 | 2.970 | 0.005 | 0.179 | 0.165 | 466.898 | 0.151 |
| Rubber Tired Loaders    | 175  | 0.224 | 3.281 | 1.590 | 0.005 | 0.084 | 0.077 | 470.459 | 0.152 |

|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 | 0.048 | 0.045 | 469.871 | 0.152 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 | 0.053 | 0.048 | 469.143 | 0.152 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 | 0.064 | 0.059 | 465.052 | 0.150 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 | 0.052 | 0.048 | 472.456 | 0.153 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 | 0.405 | 0.372 | 482.363 | 0.156 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 | 0.137 | 0.126 | 478.948 | 0.155 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 | 0.125 | 0.115 | 469.446 | 0.152 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 | 0.081 | 0.074 | 472.539 | 0.153 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 | 0.064 | 0.059 | 472.115 | 0.153 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 | 0.098 | 0.098 | 568.299 | 0.047 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 | 0.089 | 0.089 | 568.299 | 0.025 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 | 0.055 | 0.055 | 568.299 | 0.019 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 | 0.035 | 0.035 | 686.695 | 0.019 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 | 0.057 | 0.052 | 472.630 | 0.153 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 | 0.082 | 0.075 | 536.140 | 0.173 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 | 0.124 | 0.114 | 476.766 | 0.154 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 | 0.094 | 0.087 | 471.040 | 0.152 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 | 0.055 | 0.051 | 477.110 | 0.154 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 | 0.051 | 0.047 | 470.283 | 0.152 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 | 0.027 | 0.025 | 470.551 | 0.152 |
| Sweepers/S crubbers       | 15   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 |
| Sweepers/S crubbers       | 25   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 |
| Sweepers/S crubbers       | 50   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 |
| Sweepers/S crubbers       | 120  | 0.303 | 3.664 | 2.817 | 0.005 | 0.160 | 0.147 | 474.116 | 0.153 |
| Sweepers/S crubbers       | 175  | 0.213 | 3.201 | 1.638 | 0.005 | 0.072 | 0.066 | 473.122 | 0.153 |
| Sweepers/S crubbers       | 250  | 0.170 | 1.140 | 1.616 | 0.005 | 0.051 | 0.047 | 470.126 | 0.152 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 |

|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 | 0.086 | 0.079 | 477.188 | 0.154 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 | 0.059 | 0.054 | 469.329 | 0.152 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 | 0.047 | 0.044 | 470.598 | 0.152 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 | 0.039 | 0.036 | 470.910 | 0.152 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 | 0.067 | 0.062 | 466.452 | 0.151 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 | 0.285 | 0.262 | 475.901 | 0.154 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 | 0.179 | 0.165 | 467.732 | 0.151 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 | 0.144 | 0.133 | 473.917 | 0.153 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 | 0.079 | 0.072 | 470.439 | 0.152 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 | 0.009 | 0.009 | 474.486 | 0.154 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.300 | 0.061 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 | 0.112 | 0.112 | 568.299 | 0.054 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 | 0.102 | 0.102 | 568.299 | 0.028 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 | 0.063 | 0.063 | 568.299 | 0.022 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 | 0.032 | 0.032 | 568.299 | 0.018 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 | 0.031 | 0.031 | 568.299 | 0.017 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 |

2029

|         |
|---------|
| g/hp/hr |
| N2O     |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |

| 2029             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    |
| Aerial Lifts     | 15    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   |
| Aerial Lifts     | 25    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   |
| Aerial Lifts     | 50    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   |
| Aerial Lifts     | 120   | 0.099   | 3.167   | 1.511   | 0.005   | 0.026   |
| Aerial Lifts     | 500   | 0.085   | 0.970   | 0.649   | 0.005   | 0.009   |
| Aerial Lifts     | 750   | 0.153   | 0.989   | 0.974   | 0.005   | 0.028   |
| Air Compressor s | 15    | 0.683   | 3.491   | 4.278   | 0.008   | 0.183   |
| Air Compressor s | 25    | 0.709   | 2.376   | 4.407   | 0.007   | 0.177   |
| Air Compressor s | 50    | 0.659   | 4.851   | 3.755   | 0.007   | 0.116   |
| Air Compressor s | 120   | 0.345   | 3.653   | 2.313   | 0.006   | 0.104   |
| Air Compressor s | 175   | 0.269   | 3.205   | 1.383   | 0.006   | 0.065   |
| Air Compressor s | 250   | 0.220   | 1.094   | 1.086   | 0.006   | 0.033   |
| Air Compressor s | 500   | 0.217   | 1.051   | 1.001   | 0.005   | 0.032   |
| Air Compressor s | 750   | 0.217   | 1.051   | 1.021   | 0.005   | 0.032   |
| Air Compressor s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   | 0.055   |
| Bore/Drill Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   |
| Bore/Drill Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   |
| Bore/Drill Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   |
| Bore/Drill Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   | 0.067   |
| Bore/Drill Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   | 0.039   |
| Bore/Drill Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   | 0.031   |
| Bore/Drill Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   | 0.028   |
| Bore/Drill Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   | 0.023   |
| Bore/Drill Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   | 0.019   |

|       |
|-------|
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                          |      |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 | 0.168 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 | 0.099 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 | 0.089 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 | 0.056 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 | 0.543 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 | 0.260 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 | 0.166 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 | 0.114 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 | 0.088 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 | 0.068 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 | 0.065 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 | 0.456 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 | 0.285 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 | 0.150 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 | 0.096 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 | 0.081 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 | 0.057 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 | 0.112 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 | 0.107 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 | 0.095 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 | 0.060 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 | 0.031 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 | 0.030 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 | 0.030 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 | 0.053 |





|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 | 0.203 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 | 0.112 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 | 0.059 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 | 0.118 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 | 0.070 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 | 0.036 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 | 0.035 |

|       |
|-------|
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 | 0.023 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 | 0.081 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 | 0.239 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 | 0.081 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 | 0.072 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 | 0.060 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 | 0.067 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 | 0.019 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 | 0.191 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 | 0.077 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 | 0.034 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 | 0.039 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 | 0.118 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 | 0.075 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 | 0.043 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 | 0.075 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 | 0.072 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 | 0.053 |



|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 | 0.048 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 | 0.053 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 | 0.064 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 | 0.052 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 | 0.405 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 | 0.137 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 | 0.125 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 | 0.081 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 | 0.064 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 | 0.098 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 | 0.089 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 | 0.055 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 | 0.035 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 | 0.057 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 | 0.082 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 | 0.124 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 | 0.094 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 | 0.055 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 | 0.051 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 | 0.027 |
| Sweepers/S crubbers       | 15   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 |
| Sweepers/S crubbers       | 25   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 |
| Sweepers/S crubbers       | 50   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 |
| Sweepers/S crubbers       | 120  | 0.303 | 3.664 | 2.817 | 0.005 | 0.160 |
| Sweepers/S crubbers       | 175  | 0.213 | 3.201 | 1.638 | 0.005 | 0.072 |
| Sweepers/S crubbers       | 250  | 0.170 | 1.140 | 1.616 | 0.005 | 0.051 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 |

|       |
|-------|
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 | 0.086 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 | 0.059 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 | 0.047 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 | 0.039 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 | 0.067 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 | 0.285 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 | 0.179 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 | 0.144 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 | 0.079 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 | 0.009 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 | 0.112 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 | 0.102 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 | 0.063 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 | 0.032 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 | 0.031 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 |

2030



| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|
| PM2.5   | CO2     | CH4     | N2O     |
| 0.019   | 525.074 | 0.170   | 0.005   |
| 0.019   | 525.074 | 0.170   | 0.005   |
| 0.019   | 525.074 | 0.170   | 0.005   |
| 0.024   | 472.114 | 0.153   | 0.004   |
| 0.009   | 472.055 | 0.153   | 0.004   |
| 0.028   | 568.299 | 0.013   | 0.004   |
| 0.183   | 568.300 | 0.061   | 0.005   |
| 0.177   | 568.299 | 0.064   | 0.005   |
| 0.116   | 568.299 | 0.059   | 0.005   |
| 0.104   | 568.299 | 0.031   | 0.004   |
| 0.065   | 568.299 | 0.024   | 0.004   |
| 0.033   | 568.299 | 0.019   | 0.004   |
| 0.032   | 568.299 | 0.019   | 0.004   |
| 0.032   | 568.299 | 0.019   | 0.004   |
| 0.055   | 568.299 | 0.020   | 0.004   |
| 0.178   | 532.821 | 0.172   | 0.005   |
| 0.178   | 532.821 | 0.172   | 0.005   |
| 0.178   | 532.821 | 0.172   | 0.005   |
| 0.062   | 459.829 | 0.149   | 0.004   |
| 0.036   | 478.266 | 0.155   | 0.004   |
| 0.029   | 470.654 | 0.152   | 0.004   |
| 0.026   | 467.289 | 0.151   | 0.004   |
| 0.021   | 481.250 | 0.156   | 0.004   |
| 0.017   | 471.917 | 0.153   | 0.004   |

| 2030             |       | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      |
| Aerial Lifts     | 15    | 0.661   | 3.469   |
| Aerial Lifts     | 25    | 0.685   | 2.339   |
| Aerial Lifts     | 50    | 0.339   | 3.764   |
| Aerial Lifts     | 120   | 0.188   | 3.352   |
| Aerial Lifts     | 500   | 0.126   | 0.986   |
| Aerial Lifts     | 750   | 0.126   | 0.986   |
| Air Compressor s | 15    | 0.663   | 3.470   |
| Air Compressor s | 25    | 0.687   | 2.340   |
| Air Compressor s | 50    | 0.506   | 4.712   |
| Air Compressor s | 120   | 0.264   | 3.630   |
| Air Compressor s | 175   | 0.193   | 3.205   |
| Air Compressor s | 250   | 0.179   | 1.092   |
| Air Compressor s | 500   | 0.178   | 1.048   |
| Air Compressor s | 750   | 0.178   | 1.048   |
| Air Compressor s | 1000  | 0.182   | 1.049   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.029   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.038   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.168 | 568.299 | 0.062 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.099 | 568.299 | 0.047 | 0.005 |
| 0.089 | 568.300 | 0.025 | 0.004 |
| 0.056 | 568.300 | 0.019 | 0.004 |
| 0.499 | 517.872 | 0.168 | 0.005 |
| 0.240 | 469.533 | 0.152 | 0.004 |
| 0.153 | 474.748 | 0.154 | 0.004 |
| 0.105 | 472.980 | 0.153 | 0.004 |
| 0.081 | 471.967 | 0.153 | 0.004 |
| 0.062 | 470.276 | 0.152 | 0.004 |
| 0.060 | 472.055 | 0.153 | 0.004 |
| 0.420 | 516.128 | 0.167 | 0.005 |
| 0.262 | 476.134 | 0.154 | 0.004 |
| 0.138 | 471.592 | 0.153 | 0.004 |
| 0.088 | 471.622 | 0.153 | 0.004 |
| 0.074 | 474.007 | 0.153 | 0.004 |
| 0.052 | 472.408 | 0.153 | 0.004 |
| 0.103 | 475.490 | 0.154 | 0.004 |
| 0.107 | 568.299 | 0.059 | 0.005 |
| 0.095 | 568.299 | 0.031 | 0.004 |
| 0.060 | 568.299 | 0.024 | 0.004 |
| 0.031 | 568.299 | 0.020 | 0.004 |
| 0.030 | 568.299 | 0.020 | 0.004 |
| 0.030 | 568.299 | 0.020 | 0.004 |
| 0.053 | 568.299 | 0.023 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 50   | 0.409 | 4.199 |
| Concrete/Industrial Saws | 120  | 0.221 | 3.480 |
| Concrete/Industrial Saws | 175  | 0.163 | 3.074 |
| Cranes                   | 50   | 0.684 | 5.366 |
| Cranes                   | 120  | 0.343 | 3.812 |
| Cranes                   | 175  | 0.253 | 3.356 |
| Cranes                   | 250  | 0.224 | 1.147 |
| Cranes                   | 500  | 0.222 | 1.090 |
| Cranes                   | 750  | 0.222 | 1.090 |
| Cranes                   | 9999 | 0.245 | 1.108 |
| Crawler Tractors         | 50   | 0.833 | 5.605 |
| Crawler Tractors         | 120  | 0.405 | 3.871 |
| Crawler Tractors         | 175  | 0.296 | 3.397 |
| Crawler Tractors         | 250  | 0.262 | 1.207 |
| Crawler Tractors         | 500  | 0.257 | 1.200 |
| Crawler Tractors         | 750  | 0.257 | 1.200 |
| Crawler Tractors         | 1000 | 0.265 | 1.225 |
| Crushing/Proc. Equipment | 50   | 0.525 | 4.857 |
| Crushing/Proc. Equipment | 120  | 0.272 | 3.673 |
| Crushing/Proc. Equipment | 175  | 0.197 | 3.244 |
| Crushing/Proc. Equipment | 250  | 0.185 | 1.105 |
| Crushing/Proc. Equipment | 500  | 0.184 | 1.058 |
| Crushing/Proc. Equipment | 750  | 0.184 | 1.058 |
| Crushing/Proc. Equipment | 9999 | 0.196 | 1.059 |



|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.099 | 525.777 | 0.170 | 0.005 |
| 0.099 | 525.777 | 0.170 | 0.005 |
| 0.078 | 466.738 | 0.151 | 0.004 |
| 0.052 | 472.496 | 0.153 | 0.004 |
| 0.029 | 472.560 | 0.153 | 0.004 |
| 0.024 | 470.292 | 0.152 | 0.004 |
| 0.035 | 468.558 | 0.152 | 0.004 |
| 0.164 | 525.483 | 0.170 | 0.005 |
| 0.128 | 471.529 | 0.153 | 0.004 |
| 0.078 | 472.106 | 0.153 | 0.004 |
| 0.052 | 473.326 | 0.153 | 0.004 |
| 0.057 | 473.615 | 0.153 | 0.004 |
| 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 568.299 | 0.062 | 0.005 |
| 0.093 | 568.300 | 0.039 | 0.005 |
| 0.087 | 568.299 | 0.021 | 0.004 |
| 0.053 | 568.299 | 0.016 | 0.004 |
| 0.028 | 568.299 | 0.013 | 0.004 |
| 0.027 | 568.300 | 0.013 | 0.004 |
| 0.027 | 568.299 | 0.013 | 0.004 |
| 0.047 | 568.299 | 0.015 | 0.004 |
| 0.480 | 493.532 | 0.160 | 0.005 |
| 0.342 | 468.316 | 0.152 | 0.004 |
| 0.140 | 478.508 | 0.155 | 0.004 |
| 0.076 | 473.470 | 0.153 | 0.004 |
| 0.081 | 470.753 | 0.152 | 0.004 |
| 0.041 | 568.300 | 0.022 | 0.004 |
| 0.132 | 476.921 | 0.154 | 0.004 |
| 0.060 | 473.302 | 0.153 | 0.004 |
| 0.037 | 470.861 | 0.152 | 0.004 |
| 0.041 | 471.917 | 0.153 | 0.004 |
| 0.064 | 472.055 | 0.153 | 0.004 |
| 0.060 | 470.004 | 0.152 | 0.004 |
| 0.040 | 469.126 | 0.152 | 0.004 |

|                      |      |       |       |
|----------------------|------|-------|-------|
| Dumpers/Trailers     | 25   | 0.685 | 2.340 |
| Excavators           | 25   | 0.685 | 2.339 |
| Excavators           | 50   | 0.602 | 5.309 |
| Excavators           | 120  | 0.301 | 3.806 |
| Excavators           | 175  | 0.213 | 3.362 |
| Excavators           | 250  | 0.203 | 1.145 |
| Excavators           | 500  | 0.202 | 1.088 |
| Excavators           | 750  | 0.202 | 1.088 |
| Forklifts            | 50   | 0.565 | 5.272 |
| Forklifts            | 120  | 0.283 | 3.799 |
| Forklifts            | 175  | 0.199 | 3.360 |
| Forklifts            | 250  | 0.195 | 1.144 |
| Forklifts            | 500  | 0.195 | 1.088 |
| Generator Sets       | 15   | 0.592 | 3.470 |
| Generator Sets       | 25   | 0.686 | 2.340 |
| Generator Sets       | 50   | 0.315 | 3.640 |
| Generator Sets       | 120  | 0.178 | 3.316 |
| Generator Sets       | 175  | 0.130 | 2.929 |
| Generator Sets       | 250  | 0.120 | 0.998 |
| Generator Sets       | 500  | 0.119 | 0.978 |
| Generator Sets       | 750  | 0.119 | 0.978 |
| Generator Sets       | 9999 | 0.128 | 0.979 |
| Graders              | 50   | 0.648 | 5.239 |
| Graders              | 120  | 0.323 | 3.775 |
| Graders              | 175  | 0.237 | 3.326 |
| Graders              | 250  | 0.216 | 1.148 |
| Graders              | 500  | 0.214 | 1.097 |
| Graders              | 750  | 0.214 | 1.097 |
| Off-Highway Tractors | 120  | 0.518 | 3.944 |
| Off-Highway Tractors | 175  | 0.373 | 3.435 |
| Off-Highway Tractors | 250  | 0.315 | 1.286 |
| Off-Highway Tractors | 750  | 0.304 | 1.351 |
| Off-Highway Tractors | 1000 | 0.318 | 1.409 |
| Off-Highway Trucks   | 175  | 0.229 | 3.425 |
| Off-Highway Trucks   | 250  | 0.217 | 1.166 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.035 | 474.970 | 0.154 | 0.004 |
| 0.061 | 476.314 | 0.154 | 0.004 |
| 0.052 | 473.369 | 0.153 | 0.004 |
| 0.246 | 528.954 | 0.171 | 0.005 |
| 0.246 | 528.954 | 0.171 | 0.005 |
| 0.246 | 528.954 | 0.171 | 0.005 |
| 0.187 | 472.748 | 0.153 | 0.004 |
| 0.103 | 469.843 | 0.152 | 0.004 |
| 0.055 | 476.296 | 0.154 | 0.004 |
| 0.125 | 526.176 | 0.170 | 0.005 |
| 0.125 | 526.176 | 0.170 | 0.005 |
| 0.125 | 526.176 | 0.170 | 0.005 |
| 0.109 | 470.000 | 0.152 | 0.004 |
| 0.065 | 471.850 | 0.153 | 0.004 |
| 0.033 | 473.223 | 0.153 | 0.004 |
| 0.033 | 472.929 | 0.153 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.216 | 1.104 |
| Off-Highway Trucks                 | 750  | 0.217 | 1.104 |
| Off-Highway Trucks                 | 1000 | 0.220 | 1.107 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 |
| Other Construction Equipment       | 50   | 0.429 | 4.390 |
| Other Construction Equipment       | 120  | 0.225 | 3.538 |
| Other Construction Equipment       | 175  | 0.161 | 3.127 |
| Other Construction Equipment       | 500  | 0.154 | 1.028 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 |
| Other General Industrial Equipment | 50   | 0.609 | 5.299 |
| Other General Industrial Equipment | 120  | 0.309 | 3.802 |
| Other General Industrial Equipment | 175  | 0.223 | 3.357 |
| Other General Industrial Equipment | 250  | 0.209 | 1.143 |
| Other General Industrial Equipment | 500  | 0.208 | 1.087 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.021 | 473.464 | 0.153 | 0.004 |
| 0.074 | 472.055 | 0.153 | 0.004 |
| 0.219 | 523.709 | 0.169 | 0.005 |
| 0.074 | 473.588 | 0.153 | 0.004 |
| 0.067 | 472.219 | 0.153 | 0.004 |
| 0.055 | 471.482 | 0.153 | 0.004 |
| 0.061 | 470.297 | 0.152 | 0.004 |
| 0.017 | 472.055 | 0.153 | 0.004 |
| 0.243 | 526.853 | 0.170 | 0.005 |
| 0.243 | 526.853 | 0.170 | 0.005 |
| 0.175 | 469.899 | 0.152 | 0.004 |
| 0.071 | 472.485 | 0.153 | 0.004 |
| 0.031 | 473.483 | 0.153 | 0.004 |
| 0.036 | 465.882 | 0.151 | 0.004 |
| 0.130 | 520.998 | 0.169 | 0.005 |
| 0.130 | 520.998 | 0.169 | 0.005 |
| 0.108 | 473.424 | 0.153 | 0.004 |
| 0.069 | 470.484 | 0.152 | 0.004 |
| 0.040 | 472.234 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 568.299 | 0.062 | 0.005 |
| 0.075 | 568.299 | 0.027 | 0.005 |
| 0.072 | 568.299 | 0.017 | 0.004 |
| 0.053 | 568.299 | 0.016 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.208 | 1.087 |
| Other General Industrial Equipment | 1000 | 0.212 | 1.088 |
| Other Material Handling Equipment  | 50   | 0.598 | 5.237 |
| Other Material Handling Equipment  | 120  | 0.304 | 3.784 |
| Other Material Handling Equipment  | 175  | 0.220 | 3.341 |
| Other Material Handling Equipment  | 250  | 0.206 | 1.138 |
| Other Material Handling Equipment  | 500  | 0.205 | 1.083 |
| Other Material Handling Equipment  | 9999 | 0.218 | 1.084 |
| Pavers                             | 25   | 0.685 | 2.339 |
| Pavers                             | 50   | 0.845 | 5.396 |
| Pavers                             | 120  | 0.408 | 3.800 |
| Pavers                             | 175  | 0.300 | 3.326 |
| Pavers                             | 250  | 0.259 | 1.192 |
| Pavers                             | 500  | 0.253 | 1.181 |
| Paving Equipment                   | 25   | 0.685 | 2.339 |
| Paving Equipment                   | 50   | 0.802 | 5.309 |
| Paving Equipment                   | 120  | 0.390 | 3.774 |
| Paving Equipment                   | 175  | 0.290 | 3.306 |
| Paving Equipment                   | 250  | 0.250 | 1.171 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.592 | 3.470 |
| Pressure Washers                   | 25   | 0.686 | 2.340 |
| Pressure Washers                   | 50   | 0.215 | 3.124 |
| Pressure Washers                   | 120  | 0.134 | 3.167 |
| Pressure Washers                   | 175  | 0.126 | 2.907 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.009 | 568.299 | 0.008 | 0.004 |
| 0.183 | 568.299 | 0.061 | 0.005 |
| 0.177 | 568.299 | 0.064 | 0.005 |
| 0.099 | 568.299 | 0.043 | 0.005 |
| 0.092 | 568.299 | 0.023 | 0.004 |
| 0.056 | 568.300 | 0.018 | 0.004 |
| 0.029 | 568.299 | 0.014 | 0.004 |
| 0.028 | 568.300 | 0.014 | 0.004 |
| 0.029 | 568.300 | 0.014 | 0.004 |
| 0.049 | 568.299 | 0.016 | 0.004 |
| 0.154 | 526.141 | 0.170 | 0.005 |
| 0.154 | 526.141 | 0.170 | 0.005 |
| 0.154 | 526.141 | 0.170 | 0.005 |
| 0.125 | 473.851 | 0.153 | 0.004 |
| 0.046 | 471.970 | 0.153 | 0.004 |
| 0.060 | 473.681 | 0.153 | 0.004 |
| 0.083 | 477.573 | 0.155 | 0.004 |
| 0.118 | 525.027 | 0.170 | 0.005 |
| 0.047 | 473.037 | 0.153 | 0.004 |
| 0.028 | 471.475 | 0.153 | 0.004 |
| 0.033 | 472.927 | 0.153 | 0.004 |
| 0.008 | 466.541 | 0.151 | 0.004 |
| 0.212 | 474.103 | 0.153 | 0.004 |
| 0.153 | 474.573 | 0.154 | 0.004 |
| 0.139 | 479.092 | 0.155 | 0.004 |
| 0.181 | 472.998 | 0.153 | 0.004 |
| 0.115 | 568.299 | 0.037 | 0.004 |
| 0.238 | 523.908 | 0.169 | 0.005 |
| 0.238 | 523.908 | 0.169 | 0.005 |
| 0.165 | 466.898 | 0.151 | 0.004 |
| 0.077 | 470.459 | 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 |
| Pumps                   | 15   | 0.663 | 3.470 |
| Pumps                   | 25   | 0.687 | 2.340 |
| Pumps                   | 50   | 0.348 | 3.814 |
| Pumps                   | 120  | 0.193 | 3.367 |
| Pumps                   | 175  | 0.142 | 2.973 |
| Pumps                   | 250  | 0.130 | 1.013 |
| Pumps                   | 500  | 0.129 | 0.989 |
| Pumps                   | 750  | 0.129 | 0.989 |
| Pumps                   | 9999 | 0.139 | 0.990 |
| Rollers                 | 15   | 0.661 | 3.469 |
| Rollers                 | 25   | 0.685 | 2.339 |
| Rollers                 | 50   | 0.587 | 4.784 |
| Rollers                 | 120  | 0.299 | 3.639 |
| Rollers                 | 175  | 0.223 | 3.203 |
| Rollers                 | 250  | 0.195 | 1.099 |
| Rollers                 | 500  | 0.193 | 1.056 |
| Rough Terrain Forklifts | 50   | 0.548 | 5.031 |
| Rough Terrain Forklifts | 120  | 0.279 | 3.725 |
| Rough Terrain Forklifts | 175  | 0.200 | 3.291 |
| Rough Terrain Forklifts | 250  | 0.191 | 1.121 |
| Rough Terrain Forklifts | 500  | 0.190 | 1.070 |
| Rubber Tired Dozers     | 175  | 0.398 | 3.496 |
| Rubber Tired Dozers     | 250  | 0.335 | 1.322 |
| Rubber Tired Dozers     | 500  | 0.322 | 1.401 |
| Rubber Tired Dozers     | 750  | 0.323 | 1.401 |
| Rubber Tired Dozers     | 1000 | 0.338 | 1.465 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 |
| Rubber Tired Loaders    | 50   | 0.634 | 5.181 |
| Rubber Tired Loaders    | 120  | 0.317 | 3.759 |
| Rubber Tired Loaders    | 175  | 0.232 | 3.312 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.045 | 469.871 | 0.152 | 0.004 |
| 0.048 | 469.143 | 0.152 | 0.004 |
| 0.059 | 465.052 | 0.150 | 0.004 |
| 0.048 | 472.456 | 0.153 | 0.004 |
| 0.372 | 482.363 | 0.156 | 0.004 |
| 0.126 | 478.948 | 0.155 | 0.004 |
| 0.115 | 469.446 | 0.152 | 0.004 |
| 0.074 | 472.539 | 0.153 | 0.004 |
| 0.059 | 472.115 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.098 | 568.299 | 0.047 | 0.005 |
| 0.089 | 568.299 | 0.025 | 0.004 |
| 0.055 | 568.299 | 0.019 | 0.004 |
| 0.035 | 686.695 | 0.019 | 0.004 |
| 0.077 | 527.861 | 0.171 | 0.005 |
| 0.077 | 527.861 | 0.171 | 0.005 |
| 0.052 | 472.630 | 0.153 | 0.004 |
| 0.075 | 536.140 | 0.173 | 0.005 |
| 0.114 | 476.766 | 0.154 | 0.004 |
| 0.087 | 471.040 | 0.152 | 0.004 |
| 0.051 | 477.110 | 0.154 | 0.004 |
| 0.047 | 470.283 | 0.152 | 0.004 |
| 0.025 | 470.551 | 0.152 | 0.004 |
| 0.176 | 525.328 | 0.170 | 0.005 |
| 0.176 | 525.328 | 0.170 | 0.005 |
| 0.176 | 525.328 | 0.170 | 0.005 |
| 0.147 | 474.116 | 0.153 | 0.004 |
| 0.066 | 473.122 | 0.153 | 0.004 |
| 0.047 | 470.126 | 0.152 | 0.004 |
| 0.133 | 513.803 | 0.166 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.138 |
| Rubber Tired Loaders      | 500  | 0.208 | 1.085 |
| Rubber Tired Loaders      | 750  | 0.208 | 1.085 |
| Rubber Tired Loaders      | 1000 | 0.214 | 1.099 |
| Scrapers                  | 120  | 0.410 | 3.866 |
| Scrapers                  | 175  | 0.301 | 3.389 |
| Scrapers                  | 250  | 0.264 | 1.206 |
| Scrapers                  | 500  | 0.259 | 1.184 |
| Scrapers                  | 750  | 0.259 | 1.184 |
| Signal Boards             | 15   | 0.661 | 3.470 |
| Signal Boards             | 50   | 0.393 | 4.099 |
| Signal Boards             | 120  | 0.213 | 3.451 |
| Signal Boards             | 175  | 0.157 | 3.048 |
| Signal Boards             | 250  | 0.176 | 1.255 |
| Skid Steer Loaders        | 25   | 0.685 | 2.340 |
| Skid Steer Loaders        | 50   | 0.411 | 4.386 |
| Skid Steer Loaders        | 120  | 0.214 | 3.538 |
| Surfacing Equipment       | 50   | 0.518 | 4.295 |
| Surfacing Equipment       | 120  | 0.264 | 3.492 |
| Surfacing Equipment       | 175  | 0.197 | 3.071 |
| Surfacing Equipment       | 250  | 0.172 | 1.064 |
| Surfacing Equipment       | 500  | 0.169 | 1.032 |
| Surfacing Equipment       | 750  | 0.169 | 1.032 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 |
| Sweepers/Scrubbers        | 50   | 0.509 | 4.947 |
| Sweepers/Scrubbers        | 120  | 0.261 | 3.703 |
| Sweepers/Scrubbers        | 175  | 0.187 | 3.275 |
| Sweepers/Scrubbers        | 250  | 0.182 | 1.116 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.133 | 513.803 | 0.166 | 0.005 |
| 0.079 | 477.188 | 0.154 | 0.004 |
| 0.054 | 469.329 | 0.152 | 0.004 |
| 0.044 | 470.598 | 0.152 | 0.004 |
| 0.036 | 470.910 | 0.152 | 0.004 |
| 0.062 | 466.452 | 0.151 | 0.004 |
| 0.150 | 527.160 | 0.171 | 0.005 |
| 0.150 | 527.160 | 0.171 | 0.005 |
| 0.150 | 527.160 | 0.171 | 0.005 |
| 0.262 | 475.901 | 0.154 | 0.004 |
| 0.165 | 467.732 | 0.151 | 0.004 |
| 0.133 | 473.917 | 0.153 | 0.004 |
| 0.072 | 470.439 | 0.152 | 0.004 |
| 0.009 | 474.486 | 0.154 | 0.004 |
| 0.183 | 568.300 | 0.061 | 0.005 |
| 0.177 | 568.299 | 0.064 | 0.005 |
| 0.112 | 568.299 | 0.054 | 0.005 |
| 0.102 | 568.299 | 0.028 | 0.004 |
| 0.063 | 568.299 | 0.022 | 0.004 |
| 0.032 | 568.299 | 0.018 | 0.004 |
| 0.031 | 568.299 | 0.017 | 0.004 |
| 0.060 | 470.004 | 0.152 | 0.004 |
| 0.040 | 469.126 | 0.152 | 0.004 |
| 0.035 | 474.970 | 0.154 | 0.004 |
| 0.061 | 476.314 | 0.154 | 0.004 |
| 0.052 | 473.369 | 0.153 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.539 | 4.966 |
| Tractors/Loaders/Backhoes | 120  | 0.272 | 3.705 |
| Tractors/Loaders/Backhoes | 175  | 0.193 | 3.273 |
| Tractors/Loaders/Backhoes | 250  | 0.183 | 1.115 |
| Tractors/Loaders/Backhoes | 500  | 0.182 | 1.066 |
| Tractors/Loaders/Backhoes | 750  | 0.182 | 1.066 |
| Trenchers                 | 15   | 0.661 | 3.469 |
| Trenchers                 | 25   | 0.685 | 2.339 |
| Trenchers                 | 50   | 0.851 | 5.208 |
| Trenchers                 | 120  | 0.409 | 3.743 |
| Trenchers                 | 175  | 0.300 | 3.273 |
| Trenchers                 | 250  | 0.256 | 1.188 |
| Trenchers                 | 500  | 0.249 | 1.209 |
| Trenchers                 | 750  | 0.249 | 1.209 |
| Welders                   | 15   | 0.663 | 3.470 |
| Welders                   | 25   | 0.687 | 2.340 |
| Welders                   | 50   | 0.449 | 4.387 |
| Welders                   | 120  | 0.239 | 3.535 |
| Welders                   | 175  | 0.176 | 3.121 |
| Welders                   | 250  | 0.162 | 1.063 |
| Welders                   | 500  | 0.161 | 1.027 |
| Water Trucks              | 175  | 0.229 | 3.425 |
| Water Trucks              | 250  | 0.217 | 1.166 |
| Water Trucks              | 500  | 0.216 | 1.104 |
| Water Trucks              | 750  | 0.217 | 1.104 |
| Water Trucks              | 1000 | 0.220 | 1.107 |







|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.393 | 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 1.676 | 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 0.525 | 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.433 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.437 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 3.330 | 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 1.555 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.391 | 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 0.341 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 3.107 | 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 1.645 | 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 0.601 | 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.504 | 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 0.476 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.482 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 2.483 | 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 3.530 | 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 1.903 | 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 0.815 | 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 0.684 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.647 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.654 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
|       |       |       |       |         |       |       |
| 2.959 | 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
|       |       |       |       |         |       |       |
| 1.916 | 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
|       |       |       |       |         |       |       |
| 1.715 | 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
|       |       |       |       |         |       |       |
| 1.590 | 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
|       |       |       |       |         |       |       |
| 3.569 | 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
|       |       |       |       |         |       |       |
| 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
|       |       |       |       |         |       |       |
| 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|                         |
|-------------------------|
| Dumpers/Te<br>nders     |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Forklifts               |
| Forklifts               |
| Forklifts               |
| Forklifts               |
| Forklifts               |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Graders                 |
| Graders                 |
| Graders                 |
| Graders                 |
| Graders                 |
| Graders                 |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Trucks   |
| Off-Highway<br>Trucks   |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.512 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 2.660 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 3.447 | 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 1.762 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.640 | 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 0.535 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.505 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 2.653 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.841 | 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 2.468 | 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 1.425 | 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 1.246 | 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 1.141 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.809 | 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 2.393 | 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 1.363 | 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 1.176 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 2.989 | 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 1.594 | 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 0.619 | 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |

|   |
|---|
| Other<br>General<br>Industrial<br>Equipment |
| Other<br>General<br>Industrial<br>Equipment |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Plate<br>Compactors                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 3.146 | 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 1.662 | 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 0.610 | 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 0.511 | 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.482 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.488 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 2.504 | 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.480 | 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 1.950 | 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 0.907 | 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 0.745 | 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 3.359 | 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 1.671 | 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 0.537 | 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.443 | 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 2.034 | 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 1.828 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 1.658 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 1.694 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 3.676 | 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.500 | 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 1.875 | 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 0.787 | 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|                         |
|-------------------------|
| Pressure Washers        |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.655 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.619 | 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 0.627 | 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 2.722 | 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 2.384 | 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 1.320 | 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 1.149 | 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 1.057 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 1.075 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.193 | 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 1.657 | 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 0.586 | 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 0.594 | 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.128 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 1.477 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 3.400 | 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 1.959 | 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 0.939 | 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 0.789 | 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 0.738 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.749 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.294 | 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 1.569 | 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 0.431 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|                           |
|---------------------------|
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Tractors/Loaders/Backhoes |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 3.299 | 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 1.624 | 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 0.485 | 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 0.418 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.403 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.407 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.835 | 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 2.559 | 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 1.529 | 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 1.348 | 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 1.231 | 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 1.254 | 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 3.273 | 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 1.707 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.628 | 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 0.525 | 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.495 | 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

|                           |
|---------------------------|
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |

|       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 50    | 0.339   | 3.764   | 3.135   | 0.007   | 0.040   | 0.040   | 568.300 | 0.030   | 0.005   |
| 120   | 0.188   | 3.352   | 1.657   | 0.006   | 0.036   | 0.036   | 568.299 | 0.017   | 0.004   |
| 500   | 0.126   | 0.986   | 0.479   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 750   | 0.126   | 0.986   | 0.485   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 15    | 0.663   | 3.470   | 4.164   | 0.008   | 0.166   | 0.166   | 568.299 | 0.059   | 0.005   |
| 25    | 0.687   | 2.340   | 4.347   | 0.007   | 0.165   | 0.165   | 568.299 | 0.061   | 0.005   |
| 50    | 0.506   | 4.712   | 3.340   | 0.007   | 0.046   | 0.046   | 568.299 | 0.045   | 0.005   |
| 120   | 0.264   | 3.630   | 1.729   | 0.006   | 0.041   | 0.041   | 568.299 | 0.023   | 0.004   |
| 175   | 0.193   | 3.205   | 0.633   | 0.006   | 0.027   | 0.027   | 568.299 | 0.017   | 0.004   |
| 250   | 0.179   | 1.092   | 0.529   | 0.006   | 0.018   | 0.018   | 568.299 | 0.016   | 0.004   |
| 500   | 0.178   | 1.048   | 0.499   | 0.005   | 0.017   | 0.017   | 568.299 | 0.016   | 0.004   |
| 750   | 0.178   | 1.048   | 0.505   | 0.005   | 0.017   | 0.017   | 568.300 | 0.016   | 0.004   |
| 1000  | 0.182   | 1.049   | 2.600   | 0.005   | 0.033   | 0.033   | 568.299 | 0.016   | 0.004   |
| 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 50    | 0.348   | 4.029   | 3.020   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 120   | 0.183   | 3.434   | 1.415   | 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 175   | 0.127   | 3.038   | 0.279   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 250   | 0.127   | 1.035   | 0.274   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 500   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 750   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1000  | 0.127   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.333 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.409 | 4.199 | 3.222 | 0.007 | 0.041 | 0.041 | 568.299 | 0.036 | 0.005 |
| 120  | 0.221 | 3.480 | 1.667 | 0.006 | 0.036 | 0.036 | 568.299 | 0.019 | 0.004 |
| 175  | 0.163 | 3.074 | 0.590 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 50   | 0.684 | 5.366 | 3.598 | 0.007 | 0.075 | 0.075 | 568.299 | 0.061 | 0.005 |
| 120  | 0.343 | 3.812 | 1.987 | 0.006 | 0.067 | 0.067 | 568.299 | 0.030 | 0.004 |
| 175  | 0.253 | 3.356 | 0.916 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 250  | 0.224 | 1.147 | 0.748 | 0.006 | 0.024 | 0.024 | 568.299 | 0.020 | 0.004 |
| 500  | 0.222 | 1.090 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.020 | 0.004 |
| 750  | 0.222 | 1.090 | 0.709 | 0.005 | 0.024 | 0.024 | 568.300 | 0.020 | 0.004 |
| 9999 | 0.245 | 1.108 | 2.800 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 50   | 0.833 | 5.605 | 3.808 | 0.007 | 0.116 | 0.116 | 568.299 | 0.075 | 0.005 |
| 120  | 0.405 | 3.871 | 2.341 | 0.006 | 0.105 | 0.105 | 568.299 | 0.036 | 0.004 |
| 175  | 0.296 | 3.397 | 1.266 | 0.006 | 0.065 | 0.065 | 568.299 | 0.026 | 0.004 |
| 250  | 0.262 | 1.207 | 1.104 | 0.006 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 500  | 0.257 | 1.200 | 1.016 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 750  | 0.257 | 1.200 | 1.033 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 1000 | 0.265 | 1.225 | 3.094 | 0.005 | 0.056 | 0.056 | 568.300 | 0.023 | 0.004 |
| 50   | 0.525 | 4.857 | 3.351 | 0.007 | 0.043 | 0.043 | 568.299 | 0.047 | 0.005 |
| 120  | 0.272 | 3.673 | 1.708 | 0.006 | 0.038 | 0.038 | 568.299 | 0.024 | 0.004 |
| 175  | 0.197 | 3.244 | 0.600 | 0.006 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 250  | 0.185 | 1.105 | 0.502 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 500  | 0.184 | 1.058 | 0.476 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 750  | 0.184 | 1.058 | 0.478 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 9999 | 0.196 | 1.059 | 2.590 | 0.005 | 0.032 | 0.032 | 568.299 | 0.017 | 0.004 |



|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.602 | 5.309 | 3.393 | 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 120  | 0.301 | 3.806 | 1.676 | 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 175  | 0.213 | 3.362 | 0.525 | 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 250  | 0.203 | 1.145 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 500  | 0.202 | 1.088 | 0.433 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 750  | 0.202 | 1.088 | 0.437 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 50   | 0.565 | 5.272 | 3.330 | 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 120  | 0.283 | 3.799 | 1.555 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 175  | 0.199 | 3.360 | 0.391 | 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 250  | 0.195 | 1.144 | 0.341 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 500  | 0.195 | 1.088 | 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 50   | 0.315 | 3.640 | 3.107 | 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 120  | 0.178 | 3.316 | 1.645 | 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 175  | 0.130 | 2.929 | 0.601 | 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 250  | 0.120 | 0.998 | 0.504 | 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 500  | 0.119 | 0.978 | 0.476 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 750  | 0.119 | 0.978 | 0.482 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 9999 | 0.128 | 0.979 | 2.483 | 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 50   | 0.648 | 5.239 | 3.530 | 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 120  | 0.323 | 3.775 | 1.903 | 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 175  | 0.237 | 3.326 | 0.815 | 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 250  | 0.216 | 1.148 | 0.684 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 500  | 0.214 | 1.097 | 0.647 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 750  | 0.214 | 1.097 | 0.654 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 120  | 0.518 | 3.944 | 2.959 | 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
| 175  | 0.373 | 3.435 | 1.916 | 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
| 250  | 0.315 | 1.286 | 1.715 | 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
| 750  | 0.304 | 1.351 | 1.590 | 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
| 1000 | 0.318 | 1.409 | 3.569 | 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
| 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.429 | 4.390 | 3.190 | 0.007 | 0.030 | 0.030 | 568.299 | 0.038 | 0.005 |
| 120  | 0.225 | 3.538 | 1.576 | 0.006 | 0.027 | 0.027 | 568.300 | 0.020 | 0.004 |
| 175  | 0.161 | 3.127 | 0.459 | 0.006 | 0.019 | 0.019 | 568.299 | 0.014 | 0.004 |
| 500  | 0.154 | 1.028 | 0.391 | 0.005 | 0.014 | 0.014 | 568.300 | 0.013 | 0.004 |
| 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.609 | 5.299 | 3.460 | 0.007 | 0.048 | 0.048 | 568.299 | 0.054 | 0.005 |
| 120  | 0.309 | 3.802 | 1.766 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 175  | 0.223 | 3.357 | 0.641 | 0.006 | 0.028 | 0.028 | 568.299 | 0.020 | 0.004 |
| 250  | 0.209 | 1.143 | 0.536 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 500  | 0.208 | 1.087 | 0.506 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 750  | 0.208 | 1.087 | 0.512 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 1000 | 0.212 | 1.088 | 2.660 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 50   | 0.598 | 5.237 | 3.447 | 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 120  | 0.304 | 3.784 | 1.762 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 175  | 0.220 | 3.341 | 0.640 | 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 250  | 0.206 | 1.138 | 0.535 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 500  | 0.205 | 1.083 | 0.505 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 9999 | 0.218 | 1.084 | 2.653 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.845 | 5.396 | 3.841 | 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 120  | 0.408 | 3.800 | 2.468 | 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 175  | 0.300 | 3.326 | 1.425 | 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 250  | 0.259 | 1.192 | 1.246 | 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 500  | 0.253 | 1.181 | 1.141 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.802 | 5.309 | 3.809 | 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 120  | 0.390 | 3.774 | 2.393 | 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 175  | 0.290 | 3.306 | 1.363 | 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 250  | 0.250 | 1.171 | 1.176 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 50   | 0.215 | 3.124 | 2.989 | 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 120  | 0.134 | 3.167 | 1.594 | 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 175  | 0.126 | 2.907 | 0.619 | 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 50   | 0.348 | 3.814 | 3.146 | 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 120  | 0.193 | 3.367 | 1.662 | 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 175  | 0.142 | 2.973 | 0.610 | 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 250  | 0.130 | 1.013 | 0.511 | 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 500  | 0.129 | 0.989 | 0.482 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 750  | 0.129 | 0.989 | 0.488 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 9999 | 0.139 | 0.990 | 2.504 | 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.587 | 4.784 | 3.480 | 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 120  | 0.299 | 3.639 | 1.950 | 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 175  | 0.223 | 3.203 | 0.907 | 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 250  | 0.195 | 1.099 | 0.745 | 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 500  | 0.193 | 1.056 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 50   | 0.548 | 5.031 | 3.359 | 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 120  | 0.279 | 3.725 | 1.671 | 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 175  | 0.200 | 3.291 | 0.537 | 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 250  | 0.191 | 1.121 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 500  | 0.190 | 1.070 | 0.443 | 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 175  | 0.398 | 3.496 | 2.034 | 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 250  | 0.335 | 1.322 | 1.828 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 500  | 0.322 | 1.401 | 1.658 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 750  | 0.323 | 1.401 | 1.694 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 1000 | 0.338 | 1.465 | 3.676 | 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.634 | 5.181 | 3.500 | 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 120  | 0.317 | 3.759 | 1.875 | 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 175  | 0.232 | 3.312 | 0.787 | 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.210 | 1.138 | 0.655 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 500  | 0.208 | 1.085 | 0.619 | 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 750  | 0.208 | 1.085 | 0.627 | 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 1000 | 0.214 | 1.099 | 2.722 | 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 120  | 0.410 | 3.866 | 2.384 | 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 175  | 0.301 | 3.389 | 1.320 | 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 250  | 0.264 | 1.206 | 1.149 | 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 500  | 0.259 | 1.184 | 1.057 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 750  | 0.259 | 1.184 | 1.075 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 50   | 0.393 | 4.099 | 3.193 | 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 120  | 0.213 | 3.451 | 1.657 | 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 175  | 0.157 | 3.048 | 0.586 | 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 250  | 0.176 | 1.255 | 0.594 | 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 50   | 0.411 | 4.386 | 3.128 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 120  | 0.214 | 3.538 | 1.477 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 50   | 0.518 | 4.295 | 3.400 | 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 120  | 0.264 | 3.492 | 1.959 | 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 175  | 0.197 | 3.071 | 0.939 | 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 250  | 0.172 | 1.064 | 0.789 | 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 500  | 0.169 | 1.032 | 0.738 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 750  | 0.169 | 1.032 | 0.749 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.509 | 4.947 | 3.294 | 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 120  | 0.261 | 3.703 | 1.569 | 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 175  | 0.187 | 3.275 | 0.431 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 250  | 0.182 | 1.116 | 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 50   | 0.539 | 4.966 | 3.299 | 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 120  | 0.272 | 3.705 | 1.624 | 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 175  | 0.193 | 3.273 | 0.485 | 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 250  | 0.183 | 1.115 | 0.418 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 500  | 0.182 | 1.066 | 0.403 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 750  | 0.182 | 1.066 | 0.407 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.851 | 5.208 | 3.835 | 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 120  | 0.409 | 3.743 | 2.559 | 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 175  | 0.300 | 3.273 | 1.529 | 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 250  | 0.256 | 1.188 | 1.348 | 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 500  | 0.249 | 1.209 | 1.231 | 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 750  | 0.249 | 1.209 | 1.254 | 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 50   | 0.449 | 4.387 | 3.273 | 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 120  | 0.239 | 3.535 | 1.707 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 175  | 0.176 | 3.121 | 0.628 | 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 250  | 0.162 | 1.063 | 0.525 | 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 500  | 0.161 | 1.027 | 0.495 | 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

2032

| 2032             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   |
| Aerial Lifts     | 50    | 0.339   | 3.764   | 3.135   | 0.007   | 0.040   | 0.040   |
| Aerial Lifts     | 120   | 0.188   | 3.352   | 1.657   | 0.006   | 0.036   | 0.036   |
| Aerial Lifts     | 500   | 0.126   | 0.986   | 0.479   | 0.005   | 0.016   | 0.016   |
| Aerial Lifts     | 750   | 0.126   | 0.986   | 0.485   | 0.005   | 0.016   | 0.016   |
| Air Compressor s | 15    | 0.663   | 3.470   | 4.164   | 0.008   | 0.166   | 0.166   |
| Air Compressor s | 25    | 0.687   | 2.340   | 4.347   | 0.007   | 0.165   | 0.165   |
| Air Compressor s | 50    | 0.506   | 4.712   | 3.340   | 0.007   | 0.046   | 0.046   |
| Air Compressor s | 120   | 0.264   | 3.630   | 1.729   | 0.006   | 0.041   | 0.041   |
| Air Compressor s | 175   | 0.193   | 3.205   | 0.633   | 0.006   | 0.027   | 0.027   |
| Air Compressor s | 250   | 0.179   | 1.092   | 0.529   | 0.006   | 0.018   | 0.018   |
| Air Compressor s | 500   | 0.178   | 1.048   | 0.499   | 0.005   | 0.017   | 0.017   |
| Air Compressor s | 750   | 0.178   | 1.048   | 0.505   | 0.005   | 0.017   | 0.017   |
| Air Compressor s | 1000  | 0.182   | 1.049   | 2.600   | 0.005   | 0.033   | 0.033   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.029   | 3.020   | 0.007   | 0.013   | 0.013   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.415   | 0.006   | 0.012   | 0.012   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.038   | 0.279   | 0.006   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   | 0.274   | 0.006   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   |

|                          |      |       |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.333 | 0.007 | 0.162 | 0.162 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.409 | 4.199 | 3.222 | 0.007 | 0.041 | 0.041 |
| Concrete/Industrial Saws | 120  | 0.221 | 3.480 | 1.667 | 0.006 | 0.036 | 0.036 |
| Concrete/Industrial Saws | 175  | 0.163 | 3.074 | 0.590 | 0.006 | 0.025 | 0.025 |
| Cranes                   | 50   | 0.684 | 5.366 | 3.598 | 0.007 | 0.075 | 0.075 |
| Cranes                   | 120  | 0.343 | 3.812 | 1.987 | 0.006 | 0.067 | 0.067 |
| Cranes                   | 175  | 0.253 | 3.356 | 0.916 | 0.006 | 0.042 | 0.042 |
| Cranes                   | 250  | 0.224 | 1.147 | 0.748 | 0.006 | 0.024 | 0.024 |
| Cranes                   | 500  | 0.222 | 1.090 | 0.697 | 0.005 | 0.023 | 0.023 |
| Cranes                   | 750  | 0.222 | 1.090 | 0.709 | 0.005 | 0.024 | 0.024 |
| Cranes                   | 9999 | 0.245 | 1.108 | 2.800 | 0.005 | 0.043 | 0.043 |
| Crawler Tractors         | 50   | 0.833 | 5.605 | 3.808 | 0.007 | 0.116 | 0.116 |
| Crawler Tractors         | 120  | 0.405 | 3.871 | 2.341 | 0.006 | 0.105 | 0.105 |
| Crawler Tractors         | 175  | 0.296 | 3.397 | 1.266 | 0.006 | 0.065 | 0.065 |
| Crawler Tractors         | 250  | 0.262 | 1.207 | 1.104 | 0.006 | 0.040 | 0.040 |
| Crawler Tractors         | 500  | 0.257 | 1.200 | 1.016 | 0.005 | 0.038 | 0.038 |
| Crawler Tractors         | 750  | 0.257 | 1.200 | 1.033 | 0.005 | 0.038 | 0.038 |
| Crawler Tractors         | 1000 | 0.265 | 1.225 | 3.094 | 0.005 | 0.056 | 0.056 |
| Crushing/Proc. Equipment | 50   | 0.525 | 4.857 | 3.351 | 0.007 | 0.043 | 0.043 |
| Crushing/Proc. Equipment | 120  | 0.272 | 3.673 | 1.708 | 0.006 | 0.038 | 0.038 |
| Crushing/Proc. Equipment | 175  | 0.197 | 3.244 | 0.600 | 0.006 | 0.025 | 0.025 |
| Crushing/Proc. Equipment | 250  | 0.185 | 1.105 | 0.502 | 0.006 | 0.017 | 0.017 |
| Crushing/Proc. Equipment | 500  | 0.184 | 1.058 | 0.476 | 0.005 | 0.017 | 0.017 |
| Crushing/Proc. Equipment | 750  | 0.184 | 1.058 | 0.478 | 0.005 | 0.017 | 0.017 |
| Crushing/Proc. Equipment | 9999 | 0.196 | 1.059 | 2.590 | 0.005 | 0.032 | 0.032 |



|                      |      |       |       |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|
| Dumpers/Te nders     | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Excavators           | 50   | 0.602 | 5.309 | 3.393 | 0.007 | 0.038 | 0.038 |
| Excavators           | 120  | 0.301 | 3.806 | 1.676 | 0.006 | 0.034 | 0.034 |
| Excavators           | 175  | 0.213 | 3.362 | 0.525 | 0.006 | 0.023 | 0.023 |
| Excavators           | 250  | 0.203 | 1.145 | 0.452 | 0.006 | 0.016 | 0.016 |
| Excavators           | 500  | 0.202 | 1.088 | 0.433 | 0.005 | 0.016 | 0.016 |
| Excavators           | 750  | 0.202 | 1.088 | 0.437 | 0.005 | 0.016 | 0.016 |
| Forklifts            | 50   | 0.565 | 5.272 | 3.330 | 0.007 | 0.023 | 0.023 |
| Forklifts            | 120  | 0.283 | 3.799 | 1.555 | 0.006 | 0.021 | 0.021 |
| Forklifts            | 175  | 0.199 | 3.360 | 0.391 | 0.006 | 0.015 | 0.015 |
| Forklifts            | 250  | 0.195 | 1.144 | 0.341 | 0.006 | 0.012 | 0.012 |
| Forklifts            | 500  | 0.195 | 1.088 | 0.341 | 0.005 | 0.012 | 0.012 |
| Generator Sets       | 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Generator Sets       | 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Generator Sets       | 50   | 0.315 | 3.640 | 3.107 | 0.007 | 0.038 | 0.038 |
| Generator Sets       | 120  | 0.178 | 3.316 | 1.645 | 0.006 | 0.034 | 0.034 |
| Generator Sets       | 175  | 0.130 | 2.929 | 0.601 | 0.006 | 0.023 | 0.023 |
| Generator Sets       | 250  | 0.120 | 0.998 | 0.504 | 0.006 | 0.016 | 0.016 |
| Generator Sets       | 500  | 0.119 | 0.978 | 0.476 | 0.005 | 0.015 | 0.015 |
| Generator Sets       | 750  | 0.119 | 0.978 | 0.482 | 0.005 | 0.015 | 0.015 |
| Generator Sets       | 9999 | 0.128 | 0.979 | 2.483 | 0.005 | 0.029 | 0.029 |
| Graders              | 50   | 0.648 | 5.239 | 3.530 | 0.007 | 0.065 | 0.065 |
| Graders              | 120  | 0.323 | 3.775 | 1.903 | 0.006 | 0.058 | 0.058 |
| Graders              | 175  | 0.237 | 3.326 | 0.815 | 0.006 | 0.038 | 0.038 |
| Graders              | 250  | 0.216 | 1.148 | 0.684 | 0.006 | 0.024 | 0.024 |
| Graders              | 500  | 0.214 | 1.097 | 0.647 | 0.005 | 0.023 | 0.023 |
| Graders              | 750  | 0.214 | 1.097 | 0.654 | 0.005 | 0.023 | 0.023 |
| Off-Highway Tractors | 120  | 0.518 | 3.944 | 2.959 | 0.006 | 0.175 | 0.175 |
| Off-Highway Tractors | 175  | 0.373 | 3.435 | 1.916 | 0.006 | 0.104 | 0.104 |
| Off-Highway Tractors | 250  | 0.315 | 1.286 | 1.715 | 0.006 | 0.064 | 0.064 |
| Off-Highway Tractors | 750  | 0.304 | 1.351 | 1.590 | 0.005 | 0.060 | 0.060 |
| Off-Highway Tractors | 1000 | 0.318 | 1.409 | 3.569 | 0.005 | 0.078 | 0.078 |
| Off-Highway Trucks   | 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 |
| Off-Highway Trucks   | 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 |
| Off-Highway Trucks                 | 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 |
| Off-Highway Trucks                 | 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Other Construction Equipment       | 50   | 0.429 | 4.390 | 3.190 | 0.007 | 0.030 | 0.030 |
| Other Construction Equipment       | 120  | 0.225 | 3.538 | 1.576 | 0.006 | 0.027 | 0.027 |
| Other Construction Equipment       | 175  | 0.161 | 3.127 | 0.459 | 0.006 | 0.019 | 0.019 |
| Other Construction Equipment       | 500  | 0.154 | 1.028 | 0.391 | 0.005 | 0.014 | 0.014 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Other General Industrial Equipment | 50   | 0.609 | 5.299 | 3.460 | 0.007 | 0.048 | 0.048 |
| Other General Industrial Equipment | 120  | 0.309 | 3.802 | 1.766 | 0.006 | 0.043 | 0.043 |
| Other General Industrial Equipment | 175  | 0.223 | 3.357 | 0.641 | 0.006 | 0.028 | 0.028 |
| Other General Industrial Equipment | 250  | 0.209 | 1.143 | 0.536 | 0.006 | 0.018 | 0.018 |
| Other General Industrial Equipment | 500  | 0.208 | 1.087 | 0.506 | 0.005 | 0.018 | 0.018 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.208 | 1.087 | 0.512 | 0.005 | 0.018 | 0.018 |
| Other General Industrial Equipment | 1000 | 0.212 | 1.088 | 2.660 | 0.005 | 0.035 | 0.035 |
| Other Material Handling Equipment  | 50   | 0.598 | 5.237 | 3.447 | 0.007 | 0.048 | 0.048 |
| Other Material Handling Equipment  | 120  | 0.304 | 3.784 | 1.762 | 0.006 | 0.043 | 0.043 |
| Other Material Handling Equipment  | 175  | 0.220 | 3.341 | 0.640 | 0.006 | 0.028 | 0.028 |
| Other Material Handling Equipment  | 250  | 0.206 | 1.138 | 0.535 | 0.006 | 0.018 | 0.018 |
| Other Material Handling Equipment  | 500  | 0.205 | 1.083 | 0.505 | 0.005 | 0.018 | 0.018 |
| Other Material Handling Equipment  | 9999 | 0.218 | 1.084 | 2.653 | 0.005 | 0.035 | 0.035 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Pavers                             | 50   | 0.845 | 5.396 | 3.841 | 0.007 | 0.134 | 0.134 |
| Pavers                             | 120  | 0.408 | 3.800 | 2.468 | 0.006 | 0.121 | 0.121 |
| Pavers                             | 175  | 0.300 | 3.326 | 1.425 | 0.006 | 0.074 | 0.074 |
| Pavers                             | 250  | 0.259 | 1.192 | 1.246 | 0.006 | 0.045 | 0.045 |
| Pavers                             | 500  | 0.253 | 1.181 | 1.141 | 0.005 | 0.043 | 0.043 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Paving Equipment                   | 50   | 0.802 | 5.309 | 3.809 | 0.007 | 0.126 | 0.126 |
| Paving Equipment                   | 120  | 0.390 | 3.774 | 2.393 | 0.006 | 0.114 | 0.114 |
| Paving Equipment                   | 175  | 0.290 | 3.306 | 1.363 | 0.006 | 0.070 | 0.070 |
| Paving Equipment                   | 250  | 0.250 | 1.171 | 1.176 | 0.006 | 0.042 | 0.042 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Pressure Washers                   | 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Pressure Washers                   | 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Pressure Washers                   | 50   | 0.215 | 3.124 | 2.989 | 0.007 | 0.030 | 0.030 |
| Pressure Washers                   | 120  | 0.134 | 3.167 | 1.594 | 0.006 | 0.028 | 0.028 |
| Pressure Washers                   | 175  | 0.126 | 2.907 | 0.619 | 0.006 | 0.024 | 0.024 |

|                         |      |       |       |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 |
| Pumps                   | 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Pumps                   | 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Pumps                   | 50   | 0.348 | 3.814 | 3.146 | 0.007 | 0.040 | 0.040 |
| Pumps                   | 120  | 0.193 | 3.367 | 1.662 | 0.006 | 0.036 | 0.036 |
| Pumps                   | 175  | 0.142 | 2.973 | 0.610 | 0.006 | 0.024 | 0.024 |
| Pumps                   | 250  | 0.130 | 1.013 | 0.511 | 0.006 | 0.016 | 0.016 |
| Pumps                   | 500  | 0.129 | 0.989 | 0.482 | 0.005 | 0.016 | 0.016 |
| Pumps                   | 750  | 0.129 | 0.989 | 0.488 | 0.005 | 0.016 | 0.016 |
| Pumps                   | 9999 | 0.139 | 0.990 | 2.504 | 0.005 | 0.030 | 0.030 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Rollers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Rollers                 | 50   | 0.587 | 4.784 | 3.480 | 0.007 | 0.073 | 0.073 |
| Rollers                 | 120  | 0.299 | 3.639 | 1.950 | 0.006 | 0.066 | 0.066 |
| Rollers                 | 175  | 0.223 | 3.203 | 0.907 | 0.006 | 0.042 | 0.042 |
| Rollers                 | 250  | 0.195 | 1.099 | 0.745 | 0.006 | 0.024 | 0.024 |
| Rollers                 | 500  | 0.193 | 1.056 | 0.697 | 0.005 | 0.023 | 0.023 |
| Rough Terrain Forklifts | 50   | 0.548 | 5.031 | 3.359 | 0.007 | 0.039 | 0.039 |
| Rough Terrain Forklifts | 120  | 0.279 | 3.725 | 1.671 | 0.006 | 0.034 | 0.034 |
| Rough Terrain Forklifts | 175  | 0.200 | 3.291 | 0.537 | 0.006 | 0.023 | 0.023 |
| Rough Terrain Forklifts | 250  | 0.191 | 1.121 | 0.463 | 0.006 | 0.016 | 0.016 |
| Rough Terrain Forklifts | 500  | 0.190 | 1.070 | 0.443 | 0.005 | 0.016 | 0.016 |
| Rubber Tired Dozers     | 175  | 0.398 | 3.496 | 2.034 | 0.006 | 0.111 | 0.111 |
| Rubber Tired Dozers     | 250  | 0.335 | 1.322 | 1.828 | 0.006 | 0.069 | 0.069 |
| Rubber Tired Dozers     | 500  | 0.322 | 1.401 | 1.658 | 0.005 | 0.064 | 0.064 |
| Rubber Tired Dozers     | 750  | 0.323 | 1.401 | 1.694 | 0.005 | 0.064 | 0.064 |
| Rubber Tired Dozers     | 1000 | 0.338 | 1.465 | 3.676 | 0.005 | 0.082 | 0.082 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Rubber Tired Loaders    | 50   | 0.634 | 5.181 | 3.500 | 0.007 | 0.062 | 0.062 |
| Rubber Tired Loaders    | 120  | 0.317 | 3.759 | 1.875 | 0.006 | 0.056 | 0.056 |
| Rubber Tired Loaders    | 175  | 0.232 | 3.312 | 0.787 | 0.006 | 0.036 | 0.036 |

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.138 | 0.655 | 0.006 | 0.022 | 0.022 |
| Rubber Tired Loaders      | 500  | 0.208 | 1.085 | 0.619 | 0.005 | 0.021 | 0.021 |
| Rubber Tired Loaders      | 750  | 0.208 | 1.085 | 0.627 | 0.005 | 0.022 | 0.022 |
| Rubber Tired Loaders      | 1000 | 0.214 | 1.099 | 2.722 | 0.005 | 0.039 | 0.039 |
| Scrapers                  | 120  | 0.410 | 3.866 | 2.384 | 0.006 | 0.111 | 0.111 |
| Scrapers                  | 175  | 0.301 | 3.389 | 1.320 | 0.006 | 0.068 | 0.068 |
| Scrapers                  | 250  | 0.264 | 1.206 | 1.149 | 0.006 | 0.042 | 0.042 |
| Scrapers                  | 500  | 0.259 | 1.184 | 1.057 | 0.005 | 0.040 | 0.040 |
| Scrapers                  | 750  | 0.259 | 1.184 | 1.075 | 0.005 | 0.040 | 0.040 |
| Signal Boards             | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 |
| Signal Boards             | 50   | 0.393 | 4.099 | 3.193 | 0.007 | 0.040 | 0.040 |
| Signal Boards             | 120  | 0.213 | 3.451 | 1.657 | 0.006 | 0.035 | 0.035 |
| Signal Boards             | 175  | 0.157 | 3.048 | 0.586 | 0.006 | 0.024 | 0.024 |
| Signal Boards             | 250  | 0.176 | 1.255 | 0.594 | 0.007 | 0.019 | 0.019 |
| Skid Steer Loaders        | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 |
| Skid Steer Loaders        | 50   | 0.411 | 4.386 | 3.128 | 0.007 | 0.018 | 0.018 |
| Skid Steer Loaders        | 120  | 0.214 | 3.538 | 1.477 | 0.006 | 0.017 | 0.017 |
| Surfacing Equipment       | 50   | 0.518 | 4.295 | 3.400 | 0.007 | 0.075 | 0.075 |
| Surfacing Equipment       | 120  | 0.264 | 3.492 | 1.959 | 0.006 | 0.068 | 0.068 |
| Surfacing Equipment       | 175  | 0.197 | 3.071 | 0.939 | 0.006 | 0.043 | 0.043 |
| Surfacing Equipment       | 250  | 0.172 | 1.064 | 0.789 | 0.006 | 0.026 | 0.026 |
| Surfacing Equipment       | 500  | 0.169 | 1.032 | 0.738 | 0.005 | 0.025 | 0.025 |
| Surfacing Equipment       | 750  | 0.169 | 1.032 | 0.749 | 0.005 | 0.025 | 0.025 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 |
| Sweepers/Scrubbers        | 50   | 0.509 | 4.947 | 3.294 | 0.007 | 0.026 | 0.026 |
| Sweepers/Scrubbers        | 120  | 0.261 | 3.703 | 1.569 | 0.006 | 0.023 | 0.023 |
| Sweepers/Scrubbers        | 175  | 0.187 | 3.275 | 0.431 | 0.006 | 0.017 | 0.017 |
| Sweepers/Scrubbers        | 250  | 0.182 | 1.116 | 0.370 | 0.006 | 0.013 | 0.013 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.539 | 4.966 | 3.299 | 0.007 | 0.033 | 0.033 |
| Tractors/Loaders/Backhoes | 120  | 0.272 | 3.705 | 1.624 | 0.006 | 0.030 | 0.030 |
| Tractors/Loaders/Backhoes | 175  | 0.193 | 3.273 | 0.485 | 0.006 | 0.020 | 0.020 |
| Tractors/Loaders/Backhoes | 250  | 0.183 | 1.115 | 0.418 | 0.006 | 0.014 | 0.014 |
| Tractors/Loaders/Backhoes | 500  | 0.182 | 1.066 | 0.403 | 0.006 | 0.014 | 0.014 |
| Tractors/Loaders/Backhoes | 750  | 0.182 | 1.066 | 0.407 | 0.006 | 0.014 | 0.014 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Trenchers                 | 50   | 0.851 | 5.208 | 3.835 | 0.007 | 0.144 | 0.144 |
| Trenchers                 | 120  | 0.409 | 3.743 | 2.559 | 0.006 | 0.132 | 0.132 |
| Trenchers                 | 175  | 0.300 | 3.273 | 1.529 | 0.006 | 0.080 | 0.080 |
| Trenchers                 | 250  | 0.256 | 1.188 | 1.348 | 0.006 | 0.049 | 0.049 |
| Trenchers                 | 500  | 0.249 | 1.209 | 1.231 | 0.005 | 0.046 | 0.046 |
| Trenchers                 | 750  | 0.249 | 1.209 | 1.254 | 0.005 | 0.047 | 0.047 |
| Welders                   | 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Welders                   | 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Welders                   | 50   | 0.449 | 4.387 | 3.273 | 0.007 | 0.045 | 0.045 |
| Welders                   | 120  | 0.239 | 3.535 | 1.707 | 0.006 | 0.040 | 0.040 |
| Welders                   | 175  | 0.176 | 3.121 | 0.628 | 0.006 | 0.027 | 0.027 |
| Welders                   | 250  | 0.162 | 1.063 | 0.525 | 0.006 | 0.017 | 0.017 |
| Welders                   | 500  | 0.161 | 1.027 | 0.495 | 0.005 | 0.017 | 0.017 |
| Water Trucks              | 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 |
| Water Trucks              | 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 |
| Water Trucks              | 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 |
| Water Trucks              | 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 |
| Water Trucks              | 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 |

2033

| g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|
| CO2     | CH4     | N2O     |
| 568.299 | 0.059   | 0.005   |
| 568.299 | 0.061   | 0.005   |
| 568.300 | 0.030   | 0.005   |
| 568.299 | 0.017   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.059   | 0.005   |
| 568.299 | 0.061   | 0.005   |
| 568.299 | 0.045   | 0.005   |
| 568.299 | 0.023   | 0.004   |
| 568.299 | 0.017   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.300 | 0.016   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.059   | 0.005   |
| 568.299 | 0.061   | 0.005   |
| 568.299 | 0.031   | 0.005   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |

| 2033             |       | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   |
| Aerial Lifts     | 50    | 0.339   | 3.764   | 3.135   |
| Aerial Lifts     | 120   | 0.188   | 3.352   | 1.657   |
| Aerial Lifts     | 500   | 0.126   | 0.986   | 0.479   |
| Aerial Lifts     | 750   | 0.126   | 0.986   | 0.485   |
| Air Compressor s | 15    | 0.663   | 3.470   | 4.164   |
| Air Compressor s | 25    | 0.687   | 2.340   | 4.347   |
| Air Compressor s | 50    | 0.506   | 4.712   | 3.340   |
| Air Compressor s | 120   | 0.264   | 3.630   | 1.729   |
| Air Compressor s | 175   | 0.193   | 3.205   | 0.633   |
| Air Compressor s | 250   | 0.179   | 1.092   | 0.529   |
| Air Compressor s | 500   | 0.178   | 1.048   | 0.499   |
| Air Compressor s | 750   | 0.178   | 1.048   | 0.505   |
| Air Compressor s | 1000  | 0.182   | 1.049   | 2.600   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.029   | 3.020   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.415   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.038   | 0.279   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   | 0.274   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   | 0.274   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   | 0.274   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   | 2.372   |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.036 | 0.005 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.020 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.075 | 0.005 |
| 568.299 | 0.036 | 0.004 |
| 568.299 | 0.026 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.300 | 0.023 | 0.004 |
| 568.299 | 0.047 | 0.005 |
| 568.299 | 0.024 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.017 | 0.004 |

|                          |      |       |       |       |
|--------------------------|------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.333 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 |
| Concrete/Industrial Saws | 50   | 0.409 | 4.199 | 3.222 |
| Concrete/Industrial Saws | 120  | 0.221 | 3.480 | 1.667 |
| Concrete/Industrial Saws | 175  | 0.163 | 3.074 | 0.590 |
| Cranes                   | 50   | 0.684 | 5.366 | 3.598 |
| Cranes                   | 120  | 0.343 | 3.812 | 1.987 |
| Cranes                   | 175  | 0.253 | 3.356 | 0.916 |
| Cranes                   | 250  | 0.224 | 1.147 | 0.748 |
| Cranes                   | 500  | 0.222 | 1.090 | 0.697 |
| Cranes                   | 750  | 0.222 | 1.090 | 0.709 |
| Cranes                   | 9999 | 0.245 | 1.108 | 2.800 |
| Crawler Tractors         | 50   | 0.833 | 5.605 | 3.808 |
| Crawler Tractors         | 120  | 0.405 | 3.871 | 2.341 |
| Crawler Tractors         | 175  | 0.296 | 3.397 | 1.266 |
| Crawler Tractors         | 250  | 0.262 | 1.207 | 1.104 |
| Crawler Tractors         | 500  | 0.257 | 1.200 | 1.016 |
| Crawler Tractors         | 750  | 0.257 | 1.200 | 1.033 |
| Crawler Tractors         | 1000 | 0.265 | 1.225 | 3.094 |
| Crushing/Proc. Equipment | 50   | 0.525 | 4.857 | 3.351 |
| Crushing/Proc. Equipment | 120  | 0.272 | 3.673 | 1.708 |
| Crushing/Proc. Equipment | 175  | 0.197 | 3.244 | 0.600 |
| Crushing/Proc. Equipment | 250  | 0.185 | 1.105 | 0.502 |
| Crushing/Proc. Equipment | 500  | 0.184 | 1.058 | 0.476 |
| Crushing/Proc. Equipment | 750  | 0.184 | 1.058 | 0.478 |
| Crushing/Proc. Equipment | 9999 | 0.196 | 1.059 | 2.590 |



|         |       |       |
|---------|-------|-------|
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.054 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.051 | 0.005 |
| 568.299 | 0.025 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.028 | 0.005 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.010 | 0.004 |
| 568.299 | 0.010 | 0.004 |
| 568.299 | 0.010 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.058 | 0.005 |
| 568.299 | 0.029 | 0.004 |
| 568.300 | 0.021 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.046 | 0.004 |
| 568.299 | 0.033 | 0.004 |
| 568.299 | 0.028 | 0.004 |
| 568.299 | 0.027 | 0.004 |
| 568.300 | 0.028 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.019 | 0.004 |

|                      |      |       |       |       |
|----------------------|------|-------|-------|-------|
| Dumpers/Truckers     | 25   | 0.685 | 2.340 | 4.332 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 |
| Excavators           | 50   | 0.602 | 5.309 | 3.393 |
| Excavators           | 120  | 0.301 | 3.806 | 1.676 |
| Excavators           | 175  | 0.213 | 3.362 | 0.525 |
| Excavators           | 250  | 0.203 | 1.145 | 0.452 |
| Excavators           | 500  | 0.202 | 1.088 | 0.433 |
| Excavators           | 750  | 0.202 | 1.088 | 0.437 |
| Forklifts            | 50   | 0.565 | 5.272 | 3.330 |
| Forklifts            | 120  | 0.283 | 3.799 | 1.555 |
| Forklifts            | 175  | 0.199 | 3.360 | 0.391 |
| Forklifts            | 250  | 0.195 | 1.144 | 0.341 |
| Forklifts            | 500  | 0.195 | 1.088 | 0.341 |
| Generator Sets       | 15   | 0.592 | 3.470 | 4.164 |
| Generator Sets       | 25   | 0.686 | 2.340 | 4.347 |
| Generator Sets       | 50   | 0.315 | 3.640 | 3.107 |
| Generator Sets       | 120  | 0.178 | 3.316 | 1.645 |
| Generator Sets       | 175  | 0.130 | 2.929 | 0.601 |
| Generator Sets       | 250  | 0.120 | 0.998 | 0.504 |
| Generator Sets       | 500  | 0.119 | 0.978 | 0.476 |
| Generator Sets       | 750  | 0.119 | 0.978 | 0.482 |
| Generator Sets       | 9999 | 0.128 | 0.979 | 2.483 |
| Graders              | 50   | 0.648 | 5.239 | 3.530 |
| Graders              | 120  | 0.323 | 3.775 | 1.903 |
| Graders              | 175  | 0.237 | 3.326 | 0.815 |
| Graders              | 250  | 0.216 | 1.148 | 0.684 |
| Graders              | 500  | 0.214 | 1.097 | 0.647 |
| Graders              | 750  | 0.214 | 1.097 | 0.654 |
| Off-Highway Tractors | 120  | 0.518 | 3.944 | 2.959 |
| Off-Highway Tractors | 175  | 0.373 | 3.435 | 1.916 |
| Off-Highway Tractors | 250  | 0.315 | 1.286 | 1.715 |
| Off-Highway Tractors | 750  | 0.304 | 1.351 | 1.590 |
| Off-Highway Tractors | 1000 | 0.318 | 1.409 | 3.569 |
| Off-Highway Trucks   | 175  | 0.229 | 3.425 | 0.563 |
| Off-Highway Trucks   | 250  | 0.217 | 1.166 | 0.481 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.300 | 0.019 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.038 | 0.005 |
| 568.300 | 0.020 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.300 | 0.013 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.054 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.216 | 1.104 | 0.458 |
| Off-Highway Trucks                 | 750  | 0.217 | 1.104 | 0.463 |
| Off-Highway Trucks                 | 1000 | 0.220 | 1.107 | 2.651 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 |
| Other Construction Equipment       | 50   | 0.429 | 4.390 | 3.190 |
| Other Construction Equipment       | 120  | 0.225 | 3.538 | 1.576 |
| Other Construction Equipment       | 175  | 0.161 | 3.127 | 0.459 |
| Other Construction Equipment       | 500  | 0.154 | 1.028 | 0.391 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 |
| Other General Industrial Equipment | 50   | 0.609 | 5.299 | 3.460 |
| Other General Industrial Equipment | 120  | 0.309 | 3.802 | 1.766 |
| Other General Industrial Equipment | 175  | 0.223 | 3.357 | 0.641 |
| Other General Industrial Equipment | 250  | 0.209 | 1.143 | 0.536 |
| Other General Industrial Equipment | 500  | 0.208 | 1.087 | 0.506 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.076 | 0.005 |
| 568.300 | 0.036 | 0.004 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.072 | 0.005 |
| 568.300 | 0.035 | 0.004 |
| 568.299 | 0.026 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.300 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.019 | 0.005 |
| 568.300 | 0.012 | 0.004 |
| 568.299 | 0.011 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.208 | 1.087 | 0.512 |
| Other General Industrial Equipment | 1000 | 0.212 | 1.088 | 2.660 |
| Other Material Handling Equipment  | 50   | 0.598 | 5.237 | 3.447 |
| Other Material Handling Equipment  | 120  | 0.304 | 3.784 | 1.762 |
| Other Material Handling Equipment  | 175  | 0.220 | 3.341 | 0.640 |
| Other Material Handling Equipment  | 250  | 0.206 | 1.138 | 0.535 |
| Other Material Handling Equipment  | 500  | 0.205 | 1.083 | 0.505 |
| Other Material Handling Equipment  | 9999 | 0.218 | 1.084 | 2.653 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 |
| Pavers                             | 50   | 0.845 | 5.396 | 3.841 |
| Pavers                             | 120  | 0.408 | 3.800 | 2.468 |
| Pavers                             | 175  | 0.300 | 3.326 | 1.425 |
| Pavers                             | 250  | 0.259 | 1.192 | 1.246 |
| Pavers                             | 500  | 0.253 | 1.181 | 1.141 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 |
| Paving Equipment                   | 50   | 0.802 | 5.309 | 3.809 |
| Paving Equipment                   | 120  | 0.390 | 3.774 | 2.393 |
| Paving Equipment                   | 175  | 0.290 | 3.306 | 1.363 |
| Paving Equipment                   | 250  | 0.250 | 1.171 | 1.176 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 |
| Pressure Washers                   | 15   | 0.592 | 3.470 | 4.164 |
| Pressure Washers                   | 25   | 0.686 | 2.340 | 4.347 |
| Pressure Washers                   | 50   | 0.215 | 3.124 | 2.989 |
| Pressure Washers                   | 120  | 0.134 | 3.167 | 1.594 |
| Pressure Washers                   | 175  | 0.126 | 2.907 | 0.619 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.008 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.300 | 0.061 | 0.005 |
| 568.299 | 0.031 | 0.005 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.012 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.012 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.049 | 0.005 |
| 568.299 | 0.025 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.300 | 0.017 | 0.004 |
| 568.299 | 0.035 | 0.004 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.300 | 0.057 | 0.005 |
| 568.299 | 0.028 | 0.004 |
| 568.299 | 0.020 | 0.004 |

|                         |      |       |       |       |
|-------------------------|------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 |
| Pumps                   | 15   | 0.663 | 3.470 | 4.164 |
| Pumps                   | 25   | 0.687 | 2.340 | 4.347 |
| Pumps                   | 50   | 0.348 | 3.814 | 3.146 |
| Pumps                   | 120  | 0.193 | 3.367 | 1.662 |
| Pumps                   | 175  | 0.142 | 2.973 | 0.610 |
| Pumps                   | 250  | 0.130 | 1.013 | 0.511 |
| Pumps                   | 500  | 0.129 | 0.989 | 0.482 |
| Pumps                   | 750  | 0.129 | 0.989 | 0.488 |
| Pumps                   | 9999 | 0.139 | 0.990 | 2.504 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 |
| Rollers                 | 25   | 0.685 | 2.339 | 4.332 |
| Rollers                 | 50   | 0.587 | 4.784 | 3.480 |
| Rollers                 | 120  | 0.299 | 3.639 | 1.950 |
| Rollers                 | 175  | 0.223 | 3.203 | 0.907 |
| Rollers                 | 250  | 0.195 | 1.099 | 0.745 |
| Rollers                 | 500  | 0.193 | 1.056 | 0.697 |
| Rough Terrain Forklifts | 50   | 0.548 | 5.031 | 3.359 |
| Rough Terrain Forklifts | 120  | 0.279 | 3.725 | 1.671 |
| Rough Terrain Forklifts | 175  | 0.200 | 3.291 | 0.537 |
| Rough Terrain Forklifts | 250  | 0.191 | 1.121 | 0.463 |
| Rough Terrain Forklifts | 500  | 0.190 | 1.070 | 0.443 |
| Rubber Tired Dozers     | 175  | 0.398 | 3.496 | 2.034 |
| Rubber Tired Dozers     | 250  | 0.335 | 1.322 | 1.828 |
| Rubber Tired Dozers     | 500  | 0.322 | 1.401 | 1.658 |
| Rubber Tired Dozers     | 750  | 0.323 | 1.401 | 1.694 |
| Rubber Tired Dozers     | 1000 | 0.338 | 1.465 | 3.676 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 |
| Rubber Tired Loaders    | 50   | 0.634 | 5.181 | 3.500 |
| Rubber Tired Loaders    | 120  | 0.317 | 3.759 | 1.875 |
| Rubber Tired Loaders    | 175  | 0.232 | 3.312 | 0.787 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.037 | 0.004 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.035 | 0.005 |
| 568.300 | 0.019 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 686.695 | 0.015 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.037 | 0.005 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.046 | 0.005 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.046 | 0.005 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.061 | 0.005 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.138 | 0.655 |
| Rubber Tired Loaders      | 500  | 0.208 | 1.085 | 0.619 |
| Rubber Tired Loaders      | 750  | 0.208 | 1.085 | 0.627 |
| Rubber Tired Loaders      | 1000 | 0.214 | 1.099 | 2.722 |
| Scrapers                  | 120  | 0.410 | 3.866 | 2.384 |
| Scrapers                  | 175  | 0.301 | 3.389 | 1.320 |
| Scrapers                  | 250  | 0.264 | 1.206 | 1.149 |
| Scrapers                  | 500  | 0.259 | 1.184 | 1.057 |
| Scrapers                  | 750  | 0.259 | 1.184 | 1.075 |
| Signal Boards             | 15   | 0.661 | 3.470 | 4.142 |
| Signal Boards             | 50   | 0.393 | 4.099 | 3.193 |
| Signal Boards             | 120  | 0.213 | 3.451 | 1.657 |
| Signal Boards             | 175  | 0.157 | 3.048 | 0.586 |
| Signal Boards             | 250  | 0.176 | 1.255 | 0.594 |
| Skid Steer Loaders        | 25   | 0.685 | 2.340 | 4.332 |
| Skid Steer Loaders        | 50   | 0.411 | 4.386 | 3.128 |
| Skid Steer Loaders        | 120  | 0.214 | 3.538 | 1.477 |
| Surfacing Equipment       | 50   | 0.518 | 4.295 | 3.400 |
| Surfacing Equipment       | 120  | 0.264 | 3.492 | 1.959 |
| Surfacing Equipment       | 175  | 0.197 | 3.071 | 0.939 |
| Surfacing Equipment       | 250  | 0.172 | 1.064 | 0.789 |
| Surfacing Equipment       | 500  | 0.169 | 1.032 | 0.738 |
| Surfacing Equipment       | 750  | 0.169 | 1.032 | 0.749 |
| Sweepers/S crubbers       | 15   | 0.589 | 3.470 | 4.142 |
| Sweepers/S crubbers       | 25   | 0.685 | 2.340 | 4.332 |
| Sweepers/S crubbers       | 50   | 0.509 | 4.947 | 3.294 |
| Sweepers/S crubbers       | 120  | 0.261 | 3.703 | 1.569 |
| Sweepers/S crubbers       | 175  | 0.187 | 3.275 | 0.431 |
| Sweepers/S crubbers       | 250  | 0.182 | 1.116 | 0.370 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.048 | 0.005 |
| 568.299 | 0.024 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.076 | 0.005 |
| 568.299 | 0.036 | 0.004 |
| 568.300 | 0.027 | 0.004 |
| 568.300 | 0.023 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.040 | 0.005 |
| 568.299 | 0.021 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.300 | 0.019 | 0.004 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.539 | 4.966 | 3.299 |
| Tractors/Loaders/Backhoes | 120  | 0.272 | 3.705 | 1.624 |
| Tractors/Loaders/Backhoes | 175  | 0.193 | 3.273 | 0.485 |
| Tractors/Loaders/Backhoes | 250  | 0.183 | 1.115 | 0.418 |
| Tractors/Loaders/Backhoes | 500  | 0.182 | 1.066 | 0.403 |
| Tractors/Loaders/Backhoes | 750  | 0.182 | 1.066 | 0.407 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 |
| Trenchers                 | 50   | 0.851 | 5.208 | 3.835 |
| Trenchers                 | 120  | 0.409 | 3.743 | 2.559 |
| Trenchers                 | 175  | 0.300 | 3.273 | 1.529 |
| Trenchers                 | 250  | 0.256 | 1.188 | 1.348 |
| Trenchers                 | 500  | 0.249 | 1.209 | 1.231 |
| Trenchers                 | 750  | 0.249 | 1.209 | 1.254 |
| Welders                   | 15   | 0.663 | 3.470 | 4.164 |
| Welders                   | 25   | 0.687 | 2.340 | 4.347 |
| Welders                   | 50   | 0.449 | 4.387 | 3.273 |
| Welders                   | 120  | 0.239 | 3.535 | 1.707 |
| Welders                   | 175  | 0.176 | 3.121 | 0.628 |
| Welders                   | 250  | 0.162 | 1.063 | 0.525 |
| Welders                   | 500  | 0.161 | 1.027 | 0.495 |
| Water Trucks              | 175  | 0.229 | 3.425 | 0.563 |
| Water Trucks              | 250  | 0.217 | 1.166 | 0.481 |
| Water Trucks              | 500  | 0.216 | 1.104 | 0.458 |
| Water Trucks              | 750  | 0.217 | 1.104 | 0.463 |
| Water Trucks              | 1000 | 0.220 | 1.107 | 2.651 |

2034

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|
| SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 0.007   | 0.040   | 0.040   | 568.300 | 0.030   | 0.005   |
| 0.006   | 0.036   | 0.036   | 568.299 | 0.017   | 0.004   |
| 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.008   | 0.166   | 0.166   | 568.299 | 0.059   | 0.005   |
| 0.007   | 0.165   | 0.165   | 568.299 | 0.061   | 0.005   |
| 0.007   | 0.046   | 0.046   | 568.299 | 0.045   | 0.005   |
| 0.006   | 0.041   | 0.041   | 568.299 | 0.023   | 0.004   |
| 0.006   | 0.027   | 0.027   | 568.299 | 0.017   | 0.004   |
| 0.006   | 0.018   | 0.018   | 568.299 | 0.016   | 0.004   |
| 0.005   | 0.017   | 0.017   | 568.299 | 0.016   | 0.004   |
| 0.005   | 0.017   | 0.017   | 568.300 | 0.016   | 0.004   |
| 0.005   | 0.033   | 0.033   | 568.299 | 0.016   | 0.004   |
| 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

| 2034             |       |
|------------------|-------|
| Equipment        | MaxHP |
| Aerial Lifts     | 15    |
| Aerial Lifts     | 25    |
| Aerial Lifts     | 50    |
| Aerial Lifts     | 120   |
| Aerial Lifts     | 500   |
| Aerial Lifts     | 750   |
| Air Compressor s | 15    |
| Air Compressor s | 25    |
| Air Compressor s | 50    |
| Air Compressor s | 120   |
| Air Compressor s | 175   |
| Air Compressor s | 250   |
| Air Compressor s | 500   |
| Air Compressor s | 750   |
| Air Compressor s | 1000  |
| Bore/Drill Rigs  | 15    |
| Bore/Drill Rigs  | 25    |
| Bore/Drill Rigs  | 50    |
| Bore/Drill Rigs  | 120   |
| Bore/Drill Rigs  | 175   |
| Bore/Drill Rigs  | 250   |
| Bore/Drill Rigs  | 500   |
| Bore/Drill Rigs  | 750   |
| Bore/Drill Rigs  | 1000  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.041 | 0.041 | 568.299 | 0.036 | 0.005 |
| 0.006 | 0.036 | 0.036 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 0.007 | 0.075 | 0.075 | 568.299 | 0.061 | 0.005 |
| 0.006 | 0.067 | 0.067 | 568.299 | 0.030 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.020 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.020 | 0.004 |
| 0.005 | 0.024 | 0.024 | 568.300 | 0.020 | 0.004 |
| 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.007 | 0.116 | 0.116 | 568.299 | 0.075 | 0.005 |
| 0.006 | 0.105 | 0.105 | 568.299 | 0.036 | 0.004 |
| 0.006 | 0.065 | 0.065 | 568.299 | 0.026 | 0.004 |
| 0.006 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.056 | 0.056 | 568.300 | 0.023 | 0.004 |
| 0.007 | 0.043 | 0.043 | 568.299 | 0.047 | 0.005 |
| 0.006 | 0.038 | 0.038 | 568.299 | 0.024 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.005 | 0.032 | 0.032 | 568.299 | 0.017 | 0.004 |

|                          |      |
|--------------------------|------|
| Cement and Mortar Mixers | 15   |
| Cement and Mortar Mixers | 25   |
| Concrete/Industrial Saws | 25   |
| Concrete/Industrial Saws | 50   |
| Concrete/Industrial Saws | 120  |
| Concrete/Industrial Saws | 175  |
| Cranes                   | 50   |
| Cranes                   | 120  |
| Cranes                   | 175  |
| Cranes                   | 250  |
| Cranes                   | 500  |
| Cranes                   | 750  |
| Cranes                   | 9999 |
| Crawler Tractors         | 50   |
| Crawler Tractors         | 120  |
| Crawler Tractors         | 175  |
| Crawler Tractors         | 250  |
| Crawler Tractors         | 500  |
| Crawler Tractors         | 750  |
| Crawler Tractors         | 1000 |
| Crushing/Proc. Equipment | 50   |
| Crushing/Proc. Equipment | 120  |
| Crushing/Proc. Equipment | 175  |
| Crushing/Proc. Equipment | 250  |
| Crushing/Proc. Equipment | 500  |
| Crushing/Proc. Equipment | 750  |
| Crushing/Proc. Equipment | 9999 |



|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
| 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
| 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
| 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
| 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|                      |      |
|----------------------|------|
| Dumpers/Truckers     | 25   |
| Excavators           | 25   |
| Excavators           | 50   |
| Excavators           | 120  |
| Excavators           | 175  |
| Excavators           | 250  |
| Excavators           | 500  |
| Excavators           | 750  |
| Forklifts            | 50   |
| Forklifts            | 120  |
| Forklifts            | 175  |
| Forklifts            | 250  |
| Forklifts            | 500  |
| Generator Sets       | 15   |
| Generator Sets       | 25   |
| Generator Sets       | 50   |
| Generator Sets       | 120  |
| Generator Sets       | 175  |
| Generator Sets       | 250  |
| Generator Sets       | 500  |
| Generator Sets       | 750  |
| Generator Sets       | 9999 |
| Graders              | 50   |
| Graders              | 120  |
| Graders              | 175  |
| Graders              | 250  |
| Graders              | 500  |
| Graders              | 750  |
| Off-Highway Tractors | 120  |
| Off-Highway Tractors | 175  |
| Off-Highway Tractors | 250  |
| Off-Highway Tractors | 750  |
| Off-Highway Tractors | 1000 |
| Off-Highway Trucks   | 175  |
| Off-Highway Trucks   | 250  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.030 | 0.030 | 568.299 | 0.038 | 0.005 |
| 0.006 | 0.027 | 0.027 | 568.300 | 0.020 | 0.004 |
| 0.006 | 0.019 | 0.019 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.014 | 0.014 | 568.300 | 0.013 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.048 | 0.048 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.028 | 0.028 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Off-Highway Trucks                 | 500  |
| Off-Highway Trucks                 | 750  |
| Off-Highway Trucks                 | 1000 |
| Other Construction Equipment       | 15   |
| Other Construction Equipment       | 25   |
| Other Construction Equipment       | 50   |
| Other Construction Equipment       | 120  |
| Other Construction Equipment       | 175  |
| Other Construction Equipment       | 500  |
| Other General Industrial Equipment | 15   |
| Other General Industrial Equipment | 25   |
| Other General Industrial Equipment | 50   |
| Other General Industrial Equipment | 120  |
| Other General Industrial Equipment | 175  |
| Other General Industrial Equipment | 250  |
| Other General Industrial Equipment | 500  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Other General Industrial Equipment | 750  |
| Other General Industrial Equipment | 1000 |
| Other Material Handling Equipment  | 50   |
| Other Material Handling Equipment  | 120  |
| Other Material Handling Equipment  | 175  |
| Other Material Handling Equipment  | 250  |
| Other Material Handling Equipment  | 500  |
| Other Material Handling Equipment  | 9999 |
| Pavers                             | 25   |
| Pavers                             | 50   |
| Pavers                             | 120  |
| Pavers                             | 175  |
| Pavers                             | 250  |
| Pavers                             | 500  |
| Paving Equipment                   | 25   |
| Paving Equipment                   | 50   |
| Paving Equipment                   | 120  |
| Paving Equipment                   | 175  |
| Paving Equipment                   | 250  |
| Plate Compactors                   | 15   |
| Pressure Washers                   | 15   |
| Pressure Washers                   | 25   |
| Pressure Washers                   | 50   |
| Pressure Washers                   | 120  |
| Pressure Washers                   | 175  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|                         |      |
|-------------------------|------|
| Pressure Washers        | 250  |
| Pumps                   | 15   |
| Pumps                   | 25   |
| Pumps                   | 50   |
| Pumps                   | 120  |
| Pumps                   | 175  |
| Pumps                   | 250  |
| Pumps                   | 500  |
| Pumps                   | 750  |
| Pumps                   | 9999 |
| Rollers                 | 15   |
| Rollers                 | 25   |
| Rollers                 | 50   |
| Rollers                 | 120  |
| Rollers                 | 175  |
| Rollers                 | 250  |
| Rollers                 | 500  |
| Rough Terrain Forklifts | 50   |
| Rough Terrain Forklifts | 120  |
| Rough Terrain Forklifts | 175  |
| Rough Terrain Forklifts | 250  |
| Rough Terrain Forklifts | 500  |
| Rubber Tired Dozers     | 175  |
| Rubber Tired Dozers     | 250  |
| Rubber Tired Dozers     | 500  |
| Rubber Tired Dozers     | 750  |
| Rubber Tired Dozers     | 1000 |
| Rubber Tired Loaders    | 25   |
| Rubber Tired Loaders    | 50   |
| Rubber Tired Loaders    | 120  |
| Rubber Tired Loaders    | 175  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|                           |      |
|---------------------------|------|
| Rubber Tired Loaders      | 250  |
| Rubber Tired Loaders      | 500  |
| Rubber Tired Loaders      | 750  |
| Rubber Tired Loaders      | 1000 |
| Scrapers                  | 120  |
| Scrapers                  | 175  |
| Scrapers                  | 250  |
| Scrapers                  | 500  |
| Scrapers                  | 750  |
| Signal Boards             | 15   |
| Signal Boards             | 50   |
| Signal Boards             | 120  |
| Signal Boards             | 175  |
| Signal Boards             | 250  |
| Skid Steer Loaders        | 25   |
| Skid Steer Loaders        | 50   |
| Skid Steer Loaders        | 120  |
| Surfacing Equipment       | 50   |
| Surfacing Equipment       | 120  |
| Surfacing Equipment       | 175  |
| Surfacing Equipment       | 250  |
| Surfacing Equipment       | 500  |
| Surfacing Equipment       | 750  |
| Sweepers/S crubbers       | 15   |
| Sweepers/S crubbers       | 25   |
| Sweepers/S crubbers       | 50   |
| Sweepers/S crubbers       | 120  |
| Sweepers/S crubbers       | 175  |
| Sweepers/S crubbers       | 250  |
| Tractors/Loaders/Backhoes | 25   |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

|                           |      |
|---------------------------|------|
| Tractors/Loaders/Backhoes | 50   |
| Tractors/Loaders/Backhoes | 120  |
| Tractors/Loaders/Backhoes | 175  |
| Tractors/Loaders/Backhoes | 250  |
| Tractors/Loaders/Backhoes | 500  |
| Tractors/Loaders/Backhoes | 750  |
| Trenchers                 | 15   |
| Trenchers                 | 25   |
| Trenchers                 | 50   |
| Trenchers                 | 120  |
| Trenchers                 | 175  |
| Trenchers                 | 250  |
| Trenchers                 | 500  |
| Trenchers                 | 750  |
| Welders                   | 15   |
| Welders                   | 25   |
| Welders                   | 50   |
| Welders                   | 120  |
| Welders                   | 175  |
| Welders                   | 250  |
| Welders                   | 500  |
| Water Trucks              | 175  |
| Water Trucks              | 250  |
| Water Trucks              | 500  |
| Water Trucks              | 750  |
| Water Trucks              | 1000 |

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 0.339   | 3.764   | 3.135   | 0.007   | 0.040   | 0.040   | 568.300 | 0.030   | 0.005   |
| 0.188   | 3.352   | 1.657   | 0.006   | 0.036   | 0.036   | 568.299 | 0.017   | 0.004   |
| 0.126   | 0.986   | 0.479   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.126   | 0.986   | 0.485   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.663   | 3.470   | 4.164   | 0.008   | 0.166   | 0.166   | 568.299 | 0.059   | 0.005   |
| 0.687   | 2.340   | 4.347   | 0.007   | 0.165   | 0.165   | 568.299 | 0.061   | 0.005   |
| 0.506   | 4.712   | 3.340   | 0.007   | 0.046   | 0.046   | 568.299 | 0.045   | 0.005   |
| 0.264   | 3.630   | 1.729   | 0.006   | 0.041   | 0.041   | 568.299 | 0.023   | 0.004   |
| 0.193   | 3.205   | 0.633   | 0.006   | 0.027   | 0.027   | 568.299 | 0.017   | 0.004   |
| 0.179   | 1.092   | 0.529   | 0.006   | 0.018   | 0.018   | 568.299 | 0.016   | 0.004   |
| 0.178   | 1.048   | 0.499   | 0.005   | 0.017   | 0.017   | 568.299 | 0.016   | 0.004   |
| 0.178   | 1.048   | 0.505   | 0.005   | 0.017   | 0.017   | 568.300 | 0.016   | 0.004   |
| 0.182   | 1.049   | 2.600   | 0.005   | 0.033   | 0.033   | 568.299 | 0.016   | 0.004   |
| 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 0.348   | 4.029   | 3.020   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 0.183   | 3.434   | 1.415   | 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 0.127   | 3.038   | 0.279   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.035   | 0.274   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.333 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.409 | 4.199 | 3.222 | 0.007 | 0.041 | 0.041 | 568.299 | 0.036 | 0.005 |
| 0.221 | 3.480 | 1.667 | 0.006 | 0.036 | 0.036 | 568.299 | 0.019 | 0.004 |
| 0.163 | 3.074 | 0.590 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 0.684 | 5.366 | 3.598 | 0.007 | 0.075 | 0.075 | 568.299 | 0.061 | 0.005 |
| 0.343 | 3.812 | 1.987 | 0.006 | 0.067 | 0.067 | 568.299 | 0.030 | 0.004 |
| 0.253 | 3.356 | 0.916 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.224 | 1.147 | 0.748 | 0.006 | 0.024 | 0.024 | 568.299 | 0.020 | 0.004 |
| 0.222 | 1.090 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.020 | 0.004 |
| 0.222 | 1.090 | 0.709 | 0.005 | 0.024 | 0.024 | 568.300 | 0.020 | 0.004 |
| 0.245 | 1.108 | 2.800 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.833 | 5.605 | 3.808 | 0.007 | 0.116 | 0.116 | 568.299 | 0.075 | 0.005 |
| 0.405 | 3.871 | 2.341 | 0.006 | 0.105 | 0.105 | 568.299 | 0.036 | 0.004 |
| 0.296 | 3.397 | 1.266 | 0.006 | 0.065 | 0.065 | 568.299 | 0.026 | 0.004 |
| 0.262 | 1.207 | 1.104 | 0.006 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.257 | 1.200 | 1.016 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.257 | 1.200 | 1.033 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.265 | 1.225 | 3.094 | 0.005 | 0.056 | 0.056 | 568.300 | 0.023 | 0.004 |
| 0.525 | 4.857 | 3.351 | 0.007 | 0.043 | 0.043 | 568.299 | 0.047 | 0.005 |
| 0.272 | 3.673 | 1.708 | 0.006 | 0.038 | 0.038 | 568.299 | 0.024 | 0.004 |
| 0.197 | 3.244 | 0.600 | 0.006 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 0.185 | 1.105 | 0.502 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.184 | 1.058 | 0.476 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.184 | 1.058 | 0.478 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.196 | 1.059 | 2.590 | 0.005 | 0.032 | 0.032 | 568.299 | 0.017 | 0.004 |



|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.602 | 5.309 | 3.393 | 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 0.301 | 3.806 | 1.676 | 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 0.213 | 3.362 | 0.525 | 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.203 | 1.145 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.202 | 1.088 | 0.433 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.202 | 1.088 | 0.437 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.565 | 5.272 | 3.330 | 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 0.283 | 3.799 | 1.555 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.199 | 3.360 | 0.391 | 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 0.195 | 1.144 | 0.341 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.195 | 1.088 | 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.315 | 3.640 | 3.107 | 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 0.178 | 3.316 | 1.645 | 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 0.130 | 2.929 | 0.601 | 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.120 | 0.998 | 0.504 | 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 0.119 | 0.978 | 0.476 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.119 | 0.978 | 0.482 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.128 | 0.979 | 2.483 | 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 0.648 | 5.239 | 3.530 | 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 0.323 | 3.775 | 1.903 | 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 0.237 | 3.326 | 0.815 | 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 0.216 | 1.148 | 0.684 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.214 | 1.097 | 0.647 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.214 | 1.097 | 0.654 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.518 | 3.944 | 2.959 | 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
| 0.373 | 3.435 | 1.916 | 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
| 0.315 | 1.286 | 1.715 | 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
| 0.304 | 1.351 | 1.590 | 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
| 0.318 | 1.409 | 3.569 | 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
| 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.429 | 4.390 | 3.190 | 0.007 | 0.030 | 0.030 | 568.299 | 0.038 | 0.005 |
| 0.225 | 3.538 | 1.576 | 0.006 | 0.027 | 0.027 | 568.300 | 0.020 | 0.004 |
| 0.161 | 3.127 | 0.459 | 0.006 | 0.019 | 0.019 | 568.299 | 0.014 | 0.004 |
| 0.154 | 1.028 | 0.391 | 0.005 | 0.014 | 0.014 | 568.300 | 0.013 | 0.004 |
| 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.609 | 5.299 | 3.460 | 0.007 | 0.048 | 0.048 | 568.299 | 0.054 | 0.005 |
| 0.309 | 3.802 | 1.766 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.223 | 3.357 | 0.641 | 0.006 | 0.028 | 0.028 | 568.299 | 0.020 | 0.004 |
| 0.209 | 1.143 | 0.536 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.208 | 1.087 | 0.506 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.208 | 1.087 | 0.512 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.212 | 1.088 | 2.660 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.598 | 5.237 | 3.447 | 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 0.304 | 3.784 | 1.762 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.220 | 3.341 | 0.640 | 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 0.206 | 1.138 | 0.535 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.205 | 1.083 | 0.505 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.218 | 1.084 | 2.653 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.845 | 5.396 | 3.841 | 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 0.408 | 3.800 | 2.468 | 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 0.300 | 3.326 | 1.425 | 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 0.259 | 1.192 | 1.246 | 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 0.253 | 1.181 | 1.141 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.802 | 5.309 | 3.809 | 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 0.390 | 3.774 | 2.393 | 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 0.290 | 3.306 | 1.363 | 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 0.250 | 1.171 | 1.176 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.215 | 3.124 | 2.989 | 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 0.134 | 3.167 | 1.594 | 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 0.126 | 2.907 | 0.619 | 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 0.348 | 3.814 | 3.146 | 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 0.193 | 3.367 | 1.662 | 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 0.142 | 2.973 | 0.610 | 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 0.130 | 1.013 | 0.511 | 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.129 | 0.989 | 0.482 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.129 | 0.989 | 0.488 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.139 | 0.990 | 2.504 | 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.587 | 4.784 | 3.480 | 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 0.299 | 3.639 | 1.950 | 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 0.223 | 3.203 | 0.907 | 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 0.195 | 1.099 | 0.745 | 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 0.193 | 1.056 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 0.548 | 5.031 | 3.359 | 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 0.279 | 3.725 | 1.671 | 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 0.200 | 3.291 | 0.537 | 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 0.191 | 1.121 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.190 | 1.070 | 0.443 | 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 0.398 | 3.496 | 2.034 | 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 0.335 | 1.322 | 1.828 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 0.322 | 1.401 | 1.658 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.323 | 1.401 | 1.694 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.338 | 1.465 | 3.676 | 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.634 | 5.181 | 3.500 | 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 0.317 | 3.759 | 1.875 | 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 0.232 | 3.312 | 0.787 | 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.210 | 1.138 | 0.655 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.208 | 1.085 | 0.619 | 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 0.208 | 1.085 | 0.627 | 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.214 | 1.099 | 2.722 | 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 0.410 | 3.866 | 2.384 | 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 0.301 | 3.389 | 1.320 | 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 0.264 | 1.206 | 1.149 | 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 0.259 | 1.184 | 1.057 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.259 | 1.184 | 1.075 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.393 | 4.099 | 3.193 | 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 0.213 | 3.451 | 1.657 | 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 0.157 | 3.048 | 0.586 | 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 0.176 | 1.255 | 0.594 | 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.411 | 4.386 | 3.128 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 0.214 | 3.538 | 1.477 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.518 | 4.295 | 3.400 | 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 0.264 | 3.492 | 1.959 | 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 0.197 | 3.071 | 0.939 | 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 0.172 | 1.064 | 0.789 | 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 0.169 | 1.032 | 0.738 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.169 | 1.032 | 0.749 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.509 | 4.947 | 3.294 | 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 0.261 | 3.703 | 1.569 | 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 0.187 | 3.275 | 0.431 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.182 | 1.116 | 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.539 | 4.966 | 3.299 | 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 0.272 | 3.705 | 1.624 | 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 0.193 | 3.273 | 0.485 | 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 0.183 | 1.115 | 0.418 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.182 | 1.066 | 0.403 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.182 | 1.066 | 0.407 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.851 | 5.208 | 3.835 | 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 0.409 | 3.743 | 2.559 | 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 0.300 | 3.273 | 1.529 | 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 0.256 | 1.188 | 1.348 | 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 0.249 | 1.209 | 1.231 | 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 0.249 | 1.209 | 1.254 | 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.449 | 4.387 | 3.273 | 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 0.239 | 3.535 | 1.707 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.176 | 3.121 | 0.628 | 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 0.162 | 1.063 | 0.525 | 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.161 | 1.027 | 0.495 | 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

| 2035             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   | 0.019   | 0.019   | 568.299 |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   | 0.017   | 0.017   | 568.299 |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   | 0.162   | 0.162   | 568.300 |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   | 0.023   | 0.023   | 568.299 |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   | 0.020   | 0.020   | 568.299 |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   | 0.015   | 0.015   | 568.300 |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   | 0.012   | 0.012   | 568.299 |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   | 0.012   | 0.012   | 568.299 |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   | 0.012   | 0.012   | 568.299 |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   | 0.026   | 0.026   | 568.299 |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   | 0.013   | 0.013   | 568.299 |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   | 0.012   | 0.012   | 568.300 |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 |

|                          |      |       |       |       |       |       |       |         |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 | 0.021 | 0.021 | 568.300 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 | 0.018 | 0.018 | 568.299 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 | 0.014 | 0.014 | 568.299 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 | 0.039 | 0.039 | 568.299 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 | 0.036 | 0.036 | 568.300 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 | 0.024 | 0.024 | 568.299 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 | 0.016 | 0.016 | 568.299 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 | 0.016 | 0.016 | 568.299 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 | 0.031 | 0.031 | 568.299 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 | 0.066 | 0.066 | 568.299 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 | 0.060 | 0.060 | 568.299 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 | 0.038 | 0.038 | 568.299 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 | 0.026 | 0.026 | 568.299 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 | 0.025 | 0.025 | 568.299 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 | 0.025 | 0.025 | 568.299 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 | 0.041 | 0.041 | 568.299 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 | 0.023 | 0.023 | 568.299 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 | 0.020 | 0.020 | 568.299 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 | 0.015 | 0.015 | 568.299 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 | 0.012 | 0.012 | 568.300 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 | 0.026 | 0.026 | 568.299 |



|                      |      |       |       |       |       |       |       |         |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Dumpers/Tractors     | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Excavators           | 50   | 0.572 | 5.287 | 3.323 | 0.007 | 0.024 | 0.024 | 568.299 |
| Excavators           | 120  | 0.284 | 3.802 | 1.551 | 0.006 | 0.021 | 0.021 | 568.299 |
| Excavators           | 175  | 0.197 | 3.363 | 0.365 | 0.006 | 0.015 | 0.015 | 568.299 |
| Excavators           | 250  | 0.195 | 1.145 | 0.342 | 0.006 | 0.013 | 0.013 | 568.300 |
| Excavators           | 500  | 0.195 | 1.089 | 0.337 | 0.005 | 0.013 | 0.013 | 568.299 |
| Excavators           | 750  | 0.195 | 1.088 | 0.338 | 0.005 | 0.013 | 0.013 | 568.299 |
| Forklifts            | 50   | 0.558 | 5.234 | 3.268 | 0.007 | 0.017 | 0.017 | 568.299 |
| Forklifts            | 120  | 0.275 | 3.787 | 1.495 | 0.006 | 0.016 | 0.016 | 568.299 |
| Forklifts            | 175  | 0.189 | 3.350 | 0.299 | 0.006 | 0.012 | 0.012 | 568.300 |
| Forklifts            | 250  | 0.188 | 1.141 | 0.290 | 0.006 | 0.011 | 0.011 | 568.300 |
| Forklifts            | 500  | 0.188 | 1.085 | 0.290 | 0.005 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 |
| Generator Sets       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Generator Sets       | 50   | 0.276 | 3.607 | 2.991 | 0.007 | 0.018 | 0.018 | 568.299 |
| Generator Sets       | 120  | 0.156 | 3.310 | 1.458 | 0.006 | 0.016 | 0.016 | 568.299 |
| Generator Sets       | 175  | 0.113 | 2.929 | 0.373 | 0.006 | 0.013 | 0.013 | 568.299 |
| Generator Sets       | 250  | 0.110 | 0.998 | 0.331 | 0.006 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 500  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 750  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 9999 | 0.114 | 0.978 | 2.362 | 0.005 | 0.022 | 0.022 | 568.299 |
| Graders              | 50   | 0.593 | 5.189 | 3.356 | 0.007 | 0.037 | 0.037 | 568.299 |
| Graders              | 120  | 0.293 | 3.767 | 1.661 | 0.006 | 0.034 | 0.034 | 568.299 |
| Graders              | 175  | 0.206 | 3.326 | 0.506 | 0.006 | 0.022 | 0.022 | 568.300 |
| Graders              | 250  | 0.196 | 1.137 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 |
| Graders              | 500  | 0.195 | 1.083 | 0.434 | 0.005 | 0.016 | 0.016 | 568.299 |
| Graders              | 750  | 0.195 | 1.083 | 0.438 | 0.005 | 0.016 | 0.016 | 568.299 |
| Off-Highway Tractors | 120  | 0.418 | 3.902 | 2.350 | 0.006 | 0.107 | 0.107 | 568.299 |
| Off-Highway Tractors | 175  | 0.301 | 3.421 | 1.252 | 0.006 | 0.065 | 0.065 | 568.299 |
| Off-Highway Tractors | 250  | 0.268 | 1.232 | 1.115 | 0.006 | 0.042 | 0.042 | 568.299 |
| Off-Highway Tractors | 750  | 0.262 | 1.238 | 1.045 | 0.005 | 0.040 | 0.040 | 568.299 |
| Off-Highway Tractors | 1000 | 0.269 | 1.268 | 3.116 | 0.005 | 0.056 | 0.056 | 568.299 |
| Off-Highway Trucks   | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 |
| Off-Highway Trucks   | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 | 0.018 | 0.018 | 568.299 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 | 0.017 | 0.017 | 568.299 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 | 0.013 | 0.013 | 568.299 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 | 0.011 | 0.011 | 568.299 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 | 0.025 | 0.025 | 568.299 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 | 0.022 | 0.022 | 568.300 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 | 0.016 | 0.016 | 568.300 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 | 0.013 | 0.013 | 568.299 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 | 0.028 | 0.028 | 568.299 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 | 0.025 | 0.025 | 568.299 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 | 0.022 | 0.022 | 568.299 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 | 0.016 | 0.016 | 568.299 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 | 0.013 | 0.013 | 568.299 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 | 0.013 | 0.013 | 568.299 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 | 0.027 | 0.027 | 568.299 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 | 0.076 | 0.076 | 568.299 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 | 0.069 | 0.069 | 568.299 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 | 0.043 | 0.043 | 568.299 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 | 0.027 | 0.027 | 568.300 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 | 0.026 | 0.026 | 568.299 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 | 0.070 | 0.070 | 568.300 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 | 0.064 | 0.064 | 568.299 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 | 0.040 | 0.040 | 568.299 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 | 0.024 | 0.024 | 568.299 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.300 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 | 0.015 | 0.015 | 568.299 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 | 0.014 | 0.014 | 568.299 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 | 0.013 | 0.013 | 568.299 |

|                         |      |       |       |       |       |       |       |         |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 |
| Pumps                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 |
| Pumps                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Pumps                   | 50   | 0.306 | 3.778 | 3.028 | 0.007 | 0.019 | 0.019 | 568.299 |
| Pumps                   | 120  | 0.170 | 3.360 | 1.470 | 0.006 | 0.017 | 0.017 | 568.299 |
| Pumps                   | 175  | 0.123 | 2.973 | 0.377 | 0.006 | 0.014 | 0.014 | 568.299 |
| Pumps                   | 250  | 0.119 | 1.012 | 0.335 | 0.006 | 0.011 | 0.011 | 568.299 |
| Pumps                   | 500  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 |
| Pumps                   | 750  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 |
| Pumps                   | 9999 | 0.124 | 0.989 | 2.380 | 0.005 | 0.023 | 0.023 | 568.299 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Rollers                 | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 |
| Rollers                 | 50   | 0.507 | 4.711 | 3.280 | 0.007 | 0.038 | 0.038 | 568.299 |
| Rollers                 | 120  | 0.258 | 3.629 | 1.650 | 0.006 | 0.035 | 0.035 | 568.299 |
| Rollers                 | 175  | 0.184 | 3.204 | 0.523 | 0.006 | 0.023 | 0.023 | 568.299 |
| Rollers                 | 250  | 0.173 | 1.091 | 0.465 | 0.006 | 0.016 | 0.016 | 568.299 |
| Rollers                 | 500  | 0.172 | 1.048 | 0.442 | 0.005 | 0.016 | 0.016 | 568.300 |
| Rough Terrain Forklifts | 50   | 0.521 | 5.011 | 3.267 | 0.007 | 0.022 | 0.022 | 568.299 |
| Rough Terrain Forklifts | 120  | 0.262 | 3.722 | 1.530 | 0.006 | 0.020 | 0.020 | 568.299 |
| Rough Terrain Forklifts | 175  | 0.184 | 3.292 | 0.364 | 0.006 | 0.015 | 0.015 | 568.299 |
| Rough Terrain Forklifts | 250  | 0.181 | 1.121 | 0.334 | 0.006 | 0.012 | 0.012 | 568.299 |
| Rough Terrain Forklifts | 500  | 0.181 | 1.071 | 0.331 | 0.005 | 0.012 | 0.012 | 568.300 |
| Rubber Tired Dozers     | 175  | 0.322 | 3.481 | 1.345 | 0.006 | 0.071 | 0.071 | 568.299 |
| Rubber Tired Dozers     | 250  | 0.286 | 1.262 | 1.203 | 0.006 | 0.046 | 0.046 | 568.299 |
| Rubber Tired Dozers     | 500  | 0.279 | 1.279 | 1.107 | 0.005 | 0.043 | 0.043 | 568.300 |
| Rubber Tired Dozers     | 750  | 0.279 | 1.279 | 1.126 | 0.005 | 0.043 | 0.043 | 568.299 |
| Rubber Tired Dozers     | 1000 | 0.287 | 1.312 | 3.204 | 0.005 | 0.060 | 0.060 | 568.299 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Rubber Tired Loaders    | 50   | 0.575 | 5.126 | 3.337 | 0.007 | 0.035 | 0.035 | 568.299 |
| Rubber Tired Loaders    | 120  | 0.286 | 3.751 | 1.639 | 0.006 | 0.033 | 0.033 | 568.299 |
| Rubber Tired Loaders    | 175  | 0.200 | 3.312 | 0.481 | 0.006 | 0.022 | 0.022 | 568.299 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 | 0.015 | 0.015 | 568.299 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 | 0.015 | 0.015 | 568.299 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 | 0.015 | 0.015 | 568.299 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 | 0.030 | 0.030 | 568.299 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 | 0.064 | 0.064 | 568.299 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 | 0.040 | 0.040 | 568.299 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 | 0.026 | 0.026 | 568.299 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 | 0.025 | 0.025 | 568.300 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 | 0.025 | 0.025 | 568.299 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 | 0.020 | 0.020 | 568.299 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 | 0.018 | 0.018 | 568.299 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 | 0.014 | 0.014 | 568.299 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 | 0.014 | 0.014 | 686.695 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 | 0.015 | 0.015 | 568.299 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 | 0.014 | 0.014 | 568.299 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 | 0.041 | 0.041 | 568.299 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 | 0.038 | 0.038 | 568.299 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 | 0.025 | 0.025 | 568.299 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 | 0.016 | 0.016 | 568.299 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 | 0.016 | 0.016 | 568.299 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 | 0.016 | 0.016 | 568.300 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 |
| Sweepers/Scrubbers        | 50   | 0.505 | 4.929 | 3.214 | 0.007 | 0.017 | 0.017 | 568.299 |
| Sweepers/Scrubbers        | 120  | 0.253 | 3.698 | 1.486 | 0.006 | 0.016 | 0.016 | 568.299 |
| Sweepers/Scrubbers        | 175  | 0.175 | 3.271 | 0.313 | 0.006 | 0.012 | 0.012 | 568.299 |
| Sweepers/Scrubbers        | 250  | 0.173 | 1.114 | 0.294 | 0.006 | 0.011 | 0.011 | 568.299 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Tractors/Loaders/Backhoes | 50   | 0.515 | 4.949 | 3.244 | 0.007 | 0.022 | 0.022 | 568.299 |
| Tractors/Loaders/Backhoes | 120  | 0.258 | 3.703 | 1.521 | 0.006 | 0.020 | 0.020 | 568.299 |
| Tractors/Loaders/Backhoes | 175  | 0.179 | 3.275 | 0.348 | 0.006 | 0.015 | 0.015 | 568.299 |
| Tractors/Loaders/Backhoes | 250  | 0.177 | 1.115 | 0.331 | 0.006 | 0.012 | 0.012 | 568.299 |
| Tractors/Loaders/Backhoes | 500  | 0.177 | 1.066 | 0.326 | 0.006 | 0.012 | 0.012 | 568.299 |
| Tractors/Loaders/Backhoes | 750  | 0.177 | 1.066 | 0.327 | 0.006 | 0.012 | 0.012 | 568.299 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Trenchers                 | 50   | 0.681 | 5.055 | 3.548 | 0.007 | 0.084 | 0.084 | 568.299 |
| Trenchers                 | 120  | 0.332 | 3.713 | 2.049 | 0.006 | 0.076 | 0.076 | 568.300 |
| Trenchers                 | 175  | 0.241 | 3.264 | 0.966 | 0.006 | 0.048 | 0.048 | 568.299 |
| Trenchers                 | 250  | 0.216 | 1.149 | 0.847 | 0.006 | 0.031 | 0.031 | 568.299 |
| Trenchers                 | 500  | 0.213 | 1.126 | 0.790 | 0.005 | 0.029 | 0.029 | 568.299 |
| Trenchers                 | 750  | 0.213 | 1.126 | 0.801 | 0.005 | 0.029 | 0.029 | 568.300 |
| Welders                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 |
| Welders                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Welders                   | 50   | 0.406 | 4.349 | 3.147 | 0.007 | 0.022 | 0.022 | 568.299 |
| Welders                   | 120  | 0.214 | 3.528 | 1.509 | 0.006 | 0.019 | 0.019 | 568.299 |
| Welders                   | 175  | 0.153 | 3.121 | 0.387 | 0.006 | 0.015 | 0.015 | 568.299 |
| Welders                   | 250  | 0.149 | 1.063 | 0.343 | 0.006 | 0.012 | 0.012 | 568.299 |
| Welders                   | 500  | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000   |
| Water Trucks              | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 |
| Water Trucks              | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 |
| Water Trucks              | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Water Trucks              | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Water Trucks              | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 |

2036

| g/hp/hr | g/hp/hr |
|---------|---------|
| CH4     | N2O     |
| 0.059   | 0.005   |
| 0.061   | 0.005   |
| 0.026   | 0.005   |
| 0.014   | 0.004   |
| 0.010   | 0.004   |
| 0.010   | 0.004   |
|         |         |
| 0.059   | 0.005   |
|         |         |
| 0.061   | 0.005   |
|         |         |
| 0.041   | 0.005   |
|         |         |
| 0.021   | 0.004   |
|         |         |
| 0.015   | 0.004   |
|         |         |
| 0.014   | 0.004   |
|         |         |
| 0.014   | 0.004   |
|         |         |
| 0.014   | 0.004   |
|         |         |
| 0.015   | 0.004   |
|         |         |
| 0.059   | 0.005   |
|         |         |
| 0.061   | 0.005   |
|         |         |
| 0.031   | 0.005   |
|         |         |
| 0.016   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |

| 2036             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   |
| Air Compressor s |       |         |         |         |         |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   |

|       |       |
|-------|-------|
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.061 | 0.005 |
| 0.033 | 0.005 |
| 0.018 | 0.004 |
| 0.012 | 0.004 |
| 0.054 | 0.005 |
| 0.027 | 0.004 |
| 0.019 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.063 | 0.005 |
| 0.031 | 0.004 |
| 0.022 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.044 | 0.005 |
| 0.022 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.016 | 0.004 |

|                          |      |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 |



|       |       |
|-------|-------|
| 0.061 | 0.005 |
| 0.061 | 0.005 |
| 0.051 | 0.005 |
| 0.025 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.050 | 0.005 |
| 0.024 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.053 | 0.005 |
| 0.061 | 0.005 |
| 0.024 | 0.005 |
| 0.014 | 0.004 |
| 0.010 | 0.004 |
| 0.009 | 0.004 |
| 0.009 | 0.004 |
| 0.009 | 0.004 |
| 0.010 | 0.004 |
| 0.053 | 0.005 |
| 0.026 | 0.004 |
| 0.018 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.037 | 0.004 |
| 0.027 | 0.004 |
| 0.024 | 0.004 |
| 0.023 | 0.004 |
| 0.024 | 0.004 |
| 0.019 | 0.004 |
| 0.018 | 0.004 |

|                      |      |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Excavators           | 50   | 0.572 | 5.287 | 3.323 | 0.007 |
| Excavators           | 120  | 0.284 | 3.802 | 1.551 | 0.006 |
| Excavators           | 175  | 0.197 | 3.363 | 0.365 | 0.006 |
| Excavators           | 250  | 0.195 | 1.145 | 0.342 | 0.006 |
| Excavators           | 500  | 0.195 | 1.089 | 0.337 | 0.005 |
| Excavators           | 750  | 0.195 | 1.088 | 0.338 | 0.005 |
| Forklifts            | 50   | 0.558 | 5.234 | 3.268 | 0.007 |
| Forklifts            | 120  | 0.275 | 3.787 | 1.495 | 0.006 |
| Forklifts            | 175  | 0.189 | 3.350 | 0.299 | 0.006 |
| Forklifts            | 250  | 0.188 | 1.141 | 0.290 | 0.006 |
| Forklifts            | 500  | 0.188 | 1.085 | 0.290 | 0.005 |
| Generator Sets       | 15   | 0.589 | 3.470 | 4.143 | 0.008 |
| Generator Sets       | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Generator Sets       | 50   | 0.276 | 3.607 | 2.991 | 0.007 |
| Generator Sets       | 120  | 0.156 | 3.310 | 1.458 | 0.006 |
| Generator Sets       | 175  | 0.113 | 2.929 | 0.373 | 0.006 |
| Generator Sets       | 250  | 0.110 | 0.998 | 0.331 | 0.006 |
| Generator Sets       | 500  | 0.110 | 0.978 | 0.328 | 0.005 |
| Generator Sets       | 750  | 0.110 | 0.978 | 0.328 | 0.005 |
| Generator Sets       | 9999 | 0.114 | 0.978 | 2.362 | 0.005 |
| Graders              | 50   | 0.593 | 5.189 | 3.356 | 0.007 |
| Graders              | 120  | 0.293 | 3.767 | 1.661 | 0.006 |
| Graders              | 175  | 0.206 | 3.326 | 0.506 | 0.006 |
| Graders              | 250  | 0.196 | 1.137 | 0.452 | 0.006 |
| Graders              | 500  | 0.195 | 1.083 | 0.434 | 0.005 |
| Graders              | 750  | 0.195 | 1.083 | 0.438 | 0.005 |
| Off-Highway Tractors | 120  | 0.418 | 3.902 | 2.350 | 0.006 |
| Off-Highway Tractors | 175  | 0.301 | 3.421 | 1.252 | 0.006 |
| Off-Highway Tractors | 250  | 0.268 | 1.232 | 1.115 | 0.006 |
| Off-Highway Tractors | 750  | 0.262 | 1.238 | 1.045 | 0.005 |
| Off-Highway Tractors | 1000 | 0.269 | 1.268 | 3.116 | 0.005 |
| Off-Highway Trucks   | 175  | 0.211 | 3.425 | 0.380 | 0.006 |
| Off-Highway Trucks   | 250  | 0.208 | 1.167 | 0.353 | 0.006 |

|       |       |
|-------|-------|
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.037 | 0.005 |
| 0.019 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.053 | 0.005 |
| 0.061 | 0.005 |
| 0.050 | 0.005 |
| 0.025 | 0.004 |
| 0.018 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 |

|       |       |
|-------|-------|
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.049 | 0.005 |
| 0.025 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.061 | 0.005 |
| 0.062 | 0.005 |
| 0.030 | 0.004 |
| 0.022 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.061 | 0.005 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.016 | 0.005 |
| 0.010 | 0.004 |
| 0.009 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 |

|       |       |
|-------|-------|
| 0.008 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.027 | 0.005 |
| 0.015 | 0.004 |
| 0.011 | 0.004 |
| 0.010 | 0.004 |
| 0.010 | 0.004 |
| 0.010 | 0.004 |
| 0.011 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.045 | 0.005 |
| 0.023 | 0.004 |
| 0.016 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.047 | 0.005 |
| 0.023 | 0.004 |
| 0.016 | 0.004 |
| 0.016 | 0.004 |
| 0.016 | 0.004 |
| 0.029 | 0.004 |
| 0.025 | 0.004 |
| 0.025 | 0.004 |
| 0.025 | 0.004 |
| 0.025 | 0.004 |
| 0.061 | 0.005 |
| 0.051 | 0.005 |
| 0.025 | 0.004 |
| 0.018 | 0.004 |

|                         |      |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 |
| Pumps                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 |
| Pumps                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Pumps                   | 50   | 0.306 | 3.778 | 3.028 | 0.007 |
| Pumps                   | 120  | 0.170 | 3.360 | 1.470 | 0.006 |
| Pumps                   | 175  | 0.123 | 2.973 | 0.377 | 0.006 |
| Pumps                   | 250  | 0.119 | 1.012 | 0.335 | 0.006 |
| Pumps                   | 500  | 0.119 | 0.989 | 0.331 | 0.005 |
| Pumps                   | 750  | 0.119 | 0.989 | 0.331 | 0.005 |
| Pumps                   | 9999 | 0.124 | 0.989 | 2.380 | 0.005 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Rollers                 | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Rollers                 | 50   | 0.507 | 4.711 | 3.280 | 0.007 |
| Rollers                 | 120  | 0.258 | 3.629 | 1.650 | 0.006 |
| Rollers                 | 175  | 0.184 | 3.204 | 0.523 | 0.006 |
| Rollers                 | 250  | 0.173 | 1.091 | 0.465 | 0.006 |
| Rollers                 | 500  | 0.172 | 1.048 | 0.442 | 0.005 |
| Rough Terrain Forklifts | 50   | 0.521 | 5.011 | 3.267 | 0.007 |
| Rough Terrain Forklifts | 120  | 0.262 | 3.722 | 1.530 | 0.006 |
| Rough Terrain Forklifts | 175  | 0.184 | 3.292 | 0.364 | 0.006 |
| Rough Terrain Forklifts | 250  | 0.181 | 1.121 | 0.334 | 0.006 |
| Rough Terrain Forklifts | 500  | 0.181 | 1.071 | 0.331 | 0.005 |
| Rubber Tired Dozers     | 175  | 0.322 | 3.481 | 1.345 | 0.006 |
| Rubber Tired Dozers     | 250  | 0.286 | 1.262 | 1.203 | 0.006 |
| Rubber Tired Dozers     | 500  | 0.279 | 1.279 | 1.107 | 0.005 |
| Rubber Tired Dozers     | 750  | 0.279 | 1.279 | 1.126 | 0.005 |
| Rubber Tired Dozers     | 1000 | 0.287 | 1.312 | 3.204 | 0.005 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Rubber Tired Loaders    | 50   | 0.575 | 5.126 | 3.337 | 0.007 |
| Rubber Tired Loaders    | 120  | 0.286 | 3.751 | 1.639 | 0.006 |
| Rubber Tired Loaders    | 175  | 0.200 | 3.312 | 0.481 | 0.006 |

|       |       |
|-------|-------|
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.031 | 0.004 |
| 0.022 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.059 | 0.005 |
| 0.032 | 0.005 |
| 0.017 | 0.004 |
| 0.012 | 0.004 |
| 0.014 | 0.004 |
| 0.061 | 0.005 |
| 0.037 | 0.005 |
| 0.019 | 0.004 |
| 0.039 | 0.005 |
| 0.020 | 0.004 |
| 0.014 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.053 | 0.005 |
| 0.061 | 0.005 |
| 0.045 | 0.005 |
| 0.022 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.061 | 0.005 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 | 4.142 | 0.008 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Sweepers/Scrubbers        | 50   | 0.505 | 4.929 | 3.214 | 0.007 |
| Sweepers/Scrubbers        | 120  | 0.253 | 3.698 | 1.486 | 0.006 |
| Sweepers/Scrubbers        | 175  | 0.175 | 3.271 | 0.313 | 0.006 |
| Sweepers/Scrubbers        | 250  | 0.173 | 1.114 | 0.294 | 0.006 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 |

|       |       |
|-------|-------|
| 0.046 | 0.005 |
| 0.023 | 0.004 |
| 0.016 | 0.004 |
| 0.016 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.061 | 0.005 |
| 0.030 | 0.004 |
| 0.021 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.036 | 0.005 |
| 0.019 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.000 | 0.004 |
| 0.019 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.515 | 4.949 | 3.244 | 0.007 |
| Tractors/Loaders/Backhoes | 120  | 0.258 | 3.703 | 1.521 | 0.006 |
| Tractors/Loaders/Backhoes | 175  | 0.179 | 3.275 | 0.348 | 0.006 |
| Tractors/Loaders/Backhoes | 250  | 0.177 | 1.115 | 0.331 | 0.006 |
| Tractors/Loaders/Backhoes | 500  | 0.177 | 1.066 | 0.326 | 0.006 |
| Tractors/Loaders/Backhoes | 750  | 0.177 | 1.066 | 0.327 | 0.006 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Trenchers                 | 50   | 0.681 | 5.055 | 3.548 | 0.007 |
| Trenchers                 | 120  | 0.332 | 3.713 | 2.049 | 0.006 |
| Trenchers                 | 175  | 0.241 | 3.264 | 0.966 | 0.006 |
| Trenchers                 | 250  | 0.216 | 1.149 | 0.847 | 0.006 |
| Trenchers                 | 500  | 0.213 | 1.126 | 0.790 | 0.005 |
| Trenchers                 | 750  | 0.213 | 1.126 | 0.801 | 0.005 |
| Welders                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 |
| Welders                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Welders                   | 50   | 0.406 | 4.349 | 3.147 | 0.007 |
| Welders                   | 120  | 0.214 | 3.528 | 1.509 | 0.006 |
| Welders                   | 175  | 0.153 | 3.121 | 0.387 | 0.006 |
| Welders                   | 250  | 0.149 | 1.063 | 0.343 | 0.006 |
| Welders                   | 500  | 0.149 | 1.027 | 0.339 | 0.005 |
| Water Trucks              | 175  | 0.211 | 3.425 | 0.380 | 0.006 |
| Water Trucks              | 250  | 0.208 | 1.167 | 0.353 | 0.006 |
| Water Trucks              | 500  | 0.208 | 1.105 | 0.348 | 0.005 |
| Water Trucks              | 750  | 0.208 | 1.105 | 0.348 | 0.005 |
| Water Trucks              | 1000 | 0.209 | 1.105 | 2.565 | 0.005 |

2037

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|
| PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 0.019   | 0.019   | 568.299 | 0.026   | 0.005   |
| 0.017   | 0.017   | 568.299 | 0.014   | 0.004   |
| 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
| 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
|         |         |         |         |         |
| 0.162   | 0.162   | 568.300 | 0.059   | 0.005   |
|         |         |         |         |         |
| 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
|         |         |         |         |         |
| 0.023   | 0.023   | 568.299 | 0.041   | 0.005   |
|         |         |         |         |         |
| 0.020   | 0.020   | 568.299 | 0.021   | 0.004   |
|         |         |         |         |         |
| 0.015   | 0.015   | 568.300 | 0.015   | 0.004   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
|         |         |         |         |         |
| 0.026   | 0.026   | 568.299 | 0.015   | 0.004   |
|         |         |         |         |         |
| 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
|         |         |         |         |         |
| 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
|         |         |         |         |         |
| 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.300 | 0.016   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

| 2037             |       | g/hp/hr |
|------------------|-------|---------|
| Equipment        | MaxHP | ROG     |
| Aerial Lifts     | 15    | 0.661   |
| Aerial Lifts     | 25    | 0.685   |
| Aerial Lifts     | 50    | 0.297   |
| Aerial Lifts     | 120   | 0.166   |
| Aerial Lifts     | 500   | 0.116   |
| Aerial Lifts     | 750   | 0.116   |
|                  |       |         |
| Air Compressor s | 15    | 0.661   |
| Air Compressor s | 25    | 0.685   |
| Air Compressor s | 50    | 0.463   |
| Air Compressor s | 120   | 0.238   |
| Air Compressor s | 175   | 0.170   |
| Air Compressor s | 250   | 0.166   |
| Air Compressor s | 500   | 0.166   |
| Air Compressor s | 750   | 0.166   |
| Air Compressor s | 1000  | 0.167   |
| Bore/Drill Rigs  | 15    | 0.661   |
| Bore/Drill Rigs  | 25    | 0.685   |
| Bore/Drill Rigs  | 50    | 0.348   |
| Bore/Drill Rigs  | 120   | 0.183   |
| Bore/Drill Rigs  | 175   | 0.126   |
| Bore/Drill Rigs  | 250   | 0.126   |
| Bore/Drill Rigs  | 500   | 0.126   |
| Bore/Drill Rigs  | 750   | 0.126   |
| Bore/Drill Rigs  | 1000  | 0.126   |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.021 | 0.021 | 568.300 | 0.033 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 0.039 | 0.039 | 568.299 | 0.054 | 0.005 |
| 0.036 | 0.036 | 568.300 | 0.027 | 0.004 |
| 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.018 | 0.004 |
| 0.066 | 0.066 | 568.299 | 0.063 | 0.005 |
| 0.060 | 0.060 | 568.299 | 0.031 | 0.004 |
| 0.038 | 0.038 | 568.299 | 0.022 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.041 | 0.041 | 568.299 | 0.020 | 0.004 |
| 0.023 | 0.023 | 568.299 | 0.044 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.022 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.300 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.016 | 0.004 |

|                          |      |       |
|--------------------------|------|-------|
| Cement and Mortar Mixers | 15   | 0.661 |
| Cement and Mortar Mixers | 25   | 0.685 |
| Concrete/Industrial Saws | 25   | 0.685 |
| Concrete/Industrial Saws | 50   | 0.375 |
| Concrete/Industrial Saws | 120  | 0.200 |
| Concrete/Industrial Saws | 175  | 0.143 |
| Cranes                   | 50   | 0.600 |
| Cranes                   | 120  | 0.300 |
| Cranes                   | 175  | 0.212 |
| Cranes                   | 250  | 0.203 |
| Cranes                   | 500  | 0.202 |
| Cranes                   | 750  | 0.202 |
| Cranes                   | 9999 | 0.209 |
| Crawler Tractors         | 50   | 0.708 |
| Crawler Tractors         | 120  | 0.345 |
| Crawler Tractors         | 175  | 0.247 |
| Crawler Tractors         | 250  | 0.229 |
| Crawler Tractors         | 500  | 0.227 |
| Crawler Tractors         | 750  | 0.227 |
| Crawler Tractors         | 1000 | 0.231 |
| Crushing/Proc. Equipment | 50   | 0.487 |
| Crushing/Proc. Equipment | 120  | 0.249 |
| Crushing/Proc. Equipment | 175  | 0.176 |
| Crushing/Proc. Equipment | 250  | 0.172 |
| Crushing/Proc. Equipment | 500  | 0.172 |
| Crushing/Proc. Equipment | 750  | 0.172 |
| Crushing/Proc. Equipment | 9999 | 0.177 |



|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.024 | 0.024 | 568.299 | 0.051 | 0.005 |
| 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.300 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.017 | 0.017 | 568.299 | 0.050 | 0.005 |
| 0.016 | 0.016 | 568.299 | 0.024 | 0.004 |
| 0.012 | 0.012 | 568.300 | 0.017 | 0.004 |
| 0.011 | 0.011 | 568.300 | 0.017 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.162 | 0.162 | 568.299 | 0.053 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.024 | 0.005 |
| 0.016 | 0.016 | 568.299 | 0.014 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.010 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.022 | 0.022 | 568.299 | 0.010 | 0.004 |
| 0.037 | 0.037 | 568.299 | 0.053 | 0.005 |
| 0.034 | 0.034 | 568.299 | 0.026 | 0.004 |
| 0.022 | 0.022 | 568.300 | 0.018 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.107 | 0.107 | 568.299 | 0.037 | 0.004 |
| 0.065 | 0.065 | 568.299 | 0.027 | 0.004 |
| 0.042 | 0.042 | 568.299 | 0.024 | 0.004 |
| 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.056 | 0.056 | 568.299 | 0.024 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |

|                      |      |       |
|----------------------|------|-------|
| Dumpers/Tractors     | 25   | 0.685 |
| Excavators           | 25   | 0.685 |
| Excavators           | 50   | 0.572 |
| Excavators           | 120  | 0.284 |
| Excavators           | 175  | 0.197 |
| Excavators           | 250  | 0.195 |
| Excavators           | 500  | 0.195 |
| Excavators           | 750  | 0.195 |
| Forklifts            | 50   | 0.558 |
| Forklifts            | 120  | 0.275 |
| Forklifts            | 175  | 0.189 |
| Forklifts            | 250  | 0.188 |
| Forklifts            | 500  | 0.188 |
| Generator Sets       | 15   | 0.589 |
| Generator Sets       | 25   | 0.685 |
| Generator Sets       | 50   | 0.276 |
| Generator Sets       | 120  | 0.156 |
| Generator Sets       | 175  | 0.113 |
| Generator Sets       | 250  | 0.110 |
| Generator Sets       | 500  | 0.110 |
| Generator Sets       | 750  | 0.110 |
| Generator Sets       | 9999 | 0.114 |
| Graders              | 50   | 0.593 |
| Graders              | 120  | 0.293 |
| Graders              | 175  | 0.206 |
| Graders              | 250  | 0.196 |
| Graders              | 500  | 0.195 |
| Graders              | 750  | 0.195 |
| Off-Highway Tractors | 120  | 0.418 |
| Off-Highway Tractors | 175  | 0.301 |
| Off-Highway Tractors | 250  | 0.268 |
| Off-Highway Tractors | 750  | 0.262 |
| Off-Highway Tractors | 1000 | 0.269 |
| Off-Highway Trucks   | 175  | 0.211 |
| Off-Highway Trucks   | 250  | 0.208 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.013 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.025 | 0.025 | 568.299 | 0.050 | 0.005 |
| 0.022 | 0.022 | 568.300 | 0.025 | 0.004 |
| 0.016 | 0.016 | 568.300 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Off-Highway Trucks                 | 500  | 0.208 |
| Off-Highway Trucks                 | 750  | 0.208 |
| Off-Highway Trucks                 | 1000 | 0.209 |
| Other Construction Equipment       | 15   | 0.661 |
| Other Construction Equipment       | 25   | 0.685 |
| Other Construction Equipment       | 50   | 0.410 |
| Other Construction Equipment       | 120  | 0.213 |
| Other Construction Equipment       | 175  | 0.150 |
| Other Construction Equipment       | 500  | 0.147 |
| Other General Industrial Equipment | 15   | 0.589 |
| Other General Industrial Equipment | 25   | 0.685 |
| Other General Industrial Equipment | 50   | 0.564 |
| Other General Industrial Equipment | 120  | 0.282 |
| Other General Industrial Equipment | 175  | 0.199 |
| Other General Industrial Equipment | 250  | 0.195 |
| Other General Industrial Equipment | 500  | 0.195 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.017 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.049 | 0.005 |
| 0.022 | 0.022 | 568.299 | 0.025 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.027 | 0.027 | 568.299 | 0.017 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.076 | 0.076 | 568.299 | 0.062 | 0.005 |
| 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.027 | 0.027 | 568.300 | 0.019 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.019 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.070 | 0.070 | 568.300 | 0.059 | 0.005 |
| 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.162 | 0.162 | 568.300 | 0.053 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.015 | 0.015 | 568.299 | 0.016 | 0.005 |
| 0.014 | 0.014 | 568.299 | 0.010 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.009 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Other General Industrial Equipment | 750  | 0.195 |
| Other General Industrial Equipment | 1000 | 0.196 |
| Other Material Handling Equipment  | 50   | 0.552 |
| Other Material Handling Equipment  | 120  | 0.277 |
| Other Material Handling Equipment  | 175  | 0.196 |
| Other Material Handling Equipment  | 250  | 0.192 |
| Other Material Handling Equipment  | 500  | 0.192 |
| Other Material Handling Equipment  | 9999 | 0.197 |
| Pavers                             | 25   | 0.685 |
| Pavers                             | 50   | 0.694 |
| Pavers                             | 120  | 0.338 |
| Pavers                             | 175  | 0.244 |
| Pavers                             | 250  | 0.221 |
| Pavers                             | 500  | 0.218 |
| Paving Equipment                   | 25   | 0.685 |
| Paving Equipment                   | 50   | 0.664 |
| Paving Equipment                   | 120  | 0.326 |
| Paving Equipment                   | 175  | 0.235 |
| Paving Equipment                   | 250  | 0.212 |
| Plate Compactors                   | 15   | 0.661 |
| Pressure Washers                   | 15   | 0.589 |
| Pressure Washers                   | 25   | 0.685 |
| Pressure Washers                   | 50   | 0.188 |
| Pressure Washers                   | 120  | 0.116 |
| Pressure Washers                   | 175  | 0.109 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.019 | 0.019 | 568.299 | 0.027 | 0.005 |
| 0.017 | 0.017 | 568.299 | 0.015 | 0.004 |
| 0.014 | 0.014 | 568.299 | 0.011 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 0.038 | 0.038 | 568.299 | 0.045 | 0.005 |
| 0.035 | 0.035 | 568.299 | 0.023 | 0.004 |
| 0.023 | 0.023 | 568.299 | 0.016 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.015 | 0.004 |
| 0.016 | 0.016 | 568.300 | 0.015 | 0.004 |
| 0.022 | 0.022 | 568.299 | 0.047 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.300 | 0.016 | 0.004 |
| 0.071 | 0.071 | 568.299 | 0.029 | 0.004 |
| 0.046 | 0.046 | 568.299 | 0.025 | 0.004 |
| 0.043 | 0.043 | 568.300 | 0.025 | 0.004 |
| 0.043 | 0.043 | 568.299 | 0.025 | 0.004 |
| 0.060 | 0.060 | 568.299 | 0.025 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.035 | 0.035 | 568.299 | 0.051 | 0.005 |
| 0.033 | 0.033 | 568.299 | 0.025 | 0.004 |
| 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |

|                         |      |       |
|-------------------------|------|-------|
| Pressure Washers        | 250  | 0.098 |
| Pumps                   | 15   | 0.661 |
| Pumps                   | 25   | 0.685 |
| Pumps                   | 50   | 0.306 |
| Pumps                   | 120  | 0.170 |
| Pumps                   | 175  | 0.123 |
| Pumps                   | 250  | 0.119 |
| Pumps                   | 500  | 0.119 |
| Pumps                   | 750  | 0.119 |
| Pumps                   | 9999 | 0.124 |
| Rollers                 | 15   | 0.661 |
| Rollers                 | 25   | 0.685 |
| Rollers                 | 50   | 0.507 |
| Rollers                 | 120  | 0.258 |
| Rollers                 | 175  | 0.184 |
| Rollers                 | 250  | 0.173 |
| Rollers                 | 500  | 0.172 |
| Rough Terrain Forklifts | 50   | 0.521 |
| Rough Terrain Forklifts | 120  | 0.262 |
| Rough Terrain Forklifts | 175  | 0.184 |
| Rough Terrain Forklifts | 250  | 0.181 |
| Rough Terrain Forklifts | 500  | 0.181 |
| Rubber Tired Dozers     | 175  | 0.322 |
| Rubber Tired Dozers     | 250  | 0.286 |
| Rubber Tired Dozers     | 500  | 0.279 |
| Rubber Tired Dozers     | 750  | 0.279 |
| Rubber Tired Dozers     | 1000 | 0.287 |
| Rubber Tired Loaders    | 25   | 0.685 |
| Rubber Tired Loaders    | 50   | 0.575 |
| Rubber Tired Loaders    | 120  | 0.286 |
| Rubber Tired Loaders    | 175  | 0.200 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.030 | 0.030 | 568.299 | 0.017 | 0.004 |
| 0.064 | 0.064 | 568.299 | 0.031 | 0.004 |
| 0.040 | 0.040 | 568.299 | 0.022 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.300 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.032 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.017 | 0.004 |
| 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 0.014 | 0.014 | 686.695 | 0.014 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.015 | 0.015 | 568.299 | 0.037 | 0.005 |
| 0.014 | 0.014 | 568.299 | 0.019 | 0.004 |
| 0.041 | 0.041 | 568.299 | 0.039 | 0.005 |
| 0.038 | 0.038 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 0.016 | 568.300 | 0.013 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 0.017 | 0.017 | 568.299 | 0.045 | 0.005 |
| 0.016 | 0.016 | 568.299 | 0.022 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|                           |      |       |
|---------------------------|------|-------|
| Rubber Tired Loaders      | 250  | 0.191 |
| Rubber Tired Loaders      | 500  | 0.191 |
| Rubber Tired Loaders      | 750  | 0.191 |
| Rubber Tired Loaders      | 1000 | 0.193 |
| Scrapers                  | 120  | 0.348 |
| Scrapers                  | 175  | 0.250 |
| Scrapers                  | 250  | 0.229 |
| Scrapers                  | 500  | 0.226 |
| Scrapers                  | 750  | 0.226 |
| Signal Boards             | 15   | 0.661 |
| Signal Boards             | 50   | 0.356 |
| Signal Boards             | 120  | 0.192 |
| Signal Boards             | 175  | 0.138 |
| Signal Boards             | 250  | 0.162 |
| Skid Steer Loaders        | 25   | 0.685 |
| Skid Steer Loaders        | 50   | 0.411 |
| Skid Steer Loaders        | 120  | 0.211 |
| Surfacing Equipment       | 50   | 0.439 |
| Surfacing Equipment       | 120  | 0.226 |
| Surfacing Equipment       | 175  | 0.162 |
| Surfacing Equipment       | 250  | 0.149 |
| Surfacing Equipment       | 500  | 0.148 |
| Surfacing Equipment       | 750  | 0.148 |
| Sweepers/Scrubbers        | 15   | 0.589 |
| Sweepers/Scrubbers        | 25   | 0.685 |
| Sweepers/Scrubbers        | 50   | 0.505 |
| Sweepers/Scrubbers        | 120  | 0.253 |
| Sweepers/Scrubbers        | 175  | 0.175 |
| Sweepers/Scrubbers        | 250  | 0.173 |
| Tractors/Loaders/Backhoes | 25   | 0.685 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.022 | 0.022 | 568.299 | 0.046 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.084 | 0.084 | 568.299 | 0.061 | 0.005 |
| 0.076 | 0.076 | 568.300 | 0.030 | 0.004 |
| 0.048 | 0.048 | 568.299 | 0.021 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.019 | 0.004 |
| 0.029 | 0.029 | 568.299 | 0.019 | 0.004 |
| 0.029 | 0.029 | 568.300 | 0.019 | 0.004 |
| 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.022 | 0.022 | 568.299 | 0.036 | 0.005 |
| 0.019 | 0.019 | 568.299 | 0.019 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.013 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |

|                           |      |       |
|---------------------------|------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.515 |
| Tractors/Loaders/Backhoes | 120  | 0.258 |
| Tractors/Loaders/Backhoes | 175  | 0.179 |
| Tractors/Loaders/Backhoes | 250  | 0.177 |
| Tractors/Loaders/Backhoes | 500  | 0.177 |
| Tractors/Loaders/Backhoes | 750  | 0.177 |
| Trenchers                 | 15   | 0.661 |
| Trenchers                 | 25   | 0.685 |
| Trenchers                 | 50   | 0.681 |
| Trenchers                 | 120  | 0.332 |
| Trenchers                 | 175  | 0.241 |
| Trenchers                 | 250  | 0.216 |
| Trenchers                 | 500  | 0.213 |
| Trenchers                 | 750  | 0.213 |
| Welders                   | 15   | 0.661 |
| Welders                   | 25   | 0.685 |
| Welders                   | 50   | 0.406 |
| Welders                   | 120  | 0.214 |
| Welders                   | 175  | 0.153 |
| Welders                   | 250  | 0.149 |
| Welders                   | 500  | 0.149 |
| Water Trucks              | 175  | 0.211 |
| Water Trucks              | 250  | 0.208 |
| Water Trucks              | 500  | 0.208 |
| Water Trucks              | 750  | 0.208 |
| Water Trucks              | 1000 | 0.209 |

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|
| CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 3.726   | 3.017   | 0.007   | 0.019   | 0.019   | 568.299 | 0.026   | 0.005   |
| 3.345   | 1.466   | 0.006   | 0.017   | 0.017   | 568.299 | 0.014   | 0.004   |
| 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
| 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
| 3.469   | 4.143   | 0.008   | 0.162   | 0.162   | 568.300 | 0.059   | 0.005   |
| 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 4.674   | 3.215   | 0.007   | 0.023   | 0.023   | 568.299 | 0.041   | 0.005   |
| 3.623   | 1.530   | 0.006   | 0.020   | 0.020   | 568.299 | 0.021   | 0.004   |
| 3.205   | 0.391   | 0.006   | 0.015   | 0.015   | 568.300 | 0.015   | 0.004   |
| 1.091   | 0.347   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 1.048   | 0.343   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 1.048   | 0.344   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 1.048   | 2.473   | 0.005   | 0.026   | 0.026   | 568.299 | 0.015   | 0.004   |
| 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 4.030   | 3.019   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 3.434   | 1.411   | 0.006   | 0.012   | 0.012   | 568.300 | 0.016   | 0.004   |
| 3.039   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.035   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.174 | 3.107 | 0.007 | 0.021 | 0.021 | 568.300 | 0.033 | 0.005 |
| 3.476 | 1.491 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 3.075 | 0.374 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 5.292 | 3.401 | 0.007 | 0.039 | 0.039 | 568.299 | 0.054 | 0.005 |
| 3.801 | 1.676 | 0.006 | 0.036 | 0.036 | 568.300 | 0.027 | 0.004 |
| 3.357 | 0.519 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 1.143 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 1.087 | 0.441 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 1.087 | 0.446 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 1.089 | 2.618 | 0.005 | 0.031 | 0.031 | 568.299 | 0.018 | 0.004 |
| 5.493 | 3.558 | 0.007 | 0.066 | 0.066 | 568.299 | 0.063 | 0.005 |
| 3.850 | 1.922 | 0.006 | 0.060 | 0.060 | 568.299 | 0.031 | 0.004 |
| 3.391 | 0.794 | 0.006 | 0.038 | 0.038 | 568.299 | 0.022 | 0.004 |
| 1.182 | 0.695 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 1.145 | 0.657 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 1.145 | 0.664 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 1.159 | 2.792 | 0.005 | 0.041 | 0.041 | 568.299 | 0.020 | 0.004 |
| 4.819 | 3.237 | 0.007 | 0.023 | 0.023 | 568.299 | 0.044 | 0.005 |
| 3.665 | 1.531 | 0.006 | 0.020 | 0.020 | 568.299 | 0.022 | 0.004 |
| 3.242 | 0.382 | 0.006 | 0.015 | 0.015 | 568.299 | 0.015 | 0.004 |
| 1.104 | 0.342 | 0.006 | 0.012 | 0.012 | 568.300 | 0.015 | 0.004 |
| 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.058 | 2.482 | 0.005 | 0.026 | 0.026 | 568.299 | 0.016 | 0.004 |



|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.287 | 3.323 | 0.007 | 0.024 | 0.024 | 568.299 | 0.051 | 0.005 |
| 3.802 | 1.551 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 3.363 | 0.365 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.145 | 0.342 | 0.006 | 0.013 | 0.013 | 568.300 | 0.017 | 0.004 |
| 1.089 | 0.337 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.088 | 0.338 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 5.234 | 3.268 | 0.007 | 0.017 | 0.017 | 568.299 | 0.050 | 0.005 |
| 3.787 | 1.495 | 0.006 | 0.016 | 0.016 | 568.299 | 0.024 | 0.004 |
| 3.350 | 0.299 | 0.006 | 0.012 | 0.012 | 568.300 | 0.017 | 0.004 |
| 1.141 | 0.290 | 0.006 | 0.011 | 0.011 | 568.300 | 0.017 | 0.004 |
| 1.085 | 0.290 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.053 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.607 | 2.991 | 0.007 | 0.018 | 0.018 | 568.299 | 0.024 | 0.005 |
| 3.310 | 1.458 | 0.006 | 0.016 | 0.016 | 568.299 | 0.014 | 0.004 |
| 2.929 | 0.373 | 0.006 | 0.013 | 0.013 | 568.299 | 0.010 | 0.004 |
| 0.998 | 0.331 | 0.006 | 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.978 | 2.362 | 0.005 | 0.022 | 0.022 | 568.299 | 0.010 | 0.004 |
| 5.189 | 3.356 | 0.007 | 0.037 | 0.037 | 568.299 | 0.053 | 0.005 |
| 3.767 | 1.661 | 0.006 | 0.034 | 0.034 | 568.299 | 0.026 | 0.004 |
| 3.326 | 0.506 | 0.006 | 0.022 | 0.022 | 568.300 | 0.018 | 0.004 |
| 1.137 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 1.083 | 0.434 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 1.083 | 0.438 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 3.902 | 2.350 | 0.006 | 0.107 | 0.107 | 568.299 | 0.037 | 0.004 |
| 3.421 | 1.252 | 0.006 | 0.065 | 0.065 | 568.299 | 0.027 | 0.004 |
| 1.232 | 1.115 | 0.006 | 0.042 | 0.042 | 568.299 | 0.024 | 0.004 |
| 1.238 | 1.045 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 1.268 | 3.116 | 0.005 | 0.056 | 0.056 | 568.299 | 0.024 | 0.004 |
| 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.377 | 3.124 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 3.536 | 1.474 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 3.128 | 0.334 | 0.006 | 0.013 | 0.013 | 568.299 | 0.013 | 0.004 |
| 1.029 | 0.311 | 0.005 | 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.255 | 3.334 | 0.007 | 0.025 | 0.025 | 568.299 | 0.050 | 0.005 |
| 3.794 | 1.567 | 0.006 | 0.022 | 0.022 | 568.300 | 0.025 | 0.004 |
| 3.355 | 0.399 | 0.006 | 0.016 | 0.016 | 568.300 | 0.018 | 0.004 |
| 1.143 | 0.355 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.087 | 2.532 | 0.005 | 0.028 | 0.028 | 568.299 | 0.017 | 0.004 |
| 5.189 | 3.321 | 0.007 | 0.025 | 0.025 | 568.299 | 0.049 | 0.005 |
| 3.774 | 1.563 | 0.006 | 0.022 | 0.022 | 568.299 | 0.025 | 0.004 |
| 3.338 | 0.398 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 1.137 | 0.354 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.082 | 0.350 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.082 | 2.525 | 0.005 | 0.027 | 0.027 | 568.299 | 0.017 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.260 | 3.555 | 0.007 | 0.076 | 0.076 | 568.299 | 0.062 | 0.005 |
| 3.774 | 1.986 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 3.319 | 0.889 | 0.006 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 1.157 | 0.772 | 0.006 | 0.027 | 0.027 | 568.300 | 0.019 | 0.004 |
| 1.111 | 0.722 | 0.005 | 0.026 | 0.026 | 568.299 | 0.019 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.181 | 3.511 | 0.007 | 0.070 | 0.070 | 568.300 | 0.059 | 0.005 |
| 3.753 | 1.928 | 0.006 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 3.303 | 0.832 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 1.140 | 0.714 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.300 | 0.053 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.101 | 2.882 | 0.007 | 0.015 | 0.015 | 568.299 | 0.016 | 0.005 |
| 3.161 | 1.421 | 0.006 | 0.014 | 0.014 | 568.299 | 0.010 | 0.004 |
| 2.907 | 0.382 | 0.006 | 0.013 | 0.013 | 568.299 | 0.009 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.778 | 3.028 | 0.007 | 0.019 | 0.019 | 568.299 | 0.027 | 0.005 |
| 3.360 | 1.470 | 0.006 | 0.017 | 0.017 | 568.299 | 0.015 | 0.004 |
| 2.973 | 0.377 | 0.006 | 0.014 | 0.014 | 568.299 | 0.011 | 0.004 |
| 1.012 | 0.335 | 0.006 | 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.989 | 2.380 | 0.005 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 4.711 | 3.280 | 0.007 | 0.038 | 0.038 | 568.299 | 0.045 | 0.005 |
| 3.629 | 1.650 | 0.006 | 0.035 | 0.035 | 568.299 | 0.023 | 0.004 |
| 3.204 | 0.523 | 0.006 | 0.023 | 0.023 | 568.299 | 0.016 | 0.004 |
| 1.091 | 0.465 | 0.006 | 0.016 | 0.016 | 568.299 | 0.015 | 0.004 |
| 1.048 | 0.442 | 0.005 | 0.016 | 0.016 | 568.300 | 0.015 | 0.004 |
| 5.011 | 3.267 | 0.007 | 0.022 | 0.022 | 568.299 | 0.047 | 0.005 |
| 3.722 | 1.530 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 3.292 | 0.364 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 1.121 | 0.334 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 1.071 | 0.331 | 0.005 | 0.012 | 0.012 | 568.300 | 0.016 | 0.004 |
| 3.481 | 1.345 | 0.006 | 0.071 | 0.071 | 568.299 | 0.029 | 0.004 |
| 1.262 | 1.203 | 0.006 | 0.046 | 0.046 | 568.299 | 0.025 | 0.004 |
| 1.279 | 1.107 | 0.005 | 0.043 | 0.043 | 568.300 | 0.025 | 0.004 |
| 1.279 | 1.126 | 0.005 | 0.043 | 0.043 | 568.299 | 0.025 | 0.004 |
| 1.312 | 3.204 | 0.005 | 0.060 | 0.060 | 568.299 | 0.025 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.126 | 3.337 | 0.007 | 0.035 | 0.035 | 568.299 | 0.051 | 0.005 |
| 3.751 | 1.639 | 0.006 | 0.033 | 0.033 | 568.299 | 0.025 | 0.004 |
| 3.312 | 0.481 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.129 | 0.434 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.076 | 0.416 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.076 | 0.421 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.082 | 2.584 | 0.005 | 0.030 | 0.030 | 568.299 | 0.017 | 0.004 |
| 3.842 | 1.943 | 0.006 | 0.064 | 0.064 | 568.299 | 0.031 | 0.004 |
| 3.382 | 0.824 | 0.006 | 0.040 | 0.040 | 568.299 | 0.022 | 0.004 |
| 1.175 | 0.717 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 1.123 | 0.674 | 0.005 | 0.025 | 0.025 | 568.300 | 0.020 | 0.004 |
| 1.123 | 0.682 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.067 | 3.082 | 0.007 | 0.020 | 0.020 | 568.299 | 0.032 | 0.005 |
| 3.445 | 1.482 | 0.006 | 0.018 | 0.018 | 568.299 | 0.017 | 0.004 |
| 3.048 | 0.372 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 1.254 | 0.401 | 0.007 | 0.014 | 0.014 | 686.695 | 0.014 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.390 | 3.097 | 0.007 | 0.015 | 0.015 | 568.299 | 0.037 | 0.005 |
| 3.540 | 1.442 | 0.006 | 0.014 | 0.014 | 568.299 | 0.019 | 0.004 |
| 4.221 | 3.193 | 0.007 | 0.041 | 0.041 | 568.299 | 0.039 | 0.005 |
| 3.482 | 1.659 | 0.006 | 0.038 | 0.038 | 568.299 | 0.020 | 0.004 |
| 3.072 | 0.567 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 1.050 | 0.497 | 0.006 | 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 1.018 | 0.471 | 0.005 | 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 1.018 | 0.477 | 0.005 | 0.016 | 0.016 | 568.300 | 0.013 | 0.004 |
| 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 4.929 | 3.214 | 0.007 | 0.017 | 0.017 | 568.299 | 0.045 | 0.005 |
| 3.698 | 1.486 | 0.006 | 0.016 | 0.016 | 568.299 | 0.022 | 0.004 |
| 3.271 | 0.313 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.114 | 0.294 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 4.949 | 3.244 | 0.007 | 0.022 | 0.022 | 568.299 | 0.046 | 0.005 |
| 3.703 | 1.521 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 3.275 | 0.348 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 1.115 | 0.331 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 1.066 | 0.326 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.066 | 0.327 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.055 | 3.548 | 0.007 | 0.084 | 0.084 | 568.299 | 0.061 | 0.005 |
| 3.713 | 2.049 | 0.006 | 0.076 | 0.076 | 568.300 | 0.030 | 0.004 |
| 3.264 | 0.966 | 0.006 | 0.048 | 0.048 | 568.299 | 0.021 | 0.004 |
| 1.149 | 0.847 | 0.006 | 0.031 | 0.031 | 568.299 | 0.019 | 0.004 |
| 1.126 | 0.790 | 0.005 | 0.029 | 0.029 | 568.299 | 0.019 | 0.004 |
| 1.126 | 0.801 | 0.005 | 0.029 | 0.029 | 568.300 | 0.019 | 0.004 |
| 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 4.349 | 3.147 | 0.007 | 0.022 | 0.022 | 568.299 | 0.036 | 0.005 |
| 3.528 | 1.509 | 0.006 | 0.019 | 0.019 | 568.299 | 0.019 | 0.004 |
| 3.121 | 0.387 | 0.006 | 0.015 | 0.015 | 568.299 | 0.013 | 0.004 |
| 1.063 | 0.343 | 0.006 | 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 1.027 | 0.339 | 0.005 | 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |

| 2038             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   | 0.019   | 0.019   | 568.299 | 0.026   |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   | 0.017   | 0.017   | 568.299 | 0.014   |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   | 0.162   | 0.162   | 568.300 | 0.059   |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   | 0.023   | 0.023   | 568.299 | 0.041   |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   | 0.020   | 0.020   | 568.299 | 0.021   |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   | 0.015   | 0.015   | 568.300 | 0.015   |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   | 0.026   | 0.026   | 568.299 | 0.015   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   | 0.012   | 0.012   | 568.300 | 0.016   |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   |

|                          |      |       |       |       |       |       |       |         |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 | 0.021 | 0.021 | 568.300 | 0.033 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 | 0.039 | 0.039 | 568.299 | 0.054 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 | 0.036 | 0.036 | 568.300 | 0.027 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 | 0.031 | 0.031 | 568.299 | 0.018 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 | 0.066 | 0.066 | 568.299 | 0.063 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 | 0.060 | 0.060 | 568.299 | 0.031 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 | 0.038 | 0.038 | 568.299 | 0.022 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 | 0.041 | 0.041 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 | 0.023 | 0.023 | 568.299 | 0.044 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 | 0.020 | 0.020 | 568.299 | 0.022 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 | 0.015 | 0.015 | 568.299 | 0.015 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 | 0.012 | 0.012 | 568.300 | 0.015 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 | 0.026 | 0.026 | 568.299 | 0.016 |



|                      |      |       |       |       |       |       |       |         |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Dumpers/Trailers     | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Excavators           | 50   | 0.572 | 5.287 | 3.323 | 0.007 | 0.024 | 0.024 | 568.299 | 0.051 |
| Excavators           | 120  | 0.284 | 3.802 | 1.551 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 |
| Excavators           | 175  | 0.197 | 3.363 | 0.365 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 |
| Excavators           | 250  | 0.195 | 1.145 | 0.342 | 0.006 | 0.013 | 0.013 | 568.300 | 0.017 |
| Excavators           | 500  | 0.195 | 1.089 | 0.337 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Excavators           | 750  | 0.195 | 1.088 | 0.338 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Forklifts            | 50   | 0.558 | 5.234 | 3.268 | 0.007 | 0.017 | 0.017 | 568.299 | 0.050 |
| Forklifts            | 120  | 0.275 | 3.787 | 1.495 | 0.006 | 0.016 | 0.016 | 568.299 | 0.024 |
| Forklifts            | 175  | 0.189 | 3.350 | 0.299 | 0.006 | 0.012 | 0.012 | 568.300 | 0.017 |
| Forklifts            | 250  | 0.188 | 1.141 | 0.290 | 0.006 | 0.011 | 0.011 | 568.300 | 0.017 |
| Forklifts            | 500  | 0.188 | 1.085 | 0.290 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 |
| Generator Sets       | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.053 |
| Generator Sets       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Generator Sets       | 50   | 0.276 | 3.607 | 2.991 | 0.007 | 0.018 | 0.018 | 568.299 | 0.024 |
| Generator Sets       | 120  | 0.156 | 3.310 | 1.458 | 0.006 | 0.016 | 0.016 | 568.299 | 0.014 |
| Generator Sets       | 175  | 0.113 | 2.929 | 0.373 | 0.006 | 0.013 | 0.013 | 568.299 | 0.010 |
| Generator Sets       | 250  | 0.110 | 0.998 | 0.331 | 0.006 | 0.011 | 0.011 | 568.299 | 0.009 |
| Generator Sets       | 500  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 |
| Generator Sets       | 750  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 |
| Generator Sets       | 9999 | 0.114 | 0.978 | 2.362 | 0.005 | 0.022 | 0.022 | 568.299 | 0.010 |
| Graders              | 50   | 0.593 | 5.189 | 3.356 | 0.007 | 0.037 | 0.037 | 568.299 | 0.053 |
| Graders              | 120  | 0.293 | 3.767 | 1.661 | 0.006 | 0.034 | 0.034 | 568.299 | 0.026 |
| Graders              | 175  | 0.206 | 3.326 | 0.506 | 0.006 | 0.022 | 0.022 | 568.300 | 0.018 |
| Graders              | 250  | 0.196 | 1.137 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 |
| Graders              | 500  | 0.195 | 1.083 | 0.434 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 |
| Graders              | 750  | 0.195 | 1.083 | 0.438 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 |
| Off-Highway Tractors | 120  | 0.418 | 3.902 | 2.350 | 0.006 | 0.107 | 0.107 | 568.299 | 0.037 |
| Off-Highway Tractors | 175  | 0.301 | 3.421 | 1.252 | 0.006 | 0.065 | 0.065 | 568.299 | 0.027 |
| Off-Highway Tractors | 250  | 0.268 | 1.232 | 1.115 | 0.006 | 0.042 | 0.042 | 568.299 | 0.024 |
| Off-Highway Tractors | 750  | 0.262 | 1.238 | 1.045 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 |
| Off-Highway Tractors | 1000 | 0.269 | 1.268 | 3.116 | 0.005 | 0.056 | 0.056 | 568.299 | 0.024 |
| Off-Highway Trucks   | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 |
| Off-Highway Trucks   | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 | 0.013 | 0.013 | 568.299 | 0.013 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 | 0.011 | 0.011 | 568.299 | 0.013 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 | 0.025 | 0.025 | 568.299 | 0.050 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 | 0.022 | 0.022 | 568.300 | 0.025 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 | 0.016 | 0.016 | 568.300 | 0.018 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 | 0.028 | 0.028 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 | 0.025 | 0.025 | 568.299 | 0.049 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 | 0.022 | 0.022 | 568.299 | 0.025 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 | 0.027 | 0.027 | 568.299 | 0.017 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 | 0.076 | 0.076 | 568.299 | 0.062 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 | 0.043 | 0.043 | 568.299 | 0.022 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 | 0.027 | 0.027 | 568.300 | 0.019 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 | 0.026 | 0.026 | 568.299 | 0.019 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 | 0.070 | 0.070 | 568.300 | 0.059 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 | 0.064 | 0.064 | 568.299 | 0.029 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.300 | 0.053 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 | 0.015 | 0.015 | 568.299 | 0.016 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 | 0.014 | 0.014 | 568.299 | 0.010 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 | 0.013 | 0.013 | 568.299 | 0.009 |

|                         |      |       |       |       |       |       |       |         |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 |
| Pumps                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 |
| Pumps                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Pumps                   | 50   | 0.306 | 3.778 | 3.028 | 0.007 | 0.019 | 0.019 | 568.299 | 0.027 |
| Pumps                   | 120  | 0.170 | 3.360 | 1.470 | 0.006 | 0.017 | 0.017 | 568.299 | 0.015 |
| Pumps                   | 175  | 0.123 | 2.973 | 0.377 | 0.006 | 0.014 | 0.014 | 568.299 | 0.011 |
| Pumps                   | 250  | 0.119 | 1.012 | 0.335 | 0.006 | 0.011 | 0.011 | 568.299 | 0.010 |
| Pumps                   | 500  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 |
| Pumps                   | 750  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 |
| Pumps                   | 9999 | 0.124 | 0.989 | 2.380 | 0.005 | 0.023 | 0.023 | 568.299 | 0.011 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Rollers                 | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 |
| Rollers                 | 50   | 0.507 | 4.711 | 3.280 | 0.007 | 0.038 | 0.038 | 568.299 | 0.045 |
| Rollers                 | 120  | 0.258 | 3.629 | 1.650 | 0.006 | 0.035 | 0.035 | 568.299 | 0.023 |
| Rollers                 | 175  | 0.184 | 3.204 | 0.523 | 0.006 | 0.023 | 0.023 | 568.299 | 0.016 |
| Rollers                 | 250  | 0.173 | 1.091 | 0.465 | 0.006 | 0.016 | 0.016 | 568.299 | 0.015 |
| Rollers                 | 500  | 0.172 | 1.048 | 0.442 | 0.005 | 0.016 | 0.016 | 568.300 | 0.015 |
| Rough Terrain Forklifts | 50   | 0.521 | 5.011 | 3.267 | 0.007 | 0.022 | 0.022 | 568.299 | 0.047 |
| Rough Terrain Forklifts | 120  | 0.262 | 3.722 | 1.530 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 |
| Rough Terrain Forklifts | 175  | 0.184 | 3.292 | 0.364 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 |
| Rough Terrain Forklifts | 250  | 0.181 | 1.121 | 0.334 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 |
| Rough Terrain Forklifts | 500  | 0.181 | 1.071 | 0.331 | 0.005 | 0.012 | 0.012 | 568.300 | 0.016 |
| Rubber Tired Dozers     | 175  | 0.322 | 3.481 | 1.345 | 0.006 | 0.071 | 0.071 | 568.299 | 0.029 |
| Rubber Tired Dozers     | 250  | 0.286 | 1.262 | 1.203 | 0.006 | 0.046 | 0.046 | 568.299 | 0.025 |
| Rubber Tired Dozers     | 500  | 0.279 | 1.279 | 1.107 | 0.005 | 0.043 | 0.043 | 568.300 | 0.025 |
| Rubber Tired Dozers     | 750  | 0.279 | 1.279 | 1.126 | 0.005 | 0.043 | 0.043 | 568.299 | 0.025 |
| Rubber Tired Dozers     | 1000 | 0.287 | 1.312 | 3.204 | 0.005 | 0.060 | 0.060 | 568.299 | 0.025 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Rubber Tired Loaders    | 50   | 0.575 | 5.126 | 3.337 | 0.007 | 0.035 | 0.035 | 568.299 | 0.051 |
| Rubber Tired Loaders    | 120  | 0.286 | 3.751 | 1.639 | 0.006 | 0.033 | 0.033 | 568.299 | 0.025 |
| Rubber Tired Loaders    | 175  | 0.200 | 3.312 | 0.481 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 |

|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 | 0.030 | 0.030 | 568.299 | 0.017 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 | 0.064 | 0.064 | 568.299 | 0.031 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 | 0.040 | 0.040 | 568.299 | 0.022 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 | 0.025 | 0.025 | 568.300 | 0.020 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 | 0.020 | 0.020 | 568.299 | 0.032 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 | 0.018 | 0.018 | 568.299 | 0.017 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 | 0.014 | 0.014 | 686.695 | 0.014 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 | 0.015 | 0.015 | 568.299 | 0.037 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 | 0.014 | 0.014 | 568.299 | 0.019 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 | 0.041 | 0.041 | 568.299 | 0.039 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 | 0.038 | 0.038 | 568.299 | 0.020 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 | 0.016 | 0.016 | 568.299 | 0.013 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 | 0.016 | 0.016 | 568.299 | 0.013 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 | 0.016 | 0.016 | 568.300 | 0.013 |
| Sweepers/S crubbers       | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 |
| Sweepers/S crubbers       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 |
| Sweepers/S crubbers       | 50   | 0.505 | 4.929 | 3.214 | 0.007 | 0.017 | 0.017 | 568.299 | 0.045 |
| Sweepers/S crubbers       | 120  | 0.253 | 3.698 | 1.486 | 0.006 | 0.016 | 0.016 | 568.299 | 0.022 |
| Sweepers/S crubbers       | 175  | 0.175 | 3.271 | 0.313 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 |
| Sweepers/S crubbers       | 250  | 0.173 | 1.114 | 0.294 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |

|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.515 | 4.949 | 3.244 | 0.007 | 0.022 | 0.022 | 568.299 | 0.046 |
| Tractors/Loaders/Backhoes | 120  | 0.258 | 3.703 | 1.521 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 |
| Tractors/Loaders/Backhoes | 175  | 0.179 | 3.275 | 0.348 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 |
| Tractors/Loaders/Backhoes | 250  | 0.177 | 1.115 | 0.331 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 |
| Tractors/Loaders/Backhoes | 500  | 0.177 | 1.066 | 0.326 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 |
| Tractors/Loaders/Backhoes | 750  | 0.177 | 1.066 | 0.327 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Trenchers                 | 50   | 0.681 | 5.055 | 3.548 | 0.007 | 0.084 | 0.084 | 568.299 | 0.061 |
| Trenchers                 | 120  | 0.332 | 3.713 | 2.049 | 0.006 | 0.076 | 0.076 | 568.300 | 0.030 |
| Trenchers                 | 175  | 0.241 | 3.264 | 0.966 | 0.006 | 0.048 | 0.048 | 568.299 | 0.021 |
| Trenchers                 | 250  | 0.216 | 1.149 | 0.847 | 0.006 | 0.031 | 0.031 | 568.299 | 0.019 |
| Trenchers                 | 500  | 0.213 | 1.126 | 0.790 | 0.005 | 0.029 | 0.029 | 568.299 | 0.019 |
| Trenchers                 | 750  | 0.213 | 1.126 | 0.801 | 0.005 | 0.029 | 0.029 | 568.300 | 0.019 |
| Welders                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 |
| Welders                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Welders                   | 50   | 0.406 | 4.349 | 3.147 | 0.007 | 0.022 | 0.022 | 568.299 | 0.036 |
| Welders                   | 120  | 0.214 | 3.528 | 1.509 | 0.006 | 0.019 | 0.019 | 568.299 | 0.019 |
| Welders                   | 175  | 0.153 | 3.121 | 0.387 | 0.006 | 0.015 | 0.015 | 568.299 | 0.013 |
| Welders                   | 250  | 0.149 | 1.063 | 0.343 | 0.006 | 0.012 | 0.012 | 568.299 | 0.013 |
| Welders                   | 500  | 0.149 | 1.027 | 0.339 | 0.005 | 0.012 | 0.012 | 568.299 | 0.013 |
| Water Trucks              | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 |
| Water Trucks              | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 |
| Water Trucks              | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Water Trucks              | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Water Trucks              | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 |

2039

|         |
|---------|
| g/hp/hr |
| N2O     |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |

| 2039             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   | 0.019   |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   | 0.017   |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   | 0.162   |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   | 0.023   |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   | 0.020   |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   | 0.015   |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   | 0.012   |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   | 0.012   |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   | 0.012   |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   | 0.026   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   | 0.013   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   | 0.012   |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   | 0.010   |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   | 0.010   |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   | 0.021   |

|       |
|-------|
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                          |      |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 | 0.021 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 | 0.018 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 | 0.014 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 | 0.039 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 | 0.036 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 | 0.024 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 | 0.016 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 | 0.016 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 | 0.016 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 | 0.031 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 | 0.066 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 | 0.060 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 | 0.038 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 | 0.026 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 | 0.025 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 | 0.025 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 | 0.041 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 | 0.023 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 | 0.020 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 | 0.015 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 | 0.012 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 | 0.026 |



|       |
|-------|
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                      |      |       |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Excavators           | 50   | 0.572 | 5.287 | 3.323 | 0.007 | 0.024 |
| Excavators           | 120  | 0.284 | 3.802 | 1.551 | 0.006 | 0.021 |
| Excavators           | 175  | 0.197 | 3.363 | 0.365 | 0.006 | 0.015 |
| Excavators           | 250  | 0.195 | 1.145 | 0.342 | 0.006 | 0.013 |
| Excavators           | 500  | 0.195 | 1.089 | 0.337 | 0.005 | 0.013 |
| Excavators           | 750  | 0.195 | 1.088 | 0.338 | 0.005 | 0.013 |
| Forklifts            | 50   | 0.558 | 5.234 | 3.268 | 0.007 | 0.017 |
| Forklifts            | 120  | 0.275 | 3.787 | 1.495 | 0.006 | 0.016 |
| Forklifts            | 175  | 0.189 | 3.350 | 0.299 | 0.006 | 0.012 |
| Forklifts            | 250  | 0.188 | 1.141 | 0.290 | 0.006 | 0.011 |
| Forklifts            | 500  | 0.188 | 1.085 | 0.290 | 0.005 | 0.011 |
| Generator Sets       | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 |
| Generator Sets       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 |
| Generator Sets       | 50   | 0.276 | 3.607 | 2.991 | 0.007 | 0.018 |
| Generator Sets       | 120  | 0.156 | 3.310 | 1.458 | 0.006 | 0.016 |
| Generator Sets       | 175  | 0.113 | 2.929 | 0.373 | 0.006 | 0.013 |
| Generator Sets       | 250  | 0.110 | 0.998 | 0.331 | 0.006 | 0.011 |
| Generator Sets       | 500  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 |
| Generator Sets       | 750  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 |
| Generator Sets       | 9999 | 0.114 | 0.978 | 2.362 | 0.005 | 0.022 |
| Graders              | 50   | 0.593 | 5.189 | 3.356 | 0.007 | 0.037 |
| Graders              | 120  | 0.293 | 3.767 | 1.661 | 0.006 | 0.034 |
| Graders              | 175  | 0.206 | 3.326 | 0.506 | 0.006 | 0.022 |
| Graders              | 250  | 0.196 | 1.137 | 0.452 | 0.006 | 0.016 |
| Graders              | 500  | 0.195 | 1.083 | 0.434 | 0.005 | 0.016 |
| Graders              | 750  | 0.195 | 1.083 | 0.438 | 0.005 | 0.016 |
| Off-Highway Tractors | 120  | 0.418 | 3.902 | 2.350 | 0.006 | 0.107 |
| Off-Highway Tractors | 175  | 0.301 | 3.421 | 1.252 | 0.006 | 0.065 |
| Off-Highway Tractors | 250  | 0.268 | 1.232 | 1.115 | 0.006 | 0.042 |
| Off-Highway Tractors | 750  | 0.262 | 1.238 | 1.045 | 0.005 | 0.040 |
| Off-Highway Tractors | 1000 | 0.269 | 1.268 | 3.116 | 0.005 | 0.056 |
| Off-Highway Trucks   | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 |
| Off-Highway Trucks   | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 |

|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 | 0.018 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 | 0.017 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 | 0.013 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 | 0.011 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 | 0.025 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 | 0.022 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 | 0.016 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 | 0.013 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 |

|       |
|-------|
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 | 0.028 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 | 0.025 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 | 0.022 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 | 0.016 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 | 0.013 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 | 0.013 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 | 0.027 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 | 0.076 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 | 0.069 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 | 0.043 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 | 0.027 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 | 0.026 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 | 0.070 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 | 0.064 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 | 0.040 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 | 0.024 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 | 0.015 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 | 0.014 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 | 0.013 |



|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 | 0.015 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 | 0.015 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 | 0.015 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 | 0.030 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 | 0.064 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 | 0.040 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 | 0.026 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 | 0.025 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 | 0.025 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 | 0.020 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 | 0.018 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 | 0.014 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 | 0.014 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 | 0.015 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 | 0.014 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 | 0.041 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 | 0.038 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 | 0.025 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 | 0.016 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 | 0.016 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 | 0.016 |
| Sweepers/S crubbers       | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 |
| Sweepers/S crubbers       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 |
| Sweepers/S crubbers       | 50   | 0.505 | 4.929 | 3.214 | 0.007 | 0.017 |
| Sweepers/S crubbers       | 120  | 0.253 | 3.698 | 1.486 | 0.006 | 0.016 |
| Sweepers/S crubbers       | 175  | 0.175 | 3.271 | 0.313 | 0.006 | 0.012 |
| Sweepers/S crubbers       | 250  | 0.173 | 1.114 | 0.294 | 0.006 | 0.011 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |

|       |
|-------|
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.515 | 4.949 | 3.244 | 0.007 | 0.022 |
| Tractors/Loaders/Backhoes | 120  | 0.258 | 3.703 | 1.521 | 0.006 | 0.020 |
| Tractors/Loaders/Backhoes | 175  | 0.179 | 3.275 | 0.348 | 0.006 | 0.015 |
| Tractors/Loaders/Backhoes | 250  | 0.177 | 1.115 | 0.331 | 0.006 | 0.012 |
| Tractors/Loaders/Backhoes | 500  | 0.177 | 1.066 | 0.326 | 0.006 | 0.012 |
| Tractors/Loaders/Backhoes | 750  | 0.177 | 1.066 | 0.327 | 0.006 | 0.012 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Trenchers                 | 50   | 0.681 | 5.055 | 3.548 | 0.007 | 0.084 |
| Trenchers                 | 120  | 0.332 | 3.713 | 2.049 | 0.006 | 0.076 |
| Trenchers                 | 175  | 0.241 | 3.264 | 0.966 | 0.006 | 0.048 |
| Trenchers                 | 250  | 0.216 | 1.149 | 0.847 | 0.006 | 0.031 |
| Trenchers                 | 500  | 0.213 | 1.126 | 0.790 | 0.005 | 0.029 |
| Trenchers                 | 750  | 0.213 | 1.126 | 0.801 | 0.005 | 0.029 |
| Welders                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 |
| Welders                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.162 |
| Welders                   | 50   | 0.406 | 4.349 | 3.147 | 0.007 | 0.022 |
| Welders                   | 120  | 0.214 | 3.528 | 1.509 | 0.006 | 0.019 |
| Welders                   | 175  | 0.153 | 3.121 | 0.387 | 0.006 | 0.015 |
| Welders                   | 250  | 0.149 | 1.063 | 0.343 | 0.006 | 0.012 |
| Welders                   | 500  | 0.149 | 1.027 | 0.339 | 0.005 | 0.012 |
| Water Trucks              | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 |
| Water Trucks              | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 |
| Water Trucks              | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 |
| Water Trucks              | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 |
| Water Trucks              | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 |

2040

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|
| PM2.5   | CO2     | CH4     | N2O     |
| 0.161   | 568.299 | 0.059   | 0.005   |
| 0.161   | 568.299 | 0.061   | 0.005   |
| 0.019   | 568.299 | 0.026   | 0.005   |
| 0.017   | 568.299 | 0.014   | 0.004   |
| 0.011   | 568.299 | 0.010   | 0.004   |
| 0.011   | 568.299 | 0.010   | 0.004   |
| 0.162   | 568.300 | 0.059   | 0.005   |
| 0.162   | 568.299 | 0.061   | 0.005   |
| 0.023   | 568.299 | 0.041   | 0.005   |
| 0.020   | 568.299 | 0.021   | 0.004   |
| 0.015   | 568.300 | 0.015   | 0.004   |
| 0.012   | 568.299 | 0.014   | 0.004   |
| 0.012   | 568.299 | 0.014   | 0.004   |
| 0.012   | 568.299 | 0.014   | 0.004   |
| 0.026   | 568.299 | 0.015   | 0.004   |
| 0.161   | 568.299 | 0.059   | 0.005   |
| 0.161   | 568.299 | 0.061   | 0.005   |
| 0.013   | 568.299 | 0.031   | 0.005   |
| 0.012   | 568.300 | 0.016   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.021   | 568.299 | 0.011   | 0.004   |

| 2040             |       | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      |
| Aerial Lifts     | 15    | 0.661   | 3.469   |
| Aerial Lifts     | 25    | 0.685   | 2.339   |
| Aerial Lifts     | 50    | 0.295   | 3.723   |
| Aerial Lifts     | 120   | 0.161   | 3.344   |
| Aerial Lifts     | 500   | 0.112   | 0.986   |
| Aerial Lifts     | 750   | 0.112   | 0.986   |
| Air Compressor s | 15    | 0.661   | 3.469   |
| Air Compressor s | 25    | 0.685   | 2.339   |
| Air Compressor s | 50    | 0.458   | 4.659   |
| Air Compressor s | 120   | 0.232   | 3.619   |
| Air Compressor s | 175   | 0.161   | 3.201   |
| Air Compressor s | 250   | 0.160   | 1.090   |
| Air Compressor s | 500   | 0.160   | 1.047   |
| Air Compressor s | 750   | 0.160   | 1.047   |
| Air Compressor s | 1000  | 0.160   | 1.047   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.032   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.435   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.039   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.021 | 568.300 | 0.033 | 0.005 |
| 0.018 | 568.299 | 0.018 | 0.004 |
| 0.014 | 568.299 | 0.012 | 0.004 |
| 0.039 | 568.299 | 0.054 | 0.005 |
| 0.036 | 568.300 | 0.027 | 0.004 |
| 0.024 | 568.299 | 0.019 | 0.004 |
| 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 568.299 | 0.018 | 0.004 |
| 0.031 | 568.299 | 0.018 | 0.004 |
| 0.066 | 568.299 | 0.063 | 0.005 |
| 0.060 | 568.299 | 0.031 | 0.004 |
| 0.038 | 568.299 | 0.022 | 0.004 |
| 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.020 | 0.004 |
| 0.041 | 568.299 | 0.020 | 0.004 |
| 0.023 | 568.299 | 0.044 | 0.005 |
| 0.020 | 568.299 | 0.022 | 0.004 |
| 0.015 | 568.299 | 0.015 | 0.004 |
| 0.012 | 568.300 | 0.015 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.026 | 568.299 | 0.016 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.470 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 50   | 0.373 | 4.175 |
| Concrete/Industrial Saws | 120  | 0.195 | 3.477 |
| Concrete/Industrial Saws | 175  | 0.136 | 3.076 |
| Cranes                   | 50   | 0.567 | 5.268 |
| Cranes                   | 120  | 0.282 | 3.797 |
| Cranes                   | 175  | 0.197 | 3.358 |
| Cranes                   | 250  | 0.195 | 1.144 |
| Cranes                   | 500  | 0.195 | 1.087 |
| Cranes                   | 750  | 0.195 | 1.087 |
| Cranes                   | 9999 | 0.198 | 1.087 |
| Crawler Tractors         | 50   | 0.653 | 5.443 |
| Crawler Tractors         | 120  | 0.316 | 3.839 |
| Crawler Tractors         | 175  | 0.221 | 3.388 |
| Crawler Tractors         | 250  | 0.211 | 1.167 |
| Crawler Tractors         | 500  | 0.210 | 1.113 |
| Crawler Tractors         | 750  | 0.210 | 1.113 |
| Crawler Tractors         | 1000 | 0.213 | 1.122 |
| Crushing/Proc. Equipment | 50   | 0.488 | 4.833 |
| Crushing/Proc. Equipment | 120  | 0.245 | 3.670 |
| Crushing/Proc. Equipment | 175  | 0.170 | 3.246 |
| Crushing/Proc. Equipment | 250  | 0.168 | 1.106 |
| Crushing/Proc. Equipment | 500  | 0.168 | 1.059 |
| Crushing/Proc. Equipment | 750  | 0.169 | 1.059 |
| Crushing/Proc. Equipment | 9999 | 0.170 | 1.059 |



|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.024 | 568.299 | 0.051 | 0.005 |
| 0.021 | 568.299 | 0.025 | 0.004 |
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.300 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.017 | 568.299 | 0.050 | 0.005 |
| 0.016 | 568.299 | 0.024 | 0.004 |
| 0.012 | 568.300 | 0.017 | 0.004 |
| 0.011 | 568.300 | 0.017 | 0.004 |
| 0.011 | 568.299 | 0.017 | 0.004 |
| 0.162 | 568.299 | 0.053 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.018 | 568.299 | 0.024 | 0.005 |
| 0.016 | 568.299 | 0.014 | 0.004 |
| 0.013 | 568.299 | 0.010 | 0.004 |
| 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 568.299 | 0.009 | 0.004 |
| 0.022 | 568.299 | 0.010 | 0.004 |
| 0.037 | 568.299 | 0.053 | 0.005 |
| 0.034 | 568.299 | 0.026 | 0.004 |
| 0.022 | 568.300 | 0.018 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.107 | 568.299 | 0.037 | 0.004 |
| 0.065 | 568.299 | 0.027 | 0.004 |
| 0.042 | 568.299 | 0.024 | 0.004 |
| 0.040 | 568.299 | 0.023 | 0.004 |
| 0.056 | 568.299 | 0.024 | 0.004 |
| 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |

|                      |      |       |       |
|----------------------|------|-------|-------|
| Dumpers/Trailers     | 25   | 0.685 | 2.339 |
| Excavators           | 25   | 0.685 | 2.339 |
| Excavators           | 50   | 0.567 | 5.283 |
| Excavators           | 120  | 0.279 | 3.802 |
| Excavators           | 175  | 0.193 | 3.363 |
| Excavators           | 250  | 0.192 | 1.145 |
| Excavators           | 500  | 0.192 | 1.089 |
| Excavators           | 750  | 0.192 | 1.089 |
| Forklifts            | 50   | 0.562 | 5.256 |
| Forklifts            | 120  | 0.276 | 3.794 |
| Forklifts            | 175  | 0.189 | 3.356 |
| Forklifts            | 250  | 0.189 | 1.143 |
| Forklifts            | 500  | 0.189 | 1.087 |
| Generator Sets       | 15   | 0.589 | 3.469 |
| Generator Sets       | 25   | 0.685 | 2.339 |
| Generator Sets       | 50   | 0.273 | 3.601 |
| Generator Sets       | 120  | 0.152 | 3.308 |
| Generator Sets       | 175  | 0.107 | 2.928 |
| Generator Sets       | 250  | 0.106 | 0.997 |
| Generator Sets       | 500  | 0.106 | 0.978 |
| Generator Sets       | 750  | 0.106 | 0.978 |
| Generator Sets       | 9999 | 0.107 | 0.978 |
| Graders              | 50   | 0.563 | 5.161 |
| Graders              | 120  | 0.278 | 3.764 |
| Graders              | 175  | 0.193 | 3.326 |
| Graders              | 250  | 0.188 | 1.133 |
| Graders              | 500  | 0.188 | 1.079 |
| Graders              | 750  | 0.188 | 1.079 |
| Off-Highway Tractors | 120  | 0.362 | 3.878 |
| Off-Highway Tractors | 175  | 0.257 | 3.412 |
| Off-Highway Tractors | 250  | 0.237 | 1.198 |
| Off-Highway Tractors | 750  | 0.234 | 1.164 |
| Off-Highway Tractors | 1000 | 0.238 | 1.183 |
| Off-Highway Trucks   | 175  | 0.205 | 3.426 |
| Off-Highway Trucks   | 250  | 0.204 | 1.167 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 568.299 | 0.018 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.018 | 568.299 | 0.037 | 0.005 |
| 0.017 | 568.299 | 0.019 | 0.004 |
| 0.013 | 568.299 | 0.013 | 0.004 |
| 0.011 | 568.299 | 0.013 | 0.004 |
| 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.025 | 568.299 | 0.050 | 0.005 |
| 0.022 | 568.300 | 0.025 | 0.004 |
| 0.016 | 568.300 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.204 | 1.105 |
| Off-Highway Trucks                 | 750  | 0.204 | 1.105 |
| Off-Highway Trucks                 | 1000 | 0.205 | 1.105 |
| Other Construction Equipment       | 15   | 0.661 | 3.470 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 |
| Other Construction Equipment       | 50   | 0.409 | 4.377 |
| Other Construction Equipment       | 120  | 0.210 | 3.536 |
| Other Construction Equipment       | 175  | 0.145 | 3.128 |
| Other Construction Equipment       | 500  | 0.145 | 1.029 |
| Other General Industrial Equipment | 15   | 0.589 | 3.470 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 |
| Other General Industrial Equipment | 50   | 0.562 | 5.257 |
| Other General Industrial Equipment | 120  | 0.277 | 3.794 |
| Other General Industrial Equipment | 175  | 0.191 | 3.356 |
| Other General Industrial Equipment | 250  | 0.190 | 1.143 |
| Other General Industrial Equipment | 500  | 0.190 | 1.087 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.028 | 568.299 | 0.017 | 0.004 |
| 0.025 | 568.299 | 0.049 | 0.005 |
| 0.022 | 568.299 | 0.025 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.027 | 568.299 | 0.017 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.076 | 568.299 | 0.062 | 0.005 |
| 0.069 | 568.299 | 0.030 | 0.004 |
| 0.043 | 568.299 | 0.022 | 0.004 |
| 0.027 | 568.300 | 0.019 | 0.004 |
| 0.026 | 568.299 | 0.019 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.070 | 568.300 | 0.059 | 0.005 |
| 0.064 | 568.299 | 0.029 | 0.004 |
| 0.040 | 568.299 | 0.021 | 0.004 |
| 0.024 | 568.299 | 0.019 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.162 | 568.300 | 0.053 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.015 | 568.299 | 0.016 | 0.005 |
| 0.014 | 568.299 | 0.010 | 0.004 |
| 0.013 | 568.299 | 0.009 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.190 | 1.087 |
| Other General Industrial Equipment | 1000 | 0.191 | 1.087 |
| Other Material Handling Equipment  | 50   | 0.551 | 5.191 |
| Other Material Handling Equipment  | 120  | 0.272 | 3.775 |
| Other Material Handling Equipment  | 175  | 0.188 | 3.339 |
| Other Material Handling Equipment  | 250  | 0.187 | 1.137 |
| Other Material Handling Equipment  | 500  | 0.187 | 1.082 |
| Other Material Handling Equipment  | 9999 | 0.189 | 1.082 |
| Pavers                             | 25   | 0.685 | 2.339 |
| Pavers                             | 50   | 0.618 | 5.189 |
| Pavers                             | 120  | 0.302 | 3.763 |
| Pavers                             | 175  | 0.213 | 3.319 |
| Pavers                             | 250  | 0.200 | 1.138 |
| Pavers                             | 500  | 0.198 | 1.085 |
| Paving Equipment                   | 25   | 0.685 | 2.339 |
| Paving Equipment                   | 50   | 0.589 | 5.111 |
| Paving Equipment                   | 120  | 0.291 | 3.744 |
| Paving Equipment                   | 175  | 0.205 | 3.304 |
| Paving Equipment                   | 250  | 0.193 | 1.127 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.589 | 3.469 |
| Pressure Washers                   | 25   | 0.685 | 2.339 |
| Pressure Washers                   | 50   | 0.186 | 3.098 |
| Pressure Washers                   | 120  | 0.113 | 3.160 |
| Pressure Washers                   | 175  | 0.103 | 2.907 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.009 | 568.299 | 0.008 | 0.004 |
| 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.019 | 568.299 | 0.027 | 0.005 |
| 0.017 | 568.299 | 0.015 | 0.004 |
| 0.014 | 568.299 | 0.011 | 0.004 |
| 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 568.299 | 0.010 | 0.004 |
| 0.023 | 568.299 | 0.011 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.300 | 0.061 | 0.005 |
| 0.038 | 568.299 | 0.045 | 0.005 |
| 0.035 | 568.299 | 0.023 | 0.004 |
| 0.023 | 568.299 | 0.016 | 0.004 |
| 0.016 | 568.299 | 0.015 | 0.004 |
| 0.016 | 568.300 | 0.015 | 0.004 |
|       |         |       |       |
| 0.022 | 568.299 | 0.047 | 0.005 |
|       |         |       |       |
| 0.020 | 568.299 | 0.023 | 0.004 |
|       |         |       |       |
| 0.015 | 568.299 | 0.016 | 0.004 |
|       |         |       |       |
| 0.012 | 568.299 | 0.016 | 0.004 |
|       |         |       |       |
| 0.012 | 568.300 | 0.016 | 0.004 |
|       |         |       |       |
| 0.071 | 568.299 | 0.029 | 0.004 |
|       |         |       |       |
| 0.046 | 568.299 | 0.025 | 0.004 |
|       |         |       |       |
| 0.043 | 568.300 | 0.025 | 0.004 |
|       |         |       |       |
| 0.043 | 568.299 | 0.025 | 0.004 |
|       |         |       |       |
| 0.060 | 568.299 | 0.025 | 0.004 |
|       |         |       |       |
| 0.161 | 568.299 | 0.061 | 0.005 |
|       |         |       |       |
| 0.035 | 568.299 | 0.051 | 0.005 |
|       |         |       |       |
| 0.033 | 568.299 | 0.025 | 0.004 |
|       |         |       |       |
| 0.022 | 568.299 | 0.018 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 |
| Pumps                   | 15   | 0.661 | 3.469 |
| Pumps                   | 25   | 0.685 | 2.339 |
| Pumps                   | 50   | 0.303 | 3.770 |
| Pumps                   | 120  | 0.165 | 3.358 |
| Pumps                   | 175  | 0.116 | 2.971 |
| Pumps                   | 250  | 0.114 | 1.012 |
| Pumps                   | 500  | 0.114 | 0.989 |
| Pumps                   | 750  | 0.114 | 0.989 |
| Pumps                   | 9999 | 0.116 | 0.989 |
| Rollers                 | 15   | 0.661 | 3.469 |
| Rollers                 | 25   | 0.685 | 2.339 |
| Rollers                 | 50   | 0.469 | 4.682 |
| Rollers                 | 120  | 0.240 | 3.625 |
| Rollers                 | 175  | 0.168 | 3.205 |
| Rollers                 | 250  | 0.165 | 1.092 |
| Rollers                 | 500  | 0.165 | 1.048 |
| Rough Terrain Forklifts |      |       |       |
| Rough Terrain Forklifts | 50   | 0.519 | 5.010 |
| Rough Terrain Forklifts | 120  | 0.258 | 3.722 |
| Rough Terrain Forklifts | 175  | 0.178 | 3.292 |
| Rough Terrain Forklifts | 250  | 0.177 | 1.121 |
| Rough Terrain Forklifts | 500  | 0.177 | 1.071 |
| Rubber Tired Dozers     | 175  | 0.275 | 3.470 |
| Rubber Tired Dozers     | 250  | 0.253 | 1.225 |
| Rubber Tired Dozers     | 500  | 0.249 | 1.198 |
| Rubber Tired Dozers     | 750  | 0.250 | 1.198 |
| Rubber Tired Dozers     | 1000 | 0.254 | 1.218 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 |
| Rubber Tired Loaders    | 50   | 0.545 | 5.102 |
| Rubber Tired Loaders    | 120  | 0.271 | 3.748 |
| Rubber Tired Loaders    | 175  | 0.188 | 3.314 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.030 | 568.299 | 0.017 | 0.004 |
| 0.064 | 568.299 | 0.031 | 0.004 |
| 0.040 | 568.299 | 0.022 | 0.004 |
| 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.300 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.020 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.020 | 568.299 | 0.032 | 0.005 |
| 0.018 | 568.299 | 0.017 | 0.004 |
| 0.014 | 568.299 | 0.012 | 0.004 |
| 0.014 | 686.695 | 0.014 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.015 | 568.299 | 0.037 | 0.005 |
| 0.014 | 568.299 | 0.019 | 0.004 |
| 0.041 | 568.299 | 0.039 | 0.005 |
| 0.038 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.014 | 0.004 |
| 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 568.300 | 0.013 | 0.004 |
| 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 568.300 | 0.061 | 0.005 |
| 0.017 | 568.299 | 0.045 | 0.005 |
| 0.016 | 568.299 | 0.022 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.011 | 568.299 | 0.015 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.185 | 1.128 |
| Rubber Tired Loaders      | 500  | 0.185 | 1.076 |
| Rubber Tired Loaders      | 750  | 0.185 | 1.076 |
| Rubber Tired Loaders      | 1000 | 0.186 | 1.076 |
| Scrapers                  | 120  | 0.316 | 3.833 |
| Scrapers                  | 175  | 0.221 | 3.381 |
| Scrapers                  | 250  | 0.210 | 1.159 |
| Scrapers                  | 500  | 0.209 | 1.100 |
| Scrapers                  | 750  | 0.209 | 1.100 |
| Signal Boards             | 15   | 0.661 | 3.469 |
| Signal Boards             | 50   | 0.356 | 4.074 |
| Signal Boards             | 120  | 0.188 | 3.447 |
| Signal Boards             | 175  | 0.131 | 3.050 |
| Signal Boards             | 250  | 0.157 | 1.255 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 |
| Skid Steer Loaders        | 50   | 0.411 | 4.392 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 |
| Surfacing Equipment       | 50   | 0.395 | 4.183 |
| Surfacing Equipment       | 120  | 0.206 | 3.477 |
| Surfacing Equipment       | 175  | 0.146 | 3.073 |
| Surfacing Equipment       | 250  | 0.140 | 1.047 |
| Surfacing Equipment       | 500  | 0.140 | 1.015 |
| Surfacing Equipment       | 750  | 0.140 | 1.015 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 |
| Sweepers/Scrubbers        | 50   | 0.504 | 4.925 |
| Sweepers/Scrubbers        | 120  | 0.251 | 3.697 |
| Sweepers/Scrubbers        | 175  | 0.172 | 3.270 |
| Sweepers/Scrubbers        | 250  | 0.172 | 1.114 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.022 | 568.299 | 0.046 | 0.005 |
| 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.084 | 568.299 | 0.061 | 0.005 |
| 0.076 | 568.300 | 0.030 | 0.004 |
| 0.048 | 568.299 | 0.021 | 0.004 |
| 0.031 | 568.299 | 0.019 | 0.004 |
| 0.029 | 568.299 | 0.019 | 0.004 |
| 0.029 | 568.300 | 0.019 | 0.004 |
| 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.022 | 568.299 | 0.036 | 0.005 |
| 0.019 | 568.299 | 0.019 | 0.004 |
| 0.015 | 568.299 | 0.013 | 0.004 |
| 0.012 | 568.299 | 0.013 | 0.004 |
| 0.012 | 568.299 | 0.013 | 0.004 |
| 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 568.299 | 0.018 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.508 | 4.946 |
| Tractors/Loaders/Backhoes | 120  | 0.254 | 3.703 |
| Tractors/Loaders/Backhoes | 175  | 0.175 | 3.276 |
| Tractors/Loaders/Backhoes | 250  | 0.174 | 1.116 |
| Tractors/Loaders/Backhoes | 500  | 0.174 | 1.066 |
| Tractors/Loaders/Backhoes | 750  | 0.174 | 1.066 |
| Trenchers                 | 15   | 0.661 | 3.469 |
| Trenchers                 | 25   | 0.685 | 2.339 |
| Trenchers                 | 50   | 0.598 | 4.980 |
| Trenchers                 | 120  | 0.293 | 3.699 |
| Trenchers                 | 175  | 0.207 | 3.260 |
| Trenchers                 | 250  | 0.193 | 1.126 |
| Trenchers                 | 500  | 0.191 | 1.081 |
| Trenchers                 | 750  | 0.191 | 1.081 |
| Welders                   | 15   | 0.661 | 3.469 |
| Welders                   | 25   | 0.685 | 2.339 |
| Welders                   | 50   | 0.402 | 4.336 |
| Welders                   | 120  | 0.208 | 3.524 |
| Welders                   | 175  | 0.145 | 3.118 |
| Welders                   | 250  | 0.143 | 1.062 |
| Welders                   | 500  | 0.143 | 1.026 |
| Water Trucks              | 175  | 0.205 | 3.426 |
| Water Trucks              | 250  | 0.204 | 1.167 |
| Water Trucks              | 500  | 0.204 | 1.105 |
| Water Trucks              | 750  | 0.204 | 1.105 |
| Water Trucks              | 1000 | 0.205 | 1.105 |

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|
| NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 2.966   | 0.007   | 0.013   | 0.013   | 568.299 | 0.026   | 0.005   |
| 1.407   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 0.279   | 0.005   | 0.009   | 0.009   | 568.299 | 0.010   | 0.004   |
| 0.279   | 0.005   | 0.009   | 0.009   | 568.299 | 0.010   | 0.004   |
| 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 4.332   | 0.007   | 0.161   | 0.161   | 568.300 | 0.061   | 0.005   |
| 3.159   | 0.007   | 0.016   | 0.016   | 568.300 | 0.041   | 0.005   |
| 1.468   | 0.006   | 0.015   | 0.015   | 568.299 | 0.020   | 0.004   |
| 0.307   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 0.291   | 0.006   | 0.010   | 0.010   | 568.299 | 0.014   | 0.004   |
| 0.291   | 0.005   | 0.010   | 0.010   | 568.300 | 0.014   | 0.004   |
| 0.291   | 0.005   | 0.010   | 0.010   | 568.299 | 0.014   | 0.004   |
| 2.439   | 0.005   | 0.023   | 0.023   | 568.299 | 0.014   | 0.004   |
| 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 3.019   | 0.007   | 0.013   | 0.013   | 568.300 | 0.031   | 0.005   |
| 1.411   | 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.272   | 0.006   | 0.010   | 0.010   | 568.300 | 0.011   | 0.004   |
| 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.058 | 0.007 | 0.014 | 0.014 | 568.299 | 0.033 | 0.005 |
| 1.434 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.300 | 0.012 | 0.004 |
| 3.324 | 0.007 | 0.024 | 0.024 | 568.299 | 0.051 | 0.005 |
| 1.552 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.371 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.344 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.340 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.341 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 2.534 | 0.005 | 0.027 | 0.027 | 568.299 | 0.017 | 0.004 |
| 3.420 | 0.007 | 0.042 | 0.042 | 568.299 | 0.058 | 0.005 |
| 1.709 | 0.006 | 0.039 | 0.039 | 568.299 | 0.028 | 0.004 |
| 0.539 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.491 | 0.006 | 0.018 | 0.018 | 568.299 | 0.019 | 0.004 |
| 0.470 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.475 | 0.005 | 0.018 | 0.018 | 568.299 | 0.019 | 0.004 |
| 2.652 | 0.005 | 0.032 | 0.032 | 568.299 | 0.019 | 0.004 |
| 3.194 | 0.007 | 0.017 | 0.017 | 568.299 | 0.044 | 0.005 |
| 1.477 | 0.006 | 0.015 | 0.015 | 568.299 | 0.022 | 0.004 |
| 0.306 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.292 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.292 | 0.005 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.292 | 0.005 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 2.457 | 0.005 | 0.024 | 0.024 | 568.299 | 0.015 | 0.004 |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 3.290 | 0.007 | 0.019 | 0.019 | 568.299 | 0.051 | 0.005 |
| 1.507 | 0.006 | 0.017 | 0.017 | 568.299 | 0.025 | 0.004 |
| 0.311 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.300 | 0.006 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.300 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.300 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 3.272 | 0.007 | 0.017 | 0.017 | 568.299 | 0.050 | 0.005 |
| 1.491 | 0.006 | 0.016 | 0.016 | 568.299 | 0.024 | 0.004 |
| 0.288 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.288 | 0.006 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.288 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.941 | 0.007 | 0.012 | 0.012 | 568.300 | 0.024 | 0.005 |
| 1.399 | 0.006 | 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 0.293 | 0.006 | 0.010 | 0.010 | 568.299 | 0.009 | 0.004 |
| 0.277 | 0.006 | 0.009 | 0.009 | 568.299 | 0.009 | 0.004 |
| 0.277 | 0.005 | 0.009 | 0.009 | 568.299 | 0.009 | 0.004 |
| 0.277 | 0.005 | 0.009 | 0.009 | 568.300 | 0.009 | 0.004 |
| 2.330 | 0.005 | 0.020 | 0.020 | 568.299 | 0.009 | 0.004 |
| 3.298 | 0.007 | 0.026 | 0.026 | 568.300 | 0.050 | 0.005 |
| 1.560 | 0.006 | 0.024 | 0.024 | 568.299 | 0.025 | 0.004 |
| 0.380 | 0.006 | 0.017 | 0.017 | 568.299 | 0.017 | 0.004 |
| 0.360 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.353 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.976 | 0.006 | 0.067 | 0.067 | 568.299 | 0.032 | 0.004 |
| 0.836 | 0.006 | 0.041 | 0.041 | 568.299 | 0.023 | 0.004 |
| 0.747 | 0.006 | 0.028 | 0.028 | 568.299 | 0.021 | 0.004 |
| 0.710 | 0.005 | 0.027 | 0.027 | 568.299 | 0.021 | 0.004 |
| 2.844 | 0.005 | 0.042 | 0.042 | 568.299 | 0.021 | 0.004 |
| 0.318 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.006 | 0.012 | 0.012 | 568.300 | 0.018 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 2.532 | 0.005 | 0.026 | 0.026 | 568.299 | 0.018 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.300 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.096 | 0.007 | 0.015 | 0.015 | 568.300 | 0.036 | 0.005 |
| 1.441 | 0.006 | 0.014 | 0.014 | 568.299 | 0.018 | 0.004 |
| 0.290 | 0.006 | 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 0.282 | 0.005 | 0.010 | 0.010 | 568.299 | 0.013 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.283 | 0.007 | 0.019 | 0.019 | 568.299 | 0.050 | 0.005 |
| 1.506 | 0.006 | 0.017 | 0.017 | 568.299 | 0.025 | 0.004 |
| 0.315 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.299 | 0.006 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.299 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.299 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 2.500 | 0.005 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 3.269 | 0.007 | 0.018 | 0.018 | 568.299 | 0.049 | 0.005 |
| 1.502 | 0.006 | 0.017 | 0.017 | 568.300 | 0.024 | 0.004 |
| 0.314 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.298 | 0.006 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 0.298 | 0.005 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 2.493 | 0.005 | 0.025 | 0.025 | 568.300 | 0.017 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.393 | 0.007 | 0.047 | 0.047 | 568.299 | 0.055 | 0.005 |
| 1.731 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.583 | 0.006 | 0.027 | 0.027 | 568.299 | 0.019 | 0.004 |
| 0.525 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.498 | 0.005 | 0.018 | 0.018 | 568.299 | 0.017 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.361 | 0.007 | 0.042 | 0.042 | 568.300 | 0.053 | 0.005 |
| 1.687 | 0.006 | 0.039 | 0.039 | 568.299 | 0.026 | 0.004 |
| 0.536 | 0.006 | 0.025 | 0.025 | 568.299 | 0.018 | 0.004 |
| 0.485 | 0.006 | 0.017 | 0.017 | 568.299 | 0.017 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.836 | 0.007 | 0.010 | 0.010 | 568.299 | 0.016 | 0.005 |
| 1.365 | 0.006 | 0.010 | 0.010 | 568.299 | 0.010 | 0.004 |
| 0.293 | 0.006 | 0.010 | 0.010 | 568.299 | 0.009 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.976 | 0.007 | 0.013 | 0.013 | 568.299 | 0.027 | 0.005 |
| 1.410 | 0.006 | 0.012 | 0.012 | 568.299 | 0.014 | 0.004 |
| 0.295 | 0.006 | 0.010 | 0.010 | 568.299 | 0.010 | 0.004 |
| 0.279 | 0.006 | 0.009 | 0.009 | 568.299 | 0.010 | 0.004 |
| 0.279 | 0.005 | 0.009 | 0.009 | 568.299 | 0.010 | 0.004 |
| 0.279 | 0.005 | 0.009 | 0.009 | 568.299 | 0.010 | 0.004 |
| 2.347 | 0.005 | 0.020 | 0.020 | 568.299 | 0.010 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.207 | 0.007 | 0.024 | 0.024 | 568.299 | 0.042 | 0.005 |
| 1.525 | 0.006 | 0.021 | 0.021 | 568.299 | 0.021 | 0.004 |
| 0.373 | 0.006 | 0.015 | 0.015 | 568.299 | 0.015 | 0.004 |
| 0.348 | 0.006 | 0.012 | 0.012 | 568.299 | 0.014 | 0.004 |
| 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.014 | 0.004 |
| 3.228 | 0.007 | 0.017 | 0.017 | 568.300 | 0.046 | 0.005 |
| 1.485 | 0.006 | 0.016 | 0.016 | 568.299 | 0.023 | 0.004 |
| 0.303 | 0.006 | 0.012 | 0.012 | 568.300 | 0.016 | 0.004 |
| 0.292 | 0.006 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 0.292 | 0.005 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 0.903 | 0.006 | 0.045 | 0.045 | 568.299 | 0.024 | 0.004 |
| 0.810 | 0.006 | 0.031 | 0.031 | 568.299 | 0.022 | 0.004 |
| 0.758 | 0.005 | 0.029 | 0.029 | 568.299 | 0.022 | 0.004 |
| 0.767 | 0.005 | 0.029 | 0.029 | 568.300 | 0.022 | 0.004 |
| 2.910 | 0.005 | 0.045 | 0.045 | 568.300 | 0.023 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.283 | 0.007 | 0.024 | 0.024 | 568.300 | 0.049 | 0.005 |
| 1.543 | 0.006 | 0.022 | 0.022 | 568.300 | 0.024 | 0.004 |
| 0.365 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.346 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.338 | 0.005 | 0.013 | 0.013 | 568.300 | 0.016 | 0.004 |
| 0.340 | 0.005 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 2.522 | 0.005 | 0.026 | 0.026 | 568.299 | 0.016 | 0.004 |
| 1.715 | 0.006 | 0.040 | 0.040 | 568.299 | 0.028 | 0.004 |
| 0.549 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 0.498 | 0.006 | 0.018 | 0.018 | 568.300 | 0.018 | 0.004 |
| 0.475 | 0.005 | 0.017 | 0.017 | 568.299 | 0.018 | 0.004 |
| 0.480 | 0.005 | 0.017 | 0.017 | 568.299 | 0.018 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.037 | 0.007 | 0.014 | 0.014 | 568.299 | 0.032 | 0.005 |
| 1.428 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.296 | 0.006 | 0.011 | 0.011 | 568.299 | 0.011 | 0.004 |
| 0.341 | 0.007 | 0.012 | 0.012 | 686.695 | 0.014 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.093 | 0.007 | 0.014 | 0.014 | 568.299 | 0.037 | 0.005 |
| 1.435 | 0.006 | 0.013 | 0.013 | 568.300 | 0.019 | 0.004 |
| 3.114 | 0.007 | 0.025 | 0.025 | 568.299 | 0.035 | 0.005 |
| 1.521 | 0.006 | 0.024 | 0.024 | 568.299 | 0.018 | 0.004 |
| 0.397 | 0.006 | 0.017 | 0.017 | 568.299 | 0.013 | 0.004 |
| 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.012 | 0.004 |
| 0.358 | 0.005 | 0.012 | 0.012 | 568.299 | 0.012 | 0.004 |
| 0.361 | 0.005 | 0.013 | 0.013 | 568.299 | 0.012 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.300 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.203 | 0.007 | 0.016 | 0.016 | 568.300 | 0.045 | 0.005 |
| 1.469 | 0.006 | 0.015 | 0.015 | 568.299 | 0.022 | 0.004 |
| 0.284 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.284 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 3.220 | 0.007 | 0.018 | 0.018 | 568.299 | 0.045 | 0.005 |
| 1.485 | 0.006 | 0.016 | 0.016 | 568.299 | 0.022 | 0.004 |
| 0.305 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.300 | 0.015 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.374 | 0.007 | 0.052 | 0.052 | 568.299 | 0.054 | 0.005 |
| 1.767 | 0.006 | 0.047 | 0.047 | 568.299 | 0.026 | 0.004 |
| 0.639 | 0.006 | 0.030 | 0.030 | 568.300 | 0.018 | 0.004 |
| 0.573 | 0.006 | 0.020 | 0.020 | 568.300 | 0.017 | 0.004 |
| 0.542 | 0.005 | 0.020 | 0.020 | 568.300 | 0.017 | 0.004 |
| 0.549 | 0.005 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.093 | 0.007 | 0.015 | 0.015 | 568.300 | 0.036 | 0.005 |
| 1.447 | 0.006 | 0.014 | 0.014 | 568.299 | 0.018 | 0.004 |
| 0.303 | 0.006 | 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 0.287 | 0.006 | 0.010 | 0.010 | 568.300 | 0.012 | 0.004 |
| 0.287 | 0.005 | 0.010 | 0.010 | 568.299 | 0.012 | 0.004 |
| 0.318 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.006 | 0.012 | 0.012 | 568.300 | 0.018 | 0.004 |
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 2.532 | 0.005 | 0.026 | 0.026 | 568.299 | 0.018 | 0.004 |

| Basic Conversions | Factor                                       | Value   | Units  | Source  |
|-------------------|--|---------|--------|---|
|                   | 1 pound equals                               | 453.592 | grams  |   |
|                   | 1 MT equals                                  | 1.102   | tons   |   |
|                   | Total # of days in a week                    | 7       | days   |   |
|                   | 1 kg equals                                  | 1,000   | grams  |   |
|                   | 1 Year equals                                | 365     | days   |   |
|                   | 1 ton equals                                 | 2,000   | pounds |   |
|                   | Global Warming Potential of CH <sub>4</sub>  | 25      | N/A    | <a href="http://www.arb.ca.gov/cc/inventory/backgr">http://www.arb.ca.gov/cc/inventory/backgr</a> |
|                   | Global Warming Potential of N <sub>2</sub> O | 298     | N/A    | <a href="http://www.arb.ca.gov/cc/inventory/backgr">http://www.arb.ca.gov/cc/inventory/backgr</a> |

[und/gwp.htm](#)

[und/gwp.htm](#)



## Welcome to the Road Construction Emissions Model, Version 9.0.0

### User Instructions

This spreadsheet system contains the following individual worksheets:

- 1 This worksheet of User Instructions
- 2 Updates
- 3 Emission Estimates
- 4 Data Entry
- 5 Non-default Off-road Equipment
- 6 EMFAC2017
- 7 On-road Mitigation EF
- 8 OFFROAD Convert
- 9 Off-road Tier 4 EF
- 10 OFFROAD HP & LF
- 11 OFFROAD EF
- 12 x-ref



The Emission Estimates worksheet calculates a project's emissions in pounds per day (and tons) by project phase and tons over the entire construction period.

The worksheet can be used to estimate emissions for both vehicle exhaust and fugitive dust. The methodology used to estimate fugitive dust emissions is a simplified methodology involving estimates of the maximum area (acreage) of land disturbed daily. Detailed fugitive dust emission estimates associated with individual materials handling operations and/or activity/vehicle types cannot be conducted with this version of the model.

The Emission Estimates worksheet cannot be modified directly, it is a protected worksheet. It can only be modified indirectly by entering information for the project in selected areas of the Data Entry worksheet.

The last seven of these worksheets - EMFAC2017, On-road Mitigation EF, OFFROAD Convert, Off-road Tier 4 EF, OFFROAD HP & LP, OFFROAD EF and x-ref - cannot be modified by the user. They are protected worksheets.

Even though all or portions of several worksheets are protected, the individual formulas used in the calculations can be seen by the user.

The Data Entry worksheet includes several areas that can be modified by the user.

User instructions in the Data Entry worksheet are highlighted in red.

On the Data Entry worksheet, the user has two options for entering project data: required data and optional data. Required data is entered in the data input section (yellow cells). That required data is then used by the worksheet to calculate default values for the project.

The user can override the default values (blue cells) calculated for a project and is encouraged to do so if project specific information is available. Due to the difficulty in developing reliable default values for road construction projects, the user is encouraged to enter as much site specific information as is available for the project being analyzed.

The Data Entry Worksheet also includes a button that allows the user to clear previously entered data. This button is found just at the top of and to the right of the data entry portion of the worksheet.

When projects are discontinuous, the user must make adjustments to the spreadsheet manually, since the program cannot be setup to anticipate unexpected project delays.

#VALUE! <- This error message may occur during use of the spreadsheets. This occurs whenever the user enters a non numeric value, including a space character, into a cell that is used to calculate a numeric value. Consequently, to erase values entered into the spreadsheets, use the delete key instead of the space bar!

Note: Information in this worksheet is based on conversations with knowledgeable individuals at the Sacramento Metropolitan Air Quality Management District, the California Department of Transportation, the California Air Resources Board, the U.S. EPA, and private industry involved in road construction. Also, the 26th edition of Walker's Building Estimator's Reference Book (1999) was used in the development of this spreadsheet. This spreadsheet was prepared by Jones & Stokes, TIAX LLC and Ramboll Environ with the financial support and direction of the Sacramento Metropolitan Air Quality Management District.



<http://www.airquality.org>

Karen Huss



<http://www.ramboll.com/>

John Grant

## Road Construction Emissions Model, Version 9.0.0

### Updates Log

*Changes from previous version of Road Construction Emissions Model*

#### **(Version 8.1.0 to 9.0.0) (updated by SMAQMD 04/22/18 with assistance from Ramboll)**

- 1) Project length changed to include calendar years 2014 through 2040.
- 2) On-road vehicle emission factors have been updated to EMFAC2017 version 1.0.2.
- 3) Off-road emission rates updated to include calendar years 2014 through 2040.
- 4) Average Offroad HP by Equipment Type updated to be consistent with CalEEMod (version 2016.3.2)
- 5) Modified 'Data Entry' tab to calculate NOx start emissions from heavy duty trucks in "soil hauling", "asphalt hauling"

#### **(Version 7.1.5 to 8.1.0) (updated by SMAQMD 05/09/16 with assistance from Ramboll ENVIRON US Corporation)**

- 1) Project length changed to include calendar years 2014 through 2025.
- 2) Added a new project type: Type 4: Other Linear Project Type. Note that there are no default vehicle or equipment at
- 3) Emissions estimates were extended to include SOx, CH4, N2O and CO2e.
- 4) Updated off-road equipment emission factors and default average horsepower by equipment type to be consistent
- 5) On-road vehicle emission factors have been updated to EMFAC2014.
- 6) Revised pollutant order for consistency throughout the calculator.
- 7) Added flexibility for users to specify a non-default number of working days per month.
- 8) Modified soil hauling import and export quantity and haul truck capacity data requests to allow users to specify soil
- 9) Soil hauling emissions are now estimated separately for each construction phase.
- 10) Added a new feature to allow users to provide asphalt hauling quantities by phase in the "Data Entry" tab.
- 11) New component added where the user can specify construction start date and duration by phase.
- 12) The maximum daily emissions calculation was modified to sum emissions from overlapping construction phases.
- 13) Water truck activity can be specified and emissions estimated for the paving phase.
- 14) Mitigation options were added for on-road vehicles and off-road equipment. Emissions calculations include the eff
- 15) Model allows user to estimate emissions from non-default off-road equipment for all phases and for all project type equipment type for horsepower, number of equipment, load factor, hours of operation and emission factors in the "Nor
- 16) New table of total project emissions with units of tons/phase was added in the "Emission Estimates" tab.
- 17) Removed table of daily emissions in metric units from the "Emission Estimates" tab.
- 18) Removed unnecessary data from all tabs.

#### **(Version 7.1.4 to 7.1.5) (updated by SMAQMD 12/11/13 with assistance from ENVIRON Corporation)**

- 1) Grubbing and Land Clearing Phase calculation of active months in 2007, 2017, 2019 fixed.
- 2) Soil Hauling Emissions calculation to select override if it exists for round trips/day.
- 3) Worker Commute Emissions calculation of starting and hot soak emissions; drainage phase PM<sub>10</sub> emission rate.
- 4) Water Truck Emissions calculation to select number of months for Grubbing and Land Clearing Phase; maximum a

#### **(Version 6.3.2 to Version 7.1.0, 7.1.1, 7.1.2, 7.1.3 & 7.1.4) (updated by SMAQMD 8/2/13)**

- 1) EMFAC2011 emission factors added (previous EMFAC versions dropped).
- 2) OFFROAD2011 emission factors added (and fixed error).
- 3) OFFROAD2007 for categories not in OFFROAD2011 (and fixed error)
- 4) Project length changed to include calendar years 2009 through 2025.
- 5) Average Offroad HP by Equipment Type calculation updated and corrected
- 6) Load Factor Adjustment deactivated (default load factors already incorporated in ARB's calculation of emission fact
- 7) Crawler Tractor equipment added to model
- 8) Air Compressors ROG & Default Excavators calculation on Data Entry sheet corrected.
- 9) Default equipment list updated
- 10) Corrections to Worker Commute Emissions calculations



and "water truck" section

n)

activities available for the Project Type 4.

with CalEEMod (version 2013.2.2).

hauling activity by phase.

effects of mitigations if a mitigation option is selected by the user.  
es. Non-default off-road equipment specification must be included by  
"Non-default Off-road Equipment" tab.

increase/day after 2025.

itors)

Road Construction Emissions Model, Version 9.0.0

| Daily Emission Estimates for -> SR-49 Improvements (Option A) |               |              |               |                      |                        |                              |                       |                         |                               |               |               |               |               |                |
|---|---------------|--------------|---------------|----------------------|------------------------|------------------------------|-----------------------|-------------------------|-------------------------------|---------------|---------------|---------------|---------------|----------------|
| Project Phases (Pounds)                                       | ROG (lbs/day) | CO (lbs/day) | NOx (lbs/day) | Total PM10 (lbs/day) | Exhaust PM10 (lbs/day) | Fugitive Dust PM10 (lbs/day) | Total PM2.5 (lbs/day) | Exhaust PM2.5 (lbs/day) | Fugitive Dust PM2.5 (lbs/day) | SOx (lbs/day) | CO2 (lbs/day) | CH4 (lbs/day) | N2O (lbs/day) | CO2e (lbs/day) |
| Grubbing/Land Clearing  | 2.37          | 22.15        | 23.77         | 11.08                | 1.08                   | 10.00                        | 3.05                  | 0.97                    | 2.08                          | 0.06          | 5,620.98      | 0.69          | 0.31          | 5,731.93       |
| Grading/Excavation  | 2.81          | 23.28        | 30.51         | 11.29                | 1.29                   | 10.00                        | 3.18                  | 1.10                    | 2.08                          | 0.07          | 6,803.22      | 1.65          | 0.22          | 6,909.07       |
| Drainage/Utilities/Sub-Grade                                  | 1.81          | 18.14        | 16.92         | 10.81                | 0.81                   | 10.00                        | 2.82                  | 0.74                    | 2.08                          | 0.04          | 3,578.11      | 0.52          | 0.06          | 3,607.88       |
| Paving  | 0.99          | 12.79        | 10.59         | 0.54                 | 0.54                   | 0.00                         | 0.47                  | 0.47                    | 0.00                          | 0.03          | 2,533.89      | 0.56          | 0.11          | 2,582.13       |
| Maximum (pounds/day)  | 2.81          | 23.28        | 30.51         | 11.29                | 1.29                   | 10.00                        | 3.18                  | 1.10                    | 2.08                          | 0.07          | 6,803.22      | 1.65          | 0.31          | 6,909.07       |
| Total (tons/construction project)                             | 0.08          | 0.78         | 0.88          | 0.37                 | 0.04                   | 0.33                         | 0.10                  | 0.03                    | 0.07                          | 0.00          | 196.46        | 0.04          | 0.01          | 199.41         |

Notes:  
 Project Start Year -> 2022  
 Project Length (months) -> 4  
 Total Project Area (acres) -> 2  
 Maximum Area Disturbed/Day (acres) -> 1  
 Water Truck Used? -> No

| Phase                        | Total Material Imported/Exported Volume (yd <sup>3</sup> /day) |         | Daily VMT (miles/day) |                 |                |             |
|------------------------------|--|---------|-----------------------|-----------------|----------------|-------------|
|                              | Soil   | Asphalt | Soil Hauling          | Asphalt Hauling | Worker Commute | Water Truck |
| Grubbing/Land Clearing       | 300  | 0       | 450                   | 0               | 200            | 0           |
| Grading/Excavation           | 150  | 0       | 240                   | 0               | 1,120          | 0           |
| Drainage/Utilities/Sub-Grade | 20   | 0       | 30                    | 0               | 720            | 0           |
| Paving                       | 0  | 100     | 0                     | 150             | 320            | 0           |


PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.  
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

| Total Emission Estimates by Phase for -> SR-49 Improvements (Option A) |                  |                 |                  |                         |                           |                                 |                          |                            |                                  |                  |                  |                  |                  |                 |
|--|------------------|-----------------|------------------|-------------------------|---------------------------|---------------------------------|--------------------------|----------------------------|----------------------------------|------------------|------------------|------------------|------------------|-----------------|
| Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)      | ROG (tons/phase) | CO (tons/phase) | NOx (tons/phase) | Total PM10 (tons/phase) | Exhaust PM10 (tons/phase) | Fugitive Dust PM10 (tons/phase) | Total PM2.5 (tons/phase) | Exhaust PM2.5 (tons/phase) | Fugitive Dust PM2.5 (tons/phase) | SOx (tons/phase) | CO2 (tons/phase) | CH4 (tons/phase) | N2O (tons/phase) | CO2e (MT/phase) |
| Grubbing/Land Clearing   | 0.01             | 0.12            | 0.13             | 0.06                    | 0.01                      | 0.06                            | 0.02                     | 0.01                       | 0.01                             | 0.00             | 30.92            | 0.00             | 0.00             | 28.60           |
| Grading/Excavation   | 0.05             | 0.38            | 0.50             | 0.19                    | 0.02                      | 0.17                            | 0.05                     | 0.02                       | 0.03                             | 0.00             | 112.25           | 0.03             | 0.00             | 103.42          |
| Drainage/Utilities/Sub-Grade   | 0.02             | 0.20            | 0.19             | 0.12                    | 0.01                      | 0.11                            | 0.03                     | 0.01                       | 0.02                             | 0.00             | 39.36            | 0.01             | 0.00             | 36.00           |
| Paving   | 0.01             | 0.07            | 0.06             | 0.00                    | 0.00                      | 0.00                            | 0.00                     | 0.00                       | 0.00                             | 0.00             | 13.94            | 0.00             | 0.00             | 12.88           |
| Maximum (tons/phase)   | 0.05             | 0.38            | 0.50             | 0.19                    | 0.02                      | 0.17                            | 0.05                     | 0.02                       | 0.03                             | 0.00             | 112.25           | 0.03             | 0.00             | 103.42          |
| Total (tons/construction project)                                      | 0.08             | 0.78            | 0.88             | 0.37                    | 0.04                      | 0.33                            | 0.10                     | 0.03                       | 0.07                             | 0.00             | 196.46           | 0.04             | 0.01             | 180.91          |

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.  
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.  
 The CO2e emissions are reported as metric tons per phase.

**Road Construction Emissions Model  
Data Entry Worksheet**

Version 9.0.0



Note: Required data input sections have a yellow background.  
Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background.  
The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types. Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.

To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

[http://www.conservation.ca.gov/cgs/information/geologic\\_mapping/Pages/googlemaps.aspx#regionalseries](http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries)

**Input Type**

|  |                               |  |
|--|-------------------------------|--|
| Project Name   | SR-49 Improvements (Option A) |  |
| Construction Start Year  | 2022                          | Enter a Year between 2014 and 2040 (inclusive)   |
| Project Type   | 3                             | 1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway<br>2) Road Widening : Project to add a new lane to an existing roadway<br>3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane<br>4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction |
| Project Construction Time  | 3.50                          | months   |
| Working Days per Month   | 22.00                         | days (assume 22 if unknown)  |
| Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22) | 2                             | 1) Sand Gravel : Use for quaternary deposits (Delta/West County)<br>2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta)<br>3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta)   |
| Project Length   | 0.50                          | miles  |
| Total Project Area   | 2.20                          | acres  |
| Maximum Area Disturbed/Day   | 0.50                          | acres  |
| Water Trucks Used?   | 2                             | 1. Yes<br>2. No  |

**Material Hauling Quantity Input**

| Material Type | Phase                        | Haul Truck Capacity (yd <sup>3</sup> ) (assume 20 if unknown) | Import Volume (yd <sup>3</sup> /day) | Export Volume (yd <sup>3</sup> /day) |
|---------------|------------------------------|---|--------------------------------------|--------------------------------------|
| Soil          | Grubbing/Land Clearing       | 20.00   | 150.00                               | 150.00                               |
|               | Grading/Excavation           | 20.00   | 75.00                                | 75.00                                |
|               | Drainage/Utilities/Sub-Grade | 20.00   | 10.00                                | 10.00                                |
|               | Paving                       | 20.00   | 0.00                                 | 0.00                                 |
| Asphalt       | Grubbing/Land Clearing       | 20.00   | 0.00                                 | 0.00                                 |
|               | Grading/Excavation           | 20.00   | 0.00                                 | 0.00                                 |
|               | Drainage/Utilities/Sub-Grade | 20.00   | 0.00                                 | 0.00                                 |
|               | Paving                       | 20.00   | 100.00                               | 0.00                                 |

**Mitigation Options**

|   |               |   |
|---|---------------|---|
| On-road Fleet Emissions Mitigation      | No Mitigation | Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer   |
| Off-road Equipment Emissions Mitigation | No Mitigation | Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAGMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure ( <a href="http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation">http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation</a> ).<br>Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard |

The remaining sections of this sheet contain areas that can be modified by the user, although those modifications are optional.

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

| Construction Periods         | User Override of Construction Months | Program Calculated Months | User Override of Phase Starting Date | Program Default Phase Starting Date |
|------------------------------|--------------------------------------|---------------------------|--------------------------------------|-------------------------------------|
| Grubbing/Land Clearing       | 0.50                                 | 0.35                      |                                      | 1/1/2022                            |
| Grading/Excavation           | 1.50                                 | 1.58                      |                                      | 1/17/2022                           |
| Drainage/Utilities/Sub-Grade | 1.00                                 | 1.05                      |                                      | 3/4/2022                            |
| Paving                       | 0.50                                 | 0.53                      |                                      | 4/4/2022                            |
| <b>Totals (Months)</b>       |                                      | 4                         |                                      |                                     |

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

| Soil Hauling Emissions                                | User Override of Miles/Round Trip | Program Estimate of Miles/Round Trip | User Override of Truck Round Trips/Day | Default Values Round Trips/Day | Calculated Daily VMT |            |            |            |            |             |
|---|-----------------------------------|--------------------------------------|--|--------------------------------|----------------------|------------|------------|------------|------------|-------------|
| <b>User Input</b>                                     |                                   |                                      |  |                                |                      |            |            |            |            |             |
| Miles/round trip: Grubbing/Land Clearing              |                                   | 30.00                                |  | 15                             | 450.00               |            |            |            |            |             |
| Miles/round trip: Grading/Excavation                  |                                   | 30.00                                |  | 8                              | 240.00               |            |            |            |            |             |
| Miles/round trip: Drainage/Utilities/Sub-Grade        |                                   | 30.00                                |  | 1                              | 30.00                |            |            |            |            |             |
| Miles/round trip: Paving                              |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| <b>Emission Rates</b>                                 | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Grubbing/Land Clearing (grams/mile)                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grading/Excavation (grams/mile)                       | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Draining/Utilities/Sub-Grade (grams/mile)             | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Paving (grams/mile)                                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grubbing/Land Clearing (grams/trip)                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Grading/Excavation (grams/trip)                       | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Draining/Utilities/Sub-Grade (grams/trip)             | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Paving (grams/trip)                                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| <b>Hauling Emissions</b>                              | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Pounds per day - Grubbing/Land Clearing               | 0.18                              | 0.66                                 | 4.80                                   | 0.14                           | 0.08                 | 0.02       | 1,779.56   | 0.01       | 0.28       | 1,863.12    |
| Tons per const. Period - Grubbing/Land Clearing       | 0.00                              | 0.00                                 | 0.03                                   | 0.00                           | 0.00                 | 0.00       | 9.79       | 0.00       | 0.00       | 10.25       |
| Pounds per day - Grading/Excavation                   | 0.09                              | 0.35                                 | 2.56                                   | 0.08                           | 0.04                 | 0.01       | 949.10     | 0.00       | 0.15       | 993.66      |
| Tons per const. Period - Grading/Excavation           | 0.00                              | 0.01                                 | 0.04                                   | 0.00                           | 0.00                 | 0.00       | 15.66      | 0.00       | 0.00       | 16.40       |
| Pounds per day - Drainage/Utilities/Sub-Grade         | 0.01                              | 0.04                                 | 0.32                                   | 0.01                           | 0.01                 | 0.00       | 118.64     | 0.00       | 0.02       | 124.21      |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 1.31       | 0.00       | 0.00       | 1.37        |
| Pounds per day - Paving                               | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Paving                       | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Total tons per construction project                   | 0.00                              | 0.01                                 | 0.07                                   | 0.00                           | 0.00                 | 0.00       | 26.75      | 0.00       | 0.00       | 28.01       |

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

| Asphalt Hauling Emissions                             | User Override of Miles/Round Trip | Program Estimate of Miles/Round Trip | User Override of Truck Round Trips/Day | Default Values Round Trips/Day | Calculated Daily VMT |            |            |            |            |             |
|---|-----------------------------------|--------------------------------------|--|--------------------------------|----------------------|------------|------------|------------|------------|-------------|
| <b>User Input</b>                                     |                                   |                                      |  |                                |                      |            |            |            |            |             |
| Miles/round trip: Grubbing/Land Clearing              |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| Miles/round trip: Grading/Excavation                  |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| Miles/round trip: Drainage/Utilities/Sub-Grade        |                                   | 30.00                                |  | 0                              | 0.00                 |            |            |            |            |             |
| Miles/round trip: Paving                              |                                   | 30.00                                |  | 5                              | 150.00               |            |            |            |            |             |
| <b>Emission Rates</b>                                 | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Grubbing/Land Clearing (grams/mile)                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grading/Excavation (grams/mile)                       | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Draining/Utilities/Sub-Grade (grams/mile)             | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Paving (grams/mile)                                   | 0.18                              | 0.66                                 | 4.71                                   | 0.14                           | 0.08                 | 0.02       | 1,793.76   | 0.01       | 0.28       | 1,877.99    |
| Grubbing/Land Clearing (grams/trip)                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Grading/Excavation (grams/trip)                       | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Draining/Utilities/Sub-Grade (grams/trip)             | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Paving (grams/trip)                                   | 0.00                              | 0.00                                 | 3.99                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| <b>Emissions</b>                                      | <b>ROG</b>                        | <b>CO</b>                            | <b>NOx</b>                             | <b>PM10</b>                    | <b>PM2.5</b>         | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |
| Pounds per day - Grubbing/Land Clearing               | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Grubbing/Land Clearing       | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Pounds per day - Grading/Excavation                   | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Grading/Excavation           | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Pounds per day - Drainage/Utilities/Sub-Grade         | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00                              | 0.00                                 | 0.00                                   | 0.00                           | 0.00                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        |
| Pounds per day - Paving                               | 0.06                              | 0.22                                 | 1.60                                   | 0.05                           | 0.03                 | 0.01       | 593.19     | 0.00       | 0.09       | 621.04      |
| Tons per const. Period - Paving                       | 0.00                              | 0.00                                 | 0.01                                   | 0.00                           | 0.00                 | 0.00       | 3.26       | 0.00       | 0.00       | 3.42        |
| Total tons per construction project                   | 0.00                              | 0.00                                 | 0.01                                   | 0.00                           | 0.00                 | 0.00       | 3.26       | 0.00       | 0.00       | 3.42        |

Note: Worker commute default values can be overridden in cells D121 through D126.

| Worker Commute Emissions                              |            | User Override of Worker Commute Default Values |            | Default Values |              | Calculated |            |            |            |             |  |
|---|------------|--|------------|----------------|--------------|------------|------------|------------|------------|-------------|--|
| User Input  |            |  |            | Daily Trips    | Daily VMT    |            |            |            |            |             |  |
| Miles/ one-way trip                                   |            | 20   |            |                |              |            |            |            |            |             |  |
| One-way trips/day                                     |            | 2  |            |                |              |            |            |            |            |             |  |
| No. of employees: Grubbing/Land Clearing              |            | 5  |            | 10             | 200.00       |            |            |            |            |             |  |
| No. of employees: Grading/Excavation                  |            | 28   |            | 56             | 1,120.00     |            |            |            |            |             |  |
| No. of employees: Drainage/Utilities/Sub-Grade        |            | 18   |            | 36             | 720.00       |            |            |            |            |             |  |
| No. of employees: Paving                              |            | 8  |            | 16             | 320.00       |            |            |            |            |             |  |
| <b>Emission Rates</b>                                 | <b>ROG</b> | <b>CO</b>                                      | <b>NOx</b> | <b>PM10</b>    | <b>PM2.5</b> | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |  |
| Grubbing/Land Clearing (grams/mile)                   | 0.02       | 1.00   | 0.08       | 0.05           | 0.02         | 0.00       | 328.72     | 0.00       | 0.01       | 330.96      |  |
| Grading/Excavation (grams/mile)                       | 0.02       | 1.00   | 0.08       | 0.05           | 0.02         | 0.00       | 328.72     | 0.00       | 0.01       | 330.96      |  |
| Draining/Utilities/Sub-Grade (grams/mile)             | 0.02       | 1.00   | 0.08       | 0.05           | 0.02         | 0.00       | 328.72     | 0.00       | 0.01       | 330.96      |  |
| Paving (grams/mile)                                   | 0.02       | 1.00   | 0.08       | 0.05           | 0.02         | 0.00       | 328.72     | 0.00       | 0.01       | 330.96      |  |
| Grubbing/Land Clearing (grams/trip)                   | 1.11       | 2.85   | 0.32       | 0.00           | 0.00         | 0.00       | 70.54      | 0.08       | 0.03       | 82.43       |  |
| Grading/Excavation (grams/trip)                       | 1.11       | 2.85   | 0.32       | 0.00           | 0.00         | 0.00       | 70.54      | 0.08       | 0.03       | 82.43       |  |
| Draining/Utilities/Sub-Grade (grams/trip)             | 1.11       | 2.85   | 0.32       | 0.00           | 0.00         | 0.00       | 70.54      | 0.08       | 0.03       | 82.43       |  |
| Paving (grams/trip)                                   | 1.11       | 2.85   | 0.32       | 0.00           | 0.00         | 0.00       | 70.54      | 0.08       | 0.03       | 82.43       |  |
| <b>Emissions</b>                                      | <b>ROG</b> | <b>CO</b>                                      | <b>NOx</b> | <b>PM10</b>    | <b>PM2.5</b> | <b>SOx</b> | <b>CO2</b> | <b>CH4</b> | <b>N2O</b> | <b>CO2e</b> |  |
| Pounds per day - Grubbing/Land Clearing               | 0.03       | 0.50   | 0.04       | 0.02           | 0.01         | 0.00       | 146.50     | 0.00       | 0.00       | 147.74      |  |
| Tons per const. Period - Grubbing/Land Clearing       | 0.00       | 0.00   | 0.00       | 0.00           | 0.00         | 0.00       | 0.81       | 0.00       | 0.00       | 0.81        |  |
| Pounds per day - Grading/Excavation                   | 0.18       | 2.82   | 0.25       | 0.11           | 0.05         | 0.01       | 820.38     | 0.02       | 0.02       | 827.37      |  |
| Tons per const. Period - Grading/Excavation           | 0.00       | 0.05   | 0.00       | 0.00           | 0.00         | 0.00       | 13.54      | 0.00       | 0.00       | 13.65       |  |
| Pounds per day - Drainage/Utilities/Sub-Grade         | 0.12       | 1.81   | 0.16       | 0.07           | 0.03         | 0.01       | 527.39     | 0.01       | 0.01       | 531.88      |  |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00       | 0.02   | 0.00       | 0.00           | 0.00         | 0.00       | 5.80       | 0.00       | 0.00       | 5.85        |  |
| Pounds per day - Paving                               | 0.05       | 0.81   | 0.07       | 0.03           | 0.01         | 0.00       | 234.39     | 0.01       | 0.01       | 236.39      |  |
| Tons per const. Period - Paving                       | 0.00       | 0.00   | 0.00       | 0.00           | 0.00         | 0.00       | 1.29       | 0.00       | 0.00       | 1.30        |  |
| Total tons per construction project                   | 0.00       | 0.07   | 0.01       | 0.00           | 0.00         | 0.00       | 21.43      | 0.00       | 0.00       | 21.62       |  |

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

| Water Truck Emissions                                 |            | User Override of Program Estimate of |                        | User Override of Truck  |                         | Default Values |                  | Calculated       |            | User Override of |           | Default Values |  | Calculated |  |
|---|------------|--------------------------------------|------------------------|-------------------------|-------------------------|----------------|------------------|------------------|------------|------------------|-----------|----------------|--|------------|--|
| User Input  |            | Default # Water Trucks               | Number of Water Trucks | Round Trips/Vehicle/Day | Round Trips/Vehicle/Day | Trips/day      | Miles/Round Trip | Miles/Round Trip | Daily VMT  | Miles/Round Trip | Daily VMT |                |  |            |  |
| Grubbing/Land Clearing - Exhaust                      |            | 0                                    |                        |                         | 5                       | 0              |                  | 8.00             | 0.00       |                  |           |                |  |            |  |
| Grading/Excavation - Exhaust                          |            | 0                                    |                        |                         | 5                       | 0              |                  | 8.00             | 0.00       |                  |           |                |  |            |  |
| Drainage/Utilities/Subgrade                           |            | 0                                    |                        |                         | 5                       | 0              |                  | 8.00             | 0.00       |                  |           |                |  |            |  |
| Paving  |            | 0                                    |                        |                         | 5                       | 0              |                  | 8.00             | 0.00       |                  |           |                |  |            |  |
| <b>Emission Rates</b>                                 | <b>ROG</b> | <b>CO</b>                            | <b>NOx</b>             | <b>PM10</b>             | <b>PM2.5</b>            | <b>SOx</b>     | <b>CO2</b>       | <b>CH4</b>       | <b>N2O</b> | <b>CO2e</b>      |           |                |  |            |  |
| Grubbing/Land Clearing (grams/mile)                   | 0.18       | 0.66                                 | 4.71                   | 0.14                    | 0.08                    | 0.02           | 1,793.76         | 0.01             | 0.28       | 1,877.99         |           |                |  |            |  |
| Grading/Excavation (grams/mile)                       | 0.18       | 0.66                                 | 4.71                   | 0.14                    | 0.08                    | 0.02           | 1,793.76         | 0.01             | 0.28       | 1,877.99         |           |                |  |            |  |
| Draining/Utilities/Sub-Grade (grams/mile)             | 0.18       | 0.66                                 | 4.71                   | 0.14                    | 0.08                    | 0.02           | 1,793.76         | 0.01             | 0.28       | 1,877.99         |           |                |  |            |  |
| Paving (grams/mile)                                   | 0.18       | 0.66                                 | 4.71                   | 0.14                    | 0.08                    | 0.02           | 1,793.76         | 0.01             | 0.28       | 1,877.99         |           |                |  |            |  |
| Grubbing/Land Clearing (grams/trip)                   | 0.00       | 0.00                                 | 3.99                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Grading/Excavation (grams/trip)                       | 0.00       | 0.00                                 | 3.99                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Draining/Utilities/Sub-Grade (grams/trip)             | 0.00       | 0.00                                 | 3.99                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Paving (grams/trip)                                   | 0.00       | 0.00                                 | 3.99                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| <b>Emissions</b>                                      | <b>ROG</b> | <b>CO</b>                            | <b>NOx</b>             | <b>PM10</b>             | <b>PM2.5</b>            | <b>SOx</b>     | <b>CO2</b>       | <b>CH4</b>       | <b>N2O</b> | <b>CO2e</b>      |           |                |  |            |  |
| Pounds per day - Grubbing/Land Clearing               | 0.00       | 0.00                                 | 0.00                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Tons per const. Period - Grubbing/Land Clearing       | 0.00       | 0.00                                 | 0.00                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Pounds per day - Grading/Excavation                   | 0.00       | 0.00                                 | 0.00                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Tons per const. Period - Grading/Excavation           | 0.00       | 0.00                                 | 0.00                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Pounds per day - Drainage/Utilities/Sub-Grade         | 0.00       | 0.00                                 | 0.00                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00       | 0.00                                 | 0.00                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Pounds per day - Paving                               | 0.00       | 0.00                                 | 0.00                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Tons per const. Period - Paving                       | 0.00       | 0.00                                 | 0.00                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |
| Total tons per construction project                   | 0.00       | 0.00                                 | 0.00                   | 0.00                    | 0.00                    | 0.00           | 0.00             | 0.00             | 0.00       | 0.00             |           |                |  |            |  |

Note: Fugitive dust default values can be overridden in cells D183 through D185.

| Fugitive Dust                               |  | User Override of Max  |                     | Default  |             | PM10     |             | PM10     |             | PM2.5    |             | PM2.5    |             |
|---|--|-----------------------|---------------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|
|   |  | Acreage Disturbed/Day | Maximum Acreage/Day | tons/day | tons/period | tons/day | tons/period | tons/day | tons/period | tons/day | tons/period | tons/day | tons/period |
| Fugitive Dust - Grubbing/Land Clearing      |  |                       | 0.50                | 10.00    | 0.06        | 2.08     | 0.01        |          |             |          |             |          |             |
| Fugitive Dust - Grading/Excavation          |  |                       | 0.50                | 10.00    | 0.17        | 2.08     | 0.03        |          |             |          |             |          |             |
| Fugitive Dust - Drainage/Utilities/Subgrade |  |                       | 0.50                | 10.00    | 0.11        | 2.08     | 0.02        |          |             |          |             |          |             |



| Off-Road Equipment Emissions           |                        |   |                               |  |            |            |            |            |            |            |            |            |  |
|--|------------------------|---|-------------------------------|--|------------|------------|------------|------------|------------|------------|------------|------------|--|
| Grubbing/Land Clearing                 |                        | Default Number of Vehicles  | Override of Mitigation Option | Default  | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |  |
| Override of Default Number of Vehicles | Program-estimate       | Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected) | Equipment Tier                | Type   | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |  |
| 2.00                                   |                        |   | Model Default Tier            | Aerial Lifts   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Air Compressors  | 0.55       | 4.84       | 3.76       | 0.22       | 0.22       | 0.01       | 750.53     | 0.05       |  |
|  |                        |   | Model Default Tier            | Bore/Drill Rigs  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Cement and Mortar Mixers   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 2.00                                   |                        |   | Model Default Tier            | Concrete/Industrial Saws   | 0.72       | 7.33       | 5.60       | 0.30       | 0.30       | 0.01       | 1,185.33   | 0.06       |  |
|  |                        |   | Model Default Tier            | Cranes   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  | 1                      |   | Model Default Tier            | Crawler Tractors   | 0.49       | 2.31       | 6.01       | 0.23       | 0.21       | 0.01       | 759.03     | 0.25       |  |
|  |                        |   | Model Default Tier            | Crushing/Proc. Equipment   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  | 2                      |   | Model Default Tier            | Excavators   | 0.40       | 6.51       | 3.55       | 0.17       | 0.16       | 0.01       | 1,000.03   | 0.32       |  |
|  |                        |   | Model Default Tier            | Forklifts  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Generator Sets   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Graders  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Off-Highway Tractors   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Off-Highway Trucks   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Other Construction Equipment   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Other General Industrial Equipm  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Other Material Handling Equipm   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Pavers   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Paving Equipment   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Plate Compactors   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Pressure Washers   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Pumps  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Rollers  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Rough Terrain Forklifts  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Rubber Tired Dozers  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Rubber Tired Loaders   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Scrapers   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| 0.00                                   | 1                      |   | Model Default Tier            | Signal Boards  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Skid Steer Loaders   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Surfacing Equipment  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Sweepers/Scrubbers   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Tractors/Loaders/Backhoes  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Trenchers  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
|  |                        |   | Model Default Tier            | Welders  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |  |
| User-Defined Off-road Equipment        |                        |   |                               | If non-default vehicles are used, please provide information in 'Non-default Off-road Equipment' tab |            |            |            |            |            |            |            |            |  |
| Number of Vehicles                     | Equipment Tier         | Type  | ROG                           | CO   | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |            |            |  |
| 0.00                                   | N/A                    |   | 0                             | 0.00   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00                                   | N/A                    |   | 0                             | 0.00   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00                                   | N/A                    |   | 0                             | 0.00   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00                                   | N/A                    |   | 0                             | 0.00   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00                                   | N/A                    |   | 0                             | 0.00   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00                                   | N/A                    |   | 0                             | 0.00   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
| 0.00                                   | N/A                    |   | 0                             | 0.00   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |            |  |
|  | Grubbing/Land Clearing | pounds per day  | 2.16                          | 20.99  | 18.92      | 0.92       | 0.88       | 0.04       | 3,694.92   | 0.68       |            |            |  |
|  | Grubbing/Land Clearing | tons per phase  | 0.01                          | 0.12   | 0.10       | 0.01       | 0.00       | 0.00       | 20.32      | 0.00       |            |            |  |

| Grading/Excavation                     | Default            |   | Mitigation Option  |                                 | ROG            | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |            |      |
|--|--------------------|---|--------------------|---------------------------------|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------|
|  | Number of Vehicles | Override of   | Default            | Default                         |                |            |            |            |            |            |            |            |            |      |
| Override of Default Number of Vehicles | Program-estimate   | Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected) |                    | Equipment Tier                  | Type           | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |            |      |
|  |                    |   | Model Default Tier | Aerial Lifts                    |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Air Compressors                 |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    |   | Model Default Tier | Bore/Drill Rigs                 |                | 0.22       | 2.04       | 2.27       | 0.07       | 0.07       | 0.01       | 913.56     |            |      |
|  |                    |   | Model Default Tier | Cement and Mortar Mixers        |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Concrete/Industrial Saws        |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  | 1                  |   | Model Default Tier | Cranes                          |                | 0.37       | 1.89       | 4.18       | 0.17       | 0.16       | 0.01       | 558.83     |            |      |
| 1.00                                   |                    | 2   | Model Default Tier | Crawler Tractors                |                | 0.49       | 2.31       | 6.01       | 0.23       | 0.21       | 0.01       | 759.03     |            |      |
|  |                    |   | Model Default Tier | Crushing/Proc. Equipment        |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 2.00                                   |                    | 4   | Model Default Tier | Excavators                      |                | 0.40       | 6.51       | 3.55       | 0.17       | 0.16       | 0.01       | 1,000.03   |            |      |
|  |                    |   | Model Default Tier | Forklifts                       |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Generator Sets                  |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    | 2   | Model Default Tier | Graders                         |                | 0.41       | 1.72       | 5.26       | 0.17       | 0.15       | 0.01       | 641.28     |            |      |
|  |                    |   | Model Default Tier | Off-Highway Tractors            |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Off-Highway Trucks              |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Other Construction Equipment    |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Other General Industrial Equipm |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Other Material Handling Equipm  |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Pavers                          |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Paving Equipment                |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Plate Compactors                |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Pressure Washers                |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Pumps                           |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    | 3   | Model Default Tier | Rollers                         |                | 0.17       | 1.86       | 1.73       | 0.10       | 0.09       | 0.00       | 254.10     |            |      |
|  |                    |   | Model Default Tier | Rough Terrain Forklifts         |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Rubber Tired Dozers             |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    | 3   | Model Default Tier | Rubber Tired Loaders            |                | 0.29       | 1.53       | 3.02       | 0.10       | 0.09       | 0.01       | 605.66     |            |      |
| 0.00                                   |                    | 4   | Model Default Tier | Scrapers                        |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 0.00                                   |                    | 1   | Model Default Tier | Signal Boards                   |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Skid Steer Loaders              |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Surfacing Equipment             |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Sweepers/Scrubbers              |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| 1.00                                   |                    | 2   | Model Default Tier | Tractors/Loaders/Backhoes       |                | 0.16       | 2.24       | 1.68       | 0.09       | 0.08       | 0.00       | 301.24     |            |      |
|  |                    |   | Model Default Tier | Trenchers                       |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
|  |                    |   | Model Default Tier | Welders                         |                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |            |      |
| <b>User-Defined Off-road Equipment</b> |                    |   |                    |                                 |                | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |      |
| Number of Vehicles                     |                    |   |                    |                                 | Equipment Tier | Type       | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| 0.00                                   |                    |   |                    |                                 | N/A            |            | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |      |
| Grading/Excavation                     |                    |   |                    |                                 | pounds per day |            | 2.53       | 20.11      | 27.70      | 1.10       | 1.01       | 0.05       | 5,033.74   | 1.63 |
| Grading/Excavation                     |                    |   |                    |                                 | tons per phase |            | 0.04       | 0.33       | 0.46       | 0.02       | 0.02       | 0.00       | 83.06      | 0.03 |

| Drainage/Utilities/Subgrade  |                              |   |                                 | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |
|--|------------------------------|---|---------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Default  | Mitigation Option            | Default   | Default                         |            |            |            |            |            |            |            |            |
| Number of Vehicles   | Override of                  | Default   |                                 |            |            |            |            |            |            |            |            |
| Override of Default Number of Vehicles   | Program-estimate             | Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected) | Equipment Tier                  | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |
|  |                              | Model Default Tier  | Aerial Lifts                    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 1                            | Model Default Tier  | Air Compressors                 | 0.27       | 2.42       | 1.88       | 0.11       | 0.11       | 0.00       | 375.26     | 0.02       |
|  |                              | Model Default Tier  | Bore/Drill Rigs                 | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Cement and Mortar Mixers        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Concrete/Industrial Saws        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Cranes                          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Crawler Tractors                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Crushing/Proc. Equipment        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Excavators                      | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Forklifts                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 1                            | Model Default Tier  | Generator Sets                  | 0.33       | 3.68       | 2.93       | 0.15       | 0.15       | 0.01       | 623.04     | 0.03       |
| 1.00   | 2                            | Model Default Tier  | Graders                         | 0.41       | 1.72       | 5.26       | 0.17       | 0.15       | 0.01       | 641.28     | 0.21       |
|  |                              | Model Default Tier  | Off-Highway Tractors            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Off-Highway Trucks              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Other Construction Equipment    | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Other General Industrial Equipm | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Other Material Handling Equipm  | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Pavers                          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Paving Equipment                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 1                            | Model Default Tier  | Plate Compactors                | 0.04       | 0.21       | 0.25       | 0.01       | 0.01       | 0.00       | 34.48      | 0.00       |
|  |                              | Model Default Tier  | Pressure Washers                | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 1                            | Model Default Tier  | Pumps                           | 0.35       | 3.73       | 2.97       | 0.16       | 0.16       | 0.01       | 623.04     | 0.03       |
|  |                              | Model Default Tier  | Rollers                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | 1                            | Model Default Tier  | Rough Terrain Forklifts         | 0.11       | 2.29       | 1.48       | 0.05       | 0.05       | 0.00       | 333.75     | 0.11       |
|  |                              | Model Default Tier  | Rubber Tired Dozers             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Rubber Tired Loaders            | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   | 4                            | Model Default Tier  | Scrapers                        | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   | 1                            | Model Default Tier  | Signal Boards                   | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Skid Steer Loaders              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Surfacing Equipment             | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Sweepers/Scrubbers              | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 1.00   | 2                            | Model Default Tier  | Tractors/Loaders/Backhoes       | 0.16       | 2.24       | 1.68       | 0.09       | 0.08       | 0.00       | 301.24     | 0.10       |
|  |                              | Model Default Tier  | Trenchers                       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  |                              | Model Default Tier  | Welders                         | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| <b>User-Defined Off-road Equipment</b>   |                              |   |                                 | ROG        | CO         | NOx        | PM10       | PM2.5      | SOx        | CO2        | CH4        |
| If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab |                              |   |                                 |            |            |            |            |            |            |            |            |
| Number of Vehicles   |                              | Equipment Tier  | Type                            | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day | pounds/day |
| 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
| 0.00   |                              | N/A   |                                 | 0          | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       |
|  | Drainage/Utilities/Sub-Grade |   | pounds per day                  | 1.69       | 16.28      | 16.44      | 0.73       | 0.71       | 0.03       | 2,932.09   | 0.50       |
|  | Drainage/Utilities/Sub-Grade |   | tons per phase                  | 0.02       | 0.18       | 0.18       | 0.01       | 0.01       | 0.00       | 32.25      | 0.01       |

| Paving   | Default                                |                  | Mitigation Option   |                                 | ROG         | CO          | NOx         | PM10        | PM2.5       | SOx         | CO2           | CH4         |
|--|--|------------------|---|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|
|  | Number of Vehicles                     | Override of      | Default   | Default                         |             |             |             |             |             |             |               |             |
|  | Override of Default Number of Vehicles | Program-estimate | Default Equipment Tier (applicable only when "Tier 4 Mitigation" Option Selected) | Equipment Tier                  |             |             |             |             |             |             |               |             |
|  |  |                  | Model Default Tier  | Aerial Lifts                    | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Air Compressors                 | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Bore/Drill Rigs                 | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Cement and Mortar Mixers        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Concrete/Industrial Saws        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Cranes                          | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Crawler Tractors                | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Crushing/Proc. Equipment        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Excavators                      | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Forklifts                       | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Generator Sets                  | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Graders                         | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Off-Highway Tractors            | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Off-Highway Trucks              | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Other Construction Equipment    | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Other General Industrial Equipm | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Other Material Handling Equipm  | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  | 1                | Model Default Tier  | Pavers                          | 0.21        | 2.88        | 2.10        | 0.10        | 0.09        | 0.00        | 455.26        | 0.15        |
|  |  | 1                | Model Default Tier  | Paving Equipment                | 0.18        | 2.55        | 1.74        | 0.08        | 0.08        | 0.00        | 394.47        | 0.13        |
|  |  |                  | Model Default Tier  | Plate Compactors                | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Pressure Washers                | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Pumps                           | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  | 1                | Model Default Tier  | Rollers                         | 0.17        | 1.86        | 1.73        | 0.10        | 0.09        | 0.00        | 254.10        | 0.08        |
|  |  |                  | Model Default Tier  | Rough Terrain Forklifts         | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Rubber Tired Dozers             | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Rubber Tired Loaders            | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Scrapers                        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  | 0.00                                   | 1                | Model Default Tier  | Signal Boards                   | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Skid Steer Loaders              | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Surfacing Equipment             | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Sweepers/Scrubbers              | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  | 2                | Model Default Tier  | Tractors/Loaders/Backhoes       | 0.33        | 4.48        | 3.35        | 0.18        | 0.17        | 0.01        | 602.48        | 0.19        |
|  |  |                  | Model Default Tier  | Trenchers                       | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  |  |                  | Model Default Tier  | Welders                         | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
| <b>User-Defined Off-road Equipment</b>   |  |                  |   |                                 |             |             |             |             |             |             |               |             |
| If non-default vehicles are used, please provide information in "Non-default Off-road Equipment" tab |  |                  |   |                                 | ROG         | CO          | NOx         | PM10        | PM2.5       | SOx         | CO2           | CH4         |
| Number of Vehicles   |  |                  | Equipment Tier  | Type                            | pounds/day  | pounds/day  | pounds/day  | pounds/day  | pounds/day  | pounds/day  | pounds/day    | pounds/day  |
| 0.00   |  |                  | N/A   |                                 | 0           | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
| 0.00   |  |                  | N/A   |                                 | 0           | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
| 0.00   |  |                  | N/A   |                                 | 0           | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
| 0.00   |  |                  | N/A   |                                 | 0           | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
| 0.00   |  |                  | N/A   |                                 | 0           | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
| 0.00   |  |                  | N/A   |                                 | 0           | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00          | 0.00        |
|  | Paving                                 |                  |   | pounds per day                  | 0.88        | 11.77       | 8.91        | 0.46        | 0.43        | 0.02        | 1,706.31      | 0.55        |
|  | Paving                                 |                  |   | tons per phase                  | 0.00        | 0.06        | 0.05        | 0.00        | 0.00        | 0.00        | 9.38          | 0.00        |
| <b>Total Emissions all Phases (tons per construction period) =&gt;</b>                               |  |                  |   |                                 | <b>0.08</b> | <b>0.69</b> | <b>0.79</b> | <b>0.03</b> | <b>0.03</b> | <b>0.00</b> | <b>145.02</b> | <b>0.04</b> |



| N2O        | CO2e       |
|------------|------------|
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 923.43     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 564.85     |
| 0.01       | 767.22     |
| 0.00       | 0.00       |
| 0.01       | 1,010.81   |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 648.19     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 256.84     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 612.20     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 304.48     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| N2O        | CO2e       |
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.05       | 5,088.03   |
| 0.00       | 83.95      |

| N2O        | CO2e       |
|------------|------------|
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 376.72     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 625.17     |
| 0.01       | 648.19     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 34.65      |
| 0.00       | 0.00       |
| 0.00       | 625.23     |
| 0.00       | 0.00       |
| 0.00       | 337.35     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 304.48     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.02       | 2,951.79   |
| 0.00       | 32.47      |

| N2O        | CO2e       |
|------------|------------|
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 460.17     |
| 0.00       | 396.73     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 256.84     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.01       | 608.96     |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| <hr/>      |            |
| N2O        | CO2e       |
| pounds/day | pounds/day |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.00       | 0.00       |
| 0.02       | 1,724.69   |
| 0.00       | 9.49       |
| <hr/>      |            |
| 0.00       | 146.37     |



Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

| Equipment                          | User Override of<br>Horsepower | Default Values<br>Horsepower | User Override of<br>Hours/day | Default Values<br>Hours/day |
|------------------------------------|--------------------------------|------------------------------|-------------------------------|-----------------------------|
| Aerial Lifts                       |                                | 63                           |                               | 8                           |
| Air Compressors                    |                                | 78                           |                               | 8                           |
| Bore/Drill Rigs                    |                                | 221                          |                               | 8                           |
| Cement and Mortar Mixers           |                                | 9                            |                               | 8                           |
| Concrete/Industrial Saws           |                                | 81                           |                               | 8                           |
| Cranes                             |                                | 231                          |                               | 8                           |
| Crawler Tractors                   |                                | 212                          |                               | 8                           |
| Crushing/Proc. Equipment           |                                | 85                           |                               | 8                           |
| Excavators                         |                                | 158                          |                               | 8                           |
| Forklifts                          |                                | 89                           |                               | 8                           |
| Generator Sets                     |                                | 84                           |                               | 8                           |
| Graders                            |                                | 187                          |                               | 8                           |
| Off-Highway Tractors               |                                | 124                          |                               | 8                           |
| Off-Highway Trucks                 |                                | 402                          |                               | 8                           |
| Other Construction Equipment       |                                | 172                          |                               | 8                           |
| Other General Industrial Equipment |                                | 88                           |                               | 8                           |
| Other Material Handling Equipment  |                                | 168                          |                               | 8                           |
| Pavers                             |                                | 130                          |                               | 8                           |
| Paving Equipment                   |                                | 132                          |                               | 8                           |
| Plate Compactors                   |                                | 8                            |                               | 8                           |
| Pressure Washers                   |                                | 13                           |                               | 8                           |
| Pumps                              |                                | 84                           |                               | 8                           |
| Rollers                            |                                | 80                           |                               | 8                           |
| Rough Terrain Forklifts            |                                | 100                          |                               | 8                           |
| Rubber Tired Dozers                |                                | 247                          |                               | 8                           |
| Rubber Tired Loaders               |                                | 203                          |                               | 8                           |
| Scrapers                           |                                | 367                          |                               | 8                           |
| Signal Boards                      |                                | 6                            |                               | 8                           |
| Skid Steer Loaders                 |                                | 65                           |                               | 8                           |
| Surfacing Equipment                |                                | 263                          |                               | 8                           |
| Sweepers/Scrubbers                 |                                | 64                           |                               | 8                           |
| Tractors/Loaders/Backhoes          |                                | 97                           |                               | 8                           |
| Trenchers                          |                                | 78                           |                               | 8                           |
| Welders                            |                                | 46                           |                               | 8                           |

END OF DATA ENTRY SHEET







| Year  | ROG    | Weighted - Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted - Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx    |
|-------|--------|---------------------|--------------------|---------------------|-------------------|--------|---------------------|--------------------|---------------------|-------------------|--------|
| 2014  | 0.0704 | -                   | -                  | -                   | -                 | 2.5553 | -                   | -                  | -                   | -                 | 0.2855 |
| 2015  | 0.0597 | -                   | -                  | -                   | -                 | 2.2699 | -                   | -                  | -                   | -                 | 0.2490 |
| 2016  | 0.0491 | -                   | -                  | -                   | -                 | 1.9702 | -                   | -                  | -                   | -                 | 0.2095 |
| 2017  | 0.0405 | -                   | -                  | -                   | -                 | 1.7329 | -                   | -                  | -                   | -                 | 0.1791 |
| 2018  | 0.0335 | -                   | -                  | -                   | -                 | 1.5296 | -                   | -                  | -                   | -                 | 0.1530 |
| 2019  | 0.0279 | -                   | -                  | -                   | -                 | 1.3662 | -                   | -                  | -                   | -                 | 0.1307 |
| 2020  | 0.0236 | -                   | -                  | -                   | -                 | 1.2220 | -                   | -                  | -                   | -                 | 0.1123 |
| 2021  | 0.0204 | -                   | -                  | -                   | -                 | 1.1018 | -                   | -                  | -                   | -                 | 0.0968 |
| 2022  | 0.0178 | 0.0178              | 0.0178             | 0.0178              | 0.0178            | 1.0001 | 1.0001              | 1.0001             | 1.0001              | 1.0001            | 0.0838 |
| 2023  | 0.0154 | -                   | -                  | -                   | -                 | 0.9126 | -                   | -                  | -                   | -                 | 0.0726 |
| 2024  | 0.0134 | -                   | -                  | -                   | -                 | 0.8386 | -                   | -                  | -                   | -                 | 0.0632 |
| 2025  | 0.0117 | -                   | -                  | -                   | -                 | 0.7754 | -                   | -                  | -                   | -                 | 0.0554 |
| 2026  | 0.0103 | -                   | -                  | -                   | -                 | 0.7225 | -                   | -                  | -                   | -                 | 0.0491 |
| 2027  | 0.0091 | -                   | -                  | -                   | -                 | 0.6774 | -                   | -                  | -                   | -                 | 0.0437 |
| 2028  | 0.0081 | -                   | -                  | -                   | -                 | 0.6398 | -                   | -                  | -                   | -                 | 0.0393 |
| 2029  | 0.0072 | -                   | -                  | -                   | -                 | 0.6075 | -                   | -                  | -                   | -                 | 0.0355 |
| 2030  | 0.0065 | -                   | -                  | -                   | -                 | 0.5801 | -                   | -                  | -                   | -                 | 0.0324 |
| 2031  | 0.0059 | -                   | -                  | -                   | -                 | 0.5565 | -                   | -                  | -                   | -                 | 0.0297 |
| 2032  | 0.0053 | -                   | -                  | -                   | -                 | 0.5366 | -                   | -                  | -                   | -                 | 0.0275 |
| 2033  | 0.0048 | -                   | -                  | -                   | -                 | 0.5196 | -                   | -                  | -                   | -                 | 0.0257 |
| 2034  | 0.0044 | -                   | -                  | -                   | -                 | 0.5049 | -                   | -                  | -                   | -                 | 0.0242 |
| 2035  | 0.0041 | -                   | -                  | -                   | -                 | 0.4922 | -                   | -                  | -                   | -                 | 0.0229 |
| 2036  | 0.0037 | -                   | -                  | -                   | -                 | 0.4811 | -                   | -                  | -                   | -                 | 0.0219 |
| 2037  | 0.0035 | -                   | -                  | -                   | -                 | 0.4719 | -                   | -                  | -                   | -                 | 0.0211 |
| 2038  | 0.0033 | -                   | -                  | -                   | -                 | 0.4637 | -                   | -                  | -                   | -                 | 0.0203 |
| 2039  | 0.0030 | -                   | -                  | -                   | -                 | 0.4566 | -                   | -                  | -                   | -                 | 0.0197 |
| 2040  | 0.0029 | -                   | -                  | -                   | -                 | 0.4506 | -                   | -                  | -                   | -                 | 0.0191 |
| 2041  | 0.0027 |                     |                    |                     |                   | 0.4452 |                     |                    |                     |                   | 0.0187 |
| 2042  | 0.0026 |                     |                    |                     |                   | 0.4404 |                     |                    |                     |                   | 0.0183 |
| 2043  | 0.0025 |                     |                    |                     |                   | 0.4367 |                     |                    |                     |                   | 0.0180 |
| 2044  | 0.0024 |                     |                    |                     |                   | 0.4339 |                     |                    |                     |                   | 0.0178 |
| 2045  | 0.0023 |                     |                    |                     |                   | 0.4317 |                     |                    |                     |                   | 0.0177 |
| 2046  | 0.0023 |                     |                    |                     |                   | 0.4300 |                     |                    |                     |                   | 0.0176 |
| 2047  | 0.0023 |                     |                    |                     |                   | 0.4286 |                     |                    |                     |                   | 0.0175 |
| 2048  | 0.0023 |                     |                    |                     |                   | 0.4274 |                     |                    |                     |                   | 0.0174 |
| 2049  | 0.0022 |                     |                    |                     |                   | 0.4268 |                     |                    |                     |                   | 0.0174 |
| 2050  | 0.0022 |                     |                    |                     |                   | 0.4264 |                     |                    |                     |                   | 0.0174 |
| Total |        | 0.0178              | 0.0178             | 0.0178              | 0.0178            |        | 1.0001              | 1.0001             | 1.0001              | 1.0001            |        |

**Heavy-Heavy Duty Diesel Truck**

Water Truck Commute Emissions (EMFAC2017 - web 1.0.2, T7 Single Unit Construction Truck)

| Year | ROG    | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx     |
|------|--------|-------------------|--------------------|---------------------|-------------------|--------|-------------------|--------------------|---------------------|-------------------|---------|
| 2014 | 1.8521 | -                 | -                  | -                   | -                 | 4.0026 | -                 | -                  | -                   | -                 | 15.4709 |
| 2015 | 1.5946 | -                 | -                  | -                   | -                 | 3.4621 | -                 | -                  | -                   | -                 | 13.7491 |
| 2016 | 1.2921 | -                 | -                  | -                   | -                 | 2.8379 | -                 | -                  | -                   | -                 | 11.7429 |
| 2017 | 1.0636 | -                 | -                  | -                   | -                 | 2.3588 | -                 | -                  | -                   | -                 | 10.5229 |
| 2018 | 0.9069 | -                 | -                  | -                   | -                 | 2.0416 | -                 | -                  | -                   | -                 | 9.6970  |
| 2019 | 0.7863 | -                 | -                  | -                   | -                 | 1.7985 | -                 | -                  | -                   | -                 | 9.0623  |
| 2020 | 0.5270 | -                 | -                  | -                   | -                 | 1.2976 | -                 | -                  | -                   | -                 | 7.5546  |
| 2021 | 0.4260 | -                 | -                  | -                   | -                 | 1.1373 | -                 | -                  | -                   | -                 | 6.4922  |
| 2022 | 0.1785 | 0.1785            | 0.1785             | 0.1785              | 0.1785            | 0.6644 | 0.6644            | 0.6644             | 0.6644              | 0.6644            | 4.7102  |
| 2023 | 0.0441 | -                 | -                  | -                   | -                 | 0.4262 | -                 | -                  | -                   | -                 | 3.5373  |
| 2024 | 0.0423 | -                 | -                  | -                   | -                 | 0.4266 | -                 | -                  | -                   | -                 | 3.4943  |
| 2025 | 0.0406 | -                 | -                  | -                   | -                 | 0.4273 | -                 | -                  | -                   | -                 | 3.4600  |
| 2026 | 0.0391 | -                 | -                  | -                   | -                 | 0.4279 | -                 | -                  | -                   | -                 | 3.4290  |
| 2027 | 0.0378 | -                 | -                  | -                   | -                 | 0.4281 | -                 | -                  | -                   | -                 | 3.4003  |
| 2028 | 0.0367 | -                 | -                  | -                   | -                 | 0.4288 | -                 | -                  | -                   | -                 | 3.3809  |
| 2029 | 0.0359 | -                 | -                  | -                   | -                 | 0.4297 | -                 | -                  | -                   | -                 | 3.3699  |
| 2030 | 0.0351 | -                 | -                  | -                   | -                 | 0.4306 | -                 | -                  | -                   | -                 | 3.3633  |
| 2031 | 0.0345 | -                 | -                  | -                   | -                 | 0.4315 | -                 | -                  | -                   | -                 | 3.3580  |
| 2032 | 0.0339 | -                 | -                  | -                   | -                 | 0.4322 | -                 | -                  | -                   | -                 | 3.3517  |
| 2033 | 0.0334 | -                 | -                  | -                   | -                 | 0.4325 | -                 | -                  | -                   | -                 | 3.3446  |
| 2034 | 0.0330 | -                 | -                  | -                   | -                 | 0.4325 | -                 | -                  | -                   | -                 | 3.3345  |
| 2035 | 0.0326 | -                 | -                  | -                   | -                 | 0.4321 | -                 | -                  | -                   | -                 | 3.3228  |
| 2036 | 0.0323 | -                 | -                  | -                   | -                 | 0.4320 | -                 | -                  | -                   | -                 | 3.3141  |
| 2037 | 0.0321 | -                 | -                  | -                   | -                 | 0.4317 | -                 | -                  | -                   | -                 | 3.3050  |
| 2038 | 0.0319 | -                 | -                  | -                   | -                 | 0.4314 | -                 | -                  | -                   | -                 | 3.2967  |
| 2039 | 0.0317 | -                 | -                  | -                   | -                 | 0.4312 | -                 | -                  | -                   | -                 | 3.2899  |
| 2040 | 0.0315 | -                 | -                  | -                   | -                 | 0.4308 | -                 | -                  | -                   | -                 | 3.2821  |
| 2041 | 0.0314 | -                 | -                  | -                   | -                 | 0.4305 | -                 | -                  | -                   | -                 | 3.2754  |
| 2042 | 0.0313 | -                 | -                  | -                   | -                 | 0.4302 | -                 | -                  | -                   | -                 | 3.2703  |
| 2043 | 0.0312 | -                 | -                  | -                   | -                 | 0.4300 | -                 | -                  | -                   | -                 | 3.2653  |
| 2044 | 0.0311 | -                 | -                  | -                   | -                 | 0.4298 | -                 | -                  | -                   | -                 | 3.2610  |
| 2045 | 0.0310 | -                 | -                  | -                   | -                 | 0.4296 | -                 | -                  | -                   | -                 | 3.2578  |
| 2046 | 0.0309 | -                 | -                  | -                   | -                 | 0.4295 | -                 | -                  | -                   | -                 | 3.2551  |
| 2047 | 0.0309 | -                 | -                  | -                   | -                 | 0.4294 | -                 | -                  | -                   | -                 | 3.2533  |
| 2048 | 0.0309 | -                 | -                  | -                   | -                 | 0.4293 | -                 | -                  | -                   | -                 | 3.2519  |
| 2049 | 0.0309 | -                 | -                  | -                   | -                 | 0.4292 | -                 | -                  | -                   | -                 | 3.2510  |

|       |        |        |        |        |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2050  | 0.0308 |        |        |        |        | 0.4292 |        |        |        |        | 3.2504 |
| Total |        | 0.1785 | 0.1785 | 0.1785 | 0.1785 |        | 0.6644 | 0.6644 | 0.6644 | 0.6644 |        |

| Year  | ROG    | Weighted -<br>Grubbing | Weighted -<br>Grading | Weighted -<br>Drainage | Weighted -<br>Paving | CO     | Weighted -<br>Grubbing | Weighted -<br>Grading | Weighted -<br>Drainage | Weighted -<br>Paving | NOx    |
|-------|--------|------------------------|-----------------------|------------------------|----------------------|--------|------------------------|-----------------------|------------------------|----------------------|--------|
| 2014  | 0.0055 | -                      | -                     | -                      | -                    | 0.5214 | -                      | -                     | -                      | -                    | 0.0236 |
| 2015  | 0.0055 | -                      | -                     | -                      | -                    | 0.5173 | -                      | -                     | -                      | -                    | 0.0237 |
| 2016  | 0.0055 | -                      | -                     | -                      | -                    | 0.5163 | -                      | -                     | -                      | -                    | 0.0238 |
| 2017  | 0.0056 | -                      | -                     | -                      | -                    | 0.5153 | -                      | -                     | -                      | -                    | 0.0239 |
| 2018  | 0.0056 | -                      | -                     | -                      | -                    | 0.5147 | -                      | -                     | -                      | -                    | 0.0239 |
| 2019  | 0.0055 | -                      | -                     | -                      | -                    | 0.5170 | -                      | -                     | -                      | -                    | 0.0236 |
| 2020  | 0.0054 | -                      | -                     | -                      | -                    | 0.5158 | -                      | -                     | -                      | -                    | 0.0232 |
| 2021  | 0.0052 | -                      | -                     | -                      | -                    | 0.5136 | -                      | -                     | -                      | -                    | 0.0226 |
| 2022  | 0.0051 | 0.0051                 | 0.0051                | 0.0051                 | 0.0051               | 0.5106 | 0.5106                 | 0.5106                | 0.5106                 | 0.5106               | 0.0220 |
| 2023  | 0.0049 | -                      | -                     | -                      | -                    | 0.5066 | -                      | -                     | -                      | -                    | 0.0213 |
| 2024  | 0.0047 | -                      | -                     | -                      | -                    | 0.5012 | -                      | -                     | -                      | -                    | 0.0205 |
| 2025  | 0.0044 | -                      | -                     | -                      | -                    | 0.4942 | -                      | -                     | -                      | -                    | 0.0199 |
| 2026  | 0.0042 | -                      | -                     | -                      | -                    | 0.4875 | -                      | -                     | -                      | -                    | 0.0193 |
| 2027  | 0.0040 | -                      | -                     | -                      | -                    | 0.4813 | -                      | -                     | -                      | -                    | 0.0188 |
| 2028  | 0.0038 | -                      | -                     | -                      | -                    | 0.4755 | -                      | -                     | -                      | -                    | 0.0184 |
| 2029  | 0.0036 | -                      | -                     | -                      | -                    | 0.4701 | -                      | -                     | -                      | -                    | 0.0181 |
| 2030  | 0.0035 | -                      | -                     | -                      | -                    | 0.4650 | -                      | -                     | -                      | -                    | 0.0178 |
| 2031  | 0.0033 | -                      | -                     | -                      | -                    | 0.4603 | -                      | -                     | -                      | -                    | 0.0175 |
| 2032  | 0.0032 | -                      | -                     | -                      | -                    | 0.4560 | -                      | -                     | -                      | -                    | 0.0174 |
| 2033  | 0.0030 | -                      | -                     | -                      | -                    | 0.4521 | -                      | -                     | -                      | -                    | 0.0172 |
| 2034  | 0.0029 | -                      | -                     | -                      | -                    | 0.4485 | -                      | -                     | -                      | -                    | 0.0171 |
| 2035  | 0.0028 | -                      | -                     | -                      | -                    | 0.4452 | -                      | -                     | -                      | -                    | 0.0171 |
| 2036  | 0.0027 | -                      | -                     | -                      | -                    | 0.4423 | -                      | -                     | -                      | -                    | 0.0170 |
| 2037  | 0.0026 | -                      | -                     | -                      | -                    | 0.4397 | -                      | -                     | -                      | -                    | 0.0170 |
| 2038  | 0.0026 | -                      | -                     | -                      | -                    | 0.4375 | -                      | -                     | -                      | -                    | 0.0171 |
| 2039  | 0.0025 | -                      | -                     | -                      | -                    | 0.4355 | -                      | -                     | -                      | -                    | 0.0171 |
| 2040  | 0.0024 | -                      | -                     | -                      | -                    | 0.4338 | -                      | -                     | -                      | -                    | 0.0171 |
| 2041  | 0.0024 |                        |                       |                        |                      | 0.4323 |                        |                       |                        |                      | 0.0171 |
| 2042  | 0.0024 |                        |                       |                        |                      | 0.4310 |                        |                       |                        |                      | 0.0172 |
| 2043  | 0.0023 |                        |                       |                        |                      | 0.4300 |                        |                       |                        |                      | 0.0172 |
| 2044  | 0.0023 |                        |                       |                        |                      | 0.4291 |                        |                       |                        |                      | 0.0173 |
| 2045  | 0.0023 |                        |                       |                        |                      | 0.4283 |                        |                       |                        |                      | 0.0173 |
| 2046  | 0.0023 |                        |                       |                        |                      | 0.4277 |                        |                       |                        |                      | 0.0173 |
| 2047  | 0.0023 |                        |                       |                        |                      | 0.4272 |                        |                       |                        |                      | 0.0174 |
| 2048  | 0.0022 |                        |                       |                        |                      | 0.4268 |                        |                       |                        |                      | 0.0174 |
| 2049  | 0.0022 |                        |                       |                        |                      | 0.4265 |                        |                       |                        |                      | 0.0174 |
| 2050  | 0.0022 |                        |                       |                        |                      | 0.4262 |                        |                       |                        |                      | 0.0174 |
| Total |        | 0.0051                 | 0.0051                | 0.0051                 | 0.0051               |        | 0.5106                 | 0.5106                | 0.5106                 | 0.5106               |        |



**Heavy-Heavy Duty Diesel Truck**

Water Truck Commute Emissions (EMFAC2017 - web 1.0.2, T7 Single Unit Construction Truck)

| Year | ROG    | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | CO     | Weighted-Grubbing | Weighted - Grading | Weighted - Drainage | Weighted - Paving | NOx    |
|------|--------|-------------------|--------------------|---------------------|-------------------|--------|-------------------|--------------------|---------------------|-------------------|--------|
| 2014 | 0.0583 | -                 | -                  | -                   | -                 | 0.4129 | -                 | -                  | -                   | -                 | 2.9101 |
| 2015 | 0.0529 | -                 | -                  | -                   | -                 | 0.4082 | -                 | -                  | -                   | -                 | 2.8491 |
| 2016 | 0.0508 | -                 | -                  | -                   | -                 | 0.4094 | -                 | -                  | -                   | -                 | 2.8549 |
| 2017 | 0.0476 | -                 | -                  | -                   | -                 | 0.4102 | -                 | -                  | -                   | -                 | 2.8769 |
| 2018 | 0.0457 | -                 | -                  | -                   | -                 | 0.4130 | -                 | -                  | -                   | -                 | 2.9175 |
| 2019 | 0.0444 | -                 | -                  | -                   | -                 | 0.4157 | -                 | -                  | -                   | -                 | 2.9546 |
| 2020 | 0.0425 | -                 | -                  | -                   | -                 | 0.4199 | -                 | -                  | -                   | -                 | 3.0272 |
| 2021 | 0.0418 | -                 | -                  | -                   | -                 | 0.4228 | -                 | -                  | -                   | -                 | 3.0635 |
| 2022 | 0.0402 | 0.0402            | 0.0402             | 0.0402              | 0.0402            | 0.4233 | 0.4233            | 0.4233             | 0.4233              | 0.4233            | 3.0792 |
| 2023 | 0.0291 | -                 | -                  | -                   | -                 | 0.4046 | -                 | -                  | -                   | -                 | 2.9826 |
| 2024 | 0.0294 | -                 | -                  | -                   | -                 | 0.4082 | -                 | -                  | -                   | -                 | 3.0228 |
| 2025 | 0.0296 | -                 | -                  | -                   | -                 | 0.4118 | -                 | -                  | -                   | -                 | 3.0634 |
| 2026 | 0.0298 | -                 | -                  | -                   | -                 | 0.4149 | -                 | -                  | -                   | -                 | 3.0980 |
| 2027 | 0.0300 | -                 | -                  | -                   | -                 | 0.4172 | -                 | -                  | -                   | -                 | 3.1232 |
| 2028 | 0.0302 | -                 | -                  | -                   | -                 | 0.4197 | -                 | -                  | -                   | -                 | 3.1503 |
| 2029 | 0.0303 | -                 | -                  | -                   | -                 | 0.4221 | -                 | -                  | -                   | -                 | 3.1777 |
| 2030 | 0.0305 | -                 | -                  | -                   | -                 | 0.4243 | -                 | -                  | -                   | -                 | 3.2028 |
| 2031 | 0.0306 | -                 | -                  | -                   | -                 | 0.4263 | -                 | -                  | -                   | -                 | 3.2255 |
| 2032 | 0.0307 | -                 | -                  | -                   | -                 | 0.4279 | -                 | -                  | -                   | -                 | 3.2430 |
| 2033 | 0.0308 | -                 | -                  | -                   | -                 | 0.4291 | -                 | -                  | -                   | -                 | 3.2559 |
| 2034 | 0.0309 | -                 | -                  | -                   | -                 | 0.4297 | -                 | -                  | -                   | -                 | 3.2619 |
| 2035 | 0.0309 | -                 | -                  | -                   | -                 | 0.4299 | -                 | -                  | -                   | -                 | 3.2635 |
| 2036 | 0.0309 | -                 | -                  | -                   | -                 | 0.4301 | -                 | -                  | -                   | -                 | 3.2652 |
| 2037 | 0.0309 | -                 | -                  | -                   | -                 | 0.4302 | -                 | -                  | -                   | -                 | 3.2648 |
| 2038 | 0.0309 | -                 | -                  | -                   | -                 | 0.4301 | -                 | -                  | -                   | -                 | 3.2639 |
| 2039 | 0.0309 | -                 | -                  | -                   | -                 | 0.4301 | -                 | -                  | -                   | -                 | 3.2635 |
| 2040 | 0.0309 | -                 | -                  | -                   | -                 | 0.4300 | -                 | -                  | -                   | -                 | 3.2612 |
| 2041 | 0.0309 |                   |                    |                     |                   | 0.4298 |                   |                    |                     |                   | 3.2588 |
| 2042 | 0.0309 |                   |                    |                     |                   | 0.4297 |                   |                    |                     |                   | 3.2571 |
| 2043 | 0.0308 |                   |                    |                     |                   | 0.4295 |                   |                    |                     |                   | 3.2551 |
| 2044 | 0.0308 |                   |                    |                     |                   | 0.4294 |                   |                    |                     |                   | 3.2535 |
| 2045 | 0.0308 |                   |                    |                     |                   | 0.4294 |                   |                    |                     |                   | 3.2526 |
| 2046 | 0.0308 |                   |                    |                     |                   | 0.4293 |                   |                    |                     |                   | 3.2514 |
| 2047 | 0.0308 |                   |                    |                     |                   | 0.4292 |                   |                    |                     |                   | 3.2507 |
| 2048 | 0.0308 |                   |                    |                     |                   | 0.4292 |                   |                    |                     |                   | 3.2500 |
| 2049 | 0.0308 |                   |                    |                     |                   | 0.4291 |                   |                    |                     |                   | 3.2496 |

|       |        |        |        |        |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2050  | 0.0308 |        |        |        |        | 0.4291 |        |        |        |        | 3.2496 |
| Total |        | 0.0402 | 0.0402 | 0.0402 | 0.0402 |        | 0.4233 | 0.4233 | 0.4233 | 0.4233 |        |

|    | B                    | C      | D          | E          | F          | G          | H      | I          | J          | K          | L          | M      |
|----|----------------------|--------|------------|------------|------------|------------|--------|------------|------------|------------|------------|--------|
| 5  | Emissions (g/bhp-hr) |        | ROG        | ROG        | ROG        | ROG        |        | CO         | CO         | CO         | CO         |        |
| 6  | Aerial Lifts         |        | Weighted - | Weighted - | Weighted - | Weighted - |        | Weighted - | Weighted - | Weighted - | Weighted - |        |
| 7  |                      | ROG    | Grubbing   | Grading    | Drainage   | Paving     | CO     | Grubbing   | Grading    | Drainage   | Paving     | NOx    |
| 8  | 2014                 | 0.2023 | -          | -          | -          | -          | 3.2195 | -          | -          | -          | -          | 3.3728 |
| 9  | 2015                 | 0.1906 | -          | -          | -          | -          | 3.2178 | -          | -          | -          | -          | 3.1134 |
| 10 | 2016                 | 0.1655 | -          | -          | -          | -          | 3.2010 | -          | -          | -          | -          | 2.7222 |
| 11 | 2017                 | 0.1427 | -          | -          | -          | -          | 3.1843 | -          | -          | -          | -          | 2.3637 |
| 12 | 2018                 | 0.1219 | -          | -          | -          | -          | 3.1669 | -          | -          | -          | -          | 2.0636 |
| 13 | 2019                 | 0.1182 | -          | -          | -          | -          | 3.1725 | -          | -          | -          | -          | 1.9766 |
| 14 | 2020                 | 0.1149 | -          | -          | -          | -          | 3.1768 | -          | -          | -          | -          | 1.8686 |
| 15 | 2021                 | 0.1088 | -          | -          | -          | -          | 3.1762 | -          | -          | -          | -          | 1.7437 |
| 16 | 2022                 | 0.1047 | 0.1047     | 0.1047     | 0.1047     | 0.1047     | 3.1760 | 3.1760     | 3.1760     | 3.1760     | 3.1760     | 1.6266 |
| 17 | 2023                 | 0.1005 | -          | -          | -          | -          | 3.1703 | -          | -          | -          | -          | 1.5481 |
| 18 | 2024                 | 0.1005 | -          | -          | -          | -          | 3.1726 | -          | -          | -          | -          | 1.5279 |
| 19 | 2025                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 20 | 2026                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 21 | 2027                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 22 | 2028                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 23 | 2029                 | 0.0988 | -          | -          | -          | -          | 3.1674 | -          | -          | -          | -          | 1.5108 |
| 24 | 2030                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 25 | 2031                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 26 | 2032                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 27 | 2033                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 28 | 2034                 | 0.1880 | -          | -          | -          | -          | 3.3520 | -          | -          | -          | -          | 1.6570 |
| 29 | 2035                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 30 | 2036                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 31 | 2037                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 32 | 2038                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 33 | 2039                 | 0.1660 | -          | -          | -          | -          | 3.3450 | -          | -          | -          | -          | 1.4660 |
| 34 | 2040                 | 0.1610 | -          | -          | -          | -          | 3.3440 | -          | -          | -          | -          | 1.4070 |
| 35 | Aerial Lifts Total   |        | 0.1047     | 0.1047     | 0.1047     | 0.1047     |        | 3.1760     | 3.1760     | 3.1760     | 3.1760     |        |

|    | N          | O         | P          | Q          | R      | S          | T          | U          | V          |
|----|------------|-----------|------------|------------|--------|------------|------------|------------|------------|
| 5  | NOx        | NOx       | NOx        | NOx        |        | PM10       | PM10       | PM10       | PM10       |
| 6  | Weighted   | Weighted  | Weighted   | Weighted - |        | Weighted - | Weighted - | Weighted - | Weighted - |
| 7  | - Grubbing | - Grading | - Drainage | Paving     | PM10   | Grubbing   | Grading    | Drainage   | Paving     |
| 8  | -          | -         | -          | -          | 0.1608 | -          | -          | -          | -          |
| 9  | -          | -         | -          | -          | 0.1431 | -          | -          | -          | -          |
| 10 | -          | -         | -          | -          | 0.1119 | -          | -          | -          | -          |
| 11 | -          | -         | -          | -          | 0.0834 | -          | -          | -          | -          |
| 12 | -          | -         | -          | -          | 0.0571 | -          | -          | -          | -          |
| 13 | -          | -         | -          | -          | 0.0485 | -          | -          | -          | -          |
| 14 | -          | -         | -          | -          | 0.0416 | -          | -          | -          | -          |
| 15 | -          | -         | -          | -          | 0.0333 | -          | -          | -          | -          |
| 16 | 1.6266     | 1.6266    | 1.6266     | 1.6266     | 0.0302 | 0.0302     | 0.0302     | 0.0302     | 0.0302     |
| 17 | -          | -         | -          | -          | 0.0267 | -          | -          | -          | -          |
| 18 | -          | -         | -          | -          | 0.0265 | -          | -          | -          | -          |
| 19 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 20 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 21 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 22 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 23 | -          | -         | -          | -          | 0.0259 | -          | -          | -          | -          |
| 24 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 25 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 26 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 27 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 28 | -          | -         | -          | -          | 0.0360 | -          | -          | -          | -          |
| 29 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 30 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 31 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 32 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 33 | -          | -         | -          | -          | 0.0170 | -          | -          | -          | -          |
| 34 | -          | -         | -          | -          | 0.0120 | -          | -          | -          | -          |
| 35 | 1.6266     | 1.6266    | 1.6266     | 1.6266     |        | 0.0302     | 0.0302     | 0.0302     | 0.0302     |

### Off-road Equipment Tier 4 Emission Factors

| HP Bin |         | Emission Factor (g/bhp-hr) |      |      |      |       |
|--------|---------|----------------------------|------|------|------|-------|
| Low HP | High HP | ROG                        | CO   | NOx  | PM10 | PM2.5 |
| 0      | 11      | 0.30                       | 6.00 | 5.32 | 0.30 | 0.28  |
| 11     | 25      | 0.30                       | 4.90 | 5.32 | 0.30 | 0.28  |
| 25     | 50      | 0.19                       | 4.10 | 3.33 | 0.02 | 0.02  |
| 50     | 75      | 0.19                       | 3.70 | 3.33 | 0.02 | 0.02  |
| 75     | 100     | 0.15                       | 3.70 | 0.30 | 0.02 | 0.01  |
| 100    | 175     | 0.15                       | 3.70 | 0.30 | 0.02 | 0.01  |
| 175    | 300     | 0.15                       | 2.60 | 0.30 | 0.02 | 0.01  |
| 300    | 600     | 0.15                       | 2.60 | 0.30 | 0.02 | 0.01  |
| 600    | 750     | 0.15                       | 2.60 | 0.30 | 0.02 | 0.01  |
| 750    | 1200    | 0.15                       | 2.60 | 2.60 | 0.03 | 0.03  |
| 1200   | 9999    | 0.15                       | 2.60 | 2.60 | 0.03 | 0.03  |

92  
95  
1.07

**Note:**

1. Tier 4 Emission Factors are converted from EPA Non-road Diesel Engine Standards. Available at [www.epa.gov](http://www.epa.gov)
2. Assume PM2.5 is 92% of PM10.

% of PM2.5 in PM10 (from CEIDARS)

% of NOx in NMHC+NOx (from [http://www.arb.ca.gov/msprog/moyer/guidelines/2005\\_Carl\\_Moyer\\_Guidelir](http://www.arb.ca.gov/msprog/moyer/guidelines/2005_Carl_Moyer_Guidelir)  
VOC/NMHC

[www.arb.ca.gov/msprog/ordiesel/documents/Off-Road\\_Diesel\\_Std.xls](http://www.arb.ca.gov/msprog/ordiesel/documents/Off-Road_Diesel_Std.xls)

nes\_Part4.pdf)

**Default Horsepower and Load Factor**

| <b>OFFROAD Equipment Type</b>      | <b>Horsepower</b> | <b>Load Factor</b> |
|------------------------------------|-------------------|--------------------|
| Aerial Lifts                       | 63                | 0.31               |
| Air Compressors                    | 78                | 0.48               |
| Bore/Drill Rigs                    | 221               | 0.5                |
| Cement and Mortar Mixers           | 9                 | 0.56               |
| Concrete/Industrial Saws           | 81                | 0.73               |
| Cranes                             | 231               | 0.29               |
| Crawler Tractors                   | 212               | 0.43               |
| Crushing/Proc. Equipment           | 85                | 0.78               |
| Excavators                         | 158               | 0.38               |
| Forklifts                          | 89                | 0.2                |
| Generator Sets                     | 84                | 0.74               |
| Graders                            | 187               | 0.41               |
| Off-Highway Tractors               | 124               | 0.44               |
| Off-Highway Trucks                 | 402               | 0.38               |
| Other Construction Equipment       | 172               | 0.42               |
| Other General Industrial Equipment | 88                | 0.34               |
| Other Material Handling Equipment  | 168               | 0.4                |
| Pavers                             | 130               | 0.42               |
| Paving Equipment                   | 132               | 0.36               |
| Plate Compactors                   | 8                 | 0.43               |
| Pressure Washers                   | 13                | 0.3                |
| Pumps                              | 84                | 0.74               |
| Rollers                            | 80                | 0.38               |
| Rough Terrain Forklifts            | 100               | 0.4                |
| Rubber Tired Dozers                | 247               | 0.4                |
| Rubber Tired Loaders               | 203               | 0.36               |
| Scrapers                           | 367               | 0.48               |
| Signal Boards                      | 6                 | 0.82               |
| Skid Steer Loaders                 | 65                | 0.37               |
| Surfacing Equipment                | 263               | 0.3                |
| Sweepers/Scrubbers                 | 64                | 0.46               |
| Tractors/Loaders/Backhoes          | 97                | 0.37               |
| Trenchers                          | 78                | 0.5                |
| Welders                            | 46                | 0.45               |
|                                    |                   |                    |

Default Horsepower and Load Factor from CalEEMod2016 Appendix D: Table 3.3













































## Sacramento Valley Air Basin Fleet Average Emission Factors (Diesel)

2014

| 2014            |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-----------------|-------|---------|---------|---------|---------|
| Equipment       | MaxHP | ROG     | CO      | NOX     | SOX     |
| Aerial Lifts    | 15    | 0.261   | 3.233   | 4.096   | 0.005   |
| Aerial Lifts    | 25    | 0.261   | 3.233   | 4.096   | 0.005   |
| Aerial Lifts    | 50    | 0.261   | 3.233   | 4.096   | 0.005   |
| Aerial Lifts    | 120   | 0.202   | 3.220   | 3.373   | 0.005   |
| Aerial Lifts    | 500   | 0.236   | 0.983   | 4.602   | 0.005   |
| Aerial Lifts    | 750   | 0.299   | 1.178   | 3.761   | 0.005   |
| Air Compressors |       |         |         |         |         |
|                 | 15    | 0.891   | 3.723   | 5.445   | 0.008   |
| Air Compressors |       |         |         |         |         |
|                 | 25    | 0.960   | 2.780   | 5.000   | 0.007   |
| Air Compressors |       |         |         |         |         |
|                 | 50    | 2.076   | 6.181   | 5.421   | 0.007   |
| Air Compressors |       |         |         |         |         |
|                 | 120   | 0.901   | 3.880   | 5.608   | 0.006   |
| Air Compressors |       |         |         |         |         |
|                 | 175   | 0.621   | 3.227   | 4.973   | 0.006   |
| Air Compressors |       |         |         |         |         |
|                 | 250   | 0.405   | 1.237   | 4.399   | 0.006   |
| Air Compressors |       |         |         |         |         |
|                 | 500   | 0.373   | 1.249   | 3.855   | 0.005   |
| Air Compressors |       |         |         |         |         |
|                 | 750   | 0.378   | 1.249   | 3.991   | 0.005   |
| Air Compressors |       |         |         |         |         |
|                 | 1000  | 0.445   | 1.493   | 5.512   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 15    | 0.834   | 4.691   | 5.332   | 0.006   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 25    | 0.834   | 4.691   | 5.332   | 0.006   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 50    | 0.834   | 4.691   | 5.332   | 0.006   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 120   | 0.319   | 3.327   | 4.195   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 175   | 0.308   | 3.040   | 4.066   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 250   | 0.217   | 1.174   | 3.525   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 500   | 0.202   | 1.239   | 3.186   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 750   | 0.157   | 1.087   | 2.373   | 0.005   |
| Bore/Drill Rigs |       |         |         |         |         |
|                 | 1000  | 0.105   | 0.951   | 2.984   | 0.005   |

|                          |      |       |       |        |       |
|--------------------------|------|-------|-------|--------|-------|
| Cement and Mortar Mixers | 15   | 0.666 | 3.469 | 4.191  | 0.008 |
| Cement and Mortar Mixers | 25   | 0.837 | 2.570 | 4.793  | 0.007 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332  | 0.007 |
| Concrete/Industrial Saws | 50   | 1.626 | 5.313 | 5.172  | 0.007 |
| Concrete/Industrial Saws | 120  | 0.749 | 3.675 | 5.160  | 0.006 |
| Concrete/Industrial Saws | 175  | 0.517 | 3.080 | 4.531  | 0.006 |
| Cranes                   | 50   | 2.115 | 7.126 | 6.093  | 0.005 |
| Cranes                   | 120  | 1.245 | 4.923 | 10.302 | 0.005 |
| Cranes                   | 175  | 0.793 | 3.932 | 8.471  | 0.005 |
| Cranes                   | 250  | 0.661 | 2.726 | 7.860  | 0.005 |
| Cranes                   | 500  | 0.483 | 4.177 | 6.264  | 0.005 |
| Cranes                   | 750  | 0.280 | 1.635 | 4.327  | 0.005 |
| Cranes                   | 9999 | 0.120 | 0.948 | 2.281  | 0.005 |
| Crawler Tractors         | 50   | 2.521 | 8.047 | 6.396  | 0.005 |
| Crawler Tractors         | 120  | 0.884 | 4.168 | 7.524  | 0.005 |
| Crawler Tractors         | 175  | 0.629 | 3.459 | 6.875  | 0.005 |
| Crawler Tractors         | 250  | 0.454 | 1.838 | 6.238  | 0.005 |
| Crawler Tractors         | 500  | 0.412 | 2.911 | 5.616  | 0.005 |
| Crawler Tractors         | 750  | 0.347 | 1.675 | 4.895  | 0.005 |
| Crawler Tractors         | 1000 | 0.475 | 2.080 | 7.426  | 0.005 |
| Crushing/Proc. Equipment | 50   | 2.012 | 6.212 | 5.399  | 0.007 |
| Crushing/Proc. Equipment | 120  | 0.877 | 3.898 | 5.468  | 0.006 |
| Crushing/Proc. Equipment | 175  | 0.612 | 3.256 | 4.823  | 0.006 |
| Crushing/Proc. Equipment | 250  | 0.405 | 1.228 | 4.239  | 0.006 |
| Crushing/Proc. Equipment | 500  | 0.377 | 1.230 | 3.702  | 0.005 |
| Crushing/Proc. Equipment | 750  | 0.378 | 1.218 | 3.844  | 0.005 |
| Crushing/Proc. Equipment | 9999 | 0.456 | 1.460 | 5.391  | 0.005 |

|                      |      |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|
| Dumpers/Tenders      | 25   | 0.705 | 2.364 | 4.433 | 0.007 |
| Excavators           | 25   | 0.825 | 4.844 | 4.965 | 0.005 |
| Excavators           | 50   | 0.825 | 4.844 | 4.965 | 0.005 |
| Excavators           | 120  | 0.513 | 3.663 | 5.131 | 0.005 |
| Excavators           | 175  | 0.390 | 3.154 | 4.657 | 0.005 |
| Excavators           | 250  | 0.294 | 1.346 | 4.374 | 0.005 |
| Excavators           | 500  | 0.233 | 1.327 | 3.353 | 0.005 |
| Excavators           | 750  | 0.239 | 1.347 | 3.541 | 0.005 |
| Forklifts            | 50   | 2.114 | 7.321 | 6.006 | 0.005 |
| Forklifts            | 120  | 0.795 | 4.079 | 6.848 | 0.005 |
| Forklifts            | 175  | 0.578 | 3.521 | 6.352 | 0.005 |
| Forklifts            | 250  | 0.615 | 2.501 | 7.276 | 0.005 |
| Forklifts            | 500  | 0.541 | 4.252 | 6.353 | 0.005 |
| Generator Sets       | 15   | 0.783 | 3.723 | 5.369 | 0.008 |
| Generator Sets       | 25   | 0.821 | 2.780 | 5.000 | 0.007 |
| Generator Sets       | 50   | 1.427 | 4.683 | 5.048 | 0.007 |
| Generator Sets       | 120  | 0.721 | 3.532 | 5.147 | 0.006 |
| Generator Sets       | 175  | 0.486 | 2.945 | 4.565 | 0.006 |
| Generator Sets       | 250  | 0.311 | 1.130 | 4.025 | 0.006 |
| Generator Sets       | 500  | 0.279 | 1.157 | 3.603 | 0.005 |
| Generator Sets       | 750  | 0.289 | 1.157 | 3.724 | 0.005 |
| Generator Sets       | 9999 | 0.389 | 1.377 | 5.150 | 0.005 |
| Graders              | 50   | 3.094 | 9.065 | 6.550 | 0.005 |
| Graders              | 120  | 1.269 | 4.920 | 9.986 | 0.005 |
| Graders              | 175  | 0.847 | 3.951 | 8.702 | 0.005 |
| Graders              | 250  | 0.390 | 1.462 | 5.740 | 0.005 |
| Graders              | 500  | 0.314 | 1.791 | 3.714 | 0.005 |
| Graders              | 750  | 0.437 | 1.483 | 3.876 | 0.005 |
| Off-Highway Tractors | 120  | 0.698 | 3.972 | 6.281 | 0.005 |
| Off-Highway Tractors | 175  | 0.424 | 3.265 | 5.025 | 0.005 |
| Off-Highway Tractors | 250  | 0.405 | 1.628 | 5.661 | 0.005 |
| Off-Highway Tractors | 750  | 0.267 | 1.334 | 4.007 | 0.005 |
| Off-Highway Tractors | 1000 | 0.085 | 0.947 | 2.279 | 0.005 |
| Off-Highway Trucks   | 175  | 0.513 | 3.473 | 5.219 | 0.005 |
| Off-Highway Trucks   | 250  | 0.483 | 1.932 | 5.441 | 0.005 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.393 | 2.075 | 4.686 | 0.005 |
| Off-Highway Trucks                 | 750  | 0.485 | 2.953 | 5.578 | 0.005 |
| Off-Highway Trucks                 | 1000 | 0.415 | 1.779 | 6.365 | 0.005 |
| Other Construction Equipment       | 15   | 1.301 | 5.602 | 5.565 | 0.005 |
| Other Construction Equipment       | 25   | 1.301 | 5.602 | 5.565 | 0.005 |
| Other Construction Equipment       | 50   | 1.301 | 5.602 | 5.565 | 0.005 |
| Other Construction Equipment       | 120  | 0.729 | 3.906 | 6.633 | 0.005 |
| Other Construction Equipment       | 175  | 0.567 | 3.385 | 6.372 | 0.005 |
| Other Construction Equipment       | 500  | 0.330 | 2.476 | 4.561 | 0.005 |
| Other General Industrial Equipment | 15   | 1.521 | 6.288 | 5.584 | 0.005 |
| Other General Industrial Equipment | 25   | 1.521 | 6.288 | 5.584 | 0.005 |
| Other General Industrial Equipment | 50   | 1.521 | 6.288 | 5.584 | 0.005 |
| Other General Industrial Equipment | 120  | 0.789 | 4.090 | 6.723 | 0.005 |
| Other General Industrial Equipment | 175  | 0.523 | 3.469 | 5.792 | 0.005 |
| Other General Industrial Equipment | 250  | 0.488 | 2.054 | 6.153 | 0.005 |
| Other General Industrial Equipment | 500  | 0.355 | 2.499 | 4.565 | 0.005 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.256 | 1.489 | 3.622 | 0.005 |
| Other General Industrial Equipment | 1000 | 0.346 | 1.080 | 6.379 | 0.005 |
| Other Material Handling Equipment  | 50   | 1.695 | 6.590 | 5.751 | 0.005 |
| Other Material Handling Equipment  | 120  | 0.558 | 3.779 | 5.372 | 0.005 |
| Other Material Handling Equipment  | 175  | 0.528 | 3.431 | 5.798 | 0.005 |
| Other Material Handling Equipment  | 250  | 0.475 | 1.936 | 6.173 | 0.005 |
| Other Material Handling Equipment  | 500  | 0.331 | 1.927 | 4.357 | 0.005 |
| Other Material Handling Equipment  | 9999 | 0.141 | 0.978 | 3.436 | 0.005 |
| Pavers                             | 25   | 1.898 | 6.381 | 5.717 | 0.005 |
| Pavers                             | 50   | 1.898 | 6.381 | 5.717 | 0.005 |
| Pavers                             | 120  | 0.683 | 3.773 | 6.199 | 0.005 |
| Pavers                             | 175  | 0.502 | 3.115 | 5.736 | 0.005 |
| Pavers                             | 250  | 0.208 | 1.023 | 4.140 | 0.005 |
| Pavers                             | 500  | 0.180 | 1.005 | 3.047 | 0.005 |
| Paving Equipment                   | 25   | 1.053 | 4.952 | 5.184 | 0.005 |
| Paving Equipment                   | 50   | 1.053 | 4.952 | 5.184 | 0.005 |
| Paving Equipment                   | 120  | 0.677 | 3.837 | 6.370 | 0.005 |
| Paving Equipment                   | 175  | 0.415 | 3.097 | 5.216 | 0.005 |
| Paving Equipment                   | 250  | 0.310 | 1.370 | 4.782 | 0.005 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Pressure Washers                   | 15   | 0.783 | 3.723 | 5.369 | 0.008 |
| Pressure Washers                   | 25   | 0.821 | 2.780 | 5.000 | 0.007 |
| Pressure Washers                   | 50   | 1.096 | 3.951 | 4.873 | 0.007 |
| Pressure Washers                   | 120  | 0.634 | 3.367 | 4.912 | 0.006 |
| Pressure Washers                   | 175  | 0.469 | 2.923 | 4.513 | 0.006 |



|                         |      |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.137 | 0.986 | 1.047 | 0.006 |
| Pumps                   | 15   | 0.891 | 3.723 | 5.445 | 0.008 |
| Pumps                   | 25   | 0.960 | 2.780 | 5.000 | 0.007 |
| Pumps                   | 50   | 1.538 | 4.929 | 5.107 | 0.007 |
| Pumps                   | 120  | 0.751 | 3.587 | 5.226 | 0.006 |
| Pumps                   | 175  | 0.508 | 2.989 | 4.635 | 0.006 |
| Pumps                   | 250  | 0.326 | 1.149 | 4.090 | 0.006 |
| Pumps                   | 500  | 0.294 | 1.181 | 3.648 | 0.005 |
| Pumps                   | 750  | 0.303 | 1.181 | 3.770 | 0.005 |
| Pumps                   | 9999 | 0.399 | 1.406 | 5.210 | 0.005 |
| Rollers                 | 15   | 1.308 | 5.243 | 5.393 | 0.005 |
| Rollers                 | 25   | 1.308 | 5.243 | 5.393 | 0.005 |
| Rollers                 | 50   | 1.308 | 5.243 | 5.393 | 0.005 |
| Rollers                 | 120  | 0.695 | 3.809 | 6.390 | 0.005 |
| Rollers                 | 175  | 0.368 | 2.998 | 4.724 | 0.005 |
| Rollers                 | 250  | 0.381 | 1.760 | 5.403 | 0.005 |
| Rollers                 | 500  | 0.378 | 3.318 | 5.183 | 0.005 |
| Rough Terrain Forklifts | 50   | 1.182 | 4.887 | 5.226 | 0.005 |
| Rough Terrain Forklifts | 120  | 0.351 | 3.367 | 4.467 | 0.005 |
| Rough Terrain Forklifts | 175  | 0.221 | 2.852 | 3.594 | 0.005 |
| Rough Terrain Forklifts | 250  | 0.186 | 1.212 | 2.984 | 0.005 |
| Rough Terrain Forklifts | 500  | 0.170 | 0.954 | 3.500 | 0.005 |
| Rubber Tired Dozers     | 175  | 0.961 | 4.226 | 9.834 | 0.005 |
| Rubber Tired Dozers     | 250  | 0.721 | 2.712 | 7.972 | 0.005 |
| Rubber Tired Dozers     | 500  | 0.707 | 6.165 | 8.058 | 0.005 |
| Rubber Tired Dozers     | 750  | 0.513 | 2.756 | 7.147 | 0.005 |
| Rubber Tired Dozers     | 1000 | 0.691 | 3.096 | 6.849 | 0.005 |
| Rubber Tired Loaders    | 25   | 2.115 | 7.770 | 6.103 | 0.005 |
| Rubber Tired Loaders    | 50   | 2.115 | 7.770 | 6.103 | 0.005 |
| Rubber Tired Loaders    | 120  | 0.868 | 4.268 | 7.129 | 0.005 |
| Rubber Tired Loaders    | 175  | 0.605 | 3.585 | 6.272 | 0.005 |

|                               |      |       |       |       |       |
|-------------------------------|------|-------|-------|-------|-------|
| Rubber Tired Loaders          | 250  | 0.407 | 1.486 | 5.495 | 0.005 |
| Rubber Tired Loaders          | 500  | 0.421 | 2.407 | 5.194 | 0.005 |
| Rubber Tired Loaders          | 750  | 0.406 | 1.946 | 4.810 | 0.005 |
| Rubber Tired Loaders          | 1000 | 0.414 | 1.457 | 6.692 | 0.005 |
| Scrapers                      | 120  | 0.719 | 4.100 | 7.065 | 0.005 |
| Scrapers                      | 175  | 0.718 | 3.807 | 7.907 | 0.005 |
| Scrapers                      | 250  | 0.742 | 3.061 | 8.815 | 0.005 |
| Scrapers                      | 500  | 0.479 | 3.898 | 6.233 | 0.005 |
| Scrapers                      | 750  | 0.369 | 2.846 | 5.012 | 0.005 |
| Signal Boards                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Signal Boards                 | 50   | 1.625 | 5.231 | 5.139 | 0.007 |
| Signal Boards                 | 120  | 0.759 | 3.658 | 5.186 | 0.006 |
| Signal Boards                 | 175  | 0.520 | 3.058 | 4.582 | 0.006 |
| Signal Boards                 | 250  | 0.408 | 1.402 | 4.857 | 0.007 |
| Skid Steer Loaders            | 25   | 0.664 | 4.016 | 4.541 | 0.005 |
| Skid Steer Loaders            | 50   | 0.664 | 4.016 | 4.541 | 0.005 |
| Skid Steer Loaders            | 120  | 0.304 | 3.338 | 4.013 | 0.005 |
| Surfacing Equipment           | 50   | 1.141 | 4.877 | 5.425 | 0.006 |
| Surfacing Equipment           | 120  | 0.559 | 3.580 | 5.520 | 0.005 |
| Surfacing Equipment           | 175  | 0.472 | 3.012 | 5.711 | 0.005 |
| Surfacing Equipment           | 250  | 0.306 | 1.434 | 5.102 | 0.005 |
| Surfacing Equipment           | 500  | 0.237 | 1.501 | 3.895 | 0.005 |
| Surfacing Equipment           | 750  | 0.174 | 1.020 | 3.284 | 0.005 |
| Sweepers/Scrubbers            | 15   | 1.767 | 6.592 | 5.752 | 0.005 |
| Sweepers/Scrubbers            | 25   | 1.767 | 6.592 | 5.752 | 0.005 |
| Sweepers/Scrubbers            | 50   | 1.767 | 6.592 | 5.752 | 0.005 |
| Sweepers/Scrubbers            | 120  | 0.833 | 4.071 | 6.934 | 0.005 |
| Sweepers/Scrubbers            | 175  | 0.875 | 4.042 | 9.108 | 0.005 |
| Sweepers/Scrubbers            | 250  | 0.505 | 2.066 | 6.704 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 25   | 1.336 | 5.772 | 5.369 | 0.005 |

|                               |      |       |       |       |       |
|-------------------------------|------|-------|-------|-------|-------|
| Tractors/Loaders/Bac<br>khoes | 50   | 1.336 | 5.772 | 5.369 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 120  | 0.582 | 3.827 | 5.581 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 175  | 0.423 | 3.239 | 4.938 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 250  | 0.327 | 1.376 | 4.922 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 500  | 0.312 | 1.878 | 4.488 | 0.005 |
| Tractors/Loaders/Bac<br>khoes | 750  | 0.305 | 1.833 | 4.243 | 0.005 |
| Trenchers                     | 15   | 1.268 | 5.293 | 5.455 | 0.005 |
| Trenchers                     | 25   | 1.268 | 5.293 | 5.455 | 0.005 |
| Trenchers                     | 50   | 1.268 | 5.293 | 5.455 | 0.005 |
| Trenchers                     | 120  | 0.818 | 3.999 | 7.217 | 0.005 |
| Trenchers                     | 175  | 0.693 | 3.668 | 7.699 | 0.005 |
| Trenchers                     | 250  | 0.497 | 2.070 | 6.484 | 0.005 |
| Trenchers                     | 500  | 0.306 | 2.035 | 4.370 | 0.005 |
| Trenchers                     | 750  | 0.118 | 0.964 | 1.825 | 0.005 |
| Welders                       | 15   | 0.891 | 3.723 | 5.445 | 0.008 |
| Welders                       | 25   | 0.960 | 2.780 | 5.000 | 0.007 |
| Welders                       | 50   | 1.900 | 5.749 | 5.308 | 0.007 |
| Welders                       | 120  | 0.849 | 3.774 | 5.481 | 0.006 |
| Welders                       | 175  | 0.581 | 3.141 | 4.862 | 0.006 |
| Welders                       | 250  | 0.376 | 1.207 | 4.297 | 0.006 |
| Welders                       | 500  | 0.343 | 1.227 | 3.788 | 0.005 |
| Water Trucks                  | 175  | 0.513 | 3.473 | 5.219 | 0.005 |
| Water Trucks                  | 250  | 0.483 | 1.932 | 5.441 | 0.005 |
| Water Trucks                  | 500  | 0.393 | 2.075 | 4.686 | 0.005 |
| Water Trucks                  | 750  | 0.485 | 2.953 | 5.578 | 0.005 |
| Water Trucks                  | 1000 | 0.415 | 1.779 | 6.365 | 0.005 |

2015

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|
| PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.158   | 0.145   | 574.665 | 0.170   | 0.005   |
| 0.158   | 0.145   | 574.665 | 0.170   | 0.005   |
| 0.158   | 0.145   | 574.665 | 0.170   | 0.005   |
| 0.161   | 0.148   | 516.703 | 0.153   | 0.004   |
| 0.101   | 0.093   | 516.638 | 0.153   | 0.004   |
| 0.109   | 0.109   | 568.299 | 0.027   | 0.004   |
|         |         |         |         |         |
| 0.341   | 0.341   | 568.300 | 0.080   | 0.005   |
|         |         |         |         |         |
| 0.291   | 0.291   | 568.299 | 0.086   | 0.005   |
|         |         |         |         |         |
| 0.505   | 0.505   | 568.299 | 0.187   | 0.005   |
|         |         |         |         |         |
| 0.495   | 0.495   | 568.299 | 0.081   | 0.004   |
|         |         |         |         |         |
| 0.272   | 0.272   | 568.299 | 0.056   | 0.004   |
|         |         |         |         |         |
| 0.134   | 0.134   | 568.299 | 0.036   | 0.004   |
|         |         |         |         |         |
| 0.125   | 0.125   | 568.299 | 0.033   | 0.004   |
|         |         |         |         |         |
| 0.128   | 0.128   | 568.299 | 0.034   | 0.004   |
|         |         |         |         |         |
| 0.157   | 0.157   | 568.300 | 0.040   | 0.004   |
|         |         |         |         |         |
| 0.382   | 0.351   | 591.442 | 0.175   | 0.005   |
|         |         |         |         |         |
| 0.382   | 0.351   | 591.442 | 0.175   | 0.005   |
|         |         |         |         |         |
| 0.382   | 0.351   | 591.442 | 0.175   | 0.005   |
|         |         |         |         |         |
| 0.249   | 0.229   | 501.365 | 0.148   | 0.004   |
|         |         |         |         |         |
| 0.186   | 0.171   | 524.052 | 0.155   | 0.004   |
|         |         |         |         |         |
| 0.105   | 0.097   | 512.336 | 0.151   | 0.004   |
|         |         |         |         |         |
| 0.101   | 0.093   | 506.154 | 0.150   | 0.004   |
|         |         |         |         |         |
| 0.081   | 0.074   | 525.240 | 0.155   | 0.004   |
|         |         |         |         |         |
| 0.058   | 0.054   | 516.600 | 0.153   | 0.004   |

| 2015            |       | g/hp/hr |
|-----------------|-------|---------|
| Equipment       | MaxHP | ROG     |
| Aerial Lifts    | 15    | 0.248   |
| Aerial Lifts    | 25    | 0.248   |
| Aerial Lifts    | 50    | 0.248   |
| Aerial Lifts    | 120   | 0.191   |
| Aerial Lifts    | 500   | 0.239   |
| Aerial Lifts    | 750   | 0.278   |
| Air Compressors |       |         |
|                 | 15    | 0.840   |
| Air Compressors |       |         |
|                 | 25    | 0.894   |
| Air Compressors |       |         |
|                 | 50    | 1.868   |
| Air Compressors |       |         |
|                 | 120   | 0.821   |
| Air Compressors |       |         |
|                 | 175   | 0.571   |
| Air Compressors |       |         |
|                 | 250   | 0.381   |
| Air Compressors |       |         |
|                 | 500   | 0.354   |
| Air Compressors |       |         |
|                 | 750   | 0.358   |
| Air Compressors |       |         |
|                 | 1000  | 0.409   |
| Bore/Drill Rigs |       |         |
|                 | 15    | 0.847   |
| Bore/Drill Rigs |       |         |
|                 | 25    | 0.847   |
| Bore/Drill Rigs |       |         |
|                 | 50    | 0.847   |
| Bore/Drill Rigs |       |         |
|                 | 120   | 0.318   |
| Bore/Drill Rigs |       |         |
|                 | 175   | 0.302   |
| Bore/Drill Rigs |       |         |
|                 | 250   | 0.213   |
| Bore/Drill Rigs |       |         |
|                 | 500   | 0.199   |
| Bore/Drill Rigs |       |         |
|                 | 750   | 0.162   |
| Bore/Drill Rigs |       |         |
|                 | 1000  | 0.109   |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.177 | 0.177 | 568.299 | 0.060 | 0.005 |
| 0.253 | 0.253 | 568.299 | 0.075 | 0.005 |
| 0.164 | 0.164 | 568.299 | 0.061 | 0.005 |
| 0.424 | 0.424 | 568.299 | 0.146 | 0.005 |
| 0.412 | 0.412 | 568.299 | 0.067 | 0.004 |
| 0.228 | 0.228 | 568.299 | 0.046 | 0.004 |
| 0.607 | 0.559 | 567.006 | 0.168 | 0.005 |
| 0.765 | 0.704 | 514.029 | 0.152 | 0.004 |
| 0.457 | 0.421 | 519.511 | 0.154 | 0.004 |
| 0.360 | 0.331 | 517.683 | 0.153 | 0.004 |
| 0.260 | 0.239 | 516.578 | 0.153 | 0.004 |
| 0.151 | 0.139 | 515.607 | 0.152 | 0.004 |
| 0.054 | 0.050 | 516.638 | 0.153 | 0.004 |
| 0.743 | 0.684 | 564.564 | 0.167 | 0.005 |
| 0.629 | 0.578 | 522.119 | 0.154 | 0.004 |
| 0.374 | 0.344 | 516.404 | 0.153 | 0.004 |
| 0.241 | 0.222 | 518.036 | 0.153 | 0.004 |
| 0.217 | 0.200 | 520.515 | 0.154 | 0.004 |
| 0.179 | 0.164 | 517.861 | 0.153 | 0.004 |
| 0.218 | 0.201 | 520.005 | 0.154 | 0.004 |
| 0.494 | 0.494 | 568.299 | 0.181 | 0.005 |
| 0.481 | 0.481 | 568.299 | 0.079 | 0.004 |
| 0.265 | 0.265 | 568.299 | 0.055 | 0.004 |
| 0.130 | 0.130 | 568.299 | 0.036 | 0.004 |
| 0.121 | 0.121 | 568.299 | 0.034 | 0.004 |
| 0.123 | 0.123 | 568.299 | 0.034 | 0.004 |
| 0.155 | 0.155 | 568.299 | 0.041 | 0.004 |

|                          |      |       |
|--------------------------|------|-------|
| Cement and Mortar Mixers | 15   | 0.663 |
| Cement and Mortar Mixers | 25   | 0.811 |
| Concrete/Industrial Saws | 25   | 0.685 |
| Concrete/Industrial Saws | 50   | 1.470 |
| Concrete/Industrial Saws | 120  | 0.683 |
| Concrete/Industrial Saws | 175  | 0.475 |
| Cranes                   | 50   | 2.087 |
| Cranes                   | 120  | 1.214 |
| Cranes                   | 175  | 0.782 |
| Cranes                   | 250  | 0.642 |
| Cranes                   | 500  | 0.475 |
| Cranes                   | 750  | 0.286 |
| Cranes                   | 9999 | 0.131 |
| Crawler Tractors         | 50   | 2.513 |
| Crawler Tractors         | 120  | 0.885 |
| Crawler Tractors         | 175  | 0.632 |
| Crawler Tractors         | 250  | 0.451 |
| Crawler Tractors         | 500  | 0.408 |
| Crawler Tractors         | 750  | 0.351 |
| Crawler Tractors         | 1000 | 0.479 |
| Crushing/Proc. Equipment | 50   | 1.796 |
| Crushing/Proc. Equipment | 120  | 0.797 |
| Crushing/Proc. Equipment | 175  | 0.562 |
| Crushing/Proc. Equipment | 250  | 0.382 |
| Crushing/Proc. Equipment | 500  | 0.358 |
| Crushing/Proc. Equipment | 750  | 0.358 |
| Crushing/Proc. Equipment | 9999 | 0.422 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.200 | 0.200 | 568.300 | 0.063 | 0.005 |
| 0.380 | 0.350 | 575.267 | 0.170 | 0.005 |
| 0.380 | 0.350 | 575.267 | 0.170 | 0.005 |
| 0.382 | 0.352 | 511.306 | 0.151 | 0.004 |
| 0.229 | 0.211 | 516.907 | 0.153 | 0.004 |
| 0.139 | 0.128 | 517.323 | 0.153 | 0.004 |
| 0.108 | 0.099 | 515.215 | 0.152 | 0.004 |
| 0.114 | 0.105 | 511.945 | 0.151 | 0.004 |
| 0.656 | 0.604 | 575.112 | 0.170 | 0.005 |
| 0.574 | 0.528 | 516.062 | 0.153 | 0.004 |
| 0.345 | 0.318 | 516.694 | 0.153 | 0.004 |
| 0.330 | 0.304 | 518.028 | 0.153 | 0.004 |
| 0.289 | 0.266 | 518.345 | 0.153 | 0.004 |
| 0.298 | 0.298 | 568.299 | 0.070 | 0.005 |
| 0.272 | 0.272 | 568.299 | 0.074 | 0.005 |
| 0.389 | 0.389 | 568.299 | 0.128 | 0.005 |
| 0.385 | 0.385 | 568.299 | 0.065 | 0.004 |
| 0.212 | 0.212 | 568.299 | 0.043 | 0.004 |
| 0.111 | 0.111 | 568.300 | 0.028 | 0.004 |
| 0.104 | 0.104 | 568.299 | 0.025 | 0.004 |
| 0.106 | 0.106 | 568.299 | 0.026 | 0.004 |
| 0.138 | 0.138 | 568.299 | 0.035 | 0.004 |
| 0.867 | 0.798 | 539.122 | 0.159 | 0.005 |
| 0.832 | 0.765 | 515.382 | 0.152 | 0.004 |
| 0.488 | 0.449 | 527.834 | 0.156 | 0.004 |
| 0.185 | 0.171 | 522.330 | 0.154 | 0.004 |
| 0.143 | 0.131 | 517.377 | 0.153 | 0.004 |
| 0.138 | 0.138 | 568.299 | 0.039 | 0.004 |
| 0.513 | 0.472 | 520.824 | 0.154 | 0.004 |
| 0.258 | 0.237 | 518.164 | 0.153 | 0.004 |
| 0.203 | 0.187 | 514.370 | 0.152 | 0.004 |
| 0.133 | 0.122 | 516.904 | 0.153 | 0.004 |
| 0.054 | 0.050 | 516.638 | 0.153 | 0.004 |
| 0.292 | 0.269 | 514.057 | 0.152 | 0.004 |
| 0.236 | 0.217 | 512.833 | 0.152 | 0.004 |

|                      |      |       |
|----------------------|------|-------|
| Dumpers/Tenders      | 25   | 0.696 |
| Excavators           | 25   | 0.833 |
| Excavators           | 50   | 0.833 |
| Excavators           | 120  | 0.507 |
| Excavators           | 175  | 0.384 |
| Excavators           | 250  | 0.289 |
| Excavators           | 500  | 0.232 |
| Excavators           | 750  | 0.242 |
| Forklifts            | 50   | 2.073 |
| Forklifts            | 120  | 0.768 |
| Forklifts            | 175  | 0.566 |
| Forklifts            | 250  | 0.565 |
| Forklifts            | 500  | 0.454 |
| Generator Sets       | 15   | 0.747 |
| Generator Sets       | 25   | 0.793 |
| Generator Sets       | 50   | 1.281 |
| Generator Sets       | 120  | 0.651 |
| Generator Sets       | 175  | 0.440 |
| Generator Sets       | 250  | 0.287 |
| Generator Sets       | 500  | 0.258 |
| Generator Sets       | 750  | 0.267 |
| Generator Sets       | 9999 | 0.351 |
| Graders              | 50   | 3.119 |
| Graders              | 120  | 1.239 |
| Graders              | 175  | 0.844 |
| Graders              | 250  | 0.396 |
| Graders              | 500  | 0.326 |
| Graders              | 750  | 0.414 |
| Off-Highway Tractors | 120  | 0.674 |
| Off-Highway Tractors | 175  | 0.402 |
| Off-Highway Tractors | 250  | 0.400 |
| Off-Highway Tractors | 750  | 0.262 |
| Off-Highway Tractors | 1000 | 0.096 |
| Off-Highway Trucks   | 175  | 0.508 |
| Off-Highway Trucks   | 250  | 0.473 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.180 | 0.165 | 521.057 | 0.154 | 0.004 |
| 0.231 | 0.212 | 521.230 | 0.154 | 0.004 |
| 0.187 | 0.172 | 516.939 | 0.153 | 0.004 |
| 0.502 | 0.462 | 578.959 | 0.171 | 0.005 |
| 0.502 | 0.462 | 578.959 | 0.171 | 0.005 |
| 0.502 | 0.462 | 578.959 | 0.171 | 0.005 |
| 0.518 | 0.476 | 515.285 | 0.152 | 0.004 |
| 0.333 | 0.307 | 514.552 | 0.152 | 0.004 |
| 0.168 | 0.155 | 520.944 | 0.154 | 0.004 |
| 0.544 | 0.500 | 575.871 | 0.170 | 0.005 |
| 0.544 | 0.500 | 575.871 | 0.170 | 0.005 |
| 0.544 | 0.500 | 575.871 | 0.170 | 0.005 |
| 0.574 | 0.528 | 514.389 | 0.152 | 0.004 |
| 0.312 | 0.287 | 516.414 | 0.153 | 0.004 |
| 0.255 | 0.234 | 517.916 | 0.153 | 0.004 |
| 0.172 | 0.159 | 517.595 | 0.153 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Off-Highway Trucks                 | 500  | 0.385 |
| Off-Highway Trucks                 | 750  | 0.452 |
| Off-Highway Trucks                 | 1000 | 0.411 |
| Other Construction Equipment       | 15   | 1.309 |
| Other Construction Equipment       | 25   | 1.309 |
| Other Construction Equipment       | 50   | 1.309 |
| Other Construction Equipment       | 120  | 0.723 |
| Other Construction Equipment       | 175  | 0.557 |
| Other Construction Equipment       | 500  | 0.324 |
| Other General Industrial Equipment | 15   | 1.495 |
| Other General Industrial Equipment | 25   | 1.495 |
| Other General Industrial Equipment | 50   | 1.495 |
| Other General Industrial Equipment | 120  | 0.761 |
| Other General Industrial Equipment | 175  | 0.495 |
| Other General Industrial Equipment | 250  | 0.452 |
| Other General Industrial Equipment | 500  | 0.353 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.115 | 0.106 | 518.180 | 0.153 | 0.004 |
| 0.167 | 0.153 | 516.638 | 0.153 | 0.004 |
| 0.575 | 0.529 | 573.170 | 0.169 | 0.005 |
| 0.412 | 0.379 | 518.316 | 0.153 | 0.004 |
| 0.313 | 0.288 | 516.818 | 0.153 | 0.004 |
| 0.242 | 0.223 | 516.011 | 0.153 | 0.004 |
| 0.169 | 0.155 | 514.714 | 0.152 | 0.004 |
| 0.067 | 0.061 | 516.638 | 0.153 | 0.004 |
| 0.595 | 0.547 | 577.016 | 0.171 | 0.005 |
| 0.595 | 0.547 | 577.016 | 0.171 | 0.005 |
| 0.483 | 0.444 | 514.377 | 0.152 | 0.004 |
| 0.287 | 0.264 | 516.745 | 0.153 | 0.004 |
| 0.105 | 0.097 | 518.723 | 0.153 | 0.004 |
| 0.101 | 0.093 | 512.191 | 0.151 | 0.004 |
| 0.437 | 0.402 | 569.482 | 0.168 | 0.005 |
| 0.437 | 0.402 | 569.482 | 0.168 | 0.005 |
| 0.486 | 0.447 | 518.076 | 0.153 | 0.004 |
| 0.249 | 0.229 | 515.034 | 0.152 | 0.004 |
| 0.158 | 0.146 | 516.900 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.298 | 0.298 | 568.299 | 0.070 | 0.005 |
| 0.272 | 0.272 | 568.299 | 0.074 | 0.005 |
| 0.332 | 0.332 | 568.299 | 0.098 | 0.005 |
| 0.332 | 0.332 | 568.299 | 0.057 | 0.004 |
| 0.206 | 0.206 | 568.299 | 0.042 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Other General Industrial Equipment | 750  | 0.251 |
| Other General Industrial Equipment | 1000 | 0.355 |
| Other Material Handling Equipment  | 50   | 1.733 |
| Other Material Handling Equipment  | 120  | 0.528 |
| Other Material Handling Equipment  | 175  | 0.525 |
| Other Material Handling Equipment  | 250  | 0.423 |
| Other Material Handling Equipment  | 500  | 0.333 |
| Other Material Handling Equipment  | 9999 | 0.148 |
| Pavers                             | 25   | 1.853 |
| Pavers                             | 50   | 1.853 |
| Pavers                             | 120  | 0.680 |
| Pavers                             | 175  | 0.489 |
| Pavers                             | 250  | 0.214 |
| Pavers                             | 500  | 0.176 |
| Paving Equipment                   | 25   | 0.981 |
| Paving Equipment                   | 50   | 0.981 |
| Paving Equipment                   | 120  | 0.661 |
| Paving Equipment                   | 175  | 0.411 |
| Paving Equipment                   | 250  | 0.315 |
| Plate Compactors                   | 15   | 0.661 |
| Pressure Washers                   | 15   | 0.747 |
| Pressure Washers                   | 25   | 0.793 |
| Pressure Washers                   | 50   | 0.976 |
| Pressure Washers                   | 120  | 0.567 |
| Pressure Washers                   | 175  | 0.427 |



|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 0.341 | 0.341 | 568.299 | 0.080 | 0.005 |
| 0.291 | 0.291 | 568.299 | 0.086 | 0.005 |
| 0.409 | 0.409 | 568.299 | 0.138 | 0.005 |
| 0.403 | 0.403 | 568.299 | 0.067 | 0.004 |
| 0.222 | 0.222 | 568.299 | 0.045 | 0.004 |
| 0.115 | 0.115 | 568.299 | 0.029 | 0.004 |
| 0.108 | 0.108 | 568.299 | 0.026 | 0.004 |
| 0.110 | 0.110 | 568.299 | 0.027 | 0.004 |
| 0.141 | 0.141 | 568.299 | 0.036 | 0.004 |
| 0.484 | 0.445 | 575.795 | 0.170 | 0.005 |
| 0.484 | 0.445 | 575.795 | 0.170 | 0.005 |
| 0.484 | 0.445 | 575.795 | 0.170 | 0.005 |
| 0.476 | 0.438 | 518.787 | 0.153 | 0.004 |
| 0.219 | 0.202 | 516.591 | 0.153 | 0.004 |
| 0.191 | 0.176 | 517.811 | 0.153 | 0.004 |
| 0.202 | 0.185 | 522.052 | 0.154 | 0.004 |
| 0.436 | 0.401 | 575.353 | 0.170 | 0.005 |
| 0.261 | 0.240 | 517.260 | 0.153 | 0.004 |
| 0.140 | 0.128 | 516.091 | 0.153 | 0.004 |
| 0.087 | 0.080 | 517.766 | 0.153 | 0.004 |
| 0.076 | 0.070 | 511.657 | 0.151 | 0.004 |
| 0.563 | 0.518 | 518.335 | 0.153 | 0.004 |
| 0.393 | 0.361 | 520.011 | 0.154 | 0.004 |
| 0.376 | 0.346 | 524.676 | 0.155 | 0.004 |
| 0.258 | 0.237 | 517.790 | 0.153 | 0.004 |
| 0.236 | 0.236 | 568.300 | 0.062 | 0.004 |
| 0.676 | 0.622 | 573.522 | 0.170 | 0.005 |
| 0.676 | 0.622 | 573.522 | 0.170 | 0.005 |
| 0.619 | 0.569 | 510.010 | 0.151 | 0.004 |
| 0.350 | 0.322 | 515.769 | 0.152 | 0.004 |

|                         |      |       |
|-------------------------|------|-------|
| Pressure Washers        | 250  | 0.121 |
| Pumps                   | 15   | 0.840 |
| Pumps                   | 25   | 0.894 |
| Pumps                   | 50   | 1.384 |
| Pumps                   | 120  | 0.679 |
| Pumps                   | 175  | 0.461 |
| Pumps                   | 250  | 0.302 |
| Pumps                   | 500  | 0.273 |
| Pumps                   | 750  | 0.281 |
| Pumps                   | 9999 | 0.363 |
| Rollers                 | 15   | 1.311 |
| Rollers                 | 25   | 1.311 |
| Rollers                 | 50   | 1.311 |
| Rollers                 | 120  | 0.683 |
| Rollers                 | 175  | 0.364 |
| Rollers                 | 250  | 0.347 |
| Rollers                 | 500  | 0.371 |
| Rough Terrain Forklifts | 50   | 1.189 |
| Rough Terrain Forklifts | 120  | 0.338 |
| Rough Terrain Forklifts | 175  | 0.217 |
| Rough Terrain Forklifts | 250  | 0.140 |
| Rough Terrain Forklifts | 500  | 0.174 |
| Rubber Tired Dozers     | 175  | 0.965 |
| Rubber Tired Dozers     | 250  | 0.728 |
| Rubber Tired Dozers     | 500  | 0.708 |
| Rubber Tired Dozers     | 750  | 0.518 |
| Rubber Tired Dozers     | 1000 | 0.661 |
| Rubber Tired Loaders    | 25   | 2.108 |
| Rubber Tired Loaders    | 50   | 2.108 |
| Rubber Tired Loaders    | 120  | 0.856 |
| Rubber Tired Loaders    | 175  | 0.595 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.187 | 0.172 | 514.217 | 0.152 | 0.004 |
| 0.196 | 0.180 | 512.510 | 0.152 | 0.004 |
| 0.190 | 0.175 | 499.695 | 0.148 | 0.004 |
| 0.195 | 0.179 | 515.307 | 0.152 | 0.004 |
| 0.526 | 0.484 | 529.945 | 0.157 | 0.004 |
| 0.419 | 0.385 | 524.171 | 0.155 | 0.004 |
| 0.403 | 0.371 | 512.853 | 0.152 | 0.004 |
| 0.251 | 0.231 | 517.361 | 0.153 | 0.004 |
| 0.190 | 0.174 | 517.394 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.422 | 0.422 | 568.299 | 0.146 | 0.005 |
| 0.414 | 0.414 | 568.299 | 0.068 | 0.004 |
| 0.228 | 0.228 | 568.299 | 0.046 | 0.004 |
| 0.141 | 0.141 | 686.695 | 0.036 | 0.004 |
| 0.286 | 0.263 | 577.076 | 0.171 | 0.005 |
| 0.286 | 0.263 | 577.076 | 0.171 | 0.005 |
| 0.235 | 0.216 | 517.062 | 0.153 | 0.004 |
| 0.434 | 0.400 | 582.725 | 0.172 | 0.005 |
| 0.391 | 0.360 | 516.338 | 0.153 | 0.004 |
| 0.273 | 0.251 | 515.820 | 0.152 | 0.004 |
| 0.149 | 0.137 | 521.452 | 0.154 | 0.004 |
| 0.126 | 0.116 | 513.616 | 0.152 | 0.004 |
| 0.103 | 0.095 | 516.321 | 0.153 | 0.004 |
| 0.603 | 0.555 | 574.943 | 0.170 | 0.005 |
| 0.603 | 0.555 | 574.943 | 0.170 | 0.005 |
| 0.603 | 0.555 | 574.943 | 0.170 | 0.005 |
| 0.610 | 0.562 | 518.893 | 0.153 | 0.004 |
| 0.503 | 0.463 | 517.806 | 0.153 | 0.004 |
| 0.265 | 0.244 | 514.527 | 0.152 | 0.004 |
| 0.488 | 0.449 | 564.042 | 0.167 | 0.005 |

|                           |      |       |
|---------------------------|------|-------|
| Rubber Tired Loaders      | 250  | 0.406 |
| Rubber Tired Loaders      | 500  | 0.415 |
| Rubber Tired Loaders      | 750  | 0.395 |
| Rubber Tired Loaders      | 1000 | 0.420 |
| Scrapers                  | 120  | 0.731 |
| Scrapers                  | 175  | 0.714 |
| Scrapers                  | 250  | 0.730 |
| Scrapers                  | 500  | 0.472 |
| Scrapers                  | 750  | 0.360 |
| Signal Boards             | 15   | 0.661 |
| Signal Boards             | 50   | 1.461 |
| Signal Boards             | 120  | 0.687 |
| Signal Boards             | 175  | 0.474 |
| Signal Boards             | 250  | 0.380 |
| Skid Steer Loaders        | 25   | 0.639 |
| Skid Steer Loaders        | 50   | 0.639 |
| Skid Steer Loaders        | 120  | 0.294 |
| Surfacing Equipment       | 50   | 1.028 |
| Surfacing Equipment       | 120  | 0.548 |
| Surfacing Equipment       | 175  | 0.477 |
| Surfacing Equipment       | 250  | 0.310 |
| Surfacing Equipment       | 500  | 0.241 |
| Surfacing Equipment       | 750  | 0.178 |
| Sweepers/Scrubbers        | 15   | 1.808 |
| Sweepers/Scrubbers        | 25   | 1.808 |
| Sweepers/Scrubbers        | 50   | 1.808 |
| Sweepers/Scrubbers        | 120  | 0.833 |
| Sweepers/Scrubbers        | 175  | 0.839 |
| Sweepers/Scrubbers        | 250  | 0.513 |
| Tractors/Loaders/Backhoes | 25   | 1.307 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.488 | 0.449 | 564.042 | 0.167 | 0.005 |
| 0.438 | 0.403 | 523.017 | 0.155 | 0.004 |
| 0.248 | 0.229 | 513.890 | 0.152 | 0.004 |
| 0.159 | 0.146 | 515.175 | 0.152 | 0.004 |
| 0.152 | 0.140 | 517.124 | 0.153 | 0.004 |
| 0.154 | 0.141 | 511.337 | 0.151 | 0.004 |
| 0.501 | 0.461 | 577.728 | 0.171 | 0.005 |
| 0.501 | 0.461 | 577.728 | 0.171 | 0.005 |
| 0.501 | 0.461 | 577.728 | 0.171 | 0.005 |
| 0.563 | 0.518 | 520.766 | 0.154 | 0.004 |
| 0.395 | 0.364 | 512.148 | 0.151 | 0.004 |
| 0.258 | 0.237 | 517.719 | 0.153 | 0.004 |
| 0.161 | 0.148 | 513.744 | 0.152 | 0.004 |
| 0.061 | 0.056 | 519.658 | 0.154 | 0.004 |
| 0.341 | 0.341 | 568.300 | 0.080 | 0.005 |
| 0.291 | 0.291 | 568.299 | 0.086 | 0.005 |
| 0.473 | 0.473 | 568.300 | 0.171 | 0.005 |
| 0.464 | 0.464 | 568.299 | 0.076 | 0.004 |
| 0.255 | 0.255 | 568.299 | 0.052 | 0.004 |
| 0.128 | 0.128 | 568.299 | 0.034 | 0.004 |
| 0.119 | 0.119 | 568.299 | 0.031 | 0.004 |
| 0.292 | 0.269 | 514.057 | 0.152 | 0.004 |
| 0.236 | 0.217 | 512.833 | 0.152 | 0.004 |
| 0.180 | 0.165 | 521.057 | 0.154 | 0.004 |
| 0.231 | 0.212 | 521.230 | 0.154 | 0.004 |
| 0.187 | 0.172 | 516.939 | 0.153 | 0.004 |

|                           |      |       |
|---------------------------|------|-------|
| Tractors/Loaders/Backhoes | 50   | 1.307 |
| Tractors/Loaders/Backhoes | 120  | 0.569 |
| Tractors/Loaders/Backhoes | 175  | 0.421 |
| Tractors/Loaders/Backhoes | 250  | 0.326 |
| Tractors/Loaders/Backhoes | 500  | 0.312 |
| Tractors/Loaders/Backhoes | 750  | 0.308 |
| Trenchers                 | 15   | 1.259 |
| Trenchers                 | 25   | 1.259 |
| Trenchers                 | 50   | 1.259 |
| Trenchers                 | 120  | 0.817 |
| Trenchers                 | 175  | 0.697 |
| Trenchers                 | 250  | 0.502 |
| Trenchers                 | 500  | 0.311 |
| Trenchers                 | 750  | 0.114 |
| Welders                   | 15   | 0.840 |
| Welders                   | 25   | 0.894 |
| Welders                   | 50   | 1.715 |
| Welders                   | 120  | 0.772 |
| Welders                   | 175  | 0.532 |
| Welders                   | 250  | 0.352 |
| Welders                   | 500  | 0.324 |
| Water Trucks              | 175  | 0.508 |
| Water Trucks              | 250  | 0.473 |
| Water Trucks              | 500  | 0.385 |
| Water Trucks              | 750  | 0.452 |
| Water Trucks              | 1000 | 0.411 |

2016

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|
| CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 3.233   | 3.933   | 0.005   | 0.136   | 0.125   | 568.831 | 0.170   | 0.005   |
| 3.233   | 3.933   | 0.005   | 0.136   | 0.125   | 568.831 | 0.170   | 0.005   |
| 3.233   | 3.933   | 0.005   | 0.136   | 0.125   | 568.831 | 0.170   | 0.005   |
| 3.218   | 3.113   | 0.005   | 0.143   | 0.132   | 511.457 | 0.153   | 0.004   |
| 0.988   | 4.621   | 0.005   | 0.102   | 0.094   | 511.392 | 0.153   | 0.004   |
| 1.130   | 3.380   | 0.005   | 0.098   | 0.098   | 568.299 | 0.025   | 0.004   |
| 3.658   | 5.196   | 0.008   | 0.311   | 0.311   | 568.299 | 0.075   | 0.005   |
| 2.666   | 4.890   | 0.007   | 0.270   | 0.270   | 568.299 | 0.080   | 0.005   |
| 5.968   | 5.223   | 0.007   | 0.459   | 0.459   | 568.299 | 0.168   | 0.005   |
| 3.840   | 5.190   | 0.006   | 0.446   | 0.446   | 568.299 | 0.074   | 0.004   |
| 3.218   | 4.504   | 0.006   | 0.245   | 0.245   | 568.299 | 0.051   | 0.004   |
| 1.207   | 3.967   | 0.006   | 0.121   | 0.121   | 568.299 | 0.034   | 0.004   |
| 1.198   | 3.455   | 0.005   | 0.113   | 0.113   | 568.300 | 0.032   | 0.004   |
| 1.198   | 3.586   | 0.005   | 0.116   | 0.116   | 568.299 | 0.032   | 0.004   |
| 1.370   | 5.157   | 0.005   | 0.142   | 0.142   | 568.299 | 0.036   | 0.004   |
| 4.735   | 5.303   | 0.006   | 0.379   | 0.349   | 585.171 | 0.175   | 0.005   |
| 4.735   | 5.303   | 0.006   | 0.379   | 0.349   | 585.171 | 0.175   | 0.005   |
| 4.735   | 5.303   | 0.006   | 0.379   | 0.349   | 585.171 | 0.175   | 0.005   |
| 3.335   | 4.028   | 0.005   | 0.239   | 0.220   | 496.949 | 0.148   | 0.004   |
| 3.035   | 3.904   | 0.005   | 0.176   | 0.162   | 517.207 | 0.154   | 0.004   |
| 1.178   | 3.325   | 0.005   | 0.100   | 0.092   | 506.505 | 0.151   | 0.004   |
| 1.256   | 3.003   | 0.005   | 0.096   | 0.088   | 499.902 | 0.149   | 0.004   |
| 1.105   | 2.376   | 0.005   | 0.081   | 0.074   | 520.473 | 0.155   | 0.004   |
| 0.956   | 2.994   | 0.005   | 0.059   | 0.054   | 511.253 | 0.153   | 0.004   |

|       |        |       |       |       |         |       |       |
|-------|--------|-------|-------|-------|---------|-------|-------|
| 3.469 | 4.168  | 0.008 | 0.171 | 0.171 | 568.300 | 0.059 | 0.005 |
| 2.531 | 4.712  | 0.007 | 0.240 | 0.240 | 568.299 | 0.073 | 0.005 |
| 2.339 | 4.332  | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 5.165 | 4.989  | 0.007 | 0.386 | 0.386 | 568.299 | 0.132 | 0.005 |
| 3.647 | 4.789  | 0.006 | 0.372 | 0.372 | 568.300 | 0.061 | 0.004 |
| 3.077 | 4.112  | 0.006 | 0.207 | 0.207 | 568.299 | 0.042 | 0.004 |
| 7.125 | 6.075  | 0.005 | 0.601 | 0.553 | 561.224 | 0.168 | 0.005 |
| 4.884 | 10.060 | 0.005 | 0.747 | 0.687 | 508.837 | 0.152 | 0.004 |
| 3.918 | 8.325  | 0.005 | 0.450 | 0.414 | 514.260 | 0.154 | 0.004 |
| 2.653 | 7.622  | 0.005 | 0.348 | 0.320 | 512.448 | 0.153 | 0.004 |
| 4.110 | 6.124  | 0.005 | 0.253 | 0.233 | 511.197 | 0.153 | 0.004 |
| 1.643 | 4.312  | 0.005 | 0.152 | 0.140 | 510.334 | 0.152 | 0.004 |
| 0.957 | 2.295  | 0.005 | 0.055 | 0.051 | 511.392 | 0.153 | 0.004 |
| 8.076 | 6.377  | 0.005 | 0.741 | 0.682 | 558.888 | 0.167 | 0.005 |
| 4.189 | 7.494  | 0.005 | 0.630 | 0.580 | 516.843 | 0.154 | 0.004 |
| 3.479 | 6.849  | 0.005 | 0.376 | 0.346 | 511.306 | 0.153 | 0.004 |
| 1.816 | 6.143  | 0.005 | 0.237 | 0.218 | 512.897 | 0.153 | 0.004 |
| 2.845 | 5.483  | 0.005 | 0.212 | 0.195 | 515.373 | 0.154 | 0.004 |
| 1.664 | 4.883  | 0.005 | 0.179 | 0.165 | 512.540 | 0.153 | 0.004 |
| 2.088 | 7.463  | 0.005 | 0.220 | 0.202 | 514.830 | 0.154 | 0.004 |
| 5.996 | 5.195  | 0.007 | 0.446 | 0.446 | 568.299 | 0.162 | 0.005 |
| 3.859 | 5.040  | 0.006 | 0.430 | 0.430 | 568.299 | 0.071 | 0.004 |
| 3.247 | 4.343  | 0.006 | 0.237 | 0.237 | 568.299 | 0.050 | 0.004 |
| 1.201 | 3.801  | 0.006 | 0.117 | 0.117 | 568.299 | 0.034 | 0.004 |
| 1.184 | 3.304  | 0.005 | 0.109 | 0.109 | 568.299 | 0.032 | 0.004 |
| 1.176 | 3.422  | 0.005 | 0.111 | 0.111 | 568.299 | 0.032 | 0.004 |
| 1.343 | 5.019  | 0.005 | 0.140 | 0.140 | 568.299 | 0.038 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.350 | 4.402 | 0.007 | 0.187 | 0.187 | 568.299 | 0.062 | 0.005 |
| 4.925 | 4.918 | 0.005 | 0.375 | 0.345 | 569.512 | 0.170 | 0.005 |
| 4.925 | 4.918 | 0.005 | 0.375 | 0.345 | 569.512 | 0.170 | 0.005 |
| 3.679 | 5.019 | 0.005 | 0.374 | 0.344 | 506.173 | 0.151 | 0.004 |
| 3.168 | 4.481 | 0.005 | 0.221 | 0.204 | 511.687 | 0.153 | 0.004 |
| 1.331 | 4.182 | 0.005 | 0.133 | 0.122 | 512.056 | 0.153 | 0.004 |
| 1.317 | 3.214 | 0.005 | 0.104 | 0.096 | 509.868 | 0.152 | 0.004 |
| 1.354 | 3.473 | 0.005 | 0.113 | 0.104 | 506.682 | 0.151 | 0.004 |
| 7.300 | 5.931 | 0.005 | 0.643 | 0.591 | 569.274 | 0.170 | 0.005 |
| 4.063 | 6.601 | 0.005 | 0.555 | 0.510 | 510.823 | 0.153 | 0.004 |
| 3.520 | 6.135 | 0.005 | 0.335 | 0.308 | 511.448 | 0.153 | 0.004 |
| 2.325 | 6.697 | 0.005 | 0.298 | 0.274 | 512.769 | 0.153 | 0.004 |
| 3.300 | 5.332 | 0.005 | 0.237 | 0.218 | 513.083 | 0.153 | 0.004 |
| 3.658 | 5.141 | 0.008 | 0.280 | 0.280 | 568.299 | 0.067 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.256 | 0.256 | 568.299 | 0.071 | 0.005 |
| 4.538 | 4.858 | 0.007 | 0.353 | 0.353 | 568.299 | 0.115 | 0.005 |
| 3.499 | 4.769 | 0.006 | 0.347 | 0.347 | 568.299 | 0.058 | 0.004 |
| 2.938 | 4.138 | 0.006 | 0.191 | 0.191 | 568.299 | 0.039 | 0.004 |
| 1.104 | 3.633 | 0.006 | 0.100 | 0.100 | 568.300 | 0.025 | 0.004 |
| 1.114 | 3.231 | 0.005 | 0.094 | 0.094 | 568.299 | 0.023 | 0.004 |
| 1.114 | 3.347 | 0.005 | 0.096 | 0.096 | 568.299 | 0.024 | 0.004 |
| 1.269 | 4.822 | 0.005 | 0.124 | 0.124 | 568.299 | 0.031 | 0.004 |
| 9.144 | 6.570 | 0.005 | 0.874 | 0.804 | 533.681 | 0.159 | 0.005 |
| 4.884 | 9.738 | 0.005 | 0.813 | 0.748 | 509.597 | 0.152 | 0.004 |
| 3.958 | 8.637 | 0.005 | 0.486 | 0.447 | 522.218 | 0.156 | 0.004 |
| 1.466 | 5.728 | 0.005 | 0.186 | 0.171 | 517.128 | 0.154 | 0.004 |
| 1.791 | 3.721 | 0.005 | 0.144 | 0.133 | 512.098 | 0.153 | 0.004 |
| 1.420 | 3.501 | 0.005 | 0.124 | 0.124 | 568.299 | 0.037 | 0.004 |
| 3.965 | 6.067 | 0.005 | 0.494 | 0.455 | 515.320 | 0.154 | 0.004 |
| 3.264 | 4.724 | 0.005 | 0.239 | 0.220 | 512.608 | 0.153 | 0.004 |
| 1.605 | 5.528 | 0.005 | 0.199 | 0.183 | 509.190 | 0.152 | 0.004 |
| 1.172 | 3.874 | 0.005 | 0.126 | 0.116 | 511.081 | 0.153 | 0.004 |
| 0.960 | 2.300 | 0.005 | 0.056 | 0.051 | 511.392 | 0.153 | 0.004 |
| 3.489 | 5.104 | 0.005 | 0.284 | 0.262 | 508.701 | 0.152 | 0.004 |
| 1.900 | 5.242 | 0.005 | 0.227 | 0.209 | 507.809 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.037 | 4.528 | 0.005 | 0.173 | 0.159 | 515.842 | 0.154 | 0.004 |
| 2.620 | 5.124 | 0.005 | 0.209 | 0.192 | 514.644 | 0.154 | 0.004 |
| 1.772 | 6.280 | 0.005 | 0.185 | 0.170 | 511.137 | 0.153 | 0.004 |
| 5.681 | 5.564 | 0.005 | 0.503 | 0.463 | 573.020 | 0.171 | 0.005 |
| 5.681 | 5.564 | 0.005 | 0.503 | 0.463 | 573.020 | 0.171 | 0.005 |
| 5.681 | 5.564 | 0.005 | 0.503 | 0.463 | 573.020 | 0.171 | 0.005 |
| 3.916 | 6.536 | 0.005 | 0.512 | 0.471 | 510.171 | 0.152 | 0.004 |
| 3.382 | 6.231 | 0.005 | 0.326 | 0.300 | 509.307 | 0.152 | 0.004 |
| 2.407 | 4.415 | 0.005 | 0.163 | 0.150 | 515.195 | 0.154 | 0.004 |
| 6.325 | 5.524 | 0.005 | 0.532 | 0.490 | 570.024 | 0.170 | 0.005 |
| 6.325 | 5.524 | 0.005 | 0.532 | 0.490 | 570.024 | 0.170 | 0.005 |
| 6.325 | 5.524 | 0.005 | 0.532 | 0.490 | 570.024 | 0.170 | 0.005 |
| 4.081 | 6.502 | 0.005 | 0.553 | 0.509 | 509.166 | 0.152 | 0.004 |
| 3.454 | 5.397 | 0.005 | 0.294 | 0.270 | 511.171 | 0.153 | 0.004 |
| 1.926 | 5.643 | 0.005 | 0.230 | 0.211 | 512.658 | 0.153 | 0.004 |
| 2.436 | 4.425 | 0.005 | 0.167 | 0.154 | 512.340 | 0.153 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.491 | 3.365 | 0.005 | 0.109 | 0.100 | 512.919 | 0.153 | 0.004 |
| 1.094 | 6.448 | 0.005 | 0.171 | 0.158 | 511.392 | 0.153 | 0.004 |
| 6.756 | 5.799 | 0.005 | 0.586 | 0.539 | 567.351 | 0.169 | 0.005 |
| 3.758 | 4.983 | 0.005 | 0.383 | 0.352 | 513.054 | 0.153 | 0.004 |
| 3.433 | 5.645 | 0.005 | 0.306 | 0.282 | 511.571 | 0.153 | 0.004 |
| 1.742 | 5.532 | 0.005 | 0.207 | 0.191 | 510.772 | 0.153 | 0.004 |
| 1.918 | 4.272 | 0.005 | 0.166 | 0.152 | 509.489 | 0.152 | 0.004 |
| 0.984 | 3.458 | 0.005 | 0.068 | 0.063 | 511.392 | 0.153 | 0.004 |
| 6.340 | 5.637 | 0.005 | 0.579 | 0.533 | 571.086 | 0.171 | 0.005 |
| 6.340 | 5.637 | 0.005 | 0.579 | 0.533 | 571.086 | 0.171 | 0.005 |
| 3.788 | 6.141 | 0.005 | 0.479 | 0.441 | 509.377 | 0.152 | 0.004 |
| 3.115 | 5.537 | 0.005 | 0.277 | 0.255 | 511.646 | 0.153 | 0.004 |
| 1.031 | 4.161 | 0.005 | 0.107 | 0.098 | 513.468 | 0.153 | 0.004 |
| 0.978 | 2.917 | 0.005 | 0.097 | 0.089 | 506.097 | 0.151 | 0.004 |
| 4.869 | 5.028 | 0.005 | 0.407 | 0.374 | 563.553 | 0.168 | 0.005 |
| 4.869 | 5.028 | 0.005 | 0.407 | 0.374 | 563.553 | 0.168 | 0.005 |
| 3.833 | 6.145 | 0.005 | 0.471 | 0.433 | 513.167 | 0.153 | 0.004 |
| 3.104 | 4.966 | 0.005 | 0.242 | 0.223 | 509.894 | 0.152 | 0.004 |
| 1.379 | 4.772 | 0.005 | 0.159 | 0.146 | 511.654 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.657 | 5.141 | 0.008 | 0.280 | 0.280 | 568.299 | 0.067 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.256 | 0.256 | 568.299 | 0.071 | 0.005 |
| 3.833 | 4.685 | 0.007 | 0.300 | 0.300 | 568.299 | 0.088 | 0.005 |
| 3.336 | 4.551 | 0.006 | 0.297 | 0.297 | 568.299 | 0.051 | 0.004 |
| 2.917 | 4.115 | 0.006 | 0.187 | 0.187 | 568.299 | 0.038 | 0.004 |



|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.986 | 0.690 | 0.006 | 0.010 | 0.010 | 568.299 | 0.010 | 0.004 |
| 3.658 | 5.196 | 0.008 | 0.311 | 0.311 | 568.299 | 0.075 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.270 | 0.270 | 568.299 | 0.080 | 0.005 |
| 4.775 | 4.916 | 0.007 | 0.371 | 0.371 | 568.300 | 0.124 | 0.005 |
| 3.554 | 4.842 | 0.006 | 0.364 | 0.364 | 568.300 | 0.061 | 0.004 |
| 2.983 | 4.202 | 0.006 | 0.200 | 0.200 | 568.299 | 0.041 | 0.004 |
| 1.122 | 3.693 | 0.006 | 0.104 | 0.104 | 568.299 | 0.027 | 0.004 |
| 1.134 | 3.272 | 0.005 | 0.097 | 0.097 | 568.299 | 0.024 | 0.004 |
| 1.134 | 3.389 | 0.005 | 0.099 | 0.099 | 568.299 | 0.025 | 0.004 |
| 1.293 | 4.878 | 0.005 | 0.127 | 0.127 | 568.299 | 0.032 | 0.004 |
| 5.290 | 5.365 | 0.005 | 0.481 | 0.443 | 569.921 | 0.170 | 0.005 |
| 5.290 | 5.365 | 0.005 | 0.481 | 0.443 | 569.921 | 0.170 | 0.005 |
| 5.290 | 5.365 | 0.005 | 0.481 | 0.443 | 569.921 | 0.170 | 0.005 |
| 3.809 | 6.272 | 0.005 | 0.467 | 0.430 | 513.505 | 0.153 | 0.004 |
| 3.006 | 4.630 | 0.005 | 0.216 | 0.198 | 511.394 | 0.153 | 0.004 |
| 1.650 | 4.932 | 0.005 | 0.171 | 0.157 | 512.823 | 0.153 | 0.004 |
| 3.245 | 5.031 | 0.005 | 0.195 | 0.179 | 517.285 | 0.154 | 0.004 |
| 4.933 | 5.190 | 0.005 | 0.431 | 0.397 | 569.488 | 0.170 | 0.005 |
| 3.366 | 4.280 | 0.005 | 0.247 | 0.228 | 512.086 | 0.153 | 0.004 |
| 2.859 | 3.420 | 0.005 | 0.133 | 0.122 | 510.854 | 0.153 | 0.004 |
| 1.012 | 2.463 | 0.005 | 0.058 | 0.054 | 512.164 | 0.153 | 0.004 |
| 0.958 | 3.521 | 0.005 | 0.077 | 0.071 | 506.435 | 0.151 | 0.004 |
| 4.238 | 9.844 | 0.005 | 0.564 | 0.519 | 513.055 | 0.153 | 0.004 |
| 2.720 | 7.984 | 0.005 | 0.394 | 0.362 | 514.736 | 0.154 | 0.004 |
| 6.102 | 7.997 | 0.005 | 0.373 | 0.343 | 519.147 | 0.155 | 0.004 |
| 2.761 | 7.158 | 0.005 | 0.259 | 0.238 | 512.525 | 0.153 | 0.004 |
| 2.901 | 6.556 | 0.005 | 0.222 | 0.222 | 568.299 | 0.059 | 0.004 |
| 7.834 | 6.112 | 0.005 | 0.675 | 0.621 | 567.672 | 0.170 | 0.005 |
| 7.834 | 6.112 | 0.005 | 0.675 | 0.621 | 567.672 | 0.170 | 0.005 |
| 4.274 | 7.012 | 0.005 | 0.606 | 0.558 | 505.023 | 0.151 | 0.004 |
| 3.588 | 6.097 | 0.005 | 0.341 | 0.313 | 510.468 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.480 | 5.369 | 0.005 | 0.183 | 0.169 | 508.913 | 0.152 | 0.004 |
| 2.332 | 5.020 | 0.005 | 0.190 | 0.174 | 506.372 | 0.151 | 0.004 |
| 1.789 | 4.556 | 0.005 | 0.179 | 0.165 | 495.310 | 0.148 | 0.004 |
| 1.462 | 6.713 | 0.005 | 0.197 | 0.181 | 510.045 | 0.152 | 0.004 |
| 4.137 | 7.105 | 0.005 | 0.535 | 0.492 | 524.560 | 0.157 | 0.004 |
| 3.809 | 7.765 | 0.005 | 0.415 | 0.382 | 518.829 | 0.155 | 0.004 |
| 3.008 | 8.663 | 0.005 | 0.395 | 0.364 | 507.570 | 0.152 | 0.004 |
| 3.788 | 6.086 | 0.005 | 0.246 | 0.226 | 511.947 | 0.153 | 0.004 |
| 2.685 | 4.839 | 0.005 | 0.182 | 0.167 | 512.084 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 5.068 | 4.943 | 0.007 | 0.382 | 0.382 | 568.299 | 0.131 | 0.005 |
| 3.624 | 4.791 | 0.006 | 0.371 | 0.371 | 568.299 | 0.062 | 0.004 |
| 3.052 | 4.136 | 0.006 | 0.205 | 0.205 | 568.299 | 0.042 | 0.004 |
| 1.371 | 4.365 | 0.007 | 0.127 | 0.127 | 686.695 | 0.034 | 0.004 |
| 4.004 | 4.436 | 0.005 | 0.267 | 0.246 | 571.420 | 0.171 | 0.005 |
| 4.004 | 4.436 | 0.005 | 0.267 | 0.246 | 571.420 | 0.171 | 0.005 |
| 3.338 | 3.811 | 0.005 | 0.220 | 0.203 | 511.595 | 0.153 | 0.004 |
| 4.692 | 5.255 | 0.006 | 0.402 | 0.370 | 576.771 | 0.172 | 0.005 |
| 3.575 | 5.374 | 0.005 | 0.378 | 0.348 | 510.142 | 0.152 | 0.004 |
| 3.027 | 5.733 | 0.005 | 0.276 | 0.254 | 510.548 | 0.152 | 0.004 |
| 1.442 | 5.112 | 0.005 | 0.151 | 0.139 | 516.058 | 0.154 | 0.004 |
| 1.513 | 3.900 | 0.005 | 0.127 | 0.116 | 508.399 | 0.152 | 0.004 |
| 1.024 | 3.287 | 0.005 | 0.104 | 0.096 | 511.116 | 0.153 | 0.004 |
| 6.754 | 5.772 | 0.005 | 0.611 | 0.562 | 569.106 | 0.170 | 0.005 |
| 6.754 | 5.772 | 0.005 | 0.611 | 0.562 | 569.106 | 0.170 | 0.005 |
| 6.754 | 5.772 | 0.005 | 0.611 | 0.562 | 569.106 | 0.170 | 0.005 |
| 4.097 | 6.886 | 0.005 | 0.610 | 0.561 | 513.625 | 0.153 | 0.004 |
| 3.982 | 8.697 | 0.005 | 0.479 | 0.441 | 512.549 | 0.153 | 0.004 |
| 2.078 | 6.745 | 0.005 | 0.268 | 0.246 | 509.304 | 0.152 | 0.004 |
| 5.791 | 5.320 | 0.005 | 0.477 | 0.439 | 558.709 | 0.167 | 0.005 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 5.791 | 5.320 | 0.005 | 0.477 | 0.439 | 558.709 | 0.167 | 0.005 |
| 3.832 | 5.422 | 0.005 | 0.424 | 0.390 | 517.365 | 0.155 | 0.004 |
| 3.256 | 4.836 | 0.005 | 0.244 | 0.225 | 508.682 | 0.152 | 0.004 |
| 1.374 | 4.783 | 0.005 | 0.155 | 0.143 | 509.627 | 0.152 | 0.004 |
| 1.884 | 4.348 | 0.005 | 0.149 | 0.137 | 511.869 | 0.153 | 0.004 |
| 1.823 | 4.185 | 0.005 | 0.152 | 0.140 | 506.147 | 0.151 | 0.004 |
| 5.323 | 5.406 | 0.005 | 0.493 | 0.454 | 571.667 | 0.171 | 0.005 |
| 5.323 | 5.406 | 0.005 | 0.493 | 0.454 | 571.667 | 0.171 | 0.005 |
| 5.323 | 5.406 | 0.005 | 0.493 | 0.454 | 571.667 | 0.171 | 0.005 |
| 4.014 | 7.179 | 0.005 | 0.562 | 0.517 | 515.396 | 0.154 | 0.004 |
| 3.684 | 7.674 | 0.005 | 0.396 | 0.364 | 506.943 | 0.151 | 0.004 |
| 2.080 | 6.510 | 0.005 | 0.260 | 0.239 | 512.433 | 0.153 | 0.004 |
| 2.051 | 4.383 | 0.005 | 0.163 | 0.150 | 508.330 | 0.152 | 0.004 |
| 0.965 | 1.623 | 0.005 | 0.053 | 0.049 | 514.400 | 0.154 | 0.004 |
| 3.658 | 5.196 | 0.008 | 0.311 | 0.311 | 568.299 | 0.075 | 0.005 |
| 2.666 | 4.890 | 0.007 | 0.270 | 0.270 | 568.299 | 0.080 | 0.005 |
| 5.562 | 5.113 | 0.007 | 0.430 | 0.430 | 568.300 | 0.154 | 0.005 |
| 3.738 | 5.077 | 0.006 | 0.419 | 0.419 | 568.299 | 0.069 | 0.004 |
| 3.133 | 4.408 | 0.006 | 0.230 | 0.230 | 568.299 | 0.048 | 0.004 |
| 1.178 | 3.880 | 0.006 | 0.116 | 0.116 | 568.299 | 0.031 | 0.004 |
| 1.176 | 3.398 | 0.005 | 0.108 | 0.108 | 568.299 | 0.029 | 0.004 |
| 3.489 | 5.104 | 0.005 | 0.284 | 0.262 | 508.701 | 0.152 | 0.004 |
| 1.900 | 5.242 | 0.005 | 0.227 | 0.209 | 507.809 | 0.152 | 0.004 |
| 2.037 | 4.528 | 0.005 | 0.173 | 0.159 | 515.842 | 0.154 | 0.004 |
| 2.620 | 5.124 | 0.005 | 0.209 | 0.192 | 514.644 | 0.154 | 0.004 |
| 1.772 | 6.280 | 0.005 | 0.185 | 0.170 | 511.137 | 0.153 | 0.004 |

| 2016             |              | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|--------------|---------|---------|---------|---------|---------|---------|---------|
| <b>Equipment</b> | <b>MaxHP</b> | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     |
| Aerial Lifts     | 15           | 0.228   | 3.197   | 3.676   | 0.005   | 0.105   | 0.096   | 562.996 |
| Aerial Lifts     | 25           | 0.228   | 3.197   | 3.676   | 0.005   | 0.105   | 0.096   | 562.996 |
| Aerial Lifts     | 50           | 0.228   | 3.197   | 3.676   | 0.005   | 0.105   | 0.096   | 562.996 |
| Aerial Lifts     | 120          | 0.166   | 3.201   | 2.722   | 0.005   | 0.112   | 0.103   | 506.211 |
| Aerial Lifts     | 500          | 0.243   | 0.992   | 4.639   | 0.005   | 0.103   | 0.095   | 506.147 |
| Aerial Lifts     | 750          | 0.257   | 1.089   | 3.015   | 0.005   | 0.088   | 0.088   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 15           | 0.809   | 3.622   | 5.023   | 0.008   | 0.289   | 0.289   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 25           | 0.855   | 2.604   | 4.803   | 0.007   | 0.255   | 0.255   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 50           | 1.670   | 5.779   | 5.042   | 0.007   | 0.415   | 0.415   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 120          | 0.744   | 3.804   | 4.790   | 0.006   | 0.397   | 0.397   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 175          | 0.522   | 3.211   | 4.052   | 0.006   | 0.219   | 0.219   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 250          | 0.359   | 1.182   | 3.553   | 0.006   | 0.109   | 0.109   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 500          | 0.337   | 1.155   | 3.080   | 0.005   | 0.102   | 0.102   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 750          | 0.340   | 1.155   | 3.201   | 0.005   | 0.104   | 0.104   | 568.299 |
| Air Compressors  |              |         |         |         |         |         |         |         |
|                  | 1000         | 0.383   | 1.295   | 4.854   | 0.005   | 0.131   | 0.131   | 568.299 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 15           | 0.869   | 4.797   | 5.298   | 0.006   | 0.383   | 0.352   | 579.326 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 25           | 0.869   | 4.797   | 5.298   | 0.006   | 0.383   | 0.352   | 579.326 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 50           | 0.869   | 4.797   | 5.298   | 0.006   | 0.383   | 0.352   | 579.326 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 120          | 0.307   | 3.326   | 3.821   | 0.005   | 0.221   | 0.204   | 491.655 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 175          | 0.286   | 3.023   | 3.616   | 0.005   | 0.162   | 0.149   | 511.433 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 250          | 0.193   | 1.133   | 2.902   | 0.005   | 0.085   | 0.078   | 502.128 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 500          | 0.171   | 1.133   | 2.510   | 0.005   | 0.077   | 0.071   | 494.761 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 750          | 0.153   | 1.120   | 2.166   | 0.005   | 0.072   | 0.066   | 514.883 |
| Bore/Drill Rigs  |              |         |         |         |         |         |         |         |
|                  | 1000         | 0.115   | 0.964   | 3.008   | 0.005   | 0.059   | 0.055   | 506.000 |

|                          |      |       |       |       |       |       |       |         |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Cement and Mortar Mixers | 15   | 0.662 | 3.469 | 4.153 | 0.008 | 0.167 | 0.167 | 568.300 |
| Cement and Mortar Mixers | 25   | 0.788 | 2.496 | 4.636 | 0.007 | 0.227 | 0.227 | 568.299 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 50   | 1.322 | 5.029 | 4.818 | 0.007 | 0.350 | 0.350 | 568.300 |
| Concrete/Industrial Saws | 120  | 0.620 | 3.620 | 4.432 | 0.006 | 0.333 | 0.333 | 568.300 |
| Concrete/Industrial Saws | 175  | 0.435 | 3.074 | 3.708 | 0.006 | 0.186 | 0.186 | 568.299 |
| Cranes                   | 50   | 2.130 | 7.268 | 6.110 | 0.005 | 0.610 | 0.561 | 555.441 |
| Cranes                   | 120  | 1.154 | 4.797 | 9.608 | 0.005 | 0.710 | 0.653 | 503.599 |
| Cranes                   | 175  | 0.744 | 3.862 | 7.887 | 0.005 | 0.427 | 0.393 | 508.952 |
| Cranes                   | 250  | 0.623 | 2.582 | 7.381 | 0.005 | 0.335 | 0.308 | 507.155 |
| Cranes                   | 500  | 0.443 | 3.834 | 5.649 | 0.005 | 0.233 | 0.215 | 506.088 |
| Cranes                   | 750  | 0.292 | 1.650 | 4.314 | 0.005 | 0.153 | 0.141 | 505.070 |
| Cranes                   | 9999 | 0.142 | 0.966 | 2.309 | 0.005 | 0.057 | 0.052 | 506.147 |
| Crawler Tractors         | 50   | 2.519 | 8.104 | 6.317 | 0.005 | 0.733 | 0.674 | 553.214 |
| Crawler Tractors         | 120  | 0.869 | 4.185 | 7.346 | 0.005 | 0.619 | 0.570 | 511.268 |
| Crawler Tractors         | 175  | 0.624 | 3.482 | 6.721 | 0.005 | 0.371 | 0.341 | 506.034 |
| Crawler Tractors         | 250  | 0.449 | 1.803 | 6.047 | 0.005 | 0.233 | 0.215 | 507.355 |
| Crawler Tractors         | 500  | 0.398 | 2.744 | 5.279 | 0.005 | 0.205 | 0.188 | 510.339 |
| Crawler Tractors         | 750  | 0.346 | 1.621 | 4.724 | 0.005 | 0.174 | 0.160 | 507.253 |
| Crawler Tractors         | 1000 | 0.483 | 2.094 | 7.499 | 0.005 | 0.222 | 0.204 | 509.667 |
| Crushing/Proc. Equipment | 50   | 1.593 | 5.801 | 5.006 | 0.007 | 0.399 | 0.399 | 568.299 |
| Crushing/Proc. Equipment | 120  | 0.720 | 3.823 | 4.631 | 0.006 | 0.379 | 0.379 | 568.299 |
| Crushing/Proc. Equipment | 175  | 0.513 | 3.241 | 3.883 | 0.006 | 0.210 | 0.210 | 568.299 |
| Crushing/Proc. Equipment | 250  | 0.360 | 1.178 | 3.381 | 0.006 | 0.105 | 0.105 | 568.299 |
| Crushing/Proc. Equipment | 500  | 0.340 | 1.146 | 2.928 | 0.005 | 0.098 | 0.098 | 568.299 |
| Crushing/Proc. Equipment | 750  | 0.339 | 1.140 | 3.021 | 0.005 | 0.099 | 0.099 | 568.299 |
| Crushing/Proc. Equipment | 9999 | 0.397 | 1.274 | 4.700 | 0.005 | 0.127 | 0.127 | 568.299 |

|                      |      |       |       |       |       |       |       |         |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Dumpers/Tenders      | 25   | 0.690 | 2.342 | 4.378 | 0.007 | 0.175 | 0.175 | 568.299 |
| Excavators           | 25   | 0.815 | 4.942 | 4.824 | 0.005 | 0.359 | 0.330 | 563.803 |
| Excavators           | 50   | 0.815 | 4.942 | 4.824 | 0.005 | 0.359 | 0.330 | 563.803 |
| Excavators           | 120  | 0.476 | 3.661 | 4.708 | 0.005 | 0.344 | 0.317 | 500.966 |
| Excavators           | 175  | 0.358 | 3.158 | 4.081 | 0.005 | 0.201 | 0.185 | 506.495 |
| Excavators           | 250  | 0.262 | 1.277 | 3.667 | 0.005 | 0.116 | 0.107 | 506.544 |
| Excavators           | 500  | 0.213 | 1.233 | 2.815 | 0.005 | 0.091 | 0.083 | 504.290 |
| Excavators           | 750  | 0.242 | 1.349 | 3.358 | 0.005 | 0.110 | 0.101 | 501.660 |
| Forklifts            | 50   | 1.864 | 6.935 | 5.662 | 0.005 | 0.583 | 0.537 | 563.435 |
| Forklifts            | 120  | 0.723 | 4.023 | 6.222 | 0.005 | 0.520 | 0.479 | 505.583 |
| Forklifts            | 175  | 0.530 | 3.473 | 5.675 | 0.005 | 0.310 | 0.285 | 506.203 |
| Forklifts            | 250  | 0.539 | 2.226 | 6.353 | 0.005 | 0.280 | 0.258 | 507.510 |
| Forklifts            | 500  | 0.353 | 2.572 | 4.042 | 0.005 | 0.174 | 0.160 | 507.821 |
| Generator Sets       | 15   | 0.720 | 3.622 | 4.978 | 0.008 | 0.264 | 0.264 | 568.299 |
| Generator Sets       | 25   | 0.773 | 2.604 | 4.803 | 0.007 | 0.244 | 0.244 | 568.299 |
| Generator Sets       | 50   | 1.146 | 4.410 | 4.685 | 0.007 | 0.318 | 0.318 | 568.299 |
| Generator Sets       | 120  | 0.583 | 3.469 | 4.410 | 0.006 | 0.309 | 0.309 | 568.299 |
| Generator Sets       | 175  | 0.396 | 2.934 | 3.731 | 0.006 | 0.170 | 0.170 | 568.299 |
| Generator Sets       | 250  | 0.265 | 1.081 | 3.259 | 0.006 | 0.090 | 0.090 | 568.299 |
| Generator Sets       | 500  | 0.239 | 1.077 | 2.882 | 0.005 | 0.084 | 0.084 | 568.299 |
| Generator Sets       | 750  | 0.247 | 1.077 | 2.989 | 0.005 | 0.086 | 0.086 | 568.300 |
| Generator Sets       | 9999 | 0.324 | 1.204 | 4.542 | 0.005 | 0.113 | 0.113 | 568.299 |
| Graders              | 50   | 3.085 | 9.106 | 6.520 | 0.005 | 0.864 | 0.795 | 528.244 |
| Graders              | 120  | 1.193 | 4.829 | 9.415 | 0.005 | 0.780 | 0.718 | 503.161 |
| Graders              | 175  | 0.810 | 3.916 | 8.250 | 0.005 | 0.464 | 0.426 | 516.131 |
| Graders              | 250  | 0.398 | 1.459 | 5.663 | 0.005 | 0.184 | 0.169 | 511.696 |
| Graders              | 500  | 0.334 | 1.774 | 3.686 | 0.005 | 0.144 | 0.133 | 506.506 |
| Graders              | 750  | 0.393 | 1.367 | 3.154 | 0.005 | 0.112 | 0.112 | 568.299 |
| Off-Highway Tractors | 120  | 0.625 | 3.925 | 5.647 | 0.005 | 0.454 | 0.418 | 509.447 |
| Off-Highway Tractors | 175  | 0.391 | 3.278 | 4.511 | 0.005 | 0.229 | 0.211 | 507.629 |
| Off-Highway Tractors | 250  | 0.359 | 1.472 | 4.930 | 0.005 | 0.171 | 0.157 | 504.123 |
| Off-Highway Tractors | 750  | 0.252 | 1.143 | 3.573 | 0.005 | 0.117 | 0.108 | 505.762 |
| Off-Highway Tractors | 1000 | 0.107 | 0.973 | 2.320 | 0.005 | 0.057 | 0.053 | 506.147 |
| Off-Highway Trucks   | 175  | 0.473 | 3.459 | 4.647 | 0.005 | 0.258 | 0.237 | 503.552 |
| Off-Highway Trucks   | 250  | 0.446 | 1.824 | 4.826 | 0.005 | 0.208 | 0.191 | 502.473 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Off-Highway Trucks                 | 500  | 0.351 | 1.885 | 4.048 | 0.005 | 0.153 | 0.141 | 509.860 |
| Off-Highway Trucks                 | 750  | 0.418 | 2.436 | 4.642 | 0.005 | 0.187 | 0.172 | 508.392 |
| Off-Highway Trucks                 | 1000 | 0.393 | 1.707 | 6.035 | 0.005 | 0.175 | 0.161 | 505.722 |
| Other Construction Equipment       | 15   | 1.281 | 5.677 | 5.499 | 0.005 | 0.492 | 0.453 | 566.978 |
| Other Construction Equipment       | 25   | 1.281 | 5.677 | 5.499 | 0.005 | 0.492 | 0.453 | 566.978 |
| Other Construction Equipment       | 50   | 1.281 | 5.677 | 5.499 | 0.005 | 0.492 | 0.453 | 566.978 |
| Other Construction Equipment       | 120  | 0.703 | 3.909 | 6.325 | 0.005 | 0.496 | 0.456 | 505.349 |
| Other Construction Equipment       | 175  | 0.524 | 3.357 | 5.818 | 0.005 | 0.306 | 0.282 | 503.964 |
| Other Construction Equipment       | 500  | 0.308 | 2.285 | 4.090 | 0.005 | 0.151 | 0.139 | 509.706 |
| Other General Industrial Equipment | 15   | 1.421 | 6.259 | 5.407 | 0.005 | 0.507 | 0.466 | 564.178 |
| Other General Industrial Equipment | 25   | 1.421 | 6.259 | 5.407 | 0.005 | 0.507 | 0.466 | 564.178 |
| Other General Industrial Equipment | 50   | 1.421 | 6.259 | 5.407 | 0.005 | 0.507 | 0.466 | 564.178 |
| Other General Industrial Equipment | 120  | 0.716 | 4.045 | 6.144 | 0.005 | 0.518 | 0.476 | 503.944 |
| Other General Industrial Equipment | 175  | 0.470 | 3.437 | 5.055 | 0.005 | 0.276 | 0.254 | 505.928 |
| Other General Industrial Equipment | 250  | 0.437 | 1.867 | 5.407 | 0.005 | 0.217 | 0.200 | 507.400 |
| Other General Industrial Equipment | 500  | 0.342 | 2.367 | 4.150 | 0.005 | 0.159 | 0.146 | 507.085 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Other General Industrial Equipment | 750  | 0.243 | 1.491 | 3.102 | 0.005 | 0.100 | 0.092 | 507.658 |
| Other General Industrial Equipment | 1000 | 0.242 | 1.045 | 4.746 | 0.005 | 0.112 | 0.103 | 506.147 |
| Other Material Handling Equipment  | 50   | 1.765 | 6.892 | 5.802 | 0.005 | 0.593 | 0.546 | 561.532 |
| Other Material Handling Equipment  | 120  | 0.514 | 3.766 | 4.798 | 0.005 | 0.367 | 0.338 | 507.792 |
| Other Material Handling Equipment  | 175  | 0.489 | 3.418 | 5.212 | 0.005 | 0.280 | 0.257 | 506.324 |
| Other Material Handling Equipment  | 250  | 0.398 | 1.643 | 5.196 | 0.005 | 0.189 | 0.174 | 505.534 |
| Other Material Handling Equipment  | 500  | 0.323 | 1.871 | 4.053 | 0.005 | 0.156 | 0.143 | 504.263 |
| Other Material Handling Equipment  | 9999 | 0.159 | 0.997 | 3.489 | 0.005 | 0.070 | 0.065 | 506.147 |
| Pavers                             | 25   | 1.827 | 6.340 | 5.579 | 0.005 | 0.569 | 0.523 | 565.234 |
| Pavers                             | 50   | 1.827 | 6.340 | 5.579 | 0.005 | 0.569 | 0.523 | 565.234 |
| Pavers                             | 120  | 0.650 | 3.769 | 5.886 | 0.005 | 0.457 | 0.420 | 503.780 |
| Pavers                             | 175  | 0.433 | 3.080 | 4.874 | 0.005 | 0.242 | 0.223 | 506.540 |
| Pavers                             | 250  | 0.214 | 1.036 | 4.024 | 0.005 | 0.104 | 0.096 | 508.070 |
| Pavers                             | 500  | 0.180 | 0.983 | 2.885 | 0.005 | 0.096 | 0.089 | 500.936 |
| Paving Equipment                   | 25   | 0.991 | 4.937 | 4.985 | 0.005 | 0.404 | 0.371 | 557.706 |
| Paving Equipment                   | 50   | 0.991 | 4.937 | 4.985 | 0.005 | 0.404 | 0.371 | 557.706 |
| Paving Equipment                   | 120  | 0.623 | 3.796 | 5.733 | 0.005 | 0.438 | 0.403 | 507.910 |
| Paving Equipment                   | 175  | 0.372 | 3.081 | 4.322 | 0.005 | 0.215 | 0.197 | 504.820 |
| Paving Equipment                   | 250  | 0.297 | 1.331 | 4.428 | 0.005 | 0.148 | 0.136 | 506.197 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Pressure Washers                   | 15   | 0.720 | 3.622 | 4.978 | 0.008 | 0.264 | 0.264 | 568.299 |
| Pressure Washers                   | 25   | 0.773 | 2.604 | 4.803 | 0.007 | 0.244 | 0.244 | 568.299 |
| Pressure Washers                   | 50   | 0.865 | 3.729 | 4.515 | 0.007 | 0.269 | 0.269 | 568.299 |
| Pressure Washers                   | 120  | 0.504 | 3.308 | 4.209 | 0.006 | 0.264 | 0.264 | 568.299 |
| Pressure Washers                   | 175  | 0.386 | 2.913 | 3.726 | 0.006 | 0.168 | 0.168 | 568.299 |



|                         |      |       |       |       |       |       |       |         |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Pressure Washers        | 250  | 0.107 | 0.986 | 0.399 | 0.006 | 0.009 | 0.009 | 568.299 |
| Pumps                   | 15   | 0.809 | 3.622 | 5.023 | 0.008 | 0.289 | 0.289 | 568.299 |
| Pumps                   | 25   | 0.855 | 2.604 | 4.803 | 0.007 | 0.255 | 0.255 | 568.299 |
| Pumps                   | 50   | 1.240 | 4.640 | 4.742 | 0.007 | 0.335 | 0.335 | 568.299 |
| Pumps                   | 120  | 0.610 | 3.523 | 4.478 | 0.006 | 0.325 | 0.325 | 568.299 |
| Pumps                   | 175  | 0.417 | 2.978 | 3.789 | 0.006 | 0.179 | 0.179 | 568.299 |
| Pumps                   | 250  | 0.280 | 1.099 | 3.313 | 0.006 | 0.094 | 0.094 | 568.299 |
| Pumps                   | 500  | 0.254 | 1.093 | 2.919 | 0.005 | 0.088 | 0.088 | 568.299 |
| Pumps                   | 750  | 0.262 | 1.093 | 3.028 | 0.005 | 0.089 | 0.089 | 568.299 |
| Pumps                   | 9999 | 0.335 | 1.223 | 4.596 | 0.005 | 0.116 | 0.116 | 568.300 |
| Rollers                 | 15   | 1.259 | 5.231 | 5.236 | 0.005 | 0.459 | 0.423 | 563.972 |
| Rollers                 | 25   | 1.259 | 5.231 | 5.236 | 0.005 | 0.459 | 0.423 | 563.972 |
| Rollers                 | 50   | 1.259 | 5.231 | 5.236 | 0.005 | 0.459 | 0.423 | 563.972 |
| Rollers                 | 120  | 0.628 | 3.755 | 5.806 | 0.005 | 0.428 | 0.393 | 508.199 |
| Rollers                 | 175  | 0.338 | 2.993 | 4.239 | 0.005 | 0.197 | 0.181 | 505.904 |
| Rollers                 | 250  | 0.308 | 1.507 | 4.395 | 0.005 | 0.150 | 0.138 | 507.694 |
| Rollers                 | 500  | 0.334 | 2.956 | 4.456 | 0.005 | 0.173 | 0.159 | 513.415 |
| Rough Terrain Forklifts | 50   | 1.159 | 4.918 | 5.099 | 0.005 | 0.415 | 0.382 | 563.360 |
| Rough Terrain Forklifts | 120  | 0.302 | 3.342 | 3.840 | 0.005 | 0.213 | 0.196 | 507.066 |
| Rough Terrain Forklifts | 175  | 0.209 | 2.865 | 3.209 | 0.005 | 0.124 | 0.115 | 505.596 |
| Rough Terrain Forklifts | 250  | 0.144 | 1.018 | 2.468 | 0.005 | 0.059 | 0.054 | 506.896 |
| Rough Terrain Forklifts | 500  | 0.178 | 0.962 | 3.542 | 0.005 | 0.078 | 0.072 | 501.213 |
| Rubber Tired Dozers     | 175  | 0.968 | 4.249 | 9.853 | 0.005 | 0.566 | 0.521 | 507.774 |
| Rubber Tired Dozers     | 250  | 0.736 | 2.729 | 7.995 | 0.005 | 0.395 | 0.364 | 509.462 |
| Rubber Tired Dozers     | 500  | 0.688 | 5.828 | 7.710 | 0.005 | 0.359 | 0.330 | 513.311 |
| Rubber Tired Dozers     | 750  | 0.523 | 2.765 | 7.168 | 0.005 | 0.260 | 0.239 | 507.260 |
| Rubber Tired Dozers     | 1000 | 0.631 | 2.723 | 6.277 | 0.005 | 0.208 | 0.208 | 568.300 |
| Rubber Tired Loaders    | 25   | 2.055 | 7.791 | 6.053 | 0.005 | 0.660 | 0.607 | 561.903 |
| Rubber Tired Loaders    | 50   | 2.055 | 7.791 | 6.053 | 0.005 | 0.660 | 0.607 | 561.903 |
| Rubber Tired Loaders    | 120  | 0.803 | 4.212 | 6.583 | 0.005 | 0.565 | 0.520 | 499.594 |
| Rubber Tired Loaders    | 175  | 0.565 | 3.562 | 5.726 | 0.005 | 0.319 | 0.294 | 505.131 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Rubber Tired Loaders      | 250  | 0.393 | 1.452 | 5.115 | 0.005 | 0.175 | 0.161 | 503.654 |
| Rubber Tired Loaders      | 500  | 0.391 | 2.155 | 4.627 | 0.005 | 0.174 | 0.160 | 500.431 |
| Rubber Tired Loaders      | 750  | 0.373 | 1.703 | 4.172 | 0.005 | 0.164 | 0.151 | 491.918 |
| Rubber Tired Loaders      | 1000 | 0.425 | 1.464 | 6.724 | 0.005 | 0.198 | 0.182 | 504.780 |
| Scrapers                  | 120  | 0.742 | 4.173 | 7.143 | 0.005 | 0.543 | 0.500 | 519.167 |
| Scrapers                  | 175  | 0.688 | 3.781 | 7.384 | 0.005 | 0.397 | 0.365 | 513.436 |
| Scrapers                  | 250  | 0.684 | 2.840 | 8.109 | 0.005 | 0.367 | 0.338 | 502.255 |
| Scrapers                  | 500  | 0.452 | 3.606 | 5.757 | 0.005 | 0.232 | 0.214 | 506.350 |
| Scrapers                  | 750  | 0.340 | 2.482 | 4.484 | 0.005 | 0.168 | 0.154 | 506.638 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Signal Boards             | 50   | 1.306 | 4.921 | 4.761 | 0.007 | 0.343 | 0.343 | 568.299 |
| Signal Boards             | 120  | 0.618 | 3.594 | 4.414 | 0.006 | 0.330 | 0.330 | 568.299 |
| Signal Boards             | 175  | 0.430 | 3.047 | 3.708 | 0.006 | 0.183 | 0.183 | 568.299 |
| Signal Boards             | 250  | 0.354 | 1.344 | 3.894 | 0.007 | 0.114 | 0.114 | 686.695 |
| Skid Steer Loaders        | 25   | 0.599 | 3.957 | 4.268 | 0.005 | 0.241 | 0.221 | 565.228 |
| Skid Steer Loaders        | 50   | 0.599 | 3.957 | 4.268 | 0.005 | 0.241 | 0.221 | 565.228 |
| Skid Steer Loaders        | 120  | 0.273 | 3.328 | 3.534 | 0.005 | 0.197 | 0.182 | 506.297 |
| Surfacing Equipment       | 50   | 1.045 | 4.763 | 5.273 | 0.006 | 0.406 | 0.374 | 570.815 |
| Surfacing Equipment       | 120  | 0.522 | 3.550 | 5.051 | 0.005 | 0.349 | 0.321 | 505.087 |
| Surfacing Equipment       | 175  | 0.458 | 3.006 | 5.458 | 0.005 | 0.265 | 0.244 | 504.558 |
| Surfacing Equipment       | 250  | 0.307 | 1.429 | 5.048 | 0.005 | 0.148 | 0.137 | 510.706 |
| Surfacing Equipment       | 500  | 0.217 | 1.425 | 3.468 | 0.005 | 0.111 | 0.102 | 502.471 |
| Surfacing Equipment       | 750  | 0.162 | 1.000 | 2.880 | 0.005 | 0.093 | 0.085 | 506.967 |
| Sweepers/Scrubbers        | 15   | 1.781 | 6.785 | 5.726 | 0.005 | 0.603 | 0.555 | 563.269 |
| Sweepers/Scrubbers        | 25   | 1.781 | 6.785 | 5.726 | 0.005 | 0.603 | 0.555 | 563.269 |
| Sweepers/Scrubbers        | 50   | 1.781 | 6.785 | 5.726 | 0.005 | 0.603 | 0.555 | 563.269 |
| Sweepers/Scrubbers        | 120  | 0.783 | 4.059 | 6.454 | 0.005 | 0.571 | 0.525 | 508.357 |
| Sweepers/Scrubbers        | 175  | 0.746 | 3.839 | 7.787 | 0.005 | 0.419 | 0.385 | 507.292 |
| Sweepers/Scrubbers        | 250  | 0.521 | 2.089 | 6.782 | 0.005 | 0.270 | 0.248 | 504.080 |
| Tractors/Loaders/Backhoes | 25   | 1.250 | 5.741 | 5.214 | 0.005 | 0.455 | 0.418 | 553.400 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Tractors/Loaders/Backhoes | 50   | 1.250 | 5.741 | 5.214 | 0.005 | 0.455 | 0.418 | 553.400 |
| Tractors/Loaders/Backhoes | 120  | 0.538 | 3.811 | 5.142 | 0.005 | 0.396 | 0.364 | 511.346 |
| Tractors/Loaders/Backhoes | 175  | 0.389 | 3.232 | 4.379 | 0.005 | 0.222 | 0.204 | 502.629 |
| Tractors/Loaders/Backhoes | 250  | 0.311 | 1.347 | 4.426 | 0.005 | 0.145 | 0.133 | 504.401 |
| Tractors/Loaders/Backhoes | 500  | 0.284 | 1.786 | 3.787 | 0.005 | 0.131 | 0.121 | 505.270 |
| Tractors/Loaders/Backhoes | 750  | 0.300 | 1.674 | 4.022 | 0.005 | 0.144 | 0.133 | 500.955 |
| Trenchers                 | 15   | 1.219 | 5.285 | 5.298 | 0.005 | 0.475 | 0.437 | 565.994 |
| Trenchers                 | 25   | 1.219 | 5.285 | 5.298 | 0.005 | 0.475 | 0.437 | 565.994 |
| Trenchers                 | 50   | 1.219 | 5.285 | 5.298 | 0.005 | 0.475 | 0.437 | 565.994 |
| Trenchers                 | 120  | 0.788 | 3.988 | 6.902 | 0.005 | 0.541 | 0.498 | 509.903 |
| Trenchers                 | 175  | 0.583 | 3.507 | 6.503 | 0.005 | 0.328 | 0.302 | 501.781 |
| Trenchers                 | 250  | 0.487 | 2.030 | 6.312 | 0.005 | 0.251 | 0.231 | 507.145 |
| Trenchers                 | 500  | 0.296 | 1.966 | 4.099 | 0.005 | 0.150 | 0.138 | 504.410 |
| Trenchers                 | 750  | 0.120 | 0.971 | 1.630 | 0.005 | 0.054 | 0.050 | 509.143 |
| Welders                   | 15   | 0.809 | 3.622 | 5.023 | 0.008 | 0.289 | 0.289 | 568.299 |
| Welders                   | 25   | 0.855 | 2.604 | 4.803 | 0.007 | 0.255 | 0.255 | 568.299 |
| Welders                   | 50   | 1.540 | 5.395 | 4.936 | 0.007 | 0.389 | 0.389 | 568.299 |
| Welders                   | 120  | 0.699 | 3.705 | 4.692 | 0.006 | 0.375 | 0.375 | 568.300 |
| Welders                   | 175  | 0.486 | 3.128 | 3.973 | 0.006 | 0.206 | 0.206 | 568.299 |
| Welders                   | 250  | 0.330 | 1.153 | 3.481 | 0.006 | 0.104 | 0.104 | 568.299 |
| Welders                   | 500  | 0.306 | 1.134 | 3.032 | 0.005 | 0.097 | 0.097 | 568.299 |
| Water Trucks              | 175  | 0.473 | 3.459 | 4.647 | 0.005 | 0.258 | 0.237 | 503.552 |
| Water Trucks              | 250  | 0.446 | 1.824 | 4.826 | 0.005 | 0.208 | 0.191 | 502.473 |
| Water Trucks              | 500  | 0.351 | 1.885 | 4.048 | 0.005 | 0.153 | 0.141 | 509.860 |
| Water Trucks              | 750  | 0.418 | 2.436 | 4.642 | 0.005 | 0.187 | 0.172 | 508.392 |
| Water Trucks              | 1000 | 0.393 | 1.707 | 6.035 | 0.005 | 0.175 | 0.161 | 505.722 |

2017

| g/hp/hr | g/hp/hr |
|---------|---------|
| CH4     | N2O     |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.153   | 0.004   |
| 0.153   | 0.004   |
| 0.023   | 0.004   |
| 0.073   | 0.005   |
| 0.077   | 0.005   |
| 0.150   | 0.005   |
| 0.067   | 0.004   |
| 0.047   | 0.004   |
| 0.032   | 0.004   |
| 0.030   | 0.004   |
| 0.030   | 0.004   |
| 0.034   | 0.004   |
| 0.175   | 0.005   |
| 0.175   | 0.005   |
| 0.175   | 0.005   |
| 0.148   | 0.004   |
| 0.154   | 0.004   |
| 0.152   | 0.004   |
| 0.149   | 0.004   |
| 0.155   | 0.004   |
| 0.153   | 0.004   |

| 2017            |       | g/hp/hr | g/hp/hr |
|-----------------|-------|---------|---------|
| Equipment       | MaxHP | ROG     | CO      |
| Aerial Lifts    | 15    | 0.209   | 3.169   |
| Aerial Lifts    | 25    | 0.209   | 3.169   |
| Aerial Lifts    | 50    | 0.209   | 3.169   |
| Aerial Lifts    | 120   | 0.143   | 3.184   |
| Aerial Lifts    | 500   | 0.246   | 0.997   |
| Aerial Lifts    | 750   | 0.239   | 1.059   |
| Air Compressors |       |         |         |
|                 | 15    | 0.786   | 3.599   |
| Air Compressors |       |         |         |
|                 | 25    | 0.830   | 2.564   |
| Air Compressors |       |         |         |
|                 | 50    | 1.481   | 5.604   |
| Air Compressors |       |         |         |
|                 | 120   | 0.671   | 3.772   |
| Air Compressors |       |         |         |
|                 | 175   | 0.477   | 3.207   |
| Air Compressors |       |         |         |
|                 | 250   | 0.339   | 1.162   |
| Air Compressors |       |         |         |
|                 | 500   | 0.321   | 1.123   |
| Air Compressors |       |         |         |
|                 | 750   | 0.323   | 1.123   |
| Air Compressors |       |         |         |
|                 | 1000  | 0.362   | 1.246   |
| Bore/Drill Rigs |       |         |         |
|                 | 15    | 0.804   | 4.652   |
| Bore/Drill Rigs |       |         |         |
|                 | 25    | 0.804   | 4.652   |
| Bore/Drill Rigs |       |         |         |
|                 | 50    | 0.804   | 4.652   |
| Bore/Drill Rigs |       |         |         |
|                 | 120   | 0.298   | 3.331   |
| Bore/Drill Rigs |       |         |         |
|                 | 175   | 0.245   | 3.001   |
| Bore/Drill Rigs |       |         |         |
|                 | 250   | 0.174   | 1.102   |
| Bore/Drill Rigs |       |         |         |
|                 | 500   | 0.166   | 1.119   |
| Bore/Drill Rigs |       |         |         |
|                 | 750   | 0.155   | 1.137   |
| Bore/Drill Rigs |       |         |         |
|                 | 1000  | 0.121   | 0.971   |

|       |       |
|-------|-------|
| 0.059 | 0.005 |
| 0.071 | 0.005 |
| 0.061 | 0.005 |
| 0.119 | 0.005 |
| 0.055 | 0.004 |
| 0.039 | 0.004 |
| 0.168 | 0.005 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.167 | 0.005 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.143 | 0.005 |
| 0.065 | 0.004 |
| 0.046 | 0.004 |
| 0.032 | 0.004 |
| 0.030 | 0.004 |
| 0.030 | 0.004 |
| 0.035 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 |
| Cement and Mortar Mixers | 25   | 0.767 | 2.466 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.340 |
| Concrete/Industrial Saws | 50   | 1.175 | 4.894 |
| Concrete/Industrial Saws | 120  | 0.557 | 3.595 |
| Concrete/Industrial Saws | 175  | 0.395 | 3.073 |
| Cranes                   | 50   | 2.173 | 7.408 |
| Cranes                   | 120  | 1.097 | 4.710 |
| Cranes                   | 175  | 0.696 | 3.787 |
| Cranes                   | 250  | 0.561 | 2.385 |
| Cranes                   | 500  | 0.410 | 3.547 |
| Cranes                   | 750  | 0.287 | 1.633 |
| Cranes                   | 9999 | 0.152 | 0.974 |
| Crawler Tractors         | 50   | 2.459 | 8.006 |
| Crawler Tractors         | 120  | 0.849 | 4.176 |
| Crawler Tractors         | 175  | 0.614 | 3.483 |
| Crawler Tractors         | 250  | 0.430 | 1.742 |
| Crawler Tractors         | 500  | 0.385 | 2.635 |
| Crawler Tractors         | 750  | 0.324 | 1.522 |
| Crawler Tractors         | 1000 | 0.486 | 2.100 |
| Crushing/Proc. Equipment | 50   | 1.402 | 5.623 |
| Crushing/Proc. Equipment | 120  | 0.647 | 3.791 |
| Crushing/Proc. Equipment | 175  | 0.468 | 3.236 |
| Crushing/Proc. Equipment | 250  | 0.340 | 1.160 |
| Crushing/Proc. Equipment | 500  | 0.324 | 1.118 |
| Crushing/Proc. Equipment | 750  | 0.323 | 1.114 |
| Crushing/Proc. Equipment | 9999 | 0.378 | 1.231 |

|       |       |
|-------|-------|
| 0.062 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.065 | 0.005 |
| 0.069 | 0.005 |
| 0.103 | 0.005 |
| 0.052 | 0.004 |
| 0.035 | 0.004 |
| 0.023 | 0.004 |
| 0.021 | 0.004 |
| 0.022 | 0.004 |
| 0.029 | 0.004 |
| 0.159 | 0.005 |
| 0.152 | 0.004 |
| 0.156 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.035 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |

|                      |      |       |       |
|----------------------|------|-------|-------|
| Dumpers/Tenders      | 25   | 0.687 | 2.340 |
| Excavators           | 25   | 0.771 | 4.889 |
| Excavators           | 50   | 0.771 | 4.889 |
| Excavators           | 120  | 0.440 | 3.639 |
| Excavators           | 175  | 0.334 | 3.151 |
| Excavators           | 250  | 0.247 | 1.249 |
| Excavators           | 500  | 0.200 | 1.199 |
| Excavators           | 750  | 0.210 | 1.228 |
| Forklifts            | 50   | 1.703 | 6.673 |
| Forklifts            | 120  | 0.672 | 3.979 |
| Forklifts            | 175  | 0.508 | 3.452 |
| Forklifts            | 250  | 0.496 | 2.092 |
| Forklifts            | 500  | 0.338 | 2.508 |
| Generator Sets       | 15   | 0.699 | 3.599 |
| Generator Sets       | 25   | 0.757 | 2.564 |
| Generator Sets       | 50   | 1.017 | 4.292 |
| Generator Sets       | 120  | 0.520 | 3.442 |
| Generator Sets       | 175  | 0.356 | 2.931 |
| Generator Sets       | 250  | 0.245 | 1.063 |
| Generator Sets       | 500  | 0.224 | 1.048 |
| Generator Sets       | 750  | 0.230 | 1.048 |
| Generator Sets       | 9999 | 0.301 | 1.161 |
| Graders              | 50   | 3.007 | 8.978 |
| Graders              | 120  | 1.164 | 4.810 |
| Graders              | 175  | 0.757 | 3.845 |
| Graders              | 250  | 0.396 | 1.449 |
| Graders              | 500  | 0.334 | 1.707 |
| Graders              | 750  | 0.372 | 1.323 |
| Off-Highway Tractors | 120  | 0.586 | 3.901 |
| Off-Highway Tractors | 175  | 0.356 | 3.259 |
| Off-Highway Tractors | 250  | 0.328 | 1.403 |
| Off-Highway Tractors | 750  | 0.248 | 1.145 |
| Off-Highway Tractors | 1000 | 0.118 | 0.985 |
| Off-Highway Trucks   | 175  | 0.441 | 3.436 |
| Off-Highway Trucks   | 250  | 0.417 | 1.753 |

|       |       |
|-------|-------|
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.325 | 1.748 |
| Off-Highway Trucks                 | 750  | 0.394 | 2.356 |
| Off-Highway Trucks                 | 1000 | 0.362 | 1.546 |
| Other Construction Equipment       | 15   | 1.244 | 5.655 |
| Other Construction Equipment       | 25   | 1.244 | 5.655 |
| Other Construction Equipment       | 50   | 1.244 | 5.655 |
| Other Construction Equipment       | 120  | 0.676 | 3.885 |
| Other Construction Equipment       | 175  | 0.500 | 3.338 |
| Other Construction Equipment       | 500  | 0.290 | 2.121 |
| Other General Industrial Equipment | 15   | 1.349 | 6.179 |
| Other General Industrial Equipment | 25   | 1.349 | 6.179 |
| Other General Industrial Equipment | 50   | 1.349 | 6.179 |
| Other General Industrial Equipment | 120  | 0.660 | 3.998 |
| Other General Industrial Equipment | 175  | 0.437 | 3.399 |
| Other General Industrial Equipment | 250  | 0.411 | 1.780 |
| Other General Industrial Equipment | 500  | 0.334 | 2.365 |

|       |       |
|-------|-------|
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.169 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.168 | 0.005 |
| 0.168 | 0.005 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.065 | 0.005 |
| 0.069 | 0.005 |
| 0.078 | 0.005 |
| 0.045 | 0.004 |
| 0.034 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.219 | 1.480 |
| Other General Industrial Equipment | 1000 | 0.251 | 1.057 |
| Other Material Handling Equipment  | 50   | 1.615 | 6.635 |
| Other Material Handling Equipment  | 120  | 0.488 | 3.758 |
| Other Material Handling Equipment  | 175  | 0.427 | 3.351 |
| Other Material Handling Equipment  | 250  | 0.359 | 1.512 |
| Other Material Handling Equipment  | 500  | 0.325 | 1.863 |
| Other Material Handling Equipment  | 9999 | 0.169 | 1.010 |
| Pavers                             | 25   | 1.731 | 6.199 |
| Pavers                             | 50   | 1.731 | 6.199 |
| Pavers                             | 120  | 0.625 | 3.759 |
| Pavers                             | 175  | 0.389 | 3.063 |
| Pavers                             | 250  | 0.208 | 1.037 |
| Pavers                             | 500  | 0.168 | 0.979 |
| Paving Equipment                   | 25   | 0.926 | 4.804 |
| Paving Equipment                   | 50   | 0.926 | 4.804 |
| Paving Equipment                   | 120  | 0.563 | 3.741 |
| Paving Equipment                   | 175  | 0.343 | 3.073 |
| Paving Equipment                   | 250  | 0.288 | 1.333 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.699 | 3.599 |
| Pressure Washers                   | 25   | 0.757 | 2.564 |
| Pressure Washers                   | 50   | 0.760 | 3.632 |
| Pressure Washers                   | 120  | 0.444 | 3.283 |
| Pressure Washers                   | 175  | 0.346 | 2.910 |



|       |       |
|-------|-------|
| 0.009 | 0.004 |
| 0.073 | 0.005 |
| 0.077 | 0.005 |
| 0.111 | 0.005 |
| 0.055 | 0.004 |
| 0.037 | 0.004 |
| 0.025 | 0.004 |
| 0.022 | 0.004 |
| 0.023 | 0.004 |
| 0.030 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.155 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.155 | 0.004 |
| 0.153 | 0.004 |
| 0.057 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.151 | 0.004 |
| 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.102 | 0.986 |
| Pumps                   | 15   | 0.786 | 3.599 |
| Pumps                   | 25   | 0.830 | 2.564 |
| Pumps                   | 50   | 1.104 | 4.514 |
| Pumps                   | 120  | 0.546 | 3.495 |
| Pumps                   | 175  | 0.376 | 2.975 |
| Pumps                   | 250  | 0.260 | 1.080 |
| Pumps                   | 500  | 0.239 | 1.062 |
| Pumps                   | 750  | 0.244 | 1.062 |
| Pumps                   | 9999 | 0.313 | 1.177 |
| Rollers                 | 15   | 1.198 | 5.147 |
| Rollers                 | 25   | 1.198 | 5.147 |
| Rollers                 | 50   | 1.198 | 5.147 |
| Rollers                 | 120  | 0.580 | 3.713 |
| Rollers                 | 175  | 0.314 | 2.981 |
| Rollers                 | 250  | 0.274 | 1.408 |
| Rollers                 | 500  | 0.297 | 2.685 |
| Rough Terrain Forklifts | 50   | 1.108 | 4.833 |
| Rough Terrain Forklifts | 120  | 0.271 | 3.318 |
| Rough Terrain Forklifts | 175  | 0.194 | 2.866 |
| Rough Terrain Forklifts | 250  | 0.148 | 1.024 |
| Rough Terrain Forklifts | 500  | 0.182 | 0.966 |
| Rubber Tired Dozers     | 175  | 0.903 | 4.149 |
| Rubber Tired Dozers     | 250  | 0.707 | 2.655 |
| Rubber Tired Dozers     | 500  | 0.662 | 5.526 |
| Rubber Tired Dozers     | 750  | 0.526 | 2.767 |
| Rubber Tired Dozers     | 1000 | 0.602 | 2.560 |
| Rubber Tired Loaders    | 25   | 1.957 | 7.660 |
| Rubber Tired Loaders    | 50   | 1.957 | 7.660 |
| Rubber Tired Loaders    | 120  | 0.757 | 4.171 |
| Rubber Tired Loaders    | 175  | 0.522 | 3.518 |

|       |       |
|-------|-------|
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.148 | 0.004 |
| 0.152 | 0.004 |
| 0.157 | 0.004 |
| 0.155 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.117 | 0.005 |
| 0.055 | 0.004 |
| 0.038 | 0.004 |
| 0.031 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.153 | 0.004 |
| 0.172 | 0.005 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.167 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.373 | 1.417 |
| Rubber Tired Loaders      | 500  | 0.369 | 2.060 |
| Rubber Tired Loaders      | 750  | 0.367 | 1.700 |
| Rubber Tired Loaders      | 1000 | 0.415 | 1.456 |
| Scrapers                  | 120  | 0.754 | 4.207 |
| Scrapers                  | 175  | 0.629 | 3.705 |
| Scrapers                  | 250  | 0.627 | 2.647 |
| Scrapers                  | 500  | 0.425 | 3.337 |
| Scrapers                  | 750  | 0.325 | 2.295 |
| Signal Boards             | 15   | 0.661 | 3.469 |
| Signal Boards             | 50   | 1.158 | 4.785 |
| Signal Boards             | 120  | 0.553 | 3.566 |
| Signal Boards             | 175  | 0.388 | 3.044 |
| Signal Boards             | 250  | 0.330 | 1.323 |
| Skid Steer Loaders        | 25   | 0.568 | 3.919 |
| Skid Steer Loaders        | 50   | 0.568 | 3.919 |
| Skid Steer Loaders        | 120  | 0.255 | 3.319 |
| Surfacing Equipment       | 50   | 0.928 | 4.603 |
| Surfacing Equipment       | 120  | 0.508 | 3.556 |
| Surfacing Equipment       | 175  | 0.455 | 3.003 |
| Surfacing Equipment       | 250  | 0.274 | 1.343 |
| Surfacing Equipment       | 500  | 0.204 | 1.396 |
| Surfacing Equipment       | 750  | 0.160 | 1.003 |
| Sweepers/Scrubbers        | 15   | 1.712 | 6.719 |
| Sweepers/Scrubbers        | 25   | 1.712 | 6.719 |
| Sweepers/Scrubbers        | 50   | 1.712 | 6.719 |
| Sweepers/Scrubbers        | 120  | 0.721 | 4.010 |
| Sweepers/Scrubbers        | 175  | 0.711 | 3.784 |
| Sweepers/Scrubbers        | 250  | 0.513 | 2.090 |
| Tractors/Loaders/Backhoes | 25   | 1.194 | 5.689 |

|       |       |
|-------|-------|
| 0.167 | 0.005 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.154 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.073 | 0.005 |
| 0.077 | 0.005 |
| 0.138 | 0.005 |
| 0.063 | 0.004 |
| 0.043 | 0.004 |
| 0.029 | 0.004 |
| 0.027 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 1.194 | 5.689 |
| Tractors/Loaders/Backhoes | 120  | 0.501 | 3.782 |
| Tractors/Loaders/Backhoes | 175  | 0.354 | 3.200 |
| Tractors/Loaders/Backhoes | 250  | 0.291 | 1.304 |
| Tractors/Loaders/Backhoes | 500  | 0.272 | 1.739 |
| Tractors/Loaders/Backhoes | 750  | 0.296 | 1.646 |
| Trenchers                 | 15   | 1.149 | 5.197 |
| Trenchers                 | 25   | 1.149 | 5.197 |
| Trenchers                 | 50   | 1.149 | 5.197 |
| Trenchers                 | 120  | 0.762 | 3.968 |
| Trenchers                 | 175  | 0.536 | 3.434 |
| Trenchers                 | 250  | 0.486 | 2.037 |
| Trenchers                 | 500  | 0.265 | 1.966 |
| Trenchers                 | 750  | 0.114 | 0.972 |
| Welders                   | 15   | 0.786 | 3.599 |
| Welders                   | 25   | 0.830 | 2.564 |
| Welders                   | 50   | 1.372 | 5.239 |
| Welders                   | 120  | 0.630 | 3.675 |
| Welders                   | 175  | 0.442 | 3.124 |
| Welders                   | 250  | 0.310 | 1.133 |
| Welders                   | 500  | 0.290 | 1.102 |
| Water Trucks              | 175  | 0.441 | 3.436 |
| Water Trucks              | 250  | 0.417 | 1.753 |
| Water Trucks              | 500  | 0.325 | 1.748 |
| Water Trucks              | 750  | 0.394 | 2.356 |
| Water Trucks              | 1000 | 0.362 | 1.546 |





|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.362 | 0.007 | 0.171 | 0.171 | 568.299 | 0.062 | 0.005 |
| 4.678 | 0.005 | 0.332 | 0.305 | 554.910 | 0.170 | 0.005 |
| 4.678 | 0.005 | 0.332 | 0.305 | 554.910 | 0.170 | 0.005 |
| 4.380 | 0.005 | 0.310 | 0.286 | 493.409 | 0.151 | 0.004 |
| 3.700 | 0.005 | 0.182 | 0.168 | 498.522 | 0.153 | 0.004 |
| 3.319 | 0.005 | 0.105 | 0.097 | 498.436 | 0.153 | 0.004 |
| 2.507 | 0.005 | 0.081 | 0.075 | 496.810 | 0.152 | 0.004 |
| 2.719 | 0.005 | 0.090 | 0.083 | 494.550 | 0.152 | 0.004 |
| 5.450 | 0.005 | 0.536 | 0.493 | 554.677 | 0.170 | 0.005 |
| 5.818 | 0.005 | 0.480 | 0.442 | 497.725 | 0.153 | 0.004 |
| 5.362 | 0.005 | 0.294 | 0.270 | 498.334 | 0.153 | 0.004 |
| 5.751 | 0.005 | 0.252 | 0.232 | 499.621 | 0.153 | 0.004 |
| 3.780 | 0.005 | 0.161 | 0.148 | 499.927 | 0.153 | 0.004 |
| 4.847 | 0.008 | 0.250 | 0.250 | 568.299 | 0.063 | 0.005 |
| 4.729 | 0.007 | 0.233 | 0.233 | 568.299 | 0.068 | 0.005 |
| 4.522 | 0.007 | 0.285 | 0.285 | 568.299 | 0.091 | 0.005 |
| 4.072 | 0.006 | 0.274 | 0.274 | 568.299 | 0.046 | 0.004 |
| 3.347 | 0.006 | 0.151 | 0.151 | 568.299 | 0.032 | 0.004 |
| 2.910 | 0.006 | 0.081 | 0.081 | 568.299 | 0.022 | 0.004 |
| 2.579 | 0.005 | 0.076 | 0.076 | 568.299 | 0.020 | 0.004 |
| 2.660 | 0.005 | 0.077 | 0.077 | 568.299 | 0.020 | 0.004 |
| 4.293 | 0.005 | 0.104 | 0.104 | 568.299 | 0.027 | 0.004 |
| 6.423 | 0.005 | 0.843 | 0.776 | 520.075 | 0.159 | 0.005 |
| 9.191 | 0.005 | 0.759 | 0.698 | 495.919 | 0.152 | 0.004 |
| 7.663 | 0.005 | 0.430 | 0.396 | 506.748 | 0.155 | 0.004 |
| 5.525 | 0.005 | 0.180 | 0.166 | 503.802 | 0.154 | 0.004 |
| 3.557 | 0.005 | 0.139 | 0.128 | 498.600 | 0.153 | 0.004 |
| 2.835 | 0.005 | 0.100 | 0.100 | 568.299 | 0.033 | 0.004 |
| 5.317 | 0.005 | 0.423 | 0.389 | 501.245 | 0.154 | 0.004 |
| 4.026 | 0.005 | 0.205 | 0.189 | 499.245 | 0.153 | 0.004 |
| 4.382 | 0.005 | 0.151 | 0.139 | 496.498 | 0.152 | 0.004 |
| 3.324 | 0.005 | 0.112 | 0.103 | 497.618 | 0.153 | 0.004 |
| 2.340 | 0.005 | 0.059 | 0.054 | 498.280 | 0.153 | 0.004 |
| 4.236 | 0.005 | 0.233 | 0.215 | 495.924 | 0.152 | 0.004 |
| 4.368 | 0.005 | 0.189 | 0.174 | 494.794 | 0.152 | 0.004 |

|                      |
|----------------------|
| Dumpers/Trailers     |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Trucks   |
| Off-Highway Trucks   |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 2.592 | 0.005 | 0.086 | 0.079 | 499.767 | 0.153 | 0.004 |
| 4.787 | 0.005 | 0.115 | 0.105 | 498.280 | 0.153 | 0.004 |
| 5.574 | 0.005 | 0.546 | 0.502 | 552.804 | 0.169 | 0.005 |
| 4.561 | 0.005 | 0.341 | 0.314 | 499.899 | 0.153 | 0.004 |
| 4.488 | 0.005 | 0.238 | 0.219 | 498.454 | 0.153 | 0.004 |
| 4.705 | 0.005 | 0.163 | 0.150 | 497.676 | 0.153 | 0.004 |
| 3.971 | 0.005 | 0.154 | 0.141 | 496.425 | 0.152 | 0.004 |
| 3.520 | 0.005 | 0.072 | 0.067 | 498.280 | 0.153 | 0.004 |
| 5.437 | 0.005 | 0.540 | 0.497 | 556.453 | 0.171 | 0.005 |
| 5.437 | 0.005 | 0.540 | 0.497 | 556.453 | 0.171 | 0.005 |
| 5.692 | 0.005 | 0.437 | 0.402 | 495.925 | 0.152 | 0.004 |
| 4.353 | 0.005 | 0.214 | 0.197 | 498.967 | 0.153 | 0.004 |
| 3.809 | 0.005 | 0.100 | 0.092 | 499.562 | 0.153 | 0.004 |
| 2.487 | 0.005 | 0.087 | 0.081 | 491.784 | 0.151 | 0.004 |
| 4.728 | 0.005 | 0.359 | 0.331 | 548.648 | 0.168 | 0.005 |
| 4.728 | 0.005 | 0.359 | 0.331 | 548.648 | 0.168 | 0.005 |
| 5.207 | 0.005 | 0.391 | 0.359 | 500.165 | 0.153 | 0.004 |
| 3.896 | 0.005 | 0.195 | 0.179 | 497.148 | 0.152 | 0.004 |
| 4.121 | 0.005 | 0.142 | 0.130 | 498.732 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.847 | 0.008 | 0.250 | 0.250 | 568.299 | 0.063 | 0.005 |
| 4.729 | 0.007 | 0.233 | 0.233 | 568.299 | 0.068 | 0.005 |
| 4.355 | 0.007 | 0.240 | 0.240 | 568.299 | 0.068 | 0.005 |
| 3.888 | 0.006 | 0.233 | 0.233 | 568.300 | 0.040 | 0.004 |
| 3.349 | 0.006 | 0.149 | 0.149 | 568.299 | 0.031 | 0.004 |

|                                    |
|------------------------------------|
| Other General Industrial Equipment |
| Other General Industrial Equipment |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Plate Compactors                   |
| Pressure Washers                   |
| Pressure Washers                   |
| Pressure Washers                   |
| Pressure Washers                   |
| Pressure Washers                   |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.317 | 0.006 | 0.009 | 0.009 | 568.299 | 0.009 | 0.004 |
| 4.887 | 0.008 | 0.272 | 0.272 | 568.299 | 0.070 | 0.005 |
| 4.729 | 0.007 | 0.243 | 0.243 | 568.299 | 0.074 | 0.005 |
| 4.578 | 0.007 | 0.301 | 0.301 | 568.299 | 0.099 | 0.005 |
| 4.134 | 0.006 | 0.287 | 0.287 | 568.299 | 0.049 | 0.004 |
| 3.400 | 0.006 | 0.159 | 0.159 | 568.299 | 0.033 | 0.004 |
| 2.958 | 0.006 | 0.084 | 0.084 | 568.299 | 0.023 | 0.004 |
| 2.613 | 0.005 | 0.079 | 0.079 | 568.299 | 0.021 | 0.004 |
| 2.695 | 0.005 | 0.080 | 0.080 | 568.299 | 0.022 | 0.004 |
| 4.343 | 0.005 | 0.106 | 0.106 | 568.299 | 0.028 | 0.004 |
| 5.098 | 0.005 | 0.436 | 0.401 | 555.020 | 0.170 | 0.005 |
| 5.098 | 0.005 | 0.436 | 0.401 | 555.020 | 0.170 | 0.005 |
| 5.098 | 0.005 | 0.436 | 0.401 | 555.020 | 0.170 | 0.005 |
| 5.411 | 0.005 | 0.392 | 0.361 | 500.153 | 0.153 | 0.004 |
| 3.874 | 0.005 | 0.180 | 0.166 | 497.909 | 0.153 | 0.004 |
| 3.921 | 0.005 | 0.129 | 0.119 | 499.702 | 0.153 | 0.004 |
| 3.840 | 0.005 | 0.150 | 0.138 | 505.832 | 0.155 | 0.004 |
| 4.903 | 0.005 | 0.382 | 0.352 | 554.623 | 0.170 | 0.005 |
| 3.418 | 0.005 | 0.182 | 0.167 | 499.168 | 0.153 | 0.004 |
| 2.902 | 0.005 | 0.112 | 0.103 | 497.777 | 0.153 | 0.004 |
| 2.474 | 0.005 | 0.059 | 0.054 | 499.001 | 0.153 | 0.004 |
| 3.568 | 0.005 | 0.079 | 0.073 | 493.336 | 0.151 | 0.004 |
| 9.129 | 0.005 | 0.525 | 0.483 | 499.410 | 0.153 | 0.004 |
| 7.671 | 0.005 | 0.376 | 0.345 | 501.548 | 0.154 | 0.004 |
| 7.333 | 0.005 | 0.341 | 0.313 | 505.849 | 0.155 | 0.004 |
| 7.172 | 0.005 | 0.260 | 0.239 | 499.367 | 0.153 | 0.004 |
| 6.013 | 0.005 | 0.195 | 0.195 | 568.299 | 0.054 | 0.004 |
| 5.954 | 0.005 | 0.633 | 0.582 | 553.583 | 0.170 | 0.005 |
| 5.954 | 0.005 | 0.633 | 0.582 | 553.583 | 0.170 | 0.005 |
| 6.236 | 0.005 | 0.530 | 0.487 | 491.853 | 0.151 | 0.004 |
| 5.195 | 0.005 | 0.290 | 0.266 | 497.353 | 0.152 | 0.004 |

|                         |
|-------------------------|
| Pressure Washers        |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.755 | 0.005 | 0.162 | 0.149 | 495.950 | 0.152 | 0.004 |
| 4.253 | 0.005 | 0.160 | 0.148 | 492.276 | 0.151 | 0.004 |
| 4.050 | 0.005 | 0.160 | 0.147 | 484.366 | 0.148 | 0.004 |
| 6.553 | 0.005 | 0.192 | 0.177 | 496.897 | 0.152 | 0.004 |
| 7.179 | 0.005 | 0.551 | 0.507 | 511.112 | 0.157 | 0.004 |
| 6.671 | 0.005 | 0.359 | 0.331 | 505.331 | 0.155 | 0.004 |
| 7.399 | 0.005 | 0.333 | 0.306 | 494.523 | 0.152 | 0.004 |
| 5.340 | 0.005 | 0.214 | 0.197 | 498.457 | 0.153 | 0.004 |
| 4.216 | 0.005 | 0.156 | 0.143 | 498.693 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.590 | 0.007 | 0.306 | 0.306 | 568.299 | 0.104 | 0.005 |
| 4.059 | 0.006 | 0.290 | 0.290 | 568.299 | 0.049 | 0.004 |
| 3.305 | 0.006 | 0.161 | 0.161 | 568.299 | 0.035 | 0.004 |
| 3.452 | 0.007 | 0.101 | 0.101 | 686.695 | 0.029 | 0.004 |
| 4.113 | 0.005 | 0.218 | 0.200 | 556.714 | 0.171 | 0.005 |
| 4.113 | 0.005 | 0.218 | 0.200 | 556.714 | 0.171 | 0.005 |
| 3.286 | 0.005 | 0.177 | 0.163 | 498.326 | 0.153 | 0.004 |
| 5.064 | 0.006 | 0.365 | 0.336 | 564.477 | 0.173 | 0.005 |
| 4.942 | 0.005 | 0.337 | 0.310 | 498.360 | 0.153 | 0.004 |
| 5.393 | 0.005 | 0.264 | 0.243 | 496.274 | 0.152 | 0.004 |
| 4.468 | 0.005 | 0.129 | 0.119 | 501.847 | 0.154 | 0.004 |
| 3.106 | 0.005 | 0.103 | 0.094 | 496.885 | 0.152 | 0.004 |
| 2.770 | 0.005 | 0.090 | 0.083 | 499.712 | 0.153 | 0.004 |
| 5.626 | 0.005 | 0.582 | 0.535 | 554.513 | 0.170 | 0.005 |
| 5.626 | 0.005 | 0.582 | 0.535 | 554.513 | 0.170 | 0.005 |
| 5.626 | 0.005 | 0.582 | 0.535 | 554.513 | 0.170 | 0.005 |
| 6.020 | 0.005 | 0.520 | 0.479 | 500.456 | 0.153 | 0.004 |
| 7.424 | 0.005 | 0.395 | 0.363 | 499.407 | 0.153 | 0.004 |
| 6.509 | 0.005 | 0.264 | 0.243 | 496.244 | 0.152 | 0.004 |
| 5.110 | 0.005 | 0.433 | 0.399 | 544.929 | 0.167 | 0.005 |

|                           |
|---------------------------|
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Tractors/Loaders/Backhoes |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 5.110 | 0.005 | 0.433 | 0.399 | 544.929 | 0.167 | 0.005 |
| 4.809 | 0.005 | 0.362 | 0.333 | 502.795 | 0.154 | 0.004 |
| 3.879 | 0.005 | 0.197 | 0.182 | 493.912 | 0.151 | 0.004 |
| 4.041 | 0.005 | 0.132 | 0.121 | 496.845 | 0.152 | 0.004 |
| 3.490 | 0.005 | 0.122 | 0.112 | 497.113 | 0.152 | 0.004 |
| 3.862 | 0.005 | 0.139 | 0.128 | 492.953 | 0.151 | 0.004 |
| 5.166 | 0.005 | 0.449 | 0.413 | 557.460 | 0.171 | 0.005 |
| 5.166 | 0.005 | 0.449 | 0.413 | 557.460 | 0.171 | 0.005 |
| 5.166 | 0.005 | 0.449 | 0.413 | 557.460 | 0.171 | 0.005 |
| 6.679 | 0.005 | 0.523 | 0.481 | 501.992 | 0.154 | 0.004 |
| 5.927 | 0.005 | 0.300 | 0.276 | 493.764 | 0.151 | 0.004 |
| 6.194 | 0.005 | 0.250 | 0.230 | 499.228 | 0.153 | 0.004 |
| 3.442 | 0.005 | 0.129 | 0.119 | 497.020 | 0.152 | 0.004 |
| 1.430 | 0.005 | 0.046 | 0.042 | 501.183 | 0.154 | 0.004 |
| 4.887 | 0.008 | 0.272 | 0.272 | 568.299 | 0.070 | 0.005 |
| 4.729 | 0.007 | 0.243 | 0.243 | 568.299 | 0.074 | 0.005 |
| 4.768 | 0.007 | 0.350 | 0.350 | 568.299 | 0.123 | 0.005 |
| 4.328 | 0.006 | 0.332 | 0.332 | 568.299 | 0.056 | 0.004 |
| 3.562 | 0.006 | 0.183 | 0.183 | 568.299 | 0.039 | 0.004 |
| 3.105 | 0.006 | 0.094 | 0.094 | 568.299 | 0.028 | 0.004 |
| 2.713 | 0.005 | 0.088 | 0.088 | 568.299 | 0.026 | 0.004 |
| 4.236 | 0.005 | 0.233 | 0.215 | 495.924 | 0.152 | 0.004 |
| 4.368 | 0.005 | 0.189 | 0.174 | 494.794 | 0.152 | 0.004 |
| 3.668 | 0.005 | 0.136 | 0.125 | 501.437 | 0.154 | 0.004 |
| 4.257 | 0.005 | 0.170 | 0.157 | 500.199 | 0.153 | 0.004 |
| 5.653 | 0.005 | 0.159 | 0.146 | 497.115 | 0.152 | 0.004 |

|                           |
|---------------------------|
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |

|       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 15    | 0.182   | 3.116   | 3.210   | 0.005   | 0.054   | 0.050   | 545.494 | 0.170   | 0.005   |
| 25    | 0.182   | 3.116   | 3.210   | 0.005   | 0.054   | 0.050   | 545.494 | 0.170   | 0.005   |
| 50    | 0.182   | 3.116   | 3.210   | 0.005   | 0.054   | 0.050   | 545.494 | 0.170   | 0.005   |
| 120   | 0.122   | 3.167   | 2.064   | 0.005   | 0.057   | 0.053   | 490.474 | 0.153   | 0.004   |
| 500   | 0.062   | 0.937   | 0.634   | 0.005   | 0.009   | 0.008   | 490.412 | 0.153   | 0.004   |
| 750   | 0.225   | 1.037   | 2.385   | 0.005   | 0.071   | 0.071   | 568.299 | 0.020   | 0.004   |
| 15    | 0.766   | 3.580   | 4.762   | 0.008   | 0.256   | 0.256   | 568.299 | 0.069   | 0.005   |
| 25    | 0.807   | 2.531   | 4.661   | 0.007   | 0.232   | 0.232   | 568.300 | 0.072   | 0.005   |
| 50    | 1.300   | 5.439   | 4.707   | 0.007   | 0.329   | 0.329   | 568.299 | 0.117   | 0.005   |
| 120   | 0.603   | 3.744   | 4.050   | 0.006   | 0.304   | 0.304   | 568.300 | 0.054   | 0.004   |
| 175   | 0.435   | 3.205   | 3.228   | 0.006   | 0.170   | 0.170   | 568.299 | 0.039   | 0.004   |
| 250   | 0.321   | 1.146   | 2.797   | 0.006   | 0.087   | 0.087   | 568.300 | 0.029   | 0.004   |
| 500   | 0.307   | 1.101   | 2.465   | 0.005   | 0.083   | 0.083   | 568.299 | 0.027   | 0.004   |
| 750   | 0.309   | 1.101   | 2.533   | 0.005   | 0.084   | 0.084   | 568.299 | 0.027   | 0.004   |
| 1000  | 0.343   | 1.210   | 4.325   | 0.005   | 0.111   | 0.111   | 568.299 | 0.030   | 0.004   |
| 15    | 0.767   | 4.569   | 4.869   | 0.006   | 0.329   | 0.303   | 554.204 | 0.173   | 0.005   |
| 25    | 0.767   | 4.569   | 4.869   | 0.006   | 0.329   | 0.303   | 554.204 | 0.173   | 0.005   |
| 50    | 0.767   | 4.569   | 4.869   | 0.006   | 0.329   | 0.303   | 554.204 | 0.173   | 0.005   |
| 120   | 0.269   | 3.323   | 3.400   | 0.005   | 0.184   | 0.170   | 479.672 | 0.149   | 0.004   |
| 175   | 0.203   | 2.961   | 2.357   | 0.005   | 0.103   | 0.095   | 495.073 | 0.154   | 0.004   |
| 250   | 0.155   | 1.073   | 2.153   | 0.005   | 0.061   | 0.056   | 484.561 | 0.151   | 0.004   |
| 500   | 0.135   | 1.032   | 1.746   | 0.005   | 0.052   | 0.048   | 485.689 | 0.151   | 0.004   |
| 750   | 0.126   | 1.006   | 1.679   | 0.005   | 0.055   | 0.050   | 489.730 | 0.153   | 0.004   |
| 1000  | 0.125   | 0.978   | 3.032   | 0.005   | 0.060   | 0.056   | 490.243 | 0.153   | 0.004   |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.163 | 0.163 | 568.299 | 0.059 | 0.005 |
| 25   | 0.749 | 2.440 | 4.504 | 0.007 | 0.205 | 0.205 | 568.299 | 0.067 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 1.032 | 4.766 | 4.492 | 0.007 | 0.277 | 0.277 | 568.299 | 0.093 | 0.005 |
| 120  | 0.498 | 3.571 | 3.754 | 0.006 | 0.256 | 0.256 | 568.299 | 0.044 | 0.004 |
| 175  | 0.359 | 3.072 | 2.945 | 0.006 | 0.145 | 0.145 | 568.299 | 0.032 | 0.004 |
| 50   | 2.072 | 7.247 | 6.004 | 0.005 | 0.624 | 0.574 | 538.122 | 0.168 | 0.005 |
| 120  | 0.932 | 4.452 | 7.931 | 0.005 | 0.583 | 0.536 | 488.117 | 0.152 | 0.004 |
| 175  | 0.621 | 3.666 | 6.557 | 0.005 | 0.351 | 0.323 | 493.045 | 0.154 | 0.004 |
| 250  | 0.483 | 2.134 | 5.773 | 0.005 | 0.250 | 0.230 | 491.407 | 0.153 | 0.004 |
| 500  | 0.370 | 3.187 | 4.634 | 0.005 | 0.187 | 0.172 | 490.891 | 0.153 | 0.004 |
| 750  | 0.271 | 1.613 | 3.769 | 0.005 | 0.137 | 0.126 | 489.054 | 0.152 | 0.004 |
| 9999 | 0.162 | 0.983 | 2.335 | 0.005 | 0.059 | 0.054 | 490.412 | 0.153 | 0.004 |
| 50   | 2.446 | 8.009 | 6.163 | 0.005 | 0.704 | 0.648 | 536.141 | 0.167 | 0.005 |
| 120  | 0.798 | 4.123 | 6.723 | 0.005 | 0.566 | 0.521 | 494.922 | 0.154 | 0.004 |
| 175  | 0.555 | 3.421 | 5.859 | 0.005 | 0.326 | 0.299 | 490.000 | 0.153 | 0.004 |
| 250  | 0.398 | 1.654 | 5.290 | 0.005 | 0.200 | 0.184 | 491.606 | 0.153 | 0.004 |
| 500  | 0.344 | 2.382 | 4.373 | 0.005 | 0.169 | 0.156 | 493.510 | 0.154 | 0.004 |
| 750  | 0.296 | 1.445 | 3.834 | 0.005 | 0.142 | 0.130 | 491.266 | 0.153 | 0.004 |
| 1000 | 0.489 | 2.105 | 7.564 | 0.005 | 0.225 | 0.207 | 494.105 | 0.154 | 0.004 |
| 50   | 1.225 | 5.461 | 4.657 | 0.007 | 0.310 | 0.310 | 568.299 | 0.110 | 0.005 |
| 120  | 0.580 | 3.763 | 3.881 | 0.006 | 0.284 | 0.284 | 568.299 | 0.052 | 0.004 |
| 175  | 0.427 | 3.234 | 3.049 | 0.006 | 0.161 | 0.161 | 568.299 | 0.038 | 0.004 |
| 250  | 0.322 | 1.146 | 2.622 | 0.006 | 0.083 | 0.083 | 568.299 | 0.029 | 0.004 |
| 500  | 0.309 | 1.099 | 2.312 | 0.005 | 0.079 | 0.079 | 568.299 | 0.027 | 0.004 |
| 750  | 0.308 | 1.097 | 2.358 | 0.005 | 0.079 | 0.079 | 568.299 | 0.027 | 0.004 |
| 9999 | 0.361 | 1.198 | 4.168 | 0.005 | 0.107 | 0.107 | 568.299 | 0.032 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 25   | 0.686 | 2.339 | 4.350 | 0.007 | 0.169 | 0.169 | 568.299 | 0.061 | 0.005 |
| 25   | 0.687 | 4.700 | 4.395 | 0.005 | 0.284 | 0.261 | 545.347 | 0.170 | 0.005 |
| 50   | 0.687 | 4.700 | 4.395 | 0.005 | 0.284 | 0.261 | 545.347 | 0.170 | 0.005 |
| 120  | 0.368 | 3.562 | 3.764 | 0.005 | 0.251 | 0.230 | 486.056 | 0.151 | 0.004 |
| 175  | 0.273 | 3.093 | 2.924 | 0.005 | 0.142 | 0.130 | 490.673 | 0.153 | 0.004 |
| 250  | 0.202 | 1.152 | 2.594 | 0.005 | 0.079 | 0.073 | 490.257 | 0.153 | 0.004 |
| 500  | 0.175 | 1.140 | 2.050 | 0.005 | 0.066 | 0.061 | 489.103 | 0.152 | 0.004 |
| 750  | 0.189 | 1.224 | 2.266 | 0.005 | 0.076 | 0.070 | 487.653 | 0.152 | 0.004 |
| 50   | 1.393 | 6.103 | 5.052 | 0.005 | 0.447 | 0.411 | 545.919 | 0.170 | 0.005 |
| 120  | 0.567 | 3.858 | 5.015 | 0.005 | 0.400 | 0.368 | 489.866 | 0.153 | 0.004 |
| 175  | 0.427 | 3.336 | 4.430 | 0.005 | 0.241 | 0.222 | 490.466 | 0.153 | 0.004 |
| 250  | 0.425 | 1.835 | 4.938 | 0.005 | 0.207 | 0.191 | 491.733 | 0.153 | 0.004 |
| 500  | 0.282 | 1.878 | 3.019 | 0.005 | 0.125 | 0.115 | 492.034 | 0.153 | 0.004 |
| 15   | 0.679 | 3.580 | 4.728 | 0.008 | 0.237 | 0.237 | 568.299 | 0.061 | 0.005 |
| 25   | 0.744 | 2.531 | 4.661 | 0.007 | 0.224 | 0.224 | 568.299 | 0.067 | 0.005 |
| 50   | 0.895 | 4.182 | 4.366 | 0.007 | 0.253 | 0.253 | 568.299 | 0.080 | 0.005 |
| 120  | 0.461 | 3.418 | 3.752 | 0.006 | 0.239 | 0.239 | 568.299 | 0.041 | 0.004 |
| 175  | 0.319 | 2.930 | 2.989 | 0.006 | 0.133 | 0.133 | 568.299 | 0.028 | 0.004 |
| 250  | 0.226 | 1.048 | 2.582 | 0.006 | 0.072 | 0.072 | 568.299 | 0.020 | 0.004 |
| 500  | 0.211 | 1.028 | 2.310 | 0.005 | 0.069 | 0.069 | 568.299 | 0.019 | 0.004 |
| 750  | 0.215 | 1.028 | 2.370 | 0.005 | 0.070 | 0.070 | 568.299 | 0.019 | 0.004 |
| 9999 | 0.280 | 1.128 | 4.058 | 0.005 | 0.095 | 0.095 | 568.299 | 0.025 | 0.004 |
| 50   | 2.809 | 8.626 | 6.180 | 0.005 | 0.790 | 0.726 | 511.910 | 0.159 | 0.005 |
| 120  | 1.075 | 4.697 | 8.520 | 0.005 | 0.697 | 0.641 | 487.698 | 0.152 | 0.004 |
| 175  | 0.661 | 3.710 | 6.605 | 0.005 | 0.371 | 0.342 | 497.377 | 0.155 | 0.004 |
| 250  | 0.384 | 1.416 | 5.271 | 0.005 | 0.171 | 0.158 | 495.431 | 0.154 | 0.004 |
| 500  | 0.324 | 1.564 | 3.345 | 0.005 | 0.130 | 0.119 | 490.576 | 0.153 | 0.004 |
| 750  | 0.353 | 1.286 | 2.543 | 0.005 | 0.090 | 0.090 | 568.299 | 0.031 | 0.004 |
| 120  | 0.522 | 3.832 | 4.787 | 0.005 | 0.373 | 0.343 | 492.871 | 0.153 | 0.004 |
| 175  | 0.315 | 3.219 | 3.498 | 0.005 | 0.176 | 0.162 | 491.313 | 0.153 | 0.004 |
| 250  | 0.272 | 1.295 | 3.454 | 0.005 | 0.119 | 0.109 | 488.677 | 0.152 | 0.004 |
| 750  | 0.196 | 1.119 | 2.166 | 0.005 | 0.081 | 0.074 | 490.182 | 0.153 | 0.004 |
| 1000 | 0.129 | 0.998 | 2.359 | 0.005 | 0.060 | 0.055 | 490.412 | 0.153 | 0.004 |
| 175  | 0.383 | 3.383 | 3.543 | 0.005 | 0.192 | 0.177 | 488.044 | 0.152 | 0.004 |
| 250  | 0.341 | 1.543 | 3.451 | 0.005 | 0.141 | 0.130 | 487.635 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 500  | 0.287 | 1.560 | 3.090 | 0.005 | 0.113 | 0.104 | 493.506 | 0.154 | 0.004 |
| 750  | 0.348 | 2.176 | 3.691 | 0.005 | 0.143 | 0.132 | 492.114 | 0.153 | 0.004 |
| 1000 | 0.297 | 1.357 | 4.858 | 0.005 | 0.127 | 0.116 | 487.790 | 0.152 | 0.004 |
| 15   | 1.169 | 5.541 | 5.272 | 0.005 | 0.449 | 0.413 | 548.939 | 0.171 | 0.005 |
| 25   | 1.169 | 5.541 | 5.272 | 0.005 | 0.449 | 0.413 | 548.939 | 0.171 | 0.005 |
| 50   | 1.169 | 5.541 | 5.272 | 0.005 | 0.449 | 0.413 | 548.939 | 0.171 | 0.005 |
| 120  | 0.598 | 3.799 | 5.441 | 0.005 | 0.417 | 0.383 | 490.018 | 0.153 | 0.004 |
| 175  | 0.436 | 3.263 | 4.755 | 0.005 | 0.250 | 0.230 | 487.986 | 0.152 | 0.004 |
| 500  | 0.251 | 1.813 | 3.167 | 0.005 | 0.115 | 0.105 | 493.360 | 0.154 | 0.004 |
| 15   | 1.154 | 5.827 | 4.979 | 0.005 | 0.414 | 0.381 | 546.639 | 0.170 | 0.005 |
| 25   | 1.154 | 5.827 | 4.979 | 0.005 | 0.414 | 0.381 | 546.639 | 0.170 | 0.005 |
| 50   | 1.154 | 5.827 | 4.979 | 0.005 | 0.414 | 0.381 | 546.639 | 0.170 | 0.005 |
| 120  | 0.557 | 3.876 | 4.955 | 0.005 | 0.392 | 0.360 | 488.278 | 0.152 | 0.004 |
| 175  | 0.318 | 3.237 | 3.237 | 0.005 | 0.172 | 0.158 | 490.200 | 0.153 | 0.004 |
| 250  | 0.303 | 1.455 | 3.648 | 0.005 | 0.135 | 0.124 | 491.626 | 0.153 | 0.004 |
| 500  | 0.254 | 1.583 | 2.907 | 0.005 | 0.104 | 0.095 | 491.321 | 0.153 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 750  | 0.217 | 1.483 | 2.419 | 0.005 | 0.083 | 0.076 | 491.876 | 0.153 | 0.004 |
| 1000 | 0.257 | 1.066 | 4.810 | 0.005 | 0.116 | 0.107 | 490.412 | 0.153 | 0.004 |
| 50   | 1.289 | 6.061 | 5.182 | 0.005 | 0.457 | 0.420 | 544.075 | 0.169 | 0.005 |
| 120  | 0.407 | 3.675 | 3.944 | 0.005 | 0.271 | 0.249 | 492.006 | 0.153 | 0.004 |
| 175  | 0.327 | 3.218 | 3.332 | 0.005 | 0.173 | 0.159 | 490.583 | 0.153 | 0.004 |
| 250  | 0.316 | 1.388 | 4.092 | 0.005 | 0.135 | 0.124 | 489.817 | 0.153 | 0.004 |
| 500  | 0.296 | 1.633 | 3.524 | 0.005 | 0.134 | 0.123 | 488.587 | 0.152 | 0.004 |
| 9999 | 0.180 | 1.023 | 3.551 | 0.005 | 0.074 | 0.068 | 490.412 | 0.153 | 0.004 |
| 25   | 1.539 | 5.849 | 5.121 | 0.005 | 0.478 | 0.440 | 547.079 | 0.170 | 0.005 |
| 50   | 1.539 | 5.849 | 5.121 | 0.005 | 0.478 | 0.440 | 547.079 | 0.170 | 0.005 |
| 120  | 0.536 | 3.660 | 5.019 | 0.005 | 0.375 | 0.345 | 488.181 | 0.152 | 0.004 |
| 175  | 0.339 | 3.039 | 3.747 | 0.005 | 0.183 | 0.168 | 491.322 | 0.153 | 0.004 |
| 250  | 0.198 | 1.034 | 3.474 | 0.005 | 0.092 | 0.085 | 491.543 | 0.153 | 0.004 |
| 500  | 0.164 | 0.981 | 2.320 | 0.005 | 0.083 | 0.076 | 484.277 | 0.151 | 0.004 |
| 25   | 0.737 | 4.416 | 4.312 | 0.005 | 0.286 | 0.263 | 540.612 | 0.168 | 0.005 |
| 50   | 0.737 | 4.416 | 4.312 | 0.005 | 0.286 | 0.263 | 540.612 | 0.168 | 0.005 |
| 120  | 0.449 | 3.607 | 4.270 | 0.005 | 0.302 | 0.278 | 492.118 | 0.153 | 0.004 |
| 175  | 0.284 | 3.026 | 3.172 | 0.005 | 0.155 | 0.143 | 489.202 | 0.152 | 0.004 |
| 250  | 0.258 | 1.281 | 3.587 | 0.005 | 0.123 | 0.113 | 490.683 | 0.153 | 0.004 |
| 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.300 | 0.059 | 0.005 |
| 15   | 0.679 | 3.580 | 4.728 | 0.008 | 0.237 | 0.237 | 568.299 | 0.061 | 0.005 |
| 25   | 0.744 | 2.531 | 4.661 | 0.007 | 0.224 | 0.224 | 568.299 | 0.067 | 0.005 |
| 50   | 0.661 | 3.542 | 4.202 | 0.007 | 0.212 | 0.212 | 568.299 | 0.059 | 0.005 |
| 120  | 0.388 | 3.260 | 3.584 | 0.006 | 0.203 | 0.203 | 568.299 | 0.035 | 0.004 |
| 175  | 0.309 | 2.908 | 2.989 | 0.006 | 0.132 | 0.132 | 568.299 | 0.027 | 0.004 |



|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.099 | 0.986 | 0.277 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 15   | 0.766 | 3.580 | 4.762 | 0.008 | 0.256 | 0.256 | 568.299 | 0.069 | 0.005 |
| 25   | 0.807 | 2.531 | 4.661 | 0.007 | 0.232 | 0.232 | 568.299 | 0.072 | 0.005 |
| 50   | 0.973 | 4.397 | 4.422 | 0.007 | 0.267 | 0.267 | 568.299 | 0.087 | 0.005 |
| 120  | 0.485 | 3.471 | 3.808 | 0.006 | 0.252 | 0.252 | 568.299 | 0.043 | 0.004 |
| 175  | 0.338 | 2.974 | 3.035 | 0.006 | 0.140 | 0.140 | 568.299 | 0.030 | 0.004 |
| 250  | 0.242 | 1.065 | 2.624 | 0.006 | 0.075 | 0.075 | 568.299 | 0.021 | 0.004 |
| 500  | 0.226 | 1.041 | 2.340 | 0.005 | 0.071 | 0.071 | 568.299 | 0.020 | 0.004 |
| 750  | 0.230 | 1.041 | 2.401 | 0.005 | 0.072 | 0.072 | 568.299 | 0.020 | 0.004 |
| 9999 | 0.293 | 1.144 | 4.105 | 0.005 | 0.098 | 0.098 | 568.299 | 0.026 | 0.004 |
| 15   | 1.064 | 4.923 | 4.842 | 0.005 | 0.387 | 0.356 | 546.291 | 0.170 | 0.005 |
| 25   | 1.064 | 4.923 | 4.842 | 0.005 | 0.387 | 0.356 | 546.291 | 0.170 | 0.005 |
| 50   | 1.064 | 4.923 | 4.842 | 0.005 | 0.387 | 0.356 | 546.291 | 0.170 | 0.005 |
| 120  | 0.481 | 3.610 | 4.650 | 0.005 | 0.320 | 0.294 | 492.212 | 0.153 | 0.004 |
| 175  | 0.265 | 2.949 | 3.181 | 0.005 | 0.147 | 0.136 | 490.181 | 0.153 | 0.004 |
| 250  | 0.211 | 1.243 | 2.995 | 0.005 | 0.094 | 0.086 | 491.664 | 0.153 | 0.004 |
| 500  | 0.245 | 2.231 | 3.098 | 0.005 | 0.119 | 0.110 | 497.996 | 0.155 | 0.004 |
| 50   | 1.070 | 4.768 | 4.735 | 0.005 | 0.359 | 0.330 | 545.869 | 0.170 | 0.005 |
| 120  | 0.222 | 3.270 | 2.845 | 0.005 | 0.136 | 0.125 | 491.211 | 0.153 | 0.004 |
| 175  | 0.164 | 2.842 | 2.342 | 0.005 | 0.088 | 0.081 | 489.987 | 0.153 | 0.004 |
| 250  | 0.152 | 1.029 | 2.487 | 0.005 | 0.060 | 0.055 | 491.100 | 0.153 | 0.004 |
| 500  | 0.145 | 0.958 | 2.701 | 0.005 | 0.060 | 0.055 | 485.954 | 0.151 | 0.004 |
| 175  | 0.802 | 3.990 | 8.021 | 0.005 | 0.461 | 0.424 | 491.492 | 0.153 | 0.004 |
| 250  | 0.669 | 2.512 | 7.208 | 0.005 | 0.350 | 0.322 | 493.634 | 0.154 | 0.004 |
| 500  | 0.598 | 4.982 | 6.502 | 0.005 | 0.300 | 0.276 | 498.186 | 0.155 | 0.004 |
| 750  | 0.506 | 2.759 | 6.727 | 0.005 | 0.248 | 0.228 | 491.473 | 0.153 | 0.004 |
| 1000 | 0.574 | 2.413 | 5.764 | 0.005 | 0.183 | 0.183 | 568.299 | 0.051 | 0.004 |
| 25   | 1.765 | 7.299 | 5.679 | 0.005 | 0.576 | 0.530 | 545.053 | 0.170 | 0.005 |
| 50   | 1.765 | 7.299 | 5.679 | 0.005 | 0.576 | 0.530 | 545.053 | 0.170 | 0.005 |
| 120  | 0.655 | 4.047 | 5.470 | 0.005 | 0.452 | 0.416 | 484.093 | 0.151 | 0.004 |
| 175  | 0.448 | 3.423 | 4.368 | 0.005 | 0.242 | 0.223 | 489.511 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.334 | 1.346 | 4.131 | 0.005 | 0.140 | 0.129 | 487.902 | 0.152 | 0.004 |
| 500  | 0.334 | 1.868 | 3.726 | 0.005 | 0.140 | 0.128 | 484.571 | 0.151 | 0.004 |
| 750  | 0.331 | 1.555 | 3.544 | 0.005 | 0.140 | 0.129 | 476.566 | 0.148 | 0.004 |
| 1000 | 0.336 | 1.213 | 5.673 | 0.005 | 0.154 | 0.142 | 488.404 | 0.152 | 0.004 |
| 120  | 0.740 | 4.204 | 7.036 | 0.005 | 0.543 | 0.499 | 502.829 | 0.157 | 0.004 |
| 175  | 0.539 | 3.568 | 5.641 | 0.005 | 0.303 | 0.279 | 497.340 | 0.155 | 0.004 |
| 250  | 0.557 | 2.407 | 6.563 | 0.005 | 0.290 | 0.267 | 486.991 | 0.152 | 0.004 |
| 500  | 0.369 | 2.828 | 4.568 | 0.005 | 0.180 | 0.166 | 490.773 | 0.153 | 0.004 |
| 750  | 0.294 | 1.965 | 3.746 | 0.005 | 0.135 | 0.124 | 490.578 | 0.153 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 50   | 1.018 | 4.657 | 4.427 | 0.007 | 0.270 | 0.270 | 568.299 | 0.091 | 0.005 |
| 120  | 0.492 | 3.541 | 3.723 | 0.006 | 0.252 | 0.252 | 568.299 | 0.044 | 0.004 |
| 175  | 0.351 | 3.043 | 2.930 | 0.006 | 0.141 | 0.141 | 568.299 | 0.031 | 0.004 |
| 250  | 0.309 | 1.306 | 3.040 | 0.007 | 0.090 | 0.090 | 686.695 | 0.027 | 0.004 |
| 25   | 0.487 | 3.787 | 3.890 | 0.005 | 0.178 | 0.164 | 547.558 | 0.171 | 0.005 |
| 50   | 0.487 | 3.787 | 3.890 | 0.005 | 0.178 | 0.164 | 547.558 | 0.171 | 0.005 |
| 120  | 0.216 | 3.282 | 2.860 | 0.005 | 0.140 | 0.129 | 490.094 | 0.153 | 0.004 |
| 50   | 0.779 | 4.353 | 4.820 | 0.006 | 0.320 | 0.294 | 555.736 | 0.173 | 0.005 |
| 120  | 0.414 | 3.489 | 4.284 | 0.005 | 0.269 | 0.247 | 491.317 | 0.153 | 0.004 |
| 175  | 0.375 | 2.976 | 4.475 | 0.005 | 0.215 | 0.198 | 488.441 | 0.152 | 0.004 |
| 250  | 0.241 | 1.234 | 3.989 | 0.005 | 0.113 | 0.104 | 494.139 | 0.154 | 0.004 |
| 500  | 0.157 | 1.226 | 2.204 | 0.005 | 0.076 | 0.070 | 487.872 | 0.152 | 0.004 |
| 750  | 0.143 | 0.993 | 2.269 | 0.005 | 0.078 | 0.072 | 488.860 | 0.152 | 0.004 |
| 15   | 1.545 | 6.444 | 5.399 | 0.005 | 0.531 | 0.488 | 545.758 | 0.170 | 0.005 |
| 25   | 1.545 | 6.444 | 5.399 | 0.005 | 0.531 | 0.488 | 545.758 | 0.170 | 0.005 |
| 50   | 1.545 | 6.444 | 5.399 | 0.005 | 0.531 | 0.488 | 545.758 | 0.170 | 0.005 |
| 120  | 0.600 | 3.882 | 5.136 | 0.005 | 0.428 | 0.394 | 492.554 | 0.153 | 0.004 |
| 175  | 0.589 | 3.588 | 6.071 | 0.005 | 0.320 | 0.294 | 491.521 | 0.153 | 0.004 |
| 250  | 0.350 | 1.605 | 4.302 | 0.005 | 0.169 | 0.156 | 488.409 | 0.152 | 0.004 |
| 25   | 0.992 | 5.310 | 4.764 | 0.005 | 0.363 | 0.334 | 536.112 | 0.167 | 0.005 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 50   | 0.992 | 5.310 | 4.764 | 0.005 | 0.363 | 0.334 | 536.112 | 0.167 | 0.005 |
| 120  | 0.420 | 3.692 | 4.154 | 0.005 | 0.294 | 0.271 | 494.124 | 0.154 | 0.004 |
| 175  | 0.297 | 3.137 | 3.168 | 0.005 | 0.160 | 0.147 | 485.775 | 0.151 | 0.004 |
| 250  | 0.259 | 1.242 | 3.460 | 0.005 | 0.112 | 0.103 | 489.456 | 0.152 | 0.004 |
| 500  | 0.222 | 1.445 | 2.669 | 0.005 | 0.092 | 0.085 | 486.294 | 0.151 | 0.004 |
| 750  | 0.271 | 1.601 | 3.402 | 0.005 | 0.124 | 0.114 | 485.010 | 0.151 | 0.004 |
| 15   | 1.039 | 5.018 | 4.960 | 0.005 | 0.409 | 0.377 | 548.361 | 0.171 | 0.005 |
| 25   | 1.039 | 5.018 | 4.960 | 0.005 | 0.409 | 0.377 | 548.361 | 0.171 | 0.005 |
| 50   | 1.039 | 5.018 | 4.960 | 0.005 | 0.409 | 0.377 | 548.361 | 0.171 | 0.005 |
| 120  | 0.658 | 3.855 | 5.915 | 0.005 | 0.450 | 0.414 | 493.715 | 0.154 | 0.004 |
| 175  | 0.470 | 3.331 | 5.127 | 0.005 | 0.261 | 0.240 | 485.925 | 0.151 | 0.004 |
| 250  | 0.419 | 1.849 | 5.296 | 0.005 | 0.212 | 0.195 | 491.565 | 0.153 | 0.004 |
| 500  | 0.256 | 1.974 | 3.211 | 0.005 | 0.121 | 0.112 | 489.628 | 0.152 | 0.004 |
| 750  | 0.094 | 0.966 | 1.025 | 0.005 | 0.029 | 0.026 | 494.643 | 0.154 | 0.004 |
| 15   | 0.766 | 3.580 | 4.762 | 0.008 | 0.256 | 0.256 | 568.300 | 0.069 | 0.005 |
| 25   | 0.807 | 2.531 | 4.661 | 0.007 | 0.232 | 0.232 | 568.299 | 0.072 | 0.005 |
| 50   | 1.210 | 5.092 | 4.607 | 0.007 | 0.311 | 0.311 | 568.299 | 0.109 | 0.005 |
| 120  | 0.564 | 3.648 | 3.980 | 0.006 | 0.290 | 0.290 | 568.299 | 0.050 | 0.004 |
| 175  | 0.402 | 3.123 | 3.176 | 0.006 | 0.162 | 0.162 | 568.299 | 0.036 | 0.004 |
| 250  | 0.292 | 1.118 | 2.751 | 0.006 | 0.084 | 0.084 | 568.299 | 0.026 | 0.004 |
| 500  | 0.277 | 1.080 | 2.430 | 0.005 | 0.080 | 0.080 | 568.299 | 0.025 | 0.004 |
| 175  | 0.383 | 3.383 | 3.543 | 0.005 | 0.192 | 0.177 | 488.044 | 0.152 | 0.004 |
| 250  | 0.341 | 1.543 | 3.451 | 0.005 | 0.141 | 0.130 | 487.635 | 0.152 | 0.004 |
| 500  | 0.287 | 1.560 | 3.090 | 0.005 | 0.113 | 0.104 | 493.506 | 0.154 | 0.004 |
| 750  | 0.348 | 2.176 | 3.691 | 0.005 | 0.143 | 0.132 | 492.114 | 0.153 | 0.004 |
| 1000 | 0.297 | 1.357 | 4.858 | 0.005 | 0.127 | 0.116 | 487.790 | 0.152 | 0.004 |

2019

| 2019            |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-----------------|-------|---------|---------|---------|---------|---------|
| Equipment       | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    |
| Aerial Lifts    | 15    | 0.172   | 3.115   | 3.079   | 0.005   | 0.042   |
| Aerial Lifts    | 25    | 0.172   | 3.115   | 3.079   | 0.005   | 0.042   |
| Aerial Lifts    | 50    | 0.172   | 3.115   | 3.079   | 0.005   | 0.042   |
| Aerial Lifts    | 120   | 0.118   | 3.173   | 1.977   | 0.005   | 0.049   |
| Aerial Lifts    | 500   | 0.066   | 0.941   | 0.636   | 0.005   | 0.009   |
| Aerial Lifts    | 750   | 0.212   | 1.023   | 2.117   | 0.005   | 0.064   |
| Air Compressors |       |         |         |         |         |         |
|                 | 15    | 0.748   | 3.562   | 4.647   | 0.008   | 0.241   |
| Air Compressors |       |         |         |         |         |         |
|                 | 25    | 0.787   | 2.501   | 4.596   | 0.007   | 0.222   |
| Air Compressors |       |         |         |         |         |         |
|                 | 50    | 1.129   | 5.283   | 4.546   | 0.007   | 0.287   |
| Air Compressors |       |         |         |         |         |         |
|                 | 120   | 0.538   | 3.718   | 3.706   | 0.006   | 0.260   |
| Air Compressors |       |         |         |         |         |         |
|                 | 175   | 0.401   | 3.204   | 2.874   | 0.006   | 0.150   |
| Air Compressors |       |         |         |         |         |         |
|                 | 250   | 0.304   | 1.132   | 2.469   | 0.006   | 0.078   |
| Air Compressors |       |         |         |         |         |         |
|                 | 500   | 0.293   | 1.086   | 2.193   | 0.005   | 0.075   |
| Air Compressors |       |         |         |         |         |         |
|                 | 750   | 0.294   | 1.086   | 2.247   | 0.005   | 0.076   |
| Air Compressors |       |         |         |         |         |         |
|                 | 1000  | 0.324   | 1.182   | 4.073   | 0.005   | 0.102   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 15    | 0.722   | 4.497   | 4.718   | 0.006   | 0.303   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 25    | 0.722   | 4.497   | 4.718   | 0.006   | 0.303   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 50    | 0.722   | 4.497   | 4.718   | 0.006   | 0.303   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 120   | 0.267   | 3.332   | 3.321   | 0.005   | 0.180   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 175   | 0.181   | 2.956   | 2.018   | 0.005   | 0.088   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 250   | 0.143   | 1.061   | 1.894   | 0.005   | 0.054   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 500   | 0.129   | 1.034   | 1.551   | 0.005   | 0.048   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 750   | 0.117   | 0.971   | 1.449   | 0.005   | 0.048   |
| Bore/Drill Rigs |       |         |         |         |         |         |
|                 | 1000  | 0.129   | 0.983   | 3.041   | 0.005   | 0.061   |

|                          |      |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.162 |
| Cement and Mortar Mixers | 25   | 0.735 | 2.417 | 4.469 | 0.007 | 0.196 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.899 | 4.645 | 4.338 | 0.007 | 0.242 |
| Concrete/Industrial Saws | 120  | 0.443 | 3.550 | 3.441 | 0.006 | 0.220 |
| Concrete/Industrial Saws | 175  | 0.330 | 3.072 | 2.618 | 0.006 | 0.128 |
| Cranes                   | 50   | 2.045 | 7.245 | 5.952 | 0.005 | 0.615 |
| Cranes                   | 120  | 0.803 | 4.265 | 6.958 | 0.005 | 0.501 |
| Cranes                   | 175  | 0.568 | 3.598 | 5.949 | 0.005 | 0.318 |
| Cranes                   | 250  | 0.427 | 1.941 | 5.084 | 0.005 | 0.216 |
| Cranes                   | 500  | 0.349 | 2.969 | 4.297 | 0.005 | 0.173 |
| Cranes                   | 750  | 0.252 | 1.446 | 3.428 | 0.005 | 0.124 |
| Cranes                   | 9999 | 0.172 | 0.991 | 2.349 | 0.005 | 0.060 |
| Crawler Tractors         | 50   | 2.225 | 7.589 | 5.855 | 0.005 | 0.640 |
| Crawler Tractors         | 120  | 0.757 | 4.088 | 6.393 | 0.005 | 0.535 |
| Crawler Tractors         | 175  | 0.517 | 3.379 | 5.382 | 0.005 | 0.300 |
| Crawler Tractors         | 250  | 0.380 | 1.604 | 4.972 | 0.005 | 0.188 |
| Crawler Tractors         | 500  | 0.319 | 2.219 | 3.934 | 0.005 | 0.153 |
| Crawler Tractors         | 750  | 0.266 | 1.356 | 3.343 | 0.005 | 0.123 |
| Crawler Tractors         | 1000 | 0.460 | 2.020 | 7.212 | 0.005 | 0.211 |
| Crushing/Proc. Equipment | 50   | 1.064 | 5.316 | 4.495 | 0.007 | 0.269 |
| Crushing/Proc. Equipment | 120  | 0.519 | 3.739 | 3.544 | 0.006 | 0.241 |
| Crushing/Proc. Equipment | 175  | 0.394 | 3.233 | 2.700 | 0.006 | 0.141 |
| Crushing/Proc. Equipment | 250  | 0.304 | 1.134 | 2.300 | 0.006 | 0.074 |
| Crushing/Proc. Equipment | 500  | 0.295 | 1.087 | 2.046 | 0.005 | 0.071 |
| Crushing/Proc. Equipment | 750  | 0.294 | 1.085 | 2.085 | 0.005 | 0.071 |
| Crushing/Proc. Equipment | 9999 | 0.345 | 1.173 | 3.927 | 0.005 | 0.098 |

|                      |      |       |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|-------|
| Dumpers/Tenders      | 25   | 0.686 | 2.339 | 4.341 | 0.007 | 0.167 |
| Excavators           | 25   | 0.637 | 4.597 | 4.199 | 0.005 | 0.250 |
| Excavators           | 50   | 0.637 | 4.597 | 4.199 | 0.005 | 0.250 |
| Excavators           | 120  | 0.325 | 3.524 | 3.369 | 0.005 | 0.211 |
| Excavators           | 175  | 0.246 | 3.082 | 2.533 | 0.005 | 0.122 |
| Excavators           | 250  | 0.186 | 1.127 | 2.242 | 0.005 | 0.068 |
| Excavators           | 500  | 0.162 | 1.114 | 1.780 | 0.005 | 0.058 |
| Excavators           | 750  | 0.176 | 1.173 | 1.987 | 0.005 | 0.067 |
| Forklifts            | 50   | 1.244 | 5.880 | 4.862 | 0.005 | 0.401 |
| Forklifts            | 120  | 0.510 | 3.804 | 4.550 | 0.005 | 0.353 |
| Forklifts            | 175  | 0.382 | 3.288 | 3.865 | 0.005 | 0.210 |
| Forklifts            | 250  | 0.374 | 1.677 | 4.250 | 0.005 | 0.175 |
| Forklifts            | 500  | 0.268 | 1.814 | 2.751 | 0.005 | 0.112 |
| Generator Sets       | 15   | 0.662 | 3.562 | 4.617 | 0.008 | 0.224 |
| Generator Sets       | 25   | 0.731 | 2.501 | 4.596 | 0.007 | 0.214 |
| Generator Sets       | 50   | 0.779 | 4.076 | 4.215 | 0.007 | 0.222 |
| Generator Sets       | 120  | 0.405 | 3.396 | 3.446 | 0.006 | 0.206 |
| Generator Sets       | 175  | 0.290 | 2.929 | 2.669 | 0.006 | 0.118 |
| Generator Sets       | 250  | 0.211 | 1.036 | 2.285 | 0.006 | 0.064 |
| Generator Sets       | 500  | 0.199 | 1.015 | 2.056 | 0.005 | 0.062 |
| Generator Sets       | 750  | 0.202 | 1.015 | 2.104 | 0.005 | 0.062 |
| Generator Sets       | 9999 | 0.261 | 1.103 | 3.829 | 0.005 | 0.087 |
| Graders              | 50   | 2.616 | 8.279 | 5.945 | 0.005 | 0.737 |
| Graders              | 120  | 1.032 | 4.642 | 8.159 | 0.005 | 0.665 |
| Graders              | 175  | 0.609 | 3.656 | 6.014 | 0.005 | 0.337 |
| Graders              | 250  | 0.360 | 1.359 | 4.866 | 0.005 | 0.156 |
| Graders              | 500  | 0.323 | 1.528 | 3.218 | 0.005 | 0.124 |
| Graders              | 750  | 0.335 | 1.255 | 2.276 | 0.005 | 0.080 |
| Off-Highway Tractors | 120  | 0.473 | 3.795 | 4.421 | 0.005 | 0.331 |
| Off-Highway Tractors | 175  | 0.294 | 3.219 | 3.208 | 0.005 | 0.159 |
| Off-Highway Tractors | 250  | 0.239 | 1.218 | 2.914 | 0.005 | 0.098 |
| Off-Highway Tractors | 750  | 0.205 | 1.129 | 2.177 | 0.005 | 0.082 |
| Off-Highway Tractors | 1000 | 0.140 | 1.010 | 2.378 | 0.005 | 0.062 |
| Off-Highway Trucks   | 175  | 0.323 | 3.326 | 2.825 | 0.005 | 0.149 |
| Off-Highway Trucks   | 250  | 0.307 | 1.461 | 2.985 | 0.005 | 0.119 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.264 | 1.483 | 2.669 | 0.005 | 0.097 |
| Off-Highway Trucks                 | 750  | 0.327 | 2.041 | 3.320 | 0.005 | 0.129 |
| Off-Highway Trucks                 | 1000 | 0.295 | 1.356 | 4.765 | 0.005 | 0.124 |
| Other Construction Equipment       | 15   | 1.152 | 5.541 | 5.203 | 0.005 | 0.437 |
| Other Construction Equipment       | 25   | 1.152 | 5.541 | 5.203 | 0.005 | 0.437 |
| Other Construction Equipment       | 50   | 1.152 | 5.541 | 5.203 | 0.005 | 0.437 |
| Other Construction Equipment       | 120  | 0.550 | 3.754 | 5.048 | 0.005 | 0.379 |
| Other Construction Equipment       | 175  | 0.412 | 3.256 | 4.433 | 0.005 | 0.234 |
| Other Construction Equipment       | 500  | 0.234 | 1.667 | 2.855 | 0.005 | 0.103 |
| Other General Industrial Equipment | 15   | 1.042 | 5.662 | 4.807 | 0.005 | 0.374 |
| Other General Industrial Equipment | 25   | 1.042 | 5.662 | 4.807 | 0.005 | 0.374 |
| Other General Industrial Equipment | 50   | 1.042 | 5.662 | 4.807 | 0.005 | 0.374 |
| Other General Industrial Equipment | 120  | 0.500 | 3.821 | 4.497 | 0.005 | 0.343 |
| Other General Industrial Equipment | 175  | 0.302 | 3.241 | 2.999 | 0.005 | 0.157 |
| Other General Industrial Equipment | 250  | 0.259 | 1.299 | 3.020 | 0.005 | 0.106 |
| Other General Industrial Equipment | 500  | 0.239 | 1.561 | 2.575 | 0.005 | 0.092 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.199 | 1.474 | 2.115 | 0.005 | 0.076 |
| Other General Industrial Equipment | 1000 | 0.264 | 1.076 | 4.834 | 0.005 | 0.117 |
| Other Material Handling Equipment  | 50   | 1.275 | 6.139 | 5.179 | 0.005 | 0.452 |
| Other Material Handling Equipment  | 120  | 0.360 | 3.636 | 3.566 | 0.005 | 0.231 |
| Other Material Handling Equipment  | 175  | 0.280 | 3.185 | 2.774 | 0.005 | 0.139 |
| Other Material Handling Equipment  | 250  | 0.300 | 1.341 | 3.817 | 0.005 | 0.123 |
| Other Material Handling Equipment  | 500  | 0.291 | 1.620 | 3.371 | 0.005 | 0.128 |
| Other Material Handling Equipment  | 9999 | 0.190 | 1.036 | 3.583 | 0.005 | 0.076 |
| Pavers                             | 25   | 1.418 | 5.657 | 4.916 | 0.005 | 0.436 |
| Pavers                             | 50   | 1.418 | 5.657 | 4.916 | 0.005 | 0.436 |
| Pavers                             | 120  | 0.496 | 3.622 | 4.670 | 0.005 | 0.346 |
| Pavers                             | 175  | 0.299 | 3.013 | 3.245 | 0.005 | 0.159 |
| Pavers                             | 250  | 0.187 | 1.032 | 3.111 | 0.005 | 0.084 |
| Pavers                             | 500  | 0.167 | 0.986 | 2.270 | 0.005 | 0.081 |
| Paving Equipment                   | 25   | 0.705 | 4.408 | 4.238 | 0.005 | 0.270 |
| Paving Equipment                   | 50   | 0.705 | 4.408 | 4.238 | 0.005 | 0.270 |
| Paving Equipment                   | 120  | 0.425 | 3.598 | 4.042 | 0.005 | 0.281 |
| Paving Equipment                   | 175  | 0.254 | 3.011 | 2.692 | 0.005 | 0.134 |
| Paving Equipment                   | 250  | 0.241 | 1.244 | 3.251 | 0.005 | 0.112 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Pressure Washers                   | 15   | 0.662 | 3.562 | 4.617 | 0.008 | 0.224 |
| Pressure Washers                   | 25   | 0.731 | 2.501 | 4.596 | 0.007 | 0.214 |
| Pressure Washers                   | 50   | 0.569 | 3.457 | 4.053 | 0.007 | 0.184 |
| Pressure Washers                   | 120  | 0.337 | 3.240 | 3.295 | 0.006 | 0.174 |
| Pressure Washers                   | 175  | 0.280 | 2.907 | 2.670 | 0.006 | 0.117 |



|                         |      |       |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 |
| Pumps                   | 15   | 0.748 | 3.562 | 4.647 | 0.008 | 0.241 |
| Pumps                   | 25   | 0.787 | 2.501 | 4.596 | 0.007 | 0.222 |
| Pumps                   | 50   | 0.849 | 4.284 | 4.269 | 0.007 | 0.235 |
| Pumps                   | 120  | 0.429 | 3.449 | 3.497 | 0.006 | 0.217 |
| Pumps                   | 175  | 0.309 | 2.974 | 2.711 | 0.006 | 0.124 |
| Pumps                   | 250  | 0.226 | 1.052 | 2.323 | 0.006 | 0.067 |
| Pumps                   | 500  | 0.214 | 1.027 | 2.084 | 0.005 | 0.064 |
| Pumps                   | 750  | 0.217 | 1.027 | 2.133 | 0.005 | 0.065 |
| Pumps                   | 9999 | 0.273 | 1.118 | 3.873 | 0.005 | 0.089 |
| Rollers                 | 15   | 0.972 | 4.778 | 4.645 | 0.005 | 0.349 |
| Rollers                 | 25   | 0.972 | 4.778 | 4.645 | 0.005 | 0.349 |
| Rollers                 | 50   | 0.972 | 4.778 | 4.645 | 0.005 | 0.349 |
| Rollers                 | 120  | 0.423 | 3.557 | 4.179 | 0.005 | 0.275 |
| Rollers                 | 175  | 0.231 | 2.933 | 2.699 | 0.005 | 0.124 |
| Rollers                 | 250  | 0.211 | 1.249 | 2.883 | 0.005 | 0.092 |
| Rollers                 | 500  | 0.234 | 2.101 | 2.908 | 0.005 | 0.111 |
| Rough Terrain Forklifts | 50   | 1.009 | 4.674 | 4.557 | 0.005 | 0.328 |
| Rough Terrain Forklifts | 120  | 0.202 | 3.258 | 2.622 | 0.005 | 0.117 |
| Rough Terrain Forklifts | 175  | 0.149 | 2.841 | 2.058 | 0.005 | 0.075 |
| Rough Terrain Forklifts | 250  | 0.109 | 0.974 | 1.639 | 0.005 | 0.036 |
| Rough Terrain Forklifts | 500  | 0.116 | 0.950 | 1.961 | 0.005 | 0.043 |
| Rubber Tired Dozers     | 175  | 0.759 | 3.949 | 7.520 | 0.005 | 0.433 |
| Rubber Tired Dozers     | 250  | 0.651 | 2.459 | 6.929 | 0.005 | 0.338 |
| Rubber Tired Dozers     | 500  | 0.572 | 4.743 | 6.143 | 0.005 | 0.283 |
| Rubber Tired Dozers     | 750  | 0.455 | 2.598 | 6.122 | 0.005 | 0.218 |
| Rubber Tired Dozers     | 1000 | 0.547 | 2.281 | 5.528 | 0.005 | 0.171 |
| Rubber Tired Loaders    | 25   | 1.602 | 6.978 | 5.432 | 0.005 | 0.518 |
| Rubber Tired Loaders    | 50   | 1.602 | 6.978 | 5.432 | 0.005 | 0.518 |
| Rubber Tired Loaders    | 120  | 0.595 | 3.979 | 5.006 | 0.005 | 0.402 |
| Rubber Tired Loaders    | 175  | 0.405 | 3.381 | 3.859 | 0.005 | 0.213 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.309 | 1.302 | 3.745 | 0.005 | 0.126 |
| Rubber Tired Loaders      | 500  | 0.306 | 1.725 | 3.288 | 0.005 | 0.123 |
| Rubber Tired Loaders      | 750  | 0.293 | 1.452 | 3.019 | 0.005 | 0.118 |
| Rubber Tired Loaders      | 1000 | 0.323 | 1.208 | 5.459 | 0.005 | 0.146 |
| Scrapers                  | 120  | 0.718 | 4.197 | 6.841 | 0.005 | 0.526 |
| Scrapers                  | 175  | 0.510 | 3.533 | 5.264 | 0.005 | 0.283 |
| Scrapers                  | 250  | 0.501 | 2.233 | 5.831 | 0.005 | 0.257 |
| Scrapers                  | 500  | 0.343 | 2.595 | 4.156 | 0.005 | 0.163 |
| Scrapers                  | 750  | 0.277 | 1.829 | 3.431 | 0.005 | 0.123 |
| Signal Boards             | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 |
| Signal Boards             | 50   | 0.887 | 4.538 | 4.272 | 0.007 | 0.236 |
| Signal Boards             | 120  | 0.437 | 3.519 | 3.410 | 0.006 | 0.216 |
| Signal Boards             | 175  | 0.321 | 3.043 | 2.601 | 0.006 | 0.125 |
| Signal Boards             | 250  | 0.291 | 1.292 | 2.676 | 0.007 | 0.080 |
| Skid Steer Loaders        | 25   | 0.446 | 3.740 | 3.750 | 0.005 | 0.154 |
| Skid Steer Loaders        | 50   | 0.446 | 3.740 | 3.750 | 0.005 | 0.154 |
| Skid Steer Loaders        | 120  | 0.199 | 3.277 | 2.656 | 0.005 | 0.122 |
| Surfacing Equipment       | 50   | 0.643 | 4.100 | 4.420 | 0.006 | 0.250 |
| Surfacing Equipment       | 120  | 0.355 | 3.449 | 3.823 | 0.005 | 0.226 |
| Surfacing Equipment       | 175  | 0.357 | 2.972 | 4.239 | 0.005 | 0.204 |
| Surfacing Equipment       | 250  | 0.217 | 1.216 | 3.400 | 0.005 | 0.101 |
| Surfacing Equipment       | 500  | 0.146 | 1.214 | 1.899 | 0.005 | 0.068 |
| Surfacing Equipment       | 750  | 0.142 | 0.994 | 2.179 | 0.005 | 0.076 |
| Sweepers/Scrubbers        | 15   | 1.431 | 6.268 | 5.225 | 0.005 | 0.491 |
| Sweepers/Scrubbers        | 25   | 1.431 | 6.268 | 5.225 | 0.005 | 0.491 |
| Sweepers/Scrubbers        | 50   | 1.431 | 6.268 | 5.225 | 0.005 | 0.491 |
| Sweepers/Scrubbers        | 120  | 0.550 | 3.846 | 4.773 | 0.005 | 0.387 |
| Sweepers/Scrubbers        | 175  | 0.523 | 3.449 | 5.301 | 0.005 | 0.277 |
| Sweepers/Scrubbers        | 250  | 0.235 | 1.230 | 2.866 | 0.005 | 0.099 |
| Tractors/Loaders/Backhoes | 25   | 0.920 | 5.203 | 4.609 | 0.005 | 0.330 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.920 | 5.203 | 4.609 | 0.005 | 0.330 |
| Tractors/Loaders/Backhoes | 120  | 0.368 | 3.638 | 3.693 | 0.005 | 0.247 |
| Tractors/Loaders/Backhoes | 175  | 0.270 | 3.122 | 2.784 | 0.005 | 0.140 |
| Tractors/Loaders/Backhoes | 250  | 0.245 | 1.220 | 3.147 | 0.005 | 0.102 |
| Tractors/Loaders/Backhoes | 500  | 0.206 | 1.389 | 2.345 | 0.005 | 0.082 |
| Tractors/Loaders/Backhoes | 750  | 0.262 | 1.603 | 3.120 | 0.005 | 0.117 |
| Trenchers                 | 15   | 0.955 | 4.892 | 4.785 | 0.005 | 0.377 |
| Trenchers                 | 25   | 0.955 | 4.892 | 4.785 | 0.005 | 0.377 |
| Trenchers                 | 50   | 0.955 | 4.892 | 4.785 | 0.005 | 0.377 |
| Trenchers                 | 120  | 0.631 | 3.837 | 5.695 | 0.005 | 0.431 |
| Trenchers                 | 175  | 0.460 | 3.342 | 4.960 | 0.005 | 0.255 |
| Trenchers                 | 250  | 0.405 | 1.810 | 5.047 | 0.005 | 0.203 |
| Trenchers                 | 500  | 0.254 | 1.987 | 3.128 | 0.005 | 0.118 |
| Trenchers                 | 750  | 0.078 | 0.956 | 0.707 | 0.005 | 0.015 |
| Welders                   | 15   | 0.748 | 3.562 | 4.647 | 0.008 | 0.241 |
| Welders                   | 25   | 0.787 | 2.501 | 4.596 | 0.007 | 0.222 |
| Welders                   | 50   | 1.055 | 4.950 | 4.449 | 0.007 | 0.273 |
| Welders                   | 120  | 0.503 | 3.623 | 3.648 | 0.006 | 0.250 |
| Welders                   | 175  | 0.370 | 3.122 | 2.832 | 0.006 | 0.143 |
| Welders                   | 250  | 0.276 | 1.104 | 2.432 | 0.006 | 0.075 |
| Welders                   | 500  | 0.264 | 1.065 | 2.163 | 0.005 | 0.072 |
| Water Trucks              | 175  | 0.323 | 3.326 | 2.825 | 0.005 | 0.149 |
| Water Trucks              | 250  | 0.307 | 1.461 | 2.985 | 0.005 | 0.119 |
| Water Trucks              | 500  | 0.264 | 1.483 | 2.669 | 0.005 | 0.097 |
| Water Trucks              | 750  | 0.327 | 2.041 | 3.320 | 0.005 | 0.129 |
| Water Trucks              | 1000 | 0.295 | 1.356 | 4.765 | 0.005 | 0.124 |

2020

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|
| PM2.5   | CO2     | CH4     | N2O     |
| 0.038   | 536.743 | 0.170   | 0.005   |
| 0.038   | 536.743 | 0.170   | 0.005   |
| 0.038   | 536.743 | 0.170   | 0.005   |
| 0.045   | 482.606 | 0.153   | 0.004   |
| 0.008   | 482.545 | 0.153   | 0.004   |
| 0.064   | 568.299 | 0.019   | 0.004   |
| 0.241   | 568.299 | 0.067   | 0.005   |
| 0.222   | 568.299 | 0.071   | 0.005   |
| 0.287   | 568.299 | 0.101   | 0.005   |
| 0.260   | 568.299 | 0.048   | 0.004   |
| 0.150   | 568.299 | 0.036   | 0.004   |
| 0.078   | 568.299 | 0.027   | 0.004   |
| 0.075   | 568.299 | 0.026   | 0.004   |
| 0.076   | 568.299 | 0.026   | 0.004   |
| 0.102   | 568.299 | 0.029   | 0.004   |
| 0.278   | 545.293 | 0.173   | 0.005   |
| 0.278   | 545.293 | 0.173   | 0.005   |
| 0.278   | 545.293 | 0.173   | 0.005   |
| 0.166   | 472.453 | 0.150   | 0.004   |
| 0.081   | 487.355 | 0.154   | 0.004   |
| 0.049   | 475.790 | 0.151   | 0.004   |
| 0.044   | 477.046 | 0.151   | 0.004   |
| 0.044   | 481.836 | 0.152   | 0.004   |
| 0.056   | 482.359 | 0.153   | 0.004   |

| 2020             |       | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      |
| Aerial Lifts     | 15    | 0.168   | 3.099   |
| Aerial Lifts     | 25    | 0.168   | 3.099   |
| Aerial Lifts     | 50    | 0.168   | 3.099   |
| Aerial Lifts     | 120   | 0.115   | 3.177   |
| Aerial Lifts     | 500   | 0.069   | 0.946   |
| Aerial Lifts     | 750   | 0.200   | 1.013   |
| Air Compressor s | 15    | 0.731   | 3.546   |
| Air Compressor s | 25    | 0.769   | 2.473   |
| Air Compressor s | 50    | 1.001   | 5.164   |
| Air Compressor s | 120   | 0.489   | 3.698   |
| Air Compressor s | 175   | 0.374   | 3.203   |
| Air Compressor s | 250   | 0.288   | 1.121   |
| Air Compressor s | 500   | 0.279   | 1.076   |
| Air Compressor s | 750   | 0.280   | 1.076   |
| Air Compressor s | 1000  | 0.306   | 1.158   |
| Bore/Drill Rigs  | 15    | 0.716   | 4.510   |
| Bore/Drill Rigs  | 25    | 0.716   | 4.510   |
| Bore/Drill Rigs  | 50    | 0.716   | 4.510   |
| Bore/Drill Rigs  | 120   | 0.246   | 3.323   |
| Bore/Drill Rigs  | 175   | 0.174   | 2.969   |
| Bore/Drill Rigs  | 250   | 0.142   | 1.068   |
| Bore/Drill Rigs  | 500   | 0.125   | 1.013   |
| Bore/Drill Rigs  | 750   | 0.109   | 0.974   |
| Bore/Drill Rigs  | 1000  | 0.133   | 0.988   |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.162 | 568.299 | 0.059 | 0.005 |
| 0.196 | 568.299 | 0.066 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.242 | 568.299 | 0.081 | 0.005 |
| 0.220 | 568.300 | 0.040 | 0.004 |
| 0.128 | 568.299 | 0.029 | 0.004 |
| 0.566 | 529.463 | 0.168 | 0.005 |
| 0.460 | 480.325 | 0.152 | 0.004 |
| 0.292 | 485.182 | 0.154 | 0.004 |
| 0.198 | 483.462 | 0.153 | 0.004 |
| 0.159 | 483.142 | 0.153 | 0.004 |
| 0.114 | 481.119 | 0.152 | 0.004 |
| 0.055 | 482.545 | 0.153 | 0.004 |
| 0.589 | 525.977 | 0.166 | 0.005 |
| 0.492 | 486.991 | 0.154 | 0.004 |
| 0.276 | 481.622 | 0.152 | 0.004 |
| 0.173 | 483.449 | 0.153 | 0.004 |
| 0.141 | 485.865 | 0.154 | 0.004 |
| 0.113 | 483.388 | 0.153 | 0.004 |
| 0.194 | 486.255 | 0.154 | 0.004 |
| 0.269 | 568.299 | 0.096 | 0.005 |
| 0.241 | 568.299 | 0.046 | 0.004 |
| 0.141 | 568.299 | 0.035 | 0.004 |
| 0.074 | 568.299 | 0.027 | 0.004 |
| 0.071 | 568.299 | 0.026 | 0.004 |
| 0.071 | 568.299 | 0.026 | 0.004 |
| 0.098 | 568.299 | 0.031 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.470 |
| Cement and Mortar Mixers | 25   | 0.723 | 2.397 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 50   | 0.798 | 4.552 |
| Concrete/Industrial Saws | 120  | 0.401 | 3.535 |
| Concrete/Industrial Saws | 175  | 0.306 | 3.072 |
| Cranes                   | 50   | 2.084 | 7.376 |
| Cranes                   | 120  | 0.732 | 4.171 |
| Cranes                   | 175  | 0.537 | 3.562 |
| Cranes                   | 250  | 0.384 | 1.790 |
| Cranes                   | 500  | 0.321 | 2.660 |
| Cranes                   | 750  | 0.242 | 1.444 |
| Cranes                   | 9999 | 0.182 | 0.999 |
| Crawler Tractors         | 50   | 2.053 | 7.300 |
| Crawler Tractors         | 120  | 0.715 | 4.044 |
| Crawler Tractors         | 175  | 0.476 | 3.340 |
| Crawler Tractors         | 250  | 0.360 | 1.555 |
| Crawler Tractors         | 500  | 0.301 | 2.088 |
| Crawler Tractors         | 750  | 0.256 | 1.310 |
| Crawler Tractors         | 1000 | 0.463 | 2.028 |
| Crushing/Proc. Equipment | 50   | 0.947 | 5.211 |
| Crushing/Proc. Equipment | 120  | 0.473 | 3.722 |
| Crushing/Proc. Equipment | 175  | 0.367 | 3.234 |
| Crushing/Proc. Equipment | 250  | 0.289 | 1.125 |
| Crushing/Proc. Equipment | 500  | 0.281 | 1.078 |
| Crushing/Proc. Equipment | 750  | 0.281 | 1.077 |
| Crushing/Proc. Equipment | 9999 | 0.329 | 1.153 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.167 | 568.299 | 0.061 | 0.005 |
| 0.230 | 536.913 | 0.170 | 0.005 |
| 0.230 | 536.913 | 0.170 | 0.005 |
| 0.194 | 478.245 | 0.151 | 0.004 |
| 0.112 | 482.684 | 0.153 | 0.004 |
| 0.063 | 482.250 | 0.153 | 0.004 |
| 0.053 | 481.236 | 0.152 | 0.004 |
| 0.062 | 479.288 | 0.152 | 0.004 |
| 0.369 | 537.161 | 0.170 | 0.005 |
| 0.324 | 482.007 | 0.153 | 0.004 |
| 0.193 | 482.598 | 0.153 | 0.004 |
| 0.161 | 483.844 | 0.153 | 0.004 |
| 0.103 | 484.140 | 0.153 | 0.004 |
| 0.224 | 568.299 | 0.059 | 0.005 |
| 0.214 | 568.299 | 0.066 | 0.005 |
| 0.222 | 568.299 | 0.070 | 0.005 |
| 0.206 | 568.299 | 0.036 | 0.004 |
| 0.118 | 568.299 | 0.026 | 0.004 |
| 0.064 | 568.299 | 0.019 | 0.004 |
| 0.062 | 568.299 | 0.018 | 0.004 |
| 0.062 | 568.299 | 0.018 | 0.004 |
| 0.087 | 568.299 | 0.023 | 0.004 |
| 0.678 | 503.751 | 0.159 | 0.005 |
| 0.612 | 479.901 | 0.152 | 0.004 |
| 0.310 | 489.042 | 0.155 | 0.004 |
| 0.144 | 486.329 | 0.154 | 0.004 |
| 0.115 | 482.588 | 0.153 | 0.004 |
| 0.080 | 568.299 | 0.030 | 0.004 |
| 0.305 | 484.269 | 0.153 | 0.004 |
| 0.146 | 483.431 | 0.153 | 0.004 |
| 0.090 | 481.275 | 0.152 | 0.004 |
| 0.075 | 482.309 | 0.153 | 0.004 |
| 0.057 | 482.545 | 0.153 | 0.004 |
| 0.138 | 480.362 | 0.152 | 0.004 |
| 0.110 | 480.170 | 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Dumpers/Te<br>nders     | 25   | 0.685 | 2.339 |
| Excavators              | 25   | 0.593 | 4.500 |
| Excavators              | 50   | 0.593 | 4.500 |
| Excavators              | 120  | 0.299 | 3.505 |
| Excavators              | 175  | 0.231 | 3.086 |
| Excavators              | 250  | 0.177 | 1.118 |
| Excavators              | 500  | 0.153 | 1.102 |
| Excavators              | 750  | 0.170 | 1.145 |
| Forklifts               | 50   | 1.124 | 5.706 |
| Forklifts               | 120  | 0.459 | 3.760 |
| Forklifts               | 175  | 0.338 | 3.249 |
| Forklifts               | 250  | 0.293 | 1.442 |
| Forklifts               | 500  | 0.251 | 1.478 |
| Generator<br>Sets       | 15   | 0.646 | 3.546 |
| Generator<br>Sets       | 25   | 0.721 | 2.473 |
| Generator<br>Sets       | 50   | 0.691 | 3.995 |
| Generator<br>Sets       | 120  | 0.364 | 3.380 |
| Generator<br>Sets       | 175  | 0.267 | 2.930 |
| Generator<br>Sets       | 250  | 0.198 | 1.026 |
| Generator<br>Sets       | 500  | 0.188 | 1.005 |
| Generator<br>Sets       | 750  | 0.191 | 1.005 |
| Generator<br>Sets       | 9999 | 0.242 | 1.082 |
| Graders                 | 50   | 2.516 | 8.134 |
| Graders                 | 120  | 0.976 | 4.561 |
| Graders                 | 175  | 0.567 | 3.621 |
| Graders                 | 250  | 0.352 | 1.342 |
| Graders                 | 500  | 0.322 | 1.526 |
| Graders                 | 750  | 0.319 | 1.229 |
| Off-Highway<br>Tractors | 120  | 0.448 | 3.788 |
| Off-Highway<br>Tractors | 175  | 0.271 | 3.215 |
| Off-Highway<br>Tractors | 250  | 0.221 | 1.181 |
| Off-Highway<br>Tractors | 750  | 0.201 | 1.131 |
| Off-Highway<br>Tractors | 1000 | 0.150 | 1.022 |
| Off-Highway<br>Trucks   | 175  | 0.310 | 3.339 |
| Off-Highway<br>Trucks   | 250  | 0.275 | 1.391 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.089 | 485.383 | 0.154 | 0.004 |
| 0.118 | 483.218 | 0.153 | 0.004 |
| 0.114 | 480.348 | 0.152 | 0.004 |
| 0.402 | 539.735 | 0.171 | 0.005 |
| 0.402 | 539.735 | 0.171 | 0.005 |
| 0.402 | 539.735 | 0.171 | 0.005 |
| 0.349 | 482.218 | 0.153 | 0.004 |
| 0.215 | 480.452 | 0.152 | 0.004 |
| 0.094 | 485.413 | 0.154 | 0.004 |
| 0.344 | 537.869 | 0.170 | 0.005 |
| 0.344 | 537.869 | 0.170 | 0.005 |
| 0.344 | 537.869 | 0.170 | 0.005 |
| 0.316 | 480.444 | 0.152 | 0.004 |
| 0.144 | 482.336 | 0.153 | 0.004 |
| 0.097 | 483.739 | 0.153 | 0.004 |
| 0.085 | 483.439 | 0.153 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.246 | 1.414 |
| Off-Highway Trucks                 | 750  | 0.312 | 2.027 |
| Off-Highway Trucks                 | 1000 | 0.303 | 1.372 |
| Other Construction Equipment       | 15   | 1.072 | 5.404 |
| Other Construction Equipment       | 25   | 1.072 | 5.404 |
| Other Construction Equipment       | 50   | 1.072 | 5.404 |
| Other Construction Equipment       | 120  | 0.519 | 3.732 |
| Other Construction Equipment       | 175  | 0.388 | 3.235 |
| Other Construction Equipment       | 500  | 0.224 | 1.634 |
| Other General Industrial Equipment | 15   | 0.946 | 5.504 |
| Other General Industrial Equipment | 25   | 0.946 | 5.504 |
| Other General Industrial Equipment | 50   | 0.946 | 5.504 |
| Other General Industrial Equipment | 120  | 0.446 | 3.771 |
| Other General Industrial Equipment | 175  | 0.268 | 3.229 |
| Other General Industrial Equipment | 250  | 0.237 | 1.239 |
| Other General Industrial Equipment | 500  | 0.208 | 1.344 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.070 | 483.985 | 0.153 | 0.004 |
| 0.108 | 482.545 | 0.153 | 0.004 |
| 0.416 | 535.347 | 0.169 | 0.005 |
| 0.212 | 484.113 | 0.153 | 0.004 |
| 0.128 | 482.713 | 0.153 | 0.004 |
| 0.113 | 481.959 | 0.153 | 0.004 |
| 0.118 | 480.748 | 0.152 | 0.004 |
| 0.070 | 482.545 | 0.153 | 0.004 |
| 0.401 | 538.325 | 0.170 | 0.005 |
| 0.401 | 538.325 | 0.170 | 0.005 |
| 0.318 | 480.251 | 0.152 | 0.004 |
| 0.146 | 483.394 | 0.153 | 0.004 |
| 0.077 | 483.574 | 0.153 | 0.004 |
| 0.075 | 476.971 | 0.151 | 0.004 |
| 0.248 | 531.861 | 0.168 | 0.005 |
| 0.248 | 531.861 | 0.168 | 0.005 |
| 0.258 | 484.387 | 0.153 | 0.004 |
| 0.123 | 481.225 | 0.152 | 0.004 |
| 0.103 | 482.644 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.224 | 568.299 | 0.059 | 0.005 |
| 0.214 | 568.299 | 0.066 | 0.005 |
| 0.184 | 568.299 | 0.051 | 0.005 |
| 0.174 | 568.299 | 0.030 | 0.004 |
| 0.117 | 568.299 | 0.025 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.175 | 1.462 |
| Other General Industrial Equipment | 1000 | 0.271 | 1.085 |
| Other Material Handling Equipment  | 50   | 1.245 | 6.167 |
| Other Material Handling Equipment  | 120  | 0.307 | 3.589 |
| Other Material Handling Equipment  | 175  | 0.252 | 3.171 |
| Other Material Handling Equipment  | 250  | 0.291 | 1.319 |
| Other Material Handling Equipment  | 500  | 0.283 | 1.523 |
| Other Material Handling Equipment  | 9999 | 0.200 | 1.049 |
| Pavers                             | 25   | 1.318 | 5.523 |
| Pavers                             | 50   | 1.318 | 5.523 |
| Pavers                             | 120  | 0.470 | 3.604 |
| Pavers                             | 175  | 0.273 | 3.010 |
| Pavers                             | 250  | 0.176 | 1.028 |
| Pavers                             | 500  | 0.165 | 0.987 |
| Paving Equipment                   | 25   | 0.621 | 4.223 |
| Paving Equipment                   | 50   | 0.621 | 4.223 |
| Paving Equipment                   | 120  | 0.397 | 3.582 |
| Paving Equipment                   | 175  | 0.248 | 3.024 |
| Paving Equipment                   | 250  | 0.244 | 1.252 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.646 | 3.546 |
| Pressure Washers                   | 25   | 0.721 | 2.473 |
| Pressure Washers                   | 50   | 0.499 | 3.393 |
| Pressure Washers                   | 120  | 0.298 | 3.225 |
| Pressure Washers                   | 175  | 0.258 | 2.907 |



|       |         |       |       |
|-------|---------|-------|-------|
| 0.009 | 568.299 | 0.008 | 0.004 |
| 0.241 | 568.300 | 0.067 | 0.005 |
| 0.222 | 568.300 | 0.071 | 0.005 |
| 0.235 | 568.299 | 0.076 | 0.005 |
| 0.217 | 568.299 | 0.038 | 0.004 |
| 0.124 | 568.299 | 0.027 | 0.004 |
| 0.067 | 568.299 | 0.020 | 0.004 |
| 0.064 | 568.300 | 0.019 | 0.004 |
| 0.065 | 568.299 | 0.019 | 0.004 |
| 0.089 | 568.299 | 0.024 | 0.004 |
| 0.321 | 537.546 | 0.170 | 0.005 |
| 0.321 | 537.546 | 0.170 | 0.005 |
| 0.321 | 537.546 | 0.170 | 0.005 |
| 0.253 | 484.336 | 0.153 | 0.004 |
| 0.114 | 482.453 | 0.153 | 0.004 |
| 0.084 | 483.777 | 0.153 | 0.004 |
| 0.102 | 489.977 | 0.155 | 0.004 |
|       |         |       |       |
| 0.302 | 537.329 | 0.170 | 0.005 |
|       |         |       |       |
| 0.108 | 483.311 | 0.153 | 0.004 |
|       |         |       |       |
| 0.069 | 482.119 | 0.153 | 0.004 |
|       |         |       |       |
| 0.034 | 483.088 | 0.153 | 0.004 |
|       |         |       |       |
| 0.040 | 477.254 | 0.151 | 0.004 |
|       |         |       |       |
| 0.398 | 483.559 | 0.153 | 0.004 |
|       |         |       |       |
| 0.311 | 485.172 | 0.154 | 0.004 |
|       |         |       |       |
| 0.260 | 490.383 | 0.155 | 0.004 |
|       |         |       |       |
| 0.201 | 483.579 | 0.153 | 0.004 |
|       |         |       |       |
| 0.171 | 568.299 | 0.049 | 0.004 |
|       |         |       |       |
| 0.476 | 536.225 | 0.170 | 0.005 |
|       |         |       |       |
| 0.476 | 536.225 | 0.170 | 0.005 |
|       |         |       |       |
| 0.370 | 475.864 | 0.151 | 0.004 |
|       |         |       |       |
| 0.196 | 481.736 | 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 |
| Pumps                   | 15   | 0.731 | 3.546 |
| Pumps                   | 25   | 0.769 | 2.473 |
| Pumps                   | 50   | 0.755 | 4.197 |
| Pumps                   | 120  | 0.386 | 3.432 |
| Pumps                   | 175  | 0.285 | 2.974 |
| Pumps                   | 250  | 0.212 | 1.042 |
| Pumps                   | 500  | 0.203 | 1.017 |
| Pumps                   | 750  | 0.205 | 1.017 |
| Pumps                   | 9999 | 0.255 | 1.096 |
| Rollers                 | 15   | 0.926 | 4.725 |
| Rollers                 | 25   | 0.926 | 4.725 |
| Rollers                 | 50   | 0.926 | 4.725 |
| Rollers                 | 120  | 0.388 | 3.531 |
| Rollers                 | 175  | 0.215 | 2.933 |
| Rollers                 | 250  | 0.209 | 1.253 |
| Rollers                 | 500  | 0.235 | 2.113 |
|                         |      |       |       |
| Rough Terrain Forklifts | 50   | 0.999 | 4.686 |
|                         |      |       |       |
| Rough Terrain Forklifts | 120  | 0.189 | 3.256 |
|                         |      |       |       |
| Rough Terrain Forklifts | 175  | 0.143 | 2.845 |
|                         |      |       |       |
| Rough Terrain Forklifts | 250  | 0.112 | 0.978 |
|                         |      |       |       |
| Rough Terrain Forklifts | 500  | 0.089 | 0.942 |
|                         |      |       |       |
| Rubber Tired Dozers     | 175  | 0.726 | 3.893 |
|                         |      |       |       |
| Rubber Tired Dozers     | 250  | 0.620 | 2.371 |
|                         |      |       |       |
| Rubber Tired Dozers     | 500  | 0.535 | 4.411 |
|                         |      |       |       |
| Rubber Tired Dozers     | 750  | 0.457 | 2.601 |
|                         |      |       |       |
| Rubber Tired Dozers     | 1000 | 0.522 | 2.164 |
|                         |      |       |       |
| Rubber Tired Loaders    | 25   | 1.481 | 6.768 |
|                         |      |       |       |
| Rubber Tired Loaders    | 50   | 1.481 | 6.768 |
|                         |      |       |       |
| Rubber Tired Loaders    | 120  | 0.556 | 3.948 |
|                         |      |       |       |
| Rubber Tired Loaders    | 175  | 0.379 | 3.368 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.116 | 480.100 | 0.152 | 0.004 |
| 0.113 | 477.042 | 0.151 | 0.004 |
| 0.109 | 471.187 | 0.149 | 0.004 |
| 0.135 | 480.523 | 0.152 | 0.004 |
| 0.483 | 494.100 | 0.156 | 0.004 |
| 0.261 | 489.255 | 0.155 | 0.004 |
| 0.236 | 479.032 | 0.152 | 0.004 |
| 0.150 | 482.732 | 0.153 | 0.004 |
| 0.113 | 482.596 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.236 | 568.300 | 0.080 | 0.005 |
| 0.216 | 568.299 | 0.039 | 0.004 |
| 0.125 | 568.299 | 0.029 | 0.004 |
| 0.080 | 686.695 | 0.026 | 0.004 |
| 0.141 | 539.267 | 0.171 | 0.005 |
| 0.141 | 539.267 | 0.171 | 0.005 |
| 0.112 | 482.384 | 0.153 | 0.004 |
| 0.230 | 547.046 | 0.173 | 0.005 |
| 0.208 | 484.076 | 0.153 | 0.004 |
| 0.187 | 479.672 | 0.152 | 0.004 |
| 0.093 | 486.842 | 0.154 | 0.004 |
| 0.063 | 481.897 | 0.153 | 0.004 |
| 0.070 | 480.166 | 0.152 | 0.004 |
| 0.452 | 537.002 | 0.170 | 0.005 |
| 0.452 | 537.002 | 0.170 | 0.005 |
| 0.452 | 537.002 | 0.170 | 0.005 |
| 0.356 | 484.652 | 0.153 | 0.004 |
| 0.255 | 483.636 | 0.153 | 0.004 |
| 0.091 | 480.574 | 0.152 | 0.004 |
| 0.304 | 527.684 | 0.167 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.290 | 1.269 |
| Rubber Tired Loaders      | 500  | 0.289 | 1.630 |
| Rubber Tired Loaders      | 750  | 0.277 | 1.400 |
| Rubber Tired Loaders      | 1000 | 0.312 | 1.204 |
| Scrapers                  | 120  | 0.701 | 4.198 |
| Scrapers                  | 175  | 0.478 | 3.501 |
| Scrapers                  | 250  | 0.446 | 2.065 |
| Scrapers                  | 500  | 0.320 | 2.401 |
| Scrapers                  | 750  | 0.262 | 1.725 |
| Signal Boards             | 15   | 0.661 | 3.469 |
| Signal Boards             | 50   | 0.788 | 4.448 |
| Signal Boards             | 120  | 0.395 | 3.504 |
| Signal Boards             | 175  | 0.298 | 3.043 |
| Signal Boards             | 250  | 0.274 | 1.281 |
| Skid Steer Loaders        | 25   | 0.439 | 3.764 |
| Skid Steer Loaders        | 50   | 0.439 | 3.764 |
| Skid Steer Loaders        | 120  | 0.188 | 3.277 |
| Surfacing Equipment       | 50   | 0.536 | 3.934 |
| Surfacing Equipment       | 120  | 0.330 | 3.439 |
| Surfacing Equipment       | 175  | 0.308 | 2.931 |
| Surfacing Equipment       | 250  | 0.212 | 1.218 |
| Surfacing Equipment       | 500  | 0.146 | 1.219 |
| Surfacing Equipment       | 750  | 0.142 | 0.996 |
| Sweepers/Scrubbers        | 15   | 1.344 | 6.155 |
| Sweepers/Scrubbers        | 25   | 1.344 | 6.155 |
| Sweepers/Scrubbers        | 50   | 1.344 | 6.155 |
| Sweepers/Scrubbers        | 120  | 0.520 | 3.828 |
| Sweepers/Scrubbers        | 175  | 0.462 | 3.359 |
| Sweepers/Scrubbers        | 250  | 0.207 | 1.137 |
| Tractors/Loaders/Backhoes | 25   | 0.830 | 5.035 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.304 | 527.684 | 0.167 | 0.005 |
| 0.227 | 485.855 | 0.154 | 0.004 |
| 0.129 | 477.915 | 0.151 | 0.004 |
| 0.094 | 481.421 | 0.152 | 0.004 |
| 0.075 | 479.083 | 0.152 | 0.004 |
| 0.107 | 478.922 | 0.152 | 0.004 |
| 0.347 | 539.104 | 0.171 | 0.005 |
| 0.347 | 539.104 | 0.171 | 0.005 |
| 0.347 | 539.104 | 0.171 | 0.005 |
| 0.396 | 485.364 | 0.154 | 0.004 |
| 0.234 | 478.129 | 0.151 | 0.004 |
| 0.187 | 484.117 | 0.153 | 0.004 |
| 0.109 | 482.165 | 0.153 | 0.004 |
| 0.014 | 484.542 | 0.153 | 0.004 |
| 0.241 | 568.299 | 0.067 | 0.005 |
| 0.222 | 568.299 | 0.071 | 0.005 |
| 0.273 | 568.299 | 0.095 | 0.005 |
| 0.250 | 568.299 | 0.045 | 0.004 |
| 0.143 | 568.300 | 0.033 | 0.004 |
| 0.075 | 568.299 | 0.024 | 0.004 |
| 0.072 | 568.300 | 0.023 | 0.004 |
| 0.138 | 480.362 | 0.152 | 0.004 |
| 0.110 | 480.170 | 0.152 | 0.004 |
| 0.089 | 485.383 | 0.154 | 0.004 |
| 0.118 | 483.218 | 0.153 | 0.004 |
| 0.114 | 480.348 | 0.152 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.830 | 5.035 |
| Tractors/Loaders/Backhoes | 120  | 0.331 | 3.601 |
| Tractors/Loaders/Backhoes | 175  | 0.246 | 3.105 |
| Tractors/Loaders/Backhoes | 250  | 0.225 | 1.196 |
| Tractors/Loaders/Backhoes | 500  | 0.194 | 1.358 |
| Tractors/Loaders/Backhoes | 750  | 0.268 | 1.610 |
| Trenchers                 | 15   | 0.905 | 4.833 |
| Trenchers                 | 25   | 0.905 | 4.833 |
| Trenchers                 | 50   | 0.905 | 4.833 |
| Trenchers                 | 120  | 0.610 | 3.833 |
| Trenchers                 | 175  | 0.421 | 3.330 |
| Trenchers                 | 250  | 0.392 | 1.774 |
| Trenchers                 | 500  | 0.233 | 1.859 |
| Trenchers                 | 750  | 0.070 | 0.950 |
| Welders                   | 15   | 0.731 | 3.546 |
| Welders                   | 25   | 0.769 | 2.473 |
| Welders                   | 50   | 0.937 | 4.840 |
| Welders                   | 120  | 0.455 | 3.605 |
| Welders                   | 175  | 0.344 | 3.122 |
| Welders                   | 250  | 0.261 | 1.093 |
| Welders                   | 500  | 0.252 | 1.055 |
| Water Trucks              | 175  | 0.310 | 3.339 |
| Water Trucks              | 250  | 0.275 | 1.391 |
| Water Trucks              | 500  | 0.246 | 1.414 |
| Water Trucks              | 750  | 0.312 | 2.027 |
| Water Trucks              | 1000 | 0.303 | 1.372 |





|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.336 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 4.031 | 0.005 | 0.222 | 0.204 | 525.368 | 0.170 | 0.005 |
| 4.031 | 0.005 | 0.222 | 0.204 | 525.368 | 0.170 | 0.005 |
| 3.090 | 0.005 | 0.185 | 0.170 | 468.055 | 0.151 | 0.004 |
| 2.278 | 0.005 | 0.110 | 0.102 | 472.289 | 0.153 | 0.004 |
| 2.027 | 0.005 | 0.061 | 0.057 | 471.883 | 0.153 | 0.004 |
| 1.572 | 0.005 | 0.052 | 0.048 | 470.296 | 0.152 | 0.004 |
| 1.797 | 0.005 | 0.061 | 0.056 | 468.871 | 0.152 | 0.004 |
| 4.686 | 0.005 | 0.360 | 0.331 | 525.483 | 0.170 | 0.005 |
| 4.133 | 0.005 | 0.308 | 0.283 | 471.529 | 0.153 | 0.004 |
| 3.320 | 0.005 | 0.180 | 0.165 | 472.106 | 0.153 | 0.004 |
| 3.241 | 0.005 | 0.126 | 0.116 | 473.326 | 0.153 | 0.004 |
| 2.440 | 0.005 | 0.097 | 0.089 | 473.615 | 0.153 | 0.004 |
| 4.516 | 0.008 | 0.212 | 0.212 | 568.299 | 0.058 | 0.005 |
| 4.538 | 0.007 | 0.205 | 0.205 | 568.299 | 0.065 | 0.005 |
| 4.075 | 0.007 | 0.194 | 0.194 | 568.299 | 0.062 | 0.005 |
| 3.173 | 0.006 | 0.179 | 0.179 | 568.299 | 0.032 | 0.004 |
| 2.380 | 0.006 | 0.105 | 0.105 | 568.299 | 0.024 | 0.004 |
| 2.016 | 0.006 | 0.057 | 0.057 | 568.299 | 0.017 | 0.004 |
| 1.816 | 0.005 | 0.055 | 0.055 | 568.299 | 0.017 | 0.004 |
| 1.858 | 0.005 | 0.056 | 0.056 | 568.299 | 0.017 | 0.004 |
| 3.608 | 0.005 | 0.079 | 0.079 | 568.300 | 0.021 | 0.004 |
| 5.825 | 0.005 | 0.709 | 0.652 | 492.862 | 0.159 | 0.005 |
| 7.725 | 0.005 | 0.622 | 0.572 | 469.337 | 0.152 | 0.004 |
| 5.530 | 0.005 | 0.309 | 0.284 | 478.040 | 0.155 | 0.004 |
| 4.678 | 0.005 | 0.150 | 0.138 | 475.304 | 0.154 | 0.004 |
| 3.107 | 0.005 | 0.121 | 0.111 | 471.980 | 0.153 | 0.004 |
| 2.031 | 0.005 | 0.072 | 0.072 | 568.299 | 0.028 | 0.004 |
| 4.183 | 0.005 | 0.307 | 0.283 | 474.148 | 0.153 | 0.004 |
| 2.890 | 0.005 | 0.140 | 0.129 | 472.917 | 0.153 | 0.004 |
| 2.575 | 0.005 | 0.086 | 0.079 | 470.943 | 0.152 | 0.004 |
| 2.047 | 0.005 | 0.076 | 0.070 | 471.815 | 0.153 | 0.004 |
| 2.396 | 0.005 | 0.063 | 0.058 | 472.055 | 0.153 | 0.004 |
| 2.628 | 0.005 | 0.137 | 0.126 | 470.097 | 0.152 | 0.004 |
| 2.507 | 0.005 | 0.098 | 0.090 | 470.168 | 0.152 | 0.004 |

|                      |
|----------------------|
| Dumpers/Trailers     |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Excavators           |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Forklifts            |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Generator Sets       |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Graders              |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Tractors |
| Off-Highway Trucks   |
| Off-Highway Trucks   |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 1.676 | 0.005 | 0.062 | 0.057 | 473.464 | 0.153 | 0.004 |
| 4.857 | 0.005 | 0.119 | 0.109 | 472.055 | 0.153 | 0.004 |
| 5.139 | 0.005 | 0.439 | 0.404 | 523.709 | 0.169 | 0.005 |
| 3.104 | 0.005 | 0.182 | 0.168 | 473.588 | 0.153 | 0.004 |
| 2.367 | 0.005 | 0.118 | 0.109 | 472.219 | 0.153 | 0.004 |
| 3.599 | 0.005 | 0.115 | 0.106 | 471.482 | 0.153 | 0.004 |
| 3.210 | 0.005 | 0.120 | 0.110 | 470.297 | 0.152 | 0.004 |
| 3.614 | 0.005 | 0.078 | 0.072 | 472.055 | 0.153 | 0.004 |
| 4.764 | 0.005 | 0.402 | 0.370 | 526.210 | 0.170 | 0.005 |
| 4.764 | 0.005 | 0.402 | 0.370 | 526.210 | 0.170 | 0.005 |
| 4.427 | 0.005 | 0.325 | 0.299 | 469.882 | 0.152 | 0.004 |
| 2.918 | 0.005 | 0.142 | 0.131 | 472.775 | 0.153 | 0.004 |
| 2.777 | 0.005 | 0.076 | 0.070 | 472.834 | 0.153 | 0.004 |
| 2.134 | 0.005 | 0.077 | 0.071 | 466.206 | 0.151 | 0.004 |
| 3.952 | 0.005 | 0.217 | 0.200 | 520.124 | 0.168 | 0.005 |
| 3.952 | 0.005 | 0.217 | 0.200 | 520.124 | 0.168 | 0.005 |
| 3.781 | 0.005 | 0.256 | 0.235 | 473.325 | 0.153 | 0.004 |
| 2.555 | 0.005 | 0.128 | 0.118 | 470.736 | 0.152 | 0.004 |
| 3.220 | 0.005 | 0.111 | 0.102 | 472.151 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.516 | 0.008 | 0.212 | 0.212 | 568.299 | 0.058 | 0.005 |
| 4.538 | 0.007 | 0.205 | 0.205 | 568.299 | 0.065 | 0.005 |
| 3.917 | 0.007 | 0.161 | 0.161 | 568.299 | 0.045 | 0.005 |
| 3.036 | 0.006 | 0.151 | 0.151 | 568.299 | 0.026 | 0.004 |
| 2.383 | 0.006 | 0.104 | 0.104 | 568.299 | 0.023 | 0.004 |

|                                    |
|------------------------------------|
| Other General Industrial Equipment |
| Other General Industrial Equipment |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Other Material Handling Equipment  |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Pavers                             |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Paving Equipment                   |
| Plate Compactors                   |
| Pressure Washers                   |
| Pressure Washers                   |
| Pressure Washers                   |
| Pressure Washers                   |
| Pressure Washers                   |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 4.542 | 0.008 | 0.227 | 0.227 | 568.299 | 0.066 | 0.005 |
| 4.538 | 0.007 | 0.212 | 0.212 | 568.299 | 0.069 | 0.005 |
| 4.128 | 0.007 | 0.206 | 0.206 | 568.299 | 0.068 | 0.005 |
| 3.219 | 0.006 | 0.189 | 0.189 | 568.299 | 0.034 | 0.004 |
| 2.418 | 0.006 | 0.111 | 0.111 | 568.299 | 0.025 | 0.004 |
| 2.050 | 0.006 | 0.060 | 0.060 | 568.299 | 0.019 | 0.004 |
| 1.841 | 0.005 | 0.057 | 0.057 | 568.300 | 0.018 | 0.004 |
| 1.884 | 0.005 | 0.058 | 0.058 | 568.299 | 0.018 | 0.004 |
| 3.649 | 0.005 | 0.081 | 0.081 | 568.300 | 0.023 | 0.004 |
| 4.534 | 0.005 | 0.329 | 0.303 | 525.880 | 0.170 | 0.005 |
| 4.534 | 0.005 | 0.329 | 0.303 | 525.880 | 0.170 | 0.005 |
| 4.534 | 0.005 | 0.329 | 0.303 | 525.880 | 0.170 | 0.005 |
| 3.882 | 0.005 | 0.248 | 0.228 | 473.859 | 0.153 | 0.004 |
| 2.452 | 0.005 | 0.113 | 0.104 | 471.918 | 0.153 | 0.004 |
| 2.751 | 0.005 | 0.089 | 0.082 | 473.367 | 0.153 | 0.004 |
| 2.828 | 0.005 | 0.109 | 0.101 | 479.325 | 0.155 | 0.004 |
| 4.495 | 0.005 | 0.316 | 0.291 | 525.622 | 0.170 | 0.005 |
| 2.452 | 0.005 | 0.103 | 0.094 | 472.984 | 0.153 | 0.004 |
| 1.869 | 0.005 | 0.068 | 0.063 | 471.715 | 0.153 | 0.004 |
| 1.609 | 0.005 | 0.037 | 0.034 | 472.567 | 0.153 | 0.004 |
| 1.302 | 0.005 | 0.028 | 0.026 | 465.771 | 0.151 | 0.004 |
| 7.185 | 0.005 | 0.411 | 0.378 | 473.012 | 0.153 | 0.004 |
| 6.503 | 0.005 | 0.319 | 0.293 | 474.793 | 0.154 | 0.004 |
| 5.641 | 0.005 | 0.259 | 0.238 | 479.757 | 0.155 | 0.004 |
| 6.123 | 0.005 | 0.218 | 0.201 | 473.056 | 0.153 | 0.004 |
| 5.306 | 0.005 | 0.160 | 0.160 | 568.299 | 0.047 | 0.004 |
| 5.254 | 0.005 | 0.474 | 0.436 | 524.697 | 0.170 | 0.005 |
| 5.254 | 0.005 | 0.474 | 0.436 | 524.697 | 0.170 | 0.005 |
| 4.686 | 0.005 | 0.367 | 0.338 | 465.674 | 0.151 | 0.004 |
| 3.517 | 0.005 | 0.194 | 0.178 | 471.214 | 0.152 | 0.004 |

|                         |
|-------------------------|
| Pressure Washers        |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 3.421 | 0.005 | 0.114 | 0.105 | 469.513 | 0.152 | 0.004 |
| 3.017 | 0.005 | 0.112 | 0.103 | 466.783 | 0.151 | 0.004 |
| 2.767 | 0.005 | 0.108 | 0.099 | 462.193 | 0.150 | 0.004 |
| 5.253 | 0.005 | 0.139 | 0.127 | 469.935 | 0.152 | 0.004 |
| 6.677 | 0.005 | 0.510 | 0.469 | 483.745 | 0.157 | 0.004 |
| 4.869 | 0.005 | 0.262 | 0.241 | 478.608 | 0.155 | 0.004 |
| 5.089 | 0.005 | 0.223 | 0.205 | 468.988 | 0.152 | 0.004 |
| 3.783 | 0.005 | 0.148 | 0.136 | 472.175 | 0.153 | 0.004 |
| 3.126 | 0.005 | 0.113 | 0.104 | 471.778 | 0.153 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.132 | 0.007 | 0.206 | 0.206 | 568.299 | 0.071 | 0.005 |
| 3.134 | 0.006 | 0.187 | 0.187 | 568.299 | 0.035 | 0.004 |
| 2.309 | 0.006 | 0.110 | 0.110 | 568.299 | 0.026 | 0.004 |
| 2.350 | 0.007 | 0.071 | 0.071 | 686.695 | 0.024 | 0.004 |
| 3.691 | 0.005 | 0.145 | 0.133 | 527.758 | 0.171 | 0.005 |
| 3.691 | 0.005 | 0.145 | 0.133 | 527.758 | 0.171 | 0.005 |
| 2.505 | 0.005 | 0.108 | 0.100 | 471.908 | 0.153 | 0.004 |
| 4.239 | 0.006 | 0.216 | 0.199 | 535.528 | 0.173 | 0.005 |
| 3.612 | 0.005 | 0.206 | 0.190 | 473.819 | 0.153 | 0.004 |
| 3.672 | 0.005 | 0.175 | 0.161 | 469.208 | 0.152 | 0.004 |
| 3.222 | 0.005 | 0.097 | 0.089 | 476.426 | 0.154 | 0.004 |
| 1.838 | 0.005 | 0.067 | 0.062 | 471.633 | 0.153 | 0.004 |
| 2.094 | 0.005 | 0.074 | 0.068 | 469.625 | 0.152 | 0.004 |
| 5.095 | 0.005 | 0.463 | 0.426 | 525.328 | 0.170 | 0.005 |
| 5.095 | 0.005 | 0.463 | 0.426 | 525.328 | 0.170 | 0.005 |
| 5.095 | 0.005 | 0.463 | 0.426 | 525.328 | 0.170 | 0.005 |
| 4.482 | 0.005 | 0.360 | 0.331 | 474.116 | 0.153 | 0.004 |
| 4.608 | 0.005 | 0.237 | 0.218 | 473.122 | 0.153 | 0.004 |
| 2.486 | 0.005 | 0.079 | 0.073 | 470.126 | 0.152 | 0.004 |
| 4.398 | 0.005 | 0.288 | 0.265 | 515.874 | 0.167 | 0.005 |

|                           |
|---------------------------|
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Tractors/Loaders/Backhoes |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.398 | 0.005 | 0.288 | 0.265 | 515.874 | 0.167 | 0.005 |
| 3.326 | 0.005 | 0.210 | 0.194 | 475.154 | 0.154 | 0.004 |
| 2.415 | 0.005 | 0.122 | 0.112 | 467.513 | 0.151 | 0.004 |
| 2.738 | 0.005 | 0.090 | 0.083 | 470.500 | 0.152 | 0.004 |
| 2.080 | 0.005 | 0.073 | 0.067 | 468.245 | 0.151 | 0.004 |
| 3.119 | 0.005 | 0.117 | 0.108 | 468.660 | 0.152 | 0.004 |
| 4.677 | 0.005 | 0.356 | 0.328 | 527.096 | 0.171 | 0.005 |
| 4.677 | 0.005 | 0.356 | 0.328 | 527.096 | 0.171 | 0.005 |
| 4.677 | 0.005 | 0.356 | 0.328 | 527.096 | 0.171 | 0.005 |
| 5.520 | 0.005 | 0.413 | 0.380 | 475.127 | 0.154 | 0.004 |
| 4.460 | 0.005 | 0.228 | 0.210 | 467.735 | 0.151 | 0.004 |
| 4.809 | 0.005 | 0.195 | 0.179 | 473.595 | 0.153 | 0.004 |
| 2.775 | 0.005 | 0.105 | 0.097 | 470.637 | 0.152 | 0.004 |
| 0.560 | 0.005 | 0.009 | 0.008 | 472.656 | 0.153 | 0.004 |
| 4.542 | 0.008 | 0.227 | 0.227 | 568.299 | 0.066 | 0.005 |
| 4.538 | 0.007 | 0.212 | 0.212 | 568.299 | 0.069 | 0.005 |
| 4.304 | 0.007 | 0.238 | 0.238 | 568.299 | 0.084 | 0.005 |
| 3.351 | 0.006 | 0.216 | 0.216 | 568.299 | 0.041 | 0.004 |
| 2.523 | 0.006 | 0.127 | 0.127 | 568.299 | 0.031 | 0.004 |
| 2.143 | 0.006 | 0.066 | 0.066 | 568.299 | 0.023 | 0.004 |
| 1.910 | 0.005 | 0.064 | 0.064 | 568.299 | 0.022 | 0.004 |
| 2.628 | 0.005 | 0.137 | 0.126 | 470.097 | 0.152 | 0.004 |
| 2.507 | 0.005 | 0.098 | 0.090 | 470.168 | 0.152 | 0.004 |
| 2.347 | 0.005 | 0.086 | 0.079 | 474.579 | 0.154 | 0.004 |
| 3.058 | 0.005 | 0.120 | 0.110 | 472.750 | 0.153 | 0.004 |
| 4.794 | 0.005 | 0.125 | 0.115 | 469.889 | 0.152 | 0.004 |

|                           |
|---------------------------|
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |

|       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 15    | 0.165   | 3.114   | 2.922   | 0.005   | 0.027   | 0.024   | 525.074 | 0.170   | 0.005   |
| 25    | 0.165   | 3.114   | 2.922   | 0.005   | 0.027   | 0.024   | 525.074 | 0.170   | 0.005   |
| 50    | 0.165   | 3.114   | 2.922   | 0.005   | 0.027   | 0.024   | 525.074 | 0.170   | 0.005   |
| 120   | 0.109   | 3.176   | 1.744   | 0.005   | 0.033   | 0.031   | 472.114 | 0.153   | 0.004   |
| 500   | 0.072   | 0.951   | 0.640   | 0.005   | 0.009   | 0.008   | 472.055 | 0.153   | 0.004   |
| 750   | 0.187   | 1.004   | 1.610   | 0.005   | 0.050   | 0.050   | 568.299 | 0.016   | 0.004   |
| 15    | 0.717   | 3.531   | 4.462   | 0.008   | 0.214   | 0.214   | 568.299 | 0.064   | 0.005   |
| 25    | 0.752   | 2.446   | 4.497   | 0.007   | 0.201   | 0.201   | 568.299 | 0.067   | 0.005   |
| 50    | 0.887   | 5.021   | 4.221   | 0.007   | 0.212   | 0.212   | 568.299 | 0.080   | 0.005   |
| 120   | 0.442   | 3.670   | 3.083   | 0.006   | 0.190   | 0.190   | 568.299 | 0.039   | 0.004   |
| 175   | 0.343   | 3.192   | 2.218   | 0.006   | 0.115   | 0.115   | 568.299 | 0.030   | 0.004   |
| 250   | 0.268   | 1.108   | 1.859   | 0.006   | 0.060   | 0.060   | 568.299 | 0.024   | 0.004   |
| 500   | 0.261   | 1.064   | 1.663   | 0.005   | 0.058   | 0.058   | 568.299 | 0.023   | 0.004   |
| 750   | 0.262   | 1.064   | 1.699   | 0.005   | 0.058   | 0.058   | 568.299 | 0.023   | 0.004   |
| 1000  | 0.284   | 1.134   | 3.565   | 0.005   | 0.082   | 0.082   | 568.300 | 0.025   | 0.004   |
| 15    | 0.711   | 4.548   | 4.634   | 0.006   | 0.291   | 0.268   | 535.378 | 0.173   | 0.005   |
| 25    | 0.711   | 4.548   | 4.634   | 0.006   | 0.291   | 0.268   | 535.378 | 0.173   | 0.005   |
| 50    | 0.711   | 4.548   | 4.634   | 0.006   | 0.291   | 0.268   | 535.378 | 0.173   | 0.005   |
| 120   | 0.217   | 3.306   | 2.737   | 0.005   | 0.131   | 0.121   | 464.973 | 0.150   | 0.004   |
| 175   | 0.154   | 2.961   | 1.598   | 0.005   | 0.070   | 0.064   | 477.048 | 0.154   | 0.004   |
| 250   | 0.133   | 1.064   | 1.551   | 0.005   | 0.047   | 0.043   | 467.992 | 0.151   | 0.004   |
| 500   | 0.117   | 1.015   | 1.221   | 0.005   | 0.041   | 0.038   | 469.816 | 0.152   | 0.004   |
| 750   | 0.098   | 0.972   | 0.955   | 0.005   | 0.033   | 0.031   | 474.079 | 0.153   | 0.004   |
| 1000  | 0.136   | 0.993   | 3.058   | 0.005   | 0.061   | 0.057   | 471.816 | 0.153   | 0.004   |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.712 | 2.381 | 4.419 | 0.007 | 0.180 | 0.180 | 568.299 | 0.064 | 0.005 |
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.722 | 4.481 | 4.063 | 0.007 | 0.184 | 0.184 | 568.300 | 0.065 | 0.005 |
| 120  | 0.369 | 3.523 | 2.913 | 0.006 | 0.166 | 0.166 | 568.299 | 0.033 | 0.004 |
| 175  | 0.286 | 3.072 | 2.055 | 0.006 | 0.101 | 0.101 | 568.299 | 0.025 | 0.004 |
| 50   | 2.115 | 7.489 | 6.014 | 0.005 | 0.631 | 0.581 | 517.900 | 0.168 | 0.005 |
| 120  | 0.651 | 4.065 | 5.731 | 0.005 | 0.398 | 0.366 | 469.887 | 0.152 | 0.004 |
| 175  | 0.498 | 3.516 | 5.113 | 0.005 | 0.273 | 0.251 | 474.546 | 0.154 | 0.004 |
| 250  | 0.350 | 1.678 | 4.104 | 0.005 | 0.167 | 0.153 | 472.906 | 0.153 | 0.004 |
| 500  | 0.295 | 2.448 | 3.443 | 0.005 | 0.139 | 0.127 | 472.455 | 0.153 | 0.004 |
| 750  | 0.228 | 1.440 | 2.727 | 0.005 | 0.107 | 0.098 | 470.550 | 0.152 | 0.004 |
| 9999 | 0.192 | 1.008 | 2.374 | 0.005 | 0.061 | 0.057 | 472.055 | 0.153 | 0.004 |
| 50   | 2.064 | 7.349 | 5.615 | 0.005 | 0.591 | 0.543 | 516.108 | 0.167 | 0.005 |
| 120  | 0.673 | 4.005 | 5.657 | 0.005 | 0.466 | 0.429 | 476.437 | 0.154 | 0.004 |
| 175  | 0.436 | 3.310 | 4.395 | 0.005 | 0.245 | 0.225 | 471.421 | 0.153 | 0.004 |
| 250  | 0.343 | 1.515 | 4.334 | 0.005 | 0.163 | 0.150 | 472.925 | 0.153 | 0.004 |
| 500  | 0.283 | 2.024 | 3.276 | 0.005 | 0.129 | 0.119 | 474.484 | 0.154 | 0.004 |
| 750  | 0.239 | 1.270 | 2.825 | 0.005 | 0.104 | 0.096 | 473.094 | 0.153 | 0.004 |
| 1000 | 0.399 | 1.896 | 6.399 | 0.005 | 0.182 | 0.167 | 471.822 | 0.153 | 0.004 |
| 50   | 0.862 | 5.136 | 4.211 | 0.007 | 0.201 | 0.201 | 568.299 | 0.077 | 0.005 |
| 120  | 0.438 | 3.711 | 2.989 | 0.006 | 0.178 | 0.178 | 568.299 | 0.039 | 0.004 |
| 175  | 0.344 | 3.235 | 2.114 | 0.006 | 0.109 | 0.109 | 568.299 | 0.031 | 0.004 |
| 250  | 0.274 | 1.119 | 1.756 | 0.006 | 0.057 | 0.057 | 568.299 | 0.024 | 0.004 |
| 500  | 0.268 | 1.072 | 1.574 | 0.005 | 0.055 | 0.055 | 568.300 | 0.024 | 0.004 |
| 750  | 0.268 | 1.072 | 1.606 | 0.005 | 0.055 | 0.055 | 568.299 | 0.024 | 0.004 |
| 9999 | 0.314 | 1.136 | 3.487 | 0.005 | 0.080 | 0.080 | 568.299 | 0.028 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 25   | 0.685 | 2.339 | 4.333 | 0.007 | 0.163 | 0.163 | 568.299 | 0.061 | 0.005 |
| 25   | 0.562 | 4.461 | 3.919 | 0.005 | 0.202 | 0.186 | 525.377 | 0.170 | 0.005 |
| 50   | 0.562 | 4.461 | 3.919 | 0.005 | 0.202 | 0.186 | 525.377 | 0.170 | 0.005 |
| 120  | 0.275 | 3.492 | 2.849 | 0.005 | 0.161 | 0.148 | 467.791 | 0.151 | 0.004 |
| 175  | 0.216 | 3.090 | 2.034 | 0.005 | 0.099 | 0.091 | 472.359 | 0.153 | 0.004 |
| 250  | 0.163 | 1.103 | 1.706 | 0.005 | 0.052 | 0.048 | 471.793 | 0.153 | 0.004 |
| 500  | 0.143 | 1.088 | 1.332 | 0.005 | 0.045 | 0.041 | 469.616 | 0.152 | 0.004 |
| 750  | 0.165 | 1.150 | 1.619 | 0.005 | 0.056 | 0.052 | 469.547 | 0.152 | 0.004 |
| 50   | 1.002 | 5.535 | 4.520 | 0.005 | 0.318 | 0.292 | 525.483 | 0.170 | 0.005 |
| 120  | 0.412 | 3.720 | 3.756 | 0.005 | 0.267 | 0.245 | 471.529 | 0.153 | 0.004 |
| 175  | 0.308 | 3.231 | 2.921 | 0.005 | 0.158 | 0.145 | 472.106 | 0.153 | 0.004 |
| 250  | 0.249 | 1.337 | 2.582 | 0.005 | 0.099 | 0.091 | 473.326 | 0.153 | 0.004 |
| 500  | 0.254 | 1.485 | 2.303 | 0.005 | 0.094 | 0.086 | 473.615 | 0.153 | 0.004 |
| 15   | 0.634 | 3.531 | 4.441 | 0.008 | 0.201 | 0.201 | 568.299 | 0.057 | 0.005 |
| 25   | 0.712 | 2.446 | 4.497 | 0.007 | 0.196 | 0.196 | 568.299 | 0.064 | 0.005 |
| 50   | 0.613 | 3.905 | 3.916 | 0.007 | 0.165 | 0.165 | 568.299 | 0.055 | 0.005 |
| 120  | 0.326 | 3.361 | 2.888 | 0.006 | 0.153 | 0.153 | 568.299 | 0.029 | 0.004 |
| 175  | 0.243 | 2.925 | 2.068 | 0.006 | 0.091 | 0.091 | 568.299 | 0.021 | 0.004 |
| 250  | 0.183 | 1.016 | 1.730 | 0.006 | 0.049 | 0.049 | 568.299 | 0.016 | 0.004 |
| 500  | 0.175 | 0.996 | 1.562 | 0.005 | 0.048 | 0.048 | 568.299 | 0.015 | 0.004 |
| 750  | 0.177 | 0.996 | 1.596 | 0.005 | 0.048 | 0.048 | 568.299 | 0.016 | 0.004 |
| 9999 | 0.220 | 1.060 | 3.372 | 0.005 | 0.070 | 0.070 | 568.300 | 0.019 | 0.004 |
| 50   | 2.235 | 7.626 | 5.485 | 0.005 | 0.631 | 0.581 | 492.935 | 0.159 | 0.005 |
| 120  | 0.901 | 4.452 | 7.125 | 0.005 | 0.570 | 0.524 | 469.070 | 0.152 | 0.004 |
| 175  | 0.505 | 3.559 | 4.839 | 0.005 | 0.270 | 0.248 | 478.529 | 0.155 | 0.004 |
| 250  | 0.335 | 1.307 | 4.381 | 0.005 | 0.139 | 0.128 | 474.539 | 0.154 | 0.004 |
| 500  | 0.322 | 1.460 | 3.013 | 0.005 | 0.117 | 0.108 | 471.898 | 0.153 | 0.004 |
| 750  | 0.303 | 1.207 | 1.808 | 0.005 | 0.064 | 0.064 | 568.299 | 0.027 | 0.004 |
| 120  | 0.395 | 3.743 | 3.773 | 0.005 | 0.261 | 0.240 | 474.516 | 0.154 | 0.004 |
| 175  | 0.259 | 3.220 | 2.660 | 0.005 | 0.129 | 0.118 | 472.924 | 0.153 | 0.004 |
| 250  | 0.200 | 1.162 | 2.113 | 0.005 | 0.072 | 0.067 | 471.003 | 0.152 | 0.004 |
| 750  | 0.181 | 1.122 | 1.715 | 0.005 | 0.063 | 0.058 | 471.806 | 0.153 | 0.004 |
| 1000 | 0.160 | 1.033 | 2.414 | 0.005 | 0.064 | 0.059 | 472.055 | 0.153 | 0.004 |
| 175  | 0.278 | 3.324 | 2.246 | 0.005 | 0.113 | 0.104 | 470.290 | 0.152 | 0.004 |
| 250  | 0.249 | 1.348 | 2.109 | 0.005 | 0.082 | 0.076 | 470.193 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 500  | 0.225 | 1.338 | 1.954 | 0.005 | 0.072 | 0.066 | 474.542 | 0.154 | 0.004 |
| 750  | 0.293 | 1.935 | 2.668 | 0.005 | 0.106 | 0.098 | 472.991 | 0.153 | 0.004 |
| 1000 | 0.256 | 1.252 | 4.158 | 0.005 | 0.099 | 0.091 | 471.055 | 0.152 | 0.004 |
| 15   | 1.010 | 5.307 | 4.902 | 0.005 | 0.382 | 0.351 | 527.783 | 0.171 | 0.005 |
| 25   | 1.010 | 5.307 | 4.902 | 0.005 | 0.382 | 0.351 | 527.783 | 0.171 | 0.005 |
| 50   | 1.010 | 5.307 | 4.902 | 0.005 | 0.382 | 0.351 | 527.783 | 0.171 | 0.005 |
| 120  | 0.482 | 3.703 | 4.456 | 0.005 | 0.323 | 0.298 | 472.275 | 0.153 | 0.004 |
| 175  | 0.330 | 3.183 | 3.438 | 0.005 | 0.180 | 0.165 | 469.764 | 0.152 | 0.004 |
| 500  | 0.215 | 1.599 | 2.428 | 0.005 | 0.090 | 0.083 | 475.212 | 0.154 | 0.004 |
| 15   | 0.831 | 5.314 | 4.425 | 0.005 | 0.289 | 0.266 | 526.176 | 0.170 | 0.005 |
| 25   | 0.831 | 5.314 | 4.425 | 0.005 | 0.289 | 0.266 | 526.176 | 0.170 | 0.005 |
| 50   | 0.831 | 5.314 | 4.425 | 0.005 | 0.289 | 0.266 | 526.176 | 0.170 | 0.005 |
| 120  | 0.404 | 3.740 | 3.718 | 0.005 | 0.256 | 0.235 | 470.000 | 0.152 | 0.004 |
| 175  | 0.254 | 3.234 | 2.347 | 0.005 | 0.121 | 0.111 | 471.850 | 0.153 | 0.004 |
| 250  | 0.204 | 1.171 | 2.094 | 0.005 | 0.070 | 0.064 | 473.223 | 0.153 | 0.004 |
| 500  | 0.195 | 1.330 | 1.796 | 0.005 | 0.064 | 0.059 | 472.929 | 0.153 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 750  | 0.166 | 1.463 | 1.387 | 0.005 | 0.054 | 0.050 | 473.464 | 0.153 | 0.004 |
| 1000 | 0.276 | 1.093 | 4.876 | 0.005 | 0.120 | 0.110 | 472.055 | 0.153 | 0.004 |
| 50   | 1.108 | 5.960 | 4.966 | 0.005 | 0.396 | 0.364 | 523.709 | 0.169 | 0.005 |
| 120  | 0.294 | 3.602 | 2.956 | 0.005 | 0.166 | 0.152 | 473.588 | 0.153 | 0.004 |
| 175  | 0.249 | 3.196 | 2.246 | 0.005 | 0.114 | 0.105 | 472.219 | 0.153 | 0.004 |
| 250  | 0.269 | 1.309 | 3.082 | 0.005 | 0.102 | 0.094 | 471.482 | 0.153 | 0.004 |
| 500  | 0.254 | 1.442 | 2.602 | 0.005 | 0.101 | 0.093 | 470.297 | 0.152 | 0.004 |
| 9999 | 0.073 | 0.972 | 2.318 | 0.005 | 0.020 | 0.018 | 472.055 | 0.153 | 0.004 |
| 25   | 1.208 | 5.302 | 4.602 | 0.005 | 0.370 | 0.340 | 526.515 | 0.170 | 0.005 |
| 50   | 1.208 | 5.302 | 4.602 | 0.005 | 0.370 | 0.340 | 526.515 | 0.170 | 0.005 |
| 120  | 0.420 | 3.563 | 4.026 | 0.005 | 0.285 | 0.263 | 469.774 | 0.152 | 0.004 |
| 175  | 0.256 | 3.016 | 2.695 | 0.005 | 0.130 | 0.120 | 472.555 | 0.153 | 0.004 |
| 250  | 0.166 | 1.024 | 2.484 | 0.005 | 0.070 | 0.064 | 472.477 | 0.153 | 0.004 |
| 500  | 0.164 | 0.988 | 2.053 | 0.005 | 0.074 | 0.068 | 465.591 | 0.151 | 0.004 |
| 25   | 0.587 | 4.211 | 3.882 | 0.005 | 0.200 | 0.184 | 520.397 | 0.168 | 0.005 |
| 50   | 0.587 | 4.211 | 3.882 | 0.005 | 0.200 | 0.184 | 520.397 | 0.168 | 0.005 |
| 120  | 0.355 | 3.554 | 3.451 | 0.005 | 0.219 | 0.202 | 473.221 | 0.153 | 0.004 |
| 175  | 0.229 | 3.032 | 2.315 | 0.005 | 0.114 | 0.105 | 470.650 | 0.152 | 0.004 |
| 250  | 0.211 | 1.209 | 2.582 | 0.005 | 0.092 | 0.085 | 472.151 | 0.153 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 15   | 0.634 | 3.531 | 4.441 | 0.008 | 0.201 | 0.201 | 568.299 | 0.057 | 0.005 |
| 25   | 0.712 | 2.446 | 4.497 | 0.007 | 0.196 | 0.196 | 568.299 | 0.064 | 0.005 |
| 50   | 0.439 | 3.329 | 3.765 | 0.007 | 0.136 | 0.136 | 568.299 | 0.039 | 0.005 |
| 120  | 0.264 | 3.210 | 2.766 | 0.006 | 0.129 | 0.129 | 568.299 | 0.023 | 0.004 |
| 175  | 0.238 | 2.907 | 2.118 | 0.006 | 0.093 | 0.093 | 568.299 | 0.021 | 0.004 |



|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 15   | 0.717 | 3.531 | 4.462 | 0.008 | 0.214 | 0.214 | 568.299 | 0.064 | 0.005 |
| 25   | 0.752 | 2.446 | 4.497 | 0.007 | 0.201 | 0.201 | 568.299 | 0.067 | 0.005 |
| 50   | 0.671 | 4.099 | 3.966 | 0.007 | 0.175 | 0.175 | 568.299 | 0.060 | 0.005 |
| 120  | 0.347 | 3.412 | 2.928 | 0.006 | 0.162 | 0.162 | 568.300 | 0.031 | 0.004 |
| 175  | 0.260 | 2.968 | 2.101 | 0.006 | 0.096 | 0.096 | 568.299 | 0.023 | 0.004 |
| 250  | 0.197 | 1.031 | 1.759 | 0.006 | 0.052 | 0.052 | 568.299 | 0.017 | 0.004 |
| 500  | 0.189 | 1.007 | 1.584 | 0.005 | 0.050 | 0.050 | 568.299 | 0.017 | 0.004 |
| 750  | 0.191 | 1.007 | 1.618 | 0.005 | 0.050 | 0.050 | 568.299 | 0.017 | 0.004 |
| 9999 | 0.233 | 1.074 | 3.409 | 0.005 | 0.072 | 0.072 | 568.300 | 0.021 | 0.004 |
| 15   | 0.848 | 4.597 | 4.351 | 0.005 | 0.294 | 0.270 | 525.791 | 0.170 | 0.005 |
| 25   | 0.848 | 4.597 | 4.351 | 0.005 | 0.294 | 0.270 | 525.791 | 0.170 | 0.005 |
| 50   | 0.848 | 4.597 | 4.351 | 0.005 | 0.294 | 0.270 | 525.791 | 0.170 | 0.005 |
| 120  | 0.353 | 3.507 | 3.589 | 0.005 | 0.219 | 0.202 | 473.901 | 0.153 | 0.004 |
| 175  | 0.193 | 2.926 | 2.117 | 0.005 | 0.097 | 0.090 | 471.980 | 0.153 | 0.004 |
| 250  | 0.197 | 1.228 | 2.493 | 0.005 | 0.081 | 0.075 | 473.470 | 0.153 | 0.004 |
| 500  | 0.221 | 1.950 | 2.589 | 0.005 | 0.100 | 0.092 | 479.329 | 0.155 | 0.004 |
| 50   | 0.969 | 4.657 | 4.411 | 0.005 | 0.304 | 0.280 | 525.384 | 0.170 | 0.005 |
| 120  | 0.175 | 3.252 | 2.285 | 0.005 | 0.089 | 0.082 | 473.110 | 0.153 | 0.004 |
| 175  | 0.130 | 2.845 | 1.617 | 0.005 | 0.060 | 0.055 | 471.758 | 0.153 | 0.004 |
| 250  | 0.115 | 0.984 | 1.612 | 0.005 | 0.037 | 0.034 | 472.547 | 0.153 | 0.004 |
| 500  | 0.092 | 0.946 | 1.302 | 0.005 | 0.028 | 0.026 | 465.744 | 0.151 | 0.004 |
| 175  | 0.691 | 3.848 | 6.790 | 0.005 | 0.386 | 0.356 | 472.975 | 0.153 | 0.004 |
| 250  | 0.601 | 2.317 | 6.296 | 0.005 | 0.306 | 0.281 | 474.798 | 0.154 | 0.004 |
| 500  | 0.492 | 4.041 | 5.081 | 0.005 | 0.232 | 0.214 | 478.987 | 0.155 | 0.004 |
| 750  | 0.458 | 2.604 | 6.123 | 0.005 | 0.218 | 0.201 | 473.046 | 0.153 | 0.004 |
| 1000 | 0.497 | 2.057 | 5.095 | 0.005 | 0.150 | 0.150 | 568.299 | 0.044 | 0.004 |
| 25   | 1.326 | 6.449 | 4.974 | 0.005 | 0.409 | 0.377 | 524.551 | 0.170 | 0.005 |
| 50   | 1.326 | 6.449 | 4.974 | 0.005 | 0.409 | 0.377 | 524.551 | 0.170 | 0.005 |
| 120  | 0.498 | 3.892 | 4.215 | 0.005 | 0.316 | 0.291 | 466.421 | 0.151 | 0.004 |
| 175  | 0.346 | 3.354 | 3.119 | 0.005 | 0.171 | 0.157 | 471.080 | 0.152 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.266 | 1.240 | 2.998 | 0.005 | 0.100 | 0.092 | 469.564 | 0.152 | 0.004 |
| 500  | 0.264 | 1.529 | 2.610 | 0.005 | 0.097 | 0.090 | 467.928 | 0.151 | 0.004 |
| 750  | 0.271 | 1.397 | 2.641 | 0.005 | 0.102 | 0.094 | 462.055 | 0.149 | 0.004 |
| 1000 | 0.294 | 1.206 | 4.975 | 0.005 | 0.128 | 0.118 | 471.258 | 0.152 | 0.004 |
| 120  | 0.704 | 4.218 | 6.659 | 0.005 | 0.512 | 0.471 | 483.713 | 0.156 | 0.004 |
| 175  | 0.432 | 3.456 | 4.341 | 0.005 | 0.232 | 0.213 | 478.654 | 0.155 | 0.004 |
| 250  | 0.391 | 1.884 | 4.367 | 0.005 | 0.189 | 0.174 | 469.126 | 0.152 | 0.004 |
| 500  | 0.299 | 2.255 | 3.445 | 0.005 | 0.134 | 0.123 | 472.464 | 0.153 | 0.004 |
| 750  | 0.250 | 1.658 | 2.887 | 0.005 | 0.105 | 0.097 | 471.786 | 0.153 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 50   | 0.714 | 4.380 | 4.002 | 0.007 | 0.179 | 0.179 | 568.299 | 0.064 | 0.005 |
| 120  | 0.363 | 3.493 | 2.889 | 0.006 | 0.162 | 0.162 | 568.299 | 0.032 | 0.004 |
| 175  | 0.278 | 3.043 | 2.043 | 0.006 | 0.098 | 0.098 | 568.299 | 0.025 | 0.004 |
| 250  | 0.260 | 1.273 | 2.053 | 0.007 | 0.063 | 0.063 | 686.695 | 0.023 | 0.004 |
| 25   | 0.409 | 3.732 | 3.573 | 0.005 | 0.126 | 0.116 | 527.450 | 0.171 | 0.005 |
| 50   | 0.409 | 3.732 | 3.573 | 0.005 | 0.126 | 0.116 | 527.450 | 0.171 | 0.005 |
| 120  | 0.178 | 3.277 | 2.366 | 0.005 | 0.096 | 0.089 | 471.977 | 0.153 | 0.004 |
| 50   | 0.507 | 3.932 | 4.189 | 0.006 | 0.204 | 0.188 | 535.784 | 0.173 | 0.005 |
| 120  | 0.312 | 3.436 | 3.461 | 0.005 | 0.191 | 0.175 | 474.091 | 0.153 | 0.004 |
| 175  | 0.258 | 2.919 | 3.099 | 0.005 | 0.145 | 0.134 | 469.169 | 0.152 | 0.004 |
| 250  | 0.207 | 1.219 | 2.994 | 0.005 | 0.092 | 0.085 | 476.802 | 0.154 | 0.004 |
| 500  | 0.141 | 1.202 | 1.753 | 0.005 | 0.064 | 0.058 | 471.748 | 0.153 | 0.004 |
| 750  | 0.125 | 0.992 | 1.597 | 0.005 | 0.062 | 0.057 | 470.409 | 0.152 | 0.004 |
| 15   | 1.219 | 5.900 | 4.849 | 0.005 | 0.412 | 0.379 | 525.328 | 0.170 | 0.005 |
| 25   | 1.219 | 5.900 | 4.849 | 0.005 | 0.412 | 0.379 | 525.328 | 0.170 | 0.005 |
| 50   | 1.219 | 5.900 | 4.849 | 0.005 | 0.412 | 0.379 | 525.328 | 0.170 | 0.005 |
| 120  | 0.440 | 3.757 | 3.962 | 0.005 | 0.291 | 0.268 | 474.116 | 0.153 | 0.004 |
| 175  | 0.385 | 3.247 | 3.707 | 0.005 | 0.187 | 0.172 | 473.122 | 0.153 | 0.004 |
| 250  | 0.164 | 1.108 | 1.758 | 0.005 | 0.055 | 0.051 | 470.126 | 0.152 | 0.004 |
| 25   | 0.756 | 4.902 | 4.226 | 0.005 | 0.255 | 0.234 | 515.121 | 0.167 | 0.005 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 50   | 0.756 | 4.902 | 4.226 | 0.005 | 0.255 | 0.234 | 515.121 | 0.167 | 0.005 |
| 120  | 0.296 | 3.571 | 2.995 | 0.005 | 0.177 | 0.163 | 475.362 | 0.154 | 0.004 |
| 175  | 0.221 | 3.091 | 2.062 | 0.005 | 0.104 | 0.096 | 467.529 | 0.151 | 0.004 |
| 250  | 0.209 | 1.186 | 2.369 | 0.005 | 0.080 | 0.074 | 470.572 | 0.152 | 0.004 |
| 500  | 0.179 | 1.341 | 1.776 | 0.005 | 0.064 | 0.059 | 469.303 | 0.152 | 0.004 |
| 750  | 0.247 | 1.433 | 2.754 | 0.005 | 0.104 | 0.096 | 466.456 | 0.151 | 0.004 |
| 15   | 0.809 | 4.666 | 4.459 | 0.005 | 0.313 | 0.288 | 527.017 | 0.170 | 0.005 |
| 25   | 0.809 | 4.666 | 4.459 | 0.005 | 0.313 | 0.288 | 527.017 | 0.170 | 0.005 |
| 50   | 0.809 | 4.666 | 4.459 | 0.005 | 0.313 | 0.288 | 527.017 | 0.170 | 0.005 |
| 120  | 0.556 | 3.789 | 5.106 | 0.005 | 0.371 | 0.341 | 475.287 | 0.154 | 0.004 |
| 175  | 0.407 | 3.304 | 4.272 | 0.005 | 0.219 | 0.201 | 467.734 | 0.151 | 0.004 |
| 250  | 0.356 | 1.668 | 4.360 | 0.005 | 0.172 | 0.158 | 473.854 | 0.153 | 0.004 |
| 500  | 0.221 | 1.865 | 2.491 | 0.005 | 0.100 | 0.092 | 470.701 | 0.152 | 0.004 |
| 750  | 0.066 | 0.947 | 0.475 | 0.005 | 0.009 | 0.008 | 472.529 | 0.153 | 0.004 |
| 15   | 0.717 | 3.531 | 4.462 | 0.008 | 0.214 | 0.214 | 568.299 | 0.064 | 0.005 |
| 25   | 0.752 | 2.446 | 4.497 | 0.007 | 0.201 | 0.201 | 568.299 | 0.067 | 0.005 |
| 50   | 0.829 | 4.708 | 4.133 | 0.007 | 0.203 | 0.203 | 568.299 | 0.074 | 0.005 |
| 120  | 0.411 | 3.579 | 3.042 | 0.006 | 0.184 | 0.184 | 568.299 | 0.037 | 0.004 |
| 175  | 0.315 | 3.112 | 2.189 | 0.006 | 0.110 | 0.110 | 568.299 | 0.028 | 0.004 |
| 250  | 0.243 | 1.081 | 1.836 | 0.006 | 0.057 | 0.057 | 568.299 | 0.021 | 0.004 |
| 500  | 0.236 | 1.044 | 1.642 | 0.005 | 0.055 | 0.055 | 568.299 | 0.021 | 0.004 |
| 175  | 0.278 | 3.324 | 2.246 | 0.005 | 0.113 | 0.104 | 470.290 | 0.152 | 0.004 |
| 250  | 0.249 | 1.348 | 2.109 | 0.005 | 0.082 | 0.076 | 470.193 | 0.152 | 0.004 |
| 500  | 0.225 | 1.338 | 1.954 | 0.005 | 0.072 | 0.066 | 474.542 | 0.154 | 0.004 |
| 750  | 0.293 | 1.935 | 2.668 | 0.005 | 0.106 | 0.098 | 472.991 | 0.153 | 0.004 |
| 1000 | 0.256 | 1.252 | 4.158 | 0.005 | 0.099 | 0.091 | 471.055 | 0.152 | 0.004 |

2022

| 2022             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   |
| Aerial Lifts     | 15    | 0.162   | 3.112   | 2.907   | 0.005   | 0.024   | 0.022   |
| Aerial Lifts     | 25    | 0.162   | 3.112   | 2.907   | 0.005   | 0.024   | 0.022   |
| Aerial Lifts     | 50    | 0.162   | 3.112   | 2.907   | 0.005   | 0.024   | 0.022   |
| Aerial Lifts     | 120   | 0.105   | 3.176   | 1.627   | 0.005   | 0.030   | 0.028   |
| Aerial Lifts     | 500   | 0.075   | 0.956   | 0.642   | 0.005   | 0.009   | 0.008   |
| Aerial Lifts     | 750   | 0.177   | 0.998   | 1.424   | 0.005   | 0.044   | 0.044   |
| Air Compressor s | 15    | 0.707   | 3.519   | 4.408   | 0.008   | 0.203   | 0.203   |
| Air Compressor s | 25    | 0.739   | 2.426   | 4.470   | 0.007   | 0.193   | 0.193   |
| Air Compressor s | 50    | 0.814   | 4.959   | 4.093   | 0.007   | 0.183   | 0.183   |
| Air Compressor s | 120   | 0.413   | 3.662   | 2.844   | 0.006   | 0.165   | 0.165   |
| Air Compressor s | 175   | 0.322   | 3.194   | 1.959   | 0.006   | 0.101   | 0.101   |
| Air Compressor s | 250   | 0.255   | 1.102   | 1.617   | 0.006   | 0.052   | 0.052   |
| Air Compressor s | 500   | 0.249   | 1.059   | 1.472   | 0.005   | 0.051   | 0.051   |
| Air Compressor s | 750   | 0.250   | 1.059   | 1.502   | 0.005   | 0.051   | 0.051   |
| Air Compressor s | 1000  | 0.269   | 1.117   | 3.378   | 0.005   | 0.075   | 0.075   |
| Bore/Drill Rigs  | 15    | 0.631   | 4.334   | 4.285   | 0.006   | 0.241   | 0.221   |
| Bore/Drill Rigs  | 25    | 0.631   | 4.334   | 4.285   | 0.006   | 0.241   | 0.221   |
| Bore/Drill Rigs  | 50    | 0.631   | 4.334   | 4.285   | 0.006   | 0.241   | 0.221   |
| Bore/Drill Rigs  | 120   | 0.191   | 3.260   | 2.425   | 0.005   | 0.107   | 0.099   |
| Bore/Drill Rigs  | 175   | 0.137   | 2.954   | 1.288   | 0.005   | 0.057   | 0.052   |
| Bore/Drill Rigs  | 250   | 0.115   | 1.047   | 1.163   | 0.005   | 0.037   | 0.034   |
| Bore/Drill Rigs  | 500   | 0.108   | 1.002   | 1.035   | 0.005   | 0.035   | 0.032   |
| Bore/Drill Rigs  | 750   | 0.091   | 0.975   | 0.773   | 0.005   | 0.028   | 0.026   |
| Bore/Drill Rigs  | 1000  | 0.057   | 0.945   | 2.278   | 0.005   | 0.018   | 0.017   |

|                          |      |       |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.704 | 2.367 | 4.399 | 0.007 | 0.175 | 0.175 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.660 | 4.422 | 3.936 | 0.007 | 0.158 | 0.158 |
| Concrete/Industrial Saws | 120  | 0.343 | 3.514 | 2.686 | 0.006 | 0.144 | 0.144 |
| Concrete/Industrial Saws | 175  | 0.267 | 3.072 | 1.806 | 0.006 | 0.089 | 0.089 |
| Cranes                   | 50   | 2.028 | 7.368 | 5.899 | 0.005 | 0.603 | 0.555 |
| Cranes                   | 120  | 0.578 | 3.972 | 5.149 | 0.005 | 0.346 | 0.318 |
| Cranes                   | 175  | 0.457 | 3.475 | 4.617 | 0.005 | 0.246 | 0.227 |
| Cranes                   | 250  | 0.316 | 1.602 | 3.541 | 0.005 | 0.147 | 0.135 |
| Cranes                   | 500  | 0.261 | 2.212 | 2.894 | 0.005 | 0.117 | 0.108 |
| Cranes                   | 750  | 0.200 | 1.283 | 2.251 | 0.005 | 0.089 | 0.082 |
| Cranes                   | 9999 | 0.201 | 1.015 | 2.386 | 0.005 | 0.062 | 0.057 |
| Crawler Tractors         | 50   | 1.899 | 7.041 | 5.380 | 0.005 | 0.539 | 0.496 |
| Crawler Tractors         | 120  | 0.600 | 3.925 | 5.101 | 0.005 | 0.408 | 0.375 |
| Crawler Tractors         | 175  | 0.389 | 3.264 | 3.827 | 0.005 | 0.214 | 0.197 |
| Crawler Tractors         | 250  | 0.306 | 1.440 | 3.737 | 0.005 | 0.141 | 0.130 |
| Crawler Tractors         | 500  | 0.254 | 1.916 | 2.744 | 0.005 | 0.111 | 0.102 |
| Crawler Tractors         | 750  | 0.198 | 1.186 | 2.126 | 0.005 | 0.079 | 0.073 |
| Crawler Tractors         | 1000 | 0.357 | 1.732 | 5.923 | 0.005 | 0.162 | 0.149 |
| Crushing/Proc. Equipment | 50   | 0.795 | 5.081 | 4.083 | 0.007 | 0.172 | 0.172 |
| Crushing/Proc. Equipment | 120  | 0.410 | 3.704 | 2.758 | 0.006 | 0.154 | 0.154 |
| Crushing/Proc. Equipment | 175  | 0.323 | 3.237 | 1.861 | 0.006 | 0.095 | 0.095 |
| Crushing/Proc. Equipment | 250  | 0.260 | 1.114 | 1.521 | 0.006 | 0.050 | 0.050 |
| Crushing/Proc. Equipment | 500  | 0.255 | 1.067 | 1.389 | 0.005 | 0.048 | 0.048 |
| Crushing/Proc. Equipment | 750  | 0.256 | 1.067 | 1.416 | 0.005 | 0.048 | 0.048 |
| Crushing/Proc. Equipment | 9999 | 0.300 | 1.121 | 3.310 | 0.005 | 0.073 | 0.073 |

|                      |      |       |       |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.162 | 0.162 |
| Excavators           | 25   | 0.478 | 4.273 | 3.700 | 0.005 | 0.160 | 0.147 |
| Excavators           | 50   | 0.478 | 4.273 | 3.700 | 0.005 | 0.160 | 0.147 |
| Excavators           | 120  | 0.252 | 3.473 | 2.606 | 0.005 | 0.138 | 0.127 |
| Excavators           | 175  | 0.191 | 3.074 | 1.678 | 0.005 | 0.081 | 0.075 |
| Excavators           | 250  | 0.148 | 1.092 | 1.386 | 0.005 | 0.044 | 0.040 |
| Excavators           | 500  | 0.128 | 1.061 | 1.040 | 0.005 | 0.035 | 0.032 |
| Excavators           | 750  | 0.150 | 1.144 | 1.287 | 0.005 | 0.047 | 0.043 |
| Forklifts            | 50   | 0.859 | 5.304 | 4.312 | 0.005 | 0.270 | 0.248 |
| Forklifts            | 120  | 0.362 | 3.675 | 3.360 | 0.005 | 0.223 | 0.205 |
| Forklifts            | 175  | 0.273 | 3.197 | 2.480 | 0.005 | 0.132 | 0.122 |
| Forklifts            | 250  | 0.236 | 1.317 | 2.319 | 0.005 | 0.090 | 0.083 |
| Forklifts            | 500  | 0.232 | 1.219 | 1.991 | 0.005 | 0.077 | 0.071 |
| Generator Sets       | 15   | 0.626 | 3.519 | 4.390 | 0.008 | 0.193 | 0.193 |
| Generator Sets       | 25   | 0.706 | 2.426 | 4.470 | 0.007 | 0.188 | 0.188 |
| Generator Sets       | 50   | 0.560 | 3.858 | 3.796 | 0.007 | 0.143 | 0.143 |
| Generator Sets       | 120  | 0.301 | 3.353 | 2.671 | 0.006 | 0.134 | 0.134 |
| Generator Sets       | 175  | 0.226 | 2.926 | 1.830 | 0.006 | 0.081 | 0.081 |
| Generator Sets       | 250  | 0.173 | 1.010 | 1.508 | 0.006 | 0.043 | 0.043 |
| Generator Sets       | 500  | 0.166 | 0.990 | 1.384 | 0.005 | 0.042 | 0.042 |
| Generator Sets       | 750  | 0.168 | 0.990 | 1.412 | 0.005 | 0.043 | 0.043 |
| Generator Sets       | 9999 | 0.206 | 1.045 | 3.202 | 0.005 | 0.063 | 0.063 |
| Graders              | 50   | 2.106 | 7.428 | 5.332 | 0.005 | 0.595 | 0.547 |
| Graders              | 120  | 0.796 | 4.330 | 6.360 | 0.005 | 0.493 | 0.453 |
| Graders              | 175  | 0.440 | 3.493 | 4.125 | 0.005 | 0.229 | 0.211 |
| Graders              | 250  | 0.307 | 1.273 | 3.888 | 0.005 | 0.124 | 0.114 |
| Graders              | 500  | 0.311 | 1.390 | 2.802 | 0.005 | 0.108 | 0.100 |
| Graders              | 750  | 0.289 | 1.187 | 1.606 | 0.005 | 0.057 | 0.057 |
| Off-Highway Tractors | 120  | 0.348 | 3.710 | 3.400 | 0.005 | 0.219 | 0.202 |
| Off-Highway Tractors | 175  | 0.231 | 3.186 | 2.239 | 0.005 | 0.107 | 0.099 |
| Off-Highway Tractors | 250  | 0.180 | 1.143 | 1.732 | 0.005 | 0.060 | 0.055 |
| Off-Highway Tractors | 750  | 0.171 | 1.121 | 1.433 | 0.005 | 0.055 | 0.050 |
| Off-Highway Tractors | 1000 | 0.170 | 1.044 | 2.432 | 0.005 | 0.066 | 0.060 |
| Off-Highway Trucks   | 175  | 0.241 | 3.284 | 1.811 | 0.005 | 0.088 | 0.081 |
| Off-Highway Trucks   | 250  | 0.215 | 1.279 | 1.618 | 0.005 | 0.064 | 0.059 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.196 | 1.247 | 1.490 | 0.005 | 0.054 | 0.050 |
| Off-Highway Trucks                 | 750  | 0.263 | 1.746 | 2.268 | 0.005 | 0.088 | 0.081 |
| Off-Highway Trucks                 | 1000 | 0.234 | 1.214 | 3.842 | 0.005 | 0.086 | 0.079 |
| Other Construction Equipment       | 15   | 0.920 | 5.167 | 4.741 | 0.005 | 0.348 | 0.320 |
| Other Construction Equipment       | 25   | 0.920 | 5.167 | 4.741 | 0.005 | 0.348 | 0.320 |
| Other Construction Equipment       | 50   | 0.920 | 5.167 | 4.741 | 0.005 | 0.348 | 0.320 |
| Other Construction Equipment       | 120  | 0.440 | 3.666 | 4.098 | 0.005 | 0.288 | 0.265 |
| Other Construction Equipment       | 175  | 0.295 | 3.155 | 2.994 | 0.005 | 0.156 | 0.144 |
| Other Construction Equipment       | 500  | 0.188 | 1.438 | 1.975 | 0.005 | 0.074 | 0.068 |
| Other General Industrial Equipment | 15   | 0.702 | 5.076 | 4.197 | 0.005 | 0.238 | 0.219 |
| Other General Industrial Equipment | 25   | 0.702 | 5.076 | 4.197 | 0.005 | 0.238 | 0.219 |
| Other General Industrial Equipment | 50   | 0.702 | 5.076 | 4.197 | 0.005 | 0.238 | 0.219 |
| Other General Industrial Equipment | 120  | 0.339 | 3.668 | 3.200 | 0.005 | 0.199 | 0.183 |
| Other General Industrial Equipment | 175  | 0.244 | 3.233 | 2.150 | 0.005 | 0.111 | 0.102 |
| Other General Industrial Equipment | 250  | 0.187 | 1.138 | 1.759 | 0.005 | 0.057 | 0.052 |
| Other General Industrial Equipment | 500  | 0.175 | 1.171 | 1.433 | 0.005 | 0.050 | 0.046 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.149 | 1.457 | 1.062 | 0.005 | 0.046 | 0.042 |
| Other General Industrial Equipment | 1000 | 0.187 | 1.039 | 3.942 | 0.005 | 0.079 | 0.073 |
| Other Material Handling Equipment  | 50   | 1.103 | 5.984 | 4.920 | 0.005 | 0.385 | 0.354 |
| Other Material Handling Equipment  | 120  | 0.247 | 3.557 | 2.567 | 0.005 | 0.121 | 0.111 |
| Other Material Handling Equipment  | 175  | 0.226 | 3.176 | 1.894 | 0.005 | 0.103 | 0.095 |
| Other Material Handling Equipment  | 250  | 0.229 | 1.239 | 2.425 | 0.005 | 0.083 | 0.076 |
| Other Material Handling Equipment  | 500  | 0.226 | 1.346 | 2.063 | 0.005 | 0.083 | 0.077 |
| Other Material Handling Equipment  | 9999 | 0.076 | 0.978 | 2.328 | 0.005 | 0.020 | 0.018 |
| Pavers                             | 25   | 1.092 | 5.114 | 4.421 | 0.005 | 0.330 | 0.303 |
| Pavers                             | 50   | 1.092 | 5.114 | 4.421 | 0.005 | 0.330 | 0.303 |
| Pavers                             | 120  | 0.373 | 3.525 | 3.659 | 0.005 | 0.248 | 0.228 |
| Pavers                             | 175  | 0.215 | 2.995 | 2.180 | 0.005 | 0.104 | 0.095 |
| Pavers                             | 250  | 0.140 | 1.012 | 1.900 | 0.005 | 0.055 | 0.050 |
| Pavers                             | 500  | 0.150 | 0.982 | 1.810 | 0.005 | 0.063 | 0.058 |
| Paving Equipment                   | 25   | 0.572 | 4.244 | 3.836 | 0.005 | 0.188 | 0.173 |
| Paving Equipment                   | 50   | 0.572 | 4.244 | 3.836 | 0.005 | 0.188 | 0.173 |
| Paving Equipment                   | 120  | 0.296 | 3.501 | 3.000 | 0.005 | 0.171 | 0.157 |
| Paving Equipment                   | 175  | 0.213 | 3.038 | 2.073 | 0.005 | 0.101 | 0.093 |
| Paving Equipment                   | 250  | 0.196 | 1.204 | 2.228 | 0.005 | 0.083 | 0.076 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Pressure Washers                   | 15   | 0.626 | 3.519 | 4.390 | 0.008 | 0.193 | 0.193 |
| Pressure Washers                   | 25   | 0.706 | 2.426 | 4.470 | 0.007 | 0.188 | 0.188 |
| Pressure Washers                   | 50   | 0.398 | 3.291 | 3.649 | 0.007 | 0.117 | 0.117 |
| Pressure Washers                   | 120  | 0.241 | 3.202 | 2.560 | 0.006 | 0.112 | 0.112 |
| Pressure Washers                   | 175  | 0.221 | 2.907 | 1.871 | 0.006 | 0.082 | 0.082 |



|                         |      |       |       |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 |
| Pumps                   | 15   | 0.707 | 3.519 | 4.408 | 0.008 | 0.203 | 0.203 |
| Pumps                   | 25   | 0.739 | 2.426 | 4.470 | 0.007 | 0.193 | 0.193 |
| Pumps                   | 50   | 0.614 | 4.048 | 3.846 | 0.007 | 0.152 | 0.152 |
| Pumps                   | 120  | 0.321 | 3.404 | 2.708 | 0.006 | 0.142 | 0.142 |
| Pumps                   | 175  | 0.242 | 2.969 | 1.860 | 0.006 | 0.085 | 0.085 |
| Pumps                   | 250  | 0.186 | 1.025 | 1.534 | 0.006 | 0.045 | 0.045 |
| Pumps                   | 500  | 0.180 | 1.001 | 1.404 | 0.005 | 0.044 | 0.044 |
| Pumps                   | 750  | 0.181 | 1.001 | 1.432 | 0.005 | 0.044 | 0.044 |
| Pumps                   | 9999 | 0.219 | 1.058 | 3.236 | 0.005 | 0.065 | 0.065 |
| Rollers                 | 15   | 0.738 | 4.402 | 4.128 | 0.005 | 0.250 | 0.230 |
| Rollers                 | 25   | 0.738 | 4.402 | 4.128 | 0.005 | 0.250 | 0.230 |
| Rollers                 | 50   | 0.738 | 4.402 | 4.128 | 0.005 | 0.250 | 0.230 |
| Rollers                 | 120  | 0.310 | 3.470 | 3.219 | 0.005 | 0.186 | 0.171 |
| Rollers                 | 175  | 0.164 | 2.913 | 1.714 | 0.005 | 0.079 | 0.072 |
| Rollers                 | 250  | 0.187 | 1.228 | 2.212 | 0.005 | 0.077 | 0.071 |
| Rollers                 | 500  | 0.218 | 1.955 | 2.463 | 0.005 | 0.097 | 0.089 |
| Rough Terrain Forklifts | 50   | 0.789 | 4.304 | 4.041 | 0.005 | 0.238 | 0.219 |
| Rough Terrain Forklifts | 120  | 0.159 | 3.244 | 2.098 | 0.005 | 0.073 | 0.067 |
| Rough Terrain Forklifts | 175  | 0.120 | 2.844 | 1.405 | 0.005 | 0.051 | 0.047 |
| Rough Terrain Forklifts | 250  | 0.119 | 0.989 | 1.617 | 0.005 | 0.037 | 0.034 |
| Rough Terrain Forklifts | 500  | 0.068 | 0.937 | 0.558 | 0.005 | 0.009 | 0.008 |
| Rubber Tired Dozers     | 175  | 0.600 | 3.752 | 5.808 | 0.005 | 0.326 | 0.300 |
| Rubber Tired Dozers     | 250  | 0.480 | 2.056 | 5.046 | 0.005 | 0.240 | 0.220 |
| Rubber Tired Dozers     | 500  | 0.475 | 3.895 | 4.808 | 0.005 | 0.220 | 0.202 |
| Rubber Tired Dozers     | 750  | 0.460 | 2.607 | 6.122 | 0.005 | 0.218 | 0.201 |
| Rubber Tired Dozers     | 1000 | 0.475 | 1.961 | 4.896 | 0.005 | 0.140 | 0.140 |
| Rubber Tired Loaders    | 25   | 1.179 | 6.204 | 4.748 | 0.005 | 0.354 | 0.326 |
| Rubber Tired Loaders    | 50   | 1.179 | 6.204 | 4.748 | 0.005 | 0.354 | 0.326 |
| Rubber Tired Loaders    | 120  | 0.440 | 3.839 | 3.768 | 0.005 | 0.267 | 0.245 |
| Rubber Tired Loaders    | 175  | 0.295 | 3.302 | 2.518 | 0.005 | 0.136 | 0.125 |

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.226 | 1.188 | 2.347 | 0.005 | 0.079 | 0.072 |
| Rubber Tired Loaders      | 500  | 0.237 | 1.441 | 2.175 | 0.005 | 0.081 | 0.075 |
| Rubber Tired Loaders      | 750  | 0.233 | 1.315 | 2.097 | 0.005 | 0.080 | 0.074 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.162 | 3.617 | 0.005 | 0.075 | 0.069 |
| Scrapers                  | 120  | 0.681 | 4.205 | 6.455 | 0.005 | 0.494 | 0.454 |
| Scrapers                  | 175  | 0.390 | 3.417 | 3.833 | 0.005 | 0.204 | 0.187 |
| Scrapers                  | 250  | 0.341 | 1.743 | 3.669 | 0.005 | 0.160 | 0.147 |
| Scrapers                  | 500  | 0.264 | 2.052 | 2.879 | 0.005 | 0.112 | 0.103 |
| Scrapers                  | 750  | 0.224 | 1.508 | 2.475 | 0.005 | 0.090 | 0.083 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Signal Boards             | 50   | 0.655 | 4.325 | 3.880 | 0.007 | 0.154 | 0.154 |
| Signal Boards             | 120  | 0.337 | 3.484 | 2.668 | 0.006 | 0.141 | 0.141 |
| Signal Boards             | 175  | 0.260 | 3.044 | 1.801 | 0.006 | 0.086 | 0.086 |
| Signal Boards             | 250  | 0.247 | 1.266 | 1.782 | 0.007 | 0.055 | 0.055 |
| Skid Steer Loaders        | 25   | 0.365 | 3.656 | 3.433 | 0.005 | 0.103 | 0.095 |
| Skid Steer Loaders        | 50   | 0.365 | 3.656 | 3.433 | 0.005 | 0.103 | 0.095 |
| Skid Steer Loaders        | 120  | 0.164 | 3.270 | 2.189 | 0.005 | 0.081 | 0.075 |
| Surfacing Equipment       | 50   | 0.428 | 3.772 | 3.911 | 0.006 | 0.154 | 0.142 |
| Surfacing Equipment       | 120  | 0.293 | 3.409 | 3.250 | 0.005 | 0.175 | 0.161 |
| Surfacing Equipment       | 175  | 0.239 | 2.910 | 2.701 | 0.005 | 0.130 | 0.120 |
| Surfacing Equipment       | 250  | 0.196 | 1.217 | 2.667 | 0.005 | 0.085 | 0.078 |
| Surfacing Equipment       | 500  | 0.132 | 1.160 | 1.557 | 0.005 | 0.057 | 0.053 |
| Surfacing Equipment       | 750  | 0.115 | 0.988 | 1.355 | 0.005 | 0.052 | 0.048 |
| Sweepers/Scrubbers        | 15   | 1.008 | 5.451 | 4.490 | 0.005 | 0.335 | 0.308 |
| Sweepers/Scrubbers        | 25   | 1.008 | 5.451 | 4.490 | 0.005 | 0.335 | 0.308 |
| Sweepers/Scrubbers        | 50   | 1.008 | 5.451 | 4.490 | 0.005 | 0.335 | 0.308 |
| Sweepers/Scrubbers        | 120  | 0.372 | 3.692 | 3.472 | 0.005 | 0.232 | 0.214 |
| Sweepers/Scrubbers        | 175  | 0.321 | 3.222 | 3.002 | 0.005 | 0.145 | 0.133 |
| Sweepers/Scrubbers        | 250  | 0.152 | 1.101 | 1.605 | 0.005 | 0.050 | 0.046 |
| Tractors/Loaders/Backhoes | 25   | 0.688 | 4.760 | 4.030 | 0.005 | 0.218 | 0.200 |

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.688 | 4.760 | 4.030 | 0.005 | 0.218 | 0.200 |
| Tractors/Loaders/Backhoes | 120  | 0.260 | 3.536 | 2.647 | 0.005 | 0.142 | 0.131 |
| Tractors/Loaders/Backhoes | 175  | 0.200 | 3.079 | 1.753 | 0.005 | 0.089 | 0.082 |
| Tractors/Loaders/Backhoes | 250  | 0.187 | 1.162 | 1.943 | 0.005 | 0.067 | 0.062 |
| Tractors/Loaders/Backhoes | 500  | 0.160 | 1.280 | 1.437 | 0.005 | 0.053 | 0.049 |
| Tractors/Loaders/Backhoes | 750  | 0.232 | 1.353 | 2.453 | 0.005 | 0.094 | 0.087 |
| Trenchers                 | 15   | 0.722 | 4.518 | 4.269 | 0.005 | 0.275 | 0.253 |
| Trenchers                 | 25   | 0.722 | 4.518 | 4.269 | 0.005 | 0.275 | 0.253 |
| Trenchers                 | 50   | 0.722 | 4.518 | 4.269 | 0.005 | 0.275 | 0.253 |
| Trenchers                 | 120  | 0.529 | 3.778 | 4.913 | 0.005 | 0.348 | 0.320 |
| Trenchers                 | 175  | 0.396 | 3.313 | 4.103 | 0.005 | 0.212 | 0.195 |
| Trenchers                 | 250  | 0.335 | 1.663 | 3.853 | 0.005 | 0.161 | 0.148 |
| Trenchers                 | 500  | 0.212 | 1.872 | 2.212 | 0.005 | 0.094 | 0.086 |
| Trenchers                 | 750  | 0.057 | 0.945 | 0.301 | 0.005 | 0.009 | 0.008 |
| Welders                   | 15   | 0.707 | 3.519 | 4.408 | 0.008 | 0.203 | 0.203 |
| Welders                   | 25   | 0.739 | 2.426 | 4.470 | 0.007 | 0.193 | 0.193 |
| Welders                   | 50   | 0.758 | 4.645 | 4.007 | 0.007 | 0.175 | 0.175 |
| Welders                   | 120  | 0.382 | 3.570 | 2.808 | 0.006 | 0.160 | 0.160 |
| Welders                   | 175  | 0.295 | 3.113 | 1.935 | 0.006 | 0.097 | 0.097 |
| Welders                   | 250  | 0.231 | 1.074 | 1.598 | 0.006 | 0.050 | 0.050 |
| Welders                   | 500  | 0.225 | 1.038 | 1.454 | 0.005 | 0.049 | 0.049 |
| Water Trucks              | 175  | 0.241 | 3.284 | 1.811 | 0.005 | 0.088 | 0.081 |
| Water Trucks              | 250  | 0.215 | 1.279 | 1.618 | 0.005 | 0.064 | 0.059 |
| Water Trucks              | 500  | 0.196 | 1.247 | 1.490 | 0.005 | 0.054 | 0.050 |
| Water Trucks              | 750  | 0.263 | 1.746 | 2.268 | 0.005 | 0.088 | 0.081 |
| Water Trucks              | 1000 | 0.234 | 1.214 | 3.842 | 0.005 | 0.086 | 0.079 |

2023

| g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|
| CO2     | CH4     | N2O     |
| 525.074 | 0.170   | 0.005   |
| 525.074 | 0.170   | 0.005   |
| 525.074 | 0.170   | 0.005   |
| 472.114 | 0.153   | 0.004   |
| 472.055 | 0.153   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.063   | 0.005   |
| 568.299 | 0.066   | 0.005   |
| 568.299 | 0.073   | 0.005   |
| 568.299 | 0.037   | 0.004   |
| 568.299 | 0.029   | 0.004   |
| 568.300 | 0.023   | 0.004   |
| 568.299 | 0.022   | 0.004   |
| 568.299 | 0.022   | 0.004   |
| 568.300 | 0.024   | 0.004   |
| 529.870 | 0.171   | 0.005   |
| 529.870 | 0.171   | 0.005   |
| 529.870 | 0.171   | 0.005   |
| 462.267 | 0.150   | 0.004   |
| 477.372 | 0.154   | 0.004   |
| 468.760 | 0.152   | 0.004   |
| 467.192 | 0.151   | 0.004   |
| 477.141 | 0.154   | 0.004   |
| 472.921 | 0.153   | 0.004   |

| 2023             |       | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     |
| Aerial Lifts     | 15    | 0.163   | 3.122   | 2.897   |
| Aerial Lifts     | 25    | 0.163   | 3.122   | 2.897   |
| Aerial Lifts     | 50    | 0.163   | 3.122   | 2.897   |
| Aerial Lifts     | 120   | 0.101   | 3.170   | 1.548   |
| Aerial Lifts     | 500   | 0.079   | 0.961   | 0.645   |
| Aerial Lifts     | 750   | 0.169   | 0.995   | 1.265   |
| Air Compressor s | 15    | 0.698   | 3.508   | 4.359   |
| Air Compressor s | 25    | 0.728   | 2.407   | 4.447   |
| Air Compressor s | 50    | 0.753   | 4.913   | 3.975   |
| Air Compressor s | 120   | 0.387   | 3.657   | 2.631   |
| Air Compressor s | 175   | 0.303   | 3.197   | 1.748   |
| Air Compressor s | 250   | 0.243   | 1.099   | 1.420   |
| Air Compressor s | 500   | 0.238   | 1.055   | 1.305   |
| Air Compressor s | 750   | 0.239   | 1.055   | 1.331   |
| Air Compressor s | 1000  | 0.256   | 1.102   | 3.221   |
| Bore/Drill Rigs  | 15    | 0.606   | 4.311   | 4.208   |
| Bore/Drill Rigs  | 25    | 0.606   | 4.311   | 4.208   |
| Bore/Drill Rigs  | 50    | 0.606   | 4.311   | 4.208   |
| Bore/Drill Rigs  | 120   | 0.187   | 3.258   | 2.357   |
| Bore/Drill Rigs  | 175   | 0.125   | 2.969   | 1.078   |
| Bore/Drill Rigs  | 250   | 0.110   | 1.043   | 1.047   |
| Bore/Drill Rigs  | 500   | 0.101   | 0.989   | 0.898   |
| Bore/Drill Rigs  | 750   | 0.091   | 0.982   | 0.717   |
| Bore/Drill Rigs  | 1000  | 0.053   | 0.936   | 2.262   |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.063 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.300 | 0.059 | 0.005 |
| 568.299 | 0.031 | 0.004 |
| 568.300 | 0.024 | 0.004 |
| 517.872 | 0.168 | 0.005 |
| 469.993 | 0.152 | 0.004 |
| 474.589 | 0.154 | 0.004 |
| 472.983 | 0.153 | 0.004 |
| 472.181 | 0.153 | 0.004 |
| 470.476 | 0.152 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 516.148 | 0.167 | 0.005 |
| 476.022 | 0.154 | 0.004 |
| 471.567 | 0.153 | 0.004 |
| 472.098 | 0.153 | 0.004 |
| 474.412 | 0.153 | 0.004 |
| 472.876 | 0.153 | 0.004 |
| 470.701 | 0.152 | 0.004 |
| 568.299 | 0.071 | 0.005 |
| 568.299 | 0.037 | 0.004 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.027 | 0.004 |

|                          |      |       |       |       |
|--------------------------|------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 |
| Cement and Mortar Mixers | 25   | 0.697 | 2.356 | 4.382 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.340 | 4.332 |
| Concrete/Industrial Saws | 50   | 0.606 | 4.372 | 3.815 |
| Concrete/Industrial Saws | 120  | 0.320 | 3.507 | 2.478 |
| Concrete/Industrial Saws | 175  | 0.250 | 3.072 | 1.599 |
| Cranes                   | 50   | 2.047 | 7.453 | 5.923 |
| Cranes                   | 120  | 0.552 | 3.944 | 4.875 |
| Cranes                   | 175  | 0.423 | 3.443 | 4.222 |
| Cranes                   | 250  | 0.297 | 1.553 | 3.229 |
| Cranes                   | 500  | 0.236 | 2.010 | 2.511 |
| Cranes                   | 750  | 0.195 | 1.282 | 2.073 |
| Cranes                   | 9999 | 0.211 | 1.023 | 2.399 |
| Crawler Tractors         | 50   | 1.873 | 7.027 | 5.325 |
| Crawler Tractors         | 120  | 0.558 | 3.889 | 4.762 |
| Crawler Tractors         | 175  | 0.347 | 3.235 | 3.330 |
| Crawler Tractors         | 250  | 0.276 | 1.395 | 3.187 |
| Crawler Tractors         | 500  | 0.241 | 1.852 | 2.476 |
| Crawler Tractors         | 750  | 0.184 | 1.159 | 1.867 |
| Crawler Tractors         | 1000 | 0.268 | 1.610 | 4.770 |
| Crushing/Proc. Equipment | 50   | 0.739 | 5.039 | 3.962 |
| Crushing/Proc. Equipment | 120  | 0.385 | 3.700 | 2.552 |
| Crushing/Proc. Equipment | 175  | 0.304 | 3.240 | 1.654 |
| Crushing/Proc. Equipment | 250  | 0.248 | 1.111 | 1.330 |
| Crushing/Proc. Equipment | 500  | 0.244 | 1.064 | 1.227 |
| Crushing/Proc. Equipment | 750  | 0.244 | 1.065 | 1.251 |
| Crushing/Proc. Equipment | 9999 | 0.287 | 1.107 | 3.160 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.061 | 0.005 |
| 525.447 | 0.170 | 0.005 |
| 525.447 | 0.170 | 0.005 |
| 467.626 | 0.151 | 0.004 |
| 472.192 | 0.153 | 0.004 |
| 472.041 | 0.153 | 0.004 |
| 469.711 | 0.152 | 0.004 |
| 469.289 | 0.152 | 0.004 |
| 525.483 | 0.170 | 0.005 |
| 471.529 | 0.153 | 0.004 |
| 472.106 | 0.153 | 0.004 |
| 473.326 | 0.153 | 0.004 |
| 473.615 | 0.153 | 0.004 |
| 568.299 | 0.056 | 0.005 |
| 568.299 | 0.063 | 0.005 |
| 568.299 | 0.050 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 493.025 | 0.160 | 0.005 |
| 469.630 | 0.152 | 0.004 |
| 478.566 | 0.155 | 0.004 |
| 474.239 | 0.153 | 0.004 |
| 471.928 | 0.153 | 0.004 |
| 568.299 | 0.026 | 0.004 |
| 475.234 | 0.154 | 0.004 |
| 472.811 | 0.153 | 0.004 |
| 471.131 | 0.152 | 0.004 |
| 471.939 | 0.153 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 470.181 | 0.152 | 0.004 |
| 469.615 | 0.152 | 0.004 |

|                      |      |       |       |       |
|----------------------|------|-------|-------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 |
| Excavators           | 25   | 0.450 | 4.234 | 3.594 |
| Excavators           | 50   | 0.450 | 4.234 | 3.594 |
| Excavators           | 120  | 0.230 | 3.454 | 2.381 |
| Excavators           | 175  | 0.178 | 3.076 | 1.462 |
| Excavators           | 250  | 0.142 | 1.090 | 1.209 |
| Excavators           | 500  | 0.122 | 1.051 | 0.893 |
| Excavators           | 750  | 0.144 | 1.132 | 1.159 |
| Forklifts            | 50   | 0.766 | 5.166 | 4.152 |
| Forklifts            | 120  | 0.327 | 3.647 | 3.057 |
| Forklifts            | 175  | 0.244 | 3.180 | 2.112 |
| Forklifts            | 250  | 0.204 | 1.235 | 1.807 |
| Forklifts            | 500  | 0.220 | 1.216 | 1.788 |
| Generator Sets       | 15   | 0.618 | 3.508 | 4.345 |
| Generator Sets       | 25   | 0.701 | 2.407 | 4.447 |
| Generator Sets       | 50   | 0.514 | 3.819 | 3.685 |
| Generator Sets       | 120  | 0.279 | 3.347 | 2.477 |
| Generator Sets       | 175  | 0.211 | 2.927 | 1.635 |
| Generator Sets       | 250  | 0.164 | 1.006 | 1.328 |
| Generator Sets       | 500  | 0.158 | 0.986 | 1.228 |
| Generator Sets       | 750  | 0.160 | 0.986 | 1.253 |
| Generator Sets       | 9999 | 0.194 | 1.031 | 3.058 |
| Graders              | 50   | 1.947 | 7.191 | 5.148 |
| Graders              | 120  | 0.719 | 4.228 | 5.740 |
| Graders              | 175  | 0.390 | 3.450 | 3.548 |
| Graders              | 250  | 0.284 | 1.252 | 3.441 |
| Graders              | 500  | 0.309 | 1.385 | 2.705 |
| Graders              | 750  | 0.276 | 1.170 | 1.425 |
| Off-Highway Tractors | 120  | 0.316 | 3.687 | 3.095 |
| Off-Highway Tractors | 175  | 0.201 | 3.143 | 1.785 |
| Off-Highway Tractors | 250  | 0.171 | 1.138 | 1.491 |
| Off-Highway Tractors | 750  | 0.168 | 1.124 | 1.289 |
| Off-Highway Tractors | 1000 | 0.180 | 1.055 | 2.449 |
| Off-Highway Trucks   | 175  | 0.236 | 3.304 | 1.683 |
| Off-Highway Trucks   | 250  | 0.207 | 1.273 | 1.456 |

|         |       |       |
|---------|-------|-------|
| 474.714 | 0.154 | 0.004 |
| 473.977 | 0.153 | 0.004 |
| 472.344 | 0.153 | 0.004 |
| 529.183 | 0.171 | 0.005 |
| 529.183 | 0.171 | 0.005 |
| 529.183 | 0.171 | 0.005 |
| 472.318 | 0.153 | 0.004 |
| 469.613 | 0.152 | 0.004 |
| 475.998 | 0.154 | 0.004 |
| 526.176 | 0.170 | 0.005 |
| 526.176 | 0.170 | 0.005 |
| 526.176 | 0.170 | 0.005 |
| 470.000 | 0.152 | 0.004 |
| 471.850 | 0.153 | 0.004 |
| 473.223 | 0.153 | 0.004 |
| 472.929 | 0.153 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.187 | 1.221 | 1.324 |
| Off-Highway Trucks                 | 750  | 0.263 | 1.719 | 2.182 |
| Off-Highway Trucks                 | 1000 | 0.214 | 1.194 | 3.544 |
| Other Construction Equipment       | 15   | 0.866 | 5.074 | 4.594 |
| Other Construction Equipment       | 25   | 0.866 | 5.074 | 4.594 |
| Other Construction Equipment       | 50   | 0.866 | 5.074 | 4.594 |
| Other Construction Equipment       | 120  | 0.406 | 3.632 | 3.790 |
| Other Construction Equipment       | 175  | 0.274 | 3.142 | 2.698 |
| Other Construction Equipment       | 500  | 0.180 | 1.396 | 1.812 |
| Other General Industrial Equipment | 15   | 0.603 | 4.883 | 3.993 |
| Other General Industrial Equipment | 25   | 0.603 | 4.883 | 3.993 |
| Other General Industrial Equipment | 50   | 0.603 | 4.883 | 3.993 |
| Other General Industrial Equipment | 120  | 0.308 | 3.647 | 2.924 |
| Other General Industrial Equipment | 175  | 0.201 | 3.175 | 1.609 |
| Other General Industrial Equipment | 250  | 0.181 | 1.140 | 1.530 |
| Other General Industrial Equipment | 500  | 0.164 | 1.121 | 1.256 |

|         |       |       |
|---------|-------|-------|
| 473.464 | 0.153 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 523.709 | 0.169 | 0.005 |
| 473.588 | 0.153 | 0.004 |
| 472.219 | 0.153 | 0.004 |
| 471.482 | 0.153 | 0.004 |
| 470.297 | 0.152 | 0.004 |
| 472.055 | 0.153 | 0.004 |
| 526.896 | 0.170 | 0.005 |
| 526.896 | 0.170 | 0.005 |
| 470.185 | 0.152 | 0.004 |
| 472.760 | 0.153 | 0.004 |
| 472.372 | 0.153 | 0.004 |
| 466.004 | 0.151 | 0.004 |
| 520.659 | 0.168 | 0.005 |
| 520.659 | 0.168 | 0.005 |
| 473.448 | 0.153 | 0.004 |
| 470.665 | 0.152 | 0.004 |
| 472.169 | 0.153 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.056 | 0.005 |
| 568.299 | 0.063 | 0.005 |
| 568.300 | 0.035 | 0.005 |
| 568.299 | 0.021 | 0.004 |
| 568.299 | 0.019 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.111 | 1.105 | 0.626 |
| Other General Industrial Equipment | 1000 | 0.193 | 1.049 | 3.956 |
| Other Material Handling Equipment  | 50   | 1.011 | 5.757 | 4.684 |
| Other Material Handling Equipment  | 120  | 0.225 | 3.515 | 2.298 |
| Other Material Handling Equipment  | 175  | 0.217 | 3.171 | 1.769 |
| Other Material Handling Equipment  | 250  | 0.207 | 1.209 | 2.004 |
| Other Material Handling Equipment  | 500  | 0.218 | 1.344 | 1.870 |
| Other Material Handling Equipment  | 9999 | 0.054 | 0.939 | 2.268 |
| Pavers                             | 25   | 1.007 | 5.007 | 4.285 |
| Pavers                             | 50   | 1.007 | 5.007 | 4.285 |
| Pavers                             | 120  | 0.349 | 3.507 | 3.427 |
| Pavers                             | 175  | 0.199 | 2.994 | 1.955 |
| Pavers                             | 250  | 0.130 | 1.010 | 1.611 |
| Pavers                             | 500  | 0.152 | 0.987 | 1.771 |
| Paving Equipment                   | 25   | 0.541 | 4.241 | 3.774 |
| Paving Equipment                   | 50   | 0.541 | 4.241 | 3.774 |
| Paving Equipment                   | 120  | 0.278 | 3.503 | 2.837 |
| Paving Equipment                   | 175  | 0.204 | 3.051 | 1.913 |
| Paving Equipment                   | 250  | 0.175 | 1.165 | 1.885 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 |
| Pressure Washers                   | 15   | 0.618 | 3.508 | 4.345 |
| Pressure Washers                   | 25   | 0.701 | 2.407 | 4.447 |
| Pressure Washers                   | 50   | 0.363 | 3.260 | 3.541 |
| Pressure Washers                   | 120  | 0.222 | 3.196 | 2.377 |
| Pressure Washers                   | 175  | 0.205 | 2.907 | 1.665 |



|         |       |       |
|---------|-------|-------|
| 568.299 | 0.008 | 0.004 |
| 568.299 | 0.063 | 0.005 |
| 568.299 | 0.066 | 0.005 |
| 568.299 | 0.055 | 0.005 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.021 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.300 | 0.016 | 0.004 |
| 568.300 | 0.016 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 525.691 | 0.170 | 0.005 |
| 525.691 | 0.170 | 0.005 |
| 525.691 | 0.170 | 0.005 |
| 473.929 | 0.153 | 0.004 |
| 471.948 | 0.153 | 0.004 |
| 473.514 | 0.153 | 0.004 |
| 478.982 | 0.155 | 0.004 |
|         |       |       |
| 525.015 | 0.170 | 0.005 |
|         |       |       |
| 473.089 | 0.153 | 0.004 |
|         |       |       |
| 471.677 | 0.153 | 0.004 |
|         |       |       |
| 472.541 | 0.153 | 0.004 |
|         |       |       |
| 466.560 | 0.151 | 0.004 |
|         |       |       |
| 473.912 | 0.153 | 0.004 |
|         |       |       |
| 474.617 | 0.154 | 0.004 |
|         |       |       |
| 479.311 | 0.155 | 0.004 |
|         |       |       |
| 473.035 | 0.153 | 0.004 |
|         |       |       |
| 568.299 | 0.042 | 0.004 |
|         |       |       |
| 524.791 | 0.170 | 0.005 |
|         |       |       |
| 524.791 | 0.170 | 0.005 |
|         |       |       |
| 466.494 | 0.151 | 0.004 |
|         |       |       |
| 470.927 | 0.152 | 0.004 |

|                         |      |       |       |       |
|-------------------------|------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 |
| Pumps                   | 15   | 0.698 | 3.508 | 4.359 |
| Pumps                   | 25   | 0.728 | 2.407 | 4.447 |
| Pumps                   | 50   | 0.565 | 4.007 | 3.734 |
| Pumps                   | 120  | 0.299 | 3.398 | 2.511 |
| Pumps                   | 175  | 0.227 | 2.971 | 1.662 |
| Pumps                   | 250  | 0.177 | 1.021 | 1.351 |
| Pumps                   | 500  | 0.171 | 0.998 | 1.246 |
| Pumps                   | 750  | 0.173 | 0.998 | 1.271 |
| Pumps                   | 9999 | 0.207 | 1.043 | 3.090 |
| Rollers                 | 15   | 0.661 | 4.252 | 3.921 |
| Rollers                 | 25   | 0.661 | 4.252 | 3.921 |
| Rollers                 | 50   | 0.661 | 4.252 | 3.921 |
| Rollers                 | 120  | 0.287 | 3.455 | 3.003 |
| Rollers                 | 175  | 0.150 | 2.909 | 1.483 |
| Rollers                 | 250  | 0.188 | 1.234 | 2.173 |
| Rollers                 | 500  | 0.211 | 1.956 | 2.290 |
|                         |      |       |       |       |
| Rough Terrain Forklifts | 50   | 0.690 | 4.125 | 3.853 |
|                         |      |       |       |       |
| Rough Terrain Forklifts | 120  | 0.150 | 3.242 | 1.984 |
|                         |      |       |       |       |
| Rough Terrain Forklifts | 175  | 0.111 | 2.843 | 1.218 |
|                         |      |       |       |       |
| Rough Terrain Forklifts | 250  | 0.116 | 0.990 | 1.474 |
|                         |      |       |       |       |
| Rough Terrain Forklifts | 500  | 0.069 | 0.938 | 0.558 |
|                         |      |       |       |       |
| Rubber Tired Dozers     | 175  | 0.588 | 3.766 | 5.656 |
|                         |      |       |       |       |
| Rubber Tired Dozers     | 250  | 0.393 | 1.783 | 4.090 |
|                         |      |       |       |       |
| Rubber Tired Dozers     | 500  | 0.447 | 3.686 | 4.408 |
|                         |      |       |       |       |
| Rubber Tired Dozers     | 750  | 0.423 | 2.591 | 5.334 |
|                         |      |       |       |       |
| Rubber Tired Dozers     | 1000 | 0.453 | 1.874 | 4.709 |
|                         |      |       |       |       |
| Rubber Tired Loaders    | 25   | 1.049 | 5.972 | 4.521 |
|                         |      |       |       |       |
| Rubber Tired Loaders    | 50   | 1.049 | 5.972 | 4.521 |
|                         |      |       |       |       |
| Rubber Tired Loaders    | 120  | 0.412 | 3.827 | 3.512 |
|                         |      |       |       |       |
| Rubber Tired Loaders    | 175  | 0.269 | 3.292 | 2.196 |

|         |       |       |
|---------|-------|-------|
| 469.904 | 0.152 | 0.004 |
| 468.129 | 0.151 | 0.004 |
| 463.819 | 0.150 | 0.004 |
| 472.858 | 0.153 | 0.004 |
| 483.448 | 0.156 | 0.004 |
| 478.741 | 0.155 | 0.004 |
| 469.269 | 0.152 | 0.004 |
| 473.230 | 0.153 | 0.004 |
| 471.279 | 0.152 | 0.004 |
| 568.300 | 0.059 | 0.005 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 686.695 | 0.022 | 0.004 |
| 527.273 | 0.171 | 0.005 |
| 527.273 | 0.171 | 0.005 |
| 472.432 | 0.153 | 0.004 |
| 535.836 | 0.173 | 0.005 |
| 473.636 | 0.153 | 0.004 |
| 469.126 | 0.152 | 0.004 |
| 476.951 | 0.154 | 0.004 |
| 470.525 | 0.152 | 0.004 |
| 470.400 | 0.152 | 0.004 |
| 525.328 | 0.170 | 0.005 |
| 525.328 | 0.170 | 0.005 |
| 525.328 | 0.170 | 0.005 |
| 474.116 | 0.153 | 0.004 |
| 473.122 | 0.153 | 0.004 |
| 470.126 | 0.152 | 0.004 |
| 514.461 | 0.166 | 0.005 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.171 | 2.060 |
| Rubber Tired Loaders      | 500  | 0.217 | 1.384 | 1.866 |
| Rubber Tired Loaders      | 750  | 0.227 | 1.323 | 1.927 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.174 | 3.528 |
| Scrapers                  | 120  | 0.630 | 4.144 | 6.026 |
| Scrapers                  | 175  | 0.361 | 3.395 | 3.479 |
| Scrapers                  | 250  | 0.317 | 1.678 | 3.284 |
| Scrapers                  | 500  | 0.253 | 1.975 | 2.666 |
| Scrapers                  | 750  | 0.222 | 1.513 | 2.386 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 |
| Signal Boards             | 50   | 0.603 | 4.282 | 3.767 |
| Signal Boards             | 120  | 0.315 | 3.478 | 2.472 |
| Signal Boards             | 175  | 0.244 | 3.045 | 1.602 |
| Signal Boards             | 250  | 0.235 | 1.263 | 1.562 |
| Skid Steer Loaders        | 25   | 0.353 | 3.654 | 3.371 |
| Skid Steer Loaders        | 50   | 0.353 | 3.654 | 3.371 |
| Skid Steer Loaders        | 120  | 0.153 | 3.266 | 2.039 |
| Surfacing Equipment       | 50   | 0.437 | 3.832 | 3.924 |
| Surfacing Equipment       | 120  | 0.270 | 3.396 | 3.058 |
| Surfacing Equipment       | 175  | 0.224 | 2.914 | 2.455 |
| Surfacing Equipment       | 250  | 0.192 | 1.219 | 2.502 |
| Surfacing Equipment       | 500  | 0.132 | 1.163 | 1.476 |
| Surfacing Equipment       | 750  | 0.100 | 0.985 | 1.081 |
| Sweepers/Scrubbers        | 15   | 0.759 | 4.971 | 4.127 |
| Sweepers/Scrubbers        | 25   | 0.759 | 4.971 | 4.127 |
| Sweepers/Scrubbers        | 50   | 0.759 | 4.971 | 4.127 |
| Sweepers/Scrubbers        | 120  | 0.351 | 3.695 | 3.285 |
| Sweepers/Scrubbers        | 175  | 0.292 | 3.223 | 2.609 |
| Sweepers/Scrubbers        | 250  | 0.159 | 1.114 | 1.610 |
| Tractors/Loaders/Backhoes | 25   | 0.621 | 4.629 | 3.857 |

|         |       |       |
|---------|-------|-------|
| 514.461 | 0.166 | 0.005 |
| 475.898 | 0.154 | 0.004 |
| 467.800 | 0.151 | 0.004 |
| 470.124 | 0.152 | 0.004 |
| 469.256 | 0.152 | 0.004 |
| 466.633 | 0.151 | 0.004 |
| 527.026 | 0.171 | 0.005 |
| 527.026 | 0.171 | 0.005 |
| 527.026 | 0.171 | 0.005 |
| 475.326 | 0.154 | 0.004 |
| 467.734 | 0.151 | 0.004 |
| 473.851 | 0.153 | 0.004 |
| 470.585 | 0.152 | 0.004 |
| 474.289 | 0.153 | 0.004 |
| 568.300 | 0.063 | 0.005 |
| 568.299 | 0.066 | 0.005 |
| 568.299 | 0.068 | 0.005 |
| 568.299 | 0.034 | 0.004 |
| 568.300 | 0.026 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.020 | 0.004 |
| 470.181 | 0.152 | 0.004 |
| 469.615 | 0.152 | 0.004 |
| 474.714 | 0.154 | 0.004 |
| 473.977 | 0.153 | 0.004 |
| 472.344 | 0.153 | 0.004 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.621 | 4.629 | 3.857 |
| Tractors/Loaders/Backhoes | 120  | 0.239 | 3.525 | 2.426 |
| Tractors/Loaders/Backhoes | 175  | 0.184 | 3.078 | 1.521 |
| Tractors/Loaders/Backhoes | 250  | 0.169 | 1.148 | 1.588 |
| Tractors/Loaders/Backhoes | 500  | 0.152 | 1.279 | 1.247 |
| Tractors/Loaders/Backhoes | 750  | 0.234 | 1.361 | 2.419 |
| Trenchers                 | 15   | 0.642 | 4.302 | 3.959 |
| Trenchers                 | 25   | 0.642 | 4.302 | 3.959 |
| Trenchers                 | 50   | 0.642 | 4.302 | 3.959 |
| Trenchers                 | 120  | 0.504 | 3.768 | 4.700 |
| Trenchers                 | 175  | 0.359 | 3.291 | 3.657 |
| Trenchers                 | 250  | 0.328 | 1.639 | 3.737 |
| Trenchers                 | 500  | 0.199 | 1.723 | 2.005 |
| Trenchers                 | 750  | 0.060 | 0.951 | 0.303 |
| Welders                   | 15   | 0.698 | 3.508 | 4.359 |
| Welders                   | 25   | 0.728 | 2.407 | 4.447 |
| Welders                   | 50   | 0.697 | 4.596 | 3.891 |
| Welders                   | 120  | 0.357 | 3.564 | 2.599 |
| Welders                   | 175  | 0.277 | 3.115 | 1.726 |
| Welders                   | 250  | 0.000 | 1.071 | 1.404 |
| Welders                   | 500  | 0.215 | 1.034 | 1.289 |
| Water Trucks              | 175  | 0.236 | 3.304 | 1.683 |
| Water Trucks              | 250  | 0.207 | 1.273 | 1.456 |
| Water Trucks              | 500  | 0.187 | 1.221 | 1.324 |
| Water Trucks              | 750  | 0.263 | 1.719 | 2.182 |
| Water Trucks              | 1000 | 0.214 | 1.194 | 3.544 |

2024

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|
| SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.005   | 0.023   | 0.021   | 525.074 | 0.170   | 0.005   |
| 0.005   | 0.023   | 0.021   | 525.074 | 0.170   | 0.005   |
| 0.005   | 0.023   | 0.021   | 525.074 | 0.170   | 0.005   |
| 0.005   | 0.027   | 0.025   | 472.114 | 0.153   | 0.004   |
| 0.005   | 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.005   | 0.038   | 0.038   | 568.299 | 0.015   | 0.004   |
| 0.008   | 0.194   | 0.194   | 568.299 | 0.063   | 0.005   |
| 0.007   | 0.186   | 0.186   | 568.299 | 0.065   | 0.005   |
| 0.007   | 0.156   | 0.156   | 568.299 | 0.067   | 0.005   |
| 0.006   | 0.143   | 0.143   | 568.299 | 0.034   | 0.004   |
| 0.006   | 0.089   | 0.089   | 568.299 | 0.027   | 0.004   |
| 0.006   | 0.045   | 0.045   | 568.299 | 0.021   | 0.004   |
| 0.005   | 0.044   | 0.044   | 568.299 | 0.021   | 0.004   |
| 0.005   | 0.044   | 0.044   | 568.299 | 0.021   | 0.004   |
| 0.005   | 0.068   | 0.068   | 568.299 | 0.023   | 0.004   |
| 0.006   | 0.226   | 0.208   | 531.986 | 0.172   | 0.005   |
| 0.006   | 0.226   | 0.208   | 531.986 | 0.172   | 0.005   |
| 0.006   | 0.226   | 0.208   | 531.986 | 0.172   | 0.005   |
| 0.005   | 0.102   | 0.093   | 461.214 | 0.149   | 0.004   |
| 0.005   | 0.048   | 0.044   | 479.647 | 0.155   | 0.004   |
| 0.005   | 0.034   | 0.031   | 469.706 | 0.152   | 0.004   |
| 0.005   | 0.030   | 0.028   | 464.041 | 0.150   | 0.004   |
| 0.005   | 0.026   | 0.024   | 479.220 | 0.155   | 0.004   |
| 0.005   | 0.018   | 0.016   | 472.020 | 0.153   | 0.004   |

| 2024             |       |
|------------------|-------|
| Equipment        | MaxHP |
| Aerial Lifts     | 15    |
| Aerial Lifts     | 25    |
| Aerial Lifts     | 50    |
| Aerial Lifts     | 120   |
| Aerial Lifts     | 500   |
| Aerial Lifts     | 750   |
| Air Compressor s | 15    |
| Air Compressor s | 25    |
| Air Compressor s | 50    |
| Air Compressor s | 120   |
| Air Compressor s | 175   |
| Air Compressor s | 250   |
| Air Compressor s | 500   |
| Air Compressor s | 750   |
| Air Compressor s | 1000  |
| Bore/Drill Rigs  | 15    |
| Bore/Drill Rigs  | 25    |
| Bore/Drill Rigs  | 50    |
| Bore/Drill Rigs  | 120   |
| Bore/Drill Rigs  | 175   |
| Bore/Drill Rigs  | 250   |
| Bore/Drill Rigs  | 500   |
| Bore/Drill Rigs  | 750   |
| Bore/Drill Rigs  | 1000  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.172 | 0.172 | 568.299 | 0.062 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.134 | 0.134 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.123 | 0.123 | 568.300 | 0.028 | 0.004 |
| 0.006 | 0.077 | 0.077 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.608 | 0.559 | 517.872 | 0.168 | 0.005 |
| 0.005 | 0.323 | 0.297 | 469.889 | 0.152 | 0.004 |
| 0.005 | 0.224 | 0.206 | 474.595 | 0.154 | 0.004 |
| 0.005 | 0.135 | 0.124 | 472.974 | 0.153 | 0.004 |
| 0.005 | 0.102 | 0.093 | 472.294 | 0.153 | 0.004 |
| 0.005 | 0.084 | 0.077 | 470.251 | 0.152 | 0.004 |
| 0.005 | 0.063 | 0.058 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.526 | 0.484 | 516.159 | 0.167 | 0.005 |
| 0.005 | 0.373 | 0.343 | 476.158 | 0.154 | 0.004 |
| 0.005 | 0.185 | 0.170 | 471.781 | 0.153 | 0.004 |
| 0.005 | 0.124 | 0.114 | 471.624 | 0.153 | 0.004 |
| 0.005 | 0.102 | 0.094 | 474.613 | 0.154 | 0.004 |
| 0.005 | 0.069 | 0.064 | 472.530 | 0.153 | 0.004 |
| 0.005 | 0.118 | 0.109 | 473.666 | 0.153 | 0.004 |
| 0.007 | 0.146 | 0.146 | 568.299 | 0.066 | 0.005 |
| 0.006 | 0.132 | 0.132 | 568.299 | 0.034 | 0.004 |
| 0.006 | 0.083 | 0.083 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.042 | 0.042 | 568.300 | 0.022 | 0.004 |
| 0.005 | 0.066 | 0.066 | 568.299 | 0.025 | 0.004 |

|                          |      |
|--------------------------|------|
| Cement and Mortar Mixers | 15   |
| Cement and Mortar Mixers | 25   |
| Concrete/Industrial Saws | 25   |
| Concrete/Industrial Saws | 50   |
| Concrete/Industrial Saws | 120  |
| Concrete/Industrial Saws | 175  |
| Cranes                   | 50   |
| Cranes                   | 120  |
| Cranes                   | 175  |
| Cranes                   | 250  |
| Cranes                   | 500  |
| Cranes                   | 750  |
| Cranes                   | 9999 |
| Crawler Tractors         | 50   |
| Crawler Tractors         | 120  |
| Crawler Tractors         | 175  |
| Crawler Tractors         | 250  |
| Crawler Tractors         | 500  |
| Crawler Tractors         | 750  |
| Crawler Tractors         | 1000 |
| Crushing/Proc. Equipment | 50   |
| Crushing/Proc. Equipment | 120  |
| Crushing/Proc. Equipment | 175  |
| Crushing/Proc. Equipment | 250  |
| Crushing/Proc. Equipment | 500  |
| Crushing/Proc. Equipment | 750  |
| Crushing/Proc. Equipment | 9999 |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.005 | 0.139 | 0.128 | 525.429 | 0.170 | 0.005 |
| 0.005 | 0.139 | 0.128 | 525.429 | 0.170 | 0.005 |
| 0.005 | 0.116 | 0.107 | 467.157 | 0.151 | 0.004 |
| 0.005 | 0.072 | 0.066 | 472.277 | 0.153 | 0.004 |
| 0.005 | 0.039 | 0.036 | 472.213 | 0.153 | 0.004 |
| 0.005 | 0.030 | 0.028 | 469.889 | 0.152 | 0.004 |
| 0.005 | 0.043 | 0.040 | 468.683 | 0.152 | 0.004 |
| 0.005 | 0.232 | 0.213 | 525.483 | 0.170 | 0.005 |
| 0.005 | 0.189 | 0.174 | 471.529 | 0.153 | 0.004 |
| 0.005 | 0.111 | 0.102 | 472.106 | 0.153 | 0.004 |
| 0.005 | 0.069 | 0.063 | 473.326 | 0.153 | 0.004 |
| 0.005 | 0.069 | 0.063 | 473.615 | 0.153 | 0.004 |
| 0.008 | 0.186 | 0.186 | 568.299 | 0.055 | 0.005 |
| 0.007 | 0.182 | 0.182 | 568.299 | 0.063 | 0.005 |
| 0.007 | 0.124 | 0.124 | 568.299 | 0.046 | 0.005 |
| 0.006 | 0.117 | 0.117 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.071 | 0.071 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.038 | 0.038 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.037 | 0.037 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.037 | 0.037 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.058 | 0.058 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.549 | 0.505 | 494.020 | 0.160 | 0.005 |
| 0.005 | 0.436 | 0.401 | 469.286 | 0.152 | 0.004 |
| 0.005 | 0.195 | 0.180 | 478.463 | 0.155 | 0.004 |
| 0.005 | 0.112 | 0.103 | 473.926 | 0.153 | 0.004 |
| 0.005 | 0.105 | 0.097 | 471.031 | 0.152 | 0.004 |
| 0.005 | 0.051 | 0.051 | 568.300 | 0.024 | 0.004 |
| 0.005 | 0.187 | 0.172 | 476.087 | 0.154 | 0.004 |
| 0.005 | 0.085 | 0.079 | 472.996 | 0.153 | 0.004 |
| 0.005 | 0.053 | 0.049 | 470.845 | 0.152 | 0.004 |
| 0.005 | 0.051 | 0.047 | 471.932 | 0.153 | 0.004 |
| 0.005 | 0.067 | 0.062 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.081 | 0.074 | 470.292 | 0.152 | 0.004 |
| 0.005 | 0.059 | 0.054 | 469.446 | 0.152 | 0.004 |

|                      |      |
|----------------------|------|
| Dumpers/Trailers     | 25   |
| Excavators           | 25   |
| Excavators           | 50   |
| Excavators           | 120  |
| Excavators           | 175  |
| Excavators           | 250  |
| Excavators           | 500  |
| Excavators           | 750  |
| Forklifts            | 50   |
| Forklifts            | 120  |
| Forklifts            | 175  |
| Forklifts            | 250  |
| Forklifts            | 500  |
| Generator Sets       | 15   |
| Generator Sets       | 25   |
| Generator Sets       | 50   |
| Generator Sets       | 120  |
| Generator Sets       | 175  |
| Generator Sets       | 250  |
| Generator Sets       | 500  |
| Generator Sets       | 750  |
| Generator Sets       | 9999 |
| Graders              | 50   |
| Graders              | 120  |
| Graders              | 175  |
| Graders              | 250  |
| Graders              | 500  |
| Graders              | 750  |
| Off-Highway Tractors | 120  |
| Off-Highway Tractors | 175  |
| Off-Highway Tractors | 250  |
| Off-Highway Tractors | 750  |
| Off-Highway Tractors | 1000 |
| Off-Highway Trucks   | 175  |
| Off-Highway Trucks   | 250  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.048 | 0.044 | 475.049 | 0.154 | 0.004 |
| 0.005 | 0.084 | 0.078 | 473.767 | 0.153 | 0.004 |
| 0.005 | 0.074 | 0.068 | 472.857 | 0.153 | 0.004 |
| 0.006 | 0.322 | 0.296 | 529.339 | 0.171 | 0.005 |
| 0.006 | 0.322 | 0.296 | 529.339 | 0.171 | 0.005 |
| 0.006 | 0.322 | 0.296 | 529.339 | 0.171 | 0.005 |
| 0.005 | 0.259 | 0.238 | 471.990 | 0.153 | 0.004 |
| 0.005 | 0.141 | 0.129 | 469.558 | 0.152 | 0.004 |
| 0.005 | 0.069 | 0.063 | 476.185 | 0.154 | 0.004 |
| 0.005 | 0.194 | 0.179 | 526.176 | 0.170 | 0.005 |
| 0.005 | 0.194 | 0.179 | 526.176 | 0.170 | 0.005 |
| 0.005 | 0.194 | 0.179 | 526.176 | 0.170 | 0.005 |
| 0.005 | 0.169 | 0.155 | 470.000 | 0.152 | 0.004 |
| 0.005 | 0.080 | 0.074 | 471.850 | 0.153 | 0.004 |
| 0.005 | 0.051 | 0.047 | 473.223 | 0.153 | 0.004 |
| 0.005 | 0.043 | 0.040 | 472.929 | 0.153 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Off-Highway Trucks                 | 500  |
| Off-Highway Trucks                 | 750  |
| Off-Highway Trucks                 | 1000 |
| Other Construction Equipment       | 15   |
| Other Construction Equipment       | 25   |
| Other Construction Equipment       | 50   |
| Other Construction Equipment       | 120  |
| Other Construction Equipment       | 175  |
| Other Construction Equipment       | 500  |
| Other General Industrial Equipment | 15   |
| Other General Industrial Equipment | 25   |
| Other General Industrial Equipment | 50   |
| Other General Industrial Equipment | 120  |
| Other General Industrial Equipment | 175  |
| Other General Industrial Equipment | 250  |
| Other General Industrial Equipment | 500  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 0.005 | 0.080 | 0.073 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.340 | 0.313 | 523.709 | 0.169 | 0.005 |
| 0.005 | 0.104 | 0.095 | 473.588 | 0.153 | 0.004 |
| 0.005 | 0.096 | 0.088 | 472.219 | 0.153 | 0.004 |
| 0.005 | 0.069 | 0.064 | 471.482 | 0.153 | 0.004 |
| 0.005 | 0.078 | 0.072 | 470.297 | 0.152 | 0.004 |
| 0.005 | 0.018 | 0.017 | 472.055 | 0.153 | 0.004 |
| 0.005 | 0.299 | 0.275 | 526.860 | 0.170 | 0.005 |
| 0.005 | 0.299 | 0.275 | 526.860 | 0.170 | 0.005 |
| 0.005 | 0.226 | 0.208 | 470.084 | 0.152 | 0.004 |
| 0.005 | 0.092 | 0.085 | 472.718 | 0.153 | 0.004 |
| 0.005 | 0.047 | 0.043 | 472.605 | 0.153 | 0.004 |
| 0.005 | 0.062 | 0.057 | 466.004 | 0.151 | 0.004 |
| 0.005 | 0.173 | 0.159 | 521.114 | 0.169 | 0.005 |
| 0.005 | 0.173 | 0.159 | 521.114 | 0.169 | 0.005 |
| 0.005 | 0.153 | 0.140 | 473.427 | 0.153 | 0.004 |
| 0.005 | 0.093 | 0.086 | 470.663 | 0.152 | 0.004 |
| 0.005 | 0.070 | 0.065 | 472.169 | 0.153 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.008 | 0.186 | 0.186 | 568.299 | 0.055 | 0.005 |
| 0.007 | 0.182 | 0.182 | 568.299 | 0.063 | 0.005 |
| 0.007 | 0.101 | 0.101 | 568.299 | 0.032 | 0.005 |
| 0.006 | 0.097 | 0.097 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.072 | 0.072 | 568.299 | 0.018 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Other General Industrial Equipment | 750  |
| Other General Industrial Equipment | 1000 |
| Other Material Handling Equipment  | 50   |
| Other Material Handling Equipment  | 120  |
| Other Material Handling Equipment  | 175  |
| Other Material Handling Equipment  | 250  |
| Other Material Handling Equipment  | 500  |
| Other Material Handling Equipment  | 9999 |
| Pavers                             | 25   |
| Pavers                             | 50   |
| Pavers                             | 120  |
| Pavers                             | 175  |
| Pavers                             | 250  |
| Pavers                             | 500  |
| Paving Equipment                   | 25   |
| Paving Equipment                   | 50   |
| Paving Equipment                   | 120  |
| Paving Equipment                   | 175  |
| Paving Equipment                   | 250  |
| Plate Compactors                   | 15   |
| Pressure Washers                   | 15   |
| Pressure Washers                   | 25   |
| Pressure Washers                   | 50   |
| Pressure Washers                   | 120  |
| Pressure Washers                   | 175  |



|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.008 | 0.194 | 0.194 | 568.299 | 0.063 | 0.005 |
| 0.007 | 0.186 | 0.186 | 568.299 | 0.065 | 0.005 |
| 0.007 | 0.131 | 0.131 | 568.299 | 0.051 | 0.005 |
| 0.006 | 0.123 | 0.123 | 568.299 | 0.026 | 0.004 |
| 0.006 | 0.075 | 0.075 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.040 | 0.040 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.038 | 0.038 | 568.300 | 0.015 | 0.004 |
| 0.005 | 0.039 | 0.039 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.059 | 0.059 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.212 | 0.195 | 525.862 | 0.170 | 0.005 |
| 0.005 | 0.212 | 0.195 | 525.862 | 0.170 | 0.005 |
| 0.005 | 0.212 | 0.195 | 525.862 | 0.170 | 0.005 |
| 0.005 | 0.165 | 0.152 | 473.936 | 0.153 | 0.004 |
| 0.005 | 0.068 | 0.062 | 471.935 | 0.153 | 0.004 |
| 0.005 | 0.076 | 0.070 | 473.516 | 0.153 | 0.004 |
| 0.005 | 0.093 | 0.085 | 478.303 | 0.155 | 0.004 |
| 0.005 | 0.204 | 0.187 | 524.802 | 0.170 | 0.005 |
| 0.005 | 0.064 | 0.059 | 473.158 | 0.153 | 0.004 |
| 0.005 | 0.044 | 0.040 | 471.622 | 0.153 | 0.004 |
| 0.005 | 0.034 | 0.032 | 472.778 | 0.153 | 0.004 |
| 0.005 | 0.009 | 0.008 | 466.554 | 0.151 | 0.004 |
| 0.005 | 0.316 | 0.291 | 473.901 | 0.153 | 0.004 |
| 0.005 | 0.184 | 0.169 | 474.597 | 0.154 | 0.004 |
| 0.005 | 0.202 | 0.185 | 479.468 | 0.155 | 0.004 |
| 0.005 | 0.196 | 0.180 | 473.023 | 0.153 | 0.004 |
| 0.005 | 0.131 | 0.131 | 568.299 | 0.040 | 0.004 |
| 0.005 | 0.304 | 0.279 | 524.304 | 0.170 | 0.005 |
| 0.005 | 0.304 | 0.279 | 524.304 | 0.170 | 0.005 |
| 0.005 | 0.239 | 0.219 | 466.558 | 0.151 | 0.004 |
| 0.005 | 0.118 | 0.108 | 470.660 | 0.152 | 0.004 |

|                         |      |
|-------------------------|------|
| Pressure Washers        | 250  |
| Pumps                   | 15   |
| Pumps                   | 25   |
| Pumps                   | 50   |
| Pumps                   | 120  |
| Pumps                   | 175  |
| Pumps                   | 250  |
| Pumps                   | 500  |
| Pumps                   | 750  |
| Pumps                   | 9999 |
| Rollers                 | 15   |
| Rollers                 | 25   |
| Rollers                 | 50   |
| Rollers                 | 120  |
| Rollers                 | 175  |
| Rollers                 | 250  |
| Rollers                 | 500  |
| Rough Terrain Forklifts | 50   |
| Rough Terrain Forklifts | 120  |
| Rough Terrain Forklifts | 175  |
| Rough Terrain Forklifts | 250  |
| Rough Terrain Forklifts | 500  |
| Rubber Tired Dozers     | 175  |
| Rubber Tired Dozers     | 250  |
| Rubber Tired Dozers     | 500  |
| Rubber Tired Dozers     | 750  |
| Rubber Tired Dozers     | 1000 |
| Rubber Tired Loaders    | 25   |
| Rubber Tired Loaders    | 50   |
| Rubber Tired Loaders    | 120  |
| Rubber Tired Loaders    | 175  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.069 | 0.064 | 469.824 | 0.152 | 0.004 |
| 0.005 | 0.069 | 0.064 | 468.466 | 0.152 | 0.004 |
| 0.005 | 0.075 | 0.069 | 464.555 | 0.150 | 0.004 |
| 0.005 | 0.071 | 0.065 | 472.303 | 0.153 | 0.004 |
| 0.005 | 0.458 | 0.421 | 483.030 | 0.156 | 0.004 |
| 0.005 | 0.184 | 0.169 | 478.681 | 0.155 | 0.004 |
| 0.005 | 0.144 | 0.133 | 469.560 | 0.152 | 0.004 |
| 0.005 | 0.105 | 0.096 | 473.177 | 0.153 | 0.004 |
| 0.005 | 0.087 | 0.080 | 471.295 | 0.152 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.132 | 0.132 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.122 | 0.122 | 568.299 | 0.028 | 0.004 |
| 0.006 | 0.075 | 0.075 | 568.299 | 0.022 | 0.004 |
| 0.007 | 0.048 | 0.048 | 686.695 | 0.021 | 0.004 |
| 0.005 | 0.093 | 0.086 | 527.423 | 0.171 | 0.005 |
| 0.005 | 0.093 | 0.086 | 527.423 | 0.171 | 0.005 |
| 0.005 | 0.069 | 0.063 | 472.656 | 0.153 | 0.004 |
| 0.006 | 0.156 | 0.143 | 535.930 | 0.173 | 0.005 |
| 0.005 | 0.157 | 0.144 | 474.470 | 0.154 | 0.004 |
| 0.005 | 0.119 | 0.110 | 470.014 | 0.152 | 0.004 |
| 0.005 | 0.082 | 0.075 | 476.961 | 0.154 | 0.004 |
| 0.005 | 0.056 | 0.051 | 470.375 | 0.152 | 0.004 |
| 0.005 | 0.040 | 0.037 | 472.447 | 0.153 | 0.004 |
| 0.005 | 0.249 | 0.229 | 525.328 | 0.170 | 0.005 |
| 0.005 | 0.249 | 0.229 | 525.328 | 0.170 | 0.005 |
| 0.005 | 0.249 | 0.229 | 525.328 | 0.170 | 0.005 |
| 0.005 | 0.210 | 0.193 | 474.116 | 0.153 | 0.004 |
| 0.005 | 0.126 | 0.116 | 473.122 | 0.153 | 0.004 |
| 0.005 | 0.050 | 0.046 | 470.126 | 0.152 | 0.004 |
| 0.005 | 0.185 | 0.170 | 513.796 | 0.166 | 0.005 |

|                           |      |
|---------------------------|------|
| Rubber Tired Loaders      | 250  |
| Rubber Tired Loaders      | 500  |
| Rubber Tired Loaders      | 750  |
| Rubber Tired Loaders      | 1000 |
| Scrapers                  | 120  |
| Scrapers                  | 175  |
| Scrapers                  | 250  |
| Scrapers                  | 500  |
| Scrapers                  | 750  |
| Signal Boards             | 15   |
| Signal Boards             | 50   |
| Signal Boards             | 120  |
| Signal Boards             | 175  |
| Signal Boards             | 250  |
| Skid Steer Loaders        | 25   |
| Skid Steer Loaders        | 50   |
| Skid Steer Loaders        | 120  |
| Surfacing Equipment       | 50   |
| Surfacing Equipment       | 120  |
| Surfacing Equipment       | 175  |
| Surfacing Equipment       | 250  |
| Surfacing Equipment       | 500  |
| Surfacing Equipment       | 750  |
| Sweepers/S crubbers       | 15   |
| Sweepers/S crubbers       | 25   |
| Sweepers/S crubbers       | 50   |
| Sweepers/S crubbers       | 120  |
| Sweepers/S crubbers       | 175  |
| Sweepers/S crubbers       | 250  |
| Tractors/Loaders/Backhoes | 25   |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.185 | 0.170 | 513.796 | 0.166 | 0.005 |
| 0.005 | 0.120 | 0.110 | 476.431 | 0.154 | 0.004 |
| 0.005 | 0.077 | 0.070 | 468.821 | 0.152 | 0.004 |
| 0.005 | 0.058 | 0.053 | 469.752 | 0.152 | 0.004 |
| 0.005 | 0.047 | 0.043 | 469.465 | 0.152 | 0.004 |
| 0.005 | 0.095 | 0.087 | 466.676 | 0.151 | 0.004 |
| 0.005 | 0.220 | 0.202 | 527.095 | 0.171 | 0.005 |
| 0.005 | 0.220 | 0.202 | 527.095 | 0.171 | 0.005 |
| 0.005 | 0.220 | 0.202 | 527.095 | 0.171 | 0.005 |
| 0.005 | 0.326 | 0.300 | 475.690 | 0.154 | 0.004 |
| 0.005 | 0.186 | 0.171 | 467.733 | 0.151 | 0.004 |
| 0.005 | 0.155 | 0.143 | 473.849 | 0.153 | 0.004 |
| 0.005 | 0.085 | 0.078 | 471.613 | 0.153 | 0.004 |
| 0.005 | 0.009 | 0.008 | 474.471 | 0.154 | 0.004 |
| 0.008 | 0.194 | 0.194 | 568.300 | 0.063 | 0.005 |
| 0.007 | 0.186 | 0.186 | 568.299 | 0.065 | 0.005 |
| 0.007 | 0.151 | 0.151 | 568.299 | 0.062 | 0.005 |
| 0.006 | 0.139 | 0.139 | 568.299 | 0.032 | 0.004 |
| 0.006 | 0.085 | 0.085 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.044 | 0.044 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.042 | 0.042 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.081 | 0.074 | 470.292 | 0.152 | 0.004 |
| 0.005 | 0.059 | 0.054 | 469.446 | 0.152 | 0.004 |
| 0.005 | 0.048 | 0.044 | 475.049 | 0.154 | 0.004 |
| 0.005 | 0.084 | 0.078 | 473.767 | 0.153 | 0.004 |
| 0.005 | 0.074 | 0.068 | 472.857 | 0.153 | 0.004 |

|                           |      |
|---------------------------|------|
| Tractors/Loaders/Backhoes | 50   |
| Tractors/Loaders/Backhoes | 120  |
| Tractors/Loaders/Backhoes | 175  |
| Tractors/Loaders/Backhoes | 250  |
| Tractors/Loaders/Backhoes | 500  |
| Tractors/Loaders/Backhoes | 750  |
| Trenchers                 | 15   |
| Trenchers                 | 25   |
| Trenchers                 | 50   |
| Trenchers                 | 120  |
| Trenchers                 | 175  |
| Trenchers                 | 250  |
| Trenchers                 | 500  |
| Trenchers                 | 750  |
| Welders                   | 15   |
| Welders                   | 25   |
| Welders                   | 50   |
| Welders                   | 120  |
| Welders                   | 175  |
| Welders                   | 250  |
| Welders                   | 500  |
| Water Trucks              | 175  |
| Water Trucks              | 250  |
| Water Trucks              | 500  |
| Water Trucks              | 750  |
| Water Trucks              | 1000 |

2025

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.159   | 3.113   | 2.888   | 0.005   | 0.022   | 0.020   | 525.074 | 0.170   | 0.005   |
| 0.159   | 3.113   | 2.888   | 0.005   | 0.022   | 0.020   | 525.074 | 0.170   | 0.005   |
| 0.159   | 3.113   | 2.888   | 0.005   | 0.022   | 0.020   | 525.074 | 0.170   | 0.005   |
| 0.101   | 3.173   | 1.528   | 0.005   | 0.027   | 0.024   | 472.114 | 0.153   | 0.004   |
| 0.082   | 0.966   | 0.647   | 0.005   | 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.161   | 0.991   | 1.115   | 0.005   | 0.033   | 0.033   | 568.299 | 0.014   | 0.004   |
| 0.690   | 3.499   | 4.316   | 0.008   | 0.188   | 0.188   | 568.300 | 0.062   | 0.005   |
| 0.718   | 2.390   | 4.426   | 0.007   | 0.181   | 0.181   | 568.300 | 0.064   | 0.005   |
| 0.702   | 4.880   | 3.864   | 0.007   | 0.135   | 0.135   | 568.299 | 0.063   | 0.005   |
| 0.365   | 3.655   | 2.461   | 0.006   | 0.123   | 0.123   | 568.299 | 0.032   | 0.004   |
| 0.286   | 3.202   | 1.561   | 0.006   | 0.077   | 0.077   | 568.299 | 0.025   | 0.004   |
| 0.232   | 1.096   | 1.247   | 0.006   | 0.039   | 0.039   | 568.299 | 0.020   | 0.004   |
| 0.228   | 1.053   | 1.148   | 0.005   | 0.038   | 0.038   | 568.299 | 0.020   | 0.004   |
| 0.228   | 1.053   | 1.171   | 0.005   | 0.038   | 0.038   | 568.299 | 0.020   | 0.004   |
| 0.243   | 1.090   | 3.082   | 0.005   | 0.061   | 0.061   | 568.299 | 0.021   | 0.004   |
| 0.609   | 4.331   | 4.159   | 0.006   | 0.219   | 0.202   | 529.866 | 0.171   | 0.005   |
| 0.609   | 4.331   | 4.159   | 0.006   | 0.219   | 0.202   | 529.866 | 0.171   | 0.005   |
| 0.609   | 4.331   | 4.159   | 0.006   | 0.219   | 0.202   | 529.866 | 0.171   | 0.005   |
| 0.177   | 3.251   | 2.216   | 0.005   | 0.090   | 0.083   | 461.208 | 0.149   | 0.004   |
| 0.125   | 2.978   | 1.029   | 0.005   | 0.046   | 0.043   | 478.944 | 0.155   | 0.004   |
| 0.108   | 1.046   | 0.975   | 0.005   | 0.032   | 0.030   | 470.712 | 0.152   | 0.004   |
| 0.103   | 0.994   | 0.861   | 0.005   | 0.029   | 0.027   | 464.480 | 0.150   | 0.004   |
| 0.089   | 0.985   | 0.671   | 0.005   | 0.026   | 0.024   | 480.225 | 0.155   | 0.004   |
| 0.057   | 0.943   | 2.273   | 0.005   | 0.018   | 0.017   | 471.926 | 0.153   | 0.004   |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.693 | 2.349 | 4.369 | 0.007 | 0.170 | 0.170 | 568.299 | 0.062 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.561 | 4.330 | 3.701 | 0.007 | 0.115 | 0.115 | 568.300 | 0.050 | 0.005 |
| 0.300 | 3.500 | 2.315 | 0.006 | 0.106 | 0.106 | 568.299 | 0.027 | 0.004 |
| 0.235 | 3.072 | 1.418 | 0.006 | 0.067 | 0.067 | 568.299 | 0.021 | 0.004 |
| 1.937 | 7.269 | 5.788 | 0.005 | 0.577 | 0.531 | 517.872 | 0.168 | 0.005 |
| 0.524 | 3.906 | 4.619 | 0.005 | 0.301 | 0.277 | 469.903 | 0.152 | 0.004 |
| 0.381 | 3.389 | 3.703 | 0.005 | 0.196 | 0.181 | 474.636 | 0.154 | 0.004 |
| 0.281 | 1.502 | 2.966 | 0.005 | 0.123 | 0.114 | 472.964 | 0.153 | 0.004 |
| 0.231 | 1.933 | 2.383 | 0.005 | 0.096 | 0.089 | 472.066 | 0.153 | 0.004 |
| 0.191 | 1.283 | 1.900 | 0.005 | 0.080 | 0.073 | 470.331 | 0.152 | 0.004 |
| 0.220 | 1.031 | 2.411 | 0.005 | 0.064 | 0.059 | 472.055 | 0.153 | 0.004 |
| 1.756 | 6.685 | 4.975 | 0.005 | 0.466 | 0.429 | 515.466 | 0.167 | 0.005 |
| 0.513 | 3.852 | 4.409 | 0.005 | 0.335 | 0.309 | 476.234 | 0.154 | 0.004 |
| 0.326 | 3.227 | 3.041 | 0.005 | 0.170 | 0.157 | 471.829 | 0.153 | 0.004 |
| 0.264 | 1.370 | 2.953 | 0.005 | 0.115 | 0.106 | 471.860 | 0.153 | 0.004 |
| 0.228 | 1.780 | 2.244 | 0.005 | 0.093 | 0.085 | 474.025 | 0.153 | 0.004 |
| 0.181 | 1.159 | 1.767 | 0.005 | 0.066 | 0.061 | 472.283 | 0.153 | 0.004 |
| 0.263 | 1.588 | 4.689 | 0.005 | 0.115 | 0.106 | 474.645 | 0.154 | 0.004 |
| 0.694 | 5.008 | 3.850 | 0.007 | 0.125 | 0.125 | 568.299 | 0.062 | 0.005 |
| 0.364 | 3.697 | 2.389 | 0.006 | 0.112 | 0.112 | 568.299 | 0.032 | 0.004 |
| 0.287 | 3.243 | 1.472 | 0.006 | 0.071 | 0.071 | 568.299 | 0.025 | 0.004 |
| 0.236 | 1.109 | 1.165 | 0.006 | 0.036 | 0.036 | 568.299 | 0.021 | 0.004 |
| 0.232 | 1.062 | 1.077 | 0.005 | 0.035 | 0.035 | 568.299 | 0.021 | 0.004 |
| 0.233 | 1.063 | 1.098 | 0.005 | 0.036 | 0.036 | 568.299 | 0.021 | 0.004 |
| 0.274 | 1.096 | 3.029 | 0.005 | 0.059 | 0.059 | 568.299 | 0.024 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.417 | 4.205 | 3.508 | 0.005 | 0.120 | 0.110 | 525.979 | 0.170 | 0.005 |
| 0.417 | 4.205 | 3.508 | 0.005 | 0.120 | 0.110 | 525.979 | 0.170 | 0.005 |
| 0.217 | 3.453 | 2.248 | 0.005 | 0.102 | 0.094 | 467.384 | 0.151 | 0.004 |
| 0.170 | 3.083 | 1.325 | 0.005 | 0.065 | 0.060 | 472.428 | 0.153 | 0.004 |
| 0.139 | 1.090 | 1.108 | 0.005 | 0.036 | 0.033 | 472.442 | 0.153 | 0.004 |
| 0.121 | 1.054 | 0.831 | 0.005 | 0.029 | 0.026 | 469.711 | 0.152 | 0.004 |
| 0.142 | 1.134 | 1.105 | 0.005 | 0.041 | 0.037 | 468.652 | 0.152 | 0.004 |
| 0.692 | 5.089 | 4.039 | 0.005 | 0.203 | 0.187 | 525.483 | 0.170 | 0.005 |
| 0.300 | 3.629 | 2.814 | 0.005 | 0.163 | 0.150 | 471.529 | 0.153 | 0.004 |
| 0.224 | 3.174 | 1.861 | 0.005 | 0.096 | 0.088 | 472.106 | 0.153 | 0.004 |
| 0.196 | 1.218 | 1.625 | 0.005 | 0.061 | 0.057 | 473.326 | 0.153 | 0.004 |
| 0.218 | 1.219 | 1.723 | 0.005 | 0.065 | 0.060 | 473.615 | 0.153 | 0.004 |
| 0.612 | 3.499 | 4.305 | 0.008 | 0.181 | 0.181 | 568.299 | 0.055 | 0.005 |
| 0.697 | 2.390 | 4.426 | 0.007 | 0.178 | 0.178 | 568.299 | 0.062 | 0.005 |
| 0.475 | 3.787 | 3.582 | 0.007 | 0.107 | 0.107 | 568.299 | 0.042 | 0.005 |
| 0.260 | 3.342 | 2.321 | 0.006 | 0.101 | 0.101 | 568.299 | 0.023 | 0.004 |
| 0.197 | 2.929 | 1.462 | 0.006 | 0.062 | 0.062 | 568.299 | 0.017 | 0.004 |
| 0.155 | 1.003 | 1.169 | 0.006 | 0.033 | 0.033 | 568.299 | 0.014 | 0.004 |
| 0.151 | 0.983 | 1.082 | 0.005 | 0.032 | 0.032 | 568.300 | 0.013 | 0.004 |
| 0.152 | 0.983 | 1.104 | 0.005 | 0.032 | 0.032 | 568.299 | 0.013 | 0.004 |
| 0.183 | 1.018 | 2.929 | 0.005 | 0.052 | 0.052 | 568.300 | 0.016 | 0.004 |
| 1.850 | 7.051 | 5.028 | 0.005 | 0.520 | 0.479 | 493.791 | 0.160 | 0.005 |
| 0.683 | 4.200 | 5.434 | 0.005 | 0.408 | 0.375 | 469.821 | 0.152 | 0.004 |
| 0.364 | 3.432 | 3.202 | 0.005 | 0.177 | 0.163 | 478.497 | 0.155 | 0.004 |
| 0.262 | 1.225 | 3.073 | 0.005 | 0.100 | 0.092 | 473.669 | 0.153 | 0.004 |
| 0.293 | 1.356 | 2.432 | 0.005 | 0.095 | 0.088 | 470.266 | 0.152 | 0.004 |
| 0.264 | 1.155 | 1.265 | 0.005 | 0.046 | 0.046 | 568.300 | 0.023 | 0.004 |
| 0.302 | 3.691 | 2.949 | 0.005 | 0.171 | 0.157 | 476.371 | 0.154 | 0.004 |
| 0.183 | 3.133 | 1.496 | 0.005 | 0.072 | 0.066 | 473.097 | 0.153 | 0.004 |
| 0.169 | 1.135 | 1.377 | 0.005 | 0.049 | 0.045 | 470.689 | 0.152 | 0.004 |
| 0.169 | 1.130 | 1.235 | 0.005 | 0.048 | 0.044 | 471.925 | 0.153 | 0.004 |
| 0.189 | 1.066 | 2.466 | 0.005 | 0.068 | 0.063 | 472.055 | 0.153 | 0.004 |
| 0.224 | 3.325 | 1.494 | 0.005 | 0.070 | 0.064 | 470.264 | 0.152 | 0.004 |
| 0.202 | 1.259 | 1.355 | 0.005 | 0.054 | 0.050 | 469.113 | 0.152 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.185 | 1.206 | 1.235 | 0.005 | 0.045 | 0.041 | 475.220 | 0.154 | 0.004 |
| 0.259 | 1.650 | 2.085 | 0.005 | 0.079 | 0.073 | 473.839 | 0.153 | 0.004 |
| 0.209 | 1.200 | 3.439 | 0.005 | 0.069 | 0.064 | 473.097 | 0.153 | 0.004 |
| 0.828 | 5.032 | 4.510 | 0.006 | 0.305 | 0.281 | 529.209 | 0.171 | 0.005 |
| 0.828 | 5.032 | 4.510 | 0.006 | 0.305 | 0.281 | 529.209 | 0.171 | 0.005 |
| 0.828 | 5.032 | 4.510 | 0.006 | 0.305 | 0.281 | 529.209 | 0.171 | 0.005 |
| 0.382 | 3.620 | 3.582 | 0.005 | 0.237 | 0.218 | 472.125 | 0.153 | 0.004 |
| 0.261 | 3.150 | 2.520 | 0.005 | 0.130 | 0.120 | 469.545 | 0.152 | 0.004 |
| 0.175 | 1.382 | 1.677 | 0.005 | 0.064 | 0.059 | 476.484 | 0.154 | 0.004 |
| 0.546 | 4.780 | 3.859 | 0.005 | 0.165 | 0.152 | 526.176 | 0.170 | 0.005 |
| 0.546 | 4.780 | 3.859 | 0.005 | 0.165 | 0.152 | 526.176 | 0.170 | 0.005 |
| 0.546 | 4.780 | 3.859 | 0.005 | 0.165 | 0.152 | 526.176 | 0.170 | 0.005 |
| 0.287 | 3.639 | 2.708 | 0.005 | 0.146 | 0.134 | 470.000 | 0.152 | 0.004 |
| 0.191 | 3.185 | 1.448 | 0.005 | 0.073 | 0.067 | 471.850 | 0.153 | 0.004 |
| 0.173 | 1.141 | 1.319 | 0.005 | 0.046 | 0.042 | 473.223 | 0.153 | 0.004 |
| 0.158 | 1.110 | 1.153 | 0.005 | 0.040 | 0.036 | 472.929 | 0.153 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.115 | 1.112 | 0.628 | 0.005 | 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 0.198 | 1.058 | 3.971 | 0.005 | 0.080 | 0.074 | 472.055 | 0.153 | 0.004 |
| 0.943 | 5.669 | 4.579 | 0.005 | 0.314 | 0.289 | 523.709 | 0.169 | 0.005 |
| 0.220 | 3.510 | 2.222 | 0.005 | 0.096 | 0.089 | 473.588 | 0.153 | 0.004 |
| 0.208 | 3.181 | 1.639 | 0.005 | 0.088 | 0.081 | 472.219 | 0.153 | 0.004 |
| 0.210 | 1.218 | 1.986 | 0.005 | 0.068 | 0.063 | 471.482 | 0.153 | 0.004 |
| 0.212 | 1.262 | 1.756 | 0.005 | 0.072 | 0.066 | 470.297 | 0.152 | 0.004 |
| 0.058 | 0.946 | 2.278 | 0.005 | 0.018 | 0.017 | 472.055 | 0.153 | 0.004 |
| 0.950 | 4.956 | 4.203 | 0.005 | 0.279 | 0.257 | 526.857 | 0.170 | 0.005 |
| 0.950 | 4.956 | 4.203 | 0.005 | 0.279 | 0.257 | 526.857 | 0.170 | 0.005 |
| 0.337 | 3.508 | 3.277 | 0.005 | 0.213 | 0.196 | 470.226 | 0.152 | 0.004 |
| 0.191 | 3.004 | 1.809 | 0.005 | 0.085 | 0.078 | 472.661 | 0.153 | 0.004 |
| 0.119 | 1.009 | 1.343 | 0.005 | 0.041 | 0.038 | 473.236 | 0.153 | 0.004 |
| 0.143 | 0.986 | 1.548 | 0.005 | 0.054 | 0.049 | 467.171 | 0.151 | 0.004 |
| 0.523 | 4.275 | 3.743 | 0.005 | 0.164 | 0.151 | 521.058 | 0.169 | 0.005 |
| 0.523 | 4.275 | 3.743 | 0.005 | 0.164 | 0.151 | 521.058 | 0.169 | 0.005 |
| 0.262 | 3.503 | 2.673 | 0.005 | 0.135 | 0.125 | 473.175 | 0.153 | 0.004 |
| 0.197 | 3.066 | 1.785 | 0.005 | 0.086 | 0.079 | 470.661 | 0.152 | 0.004 |
| 0.138 | 1.114 | 1.296 | 0.005 | 0.048 | 0.044 | 472.212 | 0.153 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.612 | 3.499 | 4.305 | 0.008 | 0.181 | 0.181 | 568.299 | 0.055 | 0.005 |
| 0.697 | 2.390 | 4.426 | 0.007 | 0.178 | 0.178 | 568.299 | 0.062 | 0.005 |
| 0.333 | 3.233 | 3.441 | 0.007 | 0.087 | 0.087 | 568.299 | 0.030 | 0.005 |
| 0.204 | 3.191 | 2.229 | 0.006 | 0.084 | 0.084 | 568.299 | 0.018 | 0.004 |
| 0.191 | 2.907 | 1.482 | 0.006 | 0.062 | 0.062 | 568.299 | 0.017 | 0.004 |



|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.690 | 3.499 | 4.316 | 0.008 | 0.188 | 0.188 | 568.299 | 0.062 | 0.005 |
| 0.718 | 2.390 | 4.426 | 0.007 | 0.181 | 0.181 | 568.299 | 0.064 | 0.005 |
| 0.523 | 3.974 | 3.630 | 0.007 | 0.114 | 0.114 | 568.299 | 0.047 | 0.005 |
| 0.279 | 3.393 | 2.352 | 0.006 | 0.107 | 0.107 | 568.299 | 0.025 | 0.004 |
| 0.213 | 2.973 | 1.486 | 0.006 | 0.065 | 0.065 | 568.299 | 0.019 | 0.004 |
| 0.168 | 1.018 | 1.189 | 0.006 | 0.034 | 0.034 | 568.300 | 0.015 | 0.004 |
| 0.164 | 0.994 | 1.098 | 0.005 | 0.033 | 0.033 | 568.299 | 0.014 | 0.004 |
| 0.164 | 0.994 | 1.120 | 0.005 | 0.034 | 0.034 | 568.299 | 0.014 | 0.004 |
| 0.196 | 1.031 | 2.960 | 0.005 | 0.054 | 0.054 | 568.299 | 0.017 | 0.004 |
| 0.621 | 4.207 | 3.824 | 0.005 | 0.193 | 0.177 | 525.957 | 0.170 | 0.005 |
| 0.621 | 4.207 | 3.824 | 0.005 | 0.193 | 0.177 | 525.957 | 0.170 | 0.005 |
| 0.621 | 4.207 | 3.824 | 0.005 | 0.193 | 0.177 | 525.957 | 0.170 | 0.005 |
| 0.272 | 3.451 | 2.843 | 0.005 | 0.151 | 0.138 | 474.007 | 0.153 | 0.004 |
| 0.141 | 2.914 | 1.324 | 0.005 | 0.061 | 0.056 | 472.012 | 0.153 | 0.004 |
| 0.179 | 1.214 | 1.977 | 0.005 | 0.070 | 0.064 | 473.512 | 0.153 | 0.004 |
| 0.210 | 1.961 | 2.216 | 0.005 | 0.090 | 0.083 | 477.900 | 0.155 | 0.004 |
| 0.570 | 3.918 | 3.653 | 0.005 | 0.166 | 0.152 | 524.924 | 0.170 | 0.005 |
| 0.145 | 3.245 | 1.914 | 0.005 | 0.058 | 0.054 | 473.063 | 0.153 | 0.004 |
| 0.103 | 2.834 | 1.044 | 0.005 | 0.039 | 0.036 | 471.535 | 0.153 | 0.004 |
| 0.119 | 0.995 | 1.480 | 0.005 | 0.035 | 0.032 | 472.853 | 0.153 | 0.004 |
| 0.066 | 0.937 | 0.476 | 0.005 | 0.009 | 0.008 | 466.548 | 0.151 | 0.004 |
| 0.532 | 3.696 | 5.014 | 0.005 | 0.279 | 0.257 | 473.515 | 0.153 | 0.004 |
| 0.399 | 1.797 | 4.090 | 0.005 | 0.184 | 0.170 | 474.585 | 0.154 | 0.004 |
| 0.417 | 3.457 | 4.030 | 0.005 | 0.182 | 0.168 | 479.394 | 0.155 | 0.004 |
| 0.425 | 2.596 | 5.334 | 0.005 | 0.196 | 0.180 | 473.011 | 0.153 | 0.004 |
| 0.433 | 1.796 | 4.532 | 0.005 | 0.123 | 0.123 | 568.299 | 0.039 | 0.004 |
| 1.009 | 5.987 | 4.468 | 0.005 | 0.286 | 0.263 | 524.230 | 0.170 | 0.005 |
| 1.009 | 5.987 | 4.468 | 0.005 | 0.286 | 0.263 | 524.230 | 0.170 | 0.005 |
| 0.397 | 3.832 | 3.339 | 0.005 | 0.221 | 0.203 | 466.808 | 0.151 | 0.004 |
| 0.246 | 3.288 | 1.884 | 0.005 | 0.101 | 0.092 | 470.357 | 0.152 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.197 | 1.161 | 1.806 | 0.005 | 0.060 | 0.056 | 469.788 | 0.152 | 0.004 |
| 0.209 | 1.352 | 1.702 | 0.005 | 0.063 | 0.058 | 468.513 | 0.152 | 0.004 |
| 0.226 | 1.333 | 1.881 | 0.005 | 0.072 | 0.066 | 464.866 | 0.150 | 0.004 |
| 0.201 | 1.191 | 3.544 | 0.005 | 0.071 | 0.066 | 472.345 | 0.153 | 0.004 |
| 0.575 | 4.095 | 5.632 | 0.005 | 0.414 | 0.381 | 482.701 | 0.156 | 0.004 |
| 0.336 | 3.372 | 3.156 | 0.005 | 0.167 | 0.153 | 478.809 | 0.155 | 0.004 |
| 0.301 | 1.627 | 3.014 | 0.005 | 0.133 | 0.123 | 469.352 | 0.152 | 0.004 |
| 0.245 | 1.921 | 2.477 | 0.005 | 0.098 | 0.090 | 472.846 | 0.153 | 0.004 |
| 0.213 | 1.461 | 2.187 | 0.005 | 0.081 | 0.074 | 471.429 | 0.153 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.559 | 4.247 | 3.662 | 0.007 | 0.114 | 0.114 | 568.299 | 0.050 | 0.005 |
| 0.296 | 3.474 | 2.315 | 0.006 | 0.105 | 0.105 | 568.299 | 0.026 | 0.004 |
| 0.229 | 3.047 | 1.427 | 0.006 | 0.065 | 0.065 | 568.299 | 0.020 | 0.004 |
| 0.224 | 1.259 | 1.370 | 0.007 | 0.041 | 0.041 | 686.695 | 0.020 | 0.004 |
| 0.350 | 3.671 | 3.346 | 0.005 | 0.089 | 0.082 | 527.801 | 0.171 | 0.005 |
| 0.350 | 3.671 | 3.346 | 0.005 | 0.089 | 0.082 | 527.801 | 0.171 | 0.005 |
| 0.147 | 3.264 | 1.948 | 0.005 | 0.063 | 0.058 | 472.847 | 0.153 | 0.004 |
| 0.333 | 3.662 | 3.721 | 0.006 | 0.116 | 0.107 | 536.030 | 0.173 | 0.005 |
| 0.251 | 3.389 | 2.883 | 0.005 | 0.142 | 0.131 | 475.381 | 0.154 | 0.004 |
| 0.228 | 2.930 | 2.464 | 0.005 | 0.120 | 0.111 | 470.077 | 0.152 | 0.004 |
| 0.176 | 1.183 | 2.236 | 0.005 | 0.071 | 0.065 | 477.096 | 0.154 | 0.004 |
| 0.134 | 1.168 | 1.478 | 0.005 | 0.056 | 0.051 | 470.252 | 0.152 | 0.004 |
| 0.094 | 0.985 | 0.947 | 0.005 | 0.035 | 0.032 | 472.983 | 0.153 | 0.004 |
| 0.746 | 5.003 | 4.079 | 0.005 | 0.239 | 0.219 | 525.328 | 0.170 | 0.005 |
| 0.746 | 5.003 | 4.079 | 0.005 | 0.239 | 0.219 | 525.328 | 0.170 | 0.005 |
| 0.746 | 5.003 | 4.079 | 0.005 | 0.239 | 0.219 | 525.328 | 0.170 | 0.005 |
| 0.332 | 3.693 | 3.098 | 0.005 | 0.189 | 0.173 | 474.116 | 0.153 | 0.004 |
| 0.266 | 3.234 | 2.253 | 0.005 | 0.107 | 0.099 | 473.122 | 0.153 | 0.004 |
| 0.164 | 1.127 | 1.614 | 0.005 | 0.051 | 0.047 | 470.126 | 0.152 | 0.004 |
| 0.590 | 4.609 | 3.768 | 0.005 | 0.166 | 0.153 | 513.852 | 0.166 | 0.005 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.590 | 4.609 | 3.768 | 0.005 | 0.166 | 0.153 | 513.852 | 0.166 | 0.005 |
| 0.227 | 3.532 | 2.288 | 0.005 | 0.105 | 0.097 | 476.731 | 0.154 | 0.004 |
| 0.176 | 3.089 | 1.376 | 0.005 | 0.069 | 0.063 | 469.403 | 0.152 | 0.004 |
| 0.168 | 1.151 | 1.491 | 0.005 | 0.055 | 0.050 | 469.914 | 0.152 | 0.004 |
| 0.150 | 1.277 | 1.163 | 0.005 | 0.044 | 0.041 | 470.084 | 0.152 | 0.004 |
| 0.221 | 1.311 | 2.215 | 0.005 | 0.085 | 0.079 | 466.638 | 0.151 | 0.004 |
| 0.601 | 4.233 | 3.834 | 0.005 | 0.197 | 0.181 | 527.022 | 0.170 | 0.005 |
| 0.601 | 4.233 | 3.834 | 0.005 | 0.197 | 0.181 | 527.022 | 0.170 | 0.005 |
| 0.601 | 4.233 | 3.834 | 0.005 | 0.197 | 0.181 | 527.022 | 0.170 | 0.005 |
| 0.494 | 3.769 | 4.593 | 0.005 | 0.318 | 0.292 | 475.632 | 0.154 | 0.004 |
| 0.364 | 3.311 | 3.667 | 0.005 | 0.187 | 0.172 | 467.733 | 0.151 | 0.004 |
| 0.312 | 1.598 | 3.483 | 0.005 | 0.146 | 0.134 | 473.846 | 0.153 | 0.004 |
| 0.192 | 1.668 | 1.859 | 0.005 | 0.080 | 0.074 | 469.994 | 0.152 | 0.004 |
| 0.064 | 0.958 | 0.304 | 0.005 | 0.009 | 0.008 | 474.478 | 0.154 | 0.004 |
| 0.690 | 3.499 | 4.316 | 0.008 | 0.188 | 0.188 | 568.299 | 0.062 | 0.005 |
| 0.718 | 2.390 | 4.426 | 0.007 | 0.181 | 0.181 | 568.299 | 0.064 | 0.005 |
| 0.646 | 4.557 | 3.782 | 0.007 | 0.130 | 0.130 | 568.299 | 0.058 | 0.005 |
| 0.336 | 3.560 | 2.430 | 0.006 | 0.120 | 0.120 | 568.299 | 0.030 | 0.004 |
| 0.261 | 3.118 | 1.541 | 0.006 | 0.074 | 0.074 | 568.299 | 0.023 | 0.004 |
| 0.210 | 1.068 | 1.234 | 0.006 | 0.038 | 0.038 | 568.299 | 0.018 | 0.004 |
| 0.206 | 1.032 | 1.135 | 0.005 | 0.037 | 0.037 | 568.299 | 0.018 | 0.004 |
| 0.224 | 3.325 | 1.494 | 0.005 | 0.070 | 0.064 | 470.264 | 0.152 | 0.004 |
| 0.202 | 1.259 | 1.355 | 0.005 | 0.054 | 0.050 | 469.113 | 0.152 | 0.004 |
| 0.185 | 1.206 | 1.235 | 0.005 | 0.045 | 0.041 | 475.220 | 0.154 | 0.004 |
| 0.259 | 1.650 | 2.085 | 0.005 | 0.079 | 0.073 | 473.839 | 0.153 | 0.004 |
| 0.209 | 1.200 | 3.439 | 0.005 | 0.069 | 0.064 | 473.097 | 0.153 | 0.004 |

| 2025             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     |
| Aerial Lifts     | 15    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 |
| Aerial Lifts     | 25    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 |
| Aerial Lifts     | 50    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 |
| Aerial Lifts     | 120   | 0.099   | 3.167   | 1.511   | 0.005   | 0.026   | 0.024   | 472.114 |
| Aerial Lifts     | 500   | 0.085   | 0.970   | 0.649   | 0.005   | 0.009   | 0.009   | 472.055 |
| Aerial Lifts     | 750   | 0.153   | 0.989   | 0.974   | 0.005   | 0.028   | 0.028   | 568.299 |
| Air Compressor s | 15    | 0.683   | 3.491   | 4.278   | 0.008   | 0.183   | 0.183   | 568.300 |
| Air Compressor s | 25    | 0.709   | 2.376   | 4.407   | 0.007   | 0.177   | 0.177   | 568.299 |
| Air Compressor s | 50    | 0.659   | 4.851   | 3.755   | 0.007   | 0.116   | 0.116   | 568.299 |
| Air Compressor s | 120   | 0.345   | 3.653   | 2.313   | 0.006   | 0.104   | 0.104   | 568.299 |
| Air Compressor s | 175   | 0.269   | 3.205   | 1.383   | 0.006   | 0.065   | 0.065   | 568.299 |
| Air Compressor s | 250   | 0.220   | 1.094   | 1.086   | 0.006   | 0.033   | 0.033   | 568.299 |
| Air Compressor s | 500   | 0.217   | 1.051   | 1.001   | 0.005   | 0.032   | 0.032   | 568.299 |
| Air Compressor s | 750   | 0.217   | 1.051   | 1.021   | 0.005   | 0.032   | 0.032   | 568.299 |
| Air Compressor s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   | 0.055   | 0.055   | 568.299 |
| Bore/Drill Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 |
| Bore/Drill Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 |
| Bore/Drill Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 |
| Bore/Drill Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   | 0.067   | 0.062   | 459.829 |
| Bore/Drill Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   | 0.039   | 0.036   | 478.266 |
| Bore/Drill Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   | 0.031   | 0.029   | 470.654 |
| Bore/Drill Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   | 0.028   | 0.026   | 467.289 |
| Bore/Drill Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   | 0.023   | 0.021   | 481.250 |
| Bore/Drill Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   | 0.019   | 0.017   | 471.917 |

|                          |      |       |       |       |       |       |       |         |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 | 0.168 | 0.168 | 568.299 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 | 0.099 | 0.099 | 568.299 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 | 0.089 | 0.089 | 568.300 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 | 0.056 | 0.056 | 568.300 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 | 0.543 | 0.499 | 517.872 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 | 0.260 | 0.240 | 469.533 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 | 0.166 | 0.153 | 474.748 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 | 0.114 | 0.105 | 472.980 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 | 0.088 | 0.081 | 471.967 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 | 0.068 | 0.062 | 470.276 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 | 0.065 | 0.060 | 472.055 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 | 0.456 | 0.420 | 516.128 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 | 0.285 | 0.262 | 476.134 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 | 0.150 | 0.138 | 471.592 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 | 0.096 | 0.088 | 471.622 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 | 0.081 | 0.074 | 474.007 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 | 0.057 | 0.052 | 472.408 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 | 0.112 | 0.103 | 475.490 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 | 0.107 | 0.107 | 568.299 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 | 0.095 | 0.095 | 568.299 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 | 0.060 | 0.060 | 568.299 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 | 0.031 | 0.031 | 568.299 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 | 0.030 | 0.030 | 568.299 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 | 0.030 | 0.030 | 568.299 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 | 0.053 | 0.053 | 568.299 |

|                      |      |       |       |       |       |       |       |         |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Dumpers/Tractors     | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Excavators           | 25   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 |
| Excavators           | 50   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 |
| Excavators           | 120  | 0.201 | 3.439 | 2.082 | 0.005 | 0.085 | 0.078 | 466.738 |
| Excavators           | 175  | 0.158 | 3.078 | 1.154 | 0.005 | 0.057 | 0.052 | 472.496 |
| Excavators           | 250  | 0.131 | 1.081 | 0.962 | 0.005 | 0.032 | 0.029 | 472.560 |
| Excavators           | 500  | 0.115 | 1.051 | 0.726 | 0.005 | 0.026 | 0.024 | 470.292 |
| Excavators           | 750  | 0.139 | 1.135 | 1.026 | 0.005 | 0.038 | 0.035 | 468.558 |
| Forklifts            | 50   | 0.636 | 5.029 | 3.932 | 0.005 | 0.178 | 0.164 | 525.483 |
| Forklifts            | 120  | 0.277 | 3.611 | 2.607 | 0.005 | 0.140 | 0.128 | 471.529 |
| Forklifts            | 175  | 0.209 | 3.170 | 1.653 | 0.005 | 0.084 | 0.078 | 472.106 |
| Forklifts            | 250  | 0.191 | 1.214 | 1.466 | 0.005 | 0.056 | 0.052 | 473.326 |
| Forklifts            | 500  | 0.215 | 1.222 | 1.658 | 0.005 | 0.062 | 0.057 | 473.615 |
| Generator Sets       | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 |
| Generator Sets       | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 |
| Generator Sets       | 50   | 0.440 | 3.758 | 3.481 | 0.007 | 0.093 | 0.093 | 568.300 |
| Generator Sets       | 120  | 0.243 | 3.338 | 2.185 | 0.006 | 0.087 | 0.087 | 568.299 |
| Generator Sets       | 175  | 0.184 | 2.930 | 1.297 | 0.006 | 0.053 | 0.053 | 568.299 |
| Generator Sets       | 250  | 0.147 | 1.000 | 1.020 | 0.006 | 0.028 | 0.028 | 568.299 |
| Generator Sets       | 500  | 0.144 | 0.981 | 0.945 | 0.005 | 0.027 | 0.027 | 568.300 |
| Generator Sets       | 750  | 0.145 | 0.981 | 0.964 | 0.005 | 0.027 | 0.027 | 568.299 |
| Generator Sets       | 9999 | 0.173 | 1.008 | 2.812 | 0.005 | 0.047 | 0.047 | 568.299 |
| Graders              | 50   | 1.864 | 7.125 | 5.043 | 0.005 | 0.522 | 0.480 | 493.532 |
| Graders              | 120  | 0.638 | 4.149 | 5.074 | 0.005 | 0.371 | 0.342 | 468.316 |
| Graders              | 175  | 0.329 | 3.418 | 2.774 | 0.005 | 0.152 | 0.140 | 478.508 |
| Graders              | 250  | 0.230 | 1.179 | 2.556 | 0.005 | 0.082 | 0.076 | 473.470 |
| Graders              | 500  | 0.280 | 1.315 | 2.265 | 0.005 | 0.088 | 0.081 | 470.753 |
| Graders              | 750  | 0.253 | 1.141 | 1.125 | 0.005 | 0.041 | 0.041 | 568.300 |
| Off-Highway Tractors | 120  | 0.276 | 3.669 | 2.707 | 0.005 | 0.144 | 0.132 | 476.921 |
| Off-Highway Tractors | 175  | 0.175 | 3.142 | 1.349 | 0.005 | 0.065 | 0.060 | 473.302 |
| Off-Highway Tractors | 250  | 0.155 | 1.130 | 1.116 | 0.005 | 0.040 | 0.037 | 470.861 |
| Off-Highway Tractors | 750  | 0.167 | 1.135 | 1.118 | 0.005 | 0.045 | 0.041 | 471.917 |
| Off-Highway Tractors | 1000 | 0.198 | 1.077 | 2.482 | 0.005 | 0.070 | 0.064 | 472.055 |
| Off-Highway Trucks   | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 |
| Off-Highway Trucks   | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 | 0.203 | 0.187 | 472.748 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 | 0.112 | 0.103 | 469.843 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 | 0.059 | 0.055 | 476.296 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 | 0.118 | 0.109 | 470.000 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 | 0.070 | 0.065 | 471.850 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 | 0.036 | 0.033 | 473.223 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 | 0.035 | 0.033 | 472.929 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 | 0.023 | 0.021 | 473.464 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 | 0.081 | 0.074 | 472.055 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 | 0.239 | 0.219 | 523.709 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 | 0.081 | 0.074 | 473.588 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 | 0.072 | 0.067 | 472.219 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 | 0.060 | 0.055 | 471.482 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 | 0.067 | 0.061 | 470.297 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 | 0.019 | 0.017 | 472.055 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 | 0.191 | 0.175 | 469.899 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 | 0.077 | 0.071 | 472.485 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 | 0.034 | 0.031 | 473.483 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 | 0.039 | 0.036 | 465.882 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 | 0.118 | 0.108 | 473.424 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 | 0.075 | 0.069 | 470.484 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 | 0.043 | 0.040 | 472.234 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 | 0.075 | 0.075 | 568.299 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 | 0.072 | 0.072 | 568.299 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 | 0.053 | 0.053 | 568.299 |



|                         |      |       |       |       |       |       |       |         |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 |
| Pumps                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.299 |
| Pumps                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 |
| Pumps                   | 50   | 0.485 | 3.943 | 3.528 | 0.007 | 0.099 | 0.099 | 568.299 |
| Pumps                   | 120  | 0.261 | 3.389 | 2.213 | 0.006 | 0.092 | 0.092 | 568.299 |
| Pumps                   | 175  | 0.199 | 2.974 | 1.318 | 0.006 | 0.056 | 0.056 | 568.300 |
| Pumps                   | 250  | 0.159 | 1.016 | 1.038 | 0.006 | 0.029 | 0.029 | 568.299 |
| Pumps                   | 500  | 0.156 | 0.992 | 0.958 | 0.005 | 0.028 | 0.028 | 568.300 |
| Pumps                   | 750  | 0.157 | 0.992 | 0.977 | 0.005 | 0.029 | 0.029 | 568.300 |
| Pumps                   | 9999 | 0.186 | 1.020 | 2.840 | 0.005 | 0.049 | 0.049 | 568.299 |
| Rollers                 | 15   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 |
| Rollers                 | 25   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 |
| Rollers                 | 50   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 |
| Rollers                 | 120  | 0.255 | 3.444 | 2.691 | 0.005 | 0.135 | 0.125 | 473.851 |
| Rollers                 | 175  | 0.127 | 2.909 | 1.101 | 0.005 | 0.049 | 0.046 | 471.970 |
| Rollers                 | 250  | 0.173 | 1.215 | 1.783 | 0.005 | 0.066 | 0.060 | 473.681 |
| Rollers                 | 500  | 0.212 | 1.968 | 2.200 | 0.005 | 0.091 | 0.083 | 477.573 |
| Rough Terrain Forklifts | 50   | 0.456 | 3.740 | 3.477 | 0.005 | 0.128 | 0.118 | 525.027 |
| Rough Terrain Forklifts | 120  | 0.137 | 3.240 | 1.821 | 0.005 | 0.051 | 0.047 | 473.037 |
| Rough Terrain Forklifts | 175  | 0.087 | 2.821 | 0.786 | 0.005 | 0.030 | 0.028 | 471.475 |
| Rough Terrain Forklifts | 250  | 0.123 | 1.001 | 1.489 | 0.005 | 0.035 | 0.033 | 472.927 |
| Rough Terrain Forklifts | 500  | 0.069 | 0.942 | 0.477 | 0.005 | 0.009 | 0.008 | 466.541 |
| Rubber Tired Dozers     | 175  | 0.461 | 3.612 | 4.229 | 0.005 | 0.231 | 0.212 | 474.103 |
| Rubber Tired Dozers     | 250  | 0.372 | 1.720 | 3.805 | 0.005 | 0.167 | 0.153 | 474.573 |
| Rubber Tired Dozers     | 500  | 0.367 | 2.959 | 3.370 | 0.005 | 0.151 | 0.139 | 479.092 |
| Rubber Tired Dozers     | 750  | 0.428 | 2.601 | 5.333 | 0.005 | 0.196 | 0.181 | 472.998 |
| Rubber Tired Dozers     | 1000 | 0.414 | 1.725 | 4.365 | 0.005 | 0.115 | 0.115 | 568.299 |
| Rubber Tired Loaders    | 25   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 |
| Rubber Tired Loaders    | 50   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 |
| Rubber Tired Loaders    | 120  | 0.352 | 3.791 | 2.970 | 0.005 | 0.179 | 0.165 | 466.898 |
| Rubber Tired Loaders    | 175  | 0.224 | 3.281 | 1.590 | 0.005 | 0.084 | 0.077 | 470.459 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 | 0.048 | 0.045 | 469.871 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 | 0.053 | 0.048 | 469.143 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 | 0.064 | 0.059 | 465.052 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 | 0.052 | 0.048 | 472.456 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 | 0.405 | 0.372 | 482.363 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 | 0.137 | 0.126 | 478.948 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 | 0.125 | 0.115 | 469.446 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 | 0.081 | 0.074 | 472.539 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 | 0.064 | 0.059 | 472.115 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 | 0.098 | 0.098 | 568.299 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 | 0.089 | 0.089 | 568.299 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 | 0.055 | 0.055 | 568.299 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 | 0.035 | 0.035 | 686.695 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 | 0.057 | 0.052 | 472.630 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 | 0.082 | 0.075 | 536.140 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 | 0.124 | 0.114 | 476.766 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 | 0.094 | 0.087 | 471.040 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 | 0.055 | 0.051 | 477.110 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 | 0.051 | 0.047 | 470.283 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 | 0.027 | 0.025 | 470.551 |
| Sweepers/Scrubbers        | 15   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 |
| Sweepers/Scrubbers        | 25   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 |
| Sweepers/Scrubbers        | 50   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 |
| Sweepers/Scrubbers        | 120  | 0.303 | 3.664 | 2.817 | 0.005 | 0.160 | 0.147 | 474.116 |
| Sweepers/Scrubbers        | 175  | 0.213 | 3.201 | 1.638 | 0.005 | 0.072 | 0.066 | 473.122 |
| Sweepers/Scrubbers        | 250  | 0.170 | 1.140 | 1.616 | 0.005 | 0.051 | 0.047 | 470.126 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 | 0.086 | 0.079 | 477.188 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 | 0.059 | 0.054 | 469.329 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 | 0.047 | 0.044 | 470.598 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 | 0.039 | 0.036 | 470.910 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 | 0.067 | 0.062 | 466.452 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 | 0.285 | 0.262 | 475.901 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 | 0.179 | 0.165 | 467.732 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 | 0.144 | 0.133 | 473.917 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 | 0.079 | 0.072 | 470.439 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 | 0.009 | 0.009 | 474.486 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.300 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 | 0.112 | 0.112 | 568.299 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 | 0.102 | 0.102 | 568.299 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 | 0.063 | 0.063 | 568.299 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 | 0.032 | 0.032 | 568.299 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 | 0.031 | 0.031 | 568.299 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 |

2026

| g/hp/hr | g/hp/hr |
|---------|---------|
| CH4     | N2O     |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.170   | 0.005   |
| 0.153   | 0.004   |
| 0.153   | 0.004   |
| 0.013   | 0.004   |
| 0.061   | 0.005   |
| 0.064   | 0.005   |
| 0.059   | 0.005   |
| 0.031   | 0.004   |
| 0.024   | 0.004   |
| 0.019   | 0.004   |
| 0.019   | 0.004   |
| 0.019   | 0.004   |
| 0.020   | 0.004   |
| 0.172   | 0.005   |
| 0.172   | 0.005   |
| 0.172   | 0.005   |
| 0.149   | 0.004   |
| 0.155   | 0.004   |
| 0.152   | 0.004   |
| 0.151   | 0.004   |
| 0.156   | 0.004   |
| 0.153   | 0.004   |

| 2026             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     |
| Aerial Lifts     | 15    | 0.154   | 3.088   | 2.879   | 0.005   |
| Aerial Lifts     | 25    | 0.154   | 3.088   | 2.879   | 0.005   |
| Aerial Lifts     | 50    | 0.154   | 3.088   | 2.879   | 0.005   |
| Aerial Lifts     | 120   | 0.099   | 3.167   | 1.511   | 0.005   |
| Aerial Lifts     | 500   | 0.085   | 0.970   | 0.649   | 0.005   |
| Aerial Lifts     | 750   | 0.153   | 0.989   | 0.974   | 0.005   |
| Air Compressor s | 15    | 0.683   | 3.491   | 4.278   | 0.008   |
| Air Compressor s | 25    | 0.709   | 2.376   | 4.407   | 0.007   |
| Air Compressor s | 50    | 0.659   | 4.851   | 3.755   | 0.007   |
| Air Compressor s | 120   | 0.345   | 3.653   | 2.313   | 0.006   |
| Air Compressor s | 175   | 0.269   | 3.205   | 1.383   | 0.006   |
| Air Compressor s | 250   | 0.220   | 1.094   | 1.086   | 0.006   |
| Air Compressor s | 500   | 0.217   | 1.051   | 1.001   | 0.005   |
| Air Compressor s | 750   | 0.217   | 1.051   | 1.021   | 0.005   |
| Air Compressor s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   |
| Bore/Drill Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   |
| Bore/Drill Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   |
| Bore/Drill Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   |
| Bore/Drill Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   |
| Bore/Drill Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   |
| Bore/Drill Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   |
| Bore/Drill Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   |
| Bore/Drill Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   |
| Bore/Drill Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   |

|       |       |
|-------|-------|
| 0.059 | 0.005 |
| 0.062 | 0.005 |
| 0.061 | 0.005 |
| 0.047 | 0.005 |
| 0.025 | 0.004 |
| 0.019 | 0.004 |
| 0.168 | 0.005 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.167 | 0.005 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.059 | 0.005 |
| 0.031 | 0.004 |
| 0.024 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.023 | 0.004 |

|                          |      |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 |

|       |       |
|-------|-------|
| 0.061 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.054 | 0.005 |
| 0.062 | 0.005 |
| 0.039 | 0.005 |
| 0.021 | 0.004 |
| 0.016 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.015 | 0.004 |
| 0.160 | 0.005 |
| 0.152 | 0.004 |
| 0.155 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.022 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |

|                      |      |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Excavators           | 25   | 0.403 | 4.219 | 3.453 | 0.005 |
| Excavators           | 50   | 0.403 | 4.219 | 3.453 | 0.005 |
| Excavators           | 120  | 0.201 | 3.439 | 2.082 | 0.005 |
| Excavators           | 175  | 0.158 | 3.078 | 1.154 | 0.005 |
| Excavators           | 250  | 0.131 | 1.081 | 0.962 | 0.005 |
| Excavators           | 500  | 0.115 | 1.051 | 0.726 | 0.005 |
| Excavators           | 750  | 0.139 | 1.135 | 1.026 | 0.005 |
| Forklifts            | 50   | 0.636 | 5.029 | 3.932 | 0.005 |
| Forklifts            | 120  | 0.277 | 3.611 | 2.607 | 0.005 |
| Forklifts            | 175  | 0.209 | 3.170 | 1.653 | 0.005 |
| Forklifts            | 250  | 0.191 | 1.214 | 1.466 | 0.005 |
| Forklifts            | 500  | 0.215 | 1.222 | 1.658 | 0.005 |
| Generator Sets       | 15   | 0.607 | 3.491 | 4.269 | 0.008 |
| Generator Sets       | 25   | 0.694 | 2.376 | 4.407 | 0.007 |
| Generator Sets       | 50   | 0.440 | 3.758 | 3.481 | 0.007 |
| Generator Sets       | 120  | 0.243 | 3.338 | 2.185 | 0.006 |
| Generator Sets       | 175  | 0.184 | 2.930 | 1.297 | 0.006 |
| Generator Sets       | 250  | 0.147 | 1.000 | 1.020 | 0.006 |
| Generator Sets       | 500  | 0.144 | 0.981 | 0.945 | 0.005 |
| Generator Sets       | 750  | 0.145 | 0.981 | 0.964 | 0.005 |
| Generator Sets       | 9999 | 0.173 | 1.008 | 2.812 | 0.005 |
| Graders              | 50   | 1.864 | 7.125 | 5.043 | 0.005 |
| Graders              | 120  | 0.638 | 4.149 | 5.074 | 0.005 |
| Graders              | 175  | 0.329 | 3.418 | 2.774 | 0.005 |
| Graders              | 250  | 0.230 | 1.179 | 2.556 | 0.005 |
| Graders              | 500  | 0.280 | 1.315 | 2.265 | 0.005 |
| Graders              | 750  | 0.253 | 1.141 | 1.125 | 0.005 |
| Off-Highway Tractors | 120  | 0.276 | 3.669 | 2.707 | 0.005 |
| Off-Highway Tractors | 175  | 0.175 | 3.142 | 1.349 | 0.005 |
| Off-Highway Tractors | 250  | 0.155 | 1.130 | 1.116 | 0.005 |
| Off-Highway Tractors | 750  | 0.167 | 1.135 | 1.118 | 0.005 |
| Off-Highway Tractors | 1000 | 0.198 | 1.077 | 2.482 | 0.005 |
| Off-Highway Trucks   | 175  | 0.214 | 3.328 | 1.335 | 0.005 |
| Off-Highway Trucks   | 250  | 0.185 | 1.213 | 1.129 | 0.005 |

|       |       |
|-------|-------|
| 0.154 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 |

|       |       |
|-------|-------|
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.169 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.169 | 0.005 |
| 0.169 | 0.005 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.054 | 0.005 |
| 0.062 | 0.005 |
| 0.027 | 0.005 |
| 0.017 | 0.004 |
| 0.016 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 |



|       |       |
|-------|-------|
| 0.008 | 0.004 |
| 0.061 | 0.005 |
| 0.064 | 0.005 |
| 0.043 | 0.005 |
| 0.023 | 0.004 |
| 0.018 | 0.004 |
| 0.014 | 0.004 |
| 0.014 | 0.004 |
| 0.014 | 0.004 |
| 0.016 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.155 | 0.004 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.154 | 0.004 |
| 0.155 | 0.004 |
| 0.153 | 0.004 |
| 0.037 | 0.004 |
| 0.169 | 0.005 |
| 0.169 | 0.005 |
| 0.151 | 0.004 |
| 0.152 | 0.004 |

|                         |      |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 |
| Pumps                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 |
| Pumps                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 |
| Pumps                   | 50   | 0.485 | 3.943 | 3.528 | 0.007 |
| Pumps                   | 120  | 0.261 | 3.389 | 2.213 | 0.006 |
| Pumps                   | 175  | 0.199 | 2.974 | 1.318 | 0.006 |
| Pumps                   | 250  | 0.159 | 1.016 | 1.038 | 0.006 |
| Pumps                   | 500  | 0.156 | 0.992 | 0.958 | 0.005 |
| Pumps                   | 750  | 0.157 | 0.992 | 0.977 | 0.005 |
| Pumps                   | 9999 | 0.186 | 1.020 | 2.840 | 0.005 |
| Rollers                 | 15   | 0.569 | 4.125 | 3.689 | 0.005 |
| Rollers                 | 25   | 0.569 | 4.125 | 3.689 | 0.005 |
| Rollers                 | 50   | 0.569 | 4.125 | 3.689 | 0.005 |
| Rollers                 | 120  | 0.255 | 3.444 | 2.691 | 0.005 |
| Rollers                 | 175  | 0.127 | 2.909 | 1.101 | 0.005 |
| Rollers                 | 250  | 0.173 | 1.215 | 1.783 | 0.005 |
| Rollers                 | 500  | 0.212 | 1.968 | 2.200 | 0.005 |
| Rough Terrain Forklifts | 50   | 0.456 | 3.740 | 3.477 | 0.005 |
| Rough Terrain Forklifts | 120  | 0.137 | 3.240 | 1.821 | 0.005 |
| Rough Terrain Forklifts | 175  | 0.087 | 2.821 | 0.786 | 0.005 |
| Rough Terrain Forklifts | 250  | 0.123 | 1.001 | 1.489 | 0.005 |
| Rough Terrain Forklifts | 500  | 0.069 | 0.942 | 0.477 | 0.005 |
| Rubber Tired Dozers     | 175  | 0.461 | 3.612 | 4.229 | 0.005 |
| Rubber Tired Dozers     | 250  | 0.372 | 1.720 | 3.805 | 0.005 |
| Rubber Tired Dozers     | 500  | 0.367 | 2.959 | 3.370 | 0.005 |
| Rubber Tired Dozers     | 750  | 0.428 | 2.601 | 5.333 | 0.005 |
| Rubber Tired Dozers     | 1000 | 0.414 | 1.725 | 4.365 | 0.005 |
| Rubber Tired Loaders    | 25   | 0.960 | 5.941 | 4.348 | 0.005 |
| Rubber Tired Loaders    | 50   | 0.960 | 5.941 | 4.348 | 0.005 |
| Rubber Tired Loaders    | 120  | 0.352 | 3.791 | 2.970 | 0.005 |
| Rubber Tired Loaders    | 175  | 0.224 | 3.281 | 1.590 | 0.005 |

|       |       |
|-------|-------|
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.150 | 0.004 |
| 0.153 | 0.004 |
| 0.156 | 0.004 |
| 0.155 | 0.004 |
| 0.152 | 0.004 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.059 | 0.005 |
| 0.047 | 0.005 |
| 0.025 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.153 | 0.004 |
| 0.173 | 0.005 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.170 | 0.005 |
| 0.153 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.166 | 0.005 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 |
| Sweepers/Scrubbers        | 15   | 0.622 | 4.768 | 3.856 | 0.005 |
| Sweepers/Scrubbers        | 25   | 0.622 | 4.768 | 3.856 | 0.005 |
| Sweepers/Scrubbers        | 50   | 0.622 | 4.768 | 3.856 | 0.005 |
| Sweepers/Scrubbers        | 120  | 0.303 | 3.664 | 2.817 | 0.005 |
| Sweepers/Scrubbers        | 175  | 0.213 | 3.201 | 1.638 | 0.005 |
| Sweepers/Scrubbers        | 250  | 0.170 | 1.140 | 1.616 | 0.005 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 |

|       |       |
|-------|-------|
| 0.166 | 0.005 |
| 0.154 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.151 | 0.004 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.171 | 0.005 |
| 0.154 | 0.004 |
| 0.151 | 0.004 |
| 0.153 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.061 | 0.005 |
| 0.064 | 0.005 |
| 0.054 | 0.005 |
| 0.028 | 0.004 |
| 0.022 | 0.004 |
| 0.018 | 0.004 |
| 0.017 | 0.004 |
| 0.152 | 0.004 |
| 0.152 | 0.004 |
| 0.154 | 0.004 |
| 0.154 | 0.004 |
| 0.153 | 0.004 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 |

2027

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|
| PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 0.026   | 0.024   | 472.114 | 0.153   | 0.004   |
| 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.028   | 0.028   | 568.299 | 0.013   | 0.004   |
|         |         |         |         |         |
| 0.183   | 0.183   | 568.300 | 0.061   | 0.005   |
|         |         |         |         |         |
| 0.177   | 0.177   | 568.299 | 0.064   | 0.005   |
|         |         |         |         |         |
| 0.116   | 0.116   | 568.299 | 0.059   | 0.005   |
|         |         |         |         |         |
| 0.104   | 0.104   | 568.299 | 0.031   | 0.004   |
|         |         |         |         |         |
| 0.065   | 0.065   | 568.299 | 0.024   | 0.004   |
|         |         |         |         |         |
| 0.033   | 0.033   | 568.299 | 0.019   | 0.004   |
|         |         |         |         |         |
| 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
|         |         |         |         |         |
| 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
|         |         |         |         |         |
| 0.055   | 0.055   | 568.299 | 0.020   | 0.004   |
|         |         |         |         |         |
| 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
|         |         |         |         |         |
| 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
|         |         |         |         |         |
| 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
|         |         |         |         |         |
| 0.067   | 0.062   | 459.829 | 0.149   | 0.004   |
|         |         |         |         |         |
| 0.039   | 0.036   | 478.266 | 0.155   | 0.004   |
|         |         |         |         |         |
| 0.031   | 0.029   | 470.654 | 0.152   | 0.004   |
|         |         |         |         |         |
| 0.028   | 0.026   | 467.289 | 0.151   | 0.004   |
|         |         |         |         |         |
| 0.023   | 0.021   | 481.250 | 0.156   | 0.004   |
|         |         |         |         |         |
| 0.019   | 0.017   | 471.917 | 0.153   | 0.004   |

| 2027             |       | g/hp/hr |
|------------------|-------|---------|
| Equipment        | MaxHP | ROG     |
| Aerial Lifts     | 15    | 0.154   |
| Aerial Lifts     | 25    | 0.154   |
| Aerial Lifts     | 50    | 0.154   |
| Aerial Lifts     | 120   | 0.099   |
| Aerial Lifts     | 500   | 0.085   |
| Aerial Lifts     | 750   | 0.153   |
|                  |       |         |
| Air Compressor s | 15    | 0.683   |
| Air Compressor s | 25    | 0.709   |
| Air Compressor s | 50    | 0.659   |
| Air Compressor s | 120   | 0.345   |
| Air Compressor s | 175   | 0.269   |
| Air Compressor s | 250   | 0.220   |
| Air Compressor s | 500   | 0.217   |
| Air Compressor s | 750   | 0.217   |
| Air Compressor s | 1000  | 0.231   |
| Bore/Drill Rigs  | 15    | 0.591   |
| Bore/Drill Rigs  | 25    | 0.591   |
| Bore/Drill Rigs  | 50    | 0.591   |
| Bore/Drill Rigs  | 120   | 0.155   |
| Bore/Drill Rigs  | 175   | 0.114   |
| Bore/Drill Rigs  | 250   | 0.107   |
| Bore/Drill Rigs  | 500   | 0.102   |
| Bore/Drill Rigs  | 750   | 0.085   |
| Bore/Drill Rigs  | 1000  | 0.062   |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.168 | 0.168 | 568.299 | 0.062 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.099 | 0.099 | 568.299 | 0.047 | 0.005 |
| 0.089 | 0.089 | 568.300 | 0.025 | 0.004 |
| 0.056 | 0.056 | 568.300 | 0.019 | 0.004 |
| 0.543 | 0.499 | 517.872 | 0.168 | 0.005 |
| 0.260 | 0.240 | 469.533 | 0.152 | 0.004 |
| 0.166 | 0.153 | 474.748 | 0.154 | 0.004 |
| 0.114 | 0.105 | 472.980 | 0.153 | 0.004 |
| 0.088 | 0.081 | 471.967 | 0.153 | 0.004 |
| 0.068 | 0.062 | 470.276 | 0.152 | 0.004 |
| 0.065 | 0.060 | 472.055 | 0.153 | 0.004 |
| 0.456 | 0.420 | 516.128 | 0.167 | 0.005 |
| 0.285 | 0.262 | 476.134 | 0.154 | 0.004 |
| 0.150 | 0.138 | 471.592 | 0.153 | 0.004 |
| 0.096 | 0.088 | 471.622 | 0.153 | 0.004 |
| 0.081 | 0.074 | 474.007 | 0.153 | 0.004 |
| 0.057 | 0.052 | 472.408 | 0.153 | 0.004 |
| 0.112 | 0.103 | 475.490 | 0.154 | 0.004 |
| 0.107 | 0.107 | 568.299 | 0.059 | 0.005 |
| 0.095 | 0.095 | 568.299 | 0.031 | 0.004 |
| 0.060 | 0.060 | 568.299 | 0.024 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.020 | 0.004 |
| 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 0.053 | 0.053 | 568.299 | 0.023 | 0.004 |

|                          |      |       |
|--------------------------|------|-------|
| Cement and Mortar Mixers | 15   | 0.661 |
| Cement and Mortar Mixers | 25   | 0.689 |
| Concrete/Industrial Saws | 25   | 0.685 |
| Concrete/Industrial Saws | 50   | 0.525 |
| Concrete/Industrial Saws | 120  | 0.283 |
| Concrete/Industrial Saws | 175  | 0.220 |
| Cranes                   | 50   | 1.811 |
| Cranes                   | 120  | 0.463 |
| Cranes                   | 175  | 0.334 |
| Cranes                   | 250  | 0.265 |
| Cranes                   | 500  | 0.218 |
| Cranes                   | 750  | 0.172 |
| Cranes                   | 9999 | 0.229 |
| Crawler Tractors         | 50   | 1.744 |
| Crawler Tractors         | 120  | 0.454 |
| Crawler Tractors         | 175  | 0.298 |
| Crawler Tractors         | 250  | 0.232 |
| Crawler Tractors         | 500  | 0.208 |
| Crawler Tractors         | 750  | 0.167 |
| Crawler Tractors         | 1000 | 0.260 |
| Crushing/Proc. Equipment | 50   | 0.656 |
| Crushing/Proc. Equipment | 120  | 0.345 |
| Crushing/Proc. Equipment | 175  | 0.270 |
| Crushing/Proc. Equipment | 250  | 0.224 |
| Crushing/Proc. Equipment | 500  | 0.221 |
| Crushing/Proc. Equipment | 750  | 0.222 |
| Crushing/Proc. Equipment | 9999 | 0.261 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 0.085 | 0.078 | 466.738 | 0.151 | 0.004 |
| 0.057 | 0.052 | 472.496 | 0.153 | 0.004 |
| 0.032 | 0.029 | 472.560 | 0.153 | 0.004 |
| 0.026 | 0.024 | 470.292 | 0.152 | 0.004 |
| 0.038 | 0.035 | 468.558 | 0.152 | 0.004 |
| 0.178 | 0.164 | 525.483 | 0.170 | 0.005 |
| 0.140 | 0.128 | 471.529 | 0.153 | 0.004 |
| 0.084 | 0.078 | 472.106 | 0.153 | 0.004 |
| 0.056 | 0.052 | 473.326 | 0.153 | 0.004 |
| 0.062 | 0.057 | 473.615 | 0.153 | 0.004 |
| 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 0.093 | 0.093 | 568.300 | 0.039 | 0.005 |
| 0.087 | 0.087 | 568.299 | 0.021 | 0.004 |
| 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.013 | 0.004 |
| 0.027 | 0.027 | 568.300 | 0.013 | 0.004 |
| 0.027 | 0.027 | 568.299 | 0.013 | 0.004 |
| 0.047 | 0.047 | 568.299 | 0.015 | 0.004 |
| 0.522 | 0.480 | 493.532 | 0.160 | 0.005 |
| 0.371 | 0.342 | 468.316 | 0.152 | 0.004 |
| 0.152 | 0.140 | 478.508 | 0.155 | 0.004 |
| 0.082 | 0.076 | 473.470 | 0.153 | 0.004 |
| 0.088 | 0.081 | 470.753 | 0.152 | 0.004 |
| 0.041 | 0.041 | 568.300 | 0.022 | 0.004 |
| 0.144 | 0.132 | 476.921 | 0.154 | 0.004 |
| 0.065 | 0.060 | 473.302 | 0.153 | 0.004 |
| 0.040 | 0.037 | 470.861 | 0.152 | 0.004 |
| 0.045 | 0.041 | 471.917 | 0.153 | 0.004 |
| 0.070 | 0.064 | 472.055 | 0.153 | 0.004 |
| 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |

|                      |      |       |
|----------------------|------|-------|
| Dumpers/Tractors     | 25   | 0.685 |
| Excavators           | 25   | 0.403 |
| Excavators           | 50   | 0.403 |
| Excavators           | 120  | 0.201 |
| Excavators           | 175  | 0.158 |
| Excavators           | 250  | 0.131 |
| Excavators           | 500  | 0.115 |
| Excavators           | 750  | 0.139 |
| Forklifts            | 50   | 0.636 |
| Forklifts            | 120  | 0.277 |
| Forklifts            | 175  | 0.209 |
| Forklifts            | 250  | 0.191 |
| Forklifts            | 500  | 0.215 |
| Generator Sets       | 15   | 0.607 |
| Generator Sets       | 25   | 0.694 |
| Generator Sets       | 50   | 0.440 |
| Generator Sets       | 120  | 0.243 |
| Generator Sets       | 175  | 0.184 |
| Generator Sets       | 250  | 0.147 |
| Generator Sets       | 500  | 0.144 |
| Generator Sets       | 750  | 0.145 |
| Generator Sets       | 9999 | 0.173 |
| Graders              | 50   | 1.864 |
| Graders              | 120  | 0.638 |
| Graders              | 175  | 0.329 |
| Graders              | 250  | 0.230 |
| Graders              | 500  | 0.280 |
| Graders              | 750  | 0.253 |
| Off-Highway Tractors | 120  | 0.276 |
| Off-Highway Tractors | 175  | 0.175 |
| Off-Highway Tractors | 250  | 0.155 |
| Off-Highway Tractors | 750  | 0.167 |
| Off-Highway Tractors | 1000 | 0.198 |
| Off-Highway Trucks   | 175  | 0.214 |
| Off-Highway Trucks   | 250  | 0.185 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |
| 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 0.203 | 0.187 | 472.748 | 0.153 | 0.004 |
| 0.112 | 0.103 | 469.843 | 0.152 | 0.004 |
| 0.059 | 0.055 | 476.296 | 0.154 | 0.004 |
| 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 0.118 | 0.109 | 470.000 | 0.152 | 0.004 |
| 0.070 | 0.065 | 471.850 | 0.153 | 0.004 |
| 0.036 | 0.033 | 473.223 | 0.153 | 0.004 |
| 0.035 | 0.033 | 472.929 | 0.153 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Off-Highway Trucks                 | 500  | 0.177 |
| Off-Highway Trucks                 | 750  | 0.235 |
| Off-Highway Trucks                 | 1000 | 0.187 |
| Other Construction Equipment       | 15   | 0.757 |
| Other Construction Equipment       | 25   | 0.757 |
| Other Construction Equipment       | 50   | 0.757 |
| Other Construction Equipment       | 120  | 0.341 |
| Other Construction Equipment       | 175  | 0.235 |
| Other Construction Equipment       | 500  | 0.168 |
| Other General Industrial Equipment | 15   | 0.492 |
| Other General Industrial Equipment | 25   | 0.492 |
| Other General Industrial Equipment | 50   | 0.492 |
| Other General Industrial Equipment | 120  | 0.258 |
| Other General Industrial Equipment | 175  | 0.189 |
| Other General Industrial Equipment | 250  | 0.155 |
| Other General Industrial Equipment | 500  | 0.152 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 0.081 | 0.074 | 472.055 | 0.153 | 0.004 |
| 0.239 | 0.219 | 523.709 | 0.169 | 0.005 |
| 0.081 | 0.074 | 473.588 | 0.153 | 0.004 |
| 0.072 | 0.067 | 472.219 | 0.153 | 0.004 |
| 0.060 | 0.055 | 471.482 | 0.153 | 0.004 |
| 0.067 | 0.061 | 470.297 | 0.152 | 0.004 |
| 0.019 | 0.017 | 472.055 | 0.153 | 0.004 |
| 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 0.191 | 0.175 | 469.899 | 0.152 | 0.004 |
| 0.077 | 0.071 | 472.485 | 0.153 | 0.004 |
| 0.034 | 0.031 | 473.483 | 0.153 | 0.004 |
| 0.039 | 0.036 | 465.882 | 0.151 | 0.004 |
| 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 0.118 | 0.108 | 473.424 | 0.153 | 0.004 |
| 0.075 | 0.069 | 470.484 | 0.152 | 0.004 |
| 0.043 | 0.040 | 472.234 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 0.075 | 0.075 | 568.299 | 0.027 | 0.005 |
| 0.072 | 0.072 | 568.299 | 0.017 | 0.004 |
| 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Other General Industrial Equipment | 750  | 0.117 |
| Other General Industrial Equipment | 1000 | 0.203 |
| Other Material Handling Equipment  | 50   | 0.744 |
| Other Material Handling Equipment  | 120  | 0.203 |
| Other Material Handling Equipment  | 175  | 0.189 |
| Other Material Handling Equipment  | 250  | 0.200 |
| Other Material Handling Equipment  | 500  | 0.204 |
| Other Material Handling Equipment  | 9999 | 0.065 |
| Pavers                             | 25   | 0.918 |
| Pavers                             | 50   | 0.918 |
| Pavers                             | 120  | 0.314 |
| Pavers                             | 175  | 0.181 |
| Pavers                             | 250  | 0.107 |
| Pavers                             | 500  | 0.115 |
| Paving Equipment                   | 25   | 0.476 |
| Paving Equipment                   | 50   | 0.476 |
| Paving Equipment                   | 120  | 0.242 |
| Paving Equipment                   | 175  | 0.175 |
| Paving Equipment                   | 250  | 0.133 |
| Plate Compactors                   | 15   | 0.661 |
| Pressure Washers                   | 15   | 0.607 |
| Pressure Washers                   | 25   | 0.694 |
| Pressure Washers                   | 50   | 0.306 |
| Pressure Washers                   | 120  | 0.189 |
| Pressure Washers                   | 175  | 0.178 |



|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.183 | 0.183 | 568.299 | 0.061 | 0.005 |
| 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 0.099 | 0.099 | 568.299 | 0.043 | 0.005 |
| 0.092 | 0.092 | 568.299 | 0.023 | 0.004 |
| 0.056 | 0.056 | 568.300 | 0.018 | 0.004 |
| 0.029 | 0.029 | 568.299 | 0.014 | 0.004 |
| 0.028 | 0.028 | 568.300 | 0.014 | 0.004 |
| 0.029 | 0.029 | 568.300 | 0.014 | 0.004 |
| 0.049 | 0.049 | 568.299 | 0.016 | 0.004 |
| 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 0.135 | 0.125 | 473.851 | 0.153 | 0.004 |
| 0.049 | 0.046 | 471.970 | 0.153 | 0.004 |
| 0.066 | 0.060 | 473.681 | 0.153 | 0.004 |
| 0.091 | 0.083 | 477.573 | 0.155 | 0.004 |
| 0.128 | 0.118 | 525.027 | 0.170 | 0.005 |
| 0.051 | 0.047 | 473.037 | 0.153 | 0.004 |
| 0.030 | 0.028 | 471.475 | 0.153 | 0.004 |
| 0.035 | 0.033 | 472.927 | 0.153 | 0.004 |
| 0.009 | 0.008 | 466.541 | 0.151 | 0.004 |
| 0.231 | 0.212 | 474.103 | 0.153 | 0.004 |
| 0.167 | 0.153 | 474.573 | 0.154 | 0.004 |
| 0.151 | 0.139 | 479.092 | 0.155 | 0.004 |
| 0.196 | 0.181 | 472.998 | 0.153 | 0.004 |
| 0.115 | 0.115 | 568.299 | 0.037 | 0.004 |
| 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 0.179 | 0.165 | 466.898 | 0.151 | 0.004 |
| 0.084 | 0.077 | 470.459 | 0.152 | 0.004 |

|                         |      |       |
|-------------------------|------|-------|
| Pressure Washers        | 250  | 0.098 |
| Pumps                   | 15   | 0.683 |
| Pumps                   | 25   | 0.709 |
| Pumps                   | 50   | 0.485 |
| Pumps                   | 120  | 0.261 |
| Pumps                   | 175  | 0.199 |
| Pumps                   | 250  | 0.159 |
| Pumps                   | 500  | 0.156 |
| Pumps                   | 750  | 0.157 |
| Pumps                   | 9999 | 0.186 |
| Rollers                 | 15   | 0.569 |
| Rollers                 | 25   | 0.569 |
| Rollers                 | 50   | 0.569 |
| Rollers                 | 120  | 0.255 |
| Rollers                 | 175  | 0.127 |
| Rollers                 | 250  | 0.173 |
| Rollers                 | 500  | 0.212 |
| Rough Terrain Forklifts | 50   | 0.456 |
| Rough Terrain Forklifts | 120  | 0.137 |
| Rough Terrain Forklifts | 175  | 0.087 |
| Rough Terrain Forklifts | 250  | 0.123 |
| Rough Terrain Forklifts | 500  | 0.069 |
| Rubber Tired Dozers     | 175  | 0.461 |
| Rubber Tired Dozers     | 250  | 0.372 |
| Rubber Tired Dozers     | 500  | 0.367 |
| Rubber Tired Dozers     | 750  | 0.428 |
| Rubber Tired Dozers     | 1000 | 0.414 |
| Rubber Tired Loaders    | 25   | 0.960 |
| Rubber Tired Loaders    | 50   | 0.960 |
| Rubber Tired Loaders    | 120  | 0.352 |
| Rubber Tired Loaders    | 175  | 0.224 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.048 | 0.045 | 469.871 | 0.152 | 0.004 |
| 0.053 | 0.048 | 469.143 | 0.152 | 0.004 |
| 0.064 | 0.059 | 465.052 | 0.150 | 0.004 |
| 0.052 | 0.048 | 472.456 | 0.153 | 0.004 |
| 0.405 | 0.372 | 482.363 | 0.156 | 0.004 |
| 0.137 | 0.126 | 478.948 | 0.155 | 0.004 |
| 0.125 | 0.115 | 469.446 | 0.152 | 0.004 |
| 0.081 | 0.074 | 472.539 | 0.153 | 0.004 |
| 0.064 | 0.059 | 472.115 | 0.153 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.098 | 0.098 | 568.299 | 0.047 | 0.005 |
| 0.089 | 0.089 | 568.299 | 0.025 | 0.004 |
| 0.055 | 0.055 | 568.299 | 0.019 | 0.004 |
| 0.035 | 0.035 | 686.695 | 0.019 | 0.004 |
| 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 0.057 | 0.052 | 472.630 | 0.153 | 0.004 |
| 0.082 | 0.075 | 536.140 | 0.173 | 0.005 |
| 0.124 | 0.114 | 476.766 | 0.154 | 0.004 |
| 0.094 | 0.087 | 471.040 | 0.152 | 0.004 |
| 0.055 | 0.051 | 477.110 | 0.154 | 0.004 |
| 0.051 | 0.047 | 470.283 | 0.152 | 0.004 |
| 0.027 | 0.025 | 470.551 | 0.152 | 0.004 |
| 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 0.160 | 0.147 | 474.116 | 0.153 | 0.004 |
| 0.072 | 0.066 | 473.122 | 0.153 | 0.004 |
| 0.051 | 0.047 | 470.126 | 0.152 | 0.004 |
| 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |

|                           |      |       |
|---------------------------|------|-------|
| Rubber Tired Loaders      | 250  | 0.177 |
| Rubber Tired Loaders      | 500  | 0.193 |
| Rubber Tired Loaders      | 750  | 0.212 |
| Rubber Tired Loaders      | 1000 | 0.166 |
| Scrapers                  | 120  | 0.566 |
| Scrapers                  | 175  | 0.290 |
| Scrapers                  | 250  | 0.291 |
| Scrapers                  | 500  | 0.216 |
| Scrapers                  | 750  | 0.184 |
| Signal Boards             | 15   | 0.661 |
| Signal Boards             | 50   | 0.522 |
| Signal Boards             | 120  | 0.278 |
| Signal Boards             | 175  | 0.215 |
| Signal Boards             | 250  | 0.213 |
| Skid Steer Loaders        | 25   | 0.341 |
| Skid Steer Loaders        | 50   | 0.341 |
| Skid Steer Loaders        | 120  | 0.140 |
| Surfacing Equipment       | 50   | 0.235 |
| Surfacing Equipment       | 120  | 0.232 |
| Surfacing Equipment       | 175  | 0.187 |
| Surfacing Equipment       | 250  | 0.148 |
| Surfacing Equipment       | 500  | 0.128 |
| Surfacing Equipment       | 750  | 0.085 |
| Sweepers/Scrubbers        | 15   | 0.622 |
| Sweepers/Scrubbers        | 25   | 0.622 |
| Sweepers/Scrubbers        | 50   | 0.622 |
| Sweepers/Scrubbers        | 120  | 0.303 |
| Sweepers/Scrubbers        | 175  | 0.213 |
| Sweepers/Scrubbers        | 250  | 0.170 |
| Tractors/Loaders/Backhoes | 25   | 0.550 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |
| 0.086 | 0.079 | 477.188 | 0.154 | 0.004 |
| 0.059 | 0.054 | 469.329 | 0.152 | 0.004 |
| 0.047 | 0.044 | 470.598 | 0.152 | 0.004 |
| 0.039 | 0.036 | 470.910 | 0.152 | 0.004 |
| 0.067 | 0.062 | 466.452 | 0.151 | 0.004 |
| 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 0.285 | 0.262 | 475.901 | 0.154 | 0.004 |
| 0.179 | 0.165 | 467.732 | 0.151 | 0.004 |
| 0.144 | 0.133 | 473.917 | 0.153 | 0.004 |
| 0.079 | 0.072 | 470.439 | 0.152 | 0.004 |
| 0.009 | 0.009 | 474.486 | 0.154 | 0.004 |
| 0.183 | 0.183 | 568.300 | 0.061 | 0.005 |
| 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 0.112 | 0.112 | 568.299 | 0.054 | 0.005 |
| 0.102 | 0.102 | 568.299 | 0.028 | 0.004 |
| 0.063 | 0.063 | 568.299 | 0.022 | 0.004 |
| 0.032 | 0.032 | 568.299 | 0.018 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.017 | 0.004 |
| 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |
| 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |

|                           |      |       |
|---------------------------|------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 |
| Tractors/Loaders/Backhoes | 120  | 0.209 |
| Tractors/Loaders/Backhoes | 175  | 0.162 |
| Tractors/Loaders/Backhoes | 250  | 0.154 |
| Tractors/Loaders/Backhoes | 500  | 0.144 |
| Tractors/Loaders/Backhoes | 750  | 0.187 |
| Trenchers                 | 15   | 0.542 |
| Trenchers                 | 25   | 0.542 |
| Trenchers                 | 50   | 0.542 |
| Trenchers                 | 120  | 0.457 |
| Trenchers                 | 175  | 0.358 |
| Trenchers                 | 250  | 0.307 |
| Trenchers                 | 500  | 0.191 |
| Trenchers                 | 750  | 0.067 |
| Welders                   | 15   | 0.683 |
| Welders                   | 25   | 0.709 |
| Welders                   | 50   | 0.602 |
| Welders                   | 120  | 0.316 |
| Welders                   | 175  | 0.245 |
| Welders                   | 250  | 0.199 |
| Welders                   | 500  | 0.196 |
| Water Trucks              | 175  | 0.214 |
| Water Trucks              | 250  | 0.185 |
| Water Trucks              | 500  | 0.177 |
| Water Trucks              | 750  | 0.235 |
| Water Trucks              | 1000 | 0.187 |

2028

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|
| CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   | 0.005   |
| 3.167   | 1.511   | 0.005   | 0.026   | 0.024   | 472.114 | 0.153   | 0.004   |
| 0.970   | 0.649   | 0.005   | 0.009   | 0.009   | 472.055 | 0.153   | 0.004   |
| 0.989   | 0.974   | 0.005   | 0.028   | 0.028   | 568.299 | 0.013   | 0.004   |
| 3.491   | 4.278   | 0.008   | 0.183   | 0.183   | 568.300 | 0.061   | 0.005   |
| 2.376   | 4.407   | 0.007   | 0.177   | 0.177   | 568.299 | 0.064   | 0.005   |
| 4.851   | 3.755   | 0.007   | 0.116   | 0.116   | 568.299 | 0.059   | 0.005   |
| 3.653   | 2.313   | 0.006   | 0.104   | 0.104   | 568.299 | 0.031   | 0.004   |
| 3.205   | 1.383   | 0.006   | 0.065   | 0.065   | 568.299 | 0.024   | 0.004   |
| 1.094   | 1.086   | 0.006   | 0.033   | 0.033   | 568.299 | 0.019   | 0.004   |
| 1.051   | 1.001   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
| 1.051   | 1.021   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   | 0.004   |
| 1.079   | 2.954   | 0.005   | 0.055   | 0.055   | 568.299 | 0.020   | 0.004   |
| 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   | 0.005   |
| 3.218   | 1.964   | 0.005   | 0.067   | 0.062   | 459.829 | 0.149   | 0.004   |
| 2.974   | 0.888   | 0.005   | 0.039   | 0.036   | 478.266 | 0.155   | 0.004   |
| 1.045   | 0.957   | 0.005   | 0.031   | 0.029   | 470.654 | 0.152   | 0.004   |
| 0.997   | 0.823   | 0.005   | 0.028   | 0.026   | 467.289 | 0.151   | 0.004   |
| 0.983   | 0.596   | 0.005   | 0.023   | 0.021   | 481.250 | 0.156   | 0.004   |
| 0.953   | 2.289   | 0.005   | 0.019   | 0.017   | 471.917 | 0.153   | 0.004   |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.344 | 4.357 | 0.007 | 0.168 | 0.168 | 568.299 | 0.062 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.297 | 3.592 | 0.007 | 0.099 | 0.099 | 568.299 | 0.047 | 0.005 |
| 3.495 | 2.176 | 0.006 | 0.089 | 0.089 | 568.300 | 0.025 | 0.004 |
| 3.073 | 1.249 | 0.006 | 0.056 | 0.056 | 568.300 | 0.019 | 0.004 |
| 7.072 | 5.636 | 0.005 | 0.543 | 0.499 | 517.872 | 0.168 | 0.005 |
| 3.831 | 4.135 | 0.005 | 0.260 | 0.240 | 469.533 | 0.152 | 0.004 |
| 3.335 | 3.160 | 0.005 | 0.166 | 0.153 | 474.748 | 0.154 | 0.004 |
| 1.470 | 2.681 | 0.005 | 0.114 | 0.105 | 472.980 | 0.153 | 0.004 |
| 1.834 | 2.154 | 0.005 | 0.088 | 0.081 | 471.967 | 0.153 | 0.004 |
| 1.274 | 1.638 | 0.005 | 0.068 | 0.062 | 470.276 | 0.152 | 0.004 |
| 1.038 | 2.422 | 0.005 | 0.065 | 0.060 | 472.055 | 0.153 | 0.004 |
| 6.686 | 4.936 | 0.005 | 0.456 | 0.420 | 516.128 | 0.167 | 0.005 |
| 3.788 | 3.961 | 0.005 | 0.285 | 0.262 | 476.134 | 0.154 | 0.004 |
| 3.209 | 2.688 | 0.005 | 0.150 | 0.138 | 471.592 | 0.153 | 0.004 |
| 1.308 | 2.462 | 0.005 | 0.096 | 0.088 | 471.622 | 0.153 | 0.004 |
| 1.717 | 1.920 | 0.005 | 0.081 | 0.074 | 474.007 | 0.153 | 0.004 |
| 1.122 | 1.545 | 0.005 | 0.057 | 0.052 | 472.408 | 0.153 | 0.004 |
| 1.593 | 4.598 | 0.005 | 0.112 | 0.103 | 475.490 | 0.154 | 0.004 |
| 4.982 | 3.742 | 0.007 | 0.107 | 0.107 | 568.299 | 0.059 | 0.005 |
| 3.694 | 2.248 | 0.006 | 0.095 | 0.095 | 568.299 | 0.031 | 0.004 |
| 3.246 | 1.301 | 0.006 | 0.060 | 0.060 | 568.299 | 0.024 | 0.004 |
| 1.108 | 1.012 | 0.006 | 0.031 | 0.031 | 568.299 | 0.020 | 0.004 |
| 1.061 | 0.937 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 1.061 | 0.955 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 | 0.004 |
| 1.087 | 2.910 | 0.005 | 0.053 | 0.053 | 568.299 | 0.023 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 | 0.005 |
| 3.439 | 2.082 | 0.005 | 0.085 | 0.078 | 466.738 | 0.151 | 0.004 |
| 3.078 | 1.154 | 0.005 | 0.057 | 0.052 | 472.496 | 0.153 | 0.004 |
| 1.081 | 0.962 | 0.005 | 0.032 | 0.029 | 472.560 | 0.153 | 0.004 |
| 1.051 | 0.726 | 0.005 | 0.026 | 0.024 | 470.292 | 0.152 | 0.004 |
| 1.135 | 1.026 | 0.005 | 0.038 | 0.035 | 468.558 | 0.152 | 0.004 |
| 5.029 | 3.932 | 0.005 | 0.178 | 0.164 | 525.483 | 0.170 | 0.005 |
| 3.611 | 2.607 | 0.005 | 0.140 | 0.128 | 471.529 | 0.153 | 0.004 |
| 3.170 | 1.653 | 0.005 | 0.084 | 0.078 | 472.106 | 0.153 | 0.004 |
| 1.214 | 1.466 | 0.005 | 0.056 | 0.052 | 473.326 | 0.153 | 0.004 |
| 1.222 | 1.658 | 0.005 | 0.062 | 0.057 | 473.615 | 0.153 | 0.004 |
| 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 3.758 | 3.481 | 0.007 | 0.093 | 0.093 | 568.300 | 0.039 | 0.005 |
| 3.338 | 2.185 | 0.006 | 0.087 | 0.087 | 568.299 | 0.021 | 0.004 |
| 2.930 | 1.297 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |
| 1.000 | 1.020 | 0.006 | 0.028 | 0.028 | 568.299 | 0.013 | 0.004 |
| 0.981 | 0.945 | 0.005 | 0.027 | 0.027 | 568.300 | 0.013 | 0.004 |
| 0.981 | 0.964 | 0.005 | 0.027 | 0.027 | 568.299 | 0.013 | 0.004 |
| 1.008 | 2.812 | 0.005 | 0.047 | 0.047 | 568.299 | 0.015 | 0.004 |
| 7.125 | 5.043 | 0.005 | 0.522 | 0.480 | 493.532 | 0.160 | 0.005 |
| 4.149 | 5.074 | 0.005 | 0.371 | 0.342 | 468.316 | 0.152 | 0.004 |
| 3.418 | 2.774 | 0.005 | 0.152 | 0.140 | 478.508 | 0.155 | 0.004 |
| 1.179 | 2.556 | 0.005 | 0.082 | 0.076 | 473.470 | 0.153 | 0.004 |
| 1.315 | 2.265 | 0.005 | 0.088 | 0.081 | 470.753 | 0.152 | 0.004 |
| 1.141 | 1.125 | 0.005 | 0.041 | 0.041 | 568.300 | 0.022 | 0.004 |
| 3.669 | 2.707 | 0.005 | 0.144 | 0.132 | 476.921 | 0.154 | 0.004 |
| 3.142 | 1.349 | 0.005 | 0.065 | 0.060 | 473.302 | 0.153 | 0.004 |
| 1.130 | 1.116 | 0.005 | 0.040 | 0.037 | 470.861 | 0.152 | 0.004 |
| 1.135 | 1.118 | 0.005 | 0.045 | 0.041 | 471.917 | 0.153 | 0.004 |
| 1.077 | 2.482 | 0.005 | 0.070 | 0.064 | 472.055 | 0.153 | 0.004 |
| 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |
| 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 | 0.005 |
| 3.584 | 3.252 | 0.005 | 0.203 | 0.187 | 472.748 | 0.153 | 0.004 |
| 3.136 | 2.167 | 0.005 | 0.112 | 0.103 | 469.843 | 0.152 | 0.004 |
| 1.358 | 1.552 | 0.005 | 0.059 | 0.055 | 476.296 | 0.154 | 0.004 |
| 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 | 0.005 |
| 3.612 | 2.439 | 0.005 | 0.118 | 0.109 | 470.000 | 0.152 | 0.004 |
| 3.204 | 1.364 | 0.005 | 0.070 | 0.065 | 471.850 | 0.153 | 0.004 |
| 1.132 | 1.028 | 0.005 | 0.036 | 0.033 | 473.223 | 0.153 | 0.004 |
| 1.109 | 1.053 | 0.005 | 0.035 | 0.033 | 472.929 | 0.153 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.115 | 0.629 | 0.005 | 0.023 | 0.021 | 473.464 | 0.153 | 0.004 |
| 1.067 | 3.985 | 0.005 | 0.081 | 0.074 | 472.055 | 0.153 | 0.004 |
| 5.248 | 4.233 | 0.005 | 0.239 | 0.219 | 523.709 | 0.169 | 0.005 |
| 3.497 | 2.055 | 0.005 | 0.081 | 0.074 | 473.588 | 0.153 | 0.004 |
| 3.168 | 1.396 | 0.005 | 0.072 | 0.067 | 472.219 | 0.153 | 0.004 |
| 1.197 | 1.774 | 0.005 | 0.060 | 0.055 | 471.482 | 0.153 | 0.004 |
| 1.260 | 1.601 | 0.005 | 0.067 | 0.061 | 470.297 | 0.152 | 0.004 |
| 0.959 | 2.298 | 0.005 | 0.019 | 0.017 | 472.055 | 0.153 | 0.004 |
| 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 | 0.005 |
| 3.493 | 3.068 | 0.005 | 0.191 | 0.175 | 469.899 | 0.152 | 0.004 |
| 3.007 | 1.644 | 0.005 | 0.077 | 0.071 | 472.485 | 0.153 | 0.004 |
| 1.004 | 1.035 | 0.005 | 0.034 | 0.031 | 473.483 | 0.153 | 0.004 |
| 0.969 | 1.134 | 0.005 | 0.039 | 0.036 | 465.882 | 0.151 | 0.004 |
| 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 | 0.005 |
| 3.483 | 2.496 | 0.005 | 0.118 | 0.108 | 473.424 | 0.153 | 0.004 |
| 3.038 | 1.509 | 0.005 | 0.075 | 0.069 | 470.484 | 0.152 | 0.004 |
| 1.117 | 1.110 | 0.005 | 0.043 | 0.040 | 472.234 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 | 0.005 |
| 3.210 | 3.344 | 0.007 | 0.075 | 0.075 | 568.299 | 0.027 | 0.005 |
| 3.186 | 2.100 | 0.006 | 0.072 | 0.072 | 568.299 | 0.017 | 0.004 |
| 2.907 | 1.310 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 | 0.004 |



|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.299 | 0.061 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 3.943 | 3.528 | 0.007 | 0.099 | 0.099 | 568.299 | 0.043 | 0.005 |
| 3.389 | 2.213 | 0.006 | 0.092 | 0.092 | 568.299 | 0.023 | 0.004 |
| 2.974 | 1.318 | 0.006 | 0.056 | 0.056 | 568.300 | 0.018 | 0.004 |
| 1.016 | 1.038 | 0.006 | 0.029 | 0.029 | 568.299 | 0.014 | 0.004 |
| 0.992 | 0.958 | 0.005 | 0.028 | 0.028 | 568.300 | 0.014 | 0.004 |
| 0.992 | 0.977 | 0.005 | 0.029 | 0.029 | 568.300 | 0.014 | 0.004 |
| 1.020 | 2.840 | 0.005 | 0.049 | 0.049 | 568.299 | 0.016 | 0.004 |
| 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 | 0.005 |
| 3.444 | 2.691 | 0.005 | 0.135 | 0.125 | 473.851 | 0.153 | 0.004 |
| 2.909 | 1.101 | 0.005 | 0.049 | 0.046 | 471.970 | 0.153 | 0.004 |
| 1.215 | 1.783 | 0.005 | 0.066 | 0.060 | 473.681 | 0.153 | 0.004 |
| 1.968 | 2.200 | 0.005 | 0.091 | 0.083 | 477.573 | 0.155 | 0.004 |
| 3.740 | 3.477 | 0.005 | 0.128 | 0.118 | 525.027 | 0.170 | 0.005 |
| 3.240 | 1.821 | 0.005 | 0.051 | 0.047 | 473.037 | 0.153 | 0.004 |
| 2.821 | 0.786 | 0.005 | 0.030 | 0.028 | 471.475 | 0.153 | 0.004 |
| 1.001 | 1.489 | 0.005 | 0.035 | 0.033 | 472.927 | 0.153 | 0.004 |
| 0.942 | 0.477 | 0.005 | 0.009 | 0.008 | 466.541 | 0.151 | 0.004 |
| 3.612 | 4.229 | 0.005 | 0.231 | 0.212 | 474.103 | 0.153 | 0.004 |
| 1.720 | 3.805 | 0.005 | 0.167 | 0.153 | 474.573 | 0.154 | 0.004 |
| 2.959 | 3.370 | 0.005 | 0.151 | 0.139 | 479.092 | 0.155 | 0.004 |
| 2.601 | 5.333 | 0.005 | 0.196 | 0.181 | 472.998 | 0.153 | 0.004 |
| 1.725 | 4.365 | 0.005 | 0.115 | 0.115 | 568.299 | 0.037 | 0.004 |
| 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 | 0.005 |
| 3.791 | 2.970 | 0.005 | 0.179 | 0.165 | 466.898 | 0.151 | 0.004 |
| 3.281 | 1.590 | 0.005 | 0.084 | 0.077 | 470.459 | 0.152 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.142 | 1.442 | 0.005 | 0.048 | 0.045 | 469.871 | 0.152 | 0.004 |
| 1.276 | 1.433 | 0.005 | 0.053 | 0.048 | 469.143 | 0.152 | 0.004 |
| 1.333 | 1.654 | 0.005 | 0.064 | 0.059 | 465.052 | 0.150 | 0.004 |
| 1.122 | 3.089 | 0.005 | 0.052 | 0.048 | 472.456 | 0.153 | 0.004 |
| 4.094 | 5.503 | 0.005 | 0.405 | 0.372 | 482.363 | 0.156 | 0.004 |
| 3.321 | 2.631 | 0.005 | 0.137 | 0.126 | 478.948 | 0.155 | 0.004 |
| 1.602 | 2.803 | 0.005 | 0.125 | 0.115 | 469.446 | 0.152 | 0.004 |
| 1.732 | 2.051 | 0.005 | 0.081 | 0.074 | 472.539 | 0.153 | 0.004 |
| 1.338 | 1.713 | 0.005 | 0.064 | 0.059 | 472.115 | 0.153 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.217 | 3.561 | 0.007 | 0.098 | 0.098 | 568.299 | 0.047 | 0.005 |
| 3.470 | 2.179 | 0.006 | 0.089 | 0.089 | 568.299 | 0.025 | 0.004 |
| 3.049 | 1.262 | 0.006 | 0.055 | 0.055 | 568.299 | 0.019 | 0.004 |
| 1.257 | 1.192 | 0.007 | 0.035 | 0.035 | 686.695 | 0.019 | 0.004 |
| 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 | 0.005 |
| 3.252 | 1.867 | 0.005 | 0.057 | 0.052 | 472.630 | 0.153 | 0.004 |
| 3.537 | 3.576 | 0.006 | 0.082 | 0.075 | 536.140 | 0.173 | 0.005 |
| 3.385 | 2.659 | 0.005 | 0.124 | 0.114 | 476.766 | 0.154 | 0.004 |
| 2.926 | 1.999 | 0.005 | 0.094 | 0.087 | 471.040 | 0.152 | 0.004 |
| 1.143 | 1.747 | 0.005 | 0.055 | 0.051 | 477.110 | 0.154 | 0.004 |
| 1.169 | 1.327 | 0.005 | 0.051 | 0.047 | 470.283 | 0.152 | 0.004 |
| 0.978 | 0.768 | 0.005 | 0.027 | 0.025 | 470.551 | 0.152 | 0.004 |
| 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 | 0.005 |
| 3.664 | 2.817 | 0.005 | 0.160 | 0.147 | 474.116 | 0.153 | 0.004 |
| 3.201 | 1.638 | 0.005 | 0.072 | 0.066 | 473.122 | 0.153 | 0.004 |
| 1.140 | 1.616 | 0.005 | 0.051 | 0.047 | 470.126 | 0.152 | 0.004 |
| 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 | 0.005 |
| 3.522 | 2.109 | 0.005 | 0.086 | 0.079 | 477.188 | 0.154 | 0.004 |
| 3.083 | 1.180 | 0.005 | 0.059 | 0.054 | 469.329 | 0.152 | 0.004 |
| 1.146 | 1.235 | 0.005 | 0.047 | 0.044 | 470.598 | 0.152 | 0.004 |
| 1.234 | 1.046 | 0.005 | 0.039 | 0.036 | 470.910 | 0.152 | 0.004 |
| 1.261 | 1.649 | 0.005 | 0.067 | 0.062 | 466.452 | 0.151 | 0.004 |
| 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 | 0.005 |
| 3.734 | 4.279 | 0.005 | 0.285 | 0.262 | 475.901 | 0.154 | 0.004 |
| 3.309 | 3.549 | 0.005 | 0.179 | 0.165 | 467.732 | 0.151 | 0.004 |
| 1.601 | 3.315 | 0.005 | 0.144 | 0.133 | 473.917 | 0.153 | 0.004 |
| 1.676 | 1.826 | 0.005 | 0.079 | 0.072 | 470.439 | 0.152 | 0.004 |
| 0.962 | 0.305 | 0.005 | 0.009 | 0.009 | 474.486 | 0.154 | 0.004 |
| 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.300 | 0.061 | 0.005 |
| 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 | 0.005 |
| 4.524 | 3.676 | 0.007 | 0.112 | 0.112 | 568.299 | 0.054 | 0.005 |
| 3.557 | 2.283 | 0.006 | 0.102 | 0.102 | 568.299 | 0.028 | 0.004 |
| 3.121 | 1.365 | 0.006 | 0.063 | 0.063 | 568.299 | 0.022 | 0.004 |
| 1.065 | 1.075 | 0.006 | 0.032 | 0.032 | 568.299 | 0.018 | 0.004 |
| 1.029 | 0.990 | 0.005 | 0.031 | 0.031 | 568.299 | 0.017 | 0.004 |
| 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 | 0.004 |
| 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 | 0.004 |
| 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 | 0.004 |
| 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 | 0.004 |
| 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 | 0.004 |

| 2028             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     |
| Aerial Lifts     | 15    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   |
| Aerial Lifts     | 25    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   |
| Aerial Lifts     | 50    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   | 0.019   | 525.074 | 0.170   |
| Aerial Lifts     | 120   | 0.099   | 3.167   | 1.511   | 0.005   | 0.026   | 0.024   | 472.114 | 0.153   |
| Aerial Lifts     | 500   | 0.085   | 0.970   | 0.649   | 0.005   | 0.009   | 0.009   | 472.055 | 0.153   |
| Aerial Lifts     | 750   | 0.153   | 0.989   | 0.974   | 0.005   | 0.028   | 0.028   | 568.299 | 0.013   |
| Air Compressor s | 15    | 0.683   | 3.491   | 4.278   | 0.008   | 0.183   | 0.183   | 568.300 | 0.061   |
| Air Compressor s | 25    | 0.709   | 2.376   | 4.407   | 0.007   | 0.177   | 0.177   | 568.299 | 0.064   |
| Air Compressor s | 50    | 0.659   | 4.851   | 3.755   | 0.007   | 0.116   | 0.116   | 568.299 | 0.059   |
| Air Compressor s | 120   | 0.345   | 3.653   | 2.313   | 0.006   | 0.104   | 0.104   | 568.299 | 0.031   |
| Air Compressor s | 175   | 0.269   | 3.205   | 1.383   | 0.006   | 0.065   | 0.065   | 568.299 | 0.024   |
| Air Compressor s | 250   | 0.220   | 1.094   | 1.086   | 0.006   | 0.033   | 0.033   | 568.299 | 0.019   |
| Air Compressor s | 500   | 0.217   | 1.051   | 1.001   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   |
| Air Compressor s | 750   | 0.217   | 1.051   | 1.021   | 0.005   | 0.032   | 0.032   | 568.299 | 0.019   |
| Air Compressor s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   | 0.055   | 0.055   | 568.299 | 0.020   |
| Bore/Drill Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   |
| Bore/Drill Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   |
| Bore/Drill Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   | 0.178   | 532.821 | 0.172   |
| Bore/Drill Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   | 0.067   | 0.062   | 459.829 | 0.149   |
| Bore/Drill Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   | 0.039   | 0.036   | 478.266 | 0.155   |
| Bore/Drill Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   | 0.031   | 0.029   | 470.654 | 0.152   |
| Bore/Drill Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   | 0.028   | 0.026   | 467.289 | 0.151   |
| Bore/Drill Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   | 0.023   | 0.021   | 481.250 | 0.156   |
| Bore/Drill Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   | 0.019   | 0.017   | 471.917 | 0.153   |

|                          |      |       |       |       |       |       |       |         |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 | 0.168 | 0.168 | 568.299 | 0.062 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 | 0.099 | 0.099 | 568.299 | 0.047 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 | 0.089 | 0.089 | 568.300 | 0.025 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 | 0.056 | 0.056 | 568.300 | 0.019 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 | 0.543 | 0.499 | 517.872 | 0.168 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 | 0.260 | 0.240 | 469.533 | 0.152 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 | 0.166 | 0.153 | 474.748 | 0.154 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 | 0.114 | 0.105 | 472.980 | 0.153 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 | 0.088 | 0.081 | 471.967 | 0.153 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 | 0.068 | 0.062 | 470.276 | 0.152 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 | 0.065 | 0.060 | 472.055 | 0.153 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 | 0.456 | 0.420 | 516.128 | 0.167 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 | 0.285 | 0.262 | 476.134 | 0.154 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 | 0.150 | 0.138 | 471.592 | 0.153 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 | 0.096 | 0.088 | 471.622 | 0.153 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 | 0.081 | 0.074 | 474.007 | 0.153 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 | 0.057 | 0.052 | 472.408 | 0.153 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 | 0.112 | 0.103 | 475.490 | 0.154 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 | 0.107 | 0.107 | 568.299 | 0.059 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 | 0.095 | 0.095 | 568.299 | 0.031 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 | 0.060 | 0.060 | 568.299 | 0.024 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 | 0.031 | 0.031 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 | 0.030 | 0.030 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 | 0.053 | 0.053 | 568.299 | 0.023 |

|                      |      |       |       |       |       |       |       |         |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Excavators           | 25   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 |
| Excavators           | 50   | 0.403 | 4.219 | 3.453 | 0.005 | 0.107 | 0.099 | 525.777 | 0.170 |
| Excavators           | 120  | 0.201 | 3.439 | 2.082 | 0.005 | 0.085 | 0.078 | 466.738 | 0.151 |
| Excavators           | 175  | 0.158 | 3.078 | 1.154 | 0.005 | 0.057 | 0.052 | 472.496 | 0.153 |
| Excavators           | 250  | 0.131 | 1.081 | 0.962 | 0.005 | 0.032 | 0.029 | 472.560 | 0.153 |
| Excavators           | 500  | 0.115 | 1.051 | 0.726 | 0.005 | 0.026 | 0.024 | 470.292 | 0.152 |
| Excavators           | 750  | 0.139 | 1.135 | 1.026 | 0.005 | 0.038 | 0.035 | 468.558 | 0.152 |
| Forklifts            | 50   | 0.636 | 5.029 | 3.932 | 0.005 | 0.178 | 0.164 | 525.483 | 0.170 |
| Forklifts            | 120  | 0.277 | 3.611 | 2.607 | 0.005 | 0.140 | 0.128 | 471.529 | 0.153 |
| Forklifts            | 175  | 0.209 | 3.170 | 1.653 | 0.005 | 0.084 | 0.078 | 472.106 | 0.153 |
| Forklifts            | 250  | 0.191 | 1.214 | 1.466 | 0.005 | 0.056 | 0.052 | 473.326 | 0.153 |
| Forklifts            | 500  | 0.215 | 1.222 | 1.658 | 0.005 | 0.062 | 0.057 | 473.615 | 0.153 |
| Generator Sets       | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 |
| Generator Sets       | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 |
| Generator Sets       | 50   | 0.440 | 3.758 | 3.481 | 0.007 | 0.093 | 0.093 | 568.300 | 0.039 |
| Generator Sets       | 120  | 0.243 | 3.338 | 2.185 | 0.006 | 0.087 | 0.087 | 568.299 | 0.021 |
| Generator Sets       | 175  | 0.184 | 2.930 | 1.297 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 |
| Generator Sets       | 250  | 0.147 | 1.000 | 1.020 | 0.006 | 0.028 | 0.028 | 568.299 | 0.013 |
| Generator Sets       | 500  | 0.144 | 0.981 | 0.945 | 0.005 | 0.027 | 0.027 | 568.300 | 0.013 |
| Generator Sets       | 750  | 0.145 | 0.981 | 0.964 | 0.005 | 0.027 | 0.027 | 568.299 | 0.013 |
| Generator Sets       | 9999 | 0.173 | 1.008 | 2.812 | 0.005 | 0.047 | 0.047 | 568.299 | 0.015 |
| Graders              | 50   | 1.864 | 7.125 | 5.043 | 0.005 | 0.522 | 0.480 | 493.532 | 0.160 |
| Graders              | 120  | 0.638 | 4.149 | 5.074 | 0.005 | 0.371 | 0.342 | 468.316 | 0.152 |
| Graders              | 175  | 0.329 | 3.418 | 2.774 | 0.005 | 0.152 | 0.140 | 478.508 | 0.155 |
| Graders              | 250  | 0.230 | 1.179 | 2.556 | 0.005 | 0.082 | 0.076 | 473.470 | 0.153 |
| Graders              | 500  | 0.280 | 1.315 | 2.265 | 0.005 | 0.088 | 0.081 | 470.753 | 0.152 |
| Graders              | 750  | 0.253 | 1.141 | 1.125 | 0.005 | 0.041 | 0.041 | 568.300 | 0.022 |
| Off-Highway Tractors | 120  | 0.276 | 3.669 | 2.707 | 0.005 | 0.144 | 0.132 | 476.921 | 0.154 |
| Off-Highway Tractors | 175  | 0.175 | 3.142 | 1.349 | 0.005 | 0.065 | 0.060 | 473.302 | 0.153 |
| Off-Highway Tractors | 250  | 0.155 | 1.130 | 1.116 | 0.005 | 0.040 | 0.037 | 470.861 | 0.152 |
| Off-Highway Tractors | 750  | 0.167 | 1.135 | 1.118 | 0.005 | 0.045 | 0.041 | 471.917 | 0.153 |
| Off-Highway Tractors | 1000 | 0.198 | 1.077 | 2.482 | 0.005 | 0.070 | 0.064 | 472.055 | 0.153 |
| Off-Highway Trucks   | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 |
| Off-Highway Trucks   | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 | 0.246 | 528.954 | 0.171 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 | 0.203 | 0.187 | 472.748 | 0.153 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 | 0.112 | 0.103 | 469.843 | 0.152 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 | 0.059 | 0.055 | 476.296 | 0.154 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 | 0.125 | 526.176 | 0.170 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 | 0.118 | 0.109 | 470.000 | 0.152 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 | 0.070 | 0.065 | 471.850 | 0.153 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 | 0.036 | 0.033 | 473.223 | 0.153 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 | 0.035 | 0.033 | 472.929 | 0.153 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 | 0.023 | 0.021 | 473.464 | 0.153 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 | 0.081 | 0.074 | 472.055 | 0.153 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 | 0.239 | 0.219 | 523.709 | 0.169 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 | 0.081 | 0.074 | 473.588 | 0.153 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 | 0.072 | 0.067 | 472.219 | 0.153 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 | 0.060 | 0.055 | 471.482 | 0.153 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 | 0.067 | 0.061 | 470.297 | 0.152 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 | 0.019 | 0.017 | 472.055 | 0.153 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 | 0.243 | 526.853 | 0.170 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 | 0.191 | 0.175 | 469.899 | 0.152 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 | 0.077 | 0.071 | 472.485 | 0.153 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 | 0.034 | 0.031 | 473.483 | 0.153 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 | 0.039 | 0.036 | 465.882 | 0.151 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 | 0.130 | 520.998 | 0.169 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 | 0.118 | 0.108 | 473.424 | 0.153 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 | 0.075 | 0.069 | 470.484 | 0.152 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 | 0.043 | 0.040 | 472.234 | 0.153 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 | 0.178 | 568.299 | 0.054 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 | 0.175 | 568.299 | 0.062 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 | 0.075 | 0.075 | 568.299 | 0.027 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 | 0.072 | 0.072 | 568.299 | 0.017 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 | 0.053 | 0.053 | 568.299 | 0.016 |



|                         |      |       |       |       |       |       |       |         |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 |
| Pumps                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.299 | 0.061 |
| Pumps                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 |
| Pumps                   | 50   | 0.485 | 3.943 | 3.528 | 0.007 | 0.099 | 0.099 | 568.299 | 0.043 |
| Pumps                   | 120  | 0.261 | 3.389 | 2.213 | 0.006 | 0.092 | 0.092 | 568.299 | 0.023 |
| Pumps                   | 175  | 0.199 | 2.974 | 1.318 | 0.006 | 0.056 | 0.056 | 568.300 | 0.018 |
| Pumps                   | 250  | 0.159 | 1.016 | 1.038 | 0.006 | 0.029 | 0.029 | 568.299 | 0.014 |
| Pumps                   | 500  | 0.156 | 0.992 | 0.958 | 0.005 | 0.028 | 0.028 | 568.300 | 0.014 |
| Pumps                   | 750  | 0.157 | 0.992 | 0.977 | 0.005 | 0.029 | 0.029 | 568.300 | 0.014 |
| Pumps                   | 9999 | 0.186 | 1.020 | 2.840 | 0.005 | 0.049 | 0.049 | 568.299 | 0.016 |
| Rollers                 | 15   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 |
| Rollers                 | 25   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 |
| Rollers                 | 50   | 0.569 | 4.125 | 3.689 | 0.005 | 0.167 | 0.154 | 526.141 | 0.170 |
| Rollers                 | 120  | 0.255 | 3.444 | 2.691 | 0.005 | 0.135 | 0.125 | 473.851 | 0.153 |
| Rollers                 | 175  | 0.127 | 2.909 | 1.101 | 0.005 | 0.049 | 0.046 | 471.970 | 0.153 |
| Rollers                 | 250  | 0.173 | 1.215 | 1.783 | 0.005 | 0.066 | 0.060 | 473.681 | 0.153 |
| Rollers                 | 500  | 0.212 | 1.968 | 2.200 | 0.005 | 0.091 | 0.083 | 477.573 | 0.155 |
| Rough Terrain Forklifts | 50   | 0.456 | 3.740 | 3.477 | 0.005 | 0.128 | 0.118 | 525.027 | 0.170 |
| Rough Terrain Forklifts | 120  | 0.137 | 3.240 | 1.821 | 0.005 | 0.051 | 0.047 | 473.037 | 0.153 |
| Rough Terrain Forklifts | 175  | 0.087 | 2.821 | 0.786 | 0.005 | 0.030 | 0.028 | 471.475 | 0.153 |
| Rough Terrain Forklifts | 250  | 0.123 | 1.001 | 1.489 | 0.005 | 0.035 | 0.033 | 472.927 | 0.153 |
| Rough Terrain Forklifts | 500  | 0.069 | 0.942 | 0.477 | 0.005 | 0.009 | 0.008 | 466.541 | 0.151 |
| Rubber Tired Dozers     | 175  | 0.461 | 3.612 | 4.229 | 0.005 | 0.231 | 0.212 | 474.103 | 0.153 |
| Rubber Tired Dozers     | 250  | 0.372 | 1.720 | 3.805 | 0.005 | 0.167 | 0.153 | 474.573 | 0.154 |
| Rubber Tired Dozers     | 500  | 0.367 | 2.959 | 3.370 | 0.005 | 0.151 | 0.139 | 479.092 | 0.155 |
| Rubber Tired Dozers     | 750  | 0.428 | 2.601 | 5.333 | 0.005 | 0.196 | 0.181 | 472.998 | 0.153 |
| Rubber Tired Dozers     | 1000 | 0.414 | 1.725 | 4.365 | 0.005 | 0.115 | 0.115 | 568.299 | 0.037 |
| Rubber Tired Loaders    | 25   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 |
| Rubber Tired Loaders    | 50   | 0.960 | 5.941 | 4.348 | 0.005 | 0.259 | 0.238 | 523.908 | 0.169 |
| Rubber Tired Loaders    | 120  | 0.352 | 3.791 | 2.970 | 0.005 | 0.179 | 0.165 | 466.898 | 0.151 |
| Rubber Tired Loaders    | 175  | 0.224 | 3.281 | 1.590 | 0.005 | 0.084 | 0.077 | 470.459 | 0.152 |

|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 | 0.048 | 0.045 | 469.871 | 0.152 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 | 0.053 | 0.048 | 469.143 | 0.152 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 | 0.064 | 0.059 | 465.052 | 0.150 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 | 0.052 | 0.048 | 472.456 | 0.153 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 | 0.405 | 0.372 | 482.363 | 0.156 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 | 0.137 | 0.126 | 478.948 | 0.155 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 | 0.125 | 0.115 | 469.446 | 0.152 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 | 0.081 | 0.074 | 472.539 | 0.153 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 | 0.064 | 0.059 | 472.115 | 0.153 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 | 0.098 | 0.098 | 568.299 | 0.047 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 | 0.089 | 0.089 | 568.299 | 0.025 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 | 0.055 | 0.055 | 568.299 | 0.019 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 | 0.035 | 0.035 | 686.695 | 0.019 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 | 0.077 | 527.861 | 0.171 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 | 0.057 | 0.052 | 472.630 | 0.153 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 | 0.082 | 0.075 | 536.140 | 0.173 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 | 0.124 | 0.114 | 476.766 | 0.154 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 | 0.094 | 0.087 | 471.040 | 0.152 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 | 0.055 | 0.051 | 477.110 | 0.154 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 | 0.051 | 0.047 | 470.283 | 0.152 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 | 0.027 | 0.025 | 470.551 | 0.152 |
| Sweepers/S crubbers       | 15   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 |
| Sweepers/S crubbers       | 25   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 |
| Sweepers/S crubbers       | 50   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 | 0.176 | 525.328 | 0.170 |
| Sweepers/S crubbers       | 120  | 0.303 | 3.664 | 2.817 | 0.005 | 0.160 | 0.147 | 474.116 | 0.153 |
| Sweepers/S crubbers       | 175  | 0.213 | 3.201 | 1.638 | 0.005 | 0.072 | 0.066 | 473.122 | 0.153 |
| Sweepers/S crubbers       | 250  | 0.170 | 1.140 | 1.616 | 0.005 | 0.051 | 0.047 | 470.126 | 0.152 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 |

|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 | 0.133 | 513.803 | 0.166 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 | 0.086 | 0.079 | 477.188 | 0.154 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 | 0.059 | 0.054 | 469.329 | 0.152 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 | 0.047 | 0.044 | 470.598 | 0.152 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 | 0.039 | 0.036 | 470.910 | 0.152 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 | 0.067 | 0.062 | 466.452 | 0.151 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 | 0.150 | 527.160 | 0.171 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 | 0.285 | 0.262 | 475.901 | 0.154 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 | 0.179 | 0.165 | 467.732 | 0.151 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 | 0.144 | 0.133 | 473.917 | 0.153 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 | 0.079 | 0.072 | 470.439 | 0.152 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 | 0.009 | 0.009 | 474.486 | 0.154 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 | 0.183 | 568.300 | 0.061 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 | 0.177 | 568.299 | 0.064 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 | 0.112 | 0.112 | 568.299 | 0.054 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 | 0.102 | 0.102 | 568.299 | 0.028 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 | 0.063 | 0.063 | 568.299 | 0.022 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 | 0.032 | 0.032 | 568.299 | 0.018 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 | 0.031 | 0.031 | 568.299 | 0.017 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 | 0.060 | 470.004 | 0.152 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 | 0.040 | 469.126 | 0.152 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 | 0.035 | 474.970 | 0.154 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 | 0.061 | 476.314 | 0.154 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 | 0.052 | 473.369 | 0.153 |

2029

|         |
|---------|
| g/hp/hr |
| N2O     |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |

| 2029             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    |
| Aerial Lifts     | 15    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   |
| Aerial Lifts     | 25    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   |
| Aerial Lifts     | 50    | 0.154   | 3.088   | 2.879   | 0.005   | 0.021   |
| Aerial Lifts     | 120   | 0.099   | 3.167   | 1.511   | 0.005   | 0.026   |
| Aerial Lifts     | 500   | 0.085   | 0.970   | 0.649   | 0.005   | 0.009   |
| Aerial Lifts     | 750   | 0.153   | 0.989   | 0.974   | 0.005   | 0.028   |
| Air Compressor s | 15    | 0.683   | 3.491   | 4.278   | 0.008   | 0.183   |
| Air Compressor s | 25    | 0.709   | 2.376   | 4.407   | 0.007   | 0.177   |
| Air Compressor s | 50    | 0.659   | 4.851   | 3.755   | 0.007   | 0.116   |
| Air Compressor s | 120   | 0.345   | 3.653   | 2.313   | 0.006   | 0.104   |
| Air Compressor s | 175   | 0.269   | 3.205   | 1.383   | 0.006   | 0.065   |
| Air Compressor s | 250   | 0.220   | 1.094   | 1.086   | 0.006   | 0.033   |
| Air Compressor s | 500   | 0.217   | 1.051   | 1.001   | 0.005   | 0.032   |
| Air Compressor s | 750   | 0.217   | 1.051   | 1.021   | 0.005   | 0.032   |
| Air Compressor s | 1000  | 0.231   | 1.079   | 2.954   | 0.005   | 0.055   |
| Bore/Drill Rigs  | 15    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   |
| Bore/Drill Rigs  | 25    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   |
| Bore/Drill Rigs  | 50    | 0.591   | 4.273   | 3.978   | 0.006   | 0.193   |
| Bore/Drill Rigs  | 120   | 0.155   | 3.218   | 1.964   | 0.005   | 0.067   |
| Bore/Drill Rigs  | 175   | 0.114   | 2.974   | 0.888   | 0.005   | 0.039   |
| Bore/Drill Rigs  | 250   | 0.107   | 1.045   | 0.957   | 0.005   | 0.031   |
| Bore/Drill Rigs  | 500   | 0.102   | 0.997   | 0.823   | 0.005   | 0.028   |
| Bore/Drill Rigs  | 750   | 0.085   | 0.983   | 0.596   | 0.005   | 0.023   |
| Bore/Drill Rigs  | 1000  | 0.062   | 0.953   | 2.289   | 0.005   | 0.019   |

|       |
|-------|
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                          |      |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.689 | 2.344 | 4.357 | 0.007 | 0.168 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.525 | 4.297 | 3.592 | 0.007 | 0.099 |
| Concrete/Industrial Saws | 120  | 0.283 | 3.495 | 2.176 | 0.006 | 0.089 |
| Concrete/Industrial Saws | 175  | 0.220 | 3.073 | 1.249 | 0.006 | 0.056 |
| Cranes                   | 50   | 1.811 | 7.072 | 5.636 | 0.005 | 0.543 |
| Cranes                   | 120  | 0.463 | 3.831 | 4.135 | 0.005 | 0.260 |
| Cranes                   | 175  | 0.334 | 3.335 | 3.160 | 0.005 | 0.166 |
| Cranes                   | 250  | 0.265 | 1.470 | 2.681 | 0.005 | 0.114 |
| Cranes                   | 500  | 0.218 | 1.834 | 2.154 | 0.005 | 0.088 |
| Cranes                   | 750  | 0.172 | 1.274 | 1.638 | 0.005 | 0.068 |
| Cranes                   | 9999 | 0.229 | 1.038 | 2.422 | 0.005 | 0.065 |
| Crawler Tractors         | 50   | 1.744 | 6.686 | 4.936 | 0.005 | 0.456 |
| Crawler Tractors         | 120  | 0.454 | 3.788 | 3.961 | 0.005 | 0.285 |
| Crawler Tractors         | 175  | 0.298 | 3.209 | 2.688 | 0.005 | 0.150 |
| Crawler Tractors         | 250  | 0.232 | 1.308 | 2.462 | 0.005 | 0.096 |
| Crawler Tractors         | 500  | 0.208 | 1.717 | 1.920 | 0.005 | 0.081 |
| Crawler Tractors         | 750  | 0.167 | 1.122 | 1.545 | 0.005 | 0.057 |
| Crawler Tractors         | 1000 | 0.260 | 1.593 | 4.598 | 0.005 | 0.112 |
| Crushing/Proc. Equipment | 50   | 0.656 | 4.982 | 3.742 | 0.007 | 0.107 |
| Crushing/Proc. Equipment | 120  | 0.345 | 3.694 | 2.248 | 0.006 | 0.095 |
| Crushing/Proc. Equipment | 175  | 0.270 | 3.246 | 1.301 | 0.006 | 0.060 |
| Crushing/Proc. Equipment | 250  | 0.224 | 1.108 | 1.012 | 0.006 | 0.031 |
| Crushing/Proc. Equipment | 500  | 0.221 | 1.061 | 0.937 | 0.005 | 0.030 |
| Crushing/Proc. Equipment | 750  | 0.222 | 1.061 | 0.955 | 0.005 | 0.030 |
| Crushing/Proc. Equipment | 9999 | 0.261 | 1.087 | 2.910 | 0.005 | 0.053 |



|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 |
| Off-Highway Trucks                 | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 |
| Off-Highway Trucks                 | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 |
| Other Construction Equipment       | 15   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 |
| Other Construction Equipment       | 25   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 |
| Other Construction Equipment       | 50   | 0.757 | 4.874 | 4.306 | 0.006 | 0.268 |
| Other Construction Equipment       | 120  | 0.341 | 3.584 | 3.252 | 0.005 | 0.203 |
| Other Construction Equipment       | 175  | 0.235 | 3.136 | 2.167 | 0.005 | 0.112 |
| Other Construction Equipment       | 500  | 0.168 | 1.358 | 1.552 | 0.005 | 0.059 |
| Other General Industrial Equipment | 15   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 |
| Other General Industrial Equipment | 25   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 |
| Other General Industrial Equipment | 50   | 0.492 | 4.680 | 3.717 | 0.005 | 0.136 |
| Other General Industrial Equipment | 120  | 0.258 | 3.612 | 2.439 | 0.005 | 0.118 |
| Other General Industrial Equipment | 175  | 0.189 | 3.204 | 1.364 | 0.005 | 0.070 |
| Other General Industrial Equipment | 250  | 0.155 | 1.132 | 1.028 | 0.005 | 0.036 |
| Other General Industrial Equipment | 500  | 0.152 | 1.109 | 1.053 | 0.005 | 0.035 |

|       |
|-------|
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.117 | 1.115 | 0.629 | 0.005 | 0.023 |
| Other General Industrial Equipment | 1000 | 0.203 | 1.067 | 3.985 | 0.005 | 0.081 |
| Other Material Handling Equipment  | 50   | 0.744 | 5.248 | 4.233 | 0.005 | 0.239 |
| Other Material Handling Equipment  | 120  | 0.203 | 3.497 | 2.055 | 0.005 | 0.081 |
| Other Material Handling Equipment  | 175  | 0.189 | 3.168 | 1.396 | 0.005 | 0.072 |
| Other Material Handling Equipment  | 250  | 0.200 | 1.197 | 1.774 | 0.005 | 0.060 |
| Other Material Handling Equipment  | 500  | 0.204 | 1.260 | 1.601 | 0.005 | 0.067 |
| Other Material Handling Equipment  | 9999 | 0.065 | 0.959 | 2.298 | 0.005 | 0.019 |
| Pavers                             | 25   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 |
| Pavers                             | 50   | 0.918 | 4.945 | 4.131 | 0.005 | 0.265 |
| Pavers                             | 120  | 0.314 | 3.493 | 3.068 | 0.005 | 0.191 |
| Pavers                             | 175  | 0.181 | 3.007 | 1.644 | 0.005 | 0.077 |
| Pavers                             | 250  | 0.107 | 1.004 | 1.035 | 0.005 | 0.034 |
| Pavers                             | 500  | 0.115 | 0.969 | 1.134 | 0.005 | 0.039 |
| Paving Equipment                   | 25   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 |
| Paving Equipment                   | 50   | 0.476 | 4.203 | 3.627 | 0.005 | 0.142 |
| Paving Equipment                   | 120  | 0.242 | 3.483 | 2.496 | 0.005 | 0.118 |
| Paving Equipment                   | 175  | 0.175 | 3.038 | 1.509 | 0.005 | 0.075 |
| Paving Equipment                   | 250  | 0.133 | 1.117 | 1.110 | 0.005 | 0.043 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Pressure Washers                   | 15   | 0.607 | 3.491 | 4.269 | 0.008 | 0.178 |
| Pressure Washers                   | 25   | 0.694 | 2.376 | 4.407 | 0.007 | 0.175 |
| Pressure Washers                   | 50   | 0.306 | 3.210 | 3.344 | 0.007 | 0.075 |
| Pressure Washers                   | 120  | 0.189 | 3.186 | 2.100 | 0.006 | 0.072 |
| Pressure Washers                   | 175  | 0.178 | 2.907 | 1.310 | 0.006 | 0.053 |





|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.177 | 1.142 | 1.442 | 0.005 | 0.048 |
| Rubber Tired Loaders      | 500  | 0.193 | 1.276 | 1.433 | 0.005 | 0.053 |
| Rubber Tired Loaders      | 750  | 0.212 | 1.333 | 1.654 | 0.005 | 0.064 |
| Rubber Tired Loaders      | 1000 | 0.166 | 1.122 | 3.089 | 0.005 | 0.052 |
| Scrapers                  | 120  | 0.566 | 4.094 | 5.503 | 0.005 | 0.405 |
| Scrapers                  | 175  | 0.290 | 3.321 | 2.631 | 0.005 | 0.137 |
| Scrapers                  | 250  | 0.291 | 1.602 | 2.803 | 0.005 | 0.125 |
| Scrapers                  | 500  | 0.216 | 1.732 | 2.051 | 0.005 | 0.081 |
| Scrapers                  | 750  | 0.184 | 1.338 | 1.713 | 0.005 | 0.064 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Signal Boards             | 50   | 0.522 | 4.217 | 3.561 | 0.007 | 0.098 |
| Signal Boards             | 120  | 0.278 | 3.470 | 2.179 | 0.006 | 0.089 |
| Signal Boards             | 175  | 0.215 | 3.049 | 1.262 | 0.006 | 0.055 |
| Signal Boards             | 250  | 0.213 | 1.257 | 1.192 | 0.007 | 0.035 |
| Skid Steer Loaders        | 25   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 |
| Skid Steer Loaders        | 50   | 0.341 | 3.660 | 3.309 | 0.006 | 0.084 |
| Skid Steer Loaders        | 120  | 0.140 | 3.252 | 1.867 | 0.005 | 0.057 |
| Surfacing Equipment       | 50   | 0.235 | 3.537 | 3.576 | 0.006 | 0.082 |
| Surfacing Equipment       | 120  | 0.232 | 3.385 | 2.659 | 0.005 | 0.124 |
| Surfacing Equipment       | 175  | 0.187 | 2.926 | 1.999 | 0.005 | 0.094 |
| Surfacing Equipment       | 250  | 0.148 | 1.143 | 1.747 | 0.005 | 0.055 |
| Surfacing Equipment       | 500  | 0.128 | 1.169 | 1.327 | 0.005 | 0.051 |
| Surfacing Equipment       | 750  | 0.085 | 0.978 | 0.768 | 0.005 | 0.027 |
| Sweepers/S crubbers       | 15   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 |
| Sweepers/S crubbers       | 25   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 |
| Sweepers/S crubbers       | 50   | 0.622 | 4.768 | 3.856 | 0.005 | 0.191 |
| Sweepers/S crubbers       | 120  | 0.303 | 3.664 | 2.817 | 0.005 | 0.160 |
| Sweepers/S crubbers       | 175  | 0.213 | 3.201 | 1.638 | 0.005 | 0.072 |
| Sweepers/S crubbers       | 250  | 0.170 | 1.140 | 1.616 | 0.005 | 0.051 |
| Tractors/Loaders/Backhoes | 25   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 |

|       |
|-------|
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                           |      |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.550 | 4.560 | 3.662 | 0.005 | 0.145 |
| Tractors/Loaders/Backhoes | 120  | 0.209 | 3.522 | 2.109 | 0.005 | 0.086 |
| Tractors/Loaders/Backhoes | 175  | 0.162 | 3.083 | 1.180 | 0.005 | 0.059 |
| Tractors/Loaders/Backhoes | 250  | 0.154 | 1.146 | 1.235 | 0.005 | 0.047 |
| Tractors/Loaders/Backhoes | 500  | 0.144 | 1.234 | 1.046 | 0.005 | 0.039 |
| Tractors/Loaders/Backhoes | 750  | 0.187 | 1.261 | 1.649 | 0.005 | 0.067 |
| Trenchers                 | 15   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 |
| Trenchers                 | 25   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 |
| Trenchers                 | 50   | 0.542 | 4.120 | 3.657 | 0.005 | 0.163 |
| Trenchers                 | 120  | 0.457 | 3.734 | 4.279 | 0.005 | 0.285 |
| Trenchers                 | 175  | 0.358 | 3.309 | 3.549 | 0.005 | 0.179 |
| Trenchers                 | 250  | 0.307 | 1.601 | 3.315 | 0.005 | 0.144 |
| Trenchers                 | 500  | 0.191 | 1.676 | 1.826 | 0.005 | 0.079 |
| Trenchers                 | 750  | 0.067 | 0.962 | 0.305 | 0.005 | 0.009 |
| Welders                   | 15   | 0.683 | 3.491 | 4.278 | 0.008 | 0.183 |
| Welders                   | 25   | 0.709 | 2.376 | 4.407 | 0.007 | 0.177 |
| Welders                   | 50   | 0.602 | 4.524 | 3.676 | 0.007 | 0.112 |
| Welders                   | 120  | 0.316 | 3.557 | 2.283 | 0.006 | 0.102 |
| Welders                   | 175  | 0.245 | 3.121 | 1.365 | 0.006 | 0.063 |
| Welders                   | 250  | 0.199 | 1.065 | 1.075 | 0.006 | 0.032 |
| Welders                   | 500  | 0.196 | 1.029 | 0.990 | 0.005 | 0.031 |
| Water Trucks              | 175  | 0.214 | 3.328 | 1.335 | 0.005 | 0.065 |
| Water Trucks              | 250  | 0.185 | 1.213 | 1.129 | 0.005 | 0.043 |
| Water Trucks              | 500  | 0.177 | 1.182 | 1.064 | 0.005 | 0.038 |
| Water Trucks              | 750  | 0.235 | 1.578 | 1.751 | 0.005 | 0.066 |
| Water Trucks              | 1000 | 0.187 | 1.146 | 3.135 | 0.005 | 0.057 |

2030

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|
| PM2.5   | CO2     | CH4     | N2O     |
| 0.019   | 525.074 | 0.170   | 0.005   |
| 0.019   | 525.074 | 0.170   | 0.005   |
| 0.019   | 525.074 | 0.170   | 0.005   |
| 0.024   | 472.114 | 0.153   | 0.004   |
| 0.009   | 472.055 | 0.153   | 0.004   |
| 0.028   | 568.299 | 0.013   | 0.004   |
| 0.183   | 568.300 | 0.061   | 0.005   |
| 0.177   | 568.299 | 0.064   | 0.005   |
| 0.116   | 568.299 | 0.059   | 0.005   |
| 0.104   | 568.299 | 0.031   | 0.004   |
| 0.065   | 568.299 | 0.024   | 0.004   |
| 0.033   | 568.299 | 0.019   | 0.004   |
| 0.032   | 568.299 | 0.019   | 0.004   |
| 0.032   | 568.299 | 0.019   | 0.004   |
| 0.055   | 568.299 | 0.020   | 0.004   |
| 0.178   | 532.821 | 0.172   | 0.005   |
| 0.178   | 532.821 | 0.172   | 0.005   |
| 0.178   | 532.821 | 0.172   | 0.005   |
| 0.062   | 459.829 | 0.149   | 0.004   |
| 0.036   | 478.266 | 0.155   | 0.004   |
| 0.029   | 470.654 | 0.152   | 0.004   |
| 0.026   | 467.289 | 0.151   | 0.004   |
| 0.021   | 481.250 | 0.156   | 0.004   |
| 0.017   | 471.917 | 0.153   | 0.004   |

| 2030             |       | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      |
| Aerial Lifts     | 15    | 0.661   | 3.469   |
| Aerial Lifts     | 25    | 0.685   | 2.339   |
| Aerial Lifts     | 50    | 0.339   | 3.764   |
| Aerial Lifts     | 120   | 0.188   | 3.352   |
| Aerial Lifts     | 500   | 0.126   | 0.986   |
| Aerial Lifts     | 750   | 0.126   | 0.986   |
| Air Compressor s | 15    | 0.663   | 3.470   |
| Air Compressor s | 25    | 0.687   | 2.340   |
| Air Compressor s | 50    | 0.506   | 4.712   |
| Air Compressor s | 120   | 0.264   | 3.630   |
| Air Compressor s | 175   | 0.193   | 3.205   |
| Air Compressor s | 250   | 0.179   | 1.092   |
| Air Compressor s | 500   | 0.178   | 1.048   |
| Air Compressor s | 750   | 0.178   | 1.048   |
| Air Compressor s | 1000  | 0.182   | 1.049   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.029   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.038   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.168 | 568.299 | 0.062 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.099 | 568.299 | 0.047 | 0.005 |
| 0.089 | 568.300 | 0.025 | 0.004 |
| 0.056 | 568.300 | 0.019 | 0.004 |
| 0.499 | 517.872 | 0.168 | 0.005 |
| 0.240 | 469.533 | 0.152 | 0.004 |
| 0.153 | 474.748 | 0.154 | 0.004 |
| 0.105 | 472.980 | 0.153 | 0.004 |
| 0.081 | 471.967 | 0.153 | 0.004 |
| 0.062 | 470.276 | 0.152 | 0.004 |
| 0.060 | 472.055 | 0.153 | 0.004 |
| 0.420 | 516.128 | 0.167 | 0.005 |
| 0.262 | 476.134 | 0.154 | 0.004 |
| 0.138 | 471.592 | 0.153 | 0.004 |
| 0.088 | 471.622 | 0.153 | 0.004 |
| 0.074 | 474.007 | 0.153 | 0.004 |
| 0.052 | 472.408 | 0.153 | 0.004 |
| 0.103 | 475.490 | 0.154 | 0.004 |
| 0.107 | 568.299 | 0.059 | 0.005 |
| 0.095 | 568.299 | 0.031 | 0.004 |
| 0.060 | 568.299 | 0.024 | 0.004 |
| 0.031 | 568.299 | 0.020 | 0.004 |
| 0.030 | 568.299 | 0.020 | 0.004 |
| 0.030 | 568.299 | 0.020 | 0.004 |
| 0.053 | 568.299 | 0.023 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 50   | 0.409 | 4.199 |
| Concrete/Industrial Saws | 120  | 0.221 | 3.480 |
| Concrete/Industrial Saws | 175  | 0.163 | 3.074 |
| Cranes                   | 50   | 0.684 | 5.366 |
| Cranes                   | 120  | 0.343 | 3.812 |
| Cranes                   | 175  | 0.253 | 3.356 |
| Cranes                   | 250  | 0.224 | 1.147 |
| Cranes                   | 500  | 0.222 | 1.090 |
| Cranes                   | 750  | 0.222 | 1.090 |
| Cranes                   | 9999 | 0.245 | 1.108 |
| Crawler Tractors         | 50   | 0.833 | 5.605 |
| Crawler Tractors         | 120  | 0.405 | 3.871 |
| Crawler Tractors         | 175  | 0.296 | 3.397 |
| Crawler Tractors         | 250  | 0.262 | 1.207 |
| Crawler Tractors         | 500  | 0.257 | 1.200 |
| Crawler Tractors         | 750  | 0.257 | 1.200 |
| Crawler Tractors         | 1000 | 0.265 | 1.225 |
| Crushing/Proc. Equipment | 50   | 0.525 | 4.857 |
| Crushing/Proc. Equipment | 120  | 0.272 | 3.673 |
| Crushing/Proc. Equipment | 175  | 0.197 | 3.244 |
| Crushing/Proc. Equipment | 250  | 0.185 | 1.105 |
| Crushing/Proc. Equipment | 500  | 0.184 | 1.058 |
| Crushing/Proc. Equipment | 750  | 0.184 | 1.058 |
| Crushing/Proc. Equipment | 9999 | 0.196 | 1.059 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.099 | 525.777 | 0.170 | 0.005 |
| 0.099 | 525.777 | 0.170 | 0.005 |
| 0.078 | 466.738 | 0.151 | 0.004 |
| 0.052 | 472.496 | 0.153 | 0.004 |
| 0.029 | 472.560 | 0.153 | 0.004 |
| 0.024 | 470.292 | 0.152 | 0.004 |
| 0.035 | 468.558 | 0.152 | 0.004 |
| 0.164 | 525.483 | 0.170 | 0.005 |
| 0.128 | 471.529 | 0.153 | 0.004 |
| 0.078 | 472.106 | 0.153 | 0.004 |
| 0.052 | 473.326 | 0.153 | 0.004 |
| 0.057 | 473.615 | 0.153 | 0.004 |
| 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 568.299 | 0.062 | 0.005 |
| 0.093 | 568.300 | 0.039 | 0.005 |
| 0.087 | 568.299 | 0.021 | 0.004 |
| 0.053 | 568.299 | 0.016 | 0.004 |
| 0.028 | 568.299 | 0.013 | 0.004 |
| 0.027 | 568.300 | 0.013 | 0.004 |
| 0.027 | 568.299 | 0.013 | 0.004 |
| 0.047 | 568.299 | 0.015 | 0.004 |
| 0.480 | 493.532 | 0.160 | 0.005 |
| 0.342 | 468.316 | 0.152 | 0.004 |
| 0.140 | 478.508 | 0.155 | 0.004 |
| 0.076 | 473.470 | 0.153 | 0.004 |
| 0.081 | 470.753 | 0.152 | 0.004 |
| 0.041 | 568.300 | 0.022 | 0.004 |
| 0.132 | 476.921 | 0.154 | 0.004 |
| 0.060 | 473.302 | 0.153 | 0.004 |
| 0.037 | 470.861 | 0.152 | 0.004 |
| 0.041 | 471.917 | 0.153 | 0.004 |
| 0.064 | 472.055 | 0.153 | 0.004 |
| 0.060 | 470.004 | 0.152 | 0.004 |
| 0.040 | 469.126 | 0.152 | 0.004 |

|                      |      |       |       |
|----------------------|------|-------|-------|
| Dumpers/Trailers     | 25   | 0.685 | 2.340 |
| Excavators           | 25   | 0.685 | 2.339 |
| Excavators           | 50   | 0.602 | 5.309 |
| Excavators           | 120  | 0.301 | 3.806 |
| Excavators           | 175  | 0.213 | 3.362 |
| Excavators           | 250  | 0.203 | 1.145 |
| Excavators           | 500  | 0.202 | 1.088 |
| Excavators           | 750  | 0.202 | 1.088 |
| Forklifts            | 50   | 0.565 | 5.272 |
| Forklifts            | 120  | 0.283 | 3.799 |
| Forklifts            | 175  | 0.199 | 3.360 |
| Forklifts            | 250  | 0.195 | 1.144 |
| Forklifts            | 500  | 0.195 | 1.088 |
| Generator Sets       | 15   | 0.592 | 3.470 |
| Generator Sets       | 25   | 0.686 | 2.340 |
| Generator Sets       | 50   | 0.315 | 3.640 |
| Generator Sets       | 120  | 0.178 | 3.316 |
| Generator Sets       | 175  | 0.130 | 2.929 |
| Generator Sets       | 250  | 0.120 | 0.998 |
| Generator Sets       | 500  | 0.119 | 0.978 |
| Generator Sets       | 750  | 0.119 | 0.978 |
| Generator Sets       | 9999 | 0.128 | 0.979 |
| Graders              | 50   | 0.648 | 5.239 |
| Graders              | 120  | 0.323 | 3.775 |
| Graders              | 175  | 0.237 | 3.326 |
| Graders              | 250  | 0.216 | 1.148 |
| Graders              | 500  | 0.214 | 1.097 |
| Graders              | 750  | 0.214 | 1.097 |
| Off-Highway Tractors | 120  | 0.518 | 3.944 |
| Off-Highway Tractors | 175  | 0.373 | 3.435 |
| Off-Highway Tractors | 250  | 0.315 | 1.286 |
| Off-Highway Tractors | 750  | 0.304 | 1.351 |
| Off-Highway Tractors | 1000 | 0.318 | 1.409 |
| Off-Highway Trucks   | 175  | 0.229 | 3.425 |
| Off-Highway Trucks   | 250  | 0.217 | 1.166 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.035 | 474.970 | 0.154 | 0.004 |
| 0.061 | 476.314 | 0.154 | 0.004 |
| 0.052 | 473.369 | 0.153 | 0.004 |
| 0.246 | 528.954 | 0.171 | 0.005 |
| 0.246 | 528.954 | 0.171 | 0.005 |
| 0.246 | 528.954 | 0.171 | 0.005 |
| 0.187 | 472.748 | 0.153 | 0.004 |
| 0.103 | 469.843 | 0.152 | 0.004 |
| 0.055 | 476.296 | 0.154 | 0.004 |
| 0.125 | 526.176 | 0.170 | 0.005 |
| 0.125 | 526.176 | 0.170 | 0.005 |
| 0.125 | 526.176 | 0.170 | 0.005 |
| 0.109 | 470.000 | 0.152 | 0.004 |
| 0.065 | 471.850 | 0.153 | 0.004 |
| 0.033 | 473.223 | 0.153 | 0.004 |
| 0.033 | 472.929 | 0.153 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.216 | 1.104 |
| Off-Highway Trucks                 | 750  | 0.217 | 1.104 |
| Off-Highway Trucks                 | 1000 | 0.220 | 1.107 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 |
| Other Construction Equipment       | 50   | 0.429 | 4.390 |
| Other Construction Equipment       | 120  | 0.225 | 3.538 |
| Other Construction Equipment       | 175  | 0.161 | 3.127 |
| Other Construction Equipment       | 500  | 0.154 | 1.028 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 |
| Other General Industrial Equipment | 50   | 0.609 | 5.299 |
| Other General Industrial Equipment | 120  | 0.309 | 3.802 |
| Other General Industrial Equipment | 175  | 0.223 | 3.357 |
| Other General Industrial Equipment | 250  | 0.209 | 1.143 |
| Other General Industrial Equipment | 500  | 0.208 | 1.087 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.021 | 473.464 | 0.153 | 0.004 |
| 0.074 | 472.055 | 0.153 | 0.004 |
| 0.219 | 523.709 | 0.169 | 0.005 |
| 0.074 | 473.588 | 0.153 | 0.004 |
| 0.067 | 472.219 | 0.153 | 0.004 |
| 0.055 | 471.482 | 0.153 | 0.004 |
| 0.061 | 470.297 | 0.152 | 0.004 |
| 0.017 | 472.055 | 0.153 | 0.004 |
| 0.243 | 526.853 | 0.170 | 0.005 |
| 0.243 | 526.853 | 0.170 | 0.005 |
| 0.175 | 469.899 | 0.152 | 0.004 |
| 0.071 | 472.485 | 0.153 | 0.004 |
| 0.031 | 473.483 | 0.153 | 0.004 |
| 0.036 | 465.882 | 0.151 | 0.004 |
| 0.130 | 520.998 | 0.169 | 0.005 |
| 0.130 | 520.998 | 0.169 | 0.005 |
| 0.108 | 473.424 | 0.153 | 0.004 |
| 0.069 | 470.484 | 0.152 | 0.004 |
| 0.040 | 472.234 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.178 | 568.299 | 0.054 | 0.005 |
| 0.175 | 568.299 | 0.062 | 0.005 |
| 0.075 | 568.299 | 0.027 | 0.005 |
| 0.072 | 568.299 | 0.017 | 0.004 |
| 0.053 | 568.299 | 0.016 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.208 | 1.087 |
| Other General Industrial Equipment | 1000 | 0.212 | 1.088 |
| Other Material Handling Equipment  | 50   | 0.598 | 5.237 |
| Other Material Handling Equipment  | 120  | 0.304 | 3.784 |
| Other Material Handling Equipment  | 175  | 0.220 | 3.341 |
| Other Material Handling Equipment  | 250  | 0.206 | 1.138 |
| Other Material Handling Equipment  | 500  | 0.205 | 1.083 |
| Other Material Handling Equipment  | 9999 | 0.218 | 1.084 |
| Pavers                             | 25   | 0.685 | 2.339 |
| Pavers                             | 50   | 0.845 | 5.396 |
| Pavers                             | 120  | 0.408 | 3.800 |
| Pavers                             | 175  | 0.300 | 3.326 |
| Pavers                             | 250  | 0.259 | 1.192 |
| Pavers                             | 500  | 0.253 | 1.181 |
| Paving Equipment                   | 25   | 0.685 | 2.339 |
| Paving Equipment                   | 50   | 0.802 | 5.309 |
| Paving Equipment                   | 120  | 0.390 | 3.774 |
| Paving Equipment                   | 175  | 0.290 | 3.306 |
| Paving Equipment                   | 250  | 0.250 | 1.171 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.592 | 3.470 |
| Pressure Washers                   | 25   | 0.686 | 2.340 |
| Pressure Washers                   | 50   | 0.215 | 3.124 |
| Pressure Washers                   | 120  | 0.134 | 3.167 |
| Pressure Washers                   | 175  | 0.126 | 2.907 |



|       |         |       |       |
|-------|---------|-------|-------|
| 0.009 | 568.299 | 0.008 | 0.004 |
| 0.183 | 568.299 | 0.061 | 0.005 |
| 0.177 | 568.299 | 0.064 | 0.005 |
| 0.099 | 568.299 | 0.043 | 0.005 |
| 0.092 | 568.299 | 0.023 | 0.004 |
| 0.056 | 568.300 | 0.018 | 0.004 |
| 0.029 | 568.299 | 0.014 | 0.004 |
| 0.028 | 568.300 | 0.014 | 0.004 |
| 0.029 | 568.300 | 0.014 | 0.004 |
| 0.049 | 568.299 | 0.016 | 0.004 |
| 0.154 | 526.141 | 0.170 | 0.005 |
| 0.154 | 526.141 | 0.170 | 0.005 |
| 0.154 | 526.141 | 0.170 | 0.005 |
| 0.125 | 473.851 | 0.153 | 0.004 |
| 0.046 | 471.970 | 0.153 | 0.004 |
| 0.060 | 473.681 | 0.153 | 0.004 |
| 0.083 | 477.573 | 0.155 | 0.004 |
| 0.118 | 525.027 | 0.170 | 0.005 |
| 0.047 | 473.037 | 0.153 | 0.004 |
| 0.028 | 471.475 | 0.153 | 0.004 |
| 0.033 | 472.927 | 0.153 | 0.004 |
| 0.008 | 466.541 | 0.151 | 0.004 |
| 0.212 | 474.103 | 0.153 | 0.004 |
| 0.153 | 474.573 | 0.154 | 0.004 |
| 0.139 | 479.092 | 0.155 | 0.004 |
| 0.181 | 472.998 | 0.153 | 0.004 |
| 0.115 | 568.299 | 0.037 | 0.004 |
| 0.238 | 523.908 | 0.169 | 0.005 |
| 0.238 | 523.908 | 0.169 | 0.005 |
| 0.165 | 466.898 | 0.151 | 0.004 |
| 0.077 | 470.459 | 0.152 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 |
| Pumps                   | 15   | 0.663 | 3.470 |
| Pumps                   | 25   | 0.687 | 2.340 |
| Pumps                   | 50   | 0.348 | 3.814 |
| Pumps                   | 120  | 0.193 | 3.367 |
| Pumps                   | 175  | 0.142 | 2.973 |
| Pumps                   | 250  | 0.130 | 1.013 |
| Pumps                   | 500  | 0.129 | 0.989 |
| Pumps                   | 750  | 0.129 | 0.989 |
| Pumps                   | 9999 | 0.139 | 0.990 |
| Rollers                 | 15   | 0.661 | 3.469 |
| Rollers                 | 25   | 0.685 | 2.339 |
| Rollers                 | 50   | 0.587 | 4.784 |
| Rollers                 | 120  | 0.299 | 3.639 |
| Rollers                 | 175  | 0.223 | 3.203 |
| Rollers                 | 250  | 0.195 | 1.099 |
| Rollers                 | 500  | 0.193 | 1.056 |
| Rough Terrain Forklifts | 50   | 0.548 | 5.031 |
| Rough Terrain Forklifts | 120  | 0.279 | 3.725 |
| Rough Terrain Forklifts | 175  | 0.200 | 3.291 |
| Rough Terrain Forklifts | 250  | 0.191 | 1.121 |
| Rough Terrain Forklifts | 500  | 0.190 | 1.070 |
| Rubber Tired Dozers     | 175  | 0.398 | 3.496 |
| Rubber Tired Dozers     | 250  | 0.335 | 1.322 |
| Rubber Tired Dozers     | 500  | 0.322 | 1.401 |
| Rubber Tired Dozers     | 750  | 0.323 | 1.401 |
| Rubber Tired Dozers     | 1000 | 0.338 | 1.465 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 |
| Rubber Tired Loaders    | 50   | 0.634 | 5.181 |
| Rubber Tired Loaders    | 120  | 0.317 | 3.759 |
| Rubber Tired Loaders    | 175  | 0.232 | 3.312 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.045 | 469.871 | 0.152 | 0.004 |
| 0.048 | 469.143 | 0.152 | 0.004 |
| 0.059 | 465.052 | 0.150 | 0.004 |
| 0.048 | 472.456 | 0.153 | 0.004 |
| 0.372 | 482.363 | 0.156 | 0.004 |
| 0.126 | 478.948 | 0.155 | 0.004 |
| 0.115 | 469.446 | 0.152 | 0.004 |
| 0.074 | 472.539 | 0.153 | 0.004 |
| 0.059 | 472.115 | 0.153 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.098 | 568.299 | 0.047 | 0.005 |
| 0.089 | 568.299 | 0.025 | 0.004 |
| 0.055 | 568.299 | 0.019 | 0.004 |
| 0.035 | 686.695 | 0.019 | 0.004 |
| 0.077 | 527.861 | 0.171 | 0.005 |
| 0.077 | 527.861 | 0.171 | 0.005 |
| 0.052 | 472.630 | 0.153 | 0.004 |
| 0.075 | 536.140 | 0.173 | 0.005 |
| 0.114 | 476.766 | 0.154 | 0.004 |
| 0.087 | 471.040 | 0.152 | 0.004 |
| 0.051 | 477.110 | 0.154 | 0.004 |
| 0.047 | 470.283 | 0.152 | 0.004 |
| 0.025 | 470.551 | 0.152 | 0.004 |
| 0.176 | 525.328 | 0.170 | 0.005 |
| 0.176 | 525.328 | 0.170 | 0.005 |
| 0.176 | 525.328 | 0.170 | 0.005 |
| 0.147 | 474.116 | 0.153 | 0.004 |
| 0.066 | 473.122 | 0.153 | 0.004 |
| 0.047 | 470.126 | 0.152 | 0.004 |
| 0.133 | 513.803 | 0.166 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.138 |
| Rubber Tired Loaders      | 500  | 0.208 | 1.085 |
| Rubber Tired Loaders      | 750  | 0.208 | 1.085 |
| Rubber Tired Loaders      | 1000 | 0.214 | 1.099 |
| Scrapers                  | 120  | 0.410 | 3.866 |
| Scrapers                  | 175  | 0.301 | 3.389 |
| Scrapers                  | 250  | 0.264 | 1.206 |
| Scrapers                  | 500  | 0.259 | 1.184 |
| Scrapers                  | 750  | 0.259 | 1.184 |
| Signal Boards             | 15   | 0.661 | 3.470 |
| Signal Boards             | 50   | 0.393 | 4.099 |
| Signal Boards             | 120  | 0.213 | 3.451 |
| Signal Boards             | 175  | 0.157 | 3.048 |
| Signal Boards             | 250  | 0.176 | 1.255 |
| Skid Steer Loaders        | 25   | 0.685 | 2.340 |
| Skid Steer Loaders        | 50   | 0.411 | 4.386 |
| Skid Steer Loaders        | 120  | 0.214 | 3.538 |
| Surfacing Equipment       | 50   | 0.518 | 4.295 |
| Surfacing Equipment       | 120  | 0.264 | 3.492 |
| Surfacing Equipment       | 175  | 0.197 | 3.071 |
| Surfacing Equipment       | 250  | 0.172 | 1.064 |
| Surfacing Equipment       | 500  | 0.169 | 1.032 |
| Surfacing Equipment       | 750  | 0.169 | 1.032 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 |
| Sweepers/Scrubbers        | 50   | 0.509 | 4.947 |
| Sweepers/Scrubbers        | 120  | 0.261 | 3.703 |
| Sweepers/Scrubbers        | 175  | 0.187 | 3.275 |
| Sweepers/Scrubbers        | 250  | 0.182 | 1.116 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.133 | 513.803 | 0.166 | 0.005 |
| 0.079 | 477.188 | 0.154 | 0.004 |
| 0.054 | 469.329 | 0.152 | 0.004 |
| 0.044 | 470.598 | 0.152 | 0.004 |
| 0.036 | 470.910 | 0.152 | 0.004 |
| 0.062 | 466.452 | 0.151 | 0.004 |
| 0.150 | 527.160 | 0.171 | 0.005 |
| 0.150 | 527.160 | 0.171 | 0.005 |
| 0.150 | 527.160 | 0.171 | 0.005 |
| 0.262 | 475.901 | 0.154 | 0.004 |
| 0.165 | 467.732 | 0.151 | 0.004 |
| 0.133 | 473.917 | 0.153 | 0.004 |
| 0.072 | 470.439 | 0.152 | 0.004 |
| 0.009 | 474.486 | 0.154 | 0.004 |
| 0.183 | 568.300 | 0.061 | 0.005 |
| 0.177 | 568.299 | 0.064 | 0.005 |
| 0.112 | 568.299 | 0.054 | 0.005 |
| 0.102 | 568.299 | 0.028 | 0.004 |
| 0.063 | 568.299 | 0.022 | 0.004 |
| 0.032 | 568.299 | 0.018 | 0.004 |
| 0.031 | 568.299 | 0.017 | 0.004 |
| 0.060 | 470.004 | 0.152 | 0.004 |
| 0.040 | 469.126 | 0.152 | 0.004 |
| 0.035 | 474.970 | 0.154 | 0.004 |
| 0.061 | 476.314 | 0.154 | 0.004 |
| 0.052 | 473.369 | 0.153 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.539 | 4.966 |
| Tractors/Loaders/Backhoes | 120  | 0.272 | 3.705 |
| Tractors/Loaders/Backhoes | 175  | 0.193 | 3.273 |
| Tractors/Loaders/Backhoes | 250  | 0.183 | 1.115 |
| Tractors/Loaders/Backhoes | 500  | 0.182 | 1.066 |
| Tractors/Loaders/Backhoes | 750  | 0.182 | 1.066 |
| Trenchers                 | 15   | 0.661 | 3.469 |
| Trenchers                 | 25   | 0.685 | 2.339 |
| Trenchers                 | 50   | 0.851 | 5.208 |
| Trenchers                 | 120  | 0.409 | 3.743 |
| Trenchers                 | 175  | 0.300 | 3.273 |
| Trenchers                 | 250  | 0.256 | 1.188 |
| Trenchers                 | 500  | 0.249 | 1.209 |
| Trenchers                 | 750  | 0.249 | 1.209 |
| Welders                   | 15   | 0.663 | 3.470 |
| Welders                   | 25   | 0.687 | 2.340 |
| Welders                   | 50   | 0.449 | 4.387 |
| Welders                   | 120  | 0.239 | 3.535 |
| Welders                   | 175  | 0.176 | 3.121 |
| Welders                   | 250  | 0.162 | 1.063 |
| Welders                   | 500  | 0.161 | 1.027 |
| Water Trucks              | 175  | 0.229 | 3.425 |
| Water Trucks              | 250  | 0.217 | 1.166 |
| Water Trucks              | 500  | 0.216 | 1.104 |
| Water Trucks              | 750  | 0.217 | 1.104 |
| Water Trucks              | 1000 | 0.220 | 1.107 |





|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.393 | 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 1.676 | 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 0.525 | 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.433 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.437 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 3.330 | 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 1.555 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.391 | 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 0.341 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 3.107 | 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 1.645 | 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 0.601 | 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.504 | 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 0.476 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.482 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 2.483 | 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 3.530 | 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 1.903 | 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 0.815 | 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 0.684 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.647 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.654 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
|       |       |       |       |         |       |       |
| 2.959 | 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
|       |       |       |       |         |       |       |
| 1.916 | 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
|       |       |       |       |         |       |       |
| 1.715 | 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
|       |       |       |       |         |       |       |
| 1.590 | 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
|       |       |       |       |         |       |       |
| 3.569 | 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
|       |       |       |       |         |       |       |
| 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
|       |       |       |       |         |       |       |
| 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|                         |
|-------------------------|
| Dumpers/Te<br>nders     |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Excavators              |
| Forklifts               |
| Forklifts               |
| Forklifts               |
| Forklifts               |
| Forklifts               |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Generator<br>Sets       |
| Graders                 |
| Graders                 |
| Graders                 |
| Graders                 |
| Graders                 |
| Graders                 |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Tractors |
| Off-Highway<br>Trucks   |
| Off-Highway<br>Trucks   |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.512 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 2.660 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 3.447 | 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 1.762 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.640 | 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 0.535 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.505 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 2.653 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.841 | 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 2.468 | 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 1.425 | 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 1.246 | 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 1.141 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.809 | 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 2.393 | 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 1.363 | 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 1.176 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 2.989 | 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 1.594 | 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 0.619 | 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |

|   |
|---|
| Other<br>General<br>Industrial<br>Equipment |
| Other<br>General<br>Industrial<br>Equipment |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Other<br>Material<br>Handling<br>Equipment  |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Pavers                                      |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Paving<br>Equipment                         |
| Plate<br>Compactors                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |
| Pressure<br>Washers                         |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 3.146 | 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 1.662 | 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 0.610 | 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 0.511 | 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.482 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.488 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 2.504 | 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.480 | 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 1.950 | 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 0.907 | 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 0.745 | 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 3.359 | 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 1.671 | 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 0.537 | 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.443 | 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 2.034 | 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 1.828 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 1.658 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 1.694 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 3.676 | 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.500 | 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 1.875 | 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 0.787 | 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|                         |
|-------------------------|
| Pressure Washers        |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Pumps                   |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rollers                 |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rough Terrain Forklifts |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Dozers     |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |
| Rubber Tired Loaders    |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.655 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.619 | 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 0.627 | 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 2.722 | 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 2.384 | 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 1.320 | 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 1.149 | 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 1.057 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 1.075 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.193 | 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 1.657 | 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 0.586 | 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 0.594 | 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.128 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 1.477 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 3.400 | 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 1.959 | 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 0.939 | 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 0.789 | 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 0.738 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.749 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.294 | 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 1.569 | 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 0.431 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|                           |
|---------------------------|
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Rubber Tired Loaders      |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Scrapers                  |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Signal Boards             |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Skid Steer Loaders        |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Surfacing Equipment       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Sweepers/S crubbers       |
| Tractors/Loaders/Backhoes |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 3.299 | 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 1.624 | 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 0.485 | 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 0.418 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.403 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.407 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.835 | 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 2.559 | 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 1.529 | 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 1.348 | 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 1.231 | 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 1.254 | 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 3.273 | 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 1.707 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.628 | 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 0.525 | 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.495 | 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

|                           |
|---------------------------|
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Tractors/Loaders/Backhoes |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Trenchers                 |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Welders                   |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |
| Water Trucks              |

|       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 50    | 0.339   | 3.764   | 3.135   | 0.007   | 0.040   | 0.040   | 568.300 | 0.030   | 0.005   |
| 120   | 0.188   | 3.352   | 1.657   | 0.006   | 0.036   | 0.036   | 568.299 | 0.017   | 0.004   |
| 500   | 0.126   | 0.986   | 0.479   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 750   | 0.126   | 0.986   | 0.485   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 15    | 0.663   | 3.470   | 4.164   | 0.008   | 0.166   | 0.166   | 568.299 | 0.059   | 0.005   |
| 25    | 0.687   | 2.340   | 4.347   | 0.007   | 0.165   | 0.165   | 568.299 | 0.061   | 0.005   |
| 50    | 0.506   | 4.712   | 3.340   | 0.007   | 0.046   | 0.046   | 568.299 | 0.045   | 0.005   |
| 120   | 0.264   | 3.630   | 1.729   | 0.006   | 0.041   | 0.041   | 568.299 | 0.023   | 0.004   |
| 175   | 0.193   | 3.205   | 0.633   | 0.006   | 0.027   | 0.027   | 568.299 | 0.017   | 0.004   |
| 250   | 0.179   | 1.092   | 0.529   | 0.006   | 0.018   | 0.018   | 568.299 | 0.016   | 0.004   |
| 500   | 0.178   | 1.048   | 0.499   | 0.005   | 0.017   | 0.017   | 568.299 | 0.016   | 0.004   |
| 750   | 0.178   | 1.048   | 0.505   | 0.005   | 0.017   | 0.017   | 568.300 | 0.016   | 0.004   |
| 1000  | 0.182   | 1.049   | 2.600   | 0.005   | 0.033   | 0.033   | 568.299 | 0.016   | 0.004   |
| 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 50    | 0.348   | 4.029   | 3.020   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 120   | 0.183   | 3.434   | 1.415   | 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 175   | 0.127   | 3.038   | 0.279   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 250   | 0.127   | 1.035   | 0.274   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 500   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 750   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1000  | 0.127   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.333 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.409 | 4.199 | 3.222 | 0.007 | 0.041 | 0.041 | 568.299 | 0.036 | 0.005 |
| 120  | 0.221 | 3.480 | 1.667 | 0.006 | 0.036 | 0.036 | 568.299 | 0.019 | 0.004 |
| 175  | 0.163 | 3.074 | 0.590 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 50   | 0.684 | 5.366 | 3.598 | 0.007 | 0.075 | 0.075 | 568.299 | 0.061 | 0.005 |
| 120  | 0.343 | 3.812 | 1.987 | 0.006 | 0.067 | 0.067 | 568.299 | 0.030 | 0.004 |
| 175  | 0.253 | 3.356 | 0.916 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 250  | 0.224 | 1.147 | 0.748 | 0.006 | 0.024 | 0.024 | 568.299 | 0.020 | 0.004 |
| 500  | 0.222 | 1.090 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.020 | 0.004 |
| 750  | 0.222 | 1.090 | 0.709 | 0.005 | 0.024 | 0.024 | 568.300 | 0.020 | 0.004 |
| 9999 | 0.245 | 1.108 | 2.800 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 50   | 0.833 | 5.605 | 3.808 | 0.007 | 0.116 | 0.116 | 568.299 | 0.075 | 0.005 |
| 120  | 0.405 | 3.871 | 2.341 | 0.006 | 0.105 | 0.105 | 568.299 | 0.036 | 0.004 |
| 175  | 0.296 | 3.397 | 1.266 | 0.006 | 0.065 | 0.065 | 568.299 | 0.026 | 0.004 |
| 250  | 0.262 | 1.207 | 1.104 | 0.006 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 500  | 0.257 | 1.200 | 1.016 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 750  | 0.257 | 1.200 | 1.033 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 1000 | 0.265 | 1.225 | 3.094 | 0.005 | 0.056 | 0.056 | 568.300 | 0.023 | 0.004 |
| 50   | 0.525 | 4.857 | 3.351 | 0.007 | 0.043 | 0.043 | 568.299 | 0.047 | 0.005 |
| 120  | 0.272 | 3.673 | 1.708 | 0.006 | 0.038 | 0.038 | 568.299 | 0.024 | 0.004 |
| 175  | 0.197 | 3.244 | 0.600 | 0.006 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 250  | 0.185 | 1.105 | 0.502 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 500  | 0.184 | 1.058 | 0.476 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 750  | 0.184 | 1.058 | 0.478 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 9999 | 0.196 | 1.059 | 2.590 | 0.005 | 0.032 | 0.032 | 568.299 | 0.017 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.602 | 5.309 | 3.393 | 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 120  | 0.301 | 3.806 | 1.676 | 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 175  | 0.213 | 3.362 | 0.525 | 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 250  | 0.203 | 1.145 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 500  | 0.202 | 1.088 | 0.433 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 750  | 0.202 | 1.088 | 0.437 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 50   | 0.565 | 5.272 | 3.330 | 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 120  | 0.283 | 3.799 | 1.555 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 175  | 0.199 | 3.360 | 0.391 | 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 250  | 0.195 | 1.144 | 0.341 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 500  | 0.195 | 1.088 | 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 50   | 0.315 | 3.640 | 3.107 | 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 120  | 0.178 | 3.316 | 1.645 | 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 175  | 0.130 | 2.929 | 0.601 | 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 250  | 0.120 | 0.998 | 0.504 | 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 500  | 0.119 | 0.978 | 0.476 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 750  | 0.119 | 0.978 | 0.482 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 9999 | 0.128 | 0.979 | 2.483 | 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 50   | 0.648 | 5.239 | 3.530 | 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 120  | 0.323 | 3.775 | 1.903 | 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 175  | 0.237 | 3.326 | 0.815 | 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 250  | 0.216 | 1.148 | 0.684 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 500  | 0.214 | 1.097 | 0.647 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 750  | 0.214 | 1.097 | 0.654 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 120  | 0.518 | 3.944 | 2.959 | 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
| 175  | 0.373 | 3.435 | 1.916 | 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
| 250  | 0.315 | 1.286 | 1.715 | 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
| 750  | 0.304 | 1.351 | 1.590 | 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
| 1000 | 0.318 | 1.409 | 3.569 | 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
| 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.429 | 4.390 | 3.190 | 0.007 | 0.030 | 0.030 | 568.299 | 0.038 | 0.005 |
| 120  | 0.225 | 3.538 | 1.576 | 0.006 | 0.027 | 0.027 | 568.300 | 0.020 | 0.004 |
| 175  | 0.161 | 3.127 | 0.459 | 0.006 | 0.019 | 0.019 | 568.299 | 0.014 | 0.004 |
| 500  | 0.154 | 1.028 | 0.391 | 0.005 | 0.014 | 0.014 | 568.300 | 0.013 | 0.004 |
| 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.609 | 5.299 | 3.460 | 0.007 | 0.048 | 0.048 | 568.299 | 0.054 | 0.005 |
| 120  | 0.309 | 3.802 | 1.766 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 175  | 0.223 | 3.357 | 0.641 | 0.006 | 0.028 | 0.028 | 568.299 | 0.020 | 0.004 |
| 250  | 0.209 | 1.143 | 0.536 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 500  | 0.208 | 1.087 | 0.506 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 750  | 0.208 | 1.087 | 0.512 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 1000 | 0.212 | 1.088 | 2.660 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 50   | 0.598 | 5.237 | 3.447 | 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 120  | 0.304 | 3.784 | 1.762 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 175  | 0.220 | 3.341 | 0.640 | 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 250  | 0.206 | 1.138 | 0.535 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 500  | 0.205 | 1.083 | 0.505 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 9999 | 0.218 | 1.084 | 2.653 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.845 | 5.396 | 3.841 | 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 120  | 0.408 | 3.800 | 2.468 | 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 175  | 0.300 | 3.326 | 1.425 | 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 250  | 0.259 | 1.192 | 1.246 | 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 500  | 0.253 | 1.181 | 1.141 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.802 | 5.309 | 3.809 | 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 120  | 0.390 | 3.774 | 2.393 | 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 175  | 0.290 | 3.306 | 1.363 | 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 250  | 0.250 | 1.171 | 1.176 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 50   | 0.215 | 3.124 | 2.989 | 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 120  | 0.134 | 3.167 | 1.594 | 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 175  | 0.126 | 2.907 | 0.619 | 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |



|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 50   | 0.348 | 3.814 | 3.146 | 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 120  | 0.193 | 3.367 | 1.662 | 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 175  | 0.142 | 2.973 | 0.610 | 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 250  | 0.130 | 1.013 | 0.511 | 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 500  | 0.129 | 0.989 | 0.482 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 750  | 0.129 | 0.989 | 0.488 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 9999 | 0.139 | 0.990 | 2.504 | 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.587 | 4.784 | 3.480 | 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 120  | 0.299 | 3.639 | 1.950 | 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 175  | 0.223 | 3.203 | 0.907 | 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 250  | 0.195 | 1.099 | 0.745 | 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 500  | 0.193 | 1.056 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 50   | 0.548 | 5.031 | 3.359 | 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 120  | 0.279 | 3.725 | 1.671 | 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 175  | 0.200 | 3.291 | 0.537 | 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 250  | 0.191 | 1.121 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 500  | 0.190 | 1.070 | 0.443 | 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 175  | 0.398 | 3.496 | 2.034 | 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 250  | 0.335 | 1.322 | 1.828 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 500  | 0.322 | 1.401 | 1.658 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 750  | 0.323 | 1.401 | 1.694 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 1000 | 0.338 | 1.465 | 3.676 | 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.634 | 5.181 | 3.500 | 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 120  | 0.317 | 3.759 | 1.875 | 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 175  | 0.232 | 3.312 | 0.787 | 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 250  | 0.210 | 1.138 | 0.655 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 500  | 0.208 | 1.085 | 0.619 | 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 750  | 0.208 | 1.085 | 0.627 | 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 1000 | 0.214 | 1.099 | 2.722 | 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 120  | 0.410 | 3.866 | 2.384 | 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 175  | 0.301 | 3.389 | 1.320 | 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 250  | 0.264 | 1.206 | 1.149 | 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 500  | 0.259 | 1.184 | 1.057 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 750  | 0.259 | 1.184 | 1.075 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 50   | 0.393 | 4.099 | 3.193 | 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 120  | 0.213 | 3.451 | 1.657 | 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 175  | 0.157 | 3.048 | 0.586 | 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 250  | 0.176 | 1.255 | 0.594 | 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 50   | 0.411 | 4.386 | 3.128 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 120  | 0.214 | 3.538 | 1.477 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 50   | 0.518 | 4.295 | 3.400 | 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 120  | 0.264 | 3.492 | 1.959 | 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 175  | 0.197 | 3.071 | 0.939 | 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 250  | 0.172 | 1.064 | 0.789 | 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 500  | 0.169 | 1.032 | 0.738 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 750  | 0.169 | 1.032 | 0.749 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.509 | 4.947 | 3.294 | 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 120  | 0.261 | 3.703 | 1.569 | 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 175  | 0.187 | 3.275 | 0.431 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 250  | 0.182 | 1.116 | 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|      |       |       |       |       |       |       |         |       |       |
|------|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 50   | 0.539 | 4.966 | 3.299 | 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 120  | 0.272 | 3.705 | 1.624 | 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 175  | 0.193 | 3.273 | 0.485 | 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 250  | 0.183 | 1.115 | 0.418 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 500  | 0.182 | 1.066 | 0.403 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 750  | 0.182 | 1.066 | 0.407 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 50   | 0.851 | 5.208 | 3.835 | 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 120  | 0.409 | 3.743 | 2.559 | 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 175  | 0.300 | 3.273 | 1.529 | 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 250  | 0.256 | 1.188 | 1.348 | 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 500  | 0.249 | 1.209 | 1.231 | 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 750  | 0.249 | 1.209 | 1.254 | 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 50   | 0.449 | 4.387 | 3.273 | 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 120  | 0.239 | 3.535 | 1.707 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 175  | 0.176 | 3.121 | 0.628 | 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 250  | 0.162 | 1.063 | 0.525 | 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 500  | 0.161 | 1.027 | 0.495 | 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

2032

| 2032             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   |
| Aerial Lifts     | 50    | 0.339   | 3.764   | 3.135   | 0.007   | 0.040   | 0.040   |
| Aerial Lifts     | 120   | 0.188   | 3.352   | 1.657   | 0.006   | 0.036   | 0.036   |
| Aerial Lifts     | 500   | 0.126   | 0.986   | 0.479   | 0.005   | 0.016   | 0.016   |
| Aerial Lifts     | 750   | 0.126   | 0.986   | 0.485   | 0.005   | 0.016   | 0.016   |
| Air Compressor s | 15    | 0.663   | 3.470   | 4.164   | 0.008   | 0.166   | 0.166   |
| Air Compressor s | 25    | 0.687   | 2.340   | 4.347   | 0.007   | 0.165   | 0.165   |
| Air Compressor s | 50    | 0.506   | 4.712   | 3.340   | 0.007   | 0.046   | 0.046   |
| Air Compressor s | 120   | 0.264   | 3.630   | 1.729   | 0.006   | 0.041   | 0.041   |
| Air Compressor s | 175   | 0.193   | 3.205   | 0.633   | 0.006   | 0.027   | 0.027   |
| Air Compressor s | 250   | 0.179   | 1.092   | 0.529   | 0.006   | 0.018   | 0.018   |
| Air Compressor s | 500   | 0.178   | 1.048   | 0.499   | 0.005   | 0.017   | 0.017   |
| Air Compressor s | 750   | 0.178   | 1.048   | 0.505   | 0.005   | 0.017   | 0.017   |
| Air Compressor s | 1000  | 0.182   | 1.049   | 2.600   | 0.005   | 0.033   | 0.033   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.029   | 3.020   | 0.007   | 0.013   | 0.013   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.415   | 0.006   | 0.012   | 0.012   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.038   | 0.279   | 0.006   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   | 0.274   | 0.006   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   |

|                          |      |       |       |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.333 | 0.007 | 0.162 | 0.162 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Concrete/Industrial Saws | 50   | 0.409 | 4.199 | 3.222 | 0.007 | 0.041 | 0.041 |
| Concrete/Industrial Saws | 120  | 0.221 | 3.480 | 1.667 | 0.006 | 0.036 | 0.036 |
| Concrete/Industrial Saws | 175  | 0.163 | 3.074 | 0.590 | 0.006 | 0.025 | 0.025 |
| Cranes                   | 50   | 0.684 | 5.366 | 3.598 | 0.007 | 0.075 | 0.075 |
| Cranes                   | 120  | 0.343 | 3.812 | 1.987 | 0.006 | 0.067 | 0.067 |
| Cranes                   | 175  | 0.253 | 3.356 | 0.916 | 0.006 | 0.042 | 0.042 |
| Cranes                   | 250  | 0.224 | 1.147 | 0.748 | 0.006 | 0.024 | 0.024 |
| Cranes                   | 500  | 0.222 | 1.090 | 0.697 | 0.005 | 0.023 | 0.023 |
| Cranes                   | 750  | 0.222 | 1.090 | 0.709 | 0.005 | 0.024 | 0.024 |
| Cranes                   | 9999 | 0.245 | 1.108 | 2.800 | 0.005 | 0.043 | 0.043 |
| Crawler Tractors         | 50   | 0.833 | 5.605 | 3.808 | 0.007 | 0.116 | 0.116 |
| Crawler Tractors         | 120  | 0.405 | 3.871 | 2.341 | 0.006 | 0.105 | 0.105 |
| Crawler Tractors         | 175  | 0.296 | 3.397 | 1.266 | 0.006 | 0.065 | 0.065 |
| Crawler Tractors         | 250  | 0.262 | 1.207 | 1.104 | 0.006 | 0.040 | 0.040 |
| Crawler Tractors         | 500  | 0.257 | 1.200 | 1.016 | 0.005 | 0.038 | 0.038 |
| Crawler Tractors         | 750  | 0.257 | 1.200 | 1.033 | 0.005 | 0.038 | 0.038 |
| Crawler Tractors         | 1000 | 0.265 | 1.225 | 3.094 | 0.005 | 0.056 | 0.056 |
| Crushing/Proc. Equipment | 50   | 0.525 | 4.857 | 3.351 | 0.007 | 0.043 | 0.043 |
| Crushing/Proc. Equipment | 120  | 0.272 | 3.673 | 1.708 | 0.006 | 0.038 | 0.038 |
| Crushing/Proc. Equipment | 175  | 0.197 | 3.244 | 0.600 | 0.006 | 0.025 | 0.025 |
| Crushing/Proc. Equipment | 250  | 0.185 | 1.105 | 0.502 | 0.006 | 0.017 | 0.017 |
| Crushing/Proc. Equipment | 500  | 0.184 | 1.058 | 0.476 | 0.005 | 0.017 | 0.017 |
| Crushing/Proc. Equipment | 750  | 0.184 | 1.058 | 0.478 | 0.005 | 0.017 | 0.017 |
| Crushing/Proc. Equipment | 9999 | 0.196 | 1.059 | 2.590 | 0.005 | 0.032 | 0.032 |

|                         |      |       |       |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|
| Dumpers/Te<br>nders     | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 |
| Excavators              | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Excavators              | 50   | 0.602 | 5.309 | 3.393 | 0.007 | 0.038 | 0.038 |
| Excavators              | 120  | 0.301 | 3.806 | 1.676 | 0.006 | 0.034 | 0.034 |
| Excavators              | 175  | 0.213 | 3.362 | 0.525 | 0.006 | 0.023 | 0.023 |
| Excavators              | 250  | 0.203 | 1.145 | 0.452 | 0.006 | 0.016 | 0.016 |
| Excavators              | 500  | 0.202 | 1.088 | 0.433 | 0.005 | 0.016 | 0.016 |
| Excavators              | 750  | 0.202 | 1.088 | 0.437 | 0.005 | 0.016 | 0.016 |
| Forklifts               | 50   | 0.565 | 5.272 | 3.330 | 0.007 | 0.023 | 0.023 |
| Forklifts               | 120  | 0.283 | 3.799 | 1.555 | 0.006 | 0.021 | 0.021 |
| Forklifts               | 175  | 0.199 | 3.360 | 0.391 | 0.006 | 0.015 | 0.015 |
| Forklifts               | 250  | 0.195 | 1.144 | 0.341 | 0.006 | 0.012 | 0.012 |
| Forklifts               | 500  | 0.195 | 1.088 | 0.341 | 0.005 | 0.012 | 0.012 |
| Generator<br>Sets       | 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Generator<br>Sets       | 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Generator<br>Sets       | 50   | 0.315 | 3.640 | 3.107 | 0.007 | 0.038 | 0.038 |
| Generator<br>Sets       | 120  | 0.178 | 3.316 | 1.645 | 0.006 | 0.034 | 0.034 |
| Generator<br>Sets       | 175  | 0.130 | 2.929 | 0.601 | 0.006 | 0.023 | 0.023 |
| Generator<br>Sets       | 250  | 0.120 | 0.998 | 0.504 | 0.006 | 0.016 | 0.016 |
| Generator<br>Sets       | 500  | 0.119 | 0.978 | 0.476 | 0.005 | 0.015 | 0.015 |
| Generator<br>Sets       | 750  | 0.119 | 0.978 | 0.482 | 0.005 | 0.015 | 0.015 |
| Generator<br>Sets       | 9999 | 0.128 | 0.979 | 2.483 | 0.005 | 0.029 | 0.029 |
| Graders                 | 50   | 0.648 | 5.239 | 3.530 | 0.007 | 0.065 | 0.065 |
| Graders                 | 120  | 0.323 | 3.775 | 1.903 | 0.006 | 0.058 | 0.058 |
| Graders                 | 175  | 0.237 | 3.326 | 0.815 | 0.006 | 0.038 | 0.038 |
| Graders                 | 250  | 0.216 | 1.148 | 0.684 | 0.006 | 0.024 | 0.024 |
| Graders                 | 500  | 0.214 | 1.097 | 0.647 | 0.005 | 0.023 | 0.023 |
| Graders                 | 750  | 0.214 | 1.097 | 0.654 | 0.005 | 0.023 | 0.023 |
| Off-Highway<br>Tractors | 120  | 0.518 | 3.944 | 2.959 | 0.006 | 0.175 | 0.175 |
| Off-Highway<br>Tractors | 175  | 0.373 | 3.435 | 1.916 | 0.006 | 0.104 | 0.104 |
| Off-Highway<br>Tractors | 250  | 0.315 | 1.286 | 1.715 | 0.006 | 0.064 | 0.064 |
| Off-Highway<br>Tractors | 750  | 0.304 | 1.351 | 1.590 | 0.005 | 0.060 | 0.060 |
| Off-Highway<br>Tractors | 1000 | 0.318 | 1.409 | 3.569 | 0.005 | 0.078 | 0.078 |
| Off-Highway<br>Trucks   | 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 |
| Off-Highway<br>Trucks   | 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 |
| Off-Highway Trucks                 | 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 |
| Off-Highway Trucks                 | 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Other Construction Equipment       | 50   | 0.429 | 4.390 | 3.190 | 0.007 | 0.030 | 0.030 |
| Other Construction Equipment       | 120  | 0.225 | 3.538 | 1.576 | 0.006 | 0.027 | 0.027 |
| Other Construction Equipment       | 175  | 0.161 | 3.127 | 0.459 | 0.006 | 0.019 | 0.019 |
| Other Construction Equipment       | 500  | 0.154 | 1.028 | 0.391 | 0.005 | 0.014 | 0.014 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Other General Industrial Equipment | 50   | 0.609 | 5.299 | 3.460 | 0.007 | 0.048 | 0.048 |
| Other General Industrial Equipment | 120  | 0.309 | 3.802 | 1.766 | 0.006 | 0.043 | 0.043 |
| Other General Industrial Equipment | 175  | 0.223 | 3.357 | 0.641 | 0.006 | 0.028 | 0.028 |
| Other General Industrial Equipment | 250  | 0.209 | 1.143 | 0.536 | 0.006 | 0.018 | 0.018 |
| Other General Industrial Equipment | 500  | 0.208 | 1.087 | 0.506 | 0.005 | 0.018 | 0.018 |

|                                    |      |       |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.208 | 1.087 | 0.512 | 0.005 | 0.018 | 0.018 |
| Other General Industrial Equipment | 1000 | 0.212 | 1.088 | 2.660 | 0.005 | 0.035 | 0.035 |
| Other Material Handling Equipment  | 50   | 0.598 | 5.237 | 3.447 | 0.007 | 0.048 | 0.048 |
| Other Material Handling Equipment  | 120  | 0.304 | 3.784 | 1.762 | 0.006 | 0.043 | 0.043 |
| Other Material Handling Equipment  | 175  | 0.220 | 3.341 | 0.640 | 0.006 | 0.028 | 0.028 |
| Other Material Handling Equipment  | 250  | 0.206 | 1.138 | 0.535 | 0.006 | 0.018 | 0.018 |
| Other Material Handling Equipment  | 500  | 0.205 | 1.083 | 0.505 | 0.005 | 0.018 | 0.018 |
| Other Material Handling Equipment  | 9999 | 0.218 | 1.084 | 2.653 | 0.005 | 0.035 | 0.035 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Pavers                             | 50   | 0.845 | 5.396 | 3.841 | 0.007 | 0.134 | 0.134 |
| Pavers                             | 120  | 0.408 | 3.800 | 2.468 | 0.006 | 0.121 | 0.121 |
| Pavers                             | 175  | 0.300 | 3.326 | 1.425 | 0.006 | 0.074 | 0.074 |
| Pavers                             | 250  | 0.259 | 1.192 | 1.246 | 0.006 | 0.045 | 0.045 |
| Pavers                             | 500  | 0.253 | 1.181 | 1.141 | 0.005 | 0.043 | 0.043 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Paving Equipment                   | 50   | 0.802 | 5.309 | 3.809 | 0.007 | 0.126 | 0.126 |
| Paving Equipment                   | 120  | 0.390 | 3.774 | 2.393 | 0.006 | 0.114 | 0.114 |
| Paving Equipment                   | 175  | 0.290 | 3.306 | 1.363 | 0.006 | 0.070 | 0.070 |
| Paving Equipment                   | 250  | 0.250 | 1.171 | 1.176 | 0.006 | 0.042 | 0.042 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Pressure Washers                   | 15   | 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Pressure Washers                   | 25   | 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Pressure Washers                   | 50   | 0.215 | 3.124 | 2.989 | 0.007 | 0.030 | 0.030 |
| Pressure Washers                   | 120  | 0.134 | 3.167 | 1.594 | 0.006 | 0.028 | 0.028 |
| Pressure Washers                   | 175  | 0.126 | 2.907 | 0.619 | 0.006 | 0.024 | 0.024 |



|                         |      |       |       |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 |
| Pumps                   | 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Pumps                   | 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Pumps                   | 50   | 0.348 | 3.814 | 3.146 | 0.007 | 0.040 | 0.040 |
| Pumps                   | 120  | 0.193 | 3.367 | 1.662 | 0.006 | 0.036 | 0.036 |
| Pumps                   | 175  | 0.142 | 2.973 | 0.610 | 0.006 | 0.024 | 0.024 |
| Pumps                   | 250  | 0.130 | 1.013 | 0.511 | 0.006 | 0.016 | 0.016 |
| Pumps                   | 500  | 0.129 | 0.989 | 0.482 | 0.005 | 0.016 | 0.016 |
| Pumps                   | 750  | 0.129 | 0.989 | 0.488 | 0.005 | 0.016 | 0.016 |
| Pumps                   | 9999 | 0.139 | 0.990 | 2.504 | 0.005 | 0.030 | 0.030 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Rollers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Rollers                 | 50   | 0.587 | 4.784 | 3.480 | 0.007 | 0.073 | 0.073 |
| Rollers                 | 120  | 0.299 | 3.639 | 1.950 | 0.006 | 0.066 | 0.066 |
| Rollers                 | 175  | 0.223 | 3.203 | 0.907 | 0.006 | 0.042 | 0.042 |
| Rollers                 | 250  | 0.195 | 1.099 | 0.745 | 0.006 | 0.024 | 0.024 |
| Rollers                 | 500  | 0.193 | 1.056 | 0.697 | 0.005 | 0.023 | 0.023 |
| Rough Terrain Forklifts | 50   | 0.548 | 5.031 | 3.359 | 0.007 | 0.039 | 0.039 |
| Rough Terrain Forklifts | 120  | 0.279 | 3.725 | 1.671 | 0.006 | 0.034 | 0.034 |
| Rough Terrain Forklifts | 175  | 0.200 | 3.291 | 0.537 | 0.006 | 0.023 | 0.023 |
| Rough Terrain Forklifts | 250  | 0.191 | 1.121 | 0.463 | 0.006 | 0.016 | 0.016 |
| Rough Terrain Forklifts | 500  | 0.190 | 1.070 | 0.443 | 0.005 | 0.016 | 0.016 |
| Rubber Tired Dozers     | 175  | 0.398 | 3.496 | 2.034 | 0.006 | 0.111 | 0.111 |
| Rubber Tired Dozers     | 250  | 0.335 | 1.322 | 1.828 | 0.006 | 0.069 | 0.069 |
| Rubber Tired Dozers     | 500  | 0.322 | 1.401 | 1.658 | 0.005 | 0.064 | 0.064 |
| Rubber Tired Dozers     | 750  | 0.323 | 1.401 | 1.694 | 0.005 | 0.064 | 0.064 |
| Rubber Tired Dozers     | 1000 | 0.338 | 1.465 | 3.676 | 0.005 | 0.082 | 0.082 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Rubber Tired Loaders    | 50   | 0.634 | 5.181 | 3.500 | 0.007 | 0.062 | 0.062 |
| Rubber Tired Loaders    | 120  | 0.317 | 3.759 | 1.875 | 0.006 | 0.056 | 0.056 |
| Rubber Tired Loaders    | 175  | 0.232 | 3.312 | 0.787 | 0.006 | 0.036 | 0.036 |

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.138 | 0.655 | 0.006 | 0.022 | 0.022 |
| Rubber Tired Loaders      | 500  | 0.208 | 1.085 | 0.619 | 0.005 | 0.021 | 0.021 |
| Rubber Tired Loaders      | 750  | 0.208 | 1.085 | 0.627 | 0.005 | 0.022 | 0.022 |
| Rubber Tired Loaders      | 1000 | 0.214 | 1.099 | 2.722 | 0.005 | 0.039 | 0.039 |
| Scrapers                  | 120  | 0.410 | 3.866 | 2.384 | 0.006 | 0.111 | 0.111 |
| Scrapers                  | 175  | 0.301 | 3.389 | 1.320 | 0.006 | 0.068 | 0.068 |
| Scrapers                  | 250  | 0.264 | 1.206 | 1.149 | 0.006 | 0.042 | 0.042 |
| Scrapers                  | 500  | 0.259 | 1.184 | 1.057 | 0.005 | 0.040 | 0.040 |
| Scrapers                  | 750  | 0.259 | 1.184 | 1.075 | 0.005 | 0.040 | 0.040 |
| Signal Boards             | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 |
| Signal Boards             | 50   | 0.393 | 4.099 | 3.193 | 0.007 | 0.040 | 0.040 |
| Signal Boards             | 120  | 0.213 | 3.451 | 1.657 | 0.006 | 0.035 | 0.035 |
| Signal Boards             | 175  | 0.157 | 3.048 | 0.586 | 0.006 | 0.024 | 0.024 |
| Signal Boards             | 250  | 0.176 | 1.255 | 0.594 | 0.007 | 0.019 | 0.019 |
| Skid Steer Loaders        | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 |
| Skid Steer Loaders        | 50   | 0.411 | 4.386 | 3.128 | 0.007 | 0.018 | 0.018 |
| Skid Steer Loaders        | 120  | 0.214 | 3.538 | 1.477 | 0.006 | 0.017 | 0.017 |
| Surfacing Equipment       | 50   | 0.518 | 4.295 | 3.400 | 0.007 | 0.075 | 0.075 |
| Surfacing Equipment       | 120  | 0.264 | 3.492 | 1.959 | 0.006 | 0.068 | 0.068 |
| Surfacing Equipment       | 175  | 0.197 | 3.071 | 0.939 | 0.006 | 0.043 | 0.043 |
| Surfacing Equipment       | 250  | 0.172 | 1.064 | 0.789 | 0.006 | 0.026 | 0.026 |
| Surfacing Equipment       | 500  | 0.169 | 1.032 | 0.738 | 0.005 | 0.025 | 0.025 |
| Surfacing Equipment       | 750  | 0.169 | 1.032 | 0.749 | 0.005 | 0.025 | 0.025 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 |
| Sweepers/Scrubbers        | 50   | 0.509 | 4.947 | 3.294 | 0.007 | 0.026 | 0.026 |
| Sweepers/Scrubbers        | 120  | 0.261 | 3.703 | 1.569 | 0.006 | 0.023 | 0.023 |
| Sweepers/Scrubbers        | 175  | 0.187 | 3.275 | 0.431 | 0.006 | 0.017 | 0.017 |
| Sweepers/Scrubbers        | 250  | 0.182 | 1.116 | 0.370 | 0.006 | 0.013 | 0.013 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.539 | 4.966 | 3.299 | 0.007 | 0.033 | 0.033 |
| Tractors/Loaders/Backhoes | 120  | 0.272 | 3.705 | 1.624 | 0.006 | 0.030 | 0.030 |
| Tractors/Loaders/Backhoes | 175  | 0.193 | 3.273 | 0.485 | 0.006 | 0.020 | 0.020 |
| Tractors/Loaders/Backhoes | 250  | 0.183 | 1.115 | 0.418 | 0.006 | 0.014 | 0.014 |
| Tractors/Loaders/Backhoes | 500  | 0.182 | 1.066 | 0.403 | 0.006 | 0.014 | 0.014 |
| Tractors/Loaders/Backhoes | 750  | 0.182 | 1.066 | 0.407 | 0.006 | 0.014 | 0.014 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 |
| Trenchers                 | 50   | 0.851 | 5.208 | 3.835 | 0.007 | 0.144 | 0.144 |
| Trenchers                 | 120  | 0.409 | 3.743 | 2.559 | 0.006 | 0.132 | 0.132 |
| Trenchers                 | 175  | 0.300 | 3.273 | 1.529 | 0.006 | 0.080 | 0.080 |
| Trenchers                 | 250  | 0.256 | 1.188 | 1.348 | 0.006 | 0.049 | 0.049 |
| Trenchers                 | 500  | 0.249 | 1.209 | 1.231 | 0.005 | 0.046 | 0.046 |
| Trenchers                 | 750  | 0.249 | 1.209 | 1.254 | 0.005 | 0.047 | 0.047 |
| Welders                   | 15   | 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 |
| Welders                   | 25   | 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 |
| Welders                   | 50   | 0.449 | 4.387 | 3.273 | 0.007 | 0.045 | 0.045 |
| Welders                   | 120  | 0.239 | 3.535 | 1.707 | 0.006 | 0.040 | 0.040 |
| Welders                   | 175  | 0.176 | 3.121 | 0.628 | 0.006 | 0.027 | 0.027 |
| Welders                   | 250  | 0.162 | 1.063 | 0.525 | 0.006 | 0.017 | 0.017 |
| Welders                   | 500  | 0.161 | 1.027 | 0.495 | 0.005 | 0.017 | 0.017 |
| Water Trucks              | 175  | 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 |
| Water Trucks              | 250  | 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 |
| Water Trucks              | 500  | 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 |
| Water Trucks              | 750  | 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 |
| Water Trucks              | 1000 | 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 |

2033

| g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|
| CO2     | CH4     | N2O     |
| 568.299 | 0.059   | 0.005   |
| 568.299 | 0.061   | 0.005   |
| 568.300 | 0.030   | 0.005   |
| 568.299 | 0.017   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.059   | 0.005   |
| 568.299 | 0.061   | 0.005   |
| 568.299 | 0.045   | 0.005   |
| 568.299 | 0.023   | 0.004   |
| 568.299 | 0.017   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.300 | 0.016   | 0.004   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.059   | 0.005   |
| 568.299 | 0.061   | 0.005   |
| 568.299 | 0.031   | 0.005   |
| 568.299 | 0.016   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |
| 568.299 | 0.011   | 0.004   |

| 2033             |       | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   |
| Aerial Lifts     | 50    | 0.339   | 3.764   | 3.135   |
| Aerial Lifts     | 120   | 0.188   | 3.352   | 1.657   |
| Aerial Lifts     | 500   | 0.126   | 0.986   | 0.479   |
| Aerial Lifts     | 750   | 0.126   | 0.986   | 0.485   |
| Air Compressor s | 15    | 0.663   | 3.470   | 4.164   |
| Air Compressor s | 25    | 0.687   | 2.340   | 4.347   |
| Air Compressor s | 50    | 0.506   | 4.712   | 3.340   |
| Air Compressor s | 120   | 0.264   | 3.630   | 1.729   |
| Air Compressor s | 175   | 0.193   | 3.205   | 0.633   |
| Air Compressor s | 250   | 0.179   | 1.092   | 0.529   |
| Air Compressor s | 500   | 0.178   | 1.048   | 0.499   |
| Air Compressor s | 750   | 0.178   | 1.048   | 0.505   |
| Air Compressor s | 1000  | 0.182   | 1.049   | 2.600   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.029   | 3.020   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.415   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.038   | 0.279   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   | 0.274   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   | 0.274   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   | 0.274   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   | 2.372   |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.036 | 0.005 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.020 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.075 | 0.005 |
| 568.299 | 0.036 | 0.004 |
| 568.299 | 0.026 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.300 | 0.023 | 0.004 |
| 568.299 | 0.047 | 0.005 |
| 568.299 | 0.024 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.017 | 0.004 |

|                          |      |       |       |       |
|--------------------------|------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.333 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 |
| Concrete/Industrial Saws | 50   | 0.409 | 4.199 | 3.222 |
| Concrete/Industrial Saws | 120  | 0.221 | 3.480 | 1.667 |
| Concrete/Industrial Saws | 175  | 0.163 | 3.074 | 0.590 |
| Cranes                   | 50   | 0.684 | 5.366 | 3.598 |
| Cranes                   | 120  | 0.343 | 3.812 | 1.987 |
| Cranes                   | 175  | 0.253 | 3.356 | 0.916 |
| Cranes                   | 250  | 0.224 | 1.147 | 0.748 |
| Cranes                   | 500  | 0.222 | 1.090 | 0.697 |
| Cranes                   | 750  | 0.222 | 1.090 | 0.709 |
| Cranes                   | 9999 | 0.245 | 1.108 | 2.800 |
| Crawler Tractors         | 50   | 0.833 | 5.605 | 3.808 |
| Crawler Tractors         | 120  | 0.405 | 3.871 | 2.341 |
| Crawler Tractors         | 175  | 0.296 | 3.397 | 1.266 |
| Crawler Tractors         | 250  | 0.262 | 1.207 | 1.104 |
| Crawler Tractors         | 500  | 0.257 | 1.200 | 1.016 |
| Crawler Tractors         | 750  | 0.257 | 1.200 | 1.033 |
| Crawler Tractors         | 1000 | 0.265 | 1.225 | 3.094 |
| Crushing/Proc. Equipment | 50   | 0.525 | 4.857 | 3.351 |
| Crushing/Proc. Equipment | 120  | 0.272 | 3.673 | 1.708 |
| Crushing/Proc. Equipment | 175  | 0.197 | 3.244 | 0.600 |
| Crushing/Proc. Equipment | 250  | 0.185 | 1.105 | 0.502 |
| Crushing/Proc. Equipment | 500  | 0.184 | 1.058 | 0.476 |
| Crushing/Proc. Equipment | 750  | 0.184 | 1.058 | 0.478 |
| Crushing/Proc. Equipment | 9999 | 0.196 | 1.059 | 2.590 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.054 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.051 | 0.005 |
| 568.299 | 0.025 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.028 | 0.005 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.010 | 0.004 |
| 568.299 | 0.010 | 0.004 |
| 568.299 | 0.010 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.058 | 0.005 |
| 568.299 | 0.029 | 0.004 |
| 568.300 | 0.021 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.046 | 0.004 |
| 568.299 | 0.033 | 0.004 |
| 568.299 | 0.028 | 0.004 |
| 568.299 | 0.027 | 0.004 |
| 568.300 | 0.028 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.019 | 0.004 |

|                      |      |       |       |       |
|----------------------|------|-------|-------|-------|
| Dumpers/Truckers     | 25   | 0.685 | 2.340 | 4.332 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 |
| Excavators           | 50   | 0.602 | 5.309 | 3.393 |
| Excavators           | 120  | 0.301 | 3.806 | 1.676 |
| Excavators           | 175  | 0.213 | 3.362 | 0.525 |
| Excavators           | 250  | 0.203 | 1.145 | 0.452 |
| Excavators           | 500  | 0.202 | 1.088 | 0.433 |
| Excavators           | 750  | 0.202 | 1.088 | 0.437 |
| Forklifts            | 50   | 0.565 | 5.272 | 3.330 |
| Forklifts            | 120  | 0.283 | 3.799 | 1.555 |
| Forklifts            | 175  | 0.199 | 3.360 | 0.391 |
| Forklifts            | 250  | 0.195 | 1.144 | 0.341 |
| Forklifts            | 500  | 0.195 | 1.088 | 0.341 |
| Generator Sets       | 15   | 0.592 | 3.470 | 4.164 |
| Generator Sets       | 25   | 0.686 | 2.340 | 4.347 |
| Generator Sets       | 50   | 0.315 | 3.640 | 3.107 |
| Generator Sets       | 120  | 0.178 | 3.316 | 1.645 |
| Generator Sets       | 175  | 0.130 | 2.929 | 0.601 |
| Generator Sets       | 250  | 0.120 | 0.998 | 0.504 |
| Generator Sets       | 500  | 0.119 | 0.978 | 0.476 |
| Generator Sets       | 750  | 0.119 | 0.978 | 0.482 |
| Generator Sets       | 9999 | 0.128 | 0.979 | 2.483 |
| Graders              | 50   | 0.648 | 5.239 | 3.530 |
| Graders              | 120  | 0.323 | 3.775 | 1.903 |
| Graders              | 175  | 0.237 | 3.326 | 0.815 |
| Graders              | 250  | 0.216 | 1.148 | 0.684 |
| Graders              | 500  | 0.214 | 1.097 | 0.647 |
| Graders              | 750  | 0.214 | 1.097 | 0.654 |
| Off-Highway Tractors | 120  | 0.518 | 3.944 | 2.959 |
| Off-Highway Tractors | 175  | 0.373 | 3.435 | 1.916 |
| Off-Highway Tractors | 250  | 0.315 | 1.286 | 1.715 |
| Off-Highway Tractors | 750  | 0.304 | 1.351 | 1.590 |
| Off-Highway Tractors | 1000 | 0.318 | 1.409 | 3.569 |
| Off-Highway Trucks   | 175  | 0.229 | 3.425 | 0.563 |
| Off-Highway Trucks   | 250  | 0.217 | 1.166 | 0.481 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.300 | 0.019 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.038 | 0.005 |
| 568.300 | 0.020 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.300 | 0.013 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.054 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.216 | 1.104 | 0.458 |
| Off-Highway Trucks                 | 750  | 0.217 | 1.104 | 0.463 |
| Off-Highway Trucks                 | 1000 | 0.220 | 1.107 | 2.651 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 |
| Other Construction Equipment       | 50   | 0.429 | 4.390 | 3.190 |
| Other Construction Equipment       | 120  | 0.225 | 3.538 | 1.576 |
| Other Construction Equipment       | 175  | 0.161 | 3.127 | 0.459 |
| Other Construction Equipment       | 500  | 0.154 | 1.028 | 0.391 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 |
| Other General Industrial Equipment | 50   | 0.609 | 5.299 | 3.460 |
| Other General Industrial Equipment | 120  | 0.309 | 3.802 | 1.766 |
| Other General Industrial Equipment | 175  | 0.223 | 3.357 | 0.641 |
| Other General Industrial Equipment | 250  | 0.209 | 1.143 | 0.536 |
| Other General Industrial Equipment | 500  | 0.208 | 1.087 | 0.506 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.076 | 0.005 |
| 568.300 | 0.036 | 0.004 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.072 | 0.005 |
| 568.300 | 0.035 | 0.004 |
| 568.299 | 0.026 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.300 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.019 | 0.005 |
| 568.300 | 0.012 | 0.004 |
| 568.299 | 0.011 | 0.004 |

|                                    |      |       |       |       |
|------------------------------------|------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.208 | 1.087 | 0.512 |
| Other General Industrial Equipment | 1000 | 0.212 | 1.088 | 2.660 |
| Other Material Handling Equipment  | 50   | 0.598 | 5.237 | 3.447 |
| Other Material Handling Equipment  | 120  | 0.304 | 3.784 | 1.762 |
| Other Material Handling Equipment  | 175  | 0.220 | 3.341 | 0.640 |
| Other Material Handling Equipment  | 250  | 0.206 | 1.138 | 0.535 |
| Other Material Handling Equipment  | 500  | 0.205 | 1.083 | 0.505 |
| Other Material Handling Equipment  | 9999 | 0.218 | 1.084 | 2.653 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 |
| Pavers                             | 50   | 0.845 | 5.396 | 3.841 |
| Pavers                             | 120  | 0.408 | 3.800 | 2.468 |
| Pavers                             | 175  | 0.300 | 3.326 | 1.425 |
| Pavers                             | 250  | 0.259 | 1.192 | 1.246 |
| Pavers                             | 500  | 0.253 | 1.181 | 1.141 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 |
| Paving Equipment                   | 50   | 0.802 | 5.309 | 3.809 |
| Paving Equipment                   | 120  | 0.390 | 3.774 | 2.393 |
| Paving Equipment                   | 175  | 0.290 | 3.306 | 1.363 |
| Paving Equipment                   | 250  | 0.250 | 1.171 | 1.176 |
| Plate Compactors                   | 15   | 0.661 | 3.469 | 4.142 |
| Pressure Washers                   | 15   | 0.592 | 3.470 | 4.164 |
| Pressure Washers                   | 25   | 0.686 | 2.340 | 4.347 |
| Pressure Washers                   | 50   | 0.215 | 3.124 | 2.989 |
| Pressure Washers                   | 120  | 0.134 | 3.167 | 1.594 |
| Pressure Washers                   | 175  | 0.126 | 2.907 | 0.619 |



|         |       |       |
|---------|-------|-------|
| 568.299 | 0.008 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.300 | 0.061 | 0.005 |
| 568.299 | 0.031 | 0.005 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.012 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.011 | 0.004 |
| 568.299 | 0.012 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.049 | 0.005 |
| 568.299 | 0.025 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.300 | 0.017 | 0.004 |
| 568.299 | 0.035 | 0.004 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.029 | 0.004 |
| 568.299 | 0.030 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.300 | 0.057 | 0.005 |
| 568.299 | 0.028 | 0.004 |
| 568.299 | 0.020 | 0.004 |

|                         |      |       |       |       |
|-------------------------|------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 |
| Pumps                   | 15   | 0.663 | 3.470 | 4.164 |
| Pumps                   | 25   | 0.687 | 2.340 | 4.347 |
| Pumps                   | 50   | 0.348 | 3.814 | 3.146 |
| Pumps                   | 120  | 0.193 | 3.367 | 1.662 |
| Pumps                   | 175  | 0.142 | 2.973 | 0.610 |
| Pumps                   | 250  | 0.130 | 1.013 | 0.511 |
| Pumps                   | 500  | 0.129 | 0.989 | 0.482 |
| Pumps                   | 750  | 0.129 | 0.989 | 0.488 |
| Pumps                   | 9999 | 0.139 | 0.990 | 2.504 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 |
| Rollers                 | 25   | 0.685 | 2.339 | 4.332 |
| Rollers                 | 50   | 0.587 | 4.784 | 3.480 |
| Rollers                 | 120  | 0.299 | 3.639 | 1.950 |
| Rollers                 | 175  | 0.223 | 3.203 | 0.907 |
| Rollers                 | 250  | 0.195 | 1.099 | 0.745 |
| Rollers                 | 500  | 0.193 | 1.056 | 0.697 |
| Rough Terrain Forklifts | 50   | 0.548 | 5.031 | 3.359 |
| Rough Terrain Forklifts | 120  | 0.279 | 3.725 | 1.671 |
| Rough Terrain Forklifts | 175  | 0.200 | 3.291 | 0.537 |
| Rough Terrain Forklifts | 250  | 0.191 | 1.121 | 0.463 |
| Rough Terrain Forklifts | 500  | 0.190 | 1.070 | 0.443 |
| Rubber Tired Dozers     | 175  | 0.398 | 3.496 | 2.034 |
| Rubber Tired Dozers     | 250  | 0.335 | 1.322 | 1.828 |
| Rubber Tired Dozers     | 500  | 0.322 | 1.401 | 1.658 |
| Rubber Tired Dozers     | 750  | 0.323 | 1.401 | 1.694 |
| Rubber Tired Dozers     | 1000 | 0.338 | 1.465 | 3.676 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 |
| Rubber Tired Loaders    | 50   | 0.634 | 5.181 | 3.500 |
| Rubber Tired Loaders    | 120  | 0.317 | 3.759 | 1.875 |
| Rubber Tired Loaders    | 175  | 0.232 | 3.312 | 0.787 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.018 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.037 | 0.004 |
| 568.299 | 0.027 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.035 | 0.005 |
| 568.300 | 0.019 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 686.695 | 0.015 | 0.004 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.037 | 0.005 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.046 | 0.005 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.053 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.046 | 0.005 |
| 568.299 | 0.023 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.061 | 0.005 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.210 | 1.138 | 0.655 |
| Rubber Tired Loaders      | 500  | 0.208 | 1.085 | 0.619 |
| Rubber Tired Loaders      | 750  | 0.208 | 1.085 | 0.627 |
| Rubber Tired Loaders      | 1000 | 0.214 | 1.099 | 2.722 |
| Scrapers                  | 120  | 0.410 | 3.866 | 2.384 |
| Scrapers                  | 175  | 0.301 | 3.389 | 1.320 |
| Scrapers                  | 250  | 0.264 | 1.206 | 1.149 |
| Scrapers                  | 500  | 0.259 | 1.184 | 1.057 |
| Scrapers                  | 750  | 0.259 | 1.184 | 1.075 |
| Signal Boards             | 15   | 0.661 | 3.470 | 4.142 |
| Signal Boards             | 50   | 0.393 | 4.099 | 3.193 |
| Signal Boards             | 120  | 0.213 | 3.451 | 1.657 |
| Signal Boards             | 175  | 0.157 | 3.048 | 0.586 |
| Signal Boards             | 250  | 0.176 | 1.255 | 0.594 |
| Skid Steer Loaders        | 25   | 0.685 | 2.340 | 4.332 |
| Skid Steer Loaders        | 50   | 0.411 | 4.386 | 3.128 |
| Skid Steer Loaders        | 120  | 0.214 | 3.538 | 1.477 |
| Surfacing Equipment       | 50   | 0.518 | 4.295 | 3.400 |
| Surfacing Equipment       | 120  | 0.264 | 3.492 | 1.959 |
| Surfacing Equipment       | 175  | 0.197 | 3.071 | 0.939 |
| Surfacing Equipment       | 250  | 0.172 | 1.064 | 0.789 |
| Surfacing Equipment       | 500  | 0.169 | 1.032 | 0.738 |
| Surfacing Equipment       | 750  | 0.169 | 1.032 | 0.749 |
| Sweepers/S crubbers       | 15   | 0.589 | 3.470 | 4.142 |
| Sweepers/S crubbers       | 25   | 0.685 | 2.340 | 4.332 |
| Sweepers/S crubbers       | 50   | 0.509 | 4.947 | 3.294 |
| Sweepers/S crubbers       | 120  | 0.261 | 3.703 | 1.569 |
| Sweepers/S crubbers       | 175  | 0.187 | 3.275 | 0.431 |
| Sweepers/S crubbers       | 250  | 0.182 | 1.116 | 0.370 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 |

|         |       |       |
|---------|-------|-------|
| 568.299 | 0.048 | 0.005 |
| 568.299 | 0.024 | 0.004 |
| 568.299 | 0.017 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.016 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.076 | 0.005 |
| 568.299 | 0.036 | 0.004 |
| 568.300 | 0.027 | 0.004 |
| 568.300 | 0.023 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.022 | 0.004 |
| 568.299 | 0.059 | 0.005 |
| 568.299 | 0.061 | 0.005 |
| 568.299 | 0.040 | 0.005 |
| 568.299 | 0.021 | 0.004 |
| 568.299 | 0.015 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.299 | 0.014 | 0.004 |
| 568.299 | 0.020 | 0.004 |
| 568.300 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.299 | 0.019 | 0.004 |
| 568.300 | 0.019 | 0.004 |

|                           |      |       |       |       |
|---------------------------|------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.539 | 4.966 | 3.299 |
| Tractors/Loaders/Backhoes | 120  | 0.272 | 3.705 | 1.624 |
| Tractors/Loaders/Backhoes | 175  | 0.193 | 3.273 | 0.485 |
| Tractors/Loaders/Backhoes | 250  | 0.183 | 1.115 | 0.418 |
| Tractors/Loaders/Backhoes | 500  | 0.182 | 1.066 | 0.403 |
| Tractors/Loaders/Backhoes | 750  | 0.182 | 1.066 | 0.407 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 |
| Trenchers                 | 50   | 0.851 | 5.208 | 3.835 |
| Trenchers                 | 120  | 0.409 | 3.743 | 2.559 |
| Trenchers                 | 175  | 0.300 | 3.273 | 1.529 |
| Trenchers                 | 250  | 0.256 | 1.188 | 1.348 |
| Trenchers                 | 500  | 0.249 | 1.209 | 1.231 |
| Trenchers                 | 750  | 0.249 | 1.209 | 1.254 |
| Welders                   | 15   | 0.663 | 3.470 | 4.164 |
| Welders                   | 25   | 0.687 | 2.340 | 4.347 |
| Welders                   | 50   | 0.449 | 4.387 | 3.273 |
| Welders                   | 120  | 0.239 | 3.535 | 1.707 |
| Welders                   | 175  | 0.176 | 3.121 | 0.628 |
| Welders                   | 250  | 0.162 | 1.063 | 0.525 |
| Welders                   | 500  | 0.161 | 1.027 | 0.495 |
| Water Trucks              | 175  | 0.229 | 3.425 | 0.563 |
| Water Trucks              | 250  | 0.217 | 1.166 | 0.481 |
| Water Trucks              | 500  | 0.216 | 1.104 | 0.458 |
| Water Trucks              | 750  | 0.217 | 1.104 | 0.463 |
| Water Trucks              | 1000 | 0.220 | 1.107 | 2.651 |

2034

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|
| SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 0.007   | 0.040   | 0.040   | 568.300 | 0.030   | 0.005   |
| 0.006   | 0.036   | 0.036   | 568.299 | 0.017   | 0.004   |
| 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.008   | 0.166   | 0.166   | 568.299 | 0.059   | 0.005   |
| 0.007   | 0.165   | 0.165   | 568.299 | 0.061   | 0.005   |
| 0.007   | 0.046   | 0.046   | 568.299 | 0.045   | 0.005   |
| 0.006   | 0.041   | 0.041   | 568.299 | 0.023   | 0.004   |
| 0.006   | 0.027   | 0.027   | 568.299 | 0.017   | 0.004   |
| 0.006   | 0.018   | 0.018   | 568.299 | 0.016   | 0.004   |
| 0.005   | 0.017   | 0.017   | 568.299 | 0.016   | 0.004   |
| 0.005   | 0.017   | 0.017   | 568.300 | 0.016   | 0.004   |
| 0.005   | 0.033   | 0.033   | 568.299 | 0.016   | 0.004   |
| 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

| 2034             |       |
|------------------|-------|
| Equipment        | MaxHP |
| Aerial Lifts     | 15    |
| Aerial Lifts     | 25    |
| Aerial Lifts     | 50    |
| Aerial Lifts     | 120   |
| Aerial Lifts     | 500   |
| Aerial Lifts     | 750   |
| Air Compressor s | 15    |
| Air Compressor s | 25    |
| Air Compressor s | 50    |
| Air Compressor s | 120   |
| Air Compressor s | 175   |
| Air Compressor s | 250   |
| Air Compressor s | 500   |
| Air Compressor s | 750   |
| Air Compressor s | 1000  |
| Bore/Drill Rigs  | 15    |
| Bore/Drill Rigs  | 25    |
| Bore/Drill Rigs  | 50    |
| Bore/Drill Rigs  | 120   |
| Bore/Drill Rigs  | 175   |
| Bore/Drill Rigs  | 250   |
| Bore/Drill Rigs  | 500   |
| Bore/Drill Rigs  | 750   |
| Bore/Drill Rigs  | 1000  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.041 | 0.041 | 568.299 | 0.036 | 0.005 |
| 0.006 | 0.036 | 0.036 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 0.007 | 0.075 | 0.075 | 568.299 | 0.061 | 0.005 |
| 0.006 | 0.067 | 0.067 | 568.299 | 0.030 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.020 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.020 | 0.004 |
| 0.005 | 0.024 | 0.024 | 568.300 | 0.020 | 0.004 |
| 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.007 | 0.116 | 0.116 | 568.299 | 0.075 | 0.005 |
| 0.006 | 0.105 | 0.105 | 568.299 | 0.036 | 0.004 |
| 0.006 | 0.065 | 0.065 | 568.299 | 0.026 | 0.004 |
| 0.006 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.056 | 0.056 | 568.300 | 0.023 | 0.004 |
| 0.007 | 0.043 | 0.043 | 568.299 | 0.047 | 0.005 |
| 0.006 | 0.038 | 0.038 | 568.299 | 0.024 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.005 | 0.032 | 0.032 | 568.299 | 0.017 | 0.004 |

|                          |      |
|--------------------------|------|
| Cement and Mortar Mixers | 15   |
| Cement and Mortar Mixers | 25   |
| Concrete/Industrial Saws | 25   |
| Concrete/Industrial Saws | 50   |
| Concrete/Industrial Saws | 120  |
| Concrete/Industrial Saws | 175  |
| Cranes                   | 50   |
| Cranes                   | 120  |
| Cranes                   | 175  |
| Cranes                   | 250  |
| Cranes                   | 500  |
| Cranes                   | 750  |
| Cranes                   | 9999 |
| Crawler Tractors         | 50   |
| Crawler Tractors         | 120  |
| Crawler Tractors         | 175  |
| Crawler Tractors         | 250  |
| Crawler Tractors         | 500  |
| Crawler Tractors         | 750  |
| Crawler Tractors         | 1000 |
| Crushing/Proc. Equipment | 50   |
| Crushing/Proc. Equipment | 120  |
| Crushing/Proc. Equipment | 175  |
| Crushing/Proc. Equipment | 250  |
| Crushing/Proc. Equipment | 500  |
| Crushing/Proc. Equipment | 750  |
| Crushing/Proc. Equipment | 9999 |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
| 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
| 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
| 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
| 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|                      |      |
|----------------------|------|
| Dumpers/Truckers     | 25   |
| Excavators           | 25   |
| Excavators           | 50   |
| Excavators           | 120  |
| Excavators           | 175  |
| Excavators           | 250  |
| Excavators           | 500  |
| Excavators           | 750  |
| Forklifts            | 50   |
| Forklifts            | 120  |
| Forklifts            | 175  |
| Forklifts            | 250  |
| Forklifts            | 500  |
| Generator Sets       | 15   |
| Generator Sets       | 25   |
| Generator Sets       | 50   |
| Generator Sets       | 120  |
| Generator Sets       | 175  |
| Generator Sets       | 250  |
| Generator Sets       | 500  |
| Generator Sets       | 750  |
| Generator Sets       | 9999 |
| Graders              | 50   |
| Graders              | 120  |
| Graders              | 175  |
| Graders              | 250  |
| Graders              | 500  |
| Graders              | 750  |
| Off-Highway Tractors | 120  |
| Off-Highway Tractors | 175  |
| Off-Highway Tractors | 250  |
| Off-Highway Tractors | 750  |
| Off-Highway Tractors | 1000 |
| Off-Highway Trucks   | 175  |
| Off-Highway Trucks   | 250  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.030 | 0.030 | 568.299 | 0.038 | 0.005 |
| 0.006 | 0.027 | 0.027 | 568.300 | 0.020 | 0.004 |
| 0.006 | 0.019 | 0.019 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.014 | 0.014 | 568.300 | 0.013 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.048 | 0.048 | 568.299 | 0.054 | 0.005 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.028 | 0.028 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Off-Highway Trucks                 | 500  |
| Off-Highway Trucks                 | 750  |
| Off-Highway Trucks                 | 1000 |
| Other Construction Equipment       | 15   |
| Other Construction Equipment       | 25   |
| Other Construction Equipment       | 50   |
| Other Construction Equipment       | 120  |
| Other Construction Equipment       | 175  |
| Other Construction Equipment       | 500  |
| Other General Industrial Equipment | 15   |
| Other General Industrial Equipment | 25   |
| Other General Industrial Equipment | 50   |
| Other General Industrial Equipment | 120  |
| Other General Industrial Equipment | 175  |
| Other General Industrial Equipment | 250  |
| Other General Industrial Equipment | 500  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |

|                                    |      |
|------------------------------------|------|
| Other General Industrial Equipment | 750  |
| Other General Industrial Equipment | 1000 |
| Other Material Handling Equipment  | 50   |
| Other Material Handling Equipment  | 120  |
| Other Material Handling Equipment  | 175  |
| Other Material Handling Equipment  | 250  |
| Other Material Handling Equipment  | 500  |
| Other Material Handling Equipment  | 9999 |
| Pavers                             | 25   |
| Pavers                             | 50   |
| Pavers                             | 120  |
| Pavers                             | 175  |
| Pavers                             | 250  |
| Pavers                             | 500  |
| Paving Equipment                   | 25   |
| Paving Equipment                   | 50   |
| Paving Equipment                   | 120  |
| Paving Equipment                   | 175  |
| Paving Equipment                   | 250  |
| Plate Compactors                   | 15   |
| Pressure Washers                   | 15   |
| Pressure Washers                   | 25   |
| Pressure Washers                   | 50   |
| Pressure Washers                   | 120  |
| Pressure Washers                   | 175  |



|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|                         |      |
|-------------------------|------|
| Pressure Washers        | 250  |
| Pumps                   | 15   |
| Pumps                   | 25   |
| Pumps                   | 50   |
| Pumps                   | 120  |
| Pumps                   | 175  |
| Pumps                   | 250  |
| Pumps                   | 500  |
| Pumps                   | 750  |
| Pumps                   | 9999 |
| Rollers                 | 15   |
| Rollers                 | 25   |
| Rollers                 | 50   |
| Rollers                 | 120  |
| Rollers                 | 175  |
| Rollers                 | 250  |
| Rollers                 | 500  |
| Rough Terrain Forklifts | 50   |
| Rough Terrain Forklifts | 120  |
| Rough Terrain Forklifts | 175  |
| Rough Terrain Forklifts | 250  |
| Rough Terrain Forklifts | 500  |
| Rubber Tired Dozers     | 175  |
| Rubber Tired Dozers     | 250  |
| Rubber Tired Dozers     | 500  |
| Rubber Tired Dozers     | 750  |
| Rubber Tired Dozers     | 1000 |
| Rubber Tired Loaders    | 25   |
| Rubber Tired Loaders    | 50   |
| Rubber Tired Loaders    | 120  |
| Rubber Tired Loaders    | 175  |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|                           |      |
|---------------------------|------|
| Rubber Tired Loaders      | 250  |
| Rubber Tired Loaders      | 500  |
| Rubber Tired Loaders      | 750  |
| Rubber Tired Loaders      | 1000 |
| Scrapers                  | 120  |
| Scrapers                  | 175  |
| Scrapers                  | 250  |
| Scrapers                  | 500  |
| Scrapers                  | 750  |
| Signal Boards             | 15   |
| Signal Boards             | 50   |
| Signal Boards             | 120  |
| Signal Boards             | 175  |
| Signal Boards             | 250  |
| Skid Steer Loaders        | 25   |
| Skid Steer Loaders        | 50   |
| Skid Steer Loaders        | 120  |
| Surfacing Equipment       | 50   |
| Surfacing Equipment       | 120  |
| Surfacing Equipment       | 175  |
| Surfacing Equipment       | 250  |
| Surfacing Equipment       | 500  |
| Surfacing Equipment       | 750  |
| Sweepers/S crubbers       | 15   |
| Sweepers/S crubbers       | 25   |
| Sweepers/S crubbers       | 50   |
| Sweepers/S crubbers       | 120  |
| Sweepers/S crubbers       | 175  |
| Sweepers/S crubbers       | 250  |
| Tractors/Loaders/Backhoes | 25   |

|       |       |       |         |       |       |
|-------|-------|-------|---------|-------|-------|
| 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

|                           |      |
|---------------------------|------|
| Tractors/Loaders/Backhoes | 50   |
| Tractors/Loaders/Backhoes | 120  |
| Tractors/Loaders/Backhoes | 175  |
| Tractors/Loaders/Backhoes | 250  |
| Tractors/Loaders/Backhoes | 500  |
| Tractors/Loaders/Backhoes | 750  |
| Trenchers                 | 15   |
| Trenchers                 | 25   |
| Trenchers                 | 50   |
| Trenchers                 | 120  |
| Trenchers                 | 175  |
| Trenchers                 | 250  |
| Trenchers                 | 500  |
| Trenchers                 | 750  |
| Welders                   | 15   |
| Welders                   | 25   |
| Welders                   | 50   |
| Welders                   | 120  |
| Welders                   | 175  |
| Welders                   | 250  |
| Welders                   | 500  |
| Water Trucks              | 175  |
| Water Trucks              | 250  |
| Water Trucks              | 500  |
| Water Trucks              | 750  |
| Water Trucks              | 1000 |

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 0.339   | 3.764   | 3.135   | 0.007   | 0.040   | 0.040   | 568.300 | 0.030   | 0.005   |
| 0.188   | 3.352   | 1.657   | 0.006   | 0.036   | 0.036   | 568.299 | 0.017   | 0.004   |
| 0.126   | 0.986   | 0.479   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.126   | 0.986   | 0.485   | 0.005   | 0.016   | 0.016   | 568.299 | 0.011   | 0.004   |
| 0.663   | 3.470   | 4.164   | 0.008   | 0.166   | 0.166   | 568.299 | 0.059   | 0.005   |
| 0.687   | 2.340   | 4.347   | 0.007   | 0.165   | 0.165   | 568.299 | 0.061   | 0.005   |
| 0.506   | 4.712   | 3.340   | 0.007   | 0.046   | 0.046   | 568.299 | 0.045   | 0.005   |
| 0.264   | 3.630   | 1.729   | 0.006   | 0.041   | 0.041   | 568.299 | 0.023   | 0.004   |
| 0.193   | 3.205   | 0.633   | 0.006   | 0.027   | 0.027   | 568.299 | 0.017   | 0.004   |
| 0.179   | 1.092   | 0.529   | 0.006   | 0.018   | 0.018   | 568.299 | 0.016   | 0.004   |
| 0.178   | 1.048   | 0.499   | 0.005   | 0.017   | 0.017   | 568.299 | 0.016   | 0.004   |
| 0.178   | 1.048   | 0.505   | 0.005   | 0.017   | 0.017   | 568.300 | 0.016   | 0.004   |
| 0.182   | 1.049   | 2.600   | 0.005   | 0.033   | 0.033   | 568.299 | 0.016   | 0.004   |
| 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 0.348   | 4.029   | 3.020   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 0.183   | 3.434   | 1.415   | 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 0.127   | 3.038   | 0.279   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.035   | 0.274   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.006   | 0.274   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.127   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.333 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.409 | 4.199 | 3.222 | 0.007 | 0.041 | 0.041 | 568.299 | 0.036 | 0.005 |
| 0.221 | 3.480 | 1.667 | 0.006 | 0.036 | 0.036 | 568.299 | 0.019 | 0.004 |
| 0.163 | 3.074 | 0.590 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 0.684 | 5.366 | 3.598 | 0.007 | 0.075 | 0.075 | 568.299 | 0.061 | 0.005 |
| 0.343 | 3.812 | 1.987 | 0.006 | 0.067 | 0.067 | 568.299 | 0.030 | 0.004 |
| 0.253 | 3.356 | 0.916 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.224 | 1.147 | 0.748 | 0.006 | 0.024 | 0.024 | 568.299 | 0.020 | 0.004 |
| 0.222 | 1.090 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.020 | 0.004 |
| 0.222 | 1.090 | 0.709 | 0.005 | 0.024 | 0.024 | 568.300 | 0.020 | 0.004 |
| 0.245 | 1.108 | 2.800 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.833 | 5.605 | 3.808 | 0.007 | 0.116 | 0.116 | 568.299 | 0.075 | 0.005 |
| 0.405 | 3.871 | 2.341 | 0.006 | 0.105 | 0.105 | 568.299 | 0.036 | 0.004 |
| 0.296 | 3.397 | 1.266 | 0.006 | 0.065 | 0.065 | 568.299 | 0.026 | 0.004 |
| 0.262 | 1.207 | 1.104 | 0.006 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.257 | 1.200 | 1.016 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.257 | 1.200 | 1.033 | 0.005 | 0.038 | 0.038 | 568.299 | 0.023 | 0.004 |
| 0.265 | 1.225 | 3.094 | 0.005 | 0.056 | 0.056 | 568.300 | 0.023 | 0.004 |
| 0.525 | 4.857 | 3.351 | 0.007 | 0.043 | 0.043 | 568.299 | 0.047 | 0.005 |
| 0.272 | 3.673 | 1.708 | 0.006 | 0.038 | 0.038 | 568.299 | 0.024 | 0.004 |
| 0.197 | 3.244 | 0.600 | 0.006 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 0.185 | 1.105 | 0.502 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.184 | 1.058 | 0.476 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.184 | 1.058 | 0.478 | 0.005 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.196 | 1.059 | 2.590 | 0.005 | 0.032 | 0.032 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.602 | 5.309 | 3.393 | 0.007 | 0.038 | 0.038 | 568.299 | 0.054 | 0.005 |
| 0.301 | 3.806 | 1.676 | 0.006 | 0.034 | 0.034 | 568.299 | 0.027 | 0.004 |
| 0.213 | 3.362 | 0.525 | 0.006 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.203 | 1.145 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.202 | 1.088 | 0.433 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.202 | 1.088 | 0.437 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.565 | 5.272 | 3.330 | 0.007 | 0.023 | 0.023 | 568.299 | 0.051 | 0.005 |
| 0.283 | 3.799 | 1.555 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.199 | 3.360 | 0.391 | 0.006 | 0.015 | 0.015 | 568.299 | 0.018 | 0.004 |
| 0.195 | 1.144 | 0.341 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.195 | 1.088 | 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.053 | 0.005 |
| 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.315 | 3.640 | 3.107 | 0.007 | 0.038 | 0.038 | 568.299 | 0.028 | 0.005 |
| 0.178 | 3.316 | 1.645 | 0.006 | 0.034 | 0.034 | 568.299 | 0.016 | 0.004 |
| 0.130 | 2.929 | 0.601 | 0.006 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.120 | 0.998 | 0.504 | 0.006 | 0.016 | 0.016 | 568.299 | 0.010 | 0.004 |
| 0.119 | 0.978 | 0.476 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.119 | 0.978 | 0.482 | 0.005 | 0.015 | 0.015 | 568.299 | 0.010 | 0.004 |
| 0.128 | 0.979 | 2.483 | 0.005 | 0.029 | 0.029 | 568.299 | 0.011 | 0.004 |
| 0.648 | 5.239 | 3.530 | 0.007 | 0.065 | 0.065 | 568.299 | 0.058 | 0.005 |
| 0.323 | 3.775 | 1.903 | 0.006 | 0.058 | 0.058 | 568.299 | 0.029 | 0.004 |
| 0.237 | 3.326 | 0.815 | 0.006 | 0.038 | 0.038 | 568.300 | 0.021 | 0.004 |
| 0.216 | 1.148 | 0.684 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.214 | 1.097 | 0.647 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.214 | 1.097 | 0.654 | 0.005 | 0.023 | 0.023 | 568.299 | 0.019 | 0.004 |
| 0.518 | 3.944 | 2.959 | 0.006 | 0.175 | 0.175 | 568.299 | 0.046 | 0.004 |
| 0.373 | 3.435 | 1.916 | 0.006 | 0.104 | 0.104 | 568.299 | 0.033 | 0.004 |
| 0.315 | 1.286 | 1.715 | 0.006 | 0.064 | 0.064 | 568.299 | 0.028 | 0.004 |
| 0.304 | 1.351 | 1.590 | 0.005 | 0.060 | 0.060 | 568.299 | 0.027 | 0.004 |
| 0.318 | 1.409 | 3.569 | 0.005 | 0.078 | 0.078 | 568.300 | 0.028 | 0.004 |
| 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.429 | 4.390 | 3.190 | 0.007 | 0.030 | 0.030 | 568.299 | 0.038 | 0.005 |
| 0.225 | 3.538 | 1.576 | 0.006 | 0.027 | 0.027 | 568.300 | 0.020 | 0.004 |
| 0.161 | 3.127 | 0.459 | 0.006 | 0.019 | 0.019 | 568.299 | 0.014 | 0.004 |
| 0.154 | 1.028 | 0.391 | 0.005 | 0.014 | 0.014 | 568.300 | 0.013 | 0.004 |
| 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.609 | 5.299 | 3.460 | 0.007 | 0.048 | 0.048 | 568.299 | 0.054 | 0.005 |
| 0.309 | 3.802 | 1.766 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.223 | 3.357 | 0.641 | 0.006 | 0.028 | 0.028 | 568.299 | 0.020 | 0.004 |
| 0.209 | 1.143 | 0.536 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.208 | 1.087 | 0.506 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.208 | 1.087 | 0.512 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.212 | 1.088 | 2.660 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.598 | 5.237 | 3.447 | 0.007 | 0.048 | 0.048 | 568.299 | 0.053 | 0.005 |
| 0.304 | 3.784 | 1.762 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.220 | 3.341 | 0.640 | 0.006 | 0.028 | 0.028 | 568.299 | 0.019 | 0.004 |
| 0.206 | 1.138 | 0.535 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.205 | 1.083 | 0.505 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.218 | 1.084 | 2.653 | 0.005 | 0.035 | 0.035 | 568.299 | 0.019 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.845 | 5.396 | 3.841 | 0.007 | 0.134 | 0.134 | 568.299 | 0.076 | 0.005 |
| 0.408 | 3.800 | 2.468 | 0.006 | 0.121 | 0.121 | 568.300 | 0.036 | 0.004 |
| 0.300 | 3.326 | 1.425 | 0.006 | 0.074 | 0.074 | 568.299 | 0.027 | 0.004 |
| 0.259 | 1.192 | 1.246 | 0.006 | 0.045 | 0.045 | 568.299 | 0.023 | 0.004 |
| 0.253 | 1.181 | 1.141 | 0.005 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.802 | 5.309 | 3.809 | 0.007 | 0.126 | 0.126 | 568.299 | 0.072 | 0.005 |
| 0.390 | 3.774 | 2.393 | 0.006 | 0.114 | 0.114 | 568.300 | 0.035 | 0.004 |
| 0.290 | 3.306 | 1.363 | 0.006 | 0.070 | 0.070 | 568.299 | 0.026 | 0.004 |
| 0.250 | 1.171 | 1.176 | 0.006 | 0.042 | 0.042 | 568.299 | 0.022 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.592 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.300 | 0.053 | 0.005 |
| 0.686 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.215 | 3.124 | 2.989 | 0.007 | 0.030 | 0.030 | 568.299 | 0.019 | 0.005 |
| 0.134 | 3.167 | 1.594 | 0.006 | 0.028 | 0.028 | 568.300 | 0.012 | 0.004 |
| 0.126 | 2.907 | 0.619 | 0.006 | 0.024 | 0.024 | 568.299 | 0.011 | 0.004 |



|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.300 | 0.061 | 0.005 |
| 0.348 | 3.814 | 3.146 | 0.007 | 0.040 | 0.040 | 568.299 | 0.031 | 0.005 |
| 0.193 | 3.367 | 1.662 | 0.006 | 0.036 | 0.036 | 568.299 | 0.017 | 0.004 |
| 0.142 | 2.973 | 0.610 | 0.006 | 0.024 | 0.024 | 568.299 | 0.012 | 0.004 |
| 0.130 | 1.013 | 0.511 | 0.006 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.129 | 0.989 | 0.482 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.129 | 0.989 | 0.488 | 0.005 | 0.016 | 0.016 | 568.299 | 0.011 | 0.004 |
| 0.139 | 0.990 | 2.504 | 0.005 | 0.030 | 0.030 | 568.299 | 0.012 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.587 | 4.784 | 3.480 | 0.007 | 0.073 | 0.073 | 568.299 | 0.053 | 0.005 |
| 0.299 | 3.639 | 1.950 | 0.006 | 0.066 | 0.066 | 568.299 | 0.027 | 0.004 |
| 0.223 | 3.203 | 0.907 | 0.006 | 0.042 | 0.042 | 568.299 | 0.020 | 0.004 |
| 0.195 | 1.099 | 0.745 | 0.006 | 0.024 | 0.024 | 568.299 | 0.017 | 0.004 |
| 0.193 | 1.056 | 0.697 | 0.005 | 0.023 | 0.023 | 568.299 | 0.017 | 0.004 |
| 0.548 | 5.031 | 3.359 | 0.007 | 0.039 | 0.039 | 568.299 | 0.049 | 0.005 |
| 0.279 | 3.725 | 1.671 | 0.006 | 0.034 | 0.034 | 568.299 | 0.025 | 0.004 |
| 0.200 | 3.291 | 0.537 | 0.006 | 0.023 | 0.023 | 568.299 | 0.018 | 0.004 |
| 0.191 | 1.121 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.190 | 1.070 | 0.443 | 0.005 | 0.016 | 0.016 | 568.300 | 0.017 | 0.004 |
| 0.398 | 3.496 | 2.034 | 0.006 | 0.111 | 0.111 | 568.299 | 0.035 | 0.004 |
| 0.335 | 1.322 | 1.828 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 0.322 | 1.401 | 1.658 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.323 | 1.401 | 1.694 | 0.005 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.338 | 1.465 | 3.676 | 0.005 | 0.082 | 0.082 | 568.299 | 0.030 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.634 | 5.181 | 3.500 | 0.007 | 0.062 | 0.062 | 568.300 | 0.057 | 0.005 |
| 0.317 | 3.759 | 1.875 | 0.006 | 0.056 | 0.056 | 568.299 | 0.028 | 0.004 |
| 0.232 | 3.312 | 0.787 | 0.006 | 0.036 | 0.036 | 568.299 | 0.020 | 0.004 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.210 | 1.138 | 0.655 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.208 | 1.085 | 0.619 | 0.005 | 0.021 | 0.021 | 568.299 | 0.018 | 0.004 |
| 0.208 | 1.085 | 0.627 | 0.005 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |
| 0.214 | 1.099 | 2.722 | 0.005 | 0.039 | 0.039 | 568.299 | 0.019 | 0.004 |
| 0.410 | 3.866 | 2.384 | 0.006 | 0.111 | 0.111 | 568.299 | 0.037 | 0.004 |
| 0.301 | 3.389 | 1.320 | 0.006 | 0.068 | 0.068 | 568.299 | 0.027 | 0.004 |
| 0.264 | 1.206 | 1.149 | 0.006 | 0.042 | 0.042 | 568.299 | 0.023 | 0.004 |
| 0.259 | 1.184 | 1.057 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.259 | 1.184 | 1.075 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.393 | 4.099 | 3.193 | 0.007 | 0.040 | 0.040 | 568.299 | 0.035 | 0.005 |
| 0.213 | 3.451 | 1.657 | 0.006 | 0.035 | 0.035 | 568.300 | 0.019 | 0.004 |
| 0.157 | 3.048 | 0.586 | 0.006 | 0.024 | 0.024 | 568.299 | 0.014 | 0.004 |
| 0.176 | 1.255 | 0.594 | 0.007 | 0.019 | 0.019 | 686.695 | 0.015 | 0.004 |
| 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.411 | 4.386 | 3.128 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 0.214 | 3.538 | 1.477 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.518 | 4.295 | 3.400 | 0.007 | 0.075 | 0.075 | 568.299 | 0.046 | 0.005 |
| 0.264 | 3.492 | 1.959 | 0.006 | 0.068 | 0.068 | 568.299 | 0.023 | 0.004 |
| 0.197 | 3.071 | 0.939 | 0.006 | 0.043 | 0.043 | 568.299 | 0.017 | 0.004 |
| 0.172 | 1.064 | 0.789 | 0.006 | 0.026 | 0.026 | 568.299 | 0.015 | 0.004 |
| 0.169 | 1.032 | 0.738 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.169 | 1.032 | 0.749 | 0.005 | 0.025 | 0.025 | 568.299 | 0.015 | 0.004 |
| 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.509 | 4.947 | 3.294 | 0.007 | 0.026 | 0.026 | 568.299 | 0.046 | 0.005 |
| 0.261 | 3.703 | 1.569 | 0.006 | 0.023 | 0.023 | 568.299 | 0.023 | 0.004 |
| 0.187 | 3.275 | 0.431 | 0.006 | 0.017 | 0.017 | 568.299 | 0.016 | 0.004 |
| 0.182 | 1.116 | 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|       |       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.539 | 4.966 | 3.299 | 0.007 | 0.033 | 0.033 | 568.299 | 0.048 | 0.005 |
| 0.272 | 3.705 | 1.624 | 0.006 | 0.030 | 0.030 | 568.299 | 0.024 | 0.004 |
| 0.193 | 3.273 | 0.485 | 0.006 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 0.183 | 1.115 | 0.418 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.182 | 1.066 | 0.403 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.182 | 1.066 | 0.407 | 0.006 | 0.014 | 0.014 | 568.299 | 0.016 | 0.004 |
| 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.851 | 5.208 | 3.835 | 0.007 | 0.144 | 0.144 | 568.299 | 0.076 | 0.005 |
| 0.409 | 3.743 | 2.559 | 0.006 | 0.132 | 0.132 | 568.299 | 0.036 | 0.004 |
| 0.300 | 3.273 | 1.529 | 0.006 | 0.080 | 0.080 | 568.300 | 0.027 | 0.004 |
| 0.256 | 1.188 | 1.348 | 0.006 | 0.049 | 0.049 | 568.300 | 0.023 | 0.004 |
| 0.249 | 1.209 | 1.231 | 0.005 | 0.046 | 0.046 | 568.299 | 0.022 | 0.004 |
| 0.249 | 1.209 | 1.254 | 0.005 | 0.047 | 0.047 | 568.299 | 0.022 | 0.004 |
| 0.663 | 3.470 | 4.164 | 0.008 | 0.166 | 0.166 | 568.299 | 0.059 | 0.005 |
| 0.687 | 2.340 | 4.347 | 0.007 | 0.165 | 0.165 | 568.299 | 0.061 | 0.005 |
| 0.449 | 4.387 | 3.273 | 0.007 | 0.045 | 0.045 | 568.299 | 0.040 | 0.005 |
| 0.239 | 3.535 | 1.707 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.176 | 3.121 | 0.628 | 0.006 | 0.027 | 0.027 | 568.299 | 0.015 | 0.004 |
| 0.162 | 1.063 | 0.525 | 0.006 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.161 | 1.027 | 0.495 | 0.005 | 0.017 | 0.017 | 568.299 | 0.014 | 0.004 |
| 0.229 | 3.425 | 0.563 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.217 | 1.166 | 0.481 | 0.006 | 0.017 | 0.017 | 568.300 | 0.019 | 0.004 |
| 0.216 | 1.104 | 0.458 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.217 | 1.104 | 0.463 | 0.005 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.220 | 1.107 | 2.651 | 0.005 | 0.033 | 0.033 | 568.300 | 0.019 | 0.004 |

| 2035             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   | 0.019   | 0.019   | 568.299 |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   | 0.017   | 0.017   | 568.299 |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   | 0.162   | 0.162   | 568.300 |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   | 0.023   | 0.023   | 568.299 |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   | 0.020   | 0.020   | 568.299 |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   | 0.015   | 0.015   | 568.300 |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   | 0.012   | 0.012   | 568.299 |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   | 0.012   | 0.012   | 568.299 |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   | 0.012   | 0.012   | 568.299 |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   | 0.026   | 0.026   | 568.299 |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   | 0.013   | 0.013   | 568.299 |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   | 0.012   | 0.012   | 568.300 |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 |

|                          |      |       |       |       |       |       |       |         |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 | 0.021 | 0.021 | 568.300 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 | 0.018 | 0.018 | 568.299 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 | 0.014 | 0.014 | 568.299 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 | 0.039 | 0.039 | 568.299 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 | 0.036 | 0.036 | 568.300 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 | 0.024 | 0.024 | 568.299 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 | 0.016 | 0.016 | 568.299 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 | 0.016 | 0.016 | 568.299 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 | 0.031 | 0.031 | 568.299 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 | 0.066 | 0.066 | 568.299 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 | 0.060 | 0.060 | 568.299 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 | 0.038 | 0.038 | 568.299 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 | 0.026 | 0.026 | 568.299 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 | 0.025 | 0.025 | 568.299 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 | 0.025 | 0.025 | 568.299 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 | 0.041 | 0.041 | 568.299 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 | 0.023 | 0.023 | 568.299 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 | 0.020 | 0.020 | 568.299 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 | 0.015 | 0.015 | 568.299 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 | 0.012 | 0.012 | 568.300 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 | 0.026 | 0.026 | 568.299 |

|                      |      |       |       |       |       |       |       |         |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Dumpers/Tractors     | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Excavators           | 50   | 0.572 | 5.287 | 3.323 | 0.007 | 0.024 | 0.024 | 568.299 |
| Excavators           | 120  | 0.284 | 3.802 | 1.551 | 0.006 | 0.021 | 0.021 | 568.299 |
| Excavators           | 175  | 0.197 | 3.363 | 0.365 | 0.006 | 0.015 | 0.015 | 568.299 |
| Excavators           | 250  | 0.195 | 1.145 | 0.342 | 0.006 | 0.013 | 0.013 | 568.300 |
| Excavators           | 500  | 0.195 | 1.089 | 0.337 | 0.005 | 0.013 | 0.013 | 568.299 |
| Excavators           | 750  | 0.195 | 1.088 | 0.338 | 0.005 | 0.013 | 0.013 | 568.299 |
| Forklifts            | 50   | 0.558 | 5.234 | 3.268 | 0.007 | 0.017 | 0.017 | 568.299 |
| Forklifts            | 120  | 0.275 | 3.787 | 1.495 | 0.006 | 0.016 | 0.016 | 568.299 |
| Forklifts            | 175  | 0.189 | 3.350 | 0.299 | 0.006 | 0.012 | 0.012 | 568.300 |
| Forklifts            | 250  | 0.188 | 1.141 | 0.290 | 0.006 | 0.011 | 0.011 | 568.300 |
| Forklifts            | 500  | 0.188 | 1.085 | 0.290 | 0.005 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 |
| Generator Sets       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Generator Sets       | 50   | 0.276 | 3.607 | 2.991 | 0.007 | 0.018 | 0.018 | 568.299 |
| Generator Sets       | 120  | 0.156 | 3.310 | 1.458 | 0.006 | 0.016 | 0.016 | 568.299 |
| Generator Sets       | 175  | 0.113 | 2.929 | 0.373 | 0.006 | 0.013 | 0.013 | 568.299 |
| Generator Sets       | 250  | 0.110 | 0.998 | 0.331 | 0.006 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 500  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 750  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 |
| Generator Sets       | 9999 | 0.114 | 0.978 | 2.362 | 0.005 | 0.022 | 0.022 | 568.299 |
| Graders              | 50   | 0.593 | 5.189 | 3.356 | 0.007 | 0.037 | 0.037 | 568.299 |
| Graders              | 120  | 0.293 | 3.767 | 1.661 | 0.006 | 0.034 | 0.034 | 568.299 |
| Graders              | 175  | 0.206 | 3.326 | 0.506 | 0.006 | 0.022 | 0.022 | 568.300 |
| Graders              | 250  | 0.196 | 1.137 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 |
| Graders              | 500  | 0.195 | 1.083 | 0.434 | 0.005 | 0.016 | 0.016 | 568.299 |
| Graders              | 750  | 0.195 | 1.083 | 0.438 | 0.005 | 0.016 | 0.016 | 568.299 |
| Off-Highway Tractors | 120  | 0.418 | 3.902 | 2.350 | 0.006 | 0.107 | 0.107 | 568.299 |
| Off-Highway Tractors | 175  | 0.301 | 3.421 | 1.252 | 0.006 | 0.065 | 0.065 | 568.299 |
| Off-Highway Tractors | 250  | 0.268 | 1.232 | 1.115 | 0.006 | 0.042 | 0.042 | 568.299 |
| Off-Highway Tractors | 750  | 0.262 | 1.238 | 1.045 | 0.005 | 0.040 | 0.040 | 568.299 |
| Off-Highway Tractors | 1000 | 0.269 | 1.268 | 3.116 | 0.005 | 0.056 | 0.056 | 568.299 |
| Off-Highway Trucks   | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 |
| Off-Highway Trucks   | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 | 0.018 | 0.018 | 568.299 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 | 0.017 | 0.017 | 568.299 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 | 0.013 | 0.013 | 568.299 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 | 0.011 | 0.011 | 568.299 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 | 0.025 | 0.025 | 568.299 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 | 0.022 | 0.022 | 568.300 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 | 0.016 | 0.016 | 568.300 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 | 0.013 | 0.013 | 568.299 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 |

|                                    |      |       |       |       |       |       |       |         |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 | 0.028 | 0.028 | 568.299 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 | 0.025 | 0.025 | 568.299 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 | 0.022 | 0.022 | 568.299 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 | 0.016 | 0.016 | 568.299 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 | 0.013 | 0.013 | 568.299 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 | 0.013 | 0.013 | 568.299 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 | 0.027 | 0.027 | 568.299 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 | 0.076 | 0.076 | 568.299 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 | 0.069 | 0.069 | 568.299 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 | 0.043 | 0.043 | 568.299 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 | 0.027 | 0.027 | 568.300 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 | 0.026 | 0.026 | 568.299 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 | 0.070 | 0.070 | 568.300 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 | 0.064 | 0.064 | 568.299 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 | 0.040 | 0.040 | 568.299 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 | 0.024 | 0.024 | 568.299 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.300 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 | 0.015 | 0.015 | 568.299 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 | 0.014 | 0.014 | 568.299 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 | 0.013 | 0.013 | 568.299 |



|                         |      |       |       |       |       |       |       |         |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 |
| Pumps                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 |
| Pumps                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Pumps                   | 50   | 0.306 | 3.778 | 3.028 | 0.007 | 0.019 | 0.019 | 568.299 |
| Pumps                   | 120  | 0.170 | 3.360 | 1.470 | 0.006 | 0.017 | 0.017 | 568.299 |
| Pumps                   | 175  | 0.123 | 2.973 | 0.377 | 0.006 | 0.014 | 0.014 | 568.299 |
| Pumps                   | 250  | 0.119 | 1.012 | 0.335 | 0.006 | 0.011 | 0.011 | 568.299 |
| Pumps                   | 500  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 |
| Pumps                   | 750  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 |
| Pumps                   | 9999 | 0.124 | 0.989 | 2.380 | 0.005 | 0.023 | 0.023 | 568.299 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Rollers                 | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 |
| Rollers                 | 50   | 0.507 | 4.711 | 3.280 | 0.007 | 0.038 | 0.038 | 568.299 |
| Rollers                 | 120  | 0.258 | 3.629 | 1.650 | 0.006 | 0.035 | 0.035 | 568.299 |
| Rollers                 | 175  | 0.184 | 3.204 | 0.523 | 0.006 | 0.023 | 0.023 | 568.299 |
| Rollers                 | 250  | 0.173 | 1.091 | 0.465 | 0.006 | 0.016 | 0.016 | 568.299 |
| Rollers                 | 500  | 0.172 | 1.048 | 0.442 | 0.005 | 0.016 | 0.016 | 568.300 |
| Rough Terrain Forklifts | 50   | 0.521 | 5.011 | 3.267 | 0.007 | 0.022 | 0.022 | 568.299 |
| Rough Terrain Forklifts | 120  | 0.262 | 3.722 | 1.530 | 0.006 | 0.020 | 0.020 | 568.299 |
| Rough Terrain Forklifts | 175  | 0.184 | 3.292 | 0.364 | 0.006 | 0.015 | 0.015 | 568.299 |
| Rough Terrain Forklifts | 250  | 0.181 | 1.121 | 0.334 | 0.006 | 0.012 | 0.012 | 568.299 |
| Rough Terrain Forklifts | 500  | 0.181 | 1.071 | 0.331 | 0.005 | 0.012 | 0.012 | 568.300 |
| Rubber Tired Dozers     | 175  | 0.322 | 3.481 | 1.345 | 0.006 | 0.071 | 0.071 | 568.299 |
| Rubber Tired Dozers     | 250  | 0.286 | 1.262 | 1.203 | 0.006 | 0.046 | 0.046 | 568.299 |
| Rubber Tired Dozers     | 500  | 0.279 | 1.279 | 1.107 | 0.005 | 0.043 | 0.043 | 568.300 |
| Rubber Tired Dozers     | 750  | 0.279 | 1.279 | 1.126 | 0.005 | 0.043 | 0.043 | 568.299 |
| Rubber Tired Dozers     | 1000 | 0.287 | 1.312 | 3.204 | 0.005 | 0.060 | 0.060 | 568.299 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Rubber Tired Loaders    | 50   | 0.575 | 5.126 | 3.337 | 0.007 | 0.035 | 0.035 | 568.299 |
| Rubber Tired Loaders    | 120  | 0.286 | 3.751 | 1.639 | 0.006 | 0.033 | 0.033 | 568.299 |
| Rubber Tired Loaders    | 175  | 0.200 | 3.312 | 0.481 | 0.006 | 0.022 | 0.022 | 568.299 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 | 0.015 | 0.015 | 568.299 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 | 0.015 | 0.015 | 568.299 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 | 0.015 | 0.015 | 568.299 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 | 0.030 | 0.030 | 568.299 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 | 0.064 | 0.064 | 568.299 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 | 0.040 | 0.040 | 568.299 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 | 0.026 | 0.026 | 568.299 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 | 0.025 | 0.025 | 568.300 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 | 0.025 | 0.025 | 568.299 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 | 0.020 | 0.020 | 568.299 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 | 0.018 | 0.018 | 568.299 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 | 0.014 | 0.014 | 568.299 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 | 0.014 | 0.014 | 686.695 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 | 0.015 | 0.015 | 568.299 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 | 0.014 | 0.014 | 568.299 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 | 0.041 | 0.041 | 568.299 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 | 0.038 | 0.038 | 568.299 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 | 0.025 | 0.025 | 568.299 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 | 0.016 | 0.016 | 568.299 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 | 0.016 | 0.016 | 568.299 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 | 0.016 | 0.016 | 568.300 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 |
| Sweepers/Scrubbers        | 50   | 0.505 | 4.929 | 3.214 | 0.007 | 0.017 | 0.017 | 568.299 |
| Sweepers/Scrubbers        | 120  | 0.253 | 3.698 | 1.486 | 0.006 | 0.016 | 0.016 | 568.299 |
| Sweepers/Scrubbers        | 175  | 0.175 | 3.271 | 0.313 | 0.006 | 0.012 | 0.012 | 568.299 |
| Sweepers/Scrubbers        | 250  | 0.173 | 1.114 | 0.294 | 0.006 | 0.011 | 0.011 | 568.299 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |

|                           |      |       |       |       |       |       |       |         |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|
| Tractors/Loaders/Backhoes | 50   | 0.515 | 4.949 | 3.244 | 0.007 | 0.022 | 0.022 | 568.299 |
| Tractors/Loaders/Backhoes | 120  | 0.258 | 3.703 | 1.521 | 0.006 | 0.020 | 0.020 | 568.299 |
| Tractors/Loaders/Backhoes | 175  | 0.179 | 3.275 | 0.348 | 0.006 | 0.015 | 0.015 | 568.299 |
| Tractors/Loaders/Backhoes | 250  | 0.177 | 1.115 | 0.331 | 0.006 | 0.012 | 0.012 | 568.299 |
| Tractors/Loaders/Backhoes | 500  | 0.177 | 1.066 | 0.326 | 0.006 | 0.012 | 0.012 | 568.299 |
| Tractors/Loaders/Backhoes | 750  | 0.177 | 1.066 | 0.327 | 0.006 | 0.012 | 0.012 | 568.299 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 |
| Trenchers                 | 50   | 0.681 | 5.055 | 3.548 | 0.007 | 0.084 | 0.084 | 568.299 |
| Trenchers                 | 120  | 0.332 | 3.713 | 2.049 | 0.006 | 0.076 | 0.076 | 568.300 |
| Trenchers                 | 175  | 0.241 | 3.264 | 0.966 | 0.006 | 0.048 | 0.048 | 568.299 |
| Trenchers                 | 250  | 0.216 | 1.149 | 0.847 | 0.006 | 0.031 | 0.031 | 568.299 |
| Trenchers                 | 500  | 0.213 | 1.126 | 0.790 | 0.005 | 0.029 | 0.029 | 568.299 |
| Trenchers                 | 750  | 0.213 | 1.126 | 0.801 | 0.005 | 0.029 | 0.029 | 568.300 |
| Welders                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 |
| Welders                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 |
| Welders                   | 50   | 0.406 | 4.349 | 3.147 | 0.007 | 0.022 | 0.022 | 568.299 |
| Welders                   | 120  | 0.214 | 3.528 | 1.509 | 0.006 | 0.019 | 0.019 | 568.299 |
| Welders                   | 175  | 0.153 | 3.121 | 0.387 | 0.006 | 0.015 | 0.015 | 568.299 |
| Welders                   | 250  | 0.149 | 1.063 | 0.343 | 0.006 | 0.012 | 0.012 | 568.299 |
| Welders                   | 500  | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000   |
| Water Trucks              | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 |
| Water Trucks              | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 |
| Water Trucks              | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Water Trucks              | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 |
| Water Trucks              | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 |

2036

| g/hp/hr | g/hp/hr |
|---------|---------|
| CH4     | N2O     |
| 0.059   | 0.005   |
| 0.061   | 0.005   |
| 0.026   | 0.005   |
| 0.014   | 0.004   |
| 0.010   | 0.004   |
| 0.010   | 0.004   |
|         |         |
| 0.059   | 0.005   |
|         |         |
| 0.061   | 0.005   |
|         |         |
| 0.041   | 0.005   |
|         |         |
| 0.021   | 0.004   |
|         |         |
| 0.015   | 0.004   |
|         |         |
| 0.014   | 0.004   |
|         |         |
| 0.014   | 0.004   |
|         |         |
| 0.014   | 0.004   |
|         |         |
| 0.015   | 0.004   |
|         |         |
| 0.059   | 0.005   |
|         |         |
| 0.061   | 0.005   |
|         |         |
| 0.031   | 0.005   |
|         |         |
| 0.016   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |
|         |         |
| 0.011   | 0.004   |

| 2036             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   |
| Air Compressor s |       |         |         |         |         |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   |

|       |       |
|-------|-------|
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.061 | 0.005 |
| 0.033 | 0.005 |
| 0.018 | 0.004 |
| 0.012 | 0.004 |
| 0.054 | 0.005 |
| 0.027 | 0.004 |
| 0.019 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.063 | 0.005 |
| 0.031 | 0.004 |
| 0.022 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.044 | 0.005 |
| 0.022 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.016 | 0.004 |

|                          |      |       |       |       |       |
|--------------------------|------|-------|-------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 |

|       |       |
|-------|-------|
| 0.061 | 0.005 |
| 0.061 | 0.005 |
| 0.051 | 0.005 |
| 0.025 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.050 | 0.005 |
| 0.024 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.053 | 0.005 |
| 0.061 | 0.005 |
| 0.024 | 0.005 |
| 0.014 | 0.004 |
| 0.010 | 0.004 |
| 0.009 | 0.004 |
| 0.009 | 0.004 |
| 0.009 | 0.004 |
| 0.010 | 0.004 |
| 0.053 | 0.005 |
| 0.026 | 0.004 |
| 0.018 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.037 | 0.004 |
| 0.027 | 0.004 |
| 0.024 | 0.004 |
| 0.023 | 0.004 |
| 0.024 | 0.004 |
| 0.019 | 0.004 |
| 0.018 | 0.004 |

|                      |      |       |       |       |       |
|----------------------|------|-------|-------|-------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Excavators           | 50   | 0.572 | 5.287 | 3.323 | 0.007 |
| Excavators           | 120  | 0.284 | 3.802 | 1.551 | 0.006 |
| Excavators           | 175  | 0.197 | 3.363 | 0.365 | 0.006 |
| Excavators           | 250  | 0.195 | 1.145 | 0.342 | 0.006 |
| Excavators           | 500  | 0.195 | 1.089 | 0.337 | 0.005 |
| Excavators           | 750  | 0.195 | 1.088 | 0.338 | 0.005 |
| Forklifts            | 50   | 0.558 | 5.234 | 3.268 | 0.007 |
| Forklifts            | 120  | 0.275 | 3.787 | 1.495 | 0.006 |
| Forklifts            | 175  | 0.189 | 3.350 | 0.299 | 0.006 |
| Forklifts            | 250  | 0.188 | 1.141 | 0.290 | 0.006 |
| Forklifts            | 500  | 0.188 | 1.085 | 0.290 | 0.005 |
| Generator Sets       | 15   | 0.589 | 3.470 | 4.143 | 0.008 |
| Generator Sets       | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Generator Sets       | 50   | 0.276 | 3.607 | 2.991 | 0.007 |
| Generator Sets       | 120  | 0.156 | 3.310 | 1.458 | 0.006 |
| Generator Sets       | 175  | 0.113 | 2.929 | 0.373 | 0.006 |
| Generator Sets       | 250  | 0.110 | 0.998 | 0.331 | 0.006 |
| Generator Sets       | 500  | 0.110 | 0.978 | 0.328 | 0.005 |
| Generator Sets       | 750  | 0.110 | 0.978 | 0.328 | 0.005 |
| Generator Sets       | 9999 | 0.114 | 0.978 | 2.362 | 0.005 |
| Graders              | 50   | 0.593 | 5.189 | 3.356 | 0.007 |
| Graders              | 120  | 0.293 | 3.767 | 1.661 | 0.006 |
| Graders              | 175  | 0.206 | 3.326 | 0.506 | 0.006 |
| Graders              | 250  | 0.196 | 1.137 | 0.452 | 0.006 |
| Graders              | 500  | 0.195 | 1.083 | 0.434 | 0.005 |
| Graders              | 750  | 0.195 | 1.083 | 0.438 | 0.005 |
| Off-Highway Tractors | 120  | 0.418 | 3.902 | 2.350 | 0.006 |
| Off-Highway Tractors | 175  | 0.301 | 3.421 | 1.252 | 0.006 |
| Off-Highway Tractors | 250  | 0.268 | 1.232 | 1.115 | 0.006 |
| Off-Highway Tractors | 750  | 0.262 | 1.238 | 1.045 | 0.005 |
| Off-Highway Tractors | 1000 | 0.269 | 1.268 | 3.116 | 0.005 |
| Off-Highway Trucks   | 175  | 0.211 | 3.425 | 0.380 | 0.006 |
| Off-Highway Trucks   | 250  | 0.208 | 1.167 | 0.353 | 0.006 |

|       |       |
|-------|-------|
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.037 | 0.005 |
| 0.019 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.053 | 0.005 |
| 0.061 | 0.005 |
| 0.050 | 0.005 |
| 0.025 | 0.004 |
| 0.018 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 |

|       |       |
|-------|-------|
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.049 | 0.005 |
| 0.025 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.061 | 0.005 |
| 0.062 | 0.005 |
| 0.030 | 0.004 |
| 0.022 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.061 | 0.005 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.016 | 0.005 |
| 0.010 | 0.004 |
| 0.009 | 0.004 |

|                                    |      |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 |



|       |       |
|-------|-------|
| 0.008 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.027 | 0.005 |
| 0.015 | 0.004 |
| 0.011 | 0.004 |
| 0.010 | 0.004 |
| 0.010 | 0.004 |
| 0.010 | 0.004 |
| 0.011 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.045 | 0.005 |
| 0.023 | 0.004 |
| 0.016 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.047 | 0.005 |
| 0.023 | 0.004 |
| 0.016 | 0.004 |
| 0.016 | 0.004 |
| 0.016 | 0.004 |
| 0.029 | 0.004 |
| 0.025 | 0.004 |
| 0.025 | 0.004 |
| 0.025 | 0.004 |
| 0.025 | 0.004 |
| 0.061 | 0.005 |
| 0.051 | 0.005 |
| 0.025 | 0.004 |
| 0.018 | 0.004 |

|                         |      |       |       |       |       |
|-------------------------|------|-------|-------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 |
| Pumps                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 |
| Pumps                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Pumps                   | 50   | 0.306 | 3.778 | 3.028 | 0.007 |
| Pumps                   | 120  | 0.170 | 3.360 | 1.470 | 0.006 |
| Pumps                   | 175  | 0.123 | 2.973 | 0.377 | 0.006 |
| Pumps                   | 250  | 0.119 | 1.012 | 0.335 | 0.006 |
| Pumps                   | 500  | 0.119 | 0.989 | 0.331 | 0.005 |
| Pumps                   | 750  | 0.119 | 0.989 | 0.331 | 0.005 |
| Pumps                   | 9999 | 0.124 | 0.989 | 2.380 | 0.005 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Rollers                 | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Rollers                 | 50   | 0.507 | 4.711 | 3.280 | 0.007 |
| Rollers                 | 120  | 0.258 | 3.629 | 1.650 | 0.006 |
| Rollers                 | 175  | 0.184 | 3.204 | 0.523 | 0.006 |
| Rollers                 | 250  | 0.173 | 1.091 | 0.465 | 0.006 |
| Rollers                 | 500  | 0.172 | 1.048 | 0.442 | 0.005 |
| Rough Terrain Forklifts | 50   | 0.521 | 5.011 | 3.267 | 0.007 |
| Rough Terrain Forklifts | 120  | 0.262 | 3.722 | 1.530 | 0.006 |
| Rough Terrain Forklifts | 175  | 0.184 | 3.292 | 0.364 | 0.006 |
| Rough Terrain Forklifts | 250  | 0.181 | 1.121 | 0.334 | 0.006 |
| Rough Terrain Forklifts | 500  | 0.181 | 1.071 | 0.331 | 0.005 |
| Rubber Tired Dozers     | 175  | 0.322 | 3.481 | 1.345 | 0.006 |
| Rubber Tired Dozers     | 250  | 0.286 | 1.262 | 1.203 | 0.006 |
| Rubber Tired Dozers     | 500  | 0.279 | 1.279 | 1.107 | 0.005 |
| Rubber Tired Dozers     | 750  | 0.279 | 1.279 | 1.126 | 0.005 |
| Rubber Tired Dozers     | 1000 | 0.287 | 1.312 | 3.204 | 0.005 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Rubber Tired Loaders    | 50   | 0.575 | 5.126 | 3.337 | 0.007 |
| Rubber Tired Loaders    | 120  | 0.286 | 3.751 | 1.639 | 0.006 |
| Rubber Tired Loaders    | 175  | 0.200 | 3.312 | 0.481 | 0.006 |

|       |       |
|-------|-------|
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.017 | 0.004 |
| 0.031 | 0.004 |
| 0.022 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.020 | 0.004 |
| 0.059 | 0.005 |
| 0.032 | 0.005 |
| 0.017 | 0.004 |
| 0.012 | 0.004 |
| 0.014 | 0.004 |
| 0.061 | 0.005 |
| 0.037 | 0.005 |
| 0.019 | 0.004 |
| 0.039 | 0.005 |
| 0.020 | 0.004 |
| 0.014 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.053 | 0.005 |
| 0.061 | 0.005 |
| 0.045 | 0.005 |
| 0.022 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.061 | 0.005 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 |
| Sweepers/Scrubbbers       | 15   | 0.589 | 3.470 | 4.142 | 0.008 |
| Sweepers/Scrubbbers       | 25   | 0.685 | 2.340 | 4.332 | 0.007 |
| Sweepers/Scrubbbers       | 50   | 0.505 | 4.929 | 3.214 | 0.007 |
| Sweepers/Scrubbbers       | 120  | 0.253 | 3.698 | 1.486 | 0.006 |
| Sweepers/Scrubbbers       | 175  | 0.175 | 3.271 | 0.313 | 0.006 |
| Sweepers/Scrubbbers       | 250  | 0.173 | 1.114 | 0.294 | 0.006 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 |

|       |       |
|-------|-------|
| 0.046 | 0.005 |
| 0.023 | 0.004 |
| 0.016 | 0.004 |
| 0.016 | 0.004 |
| 0.015 | 0.004 |
| 0.015 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.061 | 0.005 |
| 0.030 | 0.004 |
| 0.021 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.019 | 0.004 |
| 0.059 | 0.005 |
| 0.061 | 0.005 |
| 0.036 | 0.005 |
| 0.019 | 0.004 |
| 0.013 | 0.004 |
| 0.013 | 0.004 |
| 0.000 | 0.004 |
| 0.019 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |
| 0.018 | 0.004 |

|                           |      |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.515 | 4.949 | 3.244 | 0.007 |
| Tractors/Loaders/Backhoes | 120  | 0.258 | 3.703 | 1.521 | 0.006 |
| Tractors/Loaders/Backhoes | 175  | 0.179 | 3.275 | 0.348 | 0.006 |
| Tractors/Loaders/Backhoes | 250  | 0.177 | 1.115 | 0.331 | 0.006 |
| Tractors/Loaders/Backhoes | 500  | 0.177 | 1.066 | 0.326 | 0.006 |
| Tractors/Loaders/Backhoes | 750  | 0.177 | 1.066 | 0.327 | 0.006 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Trenchers                 | 50   | 0.681 | 5.055 | 3.548 | 0.007 |
| Trenchers                 | 120  | 0.332 | 3.713 | 2.049 | 0.006 |
| Trenchers                 | 175  | 0.241 | 3.264 | 0.966 | 0.006 |
| Trenchers                 | 250  | 0.216 | 1.149 | 0.847 | 0.006 |
| Trenchers                 | 500  | 0.213 | 1.126 | 0.790 | 0.005 |
| Trenchers                 | 750  | 0.213 | 1.126 | 0.801 | 0.005 |
| Welders                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 |
| Welders                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 |
| Welders                   | 50   | 0.406 | 4.349 | 3.147 | 0.007 |
| Welders                   | 120  | 0.214 | 3.528 | 1.509 | 0.006 |
| Welders                   | 175  | 0.153 | 3.121 | 0.387 | 0.006 |
| Welders                   | 250  | 0.149 | 1.063 | 0.343 | 0.006 |
| Welders                   | 500  | 0.149 | 1.027 | 0.339 | 0.005 |
| Water Trucks              | 175  | 0.211 | 3.425 | 0.380 | 0.006 |
| Water Trucks              | 250  | 0.208 | 1.167 | 0.353 | 0.006 |
| Water Trucks              | 500  | 0.208 | 1.105 | 0.348 | 0.005 |
| Water Trucks              | 750  | 0.208 | 1.105 | 0.348 | 0.005 |
| Water Trucks              | 1000 | 0.209 | 1.105 | 2.565 | 0.005 |

2037

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|
| PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 0.019   | 0.019   | 568.299 | 0.026   | 0.005   |
| 0.017   | 0.017   | 568.299 | 0.014   | 0.004   |
| 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
| 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
|         |         |         |         |         |
| 0.162   | 0.162   | 568.300 | 0.059   | 0.005   |
|         |         |         |         |         |
| 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
|         |         |         |         |         |
| 0.023   | 0.023   | 568.299 | 0.041   | 0.005   |
|         |         |         |         |         |
| 0.020   | 0.020   | 568.299 | 0.021   | 0.004   |
|         |         |         |         |         |
| 0.015   | 0.015   | 568.300 | 0.015   | 0.004   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
|         |         |         |         |         |
| 0.026   | 0.026   | 568.299 | 0.015   | 0.004   |
|         |         |         |         |         |
| 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
|         |         |         |         |         |
| 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
|         |         |         |         |         |
| 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
|         |         |         |         |         |
| 0.012   | 0.012   | 568.300 | 0.016   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
|         |         |         |         |         |
| 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

| 2037             |       | g/hp/hr |
|------------------|-------|---------|
| Equipment        | MaxHP | ROG     |
| Aerial Lifts     | 15    | 0.661   |
| Aerial Lifts     | 25    | 0.685   |
| Aerial Lifts     | 50    | 0.297   |
| Aerial Lifts     | 120   | 0.166   |
| Aerial Lifts     | 500   | 0.116   |
| Aerial Lifts     | 750   | 0.116   |
|                  |       |         |
| Air Compressor s | 15    | 0.661   |
| Air Compressor s | 25    | 0.685   |
| Air Compressor s | 50    | 0.463   |
| Air Compressor s | 120   | 0.238   |
| Air Compressor s | 175   | 0.170   |
| Air Compressor s | 250   | 0.166   |
| Air Compressor s | 500   | 0.166   |
| Air Compressor s | 750   | 0.166   |
| Air Compressor s | 1000  | 0.167   |
| Bore/Drill Rigs  | 15    | 0.661   |
| Bore/Drill Rigs  | 25    | 0.685   |
| Bore/Drill Rigs  | 50    | 0.348   |
| Bore/Drill Rigs  | 120   | 0.183   |
| Bore/Drill Rigs  | 175   | 0.126   |
| Bore/Drill Rigs  | 250   | 0.126   |
| Bore/Drill Rigs  | 500   | 0.126   |
| Bore/Drill Rigs  | 750   | 0.126   |
| Bore/Drill Rigs  | 1000  | 0.126   |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.021 | 0.021 | 568.300 | 0.033 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 0.039 | 0.039 | 568.299 | 0.054 | 0.005 |
| 0.036 | 0.036 | 568.300 | 0.027 | 0.004 |
| 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.018 | 0.004 |
| 0.066 | 0.066 | 568.299 | 0.063 | 0.005 |
| 0.060 | 0.060 | 568.299 | 0.031 | 0.004 |
| 0.038 | 0.038 | 568.299 | 0.022 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.041 | 0.041 | 568.299 | 0.020 | 0.004 |
| 0.023 | 0.023 | 568.299 | 0.044 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.022 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.300 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.016 | 0.004 |

|                          |      |       |
|--------------------------|------|-------|
| Cement and Mortar Mixers | 15   | 0.661 |
| Cement and Mortar Mixers | 25   | 0.685 |
| Concrete/Industrial Saws | 25   | 0.685 |
| Concrete/Industrial Saws | 50   | 0.375 |
| Concrete/Industrial Saws | 120  | 0.200 |
| Concrete/Industrial Saws | 175  | 0.143 |
| Cranes                   | 50   | 0.600 |
| Cranes                   | 120  | 0.300 |
| Cranes                   | 175  | 0.212 |
| Cranes                   | 250  | 0.203 |
| Cranes                   | 500  | 0.202 |
| Cranes                   | 750  | 0.202 |
| Cranes                   | 9999 | 0.209 |
| Crawler Tractors         | 50   | 0.708 |
| Crawler Tractors         | 120  | 0.345 |
| Crawler Tractors         | 175  | 0.247 |
| Crawler Tractors         | 250  | 0.229 |
| Crawler Tractors         | 500  | 0.227 |
| Crawler Tractors         | 750  | 0.227 |
| Crawler Tractors         | 1000 | 0.231 |
| Crushing/Proc. Equipment | 50   | 0.487 |
| Crushing/Proc. Equipment | 120  | 0.249 |
| Crushing/Proc. Equipment | 175  | 0.176 |
| Crushing/Proc. Equipment | 250  | 0.172 |
| Crushing/Proc. Equipment | 500  | 0.172 |
| Crushing/Proc. Equipment | 750  | 0.172 |
| Crushing/Proc. Equipment | 9999 | 0.177 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.024 | 0.024 | 568.299 | 0.051 | 0.005 |
| 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.300 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.017 | 0.017 | 568.299 | 0.050 | 0.005 |
| 0.016 | 0.016 | 568.299 | 0.024 | 0.004 |
| 0.012 | 0.012 | 568.300 | 0.017 | 0.004 |
| 0.011 | 0.011 | 568.300 | 0.017 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.162 | 0.162 | 568.299 | 0.053 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.024 | 0.005 |
| 0.016 | 0.016 | 568.299 | 0.014 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.010 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.022 | 0.022 | 568.299 | 0.010 | 0.004 |
| 0.037 | 0.037 | 568.299 | 0.053 | 0.005 |
| 0.034 | 0.034 | 568.299 | 0.026 | 0.004 |
| 0.022 | 0.022 | 568.300 | 0.018 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.107 | 0.107 | 568.299 | 0.037 | 0.004 |
| 0.065 | 0.065 | 568.299 | 0.027 | 0.004 |
| 0.042 | 0.042 | 568.299 | 0.024 | 0.004 |
| 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 0.056 | 0.056 | 568.299 | 0.024 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |

|                      |      |       |
|----------------------|------|-------|
| Dumpers/Tractors     | 25   | 0.685 |
| Excavators           | 25   | 0.685 |
| Excavators           | 50   | 0.572 |
| Excavators           | 120  | 0.284 |
| Excavators           | 175  | 0.197 |
| Excavators           | 250  | 0.195 |
| Excavators           | 500  | 0.195 |
| Excavators           | 750  | 0.195 |
| Forklifts            | 50   | 0.558 |
| Forklifts            | 120  | 0.275 |
| Forklifts            | 175  | 0.189 |
| Forklifts            | 250  | 0.188 |
| Forklifts            | 500  | 0.188 |
| Generator Sets       | 15   | 0.589 |
| Generator Sets       | 25   | 0.685 |
| Generator Sets       | 50   | 0.276 |
| Generator Sets       | 120  | 0.156 |
| Generator Sets       | 175  | 0.113 |
| Generator Sets       | 250  | 0.110 |
| Generator Sets       | 500  | 0.110 |
| Generator Sets       | 750  | 0.110 |
| Generator Sets       | 9999 | 0.114 |
| Graders              | 50   | 0.593 |
| Graders              | 120  | 0.293 |
| Graders              | 175  | 0.206 |
| Graders              | 250  | 0.196 |
| Graders              | 500  | 0.195 |
| Graders              | 750  | 0.195 |
| Off-Highway Tractors | 120  | 0.418 |
| Off-Highway Tractors | 175  | 0.301 |
| Off-Highway Tractors | 250  | 0.268 |
| Off-Highway Tractors | 750  | 0.262 |
| Off-Highway Tractors | 1000 | 0.269 |
| Off-Highway Trucks   | 175  | 0.211 |
| Off-Highway Trucks   | 250  | 0.208 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.013 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.025 | 0.025 | 568.299 | 0.050 | 0.005 |
| 0.022 | 0.022 | 568.300 | 0.025 | 0.004 |
| 0.016 | 0.016 | 568.300 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Off-Highway Trucks                 | 500  | 0.208 |
| Off-Highway Trucks                 | 750  | 0.208 |
| Off-Highway Trucks                 | 1000 | 0.209 |
| Other Construction Equipment       | 15   | 0.661 |
| Other Construction Equipment       | 25   | 0.685 |
| Other Construction Equipment       | 50   | 0.410 |
| Other Construction Equipment       | 120  | 0.213 |
| Other Construction Equipment       | 175  | 0.150 |
| Other Construction Equipment       | 500  | 0.147 |
| Other General Industrial Equipment | 15   | 0.589 |
| Other General Industrial Equipment | 25   | 0.685 |
| Other General Industrial Equipment | 50   | 0.564 |
| Other General Industrial Equipment | 120  | 0.282 |
| Other General Industrial Equipment | 175  | 0.199 |
| Other General Industrial Equipment | 250  | 0.195 |
| Other General Industrial Equipment | 500  | 0.195 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.017 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.049 | 0.005 |
| 0.022 | 0.022 | 568.299 | 0.025 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.027 | 0.027 | 568.299 | 0.017 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.076 | 0.076 | 568.299 | 0.062 | 0.005 |
| 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 0.027 | 0.027 | 568.300 | 0.019 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.019 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.070 | 0.070 | 568.300 | 0.059 | 0.005 |
| 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.162 | 0.162 | 568.300 | 0.053 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.015 | 0.015 | 568.299 | 0.016 | 0.005 |
| 0.014 | 0.014 | 568.299 | 0.010 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.009 | 0.004 |

|                                    |      |       |
|------------------------------------|------|-------|
| Other General Industrial Equipment | 750  | 0.195 |
| Other General Industrial Equipment | 1000 | 0.196 |
| Other Material Handling Equipment  | 50   | 0.552 |
| Other Material Handling Equipment  | 120  | 0.277 |
| Other Material Handling Equipment  | 175  | 0.196 |
| Other Material Handling Equipment  | 250  | 0.192 |
| Other Material Handling Equipment  | 500  | 0.192 |
| Other Material Handling Equipment  | 9999 | 0.197 |
| Pavers                             | 25   | 0.685 |
| Pavers                             | 50   | 0.694 |
| Pavers                             | 120  | 0.338 |
| Pavers                             | 175  | 0.244 |
| Pavers                             | 250  | 0.221 |
| Pavers                             | 500  | 0.218 |
| Paving Equipment                   | 25   | 0.685 |
| Paving Equipment                   | 50   | 0.664 |
| Paving Equipment                   | 120  | 0.326 |
| Paving Equipment                   | 175  | 0.235 |
| Paving Equipment                   | 250  | 0.212 |
| Plate Compactors                   | 15   | 0.661 |
| Pressure Washers                   | 15   | 0.589 |
| Pressure Washers                   | 25   | 0.685 |
| Pressure Washers                   | 50   | 0.188 |
| Pressure Washers                   | 120  | 0.116 |
| Pressure Washers                   | 175  | 0.109 |



|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.019 | 0.019 | 568.299 | 0.027 | 0.005 |
| 0.017 | 0.017 | 568.299 | 0.015 | 0.004 |
| 0.014 | 0.014 | 568.299 | 0.011 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 0.038 | 0.038 | 568.299 | 0.045 | 0.005 |
| 0.035 | 0.035 | 568.299 | 0.023 | 0.004 |
| 0.023 | 0.023 | 568.299 | 0.016 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.015 | 0.004 |
| 0.016 | 0.016 | 568.300 | 0.015 | 0.004 |
| 0.022 | 0.022 | 568.299 | 0.047 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.300 | 0.016 | 0.004 |
| 0.071 | 0.071 | 568.299 | 0.029 | 0.004 |
| 0.046 | 0.046 | 568.299 | 0.025 | 0.004 |
| 0.043 | 0.043 | 568.300 | 0.025 | 0.004 |
| 0.043 | 0.043 | 568.299 | 0.025 | 0.004 |
| 0.060 | 0.060 | 568.299 | 0.025 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.035 | 0.035 | 568.299 | 0.051 | 0.005 |
| 0.033 | 0.033 | 568.299 | 0.025 | 0.004 |
| 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |

|                         |      |       |
|-------------------------|------|-------|
| Pressure Washers        | 250  | 0.098 |
| Pumps                   | 15   | 0.661 |
| Pumps                   | 25   | 0.685 |
| Pumps                   | 50   | 0.306 |
| Pumps                   | 120  | 0.170 |
| Pumps                   | 175  | 0.123 |
| Pumps                   | 250  | 0.119 |
| Pumps                   | 500  | 0.119 |
| Pumps                   | 750  | 0.119 |
| Pumps                   | 9999 | 0.124 |
| Rollers                 | 15   | 0.661 |
| Rollers                 | 25   | 0.685 |
| Rollers                 | 50   | 0.507 |
| Rollers                 | 120  | 0.258 |
| Rollers                 | 175  | 0.184 |
| Rollers                 | 250  | 0.173 |
| Rollers                 | 500  | 0.172 |
| Rough Terrain Forklifts | 50   | 0.521 |
| Rough Terrain Forklifts | 120  | 0.262 |
| Rough Terrain Forklifts | 175  | 0.184 |
| Rough Terrain Forklifts | 250  | 0.181 |
| Rough Terrain Forklifts | 500  | 0.181 |
| Rubber Tired Dozers     | 175  | 0.322 |
| Rubber Tired Dozers     | 250  | 0.286 |
| Rubber Tired Dozers     | 500  | 0.279 |
| Rubber Tired Dozers     | 750  | 0.279 |
| Rubber Tired Dozers     | 1000 | 0.287 |
| Rubber Tired Loaders    | 25   | 0.685 |
| Rubber Tired Loaders    | 50   | 0.575 |
| Rubber Tired Loaders    | 120  | 0.286 |
| Rubber Tired Loaders    | 175  | 0.200 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 0.030 | 0.030 | 568.299 | 0.017 | 0.004 |
| 0.064 | 0.064 | 568.299 | 0.031 | 0.004 |
| 0.040 | 0.040 | 568.299 | 0.022 | 0.004 |
| 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.300 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.032 | 0.005 |
| 0.018 | 0.018 | 568.299 | 0.017 | 0.004 |
| 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 0.014 | 0.014 | 686.695 | 0.014 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.015 | 0.015 | 568.299 | 0.037 | 0.005 |
| 0.014 | 0.014 | 568.299 | 0.019 | 0.004 |
| 0.041 | 0.041 | 568.299 | 0.039 | 0.005 |
| 0.038 | 0.038 | 568.299 | 0.020 | 0.004 |
| 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 0.016 | 568.300 | 0.013 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 0.017 | 0.017 | 568.299 | 0.045 | 0.005 |
| 0.016 | 0.016 | 568.299 | 0.022 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|                           |      |       |
|---------------------------|------|-------|
| Rubber Tired Loaders      | 250  | 0.191 |
| Rubber Tired Loaders      | 500  | 0.191 |
| Rubber Tired Loaders      | 750  | 0.191 |
| Rubber Tired Loaders      | 1000 | 0.193 |
| Scrapers                  | 120  | 0.348 |
| Scrapers                  | 175  | 0.250 |
| Scrapers                  | 250  | 0.229 |
| Scrapers                  | 500  | 0.226 |
| Scrapers                  | 750  | 0.226 |
| Signal Boards             | 15   | 0.661 |
| Signal Boards             | 50   | 0.356 |
| Signal Boards             | 120  | 0.192 |
| Signal Boards             | 175  | 0.138 |
| Signal Boards             | 250  | 0.162 |
| Skid Steer Loaders        | 25   | 0.685 |
| Skid Steer Loaders        | 50   | 0.411 |
| Skid Steer Loaders        | 120  | 0.211 |
| Surfacing Equipment       | 50   | 0.439 |
| Surfacing Equipment       | 120  | 0.226 |
| Surfacing Equipment       | 175  | 0.162 |
| Surfacing Equipment       | 250  | 0.149 |
| Surfacing Equipment       | 500  | 0.148 |
| Surfacing Equipment       | 750  | 0.148 |
| Sweepers/Scrubbers        | 15   | 0.589 |
| Sweepers/Scrubbers        | 25   | 0.685 |
| Sweepers/Scrubbers        | 50   | 0.505 |
| Sweepers/Scrubbers        | 120  | 0.253 |
| Sweepers/Scrubbers        | 175  | 0.175 |
| Sweepers/Scrubbers        | 250  | 0.173 |
| Tractors/Loaders/Backhoes | 25   | 0.685 |

|       |       |         |       |       |
|-------|-------|---------|-------|-------|
| 0.022 | 0.022 | 568.299 | 0.046 | 0.005 |
| 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 0.084 | 0.084 | 568.299 | 0.061 | 0.005 |
| 0.076 | 0.076 | 568.300 | 0.030 | 0.004 |
| 0.048 | 0.048 | 568.299 | 0.021 | 0.004 |
| 0.031 | 0.031 | 568.299 | 0.019 | 0.004 |
| 0.029 | 0.029 | 568.299 | 0.019 | 0.004 |
| 0.029 | 0.029 | 568.300 | 0.019 | 0.004 |
| 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 0.022 | 0.022 | 568.299 | 0.036 | 0.005 |
| 0.019 | 0.019 | 568.299 | 0.019 | 0.004 |
| 0.015 | 0.015 | 568.299 | 0.013 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |

|                           |      |       |
|---------------------------|------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.515 |
| Tractors/Loaders/Backhoes | 120  | 0.258 |
| Tractors/Loaders/Backhoes | 175  | 0.179 |
| Tractors/Loaders/Backhoes | 250  | 0.177 |
| Tractors/Loaders/Backhoes | 500  | 0.177 |
| Tractors/Loaders/Backhoes | 750  | 0.177 |
| Trenchers                 | 15   | 0.661 |
| Trenchers                 | 25   | 0.685 |
| Trenchers                 | 50   | 0.681 |
| Trenchers                 | 120  | 0.332 |
| Trenchers                 | 175  | 0.241 |
| Trenchers                 | 250  | 0.216 |
| Trenchers                 | 500  | 0.213 |
| Trenchers                 | 750  | 0.213 |
| Welders                   | 15   | 0.661 |
| Welders                   | 25   | 0.685 |
| Welders                   | 50   | 0.406 |
| Welders                   | 120  | 0.214 |
| Welders                   | 175  | 0.153 |
| Welders                   | 250  | 0.149 |
| Welders                   | 500  | 0.149 |
| Water Trucks              | 175  | 0.211 |
| Water Trucks              | 250  | 0.208 |
| Water Trucks              | 500  | 0.208 |
| Water Trucks              | 750  | 0.208 |
| Water Trucks              | 1000 | 0.209 |

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|---------|
| CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 3.726   | 3.017   | 0.007   | 0.019   | 0.019   | 568.299 | 0.026   | 0.005   |
| 3.345   | 1.466   | 0.006   | 0.017   | 0.017   | 568.299 | 0.014   | 0.004   |
| 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
| 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   | 0.004   |
| 3.469   | 4.143   | 0.008   | 0.162   | 0.162   | 568.300 | 0.059   | 0.005   |
| 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   | 0.005   |
| 4.674   | 3.215   | 0.007   | 0.023   | 0.023   | 568.299 | 0.041   | 0.005   |
| 3.623   | 1.530   | 0.006   | 0.020   | 0.020   | 568.299 | 0.021   | 0.004   |
| 3.205   | 0.391   | 0.006   | 0.015   | 0.015   | 568.300 | 0.015   | 0.004   |
| 1.091   | 0.347   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 1.048   | 0.343   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 1.048   | 0.344   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 1.048   | 2.473   | 0.005   | 0.026   | 0.026   | 568.299 | 0.015   | 0.004   |
| 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 4.030   | 3.019   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   | 0.005   |
| 3.434   | 1.411   | 0.006   | 0.012   | 0.012   | 568.300 | 0.016   | 0.004   |
| 3.039   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.035   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.174 | 3.107 | 0.007 | 0.021 | 0.021 | 568.300 | 0.033 | 0.005 |
| 3.476 | 1.491 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 3.075 | 0.374 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 5.292 | 3.401 | 0.007 | 0.039 | 0.039 | 568.299 | 0.054 | 0.005 |
| 3.801 | 1.676 | 0.006 | 0.036 | 0.036 | 568.300 | 0.027 | 0.004 |
| 3.357 | 0.519 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 1.143 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 1.087 | 0.441 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 1.087 | 0.446 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 | 0.004 |
| 1.089 | 2.618 | 0.005 | 0.031 | 0.031 | 568.299 | 0.018 | 0.004 |
| 5.493 | 3.558 | 0.007 | 0.066 | 0.066 | 568.299 | 0.063 | 0.005 |
| 3.850 | 1.922 | 0.006 | 0.060 | 0.060 | 568.299 | 0.031 | 0.004 |
| 3.391 | 0.794 | 0.006 | 0.038 | 0.038 | 568.299 | 0.022 | 0.004 |
| 1.182 | 0.695 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 1.145 | 0.657 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 1.145 | 0.664 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 1.159 | 2.792 | 0.005 | 0.041 | 0.041 | 568.299 | 0.020 | 0.004 |
| 4.819 | 3.237 | 0.007 | 0.023 | 0.023 | 568.299 | 0.044 | 0.005 |
| 3.665 | 1.531 | 0.006 | 0.020 | 0.020 | 568.299 | 0.022 | 0.004 |
| 3.242 | 0.382 | 0.006 | 0.015 | 0.015 | 568.299 | 0.015 | 0.004 |
| 1.104 | 0.342 | 0.006 | 0.012 | 0.012 | 568.300 | 0.015 | 0.004 |
| 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.058 | 2.482 | 0.005 | 0.026 | 0.026 | 568.299 | 0.016 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.287 | 3.323 | 0.007 | 0.024 | 0.024 | 568.299 | 0.051 | 0.005 |
| 3.802 | 1.551 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 3.363 | 0.365 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.145 | 0.342 | 0.006 | 0.013 | 0.013 | 568.300 | 0.017 | 0.004 |
| 1.089 | 0.337 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.088 | 0.338 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 5.234 | 3.268 | 0.007 | 0.017 | 0.017 | 568.299 | 0.050 | 0.005 |
| 3.787 | 1.495 | 0.006 | 0.016 | 0.016 | 568.299 | 0.024 | 0.004 |
| 3.350 | 0.299 | 0.006 | 0.012 | 0.012 | 568.300 | 0.017 | 0.004 |
| 1.141 | 0.290 | 0.006 | 0.011 | 0.011 | 568.300 | 0.017 | 0.004 |
| 1.085 | 0.290 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.053 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.607 | 2.991 | 0.007 | 0.018 | 0.018 | 568.299 | 0.024 | 0.005 |
| 3.310 | 1.458 | 0.006 | 0.016 | 0.016 | 568.299 | 0.014 | 0.004 |
| 2.929 | 0.373 | 0.006 | 0.013 | 0.013 | 568.299 | 0.010 | 0.004 |
| 0.998 | 0.331 | 0.006 | 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 | 0.004 |
| 0.978 | 2.362 | 0.005 | 0.022 | 0.022 | 568.299 | 0.010 | 0.004 |
| 5.189 | 3.356 | 0.007 | 0.037 | 0.037 | 568.299 | 0.053 | 0.005 |
| 3.767 | 1.661 | 0.006 | 0.034 | 0.034 | 568.299 | 0.026 | 0.004 |
| 3.326 | 0.506 | 0.006 | 0.022 | 0.022 | 568.300 | 0.018 | 0.004 |
| 1.137 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 1.083 | 0.434 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 1.083 | 0.438 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 3.902 | 2.350 | 0.006 | 0.107 | 0.107 | 568.299 | 0.037 | 0.004 |
| 3.421 | 1.252 | 0.006 | 0.065 | 0.065 | 568.299 | 0.027 | 0.004 |
| 1.232 | 1.115 | 0.006 | 0.042 | 0.042 | 568.299 | 0.024 | 0.004 |
| 1.238 | 1.045 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 | 0.004 |
| 1.268 | 3.116 | 0.005 | 0.056 | 0.056 | 568.299 | 0.024 | 0.004 |
| 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.377 | 3.124 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 | 0.005 |
| 3.536 | 1.474 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 | 0.004 |
| 3.128 | 0.334 | 0.006 | 0.013 | 0.013 | 568.299 | 0.013 | 0.004 |
| 1.029 | 0.311 | 0.005 | 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.255 | 3.334 | 0.007 | 0.025 | 0.025 | 568.299 | 0.050 | 0.005 |
| 3.794 | 1.567 | 0.006 | 0.022 | 0.022 | 568.300 | 0.025 | 0.004 |
| 3.355 | 0.399 | 0.006 | 0.016 | 0.016 | 568.300 | 0.018 | 0.004 |
| 1.143 | 0.355 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.087 | 2.532 | 0.005 | 0.028 | 0.028 | 568.299 | 0.017 | 0.004 |
| 5.189 | 3.321 | 0.007 | 0.025 | 0.025 | 568.299 | 0.049 | 0.005 |
| 3.774 | 1.563 | 0.006 | 0.022 | 0.022 | 568.299 | 0.025 | 0.004 |
| 3.338 | 0.398 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 1.137 | 0.354 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.082 | 0.350 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.082 | 2.525 | 0.005 | 0.027 | 0.027 | 568.299 | 0.017 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.260 | 3.555 | 0.007 | 0.076 | 0.076 | 568.299 | 0.062 | 0.005 |
| 3.774 | 1.986 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 | 0.004 |
| 3.319 | 0.889 | 0.006 | 0.043 | 0.043 | 568.299 | 0.022 | 0.004 |
| 1.157 | 0.772 | 0.006 | 0.027 | 0.027 | 568.300 | 0.019 | 0.004 |
| 1.111 | 0.722 | 0.005 | 0.026 | 0.026 | 568.299 | 0.019 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.181 | 3.511 | 0.007 | 0.070 | 0.070 | 568.300 | 0.059 | 0.005 |
| 3.753 | 1.928 | 0.006 | 0.064 | 0.064 | 568.299 | 0.029 | 0.004 |
| 3.303 | 0.832 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 | 0.004 |
| 1.140 | 0.714 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 | 0.004 |
| 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.300 | 0.053 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.101 | 2.882 | 0.007 | 0.015 | 0.015 | 568.299 | 0.016 | 0.005 |
| 3.161 | 1.421 | 0.006 | 0.014 | 0.014 | 568.299 | 0.010 | 0.004 |
| 2.907 | 0.382 | 0.006 | 0.013 | 0.013 | 568.299 | 0.009 | 0.004 |



|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 3.778 | 3.028 | 0.007 | 0.019 | 0.019 | 568.299 | 0.027 | 0.005 |
| 3.360 | 1.470 | 0.006 | 0.017 | 0.017 | 568.299 | 0.015 | 0.004 |
| 2.973 | 0.377 | 0.006 | 0.014 | 0.014 | 568.299 | 0.011 | 0.004 |
| 1.012 | 0.335 | 0.006 | 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 | 0.004 |
| 0.989 | 2.380 | 0.005 | 0.023 | 0.023 | 568.299 | 0.011 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 4.711 | 3.280 | 0.007 | 0.038 | 0.038 | 568.299 | 0.045 | 0.005 |
| 3.629 | 1.650 | 0.006 | 0.035 | 0.035 | 568.299 | 0.023 | 0.004 |
| 3.204 | 0.523 | 0.006 | 0.023 | 0.023 | 568.299 | 0.016 | 0.004 |
| 1.091 | 0.465 | 0.006 | 0.016 | 0.016 | 568.299 | 0.015 | 0.004 |
| 1.048 | 0.442 | 0.005 | 0.016 | 0.016 | 568.300 | 0.015 | 0.004 |
| 5.011 | 3.267 | 0.007 | 0.022 | 0.022 | 568.299 | 0.047 | 0.005 |
| 3.722 | 1.530 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 3.292 | 0.364 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 1.121 | 0.334 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 1.071 | 0.331 | 0.005 | 0.012 | 0.012 | 568.300 | 0.016 | 0.004 |
| 3.481 | 1.345 | 0.006 | 0.071 | 0.071 | 568.299 | 0.029 | 0.004 |
| 1.262 | 1.203 | 0.006 | 0.046 | 0.046 | 568.299 | 0.025 | 0.004 |
| 1.279 | 1.107 | 0.005 | 0.043 | 0.043 | 568.300 | 0.025 | 0.004 |
| 1.279 | 1.126 | 0.005 | 0.043 | 0.043 | 568.299 | 0.025 | 0.004 |
| 1.312 | 3.204 | 0.005 | 0.060 | 0.060 | 568.299 | 0.025 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.126 | 3.337 | 0.007 | 0.035 | 0.035 | 568.299 | 0.051 | 0.005 |
| 3.751 | 1.639 | 0.006 | 0.033 | 0.033 | 568.299 | 0.025 | 0.004 |
| 3.312 | 0.481 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 | 0.004 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 1.129 | 0.434 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.076 | 0.416 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.076 | 0.421 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 | 0.004 |
| 1.082 | 2.584 | 0.005 | 0.030 | 0.030 | 568.299 | 0.017 | 0.004 |
| 3.842 | 1.943 | 0.006 | 0.064 | 0.064 | 568.299 | 0.031 | 0.004 |
| 3.382 | 0.824 | 0.006 | 0.040 | 0.040 | 568.299 | 0.022 | 0.004 |
| 1.175 | 0.717 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 1.123 | 0.674 | 0.005 | 0.025 | 0.025 | 568.300 | 0.020 | 0.004 |
| 1.123 | 0.682 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.067 | 3.082 | 0.007 | 0.020 | 0.020 | 568.299 | 0.032 | 0.005 |
| 3.445 | 1.482 | 0.006 | 0.018 | 0.018 | 568.299 | 0.017 | 0.004 |
| 3.048 | 0.372 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 | 0.004 |
| 1.254 | 0.401 | 0.007 | 0.014 | 0.014 | 686.695 | 0.014 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.390 | 3.097 | 0.007 | 0.015 | 0.015 | 568.299 | 0.037 | 0.005 |
| 3.540 | 1.442 | 0.006 | 0.014 | 0.014 | 568.299 | 0.019 | 0.004 |
| 4.221 | 3.193 | 0.007 | 0.041 | 0.041 | 568.299 | 0.039 | 0.005 |
| 3.482 | 1.659 | 0.006 | 0.038 | 0.038 | 568.299 | 0.020 | 0.004 |
| 3.072 | 0.567 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 | 0.004 |
| 1.050 | 0.497 | 0.006 | 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 1.018 | 0.471 | 0.005 | 0.016 | 0.016 | 568.299 | 0.013 | 0.004 |
| 1.018 | 0.477 | 0.005 | 0.016 | 0.016 | 568.300 | 0.013 | 0.004 |
| 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 4.929 | 3.214 | 0.007 | 0.017 | 0.017 | 568.299 | 0.045 | 0.005 |
| 3.698 | 1.486 | 0.006 | 0.016 | 0.016 | 568.299 | 0.022 | 0.004 |
| 3.271 | 0.313 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.114 | 0.294 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|       |       |       |       |       |         |       |       |
|-------|-------|-------|-------|-------|---------|-------|-------|
| 4.949 | 3.244 | 0.007 | 0.022 | 0.022 | 568.299 | 0.046 | 0.005 |
| 3.703 | 1.521 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 | 0.004 |
| 3.275 | 0.348 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 | 0.004 |
| 1.115 | 0.331 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 | 0.004 |
| 1.066 | 0.326 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 1.066 | 0.327 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 5.055 | 3.548 | 0.007 | 0.084 | 0.084 | 568.299 | 0.061 | 0.005 |
| 3.713 | 2.049 | 0.006 | 0.076 | 0.076 | 568.300 | 0.030 | 0.004 |
| 3.264 | 0.966 | 0.006 | 0.048 | 0.048 | 568.299 | 0.021 | 0.004 |
| 1.149 | 0.847 | 0.006 | 0.031 | 0.031 | 568.299 | 0.019 | 0.004 |
| 1.126 | 0.790 | 0.005 | 0.029 | 0.029 | 568.299 | 0.019 | 0.004 |
| 1.126 | 0.801 | 0.005 | 0.029 | 0.029 | 568.300 | 0.019 | 0.004 |
| 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 | 0.005 |
| 2.339 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 | 0.005 |
| 4.349 | 3.147 | 0.007 | 0.022 | 0.022 | 568.299 | 0.036 | 0.005 |
| 3.528 | 1.509 | 0.006 | 0.019 | 0.019 | 568.299 | 0.019 | 0.004 |
| 3.121 | 0.387 | 0.006 | 0.015 | 0.015 | 568.299 | 0.013 | 0.004 |
| 1.063 | 0.343 | 0.006 | 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 1.027 | 0.339 | 0.005 | 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 | 0.004 |
| 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 | 0.004 |

| 2038             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   | 0.019   | 0.019   | 568.299 | 0.026   |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   | 0.017   | 0.017   | 568.299 | 0.014   |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   | 0.011   | 568.299 | 0.010   |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   | 0.162   | 0.162   | 568.300 | 0.059   |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   | 0.162   | 568.299 | 0.061   |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   | 0.023   | 0.023   | 568.299 | 0.041   |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   | 0.020   | 0.020   | 568.299 | 0.021   |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   | 0.015   | 0.015   | 568.300 | 0.015   |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   | 0.012   | 0.012   | 568.299 | 0.014   |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   | 0.026   | 0.026   | 568.299 | 0.015   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   | 0.013   | 0.013   | 568.299 | 0.031   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   | 0.012   | 0.012   | 568.300 | 0.016   |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   |

|                          |      |       |       |       |       |       |       |         |       |
|--------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Concrete/Industrial Saws | 50   | 0.375 | 4.174 | 3.107 | 0.007 | 0.021 | 0.021 | 568.300 | 0.033 |
| Concrete/Industrial Saws | 120  | 0.200 | 3.476 | 1.491 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 |
| Concrete/Industrial Saws | 175  | 0.143 | 3.075 | 0.374 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 |
| Cranes                   | 50   | 0.600 | 5.292 | 3.401 | 0.007 | 0.039 | 0.039 | 568.299 | 0.054 |
| Cranes                   | 120  | 0.300 | 3.801 | 1.676 | 0.006 | 0.036 | 0.036 | 568.300 | 0.027 |
| Cranes                   | 175  | 0.212 | 3.357 | 0.519 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 |
| Cranes                   | 250  | 0.203 | 1.143 | 0.463 | 0.006 | 0.016 | 0.016 | 568.299 | 0.018 |
| Cranes                   | 500  | 0.202 | 1.087 | 0.441 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 |
| Cranes                   | 750  | 0.202 | 1.087 | 0.446 | 0.005 | 0.016 | 0.016 | 568.299 | 0.018 |
| Cranes                   | 9999 | 0.209 | 1.089 | 2.618 | 0.005 | 0.031 | 0.031 | 568.299 | 0.018 |
| Crawler Tractors         | 50   | 0.708 | 5.493 | 3.558 | 0.007 | 0.066 | 0.066 | 568.299 | 0.063 |
| Crawler Tractors         | 120  | 0.345 | 3.850 | 1.922 | 0.006 | 0.060 | 0.060 | 568.299 | 0.031 |
| Crawler Tractors         | 175  | 0.247 | 3.391 | 0.794 | 0.006 | 0.038 | 0.038 | 568.299 | 0.022 |
| Crawler Tractors         | 250  | 0.229 | 1.182 | 0.695 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 |
| Crawler Tractors         | 500  | 0.227 | 1.145 | 0.657 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 |
| Crawler Tractors         | 750  | 0.227 | 1.145 | 0.664 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 |
| Crawler Tractors         | 1000 | 0.231 | 1.159 | 2.792 | 0.005 | 0.041 | 0.041 | 568.299 | 0.020 |
| Crushing/Proc. Equipment | 50   | 0.487 | 4.819 | 3.237 | 0.007 | 0.023 | 0.023 | 568.299 | 0.044 |
| Crushing/Proc. Equipment | 120  | 0.249 | 3.665 | 1.531 | 0.006 | 0.020 | 0.020 | 568.299 | 0.022 |
| Crushing/Proc. Equipment | 175  | 0.176 | 3.242 | 0.382 | 0.006 | 0.015 | 0.015 | 568.299 | 0.015 |
| Crushing/Proc. Equipment | 250  | 0.172 | 1.104 | 0.342 | 0.006 | 0.012 | 0.012 | 568.300 | 0.015 |
| Crushing/Proc. Equipment | 500  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 |
| Crushing/Proc. Equipment | 750  | 0.172 | 1.058 | 0.338 | 0.005 | 0.012 | 0.012 | 568.299 | 0.015 |
| Crushing/Proc. Equipment | 9999 | 0.177 | 1.058 | 2.482 | 0.005 | 0.026 | 0.026 | 568.299 | 0.016 |

|                      |      |       |       |       |       |       |       |         |       |
|----------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Dumpers/Trucks       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Excavators           | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Excavators           | 50   | 0.572 | 5.287 | 3.323 | 0.007 | 0.024 | 0.024 | 568.299 | 0.051 |
| Excavators           | 120  | 0.284 | 3.802 | 1.551 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 |
| Excavators           | 175  | 0.197 | 3.363 | 0.365 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 |
| Excavators           | 250  | 0.195 | 1.145 | 0.342 | 0.006 | 0.013 | 0.013 | 568.300 | 0.017 |
| Excavators           | 500  | 0.195 | 1.089 | 0.337 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Excavators           | 750  | 0.195 | 1.088 | 0.338 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Forklifts            | 50   | 0.558 | 5.234 | 3.268 | 0.007 | 0.017 | 0.017 | 568.299 | 0.050 |
| Forklifts            | 120  | 0.275 | 3.787 | 1.495 | 0.006 | 0.016 | 0.016 | 568.299 | 0.024 |
| Forklifts            | 175  | 0.189 | 3.350 | 0.299 | 0.006 | 0.012 | 0.012 | 568.300 | 0.017 |
| Forklifts            | 250  | 0.188 | 1.141 | 0.290 | 0.006 | 0.011 | 0.011 | 568.300 | 0.017 |
| Forklifts            | 500  | 0.188 | 1.085 | 0.290 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 |
| Generator Sets       | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.053 |
| Generator Sets       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Generator Sets       | 50   | 0.276 | 3.607 | 2.991 | 0.007 | 0.018 | 0.018 | 568.299 | 0.024 |
| Generator Sets       | 120  | 0.156 | 3.310 | 1.458 | 0.006 | 0.016 | 0.016 | 568.299 | 0.014 |
| Generator Sets       | 175  | 0.113 | 2.929 | 0.373 | 0.006 | 0.013 | 0.013 | 568.299 | 0.010 |
| Generator Sets       | 250  | 0.110 | 0.998 | 0.331 | 0.006 | 0.011 | 0.011 | 568.299 | 0.009 |
| Generator Sets       | 500  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 |
| Generator Sets       | 750  | 0.110 | 0.978 | 0.328 | 0.005 | 0.011 | 0.011 | 568.299 | 0.009 |
| Generator Sets       | 9999 | 0.114 | 0.978 | 2.362 | 0.005 | 0.022 | 0.022 | 568.299 | 0.010 |
| Graders              | 50   | 0.593 | 5.189 | 3.356 | 0.007 | 0.037 | 0.037 | 568.299 | 0.053 |
| Graders              | 120  | 0.293 | 3.767 | 1.661 | 0.006 | 0.034 | 0.034 | 568.299 | 0.026 |
| Graders              | 175  | 0.206 | 3.326 | 0.506 | 0.006 | 0.022 | 0.022 | 568.300 | 0.018 |
| Graders              | 250  | 0.196 | 1.137 | 0.452 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 |
| Graders              | 500  | 0.195 | 1.083 | 0.434 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 |
| Graders              | 750  | 0.195 | 1.083 | 0.438 | 0.005 | 0.016 | 0.016 | 568.299 | 0.017 |
| Off-Highway Tractors | 120  | 0.418 | 3.902 | 2.350 | 0.006 | 0.107 | 0.107 | 568.299 | 0.037 |
| Off-Highway Tractors | 175  | 0.301 | 3.421 | 1.252 | 0.006 | 0.065 | 0.065 | 568.299 | 0.027 |
| Off-Highway Tractors | 250  | 0.268 | 1.232 | 1.115 | 0.006 | 0.042 | 0.042 | 568.299 | 0.024 |
| Off-Highway Tractors | 750  | 0.262 | 1.238 | 1.045 | 0.005 | 0.040 | 0.040 | 568.299 | 0.023 |
| Off-Highway Tractors | 1000 | 0.269 | 1.268 | 3.116 | 0.005 | 0.056 | 0.056 | 568.299 | 0.024 |
| Off-Highway Trucks   | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 |
| Off-Highway Trucks   | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 | 0.018 | 0.018 | 568.299 | 0.037 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 | 0.017 | 0.017 | 568.299 | 0.019 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 | 0.013 | 0.013 | 568.299 | 0.013 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 | 0.011 | 0.011 | 568.299 | 0.013 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 | 0.025 | 0.025 | 568.299 | 0.050 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 | 0.022 | 0.022 | 568.300 | 0.025 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 | 0.016 | 0.016 | 568.300 | 0.018 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |

|                                    |      |       |       |       |       |       |       |         |       |
|------------------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 | 0.028 | 0.028 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 | 0.025 | 0.025 | 568.299 | 0.049 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 | 0.022 | 0.022 | 568.299 | 0.025 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 | 0.027 | 0.027 | 568.299 | 0.017 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 | 0.076 | 0.076 | 568.299 | 0.062 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 | 0.069 | 0.069 | 568.299 | 0.030 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 | 0.043 | 0.043 | 568.299 | 0.022 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 | 0.027 | 0.027 | 568.300 | 0.019 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 | 0.026 | 0.026 | 568.299 | 0.019 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 | 0.070 | 0.070 | 568.300 | 0.059 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 | 0.064 | 0.064 | 568.299 | 0.029 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 | 0.040 | 0.040 | 568.299 | 0.021 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 | 0.024 | 0.024 | 568.299 | 0.019 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 | 0.162 | 568.300 | 0.053 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 | 0.015 | 0.015 | 568.299 | 0.016 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 | 0.014 | 0.014 | 568.299 | 0.010 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 | 0.013 | 0.013 | 568.299 | 0.009 |



|                         |      |       |       |       |       |       |       |         |       |
|-------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 | 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 |
| Pumps                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 |
| Pumps                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Pumps                   | 50   | 0.306 | 3.778 | 3.028 | 0.007 | 0.019 | 0.019 | 568.299 | 0.027 |
| Pumps                   | 120  | 0.170 | 3.360 | 1.470 | 0.006 | 0.017 | 0.017 | 568.299 | 0.015 |
| Pumps                   | 175  | 0.123 | 2.973 | 0.377 | 0.006 | 0.014 | 0.014 | 568.299 | 0.011 |
| Pumps                   | 250  | 0.119 | 1.012 | 0.335 | 0.006 | 0.011 | 0.011 | 568.299 | 0.010 |
| Pumps                   | 500  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 |
| Pumps                   | 750  | 0.119 | 0.989 | 0.331 | 0.005 | 0.011 | 0.011 | 568.299 | 0.010 |
| Pumps                   | 9999 | 0.124 | 0.989 | 2.380 | 0.005 | 0.023 | 0.023 | 568.299 | 0.011 |
| Rollers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Rollers                 | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 |
| Rollers                 | 50   | 0.507 | 4.711 | 3.280 | 0.007 | 0.038 | 0.038 | 568.299 | 0.045 |
| Rollers                 | 120  | 0.258 | 3.629 | 1.650 | 0.006 | 0.035 | 0.035 | 568.299 | 0.023 |
| Rollers                 | 175  | 0.184 | 3.204 | 0.523 | 0.006 | 0.023 | 0.023 | 568.299 | 0.016 |
| Rollers                 | 250  | 0.173 | 1.091 | 0.465 | 0.006 | 0.016 | 0.016 | 568.299 | 0.015 |
| Rollers                 | 500  | 0.172 | 1.048 | 0.442 | 0.005 | 0.016 | 0.016 | 568.300 | 0.015 |
| Rough Terrain Forklifts | 50   | 0.521 | 5.011 | 3.267 | 0.007 | 0.022 | 0.022 | 568.299 | 0.047 |
| Rough Terrain Forklifts | 120  | 0.262 | 3.722 | 1.530 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 |
| Rough Terrain Forklifts | 175  | 0.184 | 3.292 | 0.364 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 |
| Rough Terrain Forklifts | 250  | 0.181 | 1.121 | 0.334 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 |
| Rough Terrain Forklifts | 500  | 0.181 | 1.071 | 0.331 | 0.005 | 0.012 | 0.012 | 568.300 | 0.016 |
| Rubber Tired Dozers     | 175  | 0.322 | 3.481 | 1.345 | 0.006 | 0.071 | 0.071 | 568.299 | 0.029 |
| Rubber Tired Dozers     | 250  | 0.286 | 1.262 | 1.203 | 0.006 | 0.046 | 0.046 | 568.299 | 0.025 |
| Rubber Tired Dozers     | 500  | 0.279 | 1.279 | 1.107 | 0.005 | 0.043 | 0.043 | 568.300 | 0.025 |
| Rubber Tired Dozers     | 750  | 0.279 | 1.279 | 1.126 | 0.005 | 0.043 | 0.043 | 568.299 | 0.025 |
| Rubber Tired Dozers     | 1000 | 0.287 | 1.312 | 3.204 | 0.005 | 0.060 | 0.060 | 568.299 | 0.025 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Rubber Tired Loaders    | 50   | 0.575 | 5.126 | 3.337 | 0.007 | 0.035 | 0.035 | 568.299 | 0.051 |
| Rubber Tired Loaders    | 120  | 0.286 | 3.751 | 1.639 | 0.006 | 0.033 | 0.033 | 568.299 | 0.025 |
| Rubber Tired Loaders    | 175  | 0.200 | 3.312 | 0.481 | 0.006 | 0.022 | 0.022 | 568.299 | 0.018 |

|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Rubber Tired Loaders      | 250  | 0.191 | 1.129 | 0.434 | 0.006 | 0.015 | 0.015 | 568.299 | 0.017 |
| Rubber Tired Loaders      | 500  | 0.191 | 1.076 | 0.416 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 |
| Rubber Tired Loaders      | 750  | 0.191 | 1.076 | 0.421 | 0.005 | 0.015 | 0.015 | 568.299 | 0.017 |
| Rubber Tired Loaders      | 1000 | 0.193 | 1.082 | 2.584 | 0.005 | 0.030 | 0.030 | 568.299 | 0.017 |
| Scrapers                  | 120  | 0.348 | 3.842 | 1.943 | 0.006 | 0.064 | 0.064 | 568.299 | 0.031 |
| Scrapers                  | 175  | 0.250 | 3.382 | 0.824 | 0.006 | 0.040 | 0.040 | 568.299 | 0.022 |
| Scrapers                  | 250  | 0.229 | 1.175 | 0.717 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 |
| Scrapers                  | 500  | 0.226 | 1.123 | 0.674 | 0.005 | 0.025 | 0.025 | 568.300 | 0.020 |
| Scrapers                  | 750  | 0.226 | 1.123 | 0.682 | 0.005 | 0.025 | 0.025 | 568.299 | 0.020 |
| Signal Boards             | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Signal Boards             | 50   | 0.356 | 4.067 | 3.082 | 0.007 | 0.020 | 0.020 | 568.299 | 0.032 |
| Signal Boards             | 120  | 0.192 | 3.445 | 1.482 | 0.006 | 0.018 | 0.018 | 568.299 | 0.017 |
| Signal Boards             | 175  | 0.138 | 3.048 | 0.372 | 0.006 | 0.014 | 0.014 | 568.299 | 0.012 |
| Signal Boards             | 250  | 0.162 | 1.254 | 0.401 | 0.007 | 0.014 | 0.014 | 686.695 | 0.014 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Skid Steer Loaders        | 50   | 0.411 | 4.390 | 3.097 | 0.007 | 0.015 | 0.015 | 568.299 | 0.037 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 | 1.442 | 0.006 | 0.014 | 0.014 | 568.299 | 0.019 |
| Surfacing Equipment       | 50   | 0.439 | 4.221 | 3.193 | 0.007 | 0.041 | 0.041 | 568.299 | 0.039 |
| Surfacing Equipment       | 120  | 0.226 | 3.482 | 1.659 | 0.006 | 0.038 | 0.038 | 568.299 | 0.020 |
| Surfacing Equipment       | 175  | 0.162 | 3.072 | 0.567 | 0.006 | 0.025 | 0.025 | 568.299 | 0.014 |
| Surfacing Equipment       | 250  | 0.149 | 1.050 | 0.497 | 0.006 | 0.016 | 0.016 | 568.299 | 0.013 |
| Surfacing Equipment       | 500  | 0.148 | 1.018 | 0.471 | 0.005 | 0.016 | 0.016 | 568.299 | 0.013 |
| Surfacing Equipment       | 750  | 0.148 | 1.018 | 0.477 | 0.005 | 0.016 | 0.016 | 568.300 | 0.013 |
| Sweepers/S crubbers       | 15   | 0.589 | 3.470 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 |
| Sweepers/S crubbers       | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 |
| Sweepers/S crubbers       | 50   | 0.505 | 4.929 | 3.214 | 0.007 | 0.017 | 0.017 | 568.299 | 0.045 |
| Sweepers/S crubbers       | 120  | 0.253 | 3.698 | 1.486 | 0.006 | 0.016 | 0.016 | 568.299 | 0.022 |
| Sweepers/S crubbers       | 175  | 0.175 | 3.271 | 0.313 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 |
| Sweepers/S crubbers       | 250  | 0.173 | 1.114 | 0.294 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |

|                           |      |       |       |       |       |       |       |         |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.515 | 4.949 | 3.244 | 0.007 | 0.022 | 0.022 | 568.299 | 0.046 |
| Tractors/Loaders/Backhoes | 120  | 0.258 | 3.703 | 1.521 | 0.006 | 0.020 | 0.020 | 568.299 | 0.023 |
| Tractors/Loaders/Backhoes | 175  | 0.179 | 3.275 | 0.348 | 0.006 | 0.015 | 0.015 | 568.299 | 0.016 |
| Tractors/Loaders/Backhoes | 250  | 0.177 | 1.115 | 0.331 | 0.006 | 0.012 | 0.012 | 568.299 | 0.016 |
| Tractors/Loaders/Backhoes | 500  | 0.177 | 1.066 | 0.326 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 |
| Tractors/Loaders/Backhoes | 750  | 0.177 | 1.066 | 0.327 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 |
| Trenchers                 | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 |
| Trenchers                 | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 |
| Trenchers                 | 50   | 0.681 | 5.055 | 3.548 | 0.007 | 0.084 | 0.084 | 568.299 | 0.061 |
| Trenchers                 | 120  | 0.332 | 3.713 | 2.049 | 0.006 | 0.076 | 0.076 | 568.300 | 0.030 |
| Trenchers                 | 175  | 0.241 | 3.264 | 0.966 | 0.006 | 0.048 | 0.048 | 568.299 | 0.021 |
| Trenchers                 | 250  | 0.216 | 1.149 | 0.847 | 0.006 | 0.031 | 0.031 | 568.299 | 0.019 |
| Trenchers                 | 500  | 0.213 | 1.126 | 0.790 | 0.005 | 0.029 | 0.029 | 568.299 | 0.019 |
| Trenchers                 | 750  | 0.213 | 1.126 | 0.801 | 0.005 | 0.029 | 0.029 | 568.300 | 0.019 |
| Welders                   | 15   | 0.661 | 3.469 | 4.143 | 0.008 | 0.162 | 0.162 | 568.299 | 0.059 |
| Welders                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.162 | 0.162 | 568.299 | 0.061 |
| Welders                   | 50   | 0.406 | 4.349 | 3.147 | 0.007 | 0.022 | 0.022 | 568.299 | 0.036 |
| Welders                   | 120  | 0.214 | 3.528 | 1.509 | 0.006 | 0.019 | 0.019 | 568.299 | 0.019 |
| Welders                   | 175  | 0.153 | 3.121 | 0.387 | 0.006 | 0.015 | 0.015 | 568.299 | 0.013 |
| Welders                   | 250  | 0.149 | 1.063 | 0.343 | 0.006 | 0.012 | 0.012 | 568.299 | 0.013 |
| Welders                   | 500  | 0.149 | 1.027 | 0.339 | 0.005 | 0.012 | 0.012 | 568.299 | 0.013 |
| Water Trucks              | 175  | 0.211 | 3.425 | 0.380 | 0.006 | 0.016 | 0.016 | 568.299 | 0.019 |
| Water Trucks              | 250  | 0.208 | 1.167 | 0.353 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 |
| Water Trucks              | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Water Trucks              | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 | 0.013 | 568.299 | 0.018 |
| Water Trucks              | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 | 0.028 | 568.299 | 0.018 |

2039

|         |
|---------|
| g/hp/hr |
| N2O     |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.005   |
| 0.005   |
| 0.005   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |
| 0.004   |

| 2039             |       | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|---------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      | NOX     | SOX     | PM10    |
| Aerial Lifts     | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   |
| Aerial Lifts     | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   |
| Aerial Lifts     | 50    | 0.297   | 3.726   | 3.017   | 0.007   | 0.019   |
| Aerial Lifts     | 120   | 0.166   | 3.345   | 1.466   | 0.006   | 0.017   |
| Aerial Lifts     | 500   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   |
| Aerial Lifts     | 750   | 0.116   | 0.986   | 0.330   | 0.005   | 0.011   |
| Air Compressor s | 15    | 0.661   | 3.469   | 4.143   | 0.008   | 0.162   |
| Air Compressor s | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.162   |
| Air Compressor s | 50    | 0.463   | 4.674   | 3.215   | 0.007   | 0.023   |
| Air Compressor s | 120   | 0.238   | 3.623   | 1.530   | 0.006   | 0.020   |
| Air Compressor s | 175   | 0.170   | 3.205   | 0.391   | 0.006   | 0.015   |
| Air Compressor s | 250   | 0.166   | 1.091   | 0.347   | 0.006   | 0.012   |
| Air Compressor s | 500   | 0.166   | 1.048   | 0.343   | 0.005   | 0.012   |
| Air Compressor s | 750   | 0.166   | 1.048   | 0.344   | 0.005   | 0.012   |
| Air Compressor s | 1000  | 0.167   | 1.048   | 2.473   | 0.005   | 0.026   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   | 4.142   | 0.008   | 0.161   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   | 4.332   | 0.007   | 0.161   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.030   | 3.019   | 0.007   | 0.013   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.434   | 1.411   | 0.006   | 0.012   |
| Bore/Drill Rigs  | 175   | 0.126   | 3.039   | 0.272   | 0.006   | 0.010   |
| Bore/Drill Rigs  | 250   | 0.126   | 1.035   | 0.272   | 0.006   | 0.010   |
| Bore/Drill Rigs  | 500   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   |
| Bore/Drill Rigs  | 750   | 0.126   | 1.006   | 0.272   | 0.005   | 0.010   |
| Bore/Drill Rigs  | 1000  | 0.126   | 1.006   | 2.372   | 0.005   | 0.021   |





|       |
|-------|
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 |
| Off-Highway Trucks                 | 750  | 0.208 | 1.105 | 0.348 | 0.005 | 0.013 |
| Off-Highway Trucks                 | 1000 | 0.209 | 1.105 | 2.565 | 0.005 | 0.028 |
| Other Construction Equipment       | 15   | 0.661 | 3.469 | 4.142 | 0.008 | 0.161 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Other Construction Equipment       | 50   | 0.410 | 4.377 | 3.124 | 0.007 | 0.018 |
| Other Construction Equipment       | 120  | 0.213 | 3.536 | 1.474 | 0.006 | 0.017 |
| Other Construction Equipment       | 175  | 0.150 | 3.128 | 0.334 | 0.006 | 0.013 |
| Other Construction Equipment       | 500  | 0.147 | 1.029 | 0.311 | 0.005 | 0.011 |
| Other General Industrial Equipment | 15   | 0.589 | 3.469 | 4.142 | 0.008 | 0.161 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Other General Industrial Equipment | 50   | 0.564 | 5.255 | 3.334 | 0.007 | 0.025 |
| Other General Industrial Equipment | 120  | 0.282 | 3.794 | 1.567 | 0.006 | 0.022 |
| Other General Industrial Equipment | 175  | 0.199 | 3.355 | 0.399 | 0.006 | 0.016 |
| Other General Industrial Equipment | 250  | 0.195 | 1.143 | 0.355 | 0.006 | 0.013 |
| Other General Industrial Equipment | 500  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 |

|       |
|-------|
| 0.004 |
| 0.004 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.004 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.005 |
| 0.004 |
| 0.004 |

|                                    |      |       |       |       |       |       |
|------------------------------------|------|-------|-------|-------|-------|-------|
| Other General Industrial Equipment | 750  | 0.195 | 1.087 | 0.351 | 0.005 | 0.013 |
| Other General Industrial Equipment | 1000 | 0.196 | 1.087 | 2.532 | 0.005 | 0.028 |
| Other Material Handling Equipment  | 50   | 0.552 | 5.189 | 3.321 | 0.007 | 0.025 |
| Other Material Handling Equipment  | 120  | 0.277 | 3.774 | 1.563 | 0.006 | 0.022 |
| Other Material Handling Equipment  | 175  | 0.196 | 3.338 | 0.398 | 0.006 | 0.016 |
| Other Material Handling Equipment  | 250  | 0.192 | 1.137 | 0.354 | 0.006 | 0.013 |
| Other Material Handling Equipment  | 500  | 0.192 | 1.082 | 0.350 | 0.005 | 0.013 |
| Other Material Handling Equipment  | 9999 | 0.197 | 1.082 | 2.525 | 0.005 | 0.027 |
| Pavers                             | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Pavers                             | 50   | 0.694 | 5.260 | 3.555 | 0.007 | 0.076 |
| Pavers                             | 120  | 0.338 | 3.774 | 1.986 | 0.006 | 0.069 |
| Pavers                             | 175  | 0.244 | 3.319 | 0.889 | 0.006 | 0.043 |
| Pavers                             | 250  | 0.221 | 1.157 | 0.772 | 0.006 | 0.027 |
| Pavers                             | 500  | 0.218 | 1.111 | 0.722 | 0.005 | 0.026 |
| Paving Equipment                   | 25   | 0.685 | 2.339 | 4.332 | 0.007 | 0.161 |
| Paving Equipment                   | 50   | 0.664 | 5.181 | 3.511 | 0.007 | 0.070 |
| Paving Equipment                   | 120  | 0.326 | 3.753 | 1.928 | 0.006 | 0.064 |
| Paving Equipment                   | 175  | 0.235 | 3.303 | 0.832 | 0.006 | 0.040 |
| Paving Equipment                   | 250  | 0.212 | 1.140 | 0.714 | 0.006 | 0.024 |
| Plate Compactors                   | 15   | 0.661 | 3.470 | 4.142 | 0.008 | 0.161 |
| Pressure Washers                   | 15   | 0.589 | 3.470 | 4.143 | 0.008 | 0.162 |
| Pressure Washers                   | 25   | 0.685 | 2.340 | 4.332 | 0.007 | 0.162 |
| Pressure Washers                   | 50   | 0.188 | 3.101 | 2.882 | 0.007 | 0.015 |
| Pressure Washers                   | 120  | 0.116 | 3.161 | 1.421 | 0.006 | 0.014 |
| Pressure Washers                   | 175  | 0.109 | 2.907 | 0.382 | 0.006 | 0.013 |









2040



| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|
| PM2.5   | CO2     | CH4     | N2O     |
| 0.161   | 568.299 | 0.059   | 0.005   |
| 0.161   | 568.299 | 0.061   | 0.005   |
| 0.019   | 568.299 | 0.026   | 0.005   |
| 0.017   | 568.299 | 0.014   | 0.004   |
| 0.011   | 568.299 | 0.010   | 0.004   |
| 0.011   | 568.299 | 0.010   | 0.004   |
| 0.162   | 568.300 | 0.059   | 0.005   |
| 0.162   | 568.299 | 0.061   | 0.005   |
| 0.023   | 568.299 | 0.041   | 0.005   |
| 0.020   | 568.299 | 0.021   | 0.004   |
| 0.015   | 568.300 | 0.015   | 0.004   |
| 0.012   | 568.299 | 0.014   | 0.004   |
| 0.012   | 568.299 | 0.014   | 0.004   |
| 0.012   | 568.299 | 0.014   | 0.004   |
| 0.026   | 568.299 | 0.015   | 0.004   |
| 0.161   | 568.299 | 0.059   | 0.005   |
| 0.161   | 568.299 | 0.061   | 0.005   |
| 0.013   | 568.299 | 0.031   | 0.005   |
| 0.012   | 568.300 | 0.016   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.010   | 568.299 | 0.011   | 0.004   |
| 0.021   | 568.299 | 0.011   | 0.004   |

| 2040             |       | g/hp/hr | g/hp/hr |
|------------------|-------|---------|---------|
| Equipment        | MaxHP | ROG     | CO      |
| Aerial Lifts     | 15    | 0.661   | 3.469   |
| Aerial Lifts     | 25    | 0.685   | 2.339   |
| Aerial Lifts     | 50    | 0.295   | 3.723   |
| Aerial Lifts     | 120   | 0.161   | 3.344   |
| Aerial Lifts     | 500   | 0.112   | 0.986   |
| Aerial Lifts     | 750   | 0.112   | 0.986   |
| Air Compressor s | 15    | 0.661   | 3.469   |
| Air Compressor s | 25    | 0.685   | 2.339   |
| Air Compressor s | 50    | 0.458   | 4.659   |
| Air Compressor s | 120   | 0.232   | 3.619   |
| Air Compressor s | 175   | 0.161   | 3.201   |
| Air Compressor s | 250   | 0.160   | 1.090   |
| Air Compressor s | 500   | 0.160   | 1.047   |
| Air Compressor s | 750   | 0.160   | 1.047   |
| Air Compressor s | 1000  | 0.160   | 1.047   |
| Bore/Drill Rigs  | 15    | 0.661   | 3.469   |
| Bore/Drill Rigs  | 25    | 0.685   | 2.339   |
| Bore/Drill Rigs  | 50    | 0.348   | 4.032   |
| Bore/Drill Rigs  | 120   | 0.183   | 3.435   |
| Bore/Drill Rigs  | 175   | 0.127   | 3.039   |
| Bore/Drill Rigs  | 250   | 0.127   | 1.035   |
| Bore/Drill Rigs  | 500   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 750   | 0.127   | 1.006   |
| Bore/Drill Rigs  | 1000  | 0.127   | 1.006   |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.021 | 568.300 | 0.033 | 0.005 |
| 0.018 | 568.299 | 0.018 | 0.004 |
| 0.014 | 568.299 | 0.012 | 0.004 |
| 0.039 | 568.299 | 0.054 | 0.005 |
| 0.036 | 568.300 | 0.027 | 0.004 |
| 0.024 | 568.299 | 0.019 | 0.004 |
| 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 568.299 | 0.018 | 0.004 |
| 0.016 | 568.299 | 0.018 | 0.004 |
| 0.031 | 568.299 | 0.018 | 0.004 |
| 0.066 | 568.299 | 0.063 | 0.005 |
| 0.060 | 568.299 | 0.031 | 0.004 |
| 0.038 | 568.299 | 0.022 | 0.004 |
| 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.020 | 0.004 |
| 0.041 | 568.299 | 0.020 | 0.004 |
| 0.023 | 568.299 | 0.044 | 0.005 |
| 0.020 | 568.299 | 0.022 | 0.004 |
| 0.015 | 568.299 | 0.015 | 0.004 |
| 0.012 | 568.300 | 0.015 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.026 | 568.299 | 0.016 | 0.004 |

|                          |      |       |       |
|--------------------------|------|-------|-------|
| Cement and Mortar Mixers | 15   | 0.661 | 3.470 |
| Cement and Mortar Mixers | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 25   | 0.685 | 2.339 |
| Concrete/Industrial Saws | 50   | 0.373 | 4.175 |
| Concrete/Industrial Saws | 120  | 0.195 | 3.477 |
| Concrete/Industrial Saws | 175  | 0.136 | 3.076 |
| Cranes                   | 50   | 0.567 | 5.268 |
| Cranes                   | 120  | 0.282 | 3.797 |
| Cranes                   | 175  | 0.197 | 3.358 |
| Cranes                   | 250  | 0.195 | 1.144 |
| Cranes                   | 500  | 0.195 | 1.087 |
| Cranes                   | 750  | 0.195 | 1.087 |
| Cranes                   | 9999 | 0.198 | 1.087 |
| Crawler Tractors         | 50   | 0.653 | 5.443 |
| Crawler Tractors         | 120  | 0.316 | 3.839 |
| Crawler Tractors         | 175  | 0.221 | 3.388 |
| Crawler Tractors         | 250  | 0.211 | 1.167 |
| Crawler Tractors         | 500  | 0.210 | 1.113 |
| Crawler Tractors         | 750  | 0.210 | 1.113 |
| Crawler Tractors         | 1000 | 0.213 | 1.122 |
| Crushing/Proc. Equipment | 50   | 0.488 | 4.833 |
| Crushing/Proc. Equipment | 120  | 0.245 | 3.670 |
| Crushing/Proc. Equipment | 175  | 0.170 | 3.246 |
| Crushing/Proc. Equipment | 250  | 0.168 | 1.106 |
| Crushing/Proc. Equipment | 500  | 0.168 | 1.059 |
| Crushing/Proc. Equipment | 750  | 0.169 | 1.059 |
| Crushing/Proc. Equipment | 9999 | 0.170 | 1.059 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.024 | 568.299 | 0.051 | 0.005 |
| 0.021 | 568.299 | 0.025 | 0.004 |
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.300 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.017 | 568.299 | 0.050 | 0.005 |
| 0.016 | 568.299 | 0.024 | 0.004 |
| 0.012 | 568.300 | 0.017 | 0.004 |
| 0.011 | 568.300 | 0.017 | 0.004 |
| 0.011 | 568.299 | 0.017 | 0.004 |
| 0.162 | 568.299 | 0.053 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.018 | 568.299 | 0.024 | 0.005 |
| 0.016 | 568.299 | 0.014 | 0.004 |
| 0.013 | 568.299 | 0.010 | 0.004 |
| 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 568.299 | 0.009 | 0.004 |
| 0.011 | 568.299 | 0.009 | 0.004 |
| 0.022 | 568.299 | 0.010 | 0.004 |
| 0.037 | 568.299 | 0.053 | 0.005 |
| 0.034 | 568.299 | 0.026 | 0.004 |
| 0.022 | 568.300 | 0.018 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.107 | 568.299 | 0.037 | 0.004 |
| 0.065 | 568.299 | 0.027 | 0.004 |
| 0.042 | 568.299 | 0.024 | 0.004 |
| 0.040 | 568.299 | 0.023 | 0.004 |
| 0.056 | 568.299 | 0.024 | 0.004 |
| 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |

|                      |      |       |       |
|----------------------|------|-------|-------|
| Dumpers/Trailers     | 25   | 0.685 | 2.339 |
| Excavators           | 25   | 0.685 | 2.339 |
| Excavators           | 50   | 0.567 | 5.283 |
| Excavators           | 120  | 0.279 | 3.802 |
| Excavators           | 175  | 0.193 | 3.363 |
| Excavators           | 250  | 0.192 | 1.145 |
| Excavators           | 500  | 0.192 | 1.089 |
| Excavators           | 750  | 0.192 | 1.089 |
| Forklifts            | 50   | 0.562 | 5.256 |
| Forklifts            | 120  | 0.276 | 3.794 |
| Forklifts            | 175  | 0.189 | 3.356 |
| Forklifts            | 250  | 0.189 | 1.143 |
| Forklifts            | 500  | 0.189 | 1.087 |
| Generator Sets       | 15   | 0.589 | 3.469 |
| Generator Sets       | 25   | 0.685 | 2.339 |
| Generator Sets       | 50   | 0.273 | 3.601 |
| Generator Sets       | 120  | 0.152 | 3.308 |
| Generator Sets       | 175  | 0.107 | 2.928 |
| Generator Sets       | 250  | 0.106 | 0.997 |
| Generator Sets       | 500  | 0.106 | 0.978 |
| Generator Sets       | 750  | 0.106 | 0.978 |
| Generator Sets       | 9999 | 0.107 | 0.978 |
| Graders              | 50   | 0.563 | 5.161 |
| Graders              | 120  | 0.278 | 3.764 |
| Graders              | 175  | 0.193 | 3.326 |
| Graders              | 250  | 0.188 | 1.133 |
| Graders              | 500  | 0.188 | 1.079 |
| Graders              | 750  | 0.188 | 1.079 |
| Off-Highway Tractors | 120  | 0.362 | 3.878 |
| Off-Highway Tractors | 175  | 0.257 | 3.412 |
| Off-Highway Tractors | 250  | 0.237 | 1.198 |
| Off-Highway Tractors | 750  | 0.234 | 1.164 |
| Off-Highway Tractors | 1000 | 0.238 | 1.183 |
| Off-Highway Trucks   | 175  | 0.205 | 3.426 |
| Off-Highway Trucks   | 250  | 0.204 | 1.167 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 568.299 | 0.018 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.018 | 568.299 | 0.037 | 0.005 |
| 0.017 | 568.299 | 0.019 | 0.004 |
| 0.013 | 568.299 | 0.013 | 0.004 |
| 0.011 | 568.299 | 0.013 | 0.004 |
| 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.025 | 568.299 | 0.050 | 0.005 |
| 0.022 | 568.300 | 0.025 | 0.004 |
| 0.016 | 568.300 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Off-Highway Trucks                 | 500  | 0.204 | 1.105 |
| Off-Highway Trucks                 | 750  | 0.204 | 1.105 |
| Off-Highway Trucks                 | 1000 | 0.205 | 1.105 |
| Other Construction Equipment       | 15   | 0.661 | 3.470 |
| Other Construction Equipment       | 25   | 0.685 | 2.339 |
| Other Construction Equipment       | 50   | 0.409 | 4.377 |
| Other Construction Equipment       | 120  | 0.210 | 3.536 |
| Other Construction Equipment       | 175  | 0.145 | 3.128 |
| Other Construction Equipment       | 500  | 0.145 | 1.029 |
| Other General Industrial Equipment | 15   | 0.589 | 3.470 |
| Other General Industrial Equipment | 25   | 0.685 | 2.339 |
| Other General Industrial Equipment | 50   | 0.562 | 5.257 |
| Other General Industrial Equipment | 120  | 0.277 | 3.794 |
| Other General Industrial Equipment | 175  | 0.191 | 3.356 |
| Other General Industrial Equipment | 250  | 0.190 | 1.143 |
| Other General Industrial Equipment | 500  | 0.190 | 1.087 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.028 | 568.299 | 0.017 | 0.004 |
| 0.025 | 568.299 | 0.049 | 0.005 |
| 0.022 | 568.299 | 0.025 | 0.004 |
| 0.016 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.013 | 568.299 | 0.017 | 0.004 |
| 0.027 | 568.299 | 0.017 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.076 | 568.299 | 0.062 | 0.005 |
| 0.069 | 568.299 | 0.030 | 0.004 |
| 0.043 | 568.299 | 0.022 | 0.004 |
| 0.027 | 568.300 | 0.019 | 0.004 |
| 0.026 | 568.299 | 0.019 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.070 | 568.300 | 0.059 | 0.005 |
| 0.064 | 568.299 | 0.029 | 0.004 |
| 0.040 | 568.299 | 0.021 | 0.004 |
| 0.024 | 568.299 | 0.019 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.162 | 568.300 | 0.053 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.015 | 568.299 | 0.016 | 0.005 |
| 0.014 | 568.299 | 0.010 | 0.004 |
| 0.013 | 568.299 | 0.009 | 0.004 |

|                                    |      |       |       |
|------------------------------------|------|-------|-------|
| Other General Industrial Equipment | 750  | 0.190 | 1.087 |
| Other General Industrial Equipment | 1000 | 0.191 | 1.087 |
| Other Material Handling Equipment  | 50   | 0.551 | 5.191 |
| Other Material Handling Equipment  | 120  | 0.272 | 3.775 |
| Other Material Handling Equipment  | 175  | 0.188 | 3.339 |
| Other Material Handling Equipment  | 250  | 0.187 | 1.137 |
| Other Material Handling Equipment  | 500  | 0.187 | 1.082 |
| Other Material Handling Equipment  | 9999 | 0.189 | 1.082 |
| Pavers                             | 25   | 0.685 | 2.339 |
| Pavers                             | 50   | 0.618 | 5.189 |
| Pavers                             | 120  | 0.302 | 3.763 |
| Pavers                             | 175  | 0.213 | 3.319 |
| Pavers                             | 250  | 0.200 | 1.138 |
| Pavers                             | 500  | 0.198 | 1.085 |
| Paving Equipment                   | 25   | 0.685 | 2.339 |
| Paving Equipment                   | 50   | 0.589 | 5.111 |
| Paving Equipment                   | 120  | 0.291 | 3.744 |
| Paving Equipment                   | 175  | 0.205 | 3.304 |
| Paving Equipment                   | 250  | 0.193 | 1.127 |
| Plate Compactors                   | 15   | 0.661 | 3.469 |
| Pressure Washers                   | 15   | 0.589 | 3.469 |
| Pressure Washers                   | 25   | 0.685 | 2.339 |
| Pressure Washers                   | 50   | 0.186 | 3.098 |
| Pressure Washers                   | 120  | 0.113 | 3.160 |
| Pressure Washers                   | 175  | 0.103 | 2.907 |



|       |         |       |       |
|-------|---------|-------|-------|
| 0.009 | 568.299 | 0.008 | 0.004 |
| 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.019 | 568.299 | 0.027 | 0.005 |
| 0.017 | 568.299 | 0.015 | 0.004 |
| 0.014 | 568.299 | 0.011 | 0.004 |
| 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 568.299 | 0.010 | 0.004 |
| 0.011 | 568.299 | 0.010 | 0.004 |
| 0.023 | 568.299 | 0.011 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.300 | 0.061 | 0.005 |
| 0.038 | 568.299 | 0.045 | 0.005 |
| 0.035 | 568.299 | 0.023 | 0.004 |
| 0.023 | 568.299 | 0.016 | 0.004 |
| 0.016 | 568.299 | 0.015 | 0.004 |
| 0.016 | 568.300 | 0.015 | 0.004 |
| 0.022 | 568.299 | 0.047 | 0.005 |
| 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 568.300 | 0.016 | 0.004 |
| 0.071 | 568.299 | 0.029 | 0.004 |
| 0.046 | 568.299 | 0.025 | 0.004 |
| 0.043 | 568.300 | 0.025 | 0.004 |
| 0.043 | 568.299 | 0.025 | 0.004 |
| 0.060 | 568.299 | 0.025 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.035 | 568.299 | 0.051 | 0.005 |
| 0.033 | 568.299 | 0.025 | 0.004 |
| 0.022 | 568.299 | 0.018 | 0.004 |

|                         |      |       |       |
|-------------------------|------|-------|-------|
| Pressure Washers        | 250  | 0.098 | 0.986 |
| Pumps                   | 15   | 0.661 | 3.469 |
| Pumps                   | 25   | 0.685 | 2.339 |
| Pumps                   | 50   | 0.303 | 3.770 |
| Pumps                   | 120  | 0.165 | 3.358 |
| Pumps                   | 175  | 0.116 | 2.971 |
| Pumps                   | 250  | 0.114 | 1.012 |
| Pumps                   | 500  | 0.114 | 0.989 |
| Pumps                   | 750  | 0.114 | 0.989 |
| Pumps                   | 9999 | 0.116 | 0.989 |
| Rollers                 | 15   | 0.661 | 3.469 |
| Rollers                 | 25   | 0.685 | 2.339 |
| Rollers                 | 50   | 0.469 | 4.682 |
| Rollers                 | 120  | 0.240 | 3.625 |
| Rollers                 | 175  | 0.168 | 3.205 |
| Rollers                 | 250  | 0.165 | 1.092 |
| Rollers                 | 500  | 0.165 | 1.048 |
| Rough Terrain Forklifts | 50   | 0.519 | 5.010 |
| Rough Terrain Forklifts | 120  | 0.258 | 3.722 |
| Rough Terrain Forklifts | 175  | 0.178 | 3.292 |
| Rough Terrain Forklifts | 250  | 0.177 | 1.121 |
| Rough Terrain Forklifts | 500  | 0.177 | 1.071 |
| Rubber Tired Dozers     | 175  | 0.275 | 3.470 |
| Rubber Tired Dozers     | 250  | 0.253 | 1.225 |
| Rubber Tired Dozers     | 500  | 0.249 | 1.198 |
| Rubber Tired Dozers     | 750  | 0.250 | 1.198 |
| Rubber Tired Dozers     | 1000 | 0.254 | 1.218 |
| Rubber Tired Loaders    | 25   | 0.685 | 2.339 |
| Rubber Tired Loaders    | 50   | 0.545 | 5.102 |
| Rubber Tired Loaders    | 120  | 0.271 | 3.748 |
| Rubber Tired Loaders    | 175  | 0.188 | 3.314 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.015 | 568.299 | 0.017 | 0.004 |
| 0.030 | 568.299 | 0.017 | 0.004 |
| 0.064 | 568.299 | 0.031 | 0.004 |
| 0.040 | 568.299 | 0.022 | 0.004 |
| 0.026 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.300 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.020 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.020 | 568.299 | 0.032 | 0.005 |
| 0.018 | 568.299 | 0.017 | 0.004 |
| 0.014 | 568.299 | 0.012 | 0.004 |
| 0.014 | 686.695 | 0.014 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.015 | 568.299 | 0.037 | 0.005 |
| 0.014 | 568.299 | 0.019 | 0.004 |
| 0.041 | 568.299 | 0.039 | 0.005 |
| 0.038 | 568.299 | 0.020 | 0.004 |
| 0.025 | 568.299 | 0.014 | 0.004 |
| 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 568.299 | 0.013 | 0.004 |
| 0.016 | 568.300 | 0.013 | 0.004 |
| 0.161 | 568.299 | 0.053 | 0.005 |
| 0.161 | 568.300 | 0.061 | 0.005 |
| 0.017 | 568.299 | 0.045 | 0.005 |
| 0.016 | 568.299 | 0.022 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.011 | 568.299 | 0.015 | 0.004 |
| 0.161 | 568.299 | 0.061 | 0.005 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Rubber Tired Loaders      | 250  | 0.185 | 1.128 |
| Rubber Tired Loaders      | 500  | 0.185 | 1.076 |
| Rubber Tired Loaders      | 750  | 0.185 | 1.076 |
| Rubber Tired Loaders      | 1000 | 0.186 | 1.076 |
| Scrapers                  | 120  | 0.316 | 3.833 |
| Scrapers                  | 175  | 0.221 | 3.381 |
| Scrapers                  | 250  | 0.210 | 1.159 |
| Scrapers                  | 500  | 0.209 | 1.100 |
| Scrapers                  | 750  | 0.209 | 1.100 |
| Signal Boards             | 15   | 0.661 | 3.469 |
| Signal Boards             | 50   | 0.356 | 4.074 |
| Signal Boards             | 120  | 0.188 | 3.447 |
| Signal Boards             | 175  | 0.131 | 3.050 |
| Signal Boards             | 250  | 0.157 | 1.255 |
| Skid Steer Loaders        | 25   | 0.685 | 2.339 |
| Skid Steer Loaders        | 50   | 0.411 | 4.392 |
| Skid Steer Loaders        | 120  | 0.211 | 3.540 |
| Surfacing Equipment       | 50   | 0.395 | 4.183 |
| Surfacing Equipment       | 120  | 0.206 | 3.477 |
| Surfacing Equipment       | 175  | 0.146 | 3.073 |
| Surfacing Equipment       | 250  | 0.140 | 1.047 |
| Surfacing Equipment       | 500  | 0.140 | 1.015 |
| Surfacing Equipment       | 750  | 0.140 | 1.015 |
| Sweepers/Scrubbers        | 15   | 0.589 | 3.470 |
| Sweepers/Scrubbers        | 25   | 0.685 | 2.340 |
| Sweepers/Scrubbers        | 50   | 0.504 | 4.925 |
| Sweepers/Scrubbers        | 120  | 0.251 | 3.697 |
| Sweepers/Scrubbers        | 175  | 0.172 | 3.270 |
| Sweepers/Scrubbers        | 250  | 0.172 | 1.114 |
| Tractors/Loaders/Backhoes | 25   | 0.685 | 2.339 |

|       |         |       |       |
|-------|---------|-------|-------|
| 0.022 | 568.299 | 0.046 | 0.005 |
| 0.020 | 568.299 | 0.023 | 0.004 |
| 0.015 | 568.299 | 0.016 | 0.004 |
| 0.012 | 568.299 | 0.016 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.012 | 568.299 | 0.015 | 0.004 |
| 0.161 | 568.299 | 0.059 | 0.005 |
| 0.161 | 568.299 | 0.061 | 0.005 |
| 0.084 | 568.299 | 0.061 | 0.005 |
| 0.076 | 568.300 | 0.030 | 0.004 |
| 0.048 | 568.299 | 0.021 | 0.004 |
| 0.031 | 568.299 | 0.019 | 0.004 |
| 0.029 | 568.299 | 0.019 | 0.004 |
| 0.029 | 568.300 | 0.019 | 0.004 |
| 0.162 | 568.299 | 0.059 | 0.005 |
| 0.162 | 568.299 | 0.061 | 0.005 |
| 0.022 | 568.299 | 0.036 | 0.005 |
| 0.019 | 568.299 | 0.019 | 0.004 |
| 0.015 | 568.299 | 0.013 | 0.004 |
| 0.012 | 568.299 | 0.013 | 0.004 |
| 0.012 | 568.299 | 0.013 | 0.004 |
| 0.016 | 568.299 | 0.019 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.013 | 568.299 | 0.018 | 0.004 |
| 0.028 | 568.299 | 0.018 | 0.004 |

|                           |      |       |       |
|---------------------------|------|-------|-------|
| Tractors/Loaders/Backhoes | 50   | 0.508 | 4.946 |
| Tractors/Loaders/Backhoes | 120  | 0.254 | 3.703 |
| Tractors/Loaders/Backhoes | 175  | 0.175 | 3.276 |
| Tractors/Loaders/Backhoes | 250  | 0.174 | 1.116 |
| Tractors/Loaders/Backhoes | 500  | 0.174 | 1.066 |
| Tractors/Loaders/Backhoes | 750  | 0.174 | 1.066 |
| Trenchers                 | 15   | 0.661 | 3.469 |
| Trenchers                 | 25   | 0.685 | 2.339 |
| Trenchers                 | 50   | 0.598 | 4.980 |
| Trenchers                 | 120  | 0.293 | 3.699 |
| Trenchers                 | 175  | 0.207 | 3.260 |
| Trenchers                 | 250  | 0.193 | 1.126 |
| Trenchers                 | 500  | 0.191 | 1.081 |
| Trenchers                 | 750  | 0.191 | 1.081 |
| Welders                   | 15   | 0.661 | 3.469 |
| Welders                   | 25   | 0.685 | 2.339 |
| Welders                   | 50   | 0.402 | 4.336 |
| Welders                   | 120  | 0.208 | 3.524 |
| Welders                   | 175  | 0.145 | 3.118 |
| Welders                   | 250  | 0.143 | 1.062 |
| Welders                   | 500  | 0.143 | 1.026 |
| Water Trucks              | 175  | 0.205 | 3.426 |
| Water Trucks              | 250  | 0.204 | 1.167 |
| Water Trucks              | 500  | 0.204 | 1.105 |
| Water Trucks              | 750  | 0.204 | 1.105 |
| Water Trucks              | 1000 | 0.205 | 1.105 |

| g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr | g/hp/hr |
|---------|---------|---------|---------|---------|---------|---------|
| NOX     | SOX     | PM10    | PM2.5   | CO2     | CH4     | N2O     |
| 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 2.966   | 0.007   | 0.013   | 0.013   | 568.299 | 0.026   | 0.005   |
| 1.407   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 0.279   | 0.005   | 0.009   | 0.009   | 568.299 | 0.010   | 0.004   |
| 0.279   | 0.005   | 0.009   | 0.009   | 568.299 | 0.010   | 0.004   |
| 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 4.332   | 0.007   | 0.161   | 0.161   | 568.300 | 0.061   | 0.005   |
| 3.159   | 0.007   | 0.016   | 0.016   | 568.300 | 0.041   | 0.005   |
| 1.468   | 0.006   | 0.015   | 0.015   | 568.299 | 0.020   | 0.004   |
| 0.307   | 0.006   | 0.012   | 0.012   | 568.299 | 0.014   | 0.004   |
| 0.291   | 0.006   | 0.010   | 0.010   | 568.299 | 0.014   | 0.004   |
| 0.291   | 0.005   | 0.010   | 0.010   | 568.300 | 0.014   | 0.004   |
| 0.291   | 0.005   | 0.010   | 0.010   | 568.299 | 0.014   | 0.004   |
| 2.439   | 0.005   | 0.023   | 0.023   | 568.299 | 0.014   | 0.004   |
| 4.142   | 0.008   | 0.161   | 0.161   | 568.299 | 0.059   | 0.005   |
| 4.332   | 0.007   | 0.161   | 0.161   | 568.299 | 0.061   | 0.005   |
| 3.019   | 0.007   | 0.013   | 0.013   | 568.300 | 0.031   | 0.005   |
| 1.411   | 0.006   | 0.012   | 0.012   | 568.299 | 0.016   | 0.004   |
| 0.272   | 0.006   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.272   | 0.006   | 0.010   | 0.010   | 568.300 | 0.011   | 0.004   |
| 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 0.272   | 0.005   | 0.010   | 0.010   | 568.299 | 0.011   | 0.004   |
| 2.372   | 0.005   | 0.021   | 0.021   | 568.299 | 0.011   | 0.004   |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.058 | 0.007 | 0.014 | 0.014 | 568.299 | 0.033 | 0.005 |
| 1.434 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.300 | 0.012 | 0.004 |
| 3.324 | 0.007 | 0.024 | 0.024 | 568.299 | 0.051 | 0.005 |
| 1.552 | 0.006 | 0.021 | 0.021 | 568.299 | 0.025 | 0.004 |
| 0.371 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |
| 0.344 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.340 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.341 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 2.534 | 0.005 | 0.027 | 0.027 | 568.299 | 0.017 | 0.004 |
| 3.420 | 0.007 | 0.042 | 0.042 | 568.299 | 0.058 | 0.005 |
| 1.709 | 0.006 | 0.039 | 0.039 | 568.299 | 0.028 | 0.004 |
| 0.539 | 0.006 | 0.025 | 0.025 | 568.299 | 0.020 | 0.004 |
| 0.491 | 0.006 | 0.018 | 0.018 | 568.299 | 0.019 | 0.004 |
| 0.470 | 0.005 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.475 | 0.005 | 0.018 | 0.018 | 568.299 | 0.019 | 0.004 |
| 2.652 | 0.005 | 0.032 | 0.032 | 568.299 | 0.019 | 0.004 |
| 3.194 | 0.007 | 0.017 | 0.017 | 568.299 | 0.044 | 0.005 |
| 1.477 | 0.006 | 0.015 | 0.015 | 568.299 | 0.022 | 0.004 |
| 0.306 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.292 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.292 | 0.005 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.292 | 0.005 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 2.457 | 0.005 | 0.024 | 0.024 | 568.299 | 0.015 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.300 | 0.061 | 0.005 |
| 3.290 | 0.007 | 0.019 | 0.019 | 568.299 | 0.051 | 0.005 |
| 1.507 | 0.006 | 0.017 | 0.017 | 568.299 | 0.025 | 0.004 |
| 0.311 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.300 | 0.006 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.300 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.300 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 3.272 | 0.007 | 0.017 | 0.017 | 568.299 | 0.050 | 0.005 |
| 1.491 | 0.006 | 0.016 | 0.016 | 568.299 | 0.024 | 0.004 |
| 0.288 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.288 | 0.006 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.288 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.941 | 0.007 | 0.012 | 0.012 | 568.300 | 0.024 | 0.005 |
| 1.399 | 0.006 | 0.012 | 0.012 | 568.299 | 0.013 | 0.004 |
| 0.293 | 0.006 | 0.010 | 0.010 | 568.299 | 0.009 | 0.004 |
| 0.277 | 0.006 | 0.009 | 0.009 | 568.299 | 0.009 | 0.004 |
| 0.277 | 0.005 | 0.009 | 0.009 | 568.299 | 0.009 | 0.004 |
| 0.277 | 0.005 | 0.009 | 0.009 | 568.300 | 0.009 | 0.004 |
| 2.330 | 0.005 | 0.020 | 0.020 | 568.299 | 0.009 | 0.004 |
| 3.298 | 0.007 | 0.026 | 0.026 | 568.300 | 0.050 | 0.005 |
| 1.560 | 0.006 | 0.024 | 0.024 | 568.299 | 0.025 | 0.004 |
| 0.380 | 0.006 | 0.017 | 0.017 | 568.299 | 0.017 | 0.004 |
| 0.360 | 0.006 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.351 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 0.353 | 0.005 | 0.013 | 0.013 | 568.299 | 0.017 | 0.004 |
| 1.976 | 0.006 | 0.067 | 0.067 | 568.299 | 0.032 | 0.004 |
| 0.836 | 0.006 | 0.041 | 0.041 | 568.299 | 0.023 | 0.004 |
| 0.747 | 0.006 | 0.028 | 0.028 | 568.299 | 0.021 | 0.004 |
| 0.710 | 0.005 | 0.027 | 0.027 | 568.299 | 0.021 | 0.004 |
| 2.844 | 0.005 | 0.042 | 0.042 | 568.299 | 0.021 | 0.004 |
| 0.318 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.006 | 0.012 | 0.012 | 568.300 | 0.018 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 2.532 | 0.005 | 0.026 | 0.026 | 568.299 | 0.018 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.300 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.096 | 0.007 | 0.015 | 0.015 | 568.300 | 0.036 | 0.005 |
| 1.441 | 0.006 | 0.014 | 0.014 | 568.299 | 0.018 | 0.004 |
| 0.290 | 0.006 | 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 0.282 | 0.005 | 0.010 | 0.010 | 568.299 | 0.013 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.283 | 0.007 | 0.019 | 0.019 | 568.299 | 0.050 | 0.005 |
| 1.506 | 0.006 | 0.017 | 0.017 | 568.299 | 0.025 | 0.004 |
| 0.315 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.299 | 0.006 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 0.299 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.299 | 0.005 | 0.011 | 0.011 | 568.299 | 0.017 | 0.004 |
| 2.500 | 0.005 | 0.025 | 0.025 | 568.299 | 0.017 | 0.004 |
| 3.269 | 0.007 | 0.018 | 0.018 | 568.299 | 0.049 | 0.005 |
| 1.502 | 0.006 | 0.017 | 0.017 | 568.300 | 0.024 | 0.004 |
| 0.314 | 0.006 | 0.012 | 0.012 | 568.299 | 0.017 | 0.004 |
| 0.298 | 0.006 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 0.298 | 0.005 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 2.493 | 0.005 | 0.025 | 0.025 | 568.300 | 0.017 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.393 | 0.007 | 0.047 | 0.047 | 568.299 | 0.055 | 0.005 |
| 1.731 | 0.006 | 0.043 | 0.043 | 568.299 | 0.027 | 0.004 |
| 0.583 | 0.006 | 0.027 | 0.027 | 568.299 | 0.019 | 0.004 |
| 0.525 | 0.006 | 0.018 | 0.018 | 568.299 | 0.018 | 0.004 |
| 0.498 | 0.005 | 0.018 | 0.018 | 568.299 | 0.017 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.361 | 0.007 | 0.042 | 0.042 | 568.300 | 0.053 | 0.005 |
| 1.687 | 0.006 | 0.039 | 0.039 | 568.299 | 0.026 | 0.004 |
| 0.536 | 0.006 | 0.025 | 0.025 | 568.299 | 0.018 | 0.004 |
| 0.485 | 0.006 | 0.017 | 0.017 | 568.299 | 0.017 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.836 | 0.007 | 0.010 | 0.010 | 568.299 | 0.016 | 0.005 |
| 1.365 | 0.006 | 0.010 | 0.010 | 568.299 | 0.010 | 0.004 |
| 0.293 | 0.006 | 0.010 | 0.010 | 568.299 | 0.009 | 0.004 |



|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.265 | 0.006 | 0.009 | 0.009 | 568.299 | 0.008 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 2.976 | 0.007 | 0.013 | 0.013 | 568.299 | 0.027 | 0.005 |
| 1.410 | 0.006 | 0.012 | 0.012 | 568.299 | 0.014 | 0.004 |
| 0.295 | 0.006 | 0.010 | 0.010 | 568.299 | 0.010 | 0.004 |
| 0.279 | 0.006 | 0.009 | 0.009 | 568.299 | 0.010 | 0.004 |
| 0.279 | 0.005 | 0.009 | 0.009 | 568.299 | 0.010 | 0.004 |
| 0.279 | 0.005 | 0.009 | 0.009 | 568.299 | 0.010 | 0.004 |
| 2.347 | 0.005 | 0.020 | 0.020 | 568.299 | 0.010 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.207 | 0.007 | 0.024 | 0.024 | 568.299 | 0.042 | 0.005 |
| 1.525 | 0.006 | 0.021 | 0.021 | 568.299 | 0.021 | 0.004 |
| 0.373 | 0.006 | 0.015 | 0.015 | 568.299 | 0.015 | 0.004 |
| 0.348 | 0.006 | 0.012 | 0.012 | 568.299 | 0.014 | 0.004 |
| 0.341 | 0.005 | 0.012 | 0.012 | 568.299 | 0.014 | 0.004 |
| 3.228 | 0.007 | 0.017 | 0.017 | 568.300 | 0.046 | 0.005 |
| 1.485 | 0.006 | 0.016 | 0.016 | 568.299 | 0.023 | 0.004 |
| 0.303 | 0.006 | 0.012 | 0.012 | 568.300 | 0.016 | 0.004 |
| 0.292 | 0.006 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 0.292 | 0.005 | 0.011 | 0.011 | 568.299 | 0.016 | 0.004 |
| 0.903 | 0.006 | 0.045 | 0.045 | 568.299 | 0.024 | 0.004 |
| 0.810 | 0.006 | 0.031 | 0.031 | 568.299 | 0.022 | 0.004 |
| 0.758 | 0.005 | 0.029 | 0.029 | 568.299 | 0.022 | 0.004 |
| 0.767 | 0.005 | 0.029 | 0.029 | 568.300 | 0.022 | 0.004 |
| 2.910 | 0.005 | 0.045 | 0.045 | 568.300 | 0.023 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.283 | 0.007 | 0.024 | 0.024 | 568.300 | 0.049 | 0.005 |
| 1.543 | 0.006 | 0.022 | 0.022 | 568.300 | 0.024 | 0.004 |
| 0.365 | 0.006 | 0.016 | 0.016 | 568.299 | 0.017 | 0.004 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 0.346 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.338 | 0.005 | 0.013 | 0.013 | 568.300 | 0.016 | 0.004 |
| 0.340 | 0.005 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 2.522 | 0.005 | 0.026 | 0.026 | 568.299 | 0.016 | 0.004 |
| 1.715 | 0.006 | 0.040 | 0.040 | 568.299 | 0.028 | 0.004 |
| 0.549 | 0.006 | 0.026 | 0.026 | 568.299 | 0.020 | 0.004 |
| 0.498 | 0.006 | 0.018 | 0.018 | 568.300 | 0.018 | 0.004 |
| 0.475 | 0.005 | 0.017 | 0.017 | 568.299 | 0.018 | 0.004 |
| 0.480 | 0.005 | 0.017 | 0.017 | 568.299 | 0.018 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 3.037 | 0.007 | 0.014 | 0.014 | 568.299 | 0.032 | 0.005 |
| 1.428 | 0.006 | 0.013 | 0.013 | 568.299 | 0.016 | 0.004 |
| 0.296 | 0.006 | 0.011 | 0.011 | 568.299 | 0.011 | 0.004 |
| 0.341 | 0.007 | 0.012 | 0.012 | 686.695 | 0.014 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.093 | 0.007 | 0.014 | 0.014 | 568.299 | 0.037 | 0.005 |
| 1.435 | 0.006 | 0.013 | 0.013 | 568.300 | 0.019 | 0.004 |
| 3.114 | 0.007 | 0.025 | 0.025 | 568.299 | 0.035 | 0.005 |
| 1.521 | 0.006 | 0.024 | 0.024 | 568.299 | 0.018 | 0.004 |
| 0.397 | 0.006 | 0.017 | 0.017 | 568.299 | 0.013 | 0.004 |
| 0.370 | 0.006 | 0.013 | 0.013 | 568.299 | 0.012 | 0.004 |
| 0.358 | 0.005 | 0.012 | 0.012 | 568.299 | 0.012 | 0.004 |
| 0.361 | 0.005 | 0.013 | 0.013 | 568.299 | 0.012 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.300 | 0.053 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.203 | 0.007 | 0.016 | 0.016 | 568.300 | 0.045 | 0.005 |
| 1.469 | 0.006 | 0.015 | 0.015 | 568.299 | 0.022 | 0.004 |
| 0.284 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.284 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |

|       |       |       |       |         |       |       |
|-------|-------|-------|-------|---------|-------|-------|
| 3.220 | 0.007 | 0.018 | 0.018 | 568.299 | 0.045 | 0.005 |
| 1.485 | 0.006 | 0.016 | 0.016 | 568.299 | 0.022 | 0.004 |
| 0.305 | 0.006 | 0.012 | 0.012 | 568.299 | 0.015 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.300 | 0.015 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 0.297 | 0.006 | 0.011 | 0.011 | 568.299 | 0.015 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.374 | 0.007 | 0.052 | 0.052 | 568.299 | 0.054 | 0.005 |
| 1.767 | 0.006 | 0.047 | 0.047 | 568.299 | 0.026 | 0.004 |
| 0.639 | 0.006 | 0.030 | 0.030 | 568.300 | 0.018 | 0.004 |
| 0.573 | 0.006 | 0.020 | 0.020 | 568.300 | 0.017 | 0.004 |
| 0.542 | 0.005 | 0.020 | 0.020 | 568.300 | 0.017 | 0.004 |
| 0.549 | 0.005 | 0.020 | 0.020 | 568.299 | 0.017 | 0.004 |
| 4.142 | 0.008 | 0.161 | 0.161 | 568.299 | 0.059 | 0.005 |
| 4.332 | 0.007 | 0.161 | 0.161 | 568.299 | 0.061 | 0.005 |
| 3.093 | 0.007 | 0.015 | 0.015 | 568.300 | 0.036 | 0.005 |
| 1.447 | 0.006 | 0.014 | 0.014 | 568.299 | 0.018 | 0.004 |
| 0.303 | 0.006 | 0.011 | 0.011 | 568.299 | 0.013 | 0.004 |
| 0.287 | 0.006 | 0.010 | 0.010 | 568.300 | 0.012 | 0.004 |
| 0.287 | 0.005 | 0.010 | 0.010 | 568.299 | 0.012 | 0.004 |
| 0.318 | 0.006 | 0.013 | 0.013 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.006 | 0.012 | 0.012 | 568.300 | 0.018 | 0.004 |
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 0.305 | 0.005 | 0.012 | 0.012 | 568.299 | 0.018 | 0.004 |
| 2.532 | 0.005 | 0.026 | 0.026 | 568.299 | 0.018 | 0.004 |

| Basic Conversions | Factor                                       | Value   | Units  | Source  |
|-------------------|--|---------|--------|---|
|                   | 1 pound equals                               | 453.592 | grams  |   |
|                   | 1 MT equals                                  | 1.102   | tons   |   |
|                   | Total # of days in a week                    | 7       | days   |   |
|                   | 1 kg equals                                  | 1,000   | grams  |   |
|                   | 1 Year equals                                | 365     | days   |   |
|                   | 1 ton equals                                 | 2,000   | pounds |   |
|                   | Global Warming Potential of CH <sub>4</sub>  | 25      | N/A    | <a href="http://www.arb.ca.gov/cc/inventory/backgr">http://www.arb.ca.gov/cc/inventory/backgr</a> |
|                   | Global Warming Potential of N <sub>2</sub> O | 298     | N/A    | <a href="http://www.arb.ca.gov/cc/inventory/backgr">http://www.arb.ca.gov/cc/inventory/backgr</a> |

[und/gwp.htm](#)

[und/gwp.htm](#)

## Dorado Oaks Subdivision - Construction data for CalEEMod

### Construction

Please enter data only in highlighted cells.

| Data available and confirmed in RFI   | Data Needed  | Used CalEEMod default |
|---------------------------------------|--------------|-----------------------|
| Proposed Land Uses                    | No. of Units | Built Area            |
| Single Family Residential             | 157          | 1307671               |
| Multi family Residential              | 225          | 791485                |
| Landscaping, Parks & Open Space Areas | 19           | 2991700               |
| On-site Roadway Improvements          |              |                       |

|                                   |                       |
|-----------------------------------|-----------------------|
| Site Area                         | 142.50 acres          |
| Area to be demolished             | 0 square feet         |
| Total Proposed building area      | 5,090,856 square feet |
| Volume of infill to be brought in | 7,900 cubic yards     |
| Volume of material to be exported | 0 cubic yards         |

### Construction schedule

|                            |           |
|----------------------------|-----------|
| Start date of construction | 5/15/2022 |
| First year of operation    | 2022      |

| Construction Phase    | Start Date | End Date   |
|-----------------------|------------|------------|
| Site Preparation      | 5/15/2022  | 6/30/2022  |
| Grading               | 6/16/2022  | 7/31/2022  |
| Building Construction | 10/15/2022 |            |
| Paving                | 9/15/2022  | 10/15/2022 |
| Architectural Coating |            |            |

### Construction schedule

|                            |           |
|----------------------------|-----------|
| Start date of construction | 5/15/2022 |
| First year of operation    | 2027      |

| Construction Phase    | Start Date | End Date   |
|-----------------------|------------|------------|
| Site Preparation      | 5/15/2022  | 6/30/2022  |
| Grading               | 7/1/2022   | 10/27/2022 |
| Building Construction | 10/28/2022 | 1/14/2026  |
| Paving                | 1/15/2026  | 4/10/2026  |
| Architectural Coating | 4/11/2026  | 7/7/2026   |

### Construction Equipment

| Site Preparation          |        |              |
|---------------------------|--------|--------------|
| Equipment                 | Number | Hrs/day used |
| Off-Highway Trucks        | 4      | 6            |
| Scrapers                  | 4      | 6            |
| Skid Steer Loaders        | 2      | 6            |
| Tractors/Loaders/Backhoes | 2      | 6            |
| Grading                   |        |              |
| Equipment                 | Number | Hrs/day used |
| Scrapers                  | 4      | 6            |
| Excavators                | 2      | 6            |
| Graders                   | 2      | 6            |
| Off-Highway Tractors      | 2      | 6            |

|                              |        |              |
|------------------------------|--------|--------------|
| Rollers                      | 2      | 6            |
| Tractors/Loaders/Backhoes    | 4      | 6            |
| Dumpers/Tenders              | 6      | 6            |
| Other Construction Equipment | 5      | 6            |
| <b>Building Construction</b> |        |              |
| Equipment                    | Number | Hrs/day used |
|                              |        |              |
|                              |        |              |
|                              |        |              |
|                              |        |              |
|                              |        |              |
|                              |        |              |
|                              |        |              |
|                              |        |              |
| <b>Paving</b>                |        |              |
| Equipment                    | Number | Hrs/day used |
| Dumpers/Tenders              | 6      | 6            |
| Pavers                       | 1      | 6            |
| Rollers                      | 2      | 6            |
| Paving Equipment             | 4      | 6            |
| Plate Compactors             | 2      | 6            |
| <b>Architectural Coating</b> |        |              |
| Equipment                    | Number | Hrs/day used |
|                              |        |              |
|                              |        |              |
|                              |        |              |
|                              |        |              |

### Construction Vehicle Trips

Please provide the number of trips associated with workers, material delivery and hauling during each construction phase

| Construction Phase    | worker trips/day | Vendor Truck Trips/day |
|-----------------------|------------------|------------------------|
| Site Preparation      | 10               | 2                      |
| Grading               | 20               | 2                      |
| Building Construction |                  |                        |
| Paving                | 10               | 2                      |
| Architectural Coating |                  |                        |

### Operational Trips

| Land Use                  | CalEEMod Land Use     | Size (units) |
|---------------------------|-----------------------|--------------|
| Single Family Residential | Single Family Housing | 157          |
| Multi family Residential  | Apartment Low Rise    | 225          |

| CalEEMod Default Trip rates | wkdy | Sat  |
|-----------------------------|------|------|
| Single Family Housing       | 9.52 | 9.91 |
| Apartment Low Rise          | 6.59 | 7.16 |

| Project Adjusted Trip rates | wkdy | Sat  |
|-----------------------------|------|------|
| Single Family Housing       | 9.46 | 9.85 |
| Apartment Low Rise          | 5.81 | 6.31 |

| Fireplaces            | CalEEMod Defaults |       |
|-----------------------|-------------------|-------|
|                       | Wood              | Gas   |
| Single Family Housing | 54.95             | 86.35 |

|                    |       |        |
|--------------------|-------|--------|
| Apartment Low Rise | 78.75 | 123.75 |
|--------------------|-------|--------|

**Energy Consumption**

| Residential                                       | % savings over Title 24 (2016) |          |
|---|--------------------------------|----------|
|   | Electricity                    | Lighting |
| Multi-Family without PV                           | 2%                             | 0%       |
| <i>CalEEMod defaults (based on 2016 Title 24)</i> |                                |          |
| Single Family Housing                             | 912.41                         | 1608.84  |
| Apartment Low Rise                                | 775.93                         | 810.36   |
| <i>Adjusted for Title 24 (2019)</i>               |                                |          |
| Single Family Housing                             | 894.16                         | 1608.84  |
| Apartment Low Rise                                | 760.41                         | 810.36   |



| In response to RFI | Data assumed |       |
|--------------------|--------------|-------|
| Units              | Site Area    | Units |
| square feet        | 30.02        | acres |
| square feet        | 18.17        | acres |
| square feet        | 68.7         | acres |
|                    | 18.5         | acres |

| # of workdays |
|---------------|
| 34            |
| 32            |
| -32035        |
| 22            |
| 0             |

-31947

| # of workdays |
|---------------|
| 34            |
| 85            |
| 839           |
| 62            |
| 62            |

1082

Phase

| Hauling Truck trips/day | Hauling Truck trips/phase |
|-------------------------|---------------------------|
| 5                       | 170                       |
| 10                      | 850                       |
|                         |                           |
| 20                      | 1240                      |
|                         |                           |

| Daily Trips | Trip Rate |
|-------------|-----------|
| 1485        | 9.46      |
| 1307        | 5.81      |

|            |
|------------|
| <b>Sun</b> |
| 8.62       |
| 6.07       |

|            |
|------------|
| <b>Sun</b> |
| 8.56       |
| 5.35       |

|             | Assumed        |             |
|-------------|----------------|-------------|
| <b>None</b> | <b>Propane</b> | <b>None</b> |
| 15.7        | 141.3          | 15.7        |

|      |       |      |
|------|-------|------|
| 22.5 | 202.5 | 22.5 |
|------|-------|------|

|                    |
|--------------------|
|                    |
| NG                 |
| 5%                 |
| 10517.5<br>9200.58 |
| 9991.63<br>9161.78 |

## SR-49 Intersection Improvements - Construction data for Roadway Construction

| Data available and confirmed in RFI    | Data Needed   | Used CalEEMod default |
|--|---|-----------------------|
|  | <b>Option A</b>                                     |                       |
|  | <u>Start date</u>                                   | <u>End Date</u>       |
| Overall Construction Schedule          | 5/15/2022   |                       |
| Construction Duration (months)         | 9-12  |                       |
| Building Demolition Area (square feet) | 13200   |                       |
| Project length (miles)                 | 0.5   |                       |
| Project Area (acres)                   | 2.25  |                       |
| Max. area disturbed/day (acres)        | 0.5   |                       |
| Predominant soil type                  | Weathered Rock-Earth : Use for Laguna formation (Ja |                       |

### Material Hauling Quantity Input

| Material Type | Phase                  | Haul Truck Capacity (yd <sup>3</sup> )<br>(assume 20 if unknown) |
|---------------|------------------------|--|
| Soil          | Grubbing/Land Clearing | 20   |
|               | Grading/Excavation     | 20   |
|               | Drainage/Utilities     | 20   |
|               | Paving                 | 20   |
| Asphalt       | Grubbing/Land Clearing | 20   |
|               | Grading/Excavation     | 20   |
|               | Drainage/Utilities     | 20   |
|               | Paving                 | 20   |

### Construction Phasing & Schedule

| Construction Phase     | Option A          |            |
|------------------------|-------------------|------------|
|                        | Duration (months) | Start date |
| Demolition             | 1                 | 5/15/2022  |
| Grubbing/Land Clearing | 0.5               | 6/16/2022  |
| Grading/Excavation     | 1.5               | 7/1/2022   |
| Drainage/Utilities     | 1.0               | 8/15/2022  |
| Paving                 | 0.5               | 9/16/2022  |
| TOTAL                  | 4.5               |            |

### Construction Equipment

| <b>Demolition</b>             |        |              |
|-------------------------------|--------|--------------|
| Equipment                     | Number | Hrs/day used |
|                               |        |              |
|                               |        |              |
|                               |        |              |
|                               |        |              |
|                               |        |              |
|                               |        |              |
|                               |        |              |
|                               |        |              |
| <b>Grubbing/Land Clearing</b> |        |              |
| Equipment                     | Number | Hrs/day used |
| Air Compressors               | 2      | 8            |

|                           |        |              |
|---------------------------|--------|--------------|
| Concrete/Industrial Saws  | 2      | 8            |
| Crawler Tractors          | 1      | 8            |
| Excavators                | 2      | 8            |
| <b>Grading/Excavation</b> |        |              |
| Equipment                 | Number | Hrs/day used |
| Bore/Drill Rigs           | 1      | 8            |
| Crawler Tractors          | 1      | 8            |
| Cranes                    | 1      | 8            |
| Excavators                | 2      | 8            |
| Graders                   | 1      | 8            |
| Rollers                   | 1      | 8            |
| Rubber Tired Loaders      | 1      | 8            |
| Tractors/Loaders/Backhoes | 1      | 8            |
| <b>Drainage/Utilities</b> |        |              |
| Equipment                 | Number | Hrs/day used |
| Graders                   | 1      | 8            |
| Tractors/Loaders/Backhoes | 1      | 8            |
| Air Compressors           | 1      | 8            |
| Generator Sets            | 1      | 8            |
| Plate Compactors          | 1      | 8            |
| Pumps                     | 1      | 8            |
| Rough Terrain Forklifts   | 1      | 8            |
| <b>Paving</b>             |        |              |
| Equipment                 | Number | Hrs/day used |
| Pavers                    | 1      | 8            |
| Paving Equipment          | 1      | 8            |
| Rollers                   | 1      | 8            |
| Tractors/Loaders/Backhoes | 2      | 8            |

### Construction Vehicle Trips

Please provide the number of trips associated with workers, material delivery and hauling during ea

| Construction Phase     | worker trips/day | Vendor Truck Trips/day |
|------------------------|------------------|------------------------|
| Demolition             | 10               | 2                      |
| Grubbing/Land Clearing | 10               | 1                      |
| Grading/Excavation     | 20               | 0                      |
| Drainage/Utilities     | 30               | 0                      |
| Paving                 | 10               | 0                      |

## Emissions Model

| In response to RFI | Data assumed    |
|--------------------|-----------------|
| <b>Option B</b>    |                 |
| <u>Start date</u>  | <u>End Date</u> |
| 5/15/2022          |                 |
| 6-9                |                 |
| 0                  |                 |
| 0.5                |                 |
| 2.20               |                 |
| 0.5                |                 |

ckson Highway area) or the lone formation (Scott Road, Rancho Murieta)

| Option A                             |                                      | Option B                             |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Import Volume (yd <sup>3</sup> /day) | Export Volume (yd <sup>3</sup> /day) | Import Volume (yd <sup>3</sup> /day) | Export Volume (yd <sup>3</sup> /day) |
| 100.00                               | 100.00                               | 150.00                               | 150.00                               |
| 50.00                                | 50.00                                | 75.00                                | 75.00                                |
| 10.00                                | 10.00                                | 10.00                                | 10.00                                |
| 0.00                                 | 0.00                                 | 0.00                                 | 0.00                                 |
| 0.00                                 | 0.00                                 | 0.00                                 | 0.00                                 |
| 0.00                                 | 0.00                                 | 0.00                                 | 0.00                                 |
| 0.00                                 | 0.00                                 | 0.00                                 | 0.00                                 |
| 100.00                               | 0.00                                 | 100.00                               | 0.00                                 |

| End Date  | Option B   |           |                   |
|-----------|------------|-----------|-------------------|
|           | Start date | End Date  | Duration (months) |
| 6/15/2022 | --         | --        | --                |
| 6/30/2022 | 6/16/2022  | 6/30/2022 | 0.5               |
| 8/15/2022 | 7/1/2022   | 8/15/2022 | 1.5               |
| 9/15/2022 | 8/15/2022  | 9/15/2022 | 1.0               |
| 9/30/2022 | 9/16/2022  | 9/30/2022 | 0.5               |
|           |            |           | 3.5               |

each construction phase

| Hauling Truck trips/day |
|-------------------------|
| 5                       |
| 5                       |
| 10                      |
| 20                      |
| 20                      |

## New EVA - Construction data for Roadway Construction Emissions Model

|                                     |             |              |
|-------------------------------------|-------------|--------------|
| Data available and confirmed in RFI | Data Needed | RCEM default |
|-------------------------------------|-------------|--------------|

|                                 | Start date                                     | End Date |
|---------------------------------|--|----------|
| Overall Construction Schedule   | 5/15/2022                                      |          |
| Construction Duration           | 3-6  | months   |
| Project length (feet)           | 2600   |          |
| Project Area (acres)            | 1.8  |          |
| Max. area disturbed/day (acres) | 0.1  |          |
| Predominant soil type           | Weathered Rock-Earth : Use for Laguna formatio |          |

### Material Hauling Quantity Input

| Material Type | Phase                  | Haul Truck Capacity (yd <sup>3</sup> ) (assume 20 if unknown) |
|---------------|------------------------|---|
| Soil          | Grubbing/Land Clearing | 20  |
|               | Grading/Excavation     | 20  |
|               | Drainage/Utilities     | 20  |
|               | Paving                 | 20  |
| Asphalt       | Grubbing/Land Clearing | 20  |
|               | Grading/Excavation     | 20  |
|               | Drainage/Utilities     | 20  |
|               | Paving                 | 20  |

### Construction Phasing & Schedule

| Construction Phase     | Start date | End Date  |
|------------------------|------------|-----------|
| Grubbing/Land Clearing | 6/30/2022  | 7/7/2022  |
| Grading/Excavation     | 7/8/2022   | 7/23/2022 |
| Drainage/Utilities     | 7/8/2022   | 7/23/2022 |
| Paving                 | 7/24/2022  | 7/31/2022 |
| TOTAL                  |            |           |

### Construction Equipment by Phase

| <b>Grubbing/Land Clearing</b> |        |                  |
|-------------------------------|--------|------------------|
| Equipment                     | Number | No. of Days used |
| Excavators                    | 1      | 5                |
| Dumpers/Tenders               | 3      | 5                |
| Skid Steer Loaders            | 1      | 5                |
| Tractors/Loaders/Backhoes     | 2      | 5                |
| <b>Grading/Excavation</b>     |        |                  |
| Equipment                     | Number | No. of Days used |
| Excavators                    | 1      | 15               |
| Dumpers/Tenders               | 2      | 15               |
| Tractors/Loaders/Backhoes     | 2      | 15               |
| Graders                       | 1      | 15               |
| <b>Drainage/Utilities</b>     |        |                  |
| Equipment                     | Number | No. of Days used |
| Excavators                    | 1      | 5                |
| Tractors/Loaders/Backhoes     | 1      | 5                |
| Dumpers/Tenders               | 1      | 5                |



| <b>Paving</b>             |        |                  |
|---------------------------|--------|------------------|
| Equipment                 | Number | No. of Days used |
| Pavers                    | 1      | 5                |
| Paving Equipment          | 3      | 5                |
| Tractors/Loaders/Backhoes | 1      | 5                |

### Construction Vehicle Trips

Please provide the number **trips** associated with workers, material delivery and hauling during each construction |

| <b>Construction Phase</b> | <b>worker trips/day</b> | <b>Vendor Truck Trips/day</b> |
|---------------------------|-------------------------|-------------------------------|
| Grubbing/Land Clearing    | 5                       | 0                             |
| Grading/Excavation        | 7                       | 0                             |
| Drainage/Utilities        | 4                       | 0                             |
| Paving                    | 8                       | 0                             |

In response to RFI

Data assumed

n (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta)

| Import Volume<br>(yd <sup>3</sup> /day) | Export Volume<br>(yd <sup>3</sup> /day) |
|---|---|
| 50.00                                   | 50.00                                   |
| 50.00                                   | 50.00                                   |
| 20.00                                   | 20.00                                   |
| 0.00                                    | 0.00                                    |
| 0.00                                    | 0.00                                    |
| 0.00                                    | 0.00                                    |
| 0.00                                    | 0.00                                    |
| 100.00                                  | 0.00                                    |

| Duration (months) |
|-------------------|
| 0.3               |
| 0.5               |
| 0.5               |
| 0.3               |
| 1.5               |

|              |
|--------------|
| Hrs/day used |
| 6            |
| 6            |
| 6            |
| 6            |
| Hrs/day used |
| 6            |
| 6            |
| 6            |
| 6            |
| Hrs/day used |
| 6            |
| 6            |
| 6            |

| Hrs/day used |
|--------------|
| 6            |
| 6            |
| 6            |

phase

| Hauling Truck trips/day |
|-------------------------|
| 2                       |
| 2                       |
| 1                       |
| 10                      |

**Project CalEEMod Inputs Calculation - Dorado Oaks**

**Trip Generation rate Adjustment Based on Project Traffic Study**

| Land Use   | Units | Weekday Daily Trips | Wkdy daily Trip Rate |
|--|-------|---------------------|----------------------|
| Single Family Residential  | 157   | 1485                | 9.46                 |
| Multi family Residential   | 225   | 1307                | 5.81                 |
|  |       | 2792                |                      |
| Defaults from CalEEMod   |       |                     |                      |
| CalEEMod Land Use  | Wkdy  | Sat                 | Sun                  |
| Single Family Housing  | 9.52  | 9.91                | 8.62                 |
| Apartments Low Rise  | 6.59  | 7.16                | 6.07                 |
| CalEEMod weekday, Sat and Sun trips rates adjusted based on project traffic report |       |                     |                      |
| CalEEMod Land Use  | Wkdy  | Sat                 | Sun                  |
| Single Family Housing  | 9.46  | 9.85                | 8.56                 |
| Apartments Low Rise  | 5.81  | 6.31                | 5.35                 |

**Adjustment for CalGreen Code**

| CalEEMod Land Use     | Default Indoor Water Use (gals/year) | Adjusted Indoor Water Use (less 20%) (gals/year) |             |
|-----------------------|--------------------------------------|--|-------------|
| Single Family Housing | 10,229,182.02                        | 8183345.616                                      | 8183345.616 |
| Apartments Low Rise   | 14,659,655.76                        | 11727724.61                                      | 11727724.61 |

**UNCONTROLLED CONSTRUCTION EMISSIONS - Criteria Air Pollutants**

| Year                                       | No. of Construction Wokdays | Tons |       |                          |
|--|-----------------------------|------|-------|--------------------------|
|  |                             | ROG  | NOx   | Exhaust PM <sub>10</sub> |
| Subdivision - 2022                         | 165                         | 0.42 | 4.28  | 0.17                     |
| Subdivision - 2023                         | 260                         | 0.34 | 2.41  | 0.09                     |
| Subdivision - 2024                         | 262                         | 0.32 | 2.28  | 0.08                     |
| Subdivision - 2025                         | 261                         | 0.30 | 2.13  | 0.07                     |
| Subdivision - 2026                         | 134                         | 8.01 | 0.66  | 0.02                     |
| Subdivision Total                          | 1082                        | 9.38 | 11.75 | 0.44                     |
| SR-49 Improvements - Option A demolition   |                             | 0.03 | 0.29  | 0.01                     |
| SR-49 Improvements - Option A other phases |                             | 0.08 | 0.85  | 0.04                     |
| SR-49 Improvements - Option A Total        | 99                          | 0.11 | 1.14  | 0.05                     |
| SR-49 Improvements - Option B Total        | 77                          | 0.08 | 0.88  | 0.04                     |
| New EVA Total                              | 33                          | 0.02 | 0.24  | 0.01                     |
| PROJECT TOTAL - with SR 49 OPTION A        | 1082                        | 9.5  | 13.1  | 0.5                      |
| PROJECT TOTAL - with SR 49 OPTION B        | 1082                        | 9.5  | 12.9  | 0.5                      |

**OPERATIONAL EMISSIONS - Criteria Air Pollutants**

| Source                                       | Tons per y |      |                          |                           |
|--|------------|------|--------------------------|---------------------------|
|  | ROG        | NOx  | Exhaust PM <sub>10</sub> | Fugitive PM <sub>10</sub> |
| Area - all propane fireplaces, per applicant | 3.31       | 0.45 | 0.61                     | 0.00                      |
| Energy                                       | 0.00       | 0.00 | 0.00                     | 0.00                      |
| Mobile                                       | 0.67       | 2.17 | 0.02                     | 2.94                      |
| TOTAL  | 3.98       | 2.62 | 0.64                     | 2.94                      |

**CONSTRUCTION EMISSIONS - GHG (metric tons)**

|  | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e |
|--|-----------------|-----------------|------------------|-------------------|
| Subdivision - 2022   | 755             | 0.190           | 0.0              | 760               |
| Subdivision - 2023   | 612             | 0.078           | 0.0              | 614               |
| Subdivision - 2024   | 609             | 0.078           | 0.0              | 611               |
| Subdivision - 2025   | 600             | 0.077           | 0.0              | 602               |
| Subdivision - 2026   | 198             | 0.023           | 0.0              | 198               |
| Subdivision Total  | 2774            | 0.446           | 0.0              | 2785              |
| SR-49 Improvements - Option A demolition                   | 41              | 0.011           | 0.0              | 41                |
| SR-49 Improvements - Option A other phases                 | 187             | 0.04            | 0.01             | 191               |
| SR-49 Improvements - Option A Total                        | 228             | 0.05            | 0.01             | 232               |
| SR-49 Improvements - Option B Total                        | 196             | 0.04            | 0.01             | 200               |
| New EVA Total  | 52              | 0.01            | 0.0              | 52                |
| PROJECT TOTAL - with SR 49 OPTION A                        | 3054            | 0.51            | 0.01             | 3070              |
| PROJECT TOTAL - with SR 49 OPTION B                        | 3023            | 0.50            | 0.01             | 3038              |
| Life of project (years)                                    |                 |                 |                  | 40                |
| Amortized annual emissions with SR 49 Option A (tons/year) |                 |                 |                  | 76.7              |
| Amortized annual emissions with SR 49 Option B (tons/year) |                 |                 |                  | 76.0              |

**OPERATIONAL EMISSIONS - GHG (metric tons/year)**

| Operational Source | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e |
|--------------------|-----------------|-----------------|------------------|-------------------|
| Area               | 396.3           | 0.3704          | 0.023            | 412               |
| Energy             | 344.8           | 0.0476          | 0.010            | 349               |
| Mobile             | 2497.1          | 0.0655          | 0.000            | 2499              |

|                                     |         |        |       |      |
|-------------------------------------|---------|--------|-------|------|
| Solid waste                         | 45.0    | 2.6591 | 0.000 | 111  |
| Water & Wastewater                  | 49.8    | 0.0302 | 0.017 | 55   |
| Total Project Operational Emissions | 3333.05 | 3.17   | 0.05  | 3427 |
| Service Population                  |         |        |       | 1067 |
| Emissions/Service Population        |         |        |       | 3.21 |

**MISSIONS SUMMARIES**

| Emissions over Construction Period |                        |                           |                            |                         | Average Pounds per day |      |                          |                           |                        |                           |
|------------------------------------|------------------------|---------------------------|----------------------------|-------------------------|------------------------|------|--------------------------|---------------------------|------------------------|---------------------------|
| Fugitive PM <sub>10</sub>          | Total PM <sub>10</sub> | Exhaust PM <sub>2.5</sub> | Fugitive PM <sub>2.5</sub> | Total PM <sub>2.5</sub> | ROG                    | NOx  | Exhaust PM <sub>10</sub> | Fugitive PM <sub>10</sub> | Total PM <sub>10</sub> | Exhaust PM <sub>2.5</sub> |
| 0.16                               | 0.33                   | 0.16                      | 0.03                       | 0.19                    | 5.1                    | 51.9 | 2.0                      | 1.9                       | 3.9                    | 1.9                       |
| 0.26                               | 0.35                   | 0.09                      | 0.07                       | 0.16                    | 2.6                    | 18.5 | 0.7                      | 2.0                       | 2.7                    | 0.7                       |
| 0.26                               | 0.34                   | 0.08                      | 0.07                       | 0.15                    | 2.4                    | 17.4 | 0.6                      | 2.0                       | 2.6                    | 0.6                       |
| 0.26                               | 0.33                   | 0.07                      | 0.07                       | 0.14                    | 2.3                    | 16.3 | 0.5                      | 2.0                       | 2.5                    | 0.5                       |
| 0.05                               | 0.07                   | 0.02                      | 0.01                       | 0.03                    | 119.5                  | 9.8  | 0.3                      | 0.7                       | 1.0                    | 0.3                       |
| 0.98                               | 1.42                   | 0.41                      | 0.25                       | 0.66                    | 17.3                   | 21.7 | 0.8                      | 1.8                       | 2.6                    | 0.8                       |
| 0.01                               | 0.02                   | 0.01                      | 0.00                       | 0.01                    |                        |      |                          |                           |                        |                           |
| 0.33                               | 0.37                   | 0.03                      | 0.07                       | 0.10                    |                        |      |                          |                           |                        |                           |
| 0.34                               | 0.39                   | 0.04                      | 0.07                       | 0.11                    | 2.2                    | 23.1 | 1.1                      | 6.8                       | 8.0                    | 0.9                       |
| 0.16                               | 0.20                   | 0.04                      | 0.04                       | 0.07                    | 2.1                    | 22.9 | 1.0                      | 4.2                       | 5.2                    | 0.9                       |
| 0.03                               | 0.04                   | 0.01                      | 0.01                       | 0.02                    | 1.2                    | 14.5 | 0.6                      | 1.8                       | 2.4                    | 0.6                       |
| 1.4                                | 1.9                    | 0.5                       | 0.3                        | 0.8                     | 20.8                   | 59.3 | 2.5                      | 10.5                      | 13.0                   | 2.2                       |
| 1.2                                | 1.7                    | 0.5                       | 0.3                        | 0.7                     | 20.6                   | 59.1 | 2.5                      | 7.8                       | 10.2                   | 2.3                       |

| Emissions              |                           |                            |                         | Pounds per day |      |                          |                           |                        |                           |                            |
|------------------------|---------------------------|----------------------------|-------------------------|----------------|------|--------------------------|---------------------------|------------------------|---------------------------|----------------------------|
| Total PM <sub>10</sub> | Exhaust PM <sub>2.5</sub> | Fugitive PM <sub>2.5</sub> | Total PM <sub>2.5</sub> | ROG            | NOx  | Exhaust PM <sub>10</sub> | Fugitive PM <sub>10</sub> | Total PM <sub>10</sub> | Exhaust PM <sub>2.5</sub> | Fugitive PM <sub>2.5</sub> |
| 0.61                   | 0.61                      | 0.00                       | 0.61                    | 18.1           | 2.5  | 3.4                      | 0.0                       | 3.4                    | 3.4                       | 0.0                        |
| 0.00                   | 0.00                      | 0.00                       | 0.00                    | 0.0            | 0.0  | 0.0                      | 0.0                       | 0.0                    | 0.0                       | 0.0                        |
| 2.96                   | 0.02                      | 0.79                       | 0.81                    | 3.7            | 11.9 | 0.1                      | 16.1                      | 16.2                   | 0.1                       | 4.3                        |
| 3.58                   | 0.63                      | 0.79                       | 1.42                    | 21.8           | 14.4 | 3.5                      | 16.1                      | 19.6                   | 3.5                       | 4.3                        |





| <b>Fugitive<br/>PM<sub>2.5</sub></b> | <b>Total<br/>PM<sub>2.5</sub></b> |
|--------------------------------------|-----------------------------------|
| 0.4                                  | 2.3                               |
| 0.5                                  | 1.2                               |
| 0.5                                  | 1.1                               |
| 0.5                                  | 1.0                               |
| 0.2                                  | 0.5                               |
| 0.5                                  | 1.2                               |
|                                      |                                   |
|                                      |                                   |
| 1.4                                  | 2.3                               |
| 0.9                                  | 1.8                               |
| 0.6                                  | 1.2                               |
| 2.5                                  | 4.7                               |
| 2.0                                  | 4.2                               |

| <b>Total<br/>PM<sub>2.5</sub></b> |
|-----------------------------------|
| 3.4                               |
| 0.0                               |
| 4.4                               |
| 7.8                               |

Dorado Oaks Subdivision - El Dorado-Mountain County County, Annual

**Dorado Oaks Subdivision**  
**El Dorado-Mountain County County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses             | Size   | Metric        | Lot Area |
|-----------------------|--------|---------------|----------|
| City Park             | 68.70  | Acre          | 68.70    |
| Apartments Low Rise   | 225.00 | Dwelling Unit | 18.17    |
| Single Family Housing | 157.00 | Dwelling Unit | 30.02    |

**1.2 Other Project Characteristics**

|                                |                                |                                |       |                                  |       |
|--------------------------------|--------------------------------|--------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>            | Urban                          | <b>Wind Speed (m/s)</b>        | 2.7   | <b>Precipitation Freq (Days)</b> | 7     |
| <b>Climate Zone</b>            | 1                              |                                |       | <b>Operational Year</b>          | 2     |
| <b>Utility Company</b>         | Pacific Gas & Electric Company |                                |       |                                  |       |
| <b>CO2 Intensity (lb/MWhr)</b> | 210                            | <b>CH4 Intensity (lb/MWhr)</b> | 0.029 | <b>N2O Intensity (lb/MWhr)</b>   | 0.006 |

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - Adjusted based on [http://www.pgecorp.com/corp\\_responsibility/reports/2019/assets/PGE\\_Land Use - From Project Description](http://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_Land Use - From Project Description)

Construction Phase - Applicant data. Demolition area associated with SR-49 improvement component

Off-road Equipment - Default used

Off-road Equipment - Default used

Off-road Equipment - Default equipment used

Off-road Equipment - Data from applicant

Off-road Equipment - Data from applicant

Off-road Equipment - Data from applicant

Trips and VMT - Building construction and architectural coating trips based on residential component only, default f data

Demolition -

Grading - Site area

Vehicle Trips - Adjusted based on project traffic study

Woodstoves - Default number of fireplaces assumed, all burning propane per applicant

Energy Use - Adjusted for 2019 Title 24 energy consumption rates and to account electricity replacing natural gas

Construction Off-road Equipment Mitigation -

Water And Wastewater - 20% reduction in indorr water use to account for CalGreen code requirement.

| Table Name           | Column Name                | Default Value | Ne |
|----------------------|----------------------------|---------------|----|
| tblConstructionPhase | NumDays                    | 200.00        | :  |
| tblConstructionPhase | NumDays                    | 120.00        | :  |
| tblConstructionPhase | NumDays                    | 310.00        | :  |
| tblConstructionPhase | NumDays                    | 3,100.00      | 8  |
| tblConstructionPhase | NumDays                    | 220.00        | (  |
| tblConstructionPhase | NumDays                    | 220.00        | (  |
| tblEnergyUse         | NT24E                      | 3,172.76      | 3, |
| tblEnergyUse         | NT24E                      | 6,155.97      | 6, |
| tblEnergyUse         | NT24NG                     | 1,599.00      |    |
| tblEnergyUse         | NT24NG                     | 1,599.00      |    |
| tblEnergyUse         | T24E                       | 775.93        | 3, |
| tblEnergyUse         | T24E                       | 912.41        | 3, |
| tblEnergyUse         | T24NG                      | 9,200.58      |    |
| tblEnergyUse         | T24NG                      | 10,517.50     |    |
| tblFireplaces        | NumberGas                  | 123.75        |    |
| tblFireplaces        | NumberGas                  | 86.35         |    |
| tblFireplaces        | NumberPropane              | 0.00          | 2  |
| tblFireplaces        | NumberPropane              | 0.00          | 1  |
| tblFireplaces        | NumberWood                 | 78.75         |    |
| tblFireplaces        | NumberWood                 | 54.95         |    |
| tblGrading           | AcresOfGrading             | 318.75        | 1  |
| tblGrading           | AcresOfGrading             | 102.00        |    |
| tblGrading           | MaterialImported           | 0.00          | 7, |
| tblLandUse           | LotAcreage                 | 14.06         | .  |
| tblLandUse           | LotAcreage                 | 50.97         | :  |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 2.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 2.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 1.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 3.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 2.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 2.00          |    |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 4.00          |    |
| tblOffRoadEquipment  | UsageHours                 | 8.00          |    |
| tblOffRoadEquipment  | UsageHours                 | 8.00          |    |

|                           |                                      |               |       |
|---------------------------|--------------------------------------|---------------|-------|
| tblOffRoadEquipment       | UsageHours                           | 8.00          |       |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |       |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |       |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |       |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |       |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |       |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |       |
| tblOffRoadEquipment       | UsageHours                           | 8.00          |       |
| tblProjectCharacteristics | CO2IntensityFactor                   | 641.35        |       |
| tblTripsAndVMT            | HaulingTripNumber                    | 0.00          | 3     |
| tblTripsAndVMT            | HaulingTripNumber                    | 988.00        | 1,    |
| tblTripsAndVMT            | HaulingTripNumber                    | 0.00          | 2,    |
| tblTripsAndVMT            | VendorTripNumber                     | 0.00          |       |
| tblTripsAndVMT            | VendorTripNumber                     | 0.00          |       |
| tblTripsAndVMT            | VendorTripNumber                     | 531.00        | ,     |
| tblTripsAndVMT            | VendorTripNumber                     | 0.00          |       |
| tblTripsAndVMT            | WorkerTripNumber                     | 30.00         | ;     |
| tblTripsAndVMT            | WorkerTripNumber                     | 68.00         | ,     |
| tblTripsAndVMT            | WorkerTripNumber                     | 1,475.00      | 2     |
| tblTripsAndVMT            | WorkerTripNumber                     | 38.00         | ;     |
| tblTripsAndVMT            | WorkerTripNumber                     | 295.00        | ,     |
| tblVehicleTrips           | ST_TR                                | 7.16          |       |
| tblVehicleTrips           | ST_TR                                | 22.75         |       |
| tblVehicleTrips           | ST_TR                                | 9.91          |       |
| tblVehicleTrips           | SU_TR                                | 6.07          |       |
| tblVehicleTrips           | SU_TR                                | 16.74         |       |
| tblVehicleTrips           | SU_TR                                | 8.62          |       |
| tblVehicleTrips           | WD_TR                                | 6.59          |       |
| tblVehicleTrips           | WD_TR                                | 1.89          |       |
| tblVehicleTrips           | WD_TR                                | 9.52          |       |
| tblWater                  | AerobicPercent                       | 87.46         | 1     |
| tblWater                  | AerobicPercent                       | 87.46         | 1     |
| tblWater                  | AerobicPercent                       | 87.46         | 1     |
| tblWater                  | AnaerobicandFacultativeLagoonsPercen | 2.21          |       |
| tblWater                  | AnaerobicandFacultativeLagoonsPercen | 2.21          |       |
| tblWater                  | AnaerobicandFacultativeLagoonsPercen | 2.21          |       |
| tblWater                  | IndoorWaterUseRate                   | 14,659,655.76 | 11,7: |
| tblWater                  | IndoorWaterUseRate                   | 10,229,182.02 | 8,18  |
| tblWater                  | SepticTankPercent                    | 10.33         |       |

|          |                   |       |
|----------|-------------------|-------|
| tblWater | SepticTankPercent | 10.33 |
| tblWater | SepticTankPercent | 10.33 |

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

|                | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     |
|----------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|
| Year           | tons/yr       |               |               |                 |               |               |               |                |               |               |          |               |
| 2022           | 0.4507        | 4.5706        | 3.9437        | 8.99E-03        | 0.1649        | 0.1827        | 0.3476        | 0.0314         | 0.169         | 0.2004        | 0        | 795.52        |
| 2023           | 0.3374        | 2.4071        | 3.0032        | 6.88E-03        | 0.2588        | 0.0936        | 0.3523        | 0.0697         | 0.088         | 0.1577        | 0        | 612.30        |
| 2024           | 0.3195        | 2.2818        | 2.9506        | 6.85E-03        | 0.2608        | 0.0829        | 0.3436        | 0.0702         | 0.0779        | 0.1481        | 0        | 609.48        |
| 2025           | 0.2983        | 2.1277        | 2.8729        | 6.74E-03        | 0.2598        | 0.0713        | 0.331         | 0.0699         | 0.067         | 0.1369        | 0        | 599.81        |
| 2026           | 8.0073        | 0.6598        | 0.7388        | 2.19E-03        | 0.047         | 0.0189        | 0.0659        | 0.0127         | 0.0178        | 0.0306        | 0        | 197.58        |
| <b>Maximum</b> | <b>8.0073</b> | <b>4.5706</b> | <b>3.9437</b> | <b>8.99E-03</b> | <b>0.2608</b> | <b>0.1827</b> | <b>0.3523</b> | <b>0.0702</b>  | <b>0.169</b>  | <b>0.2004</b> | <b>0</b> | <b>795.52</b> |

#### Mitigated Construction

|                | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     |
|----------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|
| Year           | tons/yr       |               |               |                 |               |               |               |                |               |               |          |               |
| 2022           | 0.4507        | 4.5706        | 3.9437        | 8.99E-03        | 0.1649        | 0.1827        | 0.3476        | 0.0314         | 0.169         | 0.2004        | 0        | 795.52        |
| 2023           | 0.3374        | 2.4071        | 3.0032        | 6.88E-03        | 0.2588        | 0.0936        | 0.3523        | 0.0697         | 0.088         | 0.1577        | 0        | 612.30        |
| 2024           | 0.3195        | 2.2818        | 2.9506        | 6.85E-03        | 0.2608        | 0.0829        | 0.3436        | 0.0702         | 0.0779        | 0.1481        | 0        | 609.48        |
| 2025           | 0.2983        | 2.1277        | 2.8729        | 6.74E-03        | 0.2598        | 0.0713        | 0.331         | 0.0699         | 0.067         | 0.1369        | 0        | 599.81        |
| 2026           | 8.0073        | 0.6598        | 0.7388        | 2.19E-03        | 0.047         | 0.0189        | 0.0659        | 0.0127         | 0.0178        | 0.0306        | 0        | 197.58        |
| <b>Maximum</b> | <b>8.0073</b> | <b>4.5706</b> | <b>3.9437</b> | <b>8.99E-03</b> | <b>0.2608</b> | <b>0.1827</b> | <b>0.3523</b> | <b>0.0702</b>  | <b>0.169</b>  | <b>0.2004</b> | <b>0</b> | <b>795.52</b> |

|                          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2    | NBio- CO2   |
|--------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|-------------|-------------|
| <b>Percent Reduction</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>   | <b>0.00</b>  | <b>0.00</b> | <b>0.00</b>    | <b>0.00</b>   | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|----------|--|--|
|---------|------------|----------|--|--|

|    |            |            |        |        |
|----|------------|------------|--------|--------|
| 1  | 5-15-2022  | 8-14-2022  | 2.4183 | 2.4183 |
| 2  | 8-15-2022  | 11-14-2022 | 2.1992 | 2.1992 |
| 3  | 11-15-2022 | 2-14-2023  | 0.7379 | 0.7379 |
| 4  | 2-15-2023  | 5-14-2023  | 0.6726 | 0.6726 |
| 5  | 5-15-2023  | 8-14-2023  | 0.6921 | 0.6921 |
| 6  | 8-15-2023  | 11-14-2023 | 0.6952 | 0.6952 |
| 7  | 11-15-2023 | 2-14-2024  | 0.6780 | 0.6780 |
| 8  | 2-15-2024  | 5-14-2024  | 0.6398 | 0.6398 |
| 9  | 5-15-2024  | 8-14-2024  | 0.6511 | 0.6511 |
| 10 | 8-15-2024  | 11-14-2024 | 0.6539 | 0.6539 |
| 11 | 11-15-2024 | 2-14-2025  | 0.6363 | 0.6363 |
| 12 | 2-15-2025  | 5-14-2025  | 0.5923 | 0.5923 |
| 13 | 5-15-2025  | 8-14-2025  | 0.6096 | 0.6096 |
| 14 | 8-15-2025  | 11-14-2025 | 0.6122 | 0.6122 |
| 15 | 11-15-2025 | 2-14-2026  | 0.6166 | 0.6166 |
| 16 | 2-15-2026  | 5-14-2026  | 3.5006 | 3.5006 |
| 17 | 5-15-2026  | 8-14-2026  | 4.9698 | 4.9698 |
|    |            | Highest    | 4.9698 | 4.9698 |

**2.2 Overall Operational**  
**Unmitigated Operational**

|              | ROG          | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2        | NBio- CO2      |
|--------------|--------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|-----------------|----------------|
| Category     | tons/yr      |               |                |               |               |               |               |                |               |               |                 |                |
| Area         | 3.3067       | 0.4508        | 6.5773         | 0.0117        |               | 0.6118        | 0.6118        |                | 0.6118        | 0.6118        | 77.216          | 319.08         |
| Energy       | 0            | 0             | 0              | 0             |               | 0             | 0             |                | 0             | 0             | 0               | 344.827        |
| Mobile       | 0.6693       | 2.1725        | 7.91           | 0.0274        | 2.9399        | 0.0241        | 2.964         | 0.7876         | 0.0224        | 0.81          | 0               | 2,497.1        |
| Waste        |              |               |                |               |               | 0             | 0             |                | 0             | 0             | 44.995          | 0              |
| Water        |              |               |                |               |               | 0             | 0             |                | 0             | 0             | 7.0446          | 42.783         |
| <b>Total</b> | <b>3.976</b> | <b>2.6233</b> | <b>14.4873</b> | <b>0.0391</b> | <b>2.9399</b> | <b>0.6359</b> | <b>3.5758</b> | <b>0.7876</b>  | <b>0.6342</b> | <b>1.4218</b> | <b>129.2556</b> | <b>3,203.8</b> |

**Mitigated Operational**

|              | ROG          | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2        | NBio- CO2      |
|--------------|--------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|-----------------|----------------|
| Category     | tons/yr      |               |                |               |               |               |               |                |               |               |                 |                |
| Area         | 3.3067       | 0.4508        | 6.5773         | 0.0117        |               | 0.6118        | 0.6118        |                | 0.6118        | 0.6118        | 77.216          | 319.08         |
| Energy       | 0            | 0             | 0              | 0             |               | 0             | 0             |                | 0             | 0             | 0               | 344.827        |
| Mobile       | 0.6693       | 2.1725        | 7.91           | 0.0274        | 2.9399        | 0.0241        | 2.964         | 0.7876         | 0.0224        | 0.81          | 0               | 2,497.1        |
| Waste        |              |               |                |               |               | 0             | 0             |                | 0             | 0             | 44.995          | 0              |
| Water        |              |               |                |               |               | 0             | 0             |                | 0             | 0             | 7.0446          | 42.783         |
| <b>Total</b> | <b>3.976</b> | <b>2.6233</b> | <b>14.4873</b> | <b>0.0391</b> | <b>2.9399</b> | <b>0.6359</b> | <b>3.5758</b> | <b>0.7876</b>  | <b>0.6342</b> | <b>1.4218</b> | <b>129.2556</b> | <b>3,203.8</b> |

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00         | 0.00       | 0.00           | 0.00          | 0.00        | 0.00     |           |

### 3.0 Construction Detail

#### Construction Phase

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date   | Num Days Week | Num Days |
|--------------|-----------------------|-----------------------|------------|------------|---------------|----------|
| 1            | Demolition            | Demolition            | 5/15/2022  | 6/14/2022  | 5             | 22       |
| 2            | Site Preparation      | Site Preparation      | 5/15/2022  | 6/30/2022  | 5             | 34       |
| 3            | Grading               | Grading               | 7/1/2022   | 10/27/2022 | 5             | 85       |
| 4            | Building Construction | Building Construction | 10/28/2022 | 1/14/2026  | 5             | 839      |
| 5            | Paving                | Paving                | 1/15/2026  | 4/10/2026  | 5             | 62       |
| 6            | Architectural Coating | Architectural Coating | 4/11/2026  | 7/7/2026   | 5             | 62       |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 142.5

Acres of Paving: 0

Residential Indoor: 1,027,890; Residential Outdoor: 342,630; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

#### OffRoad Equipment

| Phase Name       | Offroad Equipment Type   | Amount | Usage Hours | Horse Power |
|------------------|--------------------------|--------|-------------|-------------|
| Demolition       | Concrete/Industrial Saws | 1      | 8.00        | 81          |
| Demolition       | Excavators               | 3      | 8.00        | 158         |
| Demolition       | Rubber Tired Dozers      | 2      | 8.00        | 247         |
| Site Preparation | Off-Highway Trucks       | 4      | 6.00        | 402         |
| Site Preparation | Rubber Tired Dozers      | 0      | 0.00        | 247         |

|                       |                              |   |      |     |
|-----------------------|------------------------------|---|------|-----|
| Site Preparation      | Scrapers                     | 4 | 6.00 | 367 |
| Site Preparation      | Skid Steer Loaders           | 2 | 6.00 | 65  |
| Site Preparation      | Tractors/Loaders/Backhoes    | 2 | 6.00 | 97  |
| Grading               | Dumpers/Tenders              | 6 | 6.00 | 16  |
| Grading               | Excavators                   | 2 | 6.00 | 158 |
| Grading               | Graders                      | 2 | 6.00 | 187 |
| Grading               | Off-Highway Tractors         | 2 | 6.00 | 124 |
| Grading               | Other Construction Equipment | 5 | 6.00 | 172 |
| Grading               | Rollers                      | 2 | 6.00 | 80  |
| Grading               | Rubber Tired Dozers          | 0 | 0.00 | 247 |
| Grading               | Scrapers                     | 4 | 6.00 | 367 |
| Grading               | Tractors/Loaders/Backhoes    | 4 | 6.00 | 97  |
| Building Construction | Cranes                       | 1 | 7.00 | 231 |
| Building Construction | Forklifts                    | 3 | 8.00 | 89  |
| Building Construction | Generator Sets               | 1 | 8.00 | 84  |
| Building Construction | Tractors/Loaders/Backhoes    | 3 | 7.00 | 97  |
| Building Construction | Welders                      | 1 | 8.00 | 46  |
| Paving                | Dumpers/Tenders              | 6 | 6.00 | 16  |
| Paving                | Pavers                       | 1 | 6.00 | 130 |
| Paving                | Paving Equipment             | 4 | 6.00 | 132 |
| Paving                | Plate Compactors             | 2 | 6.00 | 8   |
| Paving                | Rollers                      | 2 | 6.00 | 80  |
| Architectural Coating | Air Compressors              | 1 | 6.00 | 78  |

### Trips and VMT

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Work   |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|--------|
| Demolition            | 6                       | 15.00              | 0.00               | 60.00               | 10.80              | 7.30               | 20.00               | LD_Mix |
| Site Preparation      | 12                      | 20.00              | 4.00               | 340.00              | 10.80              | 7.30               | 20.00               | LD_Mix |
| Grading               | 27                      | 40.00              | 4.00               | 1,700.00            | 10.80              | 7.30               | 20.00               | LD_Mix |
| Building Construction | 9                       | 219.00             | 41.00              | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix |
| Paving                | 15                      | 20.00              | 4.00               | 2,480.00            | 10.80              | 7.30               | 20.00               | LD_Mix |
| Architectural Coating | 1                       | 44.00              | 0.00               | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix |

### 3.1 Mitigation Measures Construction

### 3.2 Demolition - 2022

#### Unmitigated Construction On-Site

|  | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|--|-----|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|
|--|-----|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|



| Category      | tons/yr      |               |               |                 |                 |               |               |                 |               |               |          |               |
|---------------|--------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|---------------|---------------|----------|---------------|
| Fugitive Dust |              |               |               |                 | 6.60E-03        | 0             | 6.60E-03      | 1.00E-03        | 0             | 1.00E-03      | 0        | 0             |
| Off-Road      | 0.029        | 0.2829        | 0.2265        | 4.30E-04        |                 | 0.0137        | 0.0137        |                 | 0.0127        | 0.0127        | 0        | 37.389        |
| <b>Total</b>  | <b>0.029</b> | <b>0.2829</b> | <b>0.2265</b> | <b>4.30E-04</b> | <b>6.60E-03</b> | <b>0.0137</b> | <b>0.0203</b> | <b>1.00E-03</b> | <b>0.0127</b> | <b>0.0137</b> | <b>0</b> | <b>37.389</b> |

### Unmitigated Construction Off-Site

|              | ROG             | NOx             | CO              | SO2             | Fugitive PM10   | Exhaust PM10    | PM10 Total      | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC      |
|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------|---------------|
| Category     | tons/yr         |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |               |
| Hauling      | 2.40E-04        | 8.78E-03        | 2.64E-03        | 2.00E-05        | 5.00E-04        | 3.00E-05        | 5.30E-04        | 1.40E-04        | 3.00E-05        | 1.70E-04        | 0        | 2.2808        |
| Vendor       | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0               | 0        | 0             |
| Worker       | 7.30E-04        | 4.10E-04        | 4.53E-03        | 1.00E-05        | 1.30E-03        | 1.00E-05        | 1.31E-03        | 3.50E-04        | 1.00E-05        | 3.50E-04        | 0        | 1.0837        |
| <b>Total</b> | <b>9.70E-04</b> | <b>9.19E-03</b> | <b>7.17E-03</b> | <b>3.00E-05</b> | <b>1.80E-03</b> | <b>4.00E-05</b> | <b>1.84E-03</b> | <b>4.90E-04</b> | <b>4.00E-05</b> | <b>5.20E-04</b> | <b>0</b> | <b>3.3646</b> |

### Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10  | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CC      |
|---------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|
| Category      | tons/yr       |               |               |                    |                    |               |               |                    |               |               |               |               |
| Fugitive Dust |               |               |               |                    | 6.6000e-003        | 0.0000        | 6.6000e-003   | 1.0000e-003        | 0.0000        | 1.0000e-003   | 0.0000        | 0.0000        |
| Off-Road      | 0.0290        | 0.2829        | 0.2265        | 4.3000e-004        |                    | 0.0137        | 0.0137        |                    | 0.0127        | 0.0127        | 0.0000        | 37.389        |
| <b>Total</b>  | <b>0.0290</b> | <b>0.2829</b> | <b>0.2265</b> | <b>4.3000e-004</b> | <b>6.6000e-003</b> | <b>0.0137</b> | <b>0.0203</b> | <b>1.0000e-003</b> | <b>0.0127</b> | <b>0.0137</b> | <b>0.0000</b> | <b>37.389</b> |

### Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CC      |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    |               |               |
| Hauling      | 2.4000e-004        | 8.7800e-003        | 2.6400e-003        | 2.0000e-005        | 5.0000e-004        | 3.0000e-005        | 5.3000e-004        | 1.4000e-004        | 3.0000e-005        | 1.7000e-004        | 0.0000        | 2.2808        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 7.3000e-004        | 4.1000e-004        | 4.5300e-003        | 1.0000e-005        | 1.3000e-003        | 1.0000e-005        | 1.3100e-003        | 3.5000e-004        | 1.0000e-005        | 3.5000e-004        | 0.0000        | 1.0837        |
| <b>Total</b> | <b>9.7000e-004</b> | <b>9.1900e-003</b> | <b>7.1700e-003</b> | <b>3.0000e-005</b> | <b>1.8000e-003</b> | <b>4.0000e-005</b> | <b>1.8400e-003</b> | <b>4.9000e-004</b> | <b>4.0000e-005</b> | <b>5.2000e-004</b> | <b>0.0000</b> | <b>3.3646</b> |

## 3.3 Site Preparation - 2022

### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|---------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|----------------|
| Category      | tons/yr       |               |               |                 |               |               |               |                |               |               |          |                |
| Fugitive Dust |               |               |               |                 | 0             | 0             | 0             | 0              | 0             | 0             | 0        | 0              |
| Off-Road      | 0.0747        | 0.7272        | 0.5889        | 1.58E-03        |               | 0.0284        | 0.0284        |                | 0.0262        | 0.0262        | 0        | 138.803        |
| <b>Total</b>  | <b>0.0747</b> | <b>0.7272</b> | <b>0.5889</b> | <b>1.58E-03</b> | <b>0</b>      | <b>0.0284</b> | <b>0.0284</b> | <b>0</b>       | <b>0.0262</b> | <b>0.0262</b> | <b>0</b> | <b>138.803</b> |

### Unmitigated Construction Off-Site

|              | ROG             | NOx           | CO            | SO2             | Fugitive PM10   | Exhaust PM10    | PM10 Total      | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC       |
|--------------|-----------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------|----------------|
| Category     | tons/yr         |               |               |                 |                 |                 |                 |                 |                 |                 |          |                |
| Hauling      | 1.34E-03        | 0.0498        | 0.015         | 1.40E-04        | 2.82E-03        | 1.80E-04        | 3.01E-03        | 7.70E-04        | 1.80E-04        | 9.50E-04        | 0        | 12.9244        |
| Vendor       | 2.20E-04        | 7.44E-03      | 2.43E-03      | 2.00E-05        | 4.40E-04        | 2.00E-05        | 4.60E-04        | 1.30E-04        | 2.00E-05        | 1.50E-04        | 0        | 1.7068         |
| Worker       | 1.50E-03        | 8.50E-04      | 9.34E-03      | 2.00E-05        | 2.68E-03        | 2.00E-05        | 2.70E-03        | 7.10E-04        | 2.00E-05        | 7.30E-04        | 0        | 2.2331         |
| <b>Total</b> | <b>3.06E-03</b> | <b>0.0581</b> | <b>0.0267</b> | <b>1.80E-04</b> | <b>5.94E-03</b> | <b>2.20E-04</b> | <b>6.17E-03</b> | <b>1.61E-03</b> | <b>2.20E-04</b> | <b>1.83E-03</b> | <b>0</b> | <b>16.8647</b> |

### Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CC       |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Fugitive Dust |               |               |               |                    | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000         |
| Off-Road      | 0.0747        | 0.7272        | 0.5889        | 1.5800e-003        |               | 0.0284        | 0.0284        |                | 0.0262        | 0.0262        | 0.0000        | 138.803        |
| <b>Total</b>  | <b>0.0747</b> | <b>0.7272</b> | <b>0.5889</b> | <b>1.5800e-003</b> | <b>0.0000</b> | <b>0.0284</b> | <b>0.0284</b> | <b>0.0000</b>  | <b>0.0262</b> | <b>0.0262</b> | <b>0.0000</b> | <b>138.803</b> |

### Mitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CC       |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    |               |                |
| Hauling      | 1.3400e-003        | 0.0498        | 0.0150        | 1.4000e-004        | 2.8200e-003        | 1.8000e-004        | 3.0100e-003        | 7.7000e-004        | 1.8000e-004        | 9.5000e-004        | 0.0000        | 12.9244        |
| Vendor       | 2.2000e-004        | 7.4400e-003   | 2.4300e-003   | 2.0000e-005        | 4.4000e-004        | 2.0000e-005        | 4.6000e-004        | 1.3000e-004        | 2.0000e-005        | 1.5000e-004        | 0.0000        | 1.7068         |
| Worker       | 1.5000e-003        | 8.5000e-004   | 9.3400e-003   | 2.0000e-005        | 2.6800e-003        | 2.0000e-005        | 2.7000e-003        | 7.1000e-004        | 2.0000e-005        | 7.3000e-004        | 0.0000        | 2.2331         |
| <b>Total</b> | <b>3.0600e-003</b> | <b>0.0581</b> | <b>0.0267</b> | <b>1.8000e-004</b> | <b>5.9400e-003</b> | <b>2.2000e-004</b> | <b>6.1700e-003</b> | <b>1.6100e-003</b> | <b>2.2000e-004</b> | <b>1.8300e-003</b> | <b>0.0000</b> | <b>16.8647</b> |

### 3.4 Grading - 2022

#### Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5  | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2      |
|---------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|-----------------|---------------|---------------|----------|----------------|
| Category      | tons/yr       |               |               |                 |               |               |               |                 |               |               |          |                |
| Fugitive Dust |               |               |               |                 | 0.0761        | 0             | 0.0761        | 8.25E-03        | 0             | 8.25E-03      | 0        | 0              |
| Off-Road      | 0.2636        | 2.7466        | 2.4183        | 4.68E-03        |               | 0.1201        | 0.1201        |                 | 0.1108        | 0.1108        | 0        | 409.000        |
| <b>Total</b>  | <b>0.2636</b> | <b>2.7466</b> | <b>2.4183</b> | <b>4.68E-03</b> | <b>0.0761</b> | <b>0.1201</b> | <b>0.1963</b> | <b>8.25E-03</b> | <b>0.1108</b> | <b>0.1119</b> | <b>0</b> | <b>409.000</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CO2      |
|--------------|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|-----------------|-----------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |                 |               |                 |                 |                 |          |                |
| Hauling      | 6.70E-03      | 0.2488        | 0.0748        | 6.80E-04        | 0.0141        | 9.20E-04        | 0.0151        | 3.87E-03        | 8.80E-04        | 4.75E-03        | 0        | 64.6236        |
| Vendor       | 5.60E-04      | 0.0186        | 6.08E-03      | 5.00E-05        | 1.10E-03      | 5.00E-05        | 1.16E-03      | 3.20E-04        | 5.00E-05        | 3.70E-04        | 0        | 4.2669         |
| Worker       | 7.52E-03      | 4.24E-03      | 0.0467        | 1.20E-04        | 0.0134        | 1.00E-04        | 0.0135        | 3.56E-03        | 9.00E-05        | 3.65E-03        | 0        | 11.1656        |
| <b>Total</b> | <b>0.0148</b> | <b>0.2717</b> | <b>0.1276</b> | <b>8.50E-04</b> | <b>0.0286</b> | <b>1.07E-03</b> | <b>0.0297</b> | <b>7.75E-03</b> | <b>1.02E-03</b> | <b>8.77E-03</b> | <b>0</b> | <b>80.0561</b> |

#### Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5  | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2      |
|---------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|-----------------|---------------|---------------|----------|----------------|
| Category      | tons/yr       |               |               |                 |               |               |               |                 |               |               |          |                |
| Fugitive Dust |               |               |               |                 | 0.0761        | 0             | 0.0761        | 8.25E-03        | 0             | 8.25E-03      | 0        | 0              |
| Off-Road      | 0.2636        | 2.7466        | 2.4183        | 4.68E-03        |               | 0.1201        | 0.1201        |                 | 0.1108        | 0.1108        | 0        | 408.999        |
| <b>Total</b>  | <b>0.2636</b> | <b>2.7466</b> | <b>2.4183</b> | <b>4.68E-03</b> | <b>0.0761</b> | <b>0.1201</b> | <b>0.1963</b> | <b>8.25E-03</b> | <b>0.1108</b> | <b>0.1119</b> | <b>0</b> | <b>408.999</b> |

#### Mitigated Construction Off-Site

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          |           |
| Hauling  | 6.7000e-003 | 0.2488      | 0.0748      | 6.8000e-004 | 0.0141        | 9.2000e-004  | 0.0151      | 3.8700e-003    | 8.8000e-004   | 4.7500e-003 | 0.0000   | 64.6236   |
| Vendor   | 5.6000e-004 | 0.0186      | 6.0800e-003 | 5.0000e-005 | 1.1000e-003   | 5.0000e-005  | 1.1600e-003 | 3.2000e-004    | 5.0000e-005   | 3.7000e-004 | 0.0000   | 4.2669    |
| Worker   | 7.5200e-003 | 4.2400e-003 | 0.0467      | 1.2000e-004 | 0.0134        | 1.0000e-004  | 0.0135      | 3.5600e-003    | 9.0000e-005   | 3.6500e-003 | 0.0000   | 11.1656   |

|              |               |               |               |                    |               |                    |               |                    |                    |                    |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|
| <b>Total</b> | <b>0.0148</b> | <b>0.2717</b> | <b>0.1276</b> | <b>8.5000e-004</b> | <b>0.0286</b> | <b>1.0700e-003</b> | <b>0.0297</b> | <b>7.7500e-003</b> | <b>1.0200e-003</b> | <b>8.7700e-003</b> | <b>0.0000</b> | <b>80.0563</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|

### 3.5 Building Construction - 2022

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2      |
|--------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |               |               |                |               |               |          |                |
| Off-Road     | 0.0392        | 0.3592        | 0.3764        | 6.20E-04        |               | 0.0186        | 0.0186        |                | 0.0175        | 0.0175        | 0        | 53.2968        |
| <b>Total</b> | <b>0.0392</b> | <b>0.3592</b> | <b>0.3764</b> | <b>6.20E-04</b> |               | <b>0.0186</b> | <b>0.0186</b> |                | <b>0.0175</b> | <b>0.0175</b> | <b>0</b> | <b>53.2968</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total   | Bio- CO2 | NBio- CO2      |
|--------------|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|----------------|-----------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |                 |               |                |                 |               |          |                |
| Hauling      | 0             | 0             | 0             | 0               | 0             | 0               | 0             | 0              | 0               | 0             | 0        | 0              |
| Vendor       | 3.08E-03      | 0.1032        | 0.0337        | 2.50E-04        | 6.13E-03      | 2.90E-04        | 6.42E-03      | 1.77E-03       | 2.80E-04        | 2.05E-03      | 0        | 23.6683        |
| Worker       | 0.0223        | 0.0126        | 0.1384        | 3.70E-04        | 0.0397        | 2.90E-04        | 0.04          | 0.0106         | 2.70E-04        | 0.0108        | 0        | 33.0833        |
| <b>Total</b> | <b>0.0254</b> | <b>0.1158</b> | <b>0.1721</b> | <b>6.20E-04</b> | <b>0.0458</b> | <b>5.80E-04</b> | <b>0.0464</b> | <b>0.0123</b>  | <b>5.50E-04</b> | <b>0.0129</b> | <b>0</b> | <b>56.7514</b> |

#### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Off-Road     | 0.0392        | 0.3592        | 0.3764        | 6.2000e-004        |               | 0.0186        | 0.0186        |                | 0.0175        | 0.0175        | 0.0000        | 53.2968        |
| <b>Total</b> | <b>0.0392</b> | <b>0.3592</b> | <b>0.3764</b> | <b>6.2000e-004</b> |               | <b>0.0186</b> | <b>0.0186</b> |                | <b>0.0175</b> | <b>0.0175</b> | <b>0.0000</b> | <b>53.2968</b> |

#### Mitigated Construction Off-Site

|          | ROG         | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|----------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|
| Category | tons/yr     |        |        |             |               |              |             |                |               |             |          |           |
| Hauling  | 0.0000      | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    |
| Vendor   | 3.0800e-003 | 0.1032 | 0.0337 | 2.5000e-004 | 6.1300e-003   | 2.9000e-004  | 6.4200e-003 | 1.7700e-003    | 2.8000e-004   | 2.0500e-003 | 0.0000   | 23.6683   |
| Worker   | 0.0223      | 0.0126 | 0.1384 | 3.7000e-004 | 0.0397        | 2.9000e-004  | 0.0400      | 0.0106         | 2.7000e-004   | 0.0108      | 0.0000   | 33.0833   |

|              |               |               |               |                    |               |                    |               |               |                    |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|
| <b>Total</b> | <b>0.0254</b> | <b>0.1158</b> | <b>0.1721</b> | <b>6.2000e-004</b> | <b>0.0458</b> | <b>5.8000e-004</b> | <b>0.0464</b> | <b>0.0123</b> | <b>5.5000e-004</b> | <b>0.0129</b> | <b>0.0000</b> | <b>56.7514</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|

### 3.5 Building Construction - 2023

#### Unmitigated Construction On-Site

|              | ROG           | NOx         | CO            | SO2             | Fugitive PM10 | Exhaust PM10 | PM10 Total   | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2      |
|--------------|---------------|-------------|---------------|-----------------|---------------|--------------|--------------|----------------|---------------|---------------|----------|----------------|
| Category     | tons/yr       |             |               |                 |               |              |              |                |               |               |          |                |
| Off-Road     | 0.2045        | 1.87        | 2.1117        | 3.50E-03        |               | 0.091        | 0.091        |                | 0.0856        | 0.0856        | 0        | 301.346        |
| <b>Total</b> | <b>0.2045</b> | <b>1.87</b> | <b>2.1117</b> | <b>3.50E-03</b> |               | <b>0.091</b> | <b>0.091</b> |                | <b>0.0856</b> | <b>0.0856</b> | <b>0</b> | <b>301.346</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total   | Bio- CO2 | NBio- CO2      |
|--------------|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|----------------|-----------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |                 |               |                |                 |               |          |                |
| Hauling      | 0             | 0             | 0             | 0               | 0             | 0               | 0             | 0              | 0               | 0             | 0        | 0              |
| Vendor       | 0.0141        | 0.4731        | 0.1765        | 1.38E-03        | 0.0346        | 1.01E-03        | 0.0356        | 0.01           | 9.70E-04        | 0.011         | 0        | 130.899        |
| Worker       | 0.1188        | 0.064         | 0.7149        | 1.99E-03        | 0.2241        | 1.60E-03        | 0.2257        | 0.0596         | 1.47E-03        | 0.0611        | 0        | 180.061        |
| <b>Total</b> | <b>0.1329</b> | <b>0.5371</b> | <b>0.8915</b> | <b>3.37E-03</b> | <b>0.2588</b> | <b>2.61E-03</b> | <b>0.2614</b> | <b>0.0697</b>  | <b>2.44E-03</b> | <b>0.0721</b> | <b>0</b> | <b>310.960</b> |

#### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Off-Road     | 0.2045        | 1.8700        | 2.1117        | 3.5000e-003        |               | 0.0910        | 0.0910        |                | 0.0856        | 0.0856        | 0.0000        | 301.345        |
| <b>Total</b> | <b>0.2045</b> | <b>1.8700</b> | <b>2.1117</b> | <b>3.5000e-003</b> |               | <b>0.0910</b> | <b>0.0910</b> |                | <b>0.0856</b> | <b>0.0856</b> | <b>0.0000</b> | <b>301.345</b> |

#### Mitigated Construction Off-Site

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
| Category | tons/yr |        |        |             |               |              |            |                |               |             |          |           |
| Hauling  | 0.0000  | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000    |
| Vendor   | 0.0141  | 0.4731 | 0.1765 | 1.3800e-003 | 0.0346        | 1.0100e-003  | 0.0356     | 0.0100         | 9.7000e-004   | 0.0110      | 0.0000   | 130.899   |
| Worker   | 0.1188  | 0.0640 | 0.7149 | 1.9900e-003 | 0.2241        | 1.6000e-003  | 0.2257     | 0.0596         | 1.4700e-003   | 0.0611      | 0.0000   | 180.061   |

|              |               |               |               |                    |               |                    |               |               |                    |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|
| <b>Total</b> | <b>0.1329</b> | <b>0.5371</b> | <b>0.8915</b> | <b>3.3700e-003</b> | <b>0.2588</b> | <b>2.6100e-003</b> | <b>0.2614</b> | <b>0.0697</b> | <b>2.4400e-003</b> | <b>0.0721</b> | <b>0.0000</b> | <b>310.960</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|

### 3.5 Building Construction - 2024

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|--------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |               |               |                |               |               |          |                |
| Off-Road     | 0.1928        | 1.7611        | 2.1179        | 3.53E-03        |               | 0.0803        | 0.0803        |                | 0.0756        | 0.0756        | 0        | 303.722        |
| <b>Total</b> | <b>0.1928</b> | <b>1.7611</b> | <b>2.1179</b> | <b>3.53E-03</b> |               | <b>0.0803</b> | <b>0.0803</b> |                | <b>0.0756</b> | <b>0.0756</b> | <b>0</b> | <b>303.722</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|--------------|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|----------------|-----------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |                 |               |                |                 |               |          |                |
| Hauling      | 0             | 0             | 0             | 0               | 0             | 0               | 0             | 0              | 0               | 0             | 0        | 0              |
| Vendor       | 0.0136        | 0.4624        | 0.1687        | 1.39E-03        | 0.0349        | 9.50E-04        | 0.0359        | 0.0101         | 9.10E-04        | 0.011         | 0        | 131.264        |
| Worker       | 0.1131        | 0.0583        | 0.664         | 1.93E-03        | 0.2259        | 1.57E-03        | 0.2274        | 0.0601         | 1.44E-03        | 0.0615        | 0        | 174.501        |
| <b>Total</b> | <b>0.1267</b> | <b>0.5207</b> | <b>0.8328</b> | <b>3.32E-03</b> | <b>0.2608</b> | <b>2.52E-03</b> | <b>0.2633</b> | <b>0.0702</b>  | <b>2.35E-03</b> | <b>0.0725</b> | <b>0</b> | <b>305.766</b> |

#### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CC       |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Off-Road     | 0.1928        | 1.7611        | 2.1179        | 3.5300e-003        |               | 0.0803        | 0.0803        |                | 0.0756        | 0.0756        | 0.0000        | 303.722        |
| <b>Total</b> | <b>0.1928</b> | <b>1.7611</b> | <b>2.1179</b> | <b>3.5300e-003</b> |               | <b>0.0803</b> | <b>0.0803</b> |                | <b>0.0756</b> | <b>0.0756</b> | <b>0.0000</b> | <b>303.722</b> |

#### Mitigated Construction Off-Site

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|
| Category | tons/yr |        |        |             |               |              |            |                |               |             |          |          |
| Hauling  | 0.0000  | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000   |
| Vendor   | 0.0136  | 0.4624 | 0.1687 | 1.3900e-003 | 0.0349        | 9.5000e-004  | 0.0359     | 0.0101         | 9.1000e-004   | 0.0110      | 0.0000   | 131.264  |
| Worker   | 0.1131  | 0.0583 | 0.6640 | 1.9300e-003 | 0.2259        | 1.5700e-003  | 0.2274     | 0.0601         | 1.4400e-003   | 0.0615      | 0.0000   | 174.501  |

|              |               |               |               |                    |               |                    |               |               |                    |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|
| <b>Total</b> | <b>0.1267</b> | <b>0.5207</b> | <b>0.8328</b> | <b>3.3200e-003</b> | <b>0.2608</b> | <b>2.5200e-003</b> | <b>0.2633</b> | <b>0.0702</b> | <b>2.3500e-003</b> | <b>0.0725</b> | <b>0.0000</b> | <b>305.766</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|

### 3.5 Building Construction - 2025

#### Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|--------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |               |               |                |               |               |          |                |
| Off-Road     | 0.1785        | 1.6273        | 2.0991        | 3.52E-03        |               | 0.0689        | 0.0689        |                | 0.0648        | 0.0648        | 0        | 302.654        |
| <b>Total</b> | <b>0.1785</b> | <b>1.6273</b> | <b>2.0991</b> | <b>3.52E-03</b> |               | <b>0.0689</b> | <b>0.0689</b> |                | <b>0.0648</b> | <b>0.0648</b> | <b>0</b> | <b>302.654</b> |

#### Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total   | Bio- CO2 | NBio- CC       |
|--------------|---------------|---------------|---------------|-----------------|---------------|-----------------|---------------|----------------|-----------------|---------------|----------|----------------|
| Category     | tons/yr       |               |               |                 |               |                 |               |                |                 |               |          |                |
| Hauling      | 0             | 0             | 0             | 0               | 0             | 0               | 0             | 0              | 0               | 0             | 0        | 0              |
| Vendor       | 0.0131        | 0.4478        | 0.1626        | 1.37E-03        | 0.0348        | 8.80E-04        | 0.0357        | 0.0101         | 8.50E-04        | 0.0109        | 0        | 130.167        |
| Worker       | 0.1068        | 0.0526        | 0.6113        | 1.85E-03        | 0.225         | 1.52E-03        | 0.2265        | 0.0599         | 1.40E-03        | 0.0613        | 0        | 166.991        |
| <b>Total</b> | <b>0.1198</b> | <b>0.5004</b> | <b>0.7738</b> | <b>3.22E-03</b> | <b>0.2598</b> | <b>2.40E-03</b> | <b>0.2622</b> | <b>0.0699</b>  | <b>2.25E-03</b> | <b>0.0722</b> | <b>0</b> | <b>297.158</b> |

#### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CC       |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Off-Road     | 0.1784        | 1.6273        | 2.0991        | 3.5200e-003        |               | 0.0689        | 0.0689        |                | 0.0648        | 0.0648        | 0.0000        | 302.654        |
| <b>Total</b> | <b>0.1784</b> | <b>1.6273</b> | <b>2.0991</b> | <b>3.5200e-003</b> |               | <b>0.0689</b> | <b>0.0689</b> |                | <b>0.0648</b> | <b>0.0648</b> | <b>0.0000</b> | <b>302.654</b> |

#### Mitigated Construction Off-Site

|          | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|
| Category | tons/yr |        |        |             |               |              |            |                |               |             |          |          |
| Hauling  | 0.0000  | 0.0000 | 0.0000 | 0.0000      | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000   |
| Vendor   | 0.0131  | 0.4478 | 0.1626 | 1.3700e-003 | 0.0348        | 8.8000e-004  | 0.0357     | 0.0101         | 8.5000e-004   | 0.0109      | 0.0000   | 130.167  |
| Worker   | 0.1068  | 0.0526 | 0.6113 | 1.8500e-003 | 0.2250        | 1.5200e-003  | 0.2265     | 0.0599         | 1.4000e-003   | 0.0613      | 0.0000   | 166.991  |

|              |               |               |               |                    |               |                    |               |               |                    |               |               |                |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|
| <b>Total</b> | <b>0.1198</b> | <b>0.5004</b> | <b>0.7738</b> | <b>3.2200e-003</b> | <b>0.2598</b> | <b>2.4000e-003</b> | <b>0.2622</b> | <b>0.0699</b> | <b>2.2500e-003</b> | <b>0.0722</b> | <b>0.0000</b> | <b>297.158</b> |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|----------------|

### 3.5 Building Construction - 2026

#### Unmitigated Construction On-Site

|              | ROG             | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total      | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC      |
|--------------|-----------------|---------------|---------------|-----------------|---------------|-----------------|-----------------|----------------|-----------------|-----------------|----------|---------------|
| Category     | tons/yr         |               |               |                 |               |                 |                 |                |                 |                 |          |               |
| Off-Road     | 6.84E-03        | 0.0624        | 0.0804        | 1.30E-04        |               | 2.64E-03        | 2.64E-03        |                | 2.48E-03        | 2.48E-03        | 0        | 11.596        |
| <b>Total</b> | <b>6.84E-03</b> | <b>0.0624</b> | <b>0.0804</b> | <b>1.30E-04</b> |               | <b>2.64E-03</b> | <b>2.64E-03</b> |                | <b>2.48E-03</b> | <b>2.48E-03</b> | <b>0</b> | <b>11.596</b> |

#### Unmitigated Construction Off-Site

|              | ROG             | NOx           | CO            | SO2             | Fugitive PM10   | Exhaust PM10    | PM10 Total  | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC      |
|--------------|-----------------|---------------|---------------|-----------------|-----------------|-----------------|-------------|-----------------|-----------------|-----------------|----------|---------------|
| Category     | tons/yr         |               |               |                 |                 |                 |             |                 |                 |                 |          |               |
| Hauling      | 0               | 0             | 0             | 0               | 0               | 0               | 0           | 0               | 0               | 0               | 0        | 0             |
| Vendor       | 4.80E-04        | 0.0167        | 6.05E-03      | 5.00E-05        | 1.33E-03        | 3.00E-05        | 1.36E-03    | 3.80E-04        | 3.00E-05        | 4.20E-04        | 0        | 4.9668        |
| Worker       | 3.87E-03        | 1.84E-03      | 0.0217        | 7.00E-05        | 8.62E-03        | 6.00E-05        | 8.68E-03    | 2.29E-03        | 5.00E-05        | 2.35E-03        | 0        | 6.1645        |
| <b>Total</b> | <b>4.35E-03</b> | <b>0.0185</b> | <b>0.0278</b> | <b>1.20E-04</b> | <b>9.95E-03</b> | <b>9.00E-05</b> | <b>0.01</b> | <b>2.67E-03</b> | <b>8.00E-05</b> | <b>2.77E-03</b> | <b>0</b> | <b>11.131</b> |

#### Mitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CC      |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    |               |               |
| Off-Road     | 6.8400e-003        | 0.0624        | 0.0804        | 1.3000e-004        |               | 2.6400e-003        | 2.6400e-003        |                | 2.4800e-003        | 2.4800e-003        | 0.0000        | 11.596        |
| <b>Total</b> | <b>6.8400e-003</b> | <b>0.0624</b> | <b>0.0804</b> | <b>1.3000e-004</b> |               | <b>2.6400e-003</b> | <b>2.6400e-003</b> |                | <b>2.4800e-003</b> | <b>2.4800e-003</b> | <b>0.0000</b> | <b>11.596</b> |

#### Mitigated Construction Off-Site

|          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|----------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|----------|
| Category | tons/yr     |             |             |             |               |              |             |                |               |             |          |          |
| Hauling  | 0.0000      | 0.0000      | 0.0000      | 0.0000      | 0.0000        | 0.0000       | 0.0000      | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000   |
| Vendor   | 4.8000e-004 | 0.0167      | 6.0500e-003 | 5.0000e-005 | 1.3300e-003   | 3.0000e-005  | 1.3600e-003 | 3.8000e-004    | 3.0000e-005   | 4.2000e-004 | 0.0000   | 4.9668   |
| Worker   | 3.8700e-003 | 1.8400e-003 | 0.0217      | 7.0000e-005 | 8.6200e-003   | 6.0000e-005  | 8.6800e-003 | 2.2900e-003    | 5.0000e-005   | 2.3500e-003 | 0.0000   | 6.1645   |



|              |                    |               |               |                    |                    |                    |               |                    |                    |                    |               |                |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|
| <b>Total</b> | <b>4.3500e-003</b> | <b>0.0185</b> | <b>0.0278</b> | <b>1.2000e-004</b> | <b>9.9500e-003</b> | <b>9.0000e-005</b> | <b>0.0100</b> | <b>2.6700e-003</b> | <b>8.0000e-005</b> | <b>2.7700e-003</b> | <b>0.0000</b> | <b>11.1313</b> |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|

### 3.6 Paving - 2026

#### Unmitigated Construction On-Site

|              | ROG           | NOx          | CO            | SO2             | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2      |
|--------------|---------------|--------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|----------------|
| Category     | tons/yr       |              |               |                 |               |               |               |                |               |               |          |                |
| Off-Road     | 0.0362        | 0.298        | 0.4348        | 7.40E-04        |               | 0.0138        | 0.0138        |                | 0.0129        | 0.0129        | 0        | 62.7486        |
| Paving       | 0             |              |               |                 |               | 0             | 0             |                | 0             | 0             | 0        | 0              |
| <b>Total</b> | <b>0.0362</b> | <b>0.298</b> | <b>0.4348</b> | <b>7.40E-04</b> |               | <b>0.0138</b> | <b>0.0138</b> |                | <b>0.0129</b> | <b>0.0129</b> | <b>0</b> | <b>62.7486</b> |

#### Unmitigated Construction Off-Site

|              | ROG             | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total   | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CO2      |
|--------------|-----------------|---------------|---------------|-----------------|---------------|-----------------|--------------|-----------------|-----------------|-----------------|----------|----------------|
| Category     | tons/yr         |               |               |                 |               |                 |              |                 |                 |                 |          |                |
| Hauling      | 6.90E-03        | 0.232         | 0.0967        | 9.50E-04        | 0.0206        | 6.80E-04        | 0.0213       | 5.65E-03        | 6.50E-04        | 6.30E-03        | 0        | 90.0243        |
| Vendor       | 2.90E-04        | 0.0101        | 3.66E-03      | 3.00E-05        | 8.10E-04      | 2.00E-05        | 8.20E-04     | 2.30E-04        | 2.00E-05        | 2.50E-04        | 0        | 3.0043         |
| Worker       | 2.19E-03        | 1.04E-03      | 0.0123        | 4.00E-05        | 4.88E-03      | 3.00E-05        | 4.91E-03     | 1.30E-03        | 3.00E-05        | 1.33E-03        | 0        | 3.4904         |
| <b>Total</b> | <b>9.38E-03</b> | <b>0.2431</b> | <b>0.1126</b> | <b>1.02E-03</b> | <b>0.0263</b> | <b>7.30E-04</b> | <b>0.027</b> | <b>7.18E-03</b> | <b>7.00E-04</b> | <b>7.88E-03</b> | <b>0</b> | <b>96.5193</b> |

#### Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               |               |                |
| Off-Road     | 0.0362        | 0.2980        | 0.4348        | 7.4000e-004        |               | 0.0138        | 0.0138        |                | 0.0129        | 0.0129        | 0.0000        | 62.7486        |
| Paving       | 0.0000        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000         |
| <b>Total</b> | <b>0.0362</b> | <b>0.2980</b> | <b>0.4348</b> | <b>7.4000e-004</b> |               | <b>0.0138</b> | <b>0.0138</b> |                | <b>0.0129</b> | <b>0.0129</b> | <b>0.0000</b> | <b>62.7486</b> |

#### Mitigated Construction Off-Site

|          | ROG         | NOx    | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|----------|-------------|--------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|
| Category | tons/yr     |        |             |             |               |              |             |                |               |             |          |           |
| Hauling  | 6.9000e-003 | 0.2320 | 0.0967      | 9.5000e-004 | 0.0206        | 6.8000e-004  | 0.0213      | 5.6500e-003    | 6.5000e-004   | 6.3000e-003 | 0.0000   | 90.0243   |
| Vendor   | 2.9000e-004 | 0.0101 | 3.6600e-003 | 3.0000e-005 | 8.1000e-004   | 2.0000e-005  | 8.2000e-004 | 2.3000e-004    | 2.0000e-005   | 2.5000e-004 | 0.0000   | 3.0043    |

|              |                    |               |               |                    |               |                    |               |                    |                    |                    |               |                |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|----------------|
| Worker       | 2.1900e-003        | 1.0400e-003   | 0.0123        | 4.0000e-005        | 4.8800e-003   | 3.0000e-005        | 4.9100e-003   | 1.3000e-003        | 3.0000e-005        | 1.3300e-003        | 0.0000        | 3.4904         |
| <b>Total</b> | <b>9.3800e-003</b> | <b>0.2431</b> | <b>0.1126</b> | <b>1.0200e-003</b> | <b>0.0263</b> | <b>7.3000e-004</b> | <b>0.0270</b> | <b>7.1800e-003</b> | <b>7.0000e-004</b> | <b>7.8800e-003</b> | <b>0.0000</b> | <b>96.5193</b> |

### 3.7 Architectural Coating - 2026

#### Unmitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total      | Fugitive PM2.5 | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC      |
|-----------------|---------------|---------------|---------------|-----------------|---------------|-----------------|-----------------|----------------|-----------------|-----------------|----------|---------------|
| Category        | tons/yr       |               |               |                 |               |                 |                 |                |                 |                 |          |               |
| Archit. Coating | 7.9405        |               |               |                 |               | 0               | 0               |                | 0               | 0               | 0        | 0             |
| Off-Road        | 5.30E-03      | 0.0355        | 0.0561        | 9.00E-05        |               | 1.60E-03        | 1.60E-03        |                | 1.60E-03        | 1.60E-03        | 0        | 7.9151        |
| <b>Total</b>    | <b>7.9458</b> | <b>0.0355</b> | <b>0.0561</b> | <b>9.00E-05</b> |               | <b>1.60E-03</b> | <b>1.60E-03</b> |                | <b>1.60E-03</b> | <b>1.60E-03</b> | <b>0</b> | <b>7.9151</b> |

#### Unmitigated Construction Off-Site

|              | ROG             | NOx             | CO            | SO2             | Fugitive PM10 | Exhaust PM10    | PM10 Total    | Fugitive PM2.5  | Exhaust PM2.5   | PM2.5 Total     | Bio- CO2 | NBio- CC      |
|--------------|-----------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|-----------------|-----------------|----------|---------------|
| Category     | tons/yr         |                 |               |                 |               |                 |               |                 |                 |                 |          |               |
| Hauling      | 0               | 0               | 0             | 0               | 0             | 0               | 0             | 0               | 0               | 0               | 0        | 0             |
| Vendor       | 0               | 0               | 0             | 0               | 0             | 0               | 0             | 0               | 0               | 0               | 0        | 0             |
| Worker       | 4.83E-03        | 2.29E-03        | 0.0271        | 8.00E-05        | 0.0107        | 7.00E-05        | 0.0108        | 2.86E-03        | 6.00E-05        | 2.92E-03        | 0        | 7.6789        |
| <b>Total</b> | <b>4.83E-03</b> | <b>2.29E-03</b> | <b>0.0271</b> | <b>8.00E-05</b> | <b>0.0107</b> | <b>7.00E-05</b> | <b>0.0108</b> | <b>2.86E-03</b> | <b>6.00E-05</b> | <b>2.92E-03</b> | <b>0</b> | <b>7.6789</b> |

#### Mitigated Construction On-Site

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CC      |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|
| Category        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    |               |               |
| Archit. Coating | 7.9405        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 5.3000e-003   | 0.0355        | 0.0561        | 9.0000e-005        |               | 1.6000e-003        | 1.6000e-003        |                | 1.6000e-003        | 1.6000e-003        | 0.0000        | 7.9151        |
| <b>Total</b>    | <b>7.9458</b> | <b>0.0355</b> | <b>0.0561</b> | <b>9.0000e-005</b> |               | <b>1.6000e-003</b> | <b>1.6000e-003</b> |                | <b>1.6000e-003</b> | <b>1.6000e-003</b> | <b>0.0000</b> | <b>7.9151</b> |

#### Mitigated Construction Off-Site

|          | ROG     | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC |
|----------|---------|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|
| Category | tons/yr |     |    |     |               |              |            |                |               |             |          |          |

|              |                    |                    |               |                    |               |                    |               |                    |                    |                    |               |               |
|--------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|--------------------|---------------|---------------|
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        |
| Worker       | 4.8300e-003        | 2.2900e-003        | 0.0271        | 8.0000e-005        | 0.0107        | 7.0000e-005        | 0.0108        | 2.8600e-003        | 6.0000e-005        | 2.9200e-003        | 0.0000        | 7.6789        |
| <b>Total</b> | <b>4.8300e-003</b> | <b>2.2900e-003</b> | <b>0.0271</b> | <b>8.0000e-005</b> | <b>0.0107</b> | <b>7.0000e-005</b> | <b>0.0108</b> | <b>2.8600e-003</b> | <b>6.0000e-005</b> | <b>2.9200e-003</b> | <b>0.0000</b> | <b>7.6789</b> |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

|             | ROG     | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CC  |
|-------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
| Category    | tons/yr |        |        |        |               |              |            |                |               |             |          |           |
| Mitigated   | 0.6693  | 2.1725 | 7.9100 | 0.0274 | 2.9399        | 0.0241       | 2.9640     | 0.7876         | 0.0224        | 0.8100      | 0.0000   | 2,497.106 |
| Unmitigated | 0.6693  | 2.1725 | 7.9100 | 0.0274 | 2.9399        | 0.0241       | 2.9640     | 0.7876         | 0.0224        | 0.8100      | 0.0000   | 2,497.106 |

### 4.2 Trip Summary Information

| Land Use              | Average Daily Trip Rate |                 |                 | Unmitigated Annual VMT |
|-----------------------|-------------------------|-----------------|-----------------|------------------------|
|                       | Weekday                 | Saturday        | Sunday          |                        |
| Apartments Low Rise   | 1,307.25                | 1,419.75        | 1203.75         | 3,748,356              |
| City Park             | 0.00                    | 0.00            | 0.00            |                        |
| Single Family Housing | 1,485.22                | 1,546.45        | 1343.92         | 4,221,710              |
| <b>Total</b>          | <b>2,792.47</b>         | <b>2,966.20</b> | <b>2,547.67</b> | <b>7,970,066</b>       |

### 4.3 Trip Type Information

| Land Use              | Miles      |            |             | Trip %     |            |             | Primary | D |
|-----------------------|------------|------------|-------------|------------|------------|-------------|---------|---|
|                       | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW |         |   |
| Apartments Low Rise   | 10.80      | 7.30       | 7.50        | 42.60      | 21.00      | 36.40       | 86      |   |
| City Park             | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 66      |   |
| Single Family Housing | 10.80      | 7.30       | 7.50        | 42.60      | 21.00      | 36.40       | 86      |   |

### 4.4 Fleet Mix

| Land Use              | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     |
|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Low Rise   | 0.557019 | 0.034577 | 0.225137 | 0.122292 | 0.020027 | 0.004692 | 0.017649 | 0.009477 | 0.001627 |
| City Park             | 0.557019 | 0.034577 | 0.225137 | 0.122292 | 0.020027 | 0.004692 | 0.017649 | 0.009477 | 0.001627 |
| Single Family Housing | 0.557019 | 0.034577 | 0.225137 | 0.122292 | 0.020027 | 0.004692 | 0.017649 | 0.009477 | 0.001627 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

|                         | ROG     | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|-------------------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
| Category                | tons/yr |        |        |        |               |              |            |                |               |             |          |           |
| Electricity Mitigated   |         |        |        |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 344.827   |
| Electricity Unmitigated |         |        |        |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 344.827   |
| NaturalGas Mitigated    | 0.0000  | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    |
| NaturalGas Unmitigated  | 0.0000  | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000    |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

|                       | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      |
|-----------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|
| Land Use              | kBTU/yr        | tons/yr       |               |               |               |               |               |               |                |               |               |               |
| Apartments Low Rise   | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| City Park             | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| Single Family Housing | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>          |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

### Mitigated

|                       | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      |
|-----------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|
| Land Use              | kBTU/yr        | tons/yr       |               |               |               |               |               |               |                |               |               |               |
| Apartments Low Rise   | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| City Park             | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| Single Family Housing | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>          |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

|                     | Electricity Use | Total CO2 | CH4    | N2O      | CO2e   |
|---------------------|-----------------|-----------|--------|----------|--------|
| Land Use            | kWh/yr          | MT/yr     |        |          |        |
| Apartments Low Rise | 1.77E+06        | 168.3454  | 0.0233 | 4.81E-03 | 170.36 |
| City Park           | 0               | 0         | 0      | 0        | 0      |

|                       |          |                 |               |                 |                 |
|-----------------------|----------|-----------------|---------------|-----------------|-----------------|
| Single Family Housing | 1.85E+06 | 176.4819        | 0.0244        | 5.04E-03        | 178.5938        |
| <b>Total</b>          |          | <b>344.8273</b> | <b>0.0476</b> | <b>9.85E-03</b> | <b>348.9537</b> |

### Mitigated

|                       | Electricity Use | Total CO2       | CH4           | N2O                | CO2e            |
|-----------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use              | kWh/yr          | MT/yr           |               |                    |                 |
| Apartments Low Rise   | 1.76732e+006    | 168.3454        | 0.0233        | 4.8100e-003        | 170.3600        |
| City Park             | 0               | 0.0000          | 0.0000        | 0.0000             | 0.0000          |
| Single Family Housing | 1.85274e+006    | 176.4819        | 0.0244        | 5.0400e-003        | 178.5938        |
| <b>Total</b>          |                 | <b>344.8273</b> | <b>0.0476</b> | <b>9.8500e-003</b> | <b>348.9537</b> |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

|             | ROG     | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|-------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
| Category    | tons/yr |        |        |        |               |              |            |                |               |             |          |           |
| Mitigated   | 3.3067  | 0.4508 | 6.5773 | 0.0117 |               | 0.6118       | 0.6118     |                | 0.6118        | 0.6118      | 77.2160  | 319.081   |
| Unmitigated | 3.3067  | 0.4508 | 6.5773 | 0.0117 |               | 0.6118       | 0.6118     |                | 0.6118        | 0.6118      | 77.2160  | 319.081   |

### 6.2 Area by SubCategory

#### Unmitigated

|                       | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2       | NBio- CO2      |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|----------------|
| SubCategory           | tons/yr       |               |               |               |               |               |               |                |               |               |                |                |
| Architectural Coating | 0.7941        |               |               |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000         | 0.0000         |
| Consumer Products     | 2.0106        |               |               |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000         | 0.0000         |
| Hearth                | 0.4170        | 0.4182        | 3.7429        | 0.0115        |               | 0.5961        | 0.5961        |                | 0.5961        | 0.5961        | 77.2160        | 314.446        |
| Landscaping           | 0.0851        | 0.0327        | 2.8343        | 1.5000e-004   |               | 0.0157        | 0.0157        |                | 0.0157        | 0.0157        | 0.0000         | 4.6344         |
| <b>Total</b>          | <b>3.3067</b> | <b>0.4508</b> | <b>6.5773</b> | <b>0.0117</b> |               | <b>0.6118</b> | <b>0.6118</b> |                | <b>0.6118</b> | <b>0.6118</b> | <b>77.2160</b> | <b>319.081</b> |

#### Mitigated

|  | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 |
|--|-----|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|
|--|-----|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|

| SubCategory           | tons/yr       |               |               |               |  |               |               |  |               |               |                |                |
|-----------------------|---------------|---------------|---------------|---------------|--|---------------|---------------|--|---------------|---------------|----------------|----------------|
| Architectural Coating | 0.7941        |               |               |               |  | 0.0000        | 0.0000        |  | 0.0000        | 0.0000        | 0.0000         | 0.0000         |
| Consumer Products     | 2.0106        |               |               |               |  | 0.0000        | 0.0000        |  | 0.0000        | 0.0000        | 0.0000         | 0.0000         |
| Hearth                | 0.4170        | 0.4182        | 3.7429        | 0.0115        |  | 0.5961        | 0.5961        |  | 0.5961        | 0.5961        | 77.2160        | 314.446        |
| Landscaping           | 0.0851        | 0.0327        | 2.8343        | 1.5000e-004   |  | 0.0157        | 0.0157        |  | 0.0157        | 0.0157        | 0.0000         | 4.6344         |
| <b>Total</b>          | <b>3.3067</b> | <b>0.4508</b> | <b>6.5773</b> | <b>0.0117</b> |  | <b>0.6118</b> | <b>0.6118</b> |  | <b>0.6118</b> | <b>0.6118</b> | <b>77.2160</b> | <b>319.081</b> |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

|             | Total CO2 | CH4    | N2O    | CO2e    |
|-------------|-----------|--------|--------|---------|
| Category    | MT/yr     |        |        |         |
| Mitigated   | 49.8279   | 0.0302 | 0.0165 | 55.5113 |
| Unmitigated | 49.8279   | 0.0302 | 0.0165 | 55.5113 |

### 7.2 Water by Land Use

#### Unmitigated

|                       | Indoor/Outdoor Use | Total CO2      | CH4           | N2O           | CO2e           |
|-----------------------|--------------------|----------------|---------------|---------------|----------------|
| Land Use              | Mgal               | MT/yr          |               |               |                |
| Apartments Low Rise   | 11.7277 / 9.24196  | 13.2752        | 0.0155        | 9.2800e-003   | 16.4304        |
| City Park             | 0 / 81.8548        | 27.2896        | 3.7700e-003   | 7.8000e-004   | 27.6162        |
| Single Family Housing | 8.18335 / 6.44883  | 9.2631         | 0.0108        | 6.4800e-003   | 11.4648        |
| <b>Total</b>          |                    | <b>49.8279</b> | <b>0.0302</b> | <b>0.0165</b> | <b>55.5113</b> |

#### Mitigated

|                       | Indoor/Outdoor Use | Total CO2      | CH4           | N2O           | CO2e           |
|-----------------------|--------------------|----------------|---------------|---------------|----------------|
| Land Use              | Mgal               | MT/yr          |               |               |                |
| Apartments Low Rise   | 11.7277 / 9.24196  | 13.2752        | 0.0155        | 9.2800e-003   | 16.4304        |
| City Park             | 0 / 81.8548        | 27.2896        | 3.7700e-003   | 7.8000e-004   | 27.6162        |
| Single Family Housing | 8.18335 / 6.44883  | 9.2631         | 0.0108        | 6.4800e-003   | 11.4648        |
| <b>Total</b>          |                    | <b>49.8279</b> | <b>0.0302</b> | <b>0.0165</b> | <b>55.5113</b> |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

#### Category/Year

|             | Total CO2 | CH4    | N2O    | CO2e     |
|-------------|-----------|--------|--------|----------|
|             | MT/yr     |        |        |          |
| Mitigated   | 44.9950   | 2.6591 | 0.0000 | 111.4732 |
| Unmitigated | 44.9950   | 2.6591 | 0.0000 | 111.4732 |

### 8.2 Waste by Land Use

#### Unmitigated

|                       | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e            |
|-----------------------|----------------|----------------|---------------|---------------|-----------------|
| Land Use              | tons           | MT/yr          |               |               |                 |
| Apartments Low Rise   | 103.5          | 21.0096        | 1.2416        | 0.0000        | 52.0503         |
| City Park             | 5.91           | 1.1997         | 0.0709        | 0.0000        | 2.9722          |
| Single Family Housing | 112.25         | 22.7857        | 1.3466        | 0.0000        | 56.4507         |
| <b>Total</b>          |                | <b>44.9950</b> | <b>2.6591</b> | <b>0.0000</b> | <b>111.4732</b> |

#### Mitigated

|                       | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e            |
|-----------------------|----------------|----------------|---------------|---------------|-----------------|
| Land Use              | tons           | MT/yr          |               |               |                 |
| Apartments Low Rise   | 103.5          | 21.0096        | 1.2416        | 0.0000        | 52.0503         |
| City Park             | 5.91           | 1.1997         | 0.0709        | 0.0000        | 2.9722          |
| Single Family Housing | 112.25         | 22.7857        | 1.3466        | 0.0000        | 56.4507         |
| <b>Total</b>          |                | <b>44.9950</b> | <b>2.6591</b> | <b>0.0000</b> | <b>111.4732</b> |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power |
|----------------|--------|-----------|-----------|-------------|
|----------------|--------|-----------|-----------|-------------|

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

---

| Equipment Type | Number | Hours/Day | Hours/Year | Horse Power |
|----------------|--------|-----------|------------|-------------|
|----------------|--------|-----------|------------|-------------|

---

**Boilers**

| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating |
|----------------|--------|----------------|-----------------|---------------|
|----------------|--------|----------------|-----------------|---------------|

---

**User Defined Equipment**

| Equipment Type | Number |
|----------------|--------|
|----------------|--------|

**11.0 Vegetation**

---



il

---

| age | Floor Surface Area | Population |
|-----|--------------------|------------|
|     | 2,992,572.00       | 0          |
|     | 225,000.00         | 644        |
|     | 282,600.00         | 449        |

0

027

\_CRSR\_2019.pdf

for demolition, others based on applicant

| w Value |
|---------|
| 22.00   |
| 34.00   |
| 35.00   |
| 39.00   |
| 52.00   |
| 52.00   |
| 641.40  |
| 624.61  |
| 0.00    |
| 0.00    |
| 403.02  |
| 567.46  |
| 0.00    |
| 0.00    |
| 0.00    |
| 0.00    |
| 102.50  |
| 41.30   |
| 0.00    |
| 0.00    |
| 42.50   |
| 0.00    |
| 900.00  |
| 18.17   |
| 30.02   |
| 2.00    |
| 1.00    |
| 4.00    |
| 0.00    |
| 0.00    |
| 4.00    |
| 4.00    |
| 2.00    |
| 6.00    |
| 6.00    |

|           |
|-----------|
| 6.00      |
| 6.00      |
| 6.00      |
| 0.00      |
| 0.00      |
| 6.00      |
| 6.00      |
| 6.00      |
| 210       |
| 40.00     |
| 700.00    |
| 480.00    |
| 4.00      |
| 4.00      |
| 41.00     |
| 4.00      |
| 20.00     |
| 40.00     |
| 19.00     |
| 20.00     |
| 44.00     |
| 6.31      |
| 0.00      |
| 9.85      |
| 5.35      |
| 0.00      |
| 8.56      |
| 5.81      |
| 0.00      |
| 9.46      |
| 00.00     |
| 00.00     |
| 00.00     |
| 0.00      |
| 0.00      |
| 0.00      |
| 27,724.61 |
| 3,345.62  |
| 0.00      |

0.00

0.00

| 02       | Total CO2      | CH4           | N2O      | CO2e            |
|----------|----------------|---------------|----------|-----------------|
| MT/yr    |                |               |          |                 |
| 7        | 795.527        | 0.2009        | 0        | 800.5481        |
| i4       | 612.3064       | 0.0782        | 0        | 614.2606        |
| i3       | 609.4883       | 0.0778        | 0        | 611.4321        |
| i5       | 599.8135       | 0.0766        | 0        | 601.7276        |
| i2       | 197.5892       | 0.0227        | 0        | 198.1566        |
| <b>7</b> | <b>795.527</b> | <b>0.2009</b> | <b>0</b> | <b>800.5481</b> |

| 02        | Total CO2       | CH4           | N2O      | CO2e            |
|-----------|-----------------|---------------|----------|-----------------|
| MT/yr     |                 |               |          |                 |
| i2        | 795.5262        | 0.2009        | 0        | 800.5473        |
| i1        | 612.3061        | 0.0782        | 0        | 614.2602        |
| 8         | 609.488         | 0.0778        | 0        | 611.4318        |
| i1        | 599.8131        | 0.0766        | 0        | 601.7273        |
| i1        | 197.5891        | 0.0227        | 0        | 198.1565        |
| <b>i2</b> | <b>795.5262</b> | <b>0.2009</b> | <b>0</b> | <b>800.5473</b> |

| 2 | Total CO2 | CH4  | N2O  | CO2e |
|---|-----------|------|------|------|
|   | 0.00      | 0.00 | 0.00 | 0.00 |

NOX (tons/quarter)

|  |
|--|
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

| 02       | Total CO2       | CH4           | N2O          | CO2e            |
|----------|-----------------|---------------|--------------|-----------------|
| MT/yr    |                 |               |              |                 |
| 1        | 396.297         | 0.3704        | 0.0226       | 412.3048        |
| '3       | 344.8273        | 0.0476        | 9.85E-03     | 348.9537        |
| 1        | 2,497.11        | 0.0655        | 0            | 2,498.74        |
|          | 44.995          | 2.6591        | 0            | 111.4732        |
| 4        | 49.8279         | 0.0302        | 0.0165       | 55.5113         |
| <b>0</b> | <b>3,333.05</b> | <b>3.1728</b> | <b>0.049</b> | <b>3,426.99</b> |

| 02       | Total CO2       | CH4           | N2O          | CO2e            |
|----------|-----------------|---------------|--------------|-----------------|
| MT/yr    |                 |               |              |                 |
| 1        | 396.297         | 0.3704        | 0.0226       | 412.3048        |
| '3       | 344.8273        | 0.0476        | 9.85E-03     | 348.9537        |
| 1        | 2,497.11        | 0.0655        | 0            | 2,498.74        |
|          | 44.995          | 2.6591        | 0            | 111.4732        |
| 4        | 49.8279         | 0.0302        | 0.0165       | 55.5113         |
| <b>0</b> | <b>3,333.05</b> | <b>3.1728</b> | <b>0.049</b> | <b>3,426.99</b> |

| 0    | Total CO2 | CH4  | N2O  | CO2e |
|------|-----------|------|------|------|
| 0.00 | 0.00      | 0.00 | 0.00 | 0.00 |

| Phase Description |
|-------------------|
|                   |
|                   |
|                   |
|                   |
|                   |
|                   |
|                   |
|                   |
|                   |

Indoor: 0; Striped Parking Area:

| Load Factor |
|-------------|
| 0.73        |
| 0.38        |
| 0.40        |
| 0.38        |
| 0.40        |

|      |
|------|
| 0.48 |
| 0.37 |
| 0.37 |
| 0.38 |
| 0.38 |
| 0.41 |
| 0.44 |
| 0.42 |
| 0.38 |
| 0.40 |
| 0.48 |
| 0.37 |
| 0.29 |
| 0.20 |
| 0.74 |
| 0.37 |
| 0.45 |
| 0.38 |
| 0.42 |
| 0.36 |
| 0.43 |
| 0.38 |
| 0.48 |

| er Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|------------------|----------------------|-----------------------|
|                  | HDT_Mix              | HHDT                  |
|                  | HDT_Mix              | HHDT                  |
|                  | HDT_Mix              | HHDT                  |
|                  | HDT_Mix              | HHDT                  |
|                  | HDT_Mix              | HHDT                  |
|                  | HDT_Mix              | HHDT                  |

|    |           |     |     |      |
|----|-----------|-----|-----|------|
| 02 | Total CO2 | CH4 | N2O | CO2e |
|----|-----------|-----|-----|------|

| MT/yr    |                |               |          |                |
|----------|----------------|---------------|----------|----------------|
|          | 0              | 0             | 0        | 0              |
| 3        | 37.3893        | 0.0105        | 0        | 37.6518        |
| <b>3</b> | <b>37.3893</b> | <b>0.0105</b> | <b>0</b> | <b>37.6518</b> |

| 02    | Total CO2     | CH4             | N2O      | CO2e          |
|-------|---------------|-----------------|----------|---------------|
| MT/yr |               |                 |          |               |
|       | 2.2808        | 3.00E-05        | 0        | 2.2815        |
|       | 0             | 0               | 0        | 0             |
|       | 1.0837        | 3.00E-05        | 0        | 1.0845        |
|       | <b>3.3646</b> | <b>6.00E-05</b> | <b>0</b> | <b>3.3659</b> |

| 02       | Total CO2      | CH4           | N2O           | CO2e           |
|----------|----------------|---------------|---------------|----------------|
| MT/yr    |                |               |               |                |
|          | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| 2        | 37.3892        | 0.0105        | 0.0000        | 37.6518        |
| <b>2</b> | <b>37.3892</b> | <b>0.0105</b> | <b>0.0000</b> | <b>37.6518</b> |

| 02    | Total CO2     | CH4                | N2O           | CO2e          |
|-------|---------------|--------------------|---------------|---------------|
| MT/yr |               |                    |               |               |
|       | 2.2808        | 3.0000e-005        | 0.0000        | 2.2815        |
|       | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
|       | 1.0837        | 3.0000e-005        | 0.0000        | 1.0845        |
|       | <b>3.3646</b> | <b>6.0000e-005</b> | <b>0.0000</b> | <b>3.3659</b> |



| 02       | Total CO2       | CH4           | N2O      | CO2e            |
|----------|-----------------|---------------|----------|-----------------|
| MT/yr    |                 |               |          |                 |
|          | 0               | 0             | 0        | 0               |
| 6        | 138.8036        | 0.0449        | 0        | 139.9259        |
| <b>6</b> | <b>138.8036</b> | <b>0.0449</b> | <b>0</b> | <b>139.9259</b> |

| 02       | Total CO2      | CH4             | N2O      | CO2e           |
|----------|----------------|-----------------|----------|----------------|
| MT/yr    |                |                 |          |                |
| 3        | 12.9248        | 1.40E-04        | 0        | 12.9284        |
|          | 1.7068         | 3.00E-05        | 0        | 1.7075         |
|          | 2.2331         | 6.00E-05        | 0        | 2.2347         |
| <b>7</b> | <b>16.8647</b> | <b>2.30E-04</b> | <b>0</b> | <b>16.8705</b> |

| 02       | Total CO2       | CH4           | N2O           | CO2e            |
|----------|-----------------|---------------|---------------|-----------------|
| MT/yr    |                 |               |               |                 |
|          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| 5        | 138.8035        | 0.0449        | 0.0000        | 139.9258        |
| <b>5</b> | <b>138.8035</b> | <b>0.0449</b> | <b>0.0000</b> | <b>139.9258</b> |

| 02       | Total CO2      | CH4                | N2O           | CO2e           |
|----------|----------------|--------------------|---------------|----------------|
| MT/yr    |                |                    |               |                |
| 3        | 12.9248        | 1.4000e-004        | 0.0000        | 12.9284        |
|          | 1.7068         | 3.0000e-005        | 0.0000        | 1.7075         |
|          | 2.2331         | 6.0000e-005        | 0.0000        | 2.2347         |
| <b>7</b> | <b>16.8647</b> | <b>2.3000e-004</b> | <b>0.0000</b> | <b>16.8705</b> |

| 02       | Total CO2       | CH4         | N2O      | CO2e          |
|----------|-----------------|-------------|----------|---------------|
| MT/yr    |                 |             |          |               |
|          | 0               | 0           | 0        | 0             |
| 2        | 409.0002        | 0.13        | 0        | 412.25        |
| <b>2</b> | <b>409.0002</b> | <b>0.13</b> | <b>0</b> | <b>412.25</b> |

| 02       | Total CO2      | CH4             | N2O      | CO2e           |
|----------|----------------|-----------------|----------|----------------|
| MT/yr    |                |                 |          |                |
| 3        | 64.6239        | 7.20E-04        | 0        | 64.6419        |
| 1        | 4.2669         | 7.00E-05        | 0        | 4.2686         |
| 5        | 11.1656        | 3.10E-04        | 0        | 11.1733        |
| <b>3</b> | <b>80.0563</b> | <b>1.10E-03</b> | <b>0</b> | <b>80.0838</b> |

| 02       | Total CO2       | CH4         | N2O      | CO2e            |
|----------|-----------------|-------------|----------|-----------------|
| MT/yr    |                 |             |          |                 |
|          | 0               | 0           | 0        | 0               |
| 7        | 408.9997        | 0.13        | 0        | 412.2495        |
| <b>7</b> | <b>408.9997</b> | <b>0.13</b> | <b>0</b> | <b>412.2495</b> |

| 02    | Total CO2 | CH4         | N2O    | CO2e    |
|-------|-----------|-------------|--------|---------|
| MT/yr |           |             |        |         |
| 3     | 64.6239   | 7.2000e-004 | 0.0000 | 64.6419 |
| 1     | 4.2669    | 7.0000e-005 | 0.0000 | 4.2686  |
| 5     | 11.1656   | 3.1000e-004 | 0.0000 | 11.1733 |

|   |         |             |        |         |
|---|---------|-------------|--------|---------|
| 3 | 80.0563 | 1.1000e-003 | 0.0000 | 80.0838 |
|---|---------|-------------|--------|---------|

| 02    | Total CO2 | CH4    | N2O | CO2e   |
|-------|-----------|--------|-----|--------|
| MT/yr |           |        |     |        |
| 3     | 53.2968   | 0.0128 | 0   | 53.616 |
| 3     | 53.2968   | 0.0128 | 0   | 53.616 |

| 02    | Total CO2 | CH4      | N2O | CO2e    |
|-------|-----------|----------|-----|---------|
| MT/yr |           |          |     |         |
|       | 0         | 0        | 0   | 0       |
| 5     | 23.6685   | 3.90E-04 | 0   | 23.6784 |
|       | 33.083    | 9.10E-04 | 0   | 33.1057 |
| 5     | 56.7515   | 1.30E-03 | 0   | 56.7841 |

| 02    | Total CO2 | CH4    | N2O    | CO2e    |
|-------|-----------|--------|--------|---------|
| MT/yr |           |        |        |         |
| 7     | 53.2967   | 0.0128 | 0.0000 | 53.6160 |
| 7     | 53.2967   | 0.0128 | 0.0000 | 53.6160 |

| 02    | Total CO2 | CH4         | N2O    | CO2e    |
|-------|-----------|-------------|--------|---------|
| MT/yr |           |             |        |         |
|       | 0.0000    | 0.0000      | 0.0000 | 0.0000  |
| 5     | 23.6685   | 3.9000e-004 | 0.0000 | 23.6784 |
| 0     | 33.0830   | 9.1000e-004 | 0.0000 | 33.1057 |

|   |         |             |        |         |
|---|---------|-------------|--------|---------|
| 5 | 56.7515 | 1.3000e-003 | 0.0000 | 56.7841 |
|---|---------|-------------|--------|---------|

| 02    | Total CO2 | CH4    | N2O | CO2e     |
|-------|-----------|--------|-----|----------|
| MT/yr |           |        |     |          |
| 2     | 301.3462  | 0.0717 | 0   | 303.1383 |
| 2     | 301.3462  | 0.0717 | 0   | 303.1383 |

| 02    | Total CO2 | CH4      | N2O | CO2e     |
|-------|-----------|----------|-----|----------|
| MT/yr |           |          |     |          |
|       | 0         | 0        | 0   | 0        |
| 2     | 130.8992  | 1.90E-03 | 0   | 130.9467 |
| 1     | 180.0611  | 4.58E-03 | 0   | 180.1756 |
| 3     | 310.9603  | 6.48E-03 | 0   | 311.1223 |

| 02    | Total CO2 | CH4    | N2O    | CO2e     |
|-------|-----------|--------|--------|----------|
| MT/yr |           |        |        |          |
| 8     | 301.3458  | 0.0717 | 0.0000 | 303.1380 |
| 8     | 301.3458  | 0.0717 | 0.0000 | 303.1380 |

| 02    | Total CO2 | CH4         | N2O    | CO2e     |
|-------|-----------|-------------|--------|----------|
| MT/yr |           |             |        |          |
|       | 0.0000    | 0.0000      | 0.0000 | 0.0000   |
| 2     | 130.8992  | 1.9000e-003 | 0.0000 | 130.9467 |
| 1     | 180.0611  | 4.5800e-003 | 0.0000 | 180.1756 |

|   |          |             |        |          |
|---|----------|-------------|--------|----------|
| 3 | 310.9603 | 6.4800e-003 | 0.0000 | 311.1223 |
|---|----------|-------------|--------|----------|

| 02    | Total CO2 | CH4    | N2O | CO2e     |
|-------|-----------|--------|-----|----------|
| MT/yr |           |        |     |          |
| 3     | 303.7223  | 0.0718 | 0   | 305.5179 |
| 3     | 303.7223  | 0.0718 | 0   | 305.5179 |

| 02    | Total CO2 | CH4      | N2O | CO2e     |
|-------|-----------|----------|-----|----------|
| MT/yr |           |          |     |          |
|       | 0         | 0        | 0   | 0        |
| 5     | 131.2645  | 1.79E-03 | 0   | 131.3092 |
| 5     | 174.5015  | 4.14E-03 | 0   | 174.605  |
| 3     | 305.766   | 5.93E-03 | 0   | 305.9142 |

| 02    | Total CO2 | CH4    | N2O    | CO2e     |
|-------|-----------|--------|--------|----------|
| MT/yr |           |        |        |          |
| 0     | 303.7220  | 0.0718 | 0.0000 | 305.5175 |
| 0     | 303.7220  | 0.0718 | 0.0000 | 305.5175 |

| 02    | Total CO2 | CH4         | N2O    | CO2e     |
|-------|-----------|-------------|--------|----------|
| MT/yr |           |             |        |          |
|       | 0.0000    | 0.0000      | 0.0000 | 0.0000   |
| 5     | 131.2645  | 1.7900e-003 | 0.0000 | 131.3092 |
| 5     | 174.5015  | 4.1400e-003 | 0.0000 | 174.6050 |

|   |          |             |        |          |
|---|----------|-------------|--------|----------|
| 0 | 305.7660 | 5.9300e-003 | 0.0000 | 305.9142 |
|---|----------|-------------|--------|----------|

| 02    | Total CO2 | CH4    | N2O | CO2e     |
|-------|-----------|--------|-----|----------|
| MT/yr |           |        |     |          |
| 9     | 302.6549  | 0.0711 | 0   | 304.4335 |
| 9     | 302.6549  | 0.0711 | 0   | 304.4335 |

| 02    | Total CO2 | CH4      | N2O | CO2e     |
|-------|-----------|----------|-----|----------|
| MT/yr |           |          |     |          |
|       | 0         | 0        | 0   | 0        |
| 4     | 130.1674  | 1.70E-03 | 0   | 130.2098 |
| 2     | 166.9912  | 3.72E-03 | 0   | 167.0843 |
| 6     | 297.1586  | 5.42E-03 | 0   | 297.2941 |

| 02    | Total CO2 | CH4    | N2O    | CO2e     |
|-------|-----------|--------|--------|----------|
| MT/yr |           |        |        |          |
| 5     | 302.6545  | 0.0711 | 0.0000 | 304.4331 |
| 5     | 302.6545  | 0.0711 | 0.0000 | 304.4331 |

| 02    | Total CO2 | CH4         | N2O    | CO2e     |
|-------|-----------|-------------|--------|----------|
| MT/yr |           |             |        |          |
|       | 0.0000    | 0.0000      | 0.0000 | 0.0000   |
| 4     | 130.1674  | 1.7000e-003 | 0.0000 | 130.2098 |
| 2     | 166.9912  | 3.7200e-003 | 0.0000 | 167.0843 |

|   |          |             |        |          |
|---|----------|-------------|--------|----------|
| 6 | 297.1586 | 5.4200e-003 | 0.0000 | 297.2941 |
|---|----------|-------------|--------|----------|

| 02    | Total CO2 | CH4      | N2O | CO2e    |
|-------|-----------|----------|-----|---------|
| MT/yr |           |          |     |         |
|       | 11.596    | 2.73E-03 | 0   | 11.6641 |
|       | 11.596    | 2.73E-03 | 0   | 11.6641 |

| 02    | Total CO2 | CH4      | N2O | CO2e    |
|-------|-----------|----------|-----|---------|
| MT/yr |           |          |     |         |
|       | 0         | 0        | 0   | 0       |
|       | 4.9668    | 6.00E-05 | 0   | 4.9684  |
|       | 6.1645    | 1.30E-04 | 0   | 6.1678  |
| 3     | 11.1313   | 1.90E-04 | 0   | 11.1361 |

| 02    | Total CO2 | CH4         | N2O    | CO2e    |
|-------|-----------|-------------|--------|---------|
| MT/yr |           |             |        |         |
|       | 11.5960   | 2.7300e-003 | 0.0000 | 11.6641 |
|       | 11.5960   | 2.7300e-003 | 0.0000 | 11.6641 |

| 02    | Total CO2 | CH4         | N2O    | CO2e   |
|-------|-----------|-------------|--------|--------|
| MT/yr |           |             |        |        |
|       | 0.0000    | 0.0000      | 0.0000 | 0.0000 |
|       | 4.9668    | 6.0000e-005 | 0.0000 | 4.9684 |
|       | 6.1645    | 1.3000e-004 | 0.0000 | 6.1678 |

|   |         |             |        |         |
|---|---------|-------------|--------|---------|
| 3 | 11.1313 | 1.9000e-004 | 0.0000 | 11.1361 |
|---|---------|-------------|--------|---------|

| 02    | Total CO2      | CH4           | N2O      | CO2e           |
|-------|----------------|---------------|----------|----------------|
| MT/yr |                |               |          |                |
| 3     | 62.7486        | 0.0183        | 0        | 63.2063        |
|       | 0              | 0             | 0        | 0              |
| 3     | <b>62.7486</b> | <b>0.0183</b> | <b>0</b> | <b>63.2063</b> |

| 02    | Total CO2      | CH4             | N2O      | CO2e           |
|-------|----------------|-----------------|----------|----------------|
| MT/yr |                |                 |          |                |
| 5     | 90.0245        | 7.70E-04        | 0        | 90.0437        |
|       | 3.0043         | 4.00E-05        | 0        | 3.0053         |
|       | 3.4904         | 7.00E-05        | 0        | 3.4923         |
| 3     | <b>96.5193</b> | <b>8.80E-04</b> | <b>0</b> | <b>96.5412</b> |

| 02    | Total CO2      | CH4           | N2O           | CO2e           |
|-------|----------------|---------------|---------------|----------------|
| MT/yr |                |               |               |                |
| 5     | 62.7485        | 0.0183        | 0.0000        | 63.2062        |
|       | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| 5     | <b>62.7485</b> | <b>0.0183</b> | <b>0.0000</b> | <b>63.2062</b> |

| 02    | Total CO2 | CH4         | N2O    | CO2e    |
|-------|-----------|-------------|--------|---------|
| MT/yr |           |             |        |         |
| 5     | 90.0245   | 7.7000e-004 | 0.0000 | 90.0437 |
|       | 3.0043    | 4.0000e-005 | 0.0000 | 3.0053  |



|          |                |                    |               |                |
|----------|----------------|--------------------|---------------|----------------|
|          | 3.4904         | 7.0000e-005        | 0.0000        | 3.4923         |
| <b>3</b> | <b>96.5193</b> | <b>8.8000e-004</b> | <b>0.0000</b> | <b>96.5412</b> |

| 02    | Total CO2     | CH4             | N2O      | CO2e          |
|-------|---------------|-----------------|----------|---------------|
| MT/yr |               |                 |          |               |
|       | 0             | 0               | 0        | 0             |
|       | 7.9151        | 4.30E-04        | 0        | 7.9259        |
|       | <b>7.9151</b> | <b>4.30E-04</b> | <b>0</b> | <b>7.9259</b> |

| 02    | Total CO2     | CH4             | N2O      | CO2e         |
|-------|---------------|-----------------|----------|--------------|
| MT/yr |               |                 |          |              |
|       | 0             | 0               | 0        | 0            |
|       | 0             | 0               | 0        | 0            |
|       | 7.6789        | 1.60E-04        | 0        | 7.683        |
|       | <b>7.6789</b> | <b>1.60E-04</b> | <b>0</b> | <b>7.683</b> |

| 02    | Total CO2     | CH4                | N2O           | CO2e          |
|-------|---------------|--------------------|---------------|---------------|
| MT/yr |               |                    |               |               |
|       | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
|       | 7.9151        | 4.3000e-004        | 0.0000        | 7.9259        |
|       | <b>7.9151</b> | <b>4.3000e-004</b> | <b>0.0000</b> | <b>7.9259</b> |

| 02    | Total CO2 | CH4 | N2O | CO2e |
|-------|-----------|-----|-----|------|
| MT/yr |           |     |     |      |

|               |                    |               |               |
|---------------|--------------------|---------------|---------------|
| 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| 7.6789        | 1.6000e-004        | 0.0000        | 7.6830        |
| <b>7.6789</b> | <b>1.6000e-004</b> | <b>0.0000</b> | <b>7.6830</b> |

---

| 02    | Total CO2  | CH4    | N2O    | CO2e       |
|-------|------------|--------|--------|------------|
| MT/yr |            |        |        |            |
| 07    | 2,497.1076 | 0.0655 | 0.0000 | 2,498.7447 |
| 07    | 2,497.1076 | 0.0655 | 0.0000 | 2,498.7447 |

|            |
|------------|
| Mitigated  |
| Annual VMT |
| 3,748,356  |
| 4,221,710  |
| 7,970,066  |

| Trip Purpose % |         |
|----------------|---------|
| Diverted       | Pass-by |
| 11             | 3       |
| 28             | 6       |
| 11             | 3       |

| UBUS     | MCY      | SBUS     | MH       |
|----------|----------|----------|----------|
| 0.000999 | 0.004800 | 0.000764 | 0.000939 |
| 0.000999 | 0.004800 | 0.000764 | 0.000939 |
| 0.000999 | 0.004800 | 0.000764 | 0.000939 |

---

| 02    | Total CO2 | CH4    | N2O         | CO2e     |
|-------|-----------|--------|-------------|----------|
| MT/yr |           |        |             |          |
| 3     | 344.8273  | 0.0476 | 9.8500e-003 | 348.9537 |
| 3     | 344.8273  | 0.0476 | 9.8500e-003 | 348.9537 |
| 1     | 0.0000    | 0.0000 | 0.0000      | 0.0000   |
| 1     | 0.0000    | 0.0000 | 0.0000      | 0.0000   |

| 2     | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|-------|---------------|---------------|---------------|---------------|---------------|
| MT/yr |               |               |               |               |               |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

| 2     | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|-------|---------------|---------------|---------------|---------------|---------------|
| MT/yr |               |               |               |               |               |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
|       | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

---

| 02    | Total CO2 | CH4    | N2O    | CO2e     |
|-------|-----------|--------|--------|----------|
| MT/yr |           |        |        |          |
| 0     | 396.2970  | 0.3704 | 0.0226 | 412.3048 |
| 0     | 396.2970  | 0.3704 | 0.0226 | 412.3048 |

| 02       | Total CO2       | CH4           | N2O           | CO2e            |
|----------|-----------------|---------------|---------------|-----------------|
| MT/yr    |                 |               |               |                 |
| )        | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| )        | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| i6       | 391.6626        | 0.3660        | 0.0226        | 407.5594        |
| i        | 4.6344          | 4.4400e-003   | 0.0000        | 4.7454          |
| <b>0</b> | <b>396.2970</b> | <b>0.3704</b> | <b>0.0226</b> | <b>412.3048</b> |

| 02 | Total CO2 | CH4 | N2O | CO2e |
|----|-----------|-----|-----|------|
|    |           |     |     |      |

| MT/yr |                 |               |               |                 |
|-------|-----------------|---------------|---------------|-----------------|
| )     | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| )     | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| 6     | 391.6626        | 0.3660        | 0.0226        | 407.5594        |
| f     | 4.6344          | 4.4400e-003   | 0.0000        | 4.7454          |
| 0     | <b>396.2970</b> | <b>0.3704</b> | <b>0.0226</b> | <b>412.3048</b> |

---

---

---

|             |           |
|-------------|-----------|
| Load Factor | Fuel Type |
|-------------|-----------|

---

|             |           |
|-------------|-----------|
| Load Factor | Fuel Type |
|-------------|-----------|

|           |
|-----------|
| Fuel Type |
|-----------|

---

**Dorado Oaks Construction - Health Risk Assessment  
Residential Cancer Risk & hazard Index Calculations**

| Component/Year     | Start Date | End Date   | Calendar Days | 3rd Trimester |
|--------------------|------------|------------|---------------|---------------|
| Subdivision - 2022 | 5/15/2022  | 12/31/2022 | 230           | 91            |
| Subdivision - 2023 | 1/1/2023   | 12/31/2023 | 365           | 0             |
| Subdivision - 2024 | 1/1/2024   | 12/31/2024 | 365           | 0             |
| Subdivision - 2025 | 1/1/2025   | 12/31/2025 | 365           | 0             |
| Subdivision - 2026 | 1/1/2026   | 7/7/2026   | 187           | 0             |
| SR 49 - 2022       | 5/15/2022  | 9/30/2022  | 138           | 91            |
| Fowler Lane - 2022 | 6/30/2022  | 7/31/2022  | 31            | 31            |

**Cancer Risk Factors**

|   | Abbreviation    | UOM                     | 3rd Trimester |
|---|-----------------|-------------------------|---------------|
| Daily Breathing Rate (95th %'ile)         | DBR             | L/kg-day                | 361           |
| Fraction Of Time At Home                  | FAH             | unitless                | 1             |
| Exposure Frequency                        | EF              | days/year               | 0.96          |
| Age Sensitivity Factor                    | ASF             | unitless                | 10            |
| Inhalation Absorption Factor              | A               | unitless                | 1             |
| Conversion Factor                         | CF <sub>1</sub> | m <sup>3</sup> /L       | 0.001         |
| Conversion Factor                         | CF <sub>2</sub> | µg/m <sup>3</sup>       | 0.001         |
| Cancer Potency Factor (diesel exhaust)    | CPF             | mg/kg-day <sup>-1</sup> | 1.1           |
| Averaging Time (for residential exposure) | AT              | years                   | 70.00         |

**Hazard Index**

|                    |     |                   |   |
|--------------------|-----|-------------------|---|
| Chronic Inhalation | REL | µg/m <sup>3</sup> | 5 |
|--------------------|-----|-------------------|---|

Intake Factor for Inhalation, IF (m<sup>3</sup>/kg-day) = DBR\*FAH\*EF\*ED\*ASF\*A\*CF/AT

| Component/Year     | 3rd Trimester | 0<2   | 2<9   |
|--------------------|---------------|-------|-------|
| Subdivision - 2022 | 0.012         | 0.057 | 0.000 |
| Subdivision - 2023 | 0.000         | 0.149 | 0.000 |
| Subdivision - 2024 | 0.000         | 0.092 | 0.013 |
| Subdivision - 2025 | 0.000         | 0.000 | 0.035 |
| Subdivision - 2026 | 0.000         | 0.000 | 0.018 |
| SR 49 - 2022       | 0.012         | 0.019 | 0.000 |
| Fowler Lane - 2022 | 0.004         | 0.000 | 0.000 |

|     | Cancer Risk | UTM X     | UTM Y      |
|-----|-------------|-----------|------------|
| MAX | 9.26        | 689712.61 | 4284806.28 |

Diesel Particulate Matter concentration, C<sub>DPM</sub> (µg/m<sup>3</sup>)

| X (UTM)   | Y (UTM)    | P <sub>i</sub> |        |        |
|-----------|------------|----------------|--------|--------|
|           |            | PAREA1         | PAREA1 | PAREA1 |
|           |            | 2022           | 2023   | 2024   |
| 689212.05 | 4283551.57 | 0.004          | 0.002  | 0.001  |
| 689262.05 | 4283551.57 | 0.005          | 0.002  | 0.002  |



|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 689312.05 | 4283551.57 | 0.006 | 0.002 | 0.002 |
| 689362.05 | 4283551.57 | 0.008 | 0.003 | 0.002 |
| 689412.05 | 4283551.57 | 0.010 | 0.003 | 0.003 |
| 689212.05 | 4283601.57 | 0.005 | 0.002 | 0.001 |
| 689262.05 | 4283601.57 | 0.005 | 0.002 | 0.002 |
| 689312.05 | 4283601.57 | 0.006 | 0.002 | 0.002 |
| 689362.05 | 4283601.57 | 0.008 | 0.003 | 0.002 |
| 689412.05 | 4283601.57 | 0.010 | 0.004 | 0.003 |
| 689262.05 | 4283651.57 | 0.006 | 0.002 | 0.002 |
| 689312.05 | 4283651.57 | 0.007 | 0.002 | 0.002 |
| 689362.05 | 4283651.57 | 0.008 | 0.003 | 0.003 |
| 689412.05 | 4283651.57 | 0.011 | 0.004 | 0.003 |
| 689212.05 | 4283701.57 | 0.005 | 0.002 | 0.002 |
| 689262.05 | 4283701.57 | 0.006 | 0.002 | 0.002 |
| 689312.05 | 4283701.57 | 0.007 | 0.003 | 0.002 |
| 689362.05 | 4283701.57 | 0.009 | 0.003 | 0.003 |
| 689412.05 | 4283701.57 | 0.012 | 0.004 | 0.004 |
| 689062.05 | 4283751.57 | 0.003 | 0.001 | 0.001 |
| 689212.05 | 4283751.57 | 0.005 | 0.002 | 0.002 |
| 689262.05 | 4283751.57 | 0.006 | 0.002 | 0.002 |
| 689312.05 | 4283751.57 | 0.007 | 0.003 | 0.002 |
| 689362.05 | 4283751.57 | 0.010 | 0.003 | 0.003 |
| 689262.05 | 4283801.57 | 0.006 | 0.002 | 0.002 |
| 689312.05 | 4283801.57 | 0.008 | 0.003 | 0.002 |
| 689362.05 | 4283801.57 | 0.010 | 0.004 | 0.003 |
| 689412.05 | 4283801.57 | 0.015 | 0.005 | 0.005 |
| 689212.05 | 4283851.57 | 0.006 | 0.002 | 0.002 |
| 689262.05 | 4283851.57 | 0.007 | 0.002 | 0.002 |
| 689312.05 | 4283851.57 | 0.008 | 0.003 | 0.003 |
| 689362.05 | 4283851.57 | 0.011 | 0.004 | 0.003 |
| 689412.05 | 4283851.57 | 0.016 | 0.005 | 0.005 |
| 689062.05 | 4283901.57 | 0.004 | 0.001 | 0.001 |
| 689112.05 | 4283901.57 | 0.004 | 0.002 | 0.001 |
| 689162.05 | 4283901.57 | 0.005 | 0.002 | 0.002 |
| 689212.05 | 4283901.57 | 0.006 | 0.002 | 0.002 |
| 689262.05 | 4283901.57 | 0.007 | 0.002 | 0.002 |
| 689312.05 | 4283901.57 | 0.009 | 0.003 | 0.003 |
| 689362.05 | 4283901.57 | 0.011 | 0.004 | 0.004 |
| 689412.05 | 4283901.57 | 0.017 | 0.006 | 0.005 |
| 689062.05 | 4283951.57 | 0.004 | 0.001 | 0.001 |
| 689112.05 | 4283951.57 | 0.005 | 0.002 | 0.001 |
| 689162.05 | 4283951.57 | 0.005 | 0.002 | 0.002 |
| 689212.05 | 4283951.57 | 0.006 | 0.002 | 0.002 |
| 689262.05 | 4283951.57 | 0.007 | 0.003 | 0.002 |
| 689312.05 | 4283951.57 | 0.009 | 0.003 | 0.003 |
| 689362.05 | 4283951.57 | 0.012 | 0.004 | 0.004 |
| 689412.05 | 4283951.57 | 0.018 | 0.006 | 0.005 |

|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 689062.05 | 4284001.57 | 0.004 | 0.001 | 0.001 |
| 689112.05 | 4284001.57 | 0.005 | 0.002 | 0.001 |
| 689162.05 | 4284001.57 | 0.005 | 0.002 | 0.002 |
| 689212.05 | 4284001.57 | 0.006 | 0.002 | 0.002 |
| 689262.05 | 4284001.57 | 0.008 | 0.003 | 0.002 |
| 689312.05 | 4284001.57 | 0.010 | 0.003 | 0.003 |
| 689362.05 | 4284001.57 | 0.013 | 0.004 | 0.004 |
| 689412.05 | 4284001.57 | 0.019 | 0.006 | 0.006 |
| 689062.05 | 4284051.57 | 0.004 | 0.001 | 0.001 |
| 689112.05 | 4284051.57 | 0.005 | 0.002 | 0.001 |
| 689162.05 | 4284051.57 | 0.006 | 0.002 | 0.002 |
| 689212.05 | 4284051.57 | 0.007 | 0.002 | 0.002 |
| 689262.05 | 4284051.57 | 0.008 | 0.003 | 0.002 |
| 689312.05 | 4284051.57 | 0.010 | 0.004 | 0.003 |
| 689362.05 | 4284051.57 | 0.013 | 0.005 | 0.004 |
| 689412.05 | 4284051.57 | 0.020 | 0.007 | 0.006 |
| 689112.05 | 4284101.57 | 0.005 | 0.002 | 0.002 |
| 689162.05 | 4284101.57 | 0.006 | 0.002 | 0.002 |
| 689212.05 | 4284101.57 | 0.007 | 0.002 | 0.002 |
| 689262.05 | 4284101.57 | 0.008 | 0.003 | 0.003 |
| 689312.05 | 4284101.57 | 0.010 | 0.004 | 0.003 |
| 689362.05 | 4284101.57 | 0.014 | 0.005 | 0.004 |
| 689412.05 | 4284101.57 | 0.022 | 0.008 | 0.007 |
| 689162.05 | 4284151.57 | 0.006 | 0.002 | 0.002 |
| 689212.05 | 4284151.57 | 0.007 | 0.002 | 0.002 |
| 689262.05 | 4284151.57 | 0.009 | 0.003 | 0.003 |
| 689312.05 | 4284151.57 | 0.011 | 0.004 | 0.003 |
| 689362.05 | 4284151.57 | 0.014 | 0.005 | 0.004 |
| 689412.05 | 4284151.57 | 0.025 | 0.009 | 0.008 |
| 689212.05 | 4284201.57 | 0.007 | 0.003 | 0.002 |
| 689262.05 | 4284201.57 | 0.009 | 0.003 | 0.003 |
| 689312.05 | 4284201.57 | 0.011 | 0.004 | 0.003 |
| 689362.05 | 4284201.57 | 0.017 | 0.006 | 0.005 |
| 689412.05 | 4284201.57 | 0.029 | 0.010 | 0.009 |
| 689262.05 | 4284251.57 | 0.009 | 0.003 | 0.003 |
| 689312.05 | 4284251.57 | 0.012 | 0.004 | 0.004 |
| 689062.05 | 4284301.57 | 0.004 | 0.002 | 0.001 |
| 689112.05 | 4284301.57 | 0.005 | 0.002 | 0.002 |
| 689162.05 | 4284301.57 | 0.006 | 0.002 | 0.002 |
| 689062.05 | 4284451.57 | 0.004 | 0.002 | 0.001 |
| 689062.05 | 4284501.57 | 0.004 | 0.002 | 0.001 |
| 689112.05 | 4284501.57 | 0.005 | 0.002 | 0.002 |
| 689062.05 | 4284551.57 | 0.005 | 0.002 | 0.001 |
| 689112.05 | 4284551.57 | 0.005 | 0.002 | 0.002 |
| 689162.05 | 4284551.57 | 0.006 | 0.002 | 0.002 |
| 689969.65 | 4283460.34 | 0.025 | 0.009 | 0.008 |
| 690019.65 | 4283460.34 | 0.017 | 0.006 | 0.005 |

|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 690069.65 | 4283460.34 | 0.013 | 0.004 | 0.004 |
| 690119.65 | 4283460.34 | 0.011 | 0.004 | 0.003 |
| 690169.65 | 4283460.34 | 0.009 | 0.003 | 0.003 |
| 690219.65 | 4283460.34 | 0.008 | 0.003 | 0.002 |
| 689969.65 | 4283510.34 | 0.024 | 0.008 | 0.008 |
| 690019.65 | 4283510.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4283510.34 | 0.013 | 0.005 | 0.004 |
| 690119.65 | 4283510.34 | 0.011 | 0.004 | 0.003 |
| 690169.65 | 4283510.34 | 0.009 | 0.003 | 0.003 |
| 690219.65 | 4283510.34 | 0.008 | 0.003 | 0.002 |
| 689919.65 | 4283560.34 | 0.036 | 0.012 | 0.011 |
| 689969.65 | 4283560.34 | 0.023 | 0.008 | 0.007 |
| 690019.65 | 4283560.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4283560.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4283560.34 | 0.011 | 0.004 | 0.003 |
| 690169.65 | 4283560.34 | 0.009 | 0.003 | 0.003 |
| 690219.65 | 4283560.34 | 0.008 | 0.003 | 0.002 |
| 689919.65 | 4283610.34 | 0.032 | 0.011 | 0.010 |
| 689969.65 | 4283610.34 | 0.023 | 0.008 | 0.007 |
| 690019.65 | 4283610.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4283610.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4283610.34 | 0.012 | 0.004 | 0.004 |
| 690169.65 | 4283610.34 | 0.010 | 0.003 | 0.003 |
| 690219.65 | 4283610.34 | 0.008 | 0.003 | 0.002 |
| 689919.65 | 4283660.34 | 0.031 | 0.011 | 0.010 |
| 689969.65 | 4283660.34 | 0.022 | 0.008 | 0.007 |
| 690019.65 | 4283660.34 | 0.018 | 0.006 | 0.005 |
| 690069.65 | 4283660.34 | 0.015 | 0.005 | 0.005 |
| 690119.65 | 4283660.34 | 0.012 | 0.004 | 0.004 |
| 690169.65 | 4283660.34 | 0.009 | 0.003 | 0.003 |
| 690219.65 | 4283660.34 | 0.008 | 0.003 | 0.002 |
| 689869.65 | 4283710.34 | 0.050 | 0.017 | 0.015 |
| 689919.65 | 4283710.34 | 0.030 | 0.010 | 0.009 |
| 689969.65 | 4283710.34 | 0.022 | 0.008 | 0.007 |
| 690019.65 | 4283710.34 | 0.018 | 0.006 | 0.006 |
| 690069.65 | 4283710.34 | 0.015 | 0.005 | 0.005 |
| 690119.65 | 4283710.34 | 0.012 | 0.004 | 0.004 |
| 690169.65 | 4283710.34 | 0.009 | 0.003 | 0.003 |
| 690219.65 | 4283710.34 | 0.008 | 0.003 | 0.002 |
| 689919.65 | 4283760.34 | 0.029 | 0.010 | 0.009 |
| 689969.65 | 4283760.34 | 0.022 | 0.008 | 0.007 |
| 690019.65 | 4283760.34 | 0.018 | 0.006 | 0.005 |
| 690069.65 | 4283760.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4283760.34 | 0.011 | 0.004 | 0.004 |
| 690169.65 | 4283760.34 | 0.009 | 0.003 | 0.003 |
| 690219.65 | 4283760.34 | 0.008 | 0.003 | 0.002 |
| 689919.65 | 4283810.34 | 0.029 | 0.010 | 0.009 |

|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 689969.65 | 4283810.34 | 0.021 | 0.007 | 0.007 |
| 690019.65 | 4283810.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4283810.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4283810.34 | 0.012 | 0.004 | 0.004 |
| 690169.65 | 4283810.34 | 0.010 | 0.003 | 0.003 |
| 690219.65 | 4283810.34 | 0.008 | 0.003 | 0.003 |
| 689919.65 | 4283860.34 | 0.029 | 0.010 | 0.009 |
| 689969.65 | 4283860.34 | 0.021 | 0.007 | 0.007 |
| 690019.65 | 4283860.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4283860.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4283860.34 | 0.012 | 0.004 | 0.004 |
| 690169.65 | 4283860.34 | 0.010 | 0.003 | 0.003 |
| 690219.65 | 4283860.34 | 0.008 | 0.003 | 0.003 |
| 689919.65 | 4283910.34 | 0.028 | 0.010 | 0.009 |
| 689969.65 | 4283910.34 | 0.021 | 0.007 | 0.006 |
| 690019.65 | 4283910.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4283910.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4283910.34 | 0.012 | 0.004 | 0.004 |
| 690169.65 | 4283910.34 | 0.010 | 0.003 | 0.003 |
| 690219.65 | 4283910.34 | 0.008 | 0.003 | 0.003 |
| 689919.65 | 4283960.34 | 0.028 | 0.010 | 0.009 |
| 689969.65 | 4283960.34 | 0.021 | 0.007 | 0.007 |
| 690019.65 | 4283960.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4283960.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4283960.34 | 0.012 | 0.004 | 0.004 |
| 690169.65 | 4283960.34 | 0.010 | 0.003 | 0.003 |
| 690219.65 | 4283960.34 | 0.008 | 0.003 | 0.002 |
| 689919.65 | 4284010.34 | 0.028 | 0.010 | 0.009 |
| 689969.65 | 4284010.34 | 0.021 | 0.007 | 0.006 |
| 690019.65 | 4284010.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4284010.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4284010.34 | 0.012 | 0.004 | 0.004 |
| 690169.65 | 4284010.34 | 0.010 | 0.003 | 0.003 |
| 690219.65 | 4284010.34 | 0.008 | 0.003 | 0.002 |
| 689919.65 | 4284060.34 | 0.027 | 0.010 | 0.008 |
| 689969.65 | 4284060.34 | 0.021 | 0.007 | 0.006 |
| 690019.65 | 4284060.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4284060.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4284060.34 | 0.012 | 0.004 | 0.004 |
| 690169.65 | 4284060.34 | 0.010 | 0.003 | 0.003 |
| 690219.65 | 4284060.34 | 0.008 | 0.003 | 0.002 |
| 689969.65 | 4284110.34 | 0.021 | 0.007 | 0.007 |
| 690019.65 | 4284110.34 | 0.018 | 0.006 | 0.005 |
| 690069.65 | 4284110.34 | 0.016 | 0.005 | 0.005 |
| 690119.65 | 4284110.34 | 0.013 | 0.004 | 0.004 |
| 690169.65 | 4284110.34 | 0.010 | 0.003 | 0.003 |
| 690219.65 | 4284110.34 | 0.008 | 0.003 | 0.003 |

|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 689969.65 | 4284160.34 | 0.022 | 0.008 | 0.007 |
| 690019.65 | 4284160.34 | 0.019 | 0.007 | 0.006 |
| 690069.65 | 4284160.34 | 0.016 | 0.005 | 0.005 |
| 690119.65 | 4284160.34 | 0.013 | 0.004 | 0.004 |
| 690169.65 | 4284160.34 | 0.011 | 0.004 | 0.003 |
| 690219.65 | 4284160.34 | 0.008 | 0.003 | 0.003 |
| 689919.65 | 4284210.34 | 0.028 | 0.010 | 0.009 |
| 689969.65 | 4284210.34 | 0.022 | 0.008 | 0.007 |
| 690019.65 | 4284210.34 | 0.019 | 0.007 | 0.006 |
| 690069.65 | 4284210.34 | 0.016 | 0.005 | 0.005 |
| 690119.65 | 4284210.34 | 0.013 | 0.004 | 0.004 |
| 690169.65 | 4284210.34 | 0.011 | 0.004 | 0.003 |
| 690219.65 | 4284210.34 | 0.009 | 0.003 | 0.003 |
| 689869.65 | 4284260.34 | 0.039 | 0.014 | 0.012 |
| 689919.65 | 4284260.34 | 0.027 | 0.009 | 0.008 |
| 689969.65 | 4284260.34 | 0.022 | 0.008 | 0.007 |
| 690019.65 | 4284260.34 | 0.018 | 0.006 | 0.006 |
| 690069.65 | 4284260.34 | 0.015 | 0.005 | 0.005 |
| 690119.65 | 4284260.34 | 0.013 | 0.004 | 0.004 |
| 690169.65 | 4284260.34 | 0.011 | 0.004 | 0.003 |
| 690219.65 | 4284260.34 | 0.009 | 0.003 | 0.003 |
| 689919.65 | 4284310.34 | 0.027 | 0.009 | 0.008 |
| 689969.65 | 4284310.34 | 0.021 | 0.007 | 0.007 |
| 690019.65 | 4284310.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4284310.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4284310.34 | 0.012 | 0.004 | 0.004 |
| 690169.65 | 4284310.34 | 0.010 | 0.004 | 0.003 |
| 690219.65 | 4284310.34 | 0.009 | 0.003 | 0.003 |
| 689919.65 | 4284360.34 | 0.029 | 0.010 | 0.009 |
| 689969.65 | 4284360.34 | 0.022 | 0.008 | 0.007 |
| 690019.65 | 4284360.34 | 0.017 | 0.006 | 0.005 |
| 690069.65 | 4284360.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4284360.34 | 0.011 | 0.004 | 0.004 |
| 690169.65 | 4284360.34 | 0.010 | 0.004 | 0.003 |
| 690219.65 | 4284360.34 | 0.008 | 0.003 | 0.003 |
| 689919.65 | 4284410.34 | 0.030 | 0.011 | 0.009 |
| 689969.65 | 4284410.34 | 0.022 | 0.008 | 0.007 |
| 690019.65 | 4284410.34 | 0.018 | 0.006 | 0.006 |
| 690069.65 | 4284410.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4284410.34 | 0.011 | 0.004 | 0.004 |
| 690169.65 | 4284410.34 | 0.010 | 0.003 | 0.003 |
| 690219.65 | 4284410.34 | 0.008 | 0.003 | 0.003 |
| 689919.65 | 4284460.34 | 0.034 | 0.012 | 0.010 |
| 689969.65 | 4284460.34 | 0.024 | 0.008 | 0.007 |
| 690019.65 | 4284460.34 | 0.018 | 0.006 | 0.006 |
| 690069.65 | 4284460.34 | 0.014 | 0.005 | 0.004 |
| 690119.65 | 4284460.34 | 0.011 | 0.004 | 0.003 |

|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 690169.65 | 4284460.34 | 0.010 | 0.003 | 0.003 |
| 690219.65 | 4284460.34 | 0.008 | 0.003 | 0.002 |
| 689243.81 | 4283030.64 | 0.003 | 0.001 | 0.001 |
| 689293.81 | 4283030.64 | 0.003 | 0.001 | 0.001 |
| 689343.81 | 4283030.64 | 0.004 | 0.001 | 0.001 |
| 689393.81 | 4283030.64 | 0.004 | 0.001 | 0.001 |
| 689443.81 | 4283030.64 | 0.005 | 0.002 | 0.001 |
| 689493.81 | 4283030.64 | 0.005 | 0.002 | 0.002 |
| 689543.81 | 4283030.64 | 0.006 | 0.002 | 0.002 |
| 689243.81 | 4283080.64 | 0.003 | 0.001 | 0.001 |
| 689293.81 | 4283080.64 | 0.003 | 0.001 | 0.001 |
| 689343.81 | 4283080.64 | 0.004 | 0.001 | 0.001 |
| 689393.81 | 4283080.64 | 0.004 | 0.002 | 0.001 |
| 689443.81 | 4283080.64 | 0.005 | 0.002 | 0.002 |
| 689493.81 | 4283080.64 | 0.006 | 0.002 | 0.002 |
| 689543.81 | 4283080.64 | 0.007 | 0.003 | 0.002 |
| 689243.81 | 4283130.64 | 0.003 | 0.001 | 0.001 |
| 689293.81 | 4283130.64 | 0.004 | 0.001 | 0.001 |
| 689343.81 | 4283130.64 | 0.004 | 0.001 | 0.001 |
| 689393.81 | 4283130.64 | 0.005 | 0.002 | 0.001 |
| 689443.81 | 4283130.64 | 0.006 | 0.002 | 0.002 |
| 689493.81 | 4283130.64 | 0.007 | 0.002 | 0.002 |
| 689543.81 | 4283130.64 | 0.009 | 0.003 | 0.003 |
| 689243.81 | 4283180.64 | 0.003 | 0.001 | 0.001 |
| 689293.81 | 4283180.64 | 0.004 | 0.001 | 0.001 |
| 689343.81 | 4283180.64 | 0.004 | 0.002 | 0.001 |
| 689393.81 | 4283180.64 | 0.005 | 0.002 | 0.002 |
| 689443.81 | 4283180.64 | 0.006 | 0.002 | 0.002 |
| 689493.81 | 4283180.64 | 0.009 | 0.003 | 0.003 |
| 689543.81 | 4283180.64 | 0.013 | 0.004 | 0.004 |
| 689243.81 | 4283230.64 | 0.003 | 0.001 | 0.001 |
| 689293.81 | 4283230.64 | 0.004 | 0.001 | 0.001 |
| 689343.81 | 4283230.64 | 0.005 | 0.002 | 0.001 |
| 689393.81 | 4283230.64 | 0.005 | 0.002 | 0.002 |
| 689443.81 | 4283230.64 | 0.007 | 0.002 | 0.002 |
| 689243.81 | 4283280.64 | 0.004 | 0.001 | 0.001 |
| 689293.81 | 4283280.64 | 0.004 | 0.001 | 0.001 |
| 689343.81 | 4283280.64 | 0.005 | 0.002 | 0.001 |
| 689393.81 | 4283280.64 | 0.006 | 0.002 | 0.002 |
| 689443.81 | 4283280.64 | 0.007 | 0.003 | 0.002 |
| 689243.81 | 4283330.64 | 0.004 | 0.001 | 0.001 |
| 689293.81 | 4283330.64 | 0.004 | 0.002 | 0.001 |
| 689343.81 | 4283330.64 | 0.005 | 0.002 | 0.002 |
| 689393.81 | 4283330.64 | 0.006 | 0.002 | 0.002 |
| 689443.81 | 4283330.64 | 0.009 | 0.003 | 0.003 |
| 689493.81 | 4283330.64 | 0.015 | 0.005 | 0.005 |
| 689243.81 | 4283380.64 | 0.004 | 0.001 | 0.001 |

|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 689293.81 | 4283380.64 | 0.005 | 0.002 | 0.001 |
| 689343.81 | 4283380.64 | 0.006 | 0.002 | 0.002 |
| 689393.81 | 4283380.64 | 0.007 | 0.002 | 0.002 |
| 689443.81 | 4283380.64 | 0.009 | 0.003 | 0.003 |
| 689243.81 | 4283430.64 | 0.004 | 0.001 | 0.001 |
| 689293.81 | 4283430.64 | 0.005 | 0.002 | 0.002 |
| 689343.81 | 4283430.64 | 0.006 | 0.002 | 0.002 |
| 689393.81 | 4283430.64 | 0.007 | 0.003 | 0.002 |
| 689443.81 | 4283430.64 | 0.010 | 0.003 | 0.003 |
| 689243.81 | 4283480.64 | 0.004 | 0.002 | 0.001 |
| 689293.81 | 4283480.64 | 0.005 | 0.002 | 0.002 |
| 689343.81 | 4283480.64 | 0.006 | 0.002 | 0.002 |
| 689393.81 | 4283480.64 | 0.008 | 0.003 | 0.002 |
| 689443.81 | 4283480.64 | 0.010 | 0.004 | 0.003 |
| 689493.81 | 4283480.64 | 0.014 | 0.005 | 0.004 |
| 689584.29 | 4283182    | 0.015 | 0.005 | 0.005 |
| 689626.46 | 4283180.77 | 0.016 | 0.006 | 0.005 |
| 689581.46 | 4283081.75 | 0.008 | 0.003 | 0.003 |
| 689586.89 | 4283032.14 | 0.007 | 0.002 | 0.002 |
| 689628.89 | 4283033.23 | 0.008 | 0.003 | 0.002 |
| 690123.39 | 4283039.13 | 0.009 | 0.003 | 0.003 |
| 690123.39 | 4283089.13 | 0.010 | 0.003 | 0.003 |
| 690173.39 | 4283089.13 | 0.009 | 0.003 | 0.003 |
| 689923.39 | 4283139.13 | 0.019 | 0.007 | 0.006 |
| 689950.32 | 4283366.56 | 0.034 | 0.012 | 0.011 |
| 690000.32 | 4283366.56 | 0.020 | 0.007 | 0.006 |
| 689946.72 | 4283397.81 | 0.036 | 0.013 | 0.011 |
| 689990.74 | 4283391.96 | 0.022 | 0.008 | 0.007 |
| 690047.5  | 4284607.9  | 0.016 | 0.005 | 0.005 |
| 690097.5  | 4284607.9  | 0.010 | 0.004 | 0.003 |
| 690147.5  | 4284607.9  | 0.008 | 0.003 | 0.003 |
| 690197.5  | 4284607.9  | 0.007 | 0.002 | 0.002 |
| 690047.5  | 4284657.9  | 0.015 | 0.005 | 0.005 |
| 690097.5  | 4284657.9  | 0.010 | 0.003 | 0.003 |
| 690147.5  | 4284657.9  | 0.008 | 0.003 | 0.002 |
| 690197.5  | 4284657.9  | 0.007 | 0.002 | 0.002 |
| 689997.5  | 4284707.9  | 0.023 | 0.008 | 0.007 |
| 690097.5  | 4284707.9  | 0.010 | 0.003 | 0.003 |
| 690147.5  | 4284707.9  | 0.008 | 0.003 | 0.002 |
| 690197.5  | 4284707.9  | 0.007 | 0.002 | 0.002 |
| 690047.5  | 4284757.9  | 0.013 | 0.005 | 0.004 |
| 690097.5  | 4284757.9  | 0.010 | 0.003 | 0.003 |
| 690147.5  | 4284757.9  | 0.008 | 0.003 | 0.002 |
| 690197.5  | 4284757.9  | 0.006 | 0.002 | 0.002 |
| 689947.5  | 4284807.9  | 0.019 | 0.007 | 0.006 |
| 690047.5  | 4284807.9  | 0.012 | 0.004 | 0.004 |
| 690097.5  | 4284807.9  | 0.009 | 0.003 | 0.003 |

|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 690147.5  | 4284807.9  | 0.007 | 0.003 | 0.002 |
| 690197.5  | 4284807.9  | 0.006 | 0.002 | 0.002 |
| 689897.5  | 4284857.9  | 0.019 | 0.007 | 0.006 |
| 689947.5  | 4284857.9  | 0.016 | 0.006 | 0.005 |
| 689997.5  | 4284857.9  | 0.014 | 0.005 | 0.004 |
| 690047.5  | 4284857.9  | 0.011 | 0.004 | 0.003 |
| 690097.5  | 4284857.9  | 0.009 | 0.003 | 0.003 |
| 690147.5  | 4284857.9  | 0.007 | 0.003 | 0.002 |
| 690197.5  | 4284857.9  | 0.006 | 0.002 | 0.002 |
| 690247.5  | 4284857.9  | 0.006 | 0.002 | 0.002 |
| 689847.5  | 4284907.9  | 0.018 | 0.006 | 0.006 |
| 689897.5  | 4284907.9  | 0.016 | 0.006 | 0.005 |
| 689947.5  | 4284907.9  | 0.014 | 0.005 | 0.004 |
| 689997.5  | 4284907.9  | 0.012 | 0.004 | 0.004 |
| 690047.5  | 4284907.9  | 0.010 | 0.004 | 0.003 |
| 690097.5  | 4284907.9  | 0.008 | 0.003 | 0.003 |
| 690147.5  | 4284907.9  | 0.007 | 0.003 | 0.002 |
| 690197.5  | 4284907.9  | 0.006 | 0.002 | 0.002 |
| 690247.5  | 4284907.9  | 0.005 | 0.002 | 0.002 |
| 689797.5  | 4284957.9  | 0.017 | 0.006 | 0.005 |
| 689847.5  | 4284957.9  | 0.016 | 0.006 | 0.005 |
| 689897.5  | 4284957.9  | 0.014 | 0.005 | 0.004 |
| 689947.5  | 4284957.9  | 0.013 | 0.004 | 0.004 |
| 689997.5  | 4284957.9  | 0.011 | 0.004 | 0.003 |
| 690047.5  | 4284957.9  | 0.009 | 0.003 | 0.003 |
| 690097.5  | 4284957.9  | 0.008 | 0.003 | 0.002 |
| 690147.5  | 4284957.9  | 0.007 | 0.002 | 0.002 |
| 690197.5  | 4284957.9  | 0.006 | 0.002 | 0.002 |
| 690247.5  | 4284957.9  | 0.005 | 0.002 | 0.002 |
| 689897.5  | 4285007.9  | 0.013 | 0.004 | 0.004 |
| 689947.5  | 4285007.9  | 0.011 | 0.004 | 0.003 |
| 689997.5  | 4285007.9  | 0.010 | 0.003 | 0.003 |
| 690047.5  | 4285007.9  | 0.009 | 0.003 | 0.003 |
| 690097.5  | 4285007.9  | 0.008 | 0.003 | 0.002 |
| 690147.5  | 4285007.9  | 0.007 | 0.002 | 0.002 |
| 690197.5  | 4285007.9  | 0.006 | 0.002 | 0.002 |
| 690247.5  | 4285007.9  | 0.005 | 0.002 | 0.002 |
| 689897.5  | 4285057.9  | 0.011 | 0.004 | 0.004 |
| 689947.5  | 4285057.9  | 0.010 | 0.004 | 0.003 |
| 689997.5  | 4285057.9  | 0.009 | 0.003 | 0.003 |
| 690047.5  | 4285057.9  | 0.008 | 0.003 | 0.002 |
| 690097.5  | 4285057.9  | 0.007 | 0.002 | 0.002 |
| 690147.5  | 4285057.9  | 0.006 | 0.002 | 0.002 |
| 690197.5  | 4285057.9  | 0.006 | 0.002 | 0.002 |
| 690247.5  | 4285057.9  | 0.005 | 0.002 | 0.002 |
| 689970.15 | 4284514.09 | 0.027 | 0.009 | 0.008 |
| 690020.15 | 4284514.09 | 0.019 | 0.007 | 0.006 |



|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 690070.15 | 4284514.09 | 0.014 | 0.005 | 0.004 |
| 690120.15 | 4284514.09 | 0.011 | 0.004 | 0.003 |
| 690170.15 | 4284514.09 | 0.009 | 0.003 | 0.003 |
| 690220.15 | 4284514.09 | 0.007 | 0.003 | 0.002 |
| 690020.15 | 4284564.09 | 0.020 | 0.007 | 0.006 |
| 690070.15 | 4284564.09 | 0.014 | 0.005 | 0.004 |
| 690120.15 | 4284564.09 | 0.010 | 0.003 | 0.003 |
| 690170.15 | 4284564.09 | 0.008 | 0.003 | 0.003 |
| 690220.15 | 4284564.09 | 0.007 | 0.002 | 0.002 |
| 689216.55 | 4284758.96 | 0.006 | 0.002 | 0.002 |
| 689266.55 | 4284758.96 | 0.007 | 0.003 | 0.002 |
| 689316.55 | 4284758.96 | 0.008 | 0.003 | 0.003 |
| 689366.55 | 4284758.96 | 0.010 | 0.003 | 0.003 |
| 689416.55 | 4284758.96 | 0.012 | 0.004 | 0.004 |
| 689466.55 | 4284758.96 | 0.014 | 0.005 | 0.004 |
| 689516.55 | 4284758.96 | 0.019 | 0.007 | 0.006 |
| 689216.55 | 4284808.96 | 0.006 | 0.002 | 0.002 |
| 689266.55 | 4284808.96 | 0.007 | 0.002 | 0.002 |
| 689316.55 | 4284808.96 | 0.008 | 0.003 | 0.002 |
| 689366.55 | 4284808.96 | 0.009 | 0.003 | 0.003 |
| 689416.55 | 4284808.96 | 0.011 | 0.004 | 0.003 |
| 689566.55 | 4284808.96 | 0.022 | 0.008 | 0.007 |
| 689216.55 | 4284858.96 | 0.006 | 0.002 | 0.002 |
| 689266.55 | 4284858.96 | 0.007 | 0.002 | 0.002 |
| 689316.55 | 4284858.96 | 0.008 | 0.003 | 0.002 |
| 689366.55 | 4284858.96 | 0.009 | 0.003 | 0.003 |
| 689466.55 | 4284858.96 | 0.012 | 0.004 | 0.004 |
| 689516.55 | 4284858.96 | 0.015 | 0.005 | 0.005 |
| 689566.55 | 4284858.96 | 0.020 | 0.007 | 0.006 |
| 689666.55 | 4284858.96 | 0.031 | 0.011 | 0.010 |
| 689266.55 | 4284908.96 | 0.006 | 0.002 | 0.002 |
| 689316.55 | 4284908.96 | 0.007 | 0.003 | 0.002 |
| 689366.55 | 4284908.96 | 0.008 | 0.003 | 0.003 |
| 689416.55 | 4284908.96 | 0.010 | 0.003 | 0.003 |
| 689466.55 | 4284908.96 | 0.011 | 0.004 | 0.004 |
| 689616.55 | 4284908.96 | 0.021 | 0.007 | 0.007 |
| 689216.55 | 4284958.96 | 0.005 | 0.002 | 0.002 |
| 689366.55 | 4284958.96 | 0.008 | 0.003 | 0.002 |
| 689416.55 | 4284958.96 | 0.009 | 0.003 | 0.003 |
| 689466.55 | 4284958.96 | 0.011 | 0.004 | 0.003 |
| 689516.55 | 4284958.96 | 0.013 | 0.004 | 0.004 |
| 689566.55 | 4284958.96 | 0.015 | 0.005 | 0.005 |
| 689616.55 | 4284958.96 | 0.017 | 0.006 | 0.005 |
| 689216.55 | 4285008.96 | 0.005 | 0.002 | 0.002 |
| 689366.55 | 4285008.96 | 0.007 | 0.003 | 0.002 |
| 689416.55 | 4285008.96 | 0.008 | 0.003 | 0.003 |
| 689566.55 | 4285008.96 | 0.013 | 0.005 | 0.004 |

|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 689712.61 | 4284806.28 | 0.040 | 0.014 | 0.012 |
| 689665.5  | 4284822.91 | 0.038 | 0.013 | 0.012 |
| 689153.77 | 4285125.11 | 0.005 | 0.002 | 0.001 |
| 689203.77 | 4285125.11 | 0.005 | 0.002 | 0.002 |
| 689303.77 | 4285125.11 | 0.006 | 0.002 | 0.002 |
| 689353.77 | 4285125.11 | 0.007 | 0.002 | 0.002 |
| 689603.77 | 4285125.11 | 0.011 | 0.004 | 0.003 |
| 689653.77 | 4285125.11 | 0.012 | 0.004 | 0.004 |
| 689703.77 | 4285125.11 | 0.012 | 0.004 | 0.004 |
| 689803.77 | 4285125.11 | 0.012 | 0.004 | 0.004 |
| 689853.77 | 4285125.11 | 0.011 | 0.004 | 0.003 |
| 689903.77 | 4285125.11 | 0.010 | 0.004 | 0.003 |
| 689953.77 | 4285125.11 | 0.009 | 0.003 | 0.003 |
| 690003.77 | 4285125.11 | 0.008 | 0.003 | 0.003 |
| 690103.77 | 4285125.11 | 0.007 | 0.002 | 0.002 |
| 689153.77 | 4285175.11 | 0.004 | 0.002 | 0.001 |
| 689203.77 | 4285175.11 | 0.005 | 0.002 | 0.001 |
| 689303.77 | 4285175.11 | 0.006 | 0.002 | 0.002 |
| 689353.77 | 4285175.11 | 0.006 | 0.002 | 0.002 |
| 689603.77 | 4285175.11 | 0.010 | 0.003 | 0.003 |
| 689653.77 | 4285175.11 | 0.010 | 0.004 | 0.003 |
| 689703.77 | 4285175.11 | 0.010 | 0.004 | 0.003 |
| 689753.77 | 4285175.11 | 0.010 | 0.004 | 0.003 |
| 689803.77 | 4285175.11 | 0.010 | 0.004 | 0.003 |
| 689853.77 | 4285175.11 | 0.010 | 0.003 | 0.003 |
| 689903.77 | 4285175.11 | 0.009 | 0.003 | 0.003 |
| 689953.77 | 4285175.11 | 0.009 | 0.003 | 0.003 |
| 690003.77 | 4285175.11 | 0.008 | 0.003 | 0.002 |
| 689153.77 | 4285225.11 | 0.004 | 0.001 | 0.001 |
| 689203.77 | 4285225.11 | 0.005 | 0.002 | 0.001 |
| 689253.77 | 4285225.11 | 0.005 | 0.002 | 0.002 |
| 689303.77 | 4285225.11 | 0.005 | 0.002 | 0.002 |
| 689353.77 | 4285225.11 | 0.006 | 0.002 | 0.002 |
| 689403.77 | 4285225.11 | 0.006 | 0.002 | 0.002 |
| 689453.77 | 4285225.11 | 0.007 | 0.002 | 0.002 |
| 689503.77 | 4285225.11 | 0.008 | 0.003 | 0.002 |
| 689553.77 | 4285225.11 | 0.008 | 0.003 | 0.003 |
| 689603.77 | 4285225.11 | 0.009 | 0.003 | 0.003 |
| 689653.77 | 4285225.11 | 0.009 | 0.003 | 0.003 |
| 689703.77 | 4285225.11 | 0.009 | 0.003 | 0.003 |
| 689753.77 | 4285225.11 | 0.009 | 0.003 | 0.003 |
| 689803.77 | 4285225.11 | 0.009 | 0.003 | 0.003 |
| 689853.77 | 4285225.11 | 0.009 | 0.003 | 0.003 |
| 689903.77 | 4285225.11 | 0.008 | 0.003 | 0.002 |
| 689953.77 | 4285225.11 | 0.007 | 0.003 | 0.002 |
| 690003.77 | 4285225.11 | 0.007 | 0.003 | 0.002 |
| 690053.77 | 4285225.11 | 0.006 | 0.002 | 0.002 |

|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 689153.77 | 4285275.11 | 0.004 | 0.001 | 0.001 |
| 689203.77 | 4285275.11 | 0.004 | 0.002 | 0.001 |
| 689253.77 | 4285275.11 | 0.005 | 0.002 | 0.001 |
| 689303.77 | 4285275.11 | 0.005 | 0.002 | 0.002 |
| 689353.77 | 4285275.11 | 0.006 | 0.002 | 0.002 |
| 689403.77 | 4285275.11 | 0.006 | 0.002 | 0.002 |
| 689453.77 | 4285275.11 | 0.007 | 0.002 | 0.002 |
| 689503.77 | 4285275.11 | 0.007 | 0.002 | 0.002 |
| 689553.77 | 4285275.11 | 0.007 | 0.003 | 0.002 |
| 689603.77 | 4285275.11 | 0.008 | 0.003 | 0.002 |
| 689653.77 | 4285275.11 | 0.008 | 0.003 | 0.002 |
| 689703.77 | 4285275.11 | 0.007 | 0.003 | 0.002 |
| 689753.77 | 4285275.11 | 0.007 | 0.003 | 0.002 |
| 689803.77 | 4285275.11 | 0.008 | 0.003 | 0.002 |
| 689853.77 | 4285275.11 | 0.007 | 0.002 | 0.002 |
| 689903.77 | 4285275.11 | 0.006 | 0.002 | 0.002 |
| 689953.77 | 4285275.11 | 0.006 | 0.002 | 0.002 |
| 690003.77 | 4285275.11 | 0.006 | 0.002 | 0.002 |
| 690053.77 | 4285275.11 | 0.005 | 0.002 | 0.002 |
| 689153.77 | 4285325.11 | 0.004 | 0.001 | 0.001 |
| 689203.77 | 4285325.11 | 0.004 | 0.001 | 0.001 |
| 689253.77 | 4285325.11 | 0.004 | 0.002 | 0.001 |
| 689303.77 | 4285325.11 | 0.005 | 0.002 | 0.001 |
| 689353.77 | 4285325.11 | 0.005 | 0.002 | 0.002 |
| 689403.77 | 4285325.11 | 0.006 | 0.002 | 0.002 |
| 689453.77 | 4285325.11 | 0.006 | 0.002 | 0.002 |
| 689503.77 | 4285325.11 | 0.006 | 0.002 | 0.002 |
| 689553.77 | 4285325.11 | 0.007 | 0.002 | 0.002 |
| 689603.77 | 4285325.11 | 0.007 | 0.002 | 0.002 |
| 689653.77 | 4285325.11 | 0.007 | 0.002 | 0.002 |
| 689703.77 | 4285325.11 | 0.006 | 0.002 | 0.002 |
| 689753.77 | 4285325.11 | 0.006 | 0.002 | 0.002 |
| 689803.77 | 4285325.11 | 0.007 | 0.002 | 0.002 |
| 689853.77 | 4285325.11 | 0.006 | 0.002 | 0.002 |
| 689903.77 | 4285325.11 | 0.006 | 0.002 | 0.002 |
| 689953.77 | 4285325.11 | 0.005 | 0.002 | 0.002 |
| 690003.77 | 4285325.11 | 0.005 | 0.002 | 0.002 |
| 690053.77 | 4285325.11 | 0.005 | 0.002 | 0.001 |
| 690103.77 | 4285325.11 | 0.005 | 0.002 | 0.001 |
| 689653.19 | 4285078.65 | 0.013 | 0.005 | 0.004 |
| 689596.53 | 4285079.83 | 0.012 | 0.004 | 0.004 |
| 689417.31 | 4285054.43 | 0.008 | 0.003 | 0.003 |
| 689465.48 | 4285057.44 | 0.009 | 0.003 | 0.003 |
| 689160.76 | 4284611.23 | 0.006 | 0.002 | 0.002 |
| 689595.79 | 4284809.16 | 0.029 | 0.010 | 0.009 |
| 689614.28 | 4284828.01 | 0.031 | 0.011 | 0.010 |
| 689880.93 | 4283885.33 | 0.041 | 0.014 | 0.013 |

|           |            |       |       |       |
|-----------|------------|-------|-------|-------|
| 689878.21 | 4284393.24 | 0.041 | 0.014 | 0.013 |
| 689919.3  | 4284393.48 | 0.030 | 0.010 | 0.009 |
| 690067.31 | 4284711.79 | 0.012 | 0.004 | 0.004 |
| 689854.2  | 4285030.1  | 0.013 | 0.005 | 0.004 |
| 689832.17 | 4285004.36 | 0.015 | 0.005 | 0.005 |
| 689709.9  | 4284847.93 | 0.032 | 0.011 | 0.010 |
| 689566.83 | 4284730.6  | 0.028 | 0.010 | 0.009 |
| 689380.2  | 4284259.82 | 0.023 | 0.008 | 0.007 |
| 689367.58 | 4284231.36 | 0.019 | 0.007 | 0.006 |
| 689441.09 | 4283793    | 0.020 | 0.007 | 0.006 |
| 689436.64 | 4283733.85 | 0.017 | 0.006 | 0.005 |
| 689439.11 | 4283767.76 | 0.019 | 0.007 | 0.006 |
| 689436.64 | 4283689.05 | 0.015 | 0.005 | 0.005 |
| 689444.06 | 4283650.43 | 0.015 | 0.005 | 0.005 |
| 689500.74 | 4283585.58 | 0.023 | 0.008 | 0.007 |
| 689505.94 | 4283507.86 | 0.015 | 0.005 | 0.005 |
| 689546.04 | 4283356.63 | 0.017 | 0.006 | 0.005 |
| 689912.61 | 4283166.04 | 0.022 | 0.008 | 0.007 |

SOURCE: Office of Environmental Health Hazard Assessment, 2015. *Air Toxics Hot Spots Program Guidance*  
Daily breathing rate for residential receptor is based on the OEHHA 95th percentile moderate intensity breathing rate.  
Fraction of time at home is set to values per OEHHA Table 8.4 for residential since the nearest school has an air quality receptor.  
Inhalation cancer potency factor from OEHHA Table 7.1

|     |     | DPM Emissions (tons) |        | DPM Emission Rate (g/s) |        |
|-----|-----|----------------------|--------|-------------------------|--------|
| 0<2 | 2<9 | Uncontrolled         | Tier 4 | Uncontrolled            | Tier 4 |
| 139 | 0   | 0.17                 |        | 0.017                   |        |
| 365 | 0   | 0.09                 |        | 0.006                   |        |
| 226 | 139 | 0.08                 |        | 0.005                   |        |
| 0   | 365 | 0.07                 |        | 0.004                   |        |
| 0   | 187 | 0.02                 |        | 0.002                   |        |
| 47  | 0   | 0.05                 |        | 0.009                   |        |
| 0   | 0   | 0.01                 |        | 0.007                   |        |

| 0<2   | 2<9   |
|-------|-------|
| 1090  | 861   |
| 1     | 1     |
| 0.96  | 0.96  |
| 10    | 3     |
| 1     | 1     |
| 0.001 | 0.001 |
| 0.001 | 0.001 |
| 1.1   | 1.1   |
| 70.00 | 70.00 |

Risk Calculation Part 1,  $R1 = IF * CPF * CF$

| 3rd Trimester | 0<2      | 2<9      |
|---------------|----------|----------|
| 1.36E-05      | 6.25E-05 | 0.00E+00 |
| 0.00E+00      | 1.64E-04 | 0.00E+00 |
| 0.00E+00      | 1.02E-04 | 1.48E-05 |
| 0.00E+00      | 0.00E+00 | 3.89E-05 |
| 0.00E+00      | 0.00E+00 | 1.99E-05 |
| 1.36E-05      | 2.11E-05 | 0.00E+00 |
| 4.62E-06      | 0.00E+00 | 0.00E+00 |

| HI   | UTM X     | UTM Y      |
|------|-----------|------------|
| 0.03 | 689653.19 | 4285078.65 |

| Project Construction |        |        |       |
|----------------------|--------|--------|-------|
| PAREA1               | PAREA1 | PAREA2 | ARLN1 |
| 2025                 | 2026   | 2022   | 2022  |
| 0.001                | 0.001  | 0.001  | 0.003 |
| 0.001                | 0.001  | 0.001  | 0.003 |

| 3rd Trimester |
|---------------|
| 8.44E-08      |
| 9.77E-08      |

|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.002 | 0.001 | 0.001 | 0.004 | 1.17E-07 |
| 0.002 | 0.001 | 0.001 | 0.006 | 1.44E-07 |
| 0.003 | 0.001 | 0.001 | 0.008 | 1.83E-07 |
| 0.001 | 0.001 | 0.001 | 0.003 | 8.69E-08 |
| 0.001 | 0.001 | 0.001 | 0.003 | 1.01E-07 |
| 0.002 | 0.001 | 0.001 | 0.004 | 1.21E-07 |
| 0.002 | 0.001 | 0.001 | 0.005 | 1.49E-07 |
| 0.003 | 0.001 | 0.001 | 0.007 | 1.91E-07 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.05E-07 |
| 0.002 | 0.001 | 0.001 | 0.004 | 1.26E-07 |
| 0.002 | 0.001 | 0.001 | 0.005 | 1.55E-07 |
| 0.003 | 0.002 | 0.001 | 0.007 | 2.00E-07 |
| 0.001 | 0.001 | 0.001 | 0.003 | 9.22E-08 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.09E-07 |
| 0.002 | 0.001 | 0.001 | 0.004 | 1.31E-07 |
| 0.002 | 0.001 | 0.001 | 0.005 | 1.61E-07 |
| 0.003 | 0.002 | 0.001 | 0.006 | 2.12E-07 |
| 0.001 | 0.000 | 0.001 | 0.002 | 6.67E-08 |
| 0.001 | 0.001 | 0.001 | 0.003 | 9.57E-08 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.13E-07 |
| 0.002 | 0.001 | 0.001 | 0.004 | 1.36E-07 |
| 0.003 | 0.001 | 0.001 | 0.005 | 1.69E-07 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.17E-07 |
| 0.002 | 0.001 | 0.001 | 0.004 | 1.41E-07 |
| 0.003 | 0.001 | 0.001 | 0.005 | 1.79E-07 |
| 0.004 | 0.002 | 0.002 | 0.005 | 2.46E-07 |
| 0.001 | 0.001 | 0.001 | 0.003 | 1.03E-07 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.22E-07 |
| 0.002 | 0.001 | 0.001 | 0.004 | 1.47E-07 |
| 0.003 | 0.002 | 0.001 | 0.004 | 1.87E-07 |
| 0.004 | 0.002 | 0.002 | 0.005 | 2.58E-07 |
| 0.001 | 0.001 | 0.001 | 0.002 | 7.11E-08 |
| 0.001 | 0.001 | 0.001 | 0.002 | 8.08E-08 |
| 0.001 | 0.001 | 0.001 | 0.003 | 9.24E-08 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.07E-07 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.26E-07 |
| 0.002 | 0.001 | 0.001 | 0.004 | 1.53E-07 |
| 0.003 | 0.002 | 0.001 | 0.004 | 1.94E-07 |
| 0.004 | 0.002 | 0.002 | 0.005 | 2.68E-07 |
| 0.001 | 0.001 | 0.001 | 0.002 | 7.27E-08 |
| 0.001 | 0.001 | 0.001 | 0.002 | 8.29E-08 |
| 0.001 | 0.001 | 0.001 | 0.002 | 9.50E-08 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.10E-07 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.30E-07 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.58E-07 |
| 0.003 | 0.002 | 0.001 | 0.004 | 2.02E-07 |
| 0.005 | 0.002 | 0.002 | 0.004 | 2.82E-07 |

|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.001 | 0.001 | 0.001 | 0.002 | 7.46E-08 |
| 0.001 | 0.001 | 0.001 | 0.002 | 8.51E-08 |
| 0.001 | 0.001 | 0.001 | 0.002 | 9.75E-08 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.13E-07 |
| 0.002 | 0.001 | 0.001 | 0.003 | 1.34E-07 |
| 0.003 | 0.001 | 0.001 | 0.003 | 1.63E-07 |
| 0.003 | 0.002 | 0.002 | 0.004 | 2.09E-07 |
| 0.005 | 0.003 | 0.002 | 0.004 | 2.95E-07 |
| 0.001 | 0.001 | 0.001 | 0.002 | 7.64E-08 |
| 0.001 | 0.001 | 0.001 | 0.002 | 8.69E-08 |
| 0.001 | 0.001 | 0.001 | 0.002 | 9.99E-08 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.17E-07 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.39E-07 |
| 0.003 | 0.001 | 0.001 | 0.003 | 1.70E-07 |
| 0.004 | 0.002 | 0.002 | 0.003 | 2.17E-07 |
| 0.005 | 0.003 | 0.002 | 0.004 | 3.12E-07 |
| 0.001 | 0.001 | 0.001 | 0.002 | 8.81E-08 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.02E-07 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.20E-07 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.44E-07 |
| 0.003 | 0.001 | 0.002 | 0.003 | 1.75E-07 |
| 0.004 | 0.002 | 0.002 | 0.003 | 2.25E-07 |
| 0.006 | 0.003 | 0.002 | 0.003 | 3.40E-07 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.04E-07 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.21E-07 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.46E-07 |
| 0.003 | 0.001 | 0.002 | 0.002 | 1.82E-07 |
| 0.004 | 0.002 | 0.002 | 0.003 | 2.33E-07 |
| 0.007 | 0.003 | 0.002 | 0.003 | 3.78E-07 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.24E-07 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.48E-07 |
| 0.003 | 0.002 | 0.002 | 0.002 | 1.85E-07 |
| 0.005 | 0.002 | 0.002 | 0.002 | 2.76E-07 |
| 0.008 | 0.004 | 0.002 | 0.003 | 4.37E-07 |
| 0.002 | 0.001 | 0.002 | 0.002 | 1.51E-07 |
| 0.003 | 0.002 | 0.002 | 0.002 | 1.96E-07 |
| 0.001 | 0.001 | 0.001 | 0.001 | 8.18E-08 |
| 0.001 | 0.001 | 0.001 | 0.001 | 9.32E-08 |
| 0.002 | 0.001 | 0.001 | 0.002 | 1.08E-07 |
| 0.001 | 0.001 | 0.001 | 0.001 | 8.71E-08 |
| 0.001 | 0.001 | 0.002 | 0.001 | 8.93E-08 |
| 0.001 | 0.001 | 0.002 | 0.001 | 9.96E-08 |
| 0.001 | 0.001 | 0.002 | 0.001 | 9.21E-08 |
| 0.001 | 0.001 | 0.002 | 0.001 | 1.02E-07 |
| 0.002 | 0.001 | 0.002 | 0.001 | 1.15E-07 |
| 0.007 | 0.004 | 0.001 | 0.008 | 3.99E-07 |
| 0.004 | 0.002 | 0.001 | 0.005 | 2.71E-07 |

|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.003 | 0.002 | 0.001 | 0.004 | 2.11E-07 |
| 0.003 | 0.001 | 0.001 | 0.003 | 1.76E-07 |
| 0.002 | 0.001 | 0.002 | 0.002 | 1.53E-07 |
| 0.002 | 0.001 | 0.002 | 0.002 | 1.36E-07 |
| 0.006 | 0.003 | 0.001 | 0.008 | 3.85E-07 |
| 0.004 | 0.002 | 0.001 | 0.005 | 2.74E-07 |
| 0.004 | 0.002 | 0.002 | 0.004 | 2.18E-07 |
| 0.003 | 0.001 | 0.002 | 0.003 | 1.84E-07 |
| 0.002 | 0.001 | 0.002 | 0.003 | 1.59E-07 |
| 0.002 | 0.001 | 0.002 | 0.002 | 1.40E-07 |
| 0.009 | 0.005 | 0.001 | 0.012 | 5.57E-07 |
| 0.006 | 0.003 | 0.001 | 0.008 | 3.72E-07 |
| 0.005 | 0.002 | 0.002 | 0.006 | 2.83E-07 |
| 0.004 | 0.002 | 0.002 | 0.004 | 2.28E-07 |
| 0.003 | 0.002 | 0.002 | 0.003 | 1.92E-07 |
| 0.003 | 0.001 | 0.002 | 0.003 | 1.65E-07 |
| 0.002 | 0.001 | 0.002 | 0.002 | 1.44E-07 |
| 0.009 | 0.004 | 0.002 | 0.012 | 5.13E-07 |
| 0.006 | 0.003 | 0.002 | 0.008 | 3.64E-07 |
| 0.005 | 0.002 | 0.002 | 0.006 | 2.85E-07 |
| 0.004 | 0.002 | 0.002 | 0.004 | 2.35E-07 |
| 0.003 | 0.002 | 0.002 | 0.003 | 1.98E-07 |
| 0.003 | 0.001 | 0.002 | 0.003 | 1.69E-07 |
| 0.002 | 0.001 | 0.002 | 0.003 | 1.46E-07 |
| 0.008 | 0.004 | 0.002 | 0.011 | 4.94E-07 |
| 0.006 | 0.003 | 0.002 | 0.008 | 3.61E-07 |
| 0.005 | 0.002 | 0.002 | 0.005 | 2.89E-07 |
| 0.004 | 0.002 | 0.002 | 0.003 | 2.41E-07 |
| 0.003 | 0.002 | 0.002 | 0.003 | 2.00E-07 |
| 0.003 | 0.001 | 0.002 | 0.003 | 1.70E-07 |
| 0.002 | 0.001 | 0.002 | 0.002 | 1.46E-07 |
| 0.013 | 0.007 | 0.002 | 0.014 | 7.63E-07 |
| 0.008 | 0.004 | 0.002 | 0.011 | 4.82E-07 |
| 0.006 | 0.003 | 0.002 | 0.008 | 3.58E-07 |
| 0.005 | 0.002 | 0.002 | 0.005 | 2.92E-07 |
| 0.004 | 0.002 | 0.002 | 0.003 | 2.43E-07 |
| 0.003 | 0.002 | 0.002 | 0.003 | 2.01E-07 |
| 0.002 | 0.001 | 0.002 | 0.003 | 1.71E-07 |
| 0.002 | 0.001 | 0.002 | 0.002 | 1.47E-07 |
| 0.008 | 0.004 | 0.002 | 0.010 | 4.71E-07 |
| 0.006 | 0.003 | 0.002 | 0.008 | 3.56E-07 |
| 0.005 | 0.002 | 0.002 | 0.005 | 2.90E-07 |
| 0.004 | 0.002 | 0.002 | 0.003 | 2.41E-07 |
| 0.003 | 0.002 | 0.002 | 0.003 | 2.02E-07 |
| 0.002 | 0.001 | 0.002 | 0.003 | 1.73E-07 |
| 0.002 | 0.001 | 0.003 | 0.003 | 1.54E-07 |
| 0.008 | 0.004 | 0.002 | 0.009 | 4.65E-07 |



|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.006 | 0.003 | 0.002 | 0.007 | 3.54E-07 |
| 0.005 | 0.002 | 0.002 | 0.005 | 2.91E-07 |
| 0.004 | 0.002 | 0.003 | 0.003 | 2.43E-07 |
| 0.003 | 0.002 | 0.003 | 0.003 | 2.06E-07 |
| 0.003 | 0.001 | 0.003 | 0.003 | 1.80E-07 |
| 0.002 | 0.001 | 0.003 | 0.002 | 1.59E-07 |
| 0.008 | 0.004 | 0.002 | 0.008 | 4.59E-07 |
| 0.006 | 0.003 | 0.002 | 0.007 | 3.52E-07 |
| 0.005 | 0.002 | 0.003 | 0.005 | 2.92E-07 |
| 0.004 | 0.002 | 0.003 | 0.003 | 2.45E-07 |
| 0.003 | 0.002 | 0.003 | 0.003 | 2.09E-07 |
| 0.003 | 0.001 | 0.003 | 0.002 | 1.83E-07 |
| 0.002 | 0.001 | 0.003 | 0.002 | 1.61E-07 |
| 0.008 | 0.004 | 0.003 | 0.008 | 4.56E-07 |
| 0.006 | 0.003 | 0.003 | 0.006 | 3.51E-07 |
| 0.004 | 0.002 | 0.003 | 0.005 | 2.91E-07 |
| 0.004 | 0.002 | 0.003 | 0.003 | 2.47E-07 |
| 0.003 | 0.002 | 0.003 | 0.003 | 2.13E-07 |
| 0.003 | 0.001 | 0.003 | 0.002 | 1.87E-07 |
| 0.002 | 0.001 | 0.003 | 0.002 | 1.65E-07 |
| 0.007 | 0.004 | 0.003 | 0.007 | 4.52E-07 |
| 0.006 | 0.003 | 0.003 | 0.006 | 3.53E-07 |
| 0.005 | 0.002 | 0.003 | 0.004 | 2.94E-07 |
| 0.004 | 0.002 | 0.003 | 0.003 | 2.51E-07 |
| 0.003 | 0.002 | 0.004 | 0.002 | 2.19E-07 |
| 0.003 | 0.001 | 0.004 | 0.002 | 1.91E-07 |
| 0.002 | 0.001 | 0.004 | 0.002 | 1.67E-07 |
| 0.007 | 0.004 | 0.003 | 0.006 | 4.46E-07 |
| 0.006 | 0.003 | 0.003 | 0.005 | 3.53E-07 |
| 0.005 | 0.002 | 0.004 | 0.004 | 2.97E-07 |
| 0.004 | 0.002 | 0.004 | 0.003 | 2.56E-07 |
| 0.003 | 0.002 | 0.004 | 0.002 | 2.27E-07 |
| 0.003 | 0.001 | 0.004 | 0.002 | 1.96E-07 |
| 0.002 | 0.001 | 0.004 | 0.002 | 1.71E-07 |
| 0.007 | 0.004 | 0.004 | 0.005 | 4.43E-07 |
| 0.006 | 0.003 | 0.004 | 0.005 | 3.55E-07 |
| 0.005 | 0.002 | 0.004 | 0.003 | 3.04E-07 |
| 0.004 | 0.002 | 0.004 | 0.003 | 2.66E-07 |
| 0.003 | 0.002 | 0.005 | 0.002 | 2.36E-07 |
| 0.003 | 0.001 | 0.004 | 0.002 | 2.00E-07 |
| 0.002 | 0.001 | 0.004 | 0.002 | 1.76E-07 |
| 0.006 | 0.003 | 0.004 | 0.004 | 3.67E-07 |
| 0.005 | 0.002 | 0.005 | 0.003 | 3.20E-07 |
| 0.004 | 0.002 | 0.005 | 0.002 | 2.94E-07 |
| 0.003 | 0.002 | 0.005 | 0.002 | 2.53E-07 |
| 0.003 | 0.001 | 0.005 | 0.002 | 2.08E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 1.86E-07 |

|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.006 | 0.003 | 0.005 | 0.003 | 3.85E-07 |
| 0.005 | 0.003 | 0.006 | 0.002 | 3.55E-07 |
| 0.004 | 0.002 | 0.006 | 0.002 | 3.03E-07 |
| 0.003 | 0.002 | 0.006 | 0.002 | 2.66E-07 |
| 0.003 | 0.001 | 0.006 | 0.002 | 2.35E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 1.90E-07 |
| 0.007 | 0.004 | 0.005 | 0.004 | 4.64E-07 |
| 0.006 | 0.003 | 0.006 | 0.003 | 3.97E-07 |
| 0.005 | 0.003 | 0.007 | 0.002 | 3.65E-07 |
| 0.004 | 0.002 | 0.007 | 0.002 | 3.14E-07 |
| 0.003 | 0.002 | 0.007 | 0.002 | 2.75E-07 |
| 0.003 | 0.001 | 0.007 | 0.002 | 2.43E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 2.06E-07 |
| 0.010 | 0.005 | 0.006 | 0.004 | 6.22E-07 |
| 0.007 | 0.004 | 0.006 | 0.004 | 4.63E-07 |
| 0.006 | 0.003 | 0.007 | 0.003 | 4.01E-07 |
| 0.005 | 0.002 | 0.007 | 0.002 | 3.54E-07 |
| 0.004 | 0.002 | 0.008 | 0.002 | 3.20E-07 |
| 0.003 | 0.002 | 0.008 | 0.002 | 2.85E-07 |
| 0.003 | 0.001 | 0.007 | 0.001 | 2.46E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 2.12E-07 |
| 0.007 | 0.004 | 0.007 | 0.003 | 4.79E-07 |
| 0.006 | 0.003 | 0.008 | 0.003 | 4.04E-07 |
| 0.005 | 0.002 | 0.008 | 0.002 | 3.55E-07 |
| 0.004 | 0.002 | 0.008 | 0.002 | 3.08E-07 |
| 0.003 | 0.002 | 0.008 | 0.002 | 2.71E-07 |
| 0.003 | 0.001 | 0.007 | 0.001 | 2.46E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 2.10E-07 |
| 0.008 | 0.004 | 0.008 | 0.003 | 5.14E-07 |
| 0.006 | 0.003 | 0.009 | 0.003 | 4.26E-07 |
| 0.005 | 0.002 | 0.009 | 0.002 | 3.67E-07 |
| 0.004 | 0.002 | 0.009 | 0.002 | 3.14E-07 |
| 0.003 | 0.002 | 0.008 | 0.002 | 2.72E-07 |
| 0.003 | 0.001 | 0.008 | 0.001 | 2.46E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 2.10E-07 |
| 0.008 | 0.004 | 0.010 | 0.003 | 5.61E-07 |
| 0.006 | 0.003 | 0.010 | 0.003 | 4.53E-07 |
| 0.005 | 0.002 | 0.010 | 0.002 | 3.91E-07 |
| 0.004 | 0.002 | 0.009 | 0.002 | 3.28E-07 |
| 0.003 | 0.002 | 0.008 | 0.002 | 2.76E-07 |
| 0.003 | 0.001 | 0.008 | 0.001 | 2.46E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 2.09E-07 |
| 0.009 | 0.005 | 0.012 | 0.003 | 6.30E-07 |
| 0.006 | 0.003 | 0.012 | 0.002 | 4.99E-07 |
| 0.005 | 0.003 | 0.011 | 0.002 | 4.11E-07 |
| 0.004 | 0.002 | 0.010 | 0.002 | 3.40E-07 |
| 0.003 | 0.002 | 0.009 | 0.002 | 2.83E-07 |

|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.003 | 0.001 | 0.008 | 0.001 | 2.50E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 2.02E-07 |
| 0.001 | 0.000 | 0.001 | 0.002 | 5.97E-08 |
| 0.001 | 0.000 | 0.001 | 0.003 | 6.63E-08 |
| 0.001 | 0.000 | 0.001 | 0.003 | 7.41E-08 |
| 0.001 | 0.001 | 0.001 | 0.004 | 8.51E-08 |
| 0.001 | 0.001 | 0.001 | 0.006 | 1.01E-07 |
| 0.001 | 0.001 | 0.001 | 0.009 | 1.24E-07 |
| 0.002 | 0.001 | 0.001 | 0.013 | 1.54E-07 |
| 0.001 | 0.000 | 0.001 | 0.003 | 6.35E-08 |
| 0.001 | 0.000 | 0.001 | 0.003 | 7.22E-08 |
| 0.001 | 0.001 | 0.001 | 0.004 | 8.18E-08 |
| 0.001 | 0.001 | 0.001 | 0.005 | 9.39E-08 |
| 0.001 | 0.001 | 0.001 | 0.008 | 1.14E-07 |
| 0.002 | 0.001 | 0.001 | 0.012 | 1.49E-07 |
| 0.002 | 0.001 | 0.001 | 0.019 | 1.95E-07 |
| 0.001 | 0.000 | 0.001 | 0.002 | 6.49E-08 |
| 0.001 | 0.001 | 0.001 | 0.003 | 7.34E-08 |
| 0.001 | 0.001 | 0.001 | 0.004 | 8.57E-08 |
| 0.001 | 0.001 | 0.001 | 0.006 | 1.04E-07 |
| 0.001 | 0.001 | 0.001 | 0.009 | 1.32E-07 |
| 0.002 | 0.001 | 0.001 | 0.019 | 1.93E-07 |
| 0.002 | 0.001 | 0.001 | 0.031 | 2.77E-07 |
| 0.001 | 0.000 | 0.001 | 0.002 | 6.45E-08 |
| 0.001 | 0.001 | 0.001 | 0.002 | 7.46E-08 |
| 0.001 | 0.001 | 0.001 | 0.003 | 8.81E-08 |
| 0.001 | 0.001 | 0.001 | 0.006 | 1.11E-07 |
| 0.002 | 0.001 | 0.001 | 0.013 | 1.56E-07 |
| 0.002 | 0.001 | 0.001 | 0.038 | 3.06E-07 |
| 0.003 | 0.002 | 0.001 | 0.062 | 4.68E-07 |
| 0.001 | 0.000 | 0.001 | 0.002 | 6.57E-08 |
| 0.001 | 0.001 | 0.001 | 0.002 | 7.54E-08 |
| 0.001 | 0.001 | 0.001 | 0.003 | 8.86E-08 |
| 0.001 | 0.001 | 0.001 | 0.005 | 1.11E-07 |
| 0.002 | 0.001 | 0.001 | 0.013 | 1.66E-07 |
| 0.001 | 0.000 | 0.001 | 0.002 | 6.84E-08 |
| 0.001 | 0.001 | 0.001 | 0.002 | 7.85E-08 |
| 0.001 | 0.001 | 0.001 | 0.003 | 9.29E-08 |
| 0.002 | 0.001 | 0.001 | 0.006 | 1.20E-07 |
| 0.002 | 0.001 | 0.001 | 0.020 | 2.07E-07 |
| 0.001 | 0.001 | 0.001 | 0.002 | 7.18E-08 |
| 0.001 | 0.001 | 0.001 | 0.003 | 8.41E-08 |
| 0.001 | 0.001 | 0.001 | 0.005 | 1.04E-07 |
| 0.002 | 0.001 | 0.001 | 0.009 | 1.39E-07 |
| 0.002 | 0.001 | 0.001 | 0.021 | 2.30E-07 |
| 0.004 | 0.002 | 0.001 | 0.057 | 4.79E-07 |
| 0.001 | 0.001 | 0.001 | 0.002 | 7.62E-08 |

|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.001 | 0.001 | 0.001 | 0.003 | 8.97E-08 |
| 0.001 | 0.001 | 0.001 | 0.005 | 1.10E-07 |
| 0.002 | 0.001 | 0.001 | 0.008 | 1.46E-07 |
| 0.002 | 0.001 | 0.001 | 0.016 | 2.16E-07 |
| 0.001 | 0.001 | 0.001 | 0.003 | 8.13E-08 |
| 0.001 | 0.001 | 0.001 | 0.004 | 9.61E-08 |
| 0.002 | 0.001 | 0.001 | 0.005 | 1.18E-07 |
| 0.002 | 0.001 | 0.001 | 0.008 | 1.53E-07 |
| 0.003 | 0.001 | 0.001 | 0.013 | 2.10E-07 |
| 0.001 | 0.001 | 0.001 | 0.003 | 8.59E-08 |
| 0.001 | 0.001 | 0.001 | 0.004 | 1.02E-07 |
| 0.002 | 0.001 | 0.001 | 0.005 | 1.25E-07 |
| 0.002 | 0.001 | 0.001 | 0.008 | 1.59E-07 |
| 0.003 | 0.001 | 0.001 | 0.011 | 2.10E-07 |
| 0.004 | 0.002 | 0.001 | 0.016 | 2.79E-07 |
| 0.004 | 0.002 | 0.001 | 0.057 | 4.74E-07 |
| 0.004 | 0.002 | 0.001 | 0.052 | 4.69E-07 |
| 0.002 | 0.001 | 0.001 | 0.023 | 2.27E-07 |
| 0.002 | 0.001 | 0.001 | 0.016 | 1.79E-07 |
| 0.002 | 0.001 | 0.001 | 0.019 | 2.03E-07 |
| 0.002 | 0.001 | 0.001 | 0.006 | 1.65E-07 |
| 0.003 | 0.001 | 0.001 | 0.006 | 1.72E-07 |
| 0.002 | 0.001 | 0.001 | 0.005 | 1.51E-07 |
| 0.005 | 0.003 | 0.001 | 0.014 | 3.36E-07 |
| 0.009 | 0.005 | 0.001 | 0.008 | 5.19E-07 |
| 0.005 | 0.003 | 0.001 | 0.005 | 3.18E-07 |
| 0.010 | 0.005 | 0.001 | 0.008 | 5.42E-07 |
| 0.006 | 0.003 | 0.001 | 0.006 | 3.42E-07 |
| 0.004 | 0.002 | 0.013 | 0.002 | 3.88E-07 |
| 0.003 | 0.001 | 0.010 | 0.001 | 2.86E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.31E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.04E-07 |
| 0.004 | 0.002 | 0.013 | 0.002 | 3.77E-07 |
| 0.003 | 0.001 | 0.010 | 0.001 | 2.75E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.21E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 1.96E-07 |
| 0.006 | 0.003 | 0.016 | 0.002 | 5.43E-07 |
| 0.003 | 0.001 | 0.010 | 0.001 | 2.68E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.14E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 1.86E-07 |
| 0.004 | 0.002 | 0.012 | 0.001 | 3.48E-07 |
| 0.003 | 0.001 | 0.009 | 0.001 | 2.59E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 2.04E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 1.73E-07 |
| 0.005 | 0.003 | 0.022 | 0.001 | 5.61E-07 |
| 0.003 | 0.002 | 0.011 | 0.001 | 3.20E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.46E-07 |

|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.002 | 0.001 | 0.006 | 0.001 | 1.94E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 1.61E-07 |
| 0.005 | 0.003 | 0.033 | 0.001 | 7.05E-07 |
| 0.004 | 0.002 | 0.022 | 0.001 | 5.19E-07 |
| 0.004 | 0.002 | 0.015 | 0.001 | 3.88E-07 |
| 0.003 | 0.002 | 0.010 | 0.001 | 2.94E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.30E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 1.85E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 1.54E-07 |
| 0.001 | 0.001 | 0.004 | 0.001 | 1.36E-07 |
| 0.005 | 0.003 | 0.058 | 0.001 | 1.04E-06 |
| 0.004 | 0.002 | 0.034 | 0.001 | 6.83E-07 |
| 0.004 | 0.002 | 0.021 | 0.001 | 4.79E-07 |
| 0.003 | 0.002 | 0.014 | 0.001 | 3.53E-07 |
| 0.003 | 0.001 | 0.009 | 0.001 | 2.71E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 2.13E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 1.75E-07 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.47E-07 |
| 0.001 | 0.001 | 0.004 | 0.001 | 1.27E-07 |
| 0.005 | 0.002 | 0.115 | 0.001 | 1.81E-06 |
| 0.004 | 0.002 | 0.062 | 0.001 | 1.06E-06 |
| 0.004 | 0.002 | 0.034 | 0.001 | 6.61E-07 |
| 0.003 | 0.002 | 0.019 | 0.001 | 4.38E-07 |
| 0.003 | 0.001 | 0.012 | 0.001 | 3.18E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.46E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 1.98E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 1.64E-07 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.38E-07 |
| 0.001 | 0.001 | 0.003 | 0.001 | 1.21E-07 |
| 0.003 | 0.002 | 0.032 | 0.001 | 6.13E-07 |
| 0.003 | 0.002 | 0.017 | 0.001 | 3.88E-07 |
| 0.003 | 0.001 | 0.011 | 0.001 | 2.86E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.25E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 1.83E-07 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.53E-07 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.32E-07 |
| 0.001 | 0.001 | 0.003 | 0.001 | 1.16E-07 |
| 0.003 | 0.002 | 0.028 | 0.001 | 5.46E-07 |
| 0.003 | 0.001 | 0.016 | 0.001 | 3.58E-07 |
| 0.002 | 0.001 | 0.010 | 0.001 | 2.66E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 2.11E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 1.73E-07 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.47E-07 |
| 0.001 | 0.001 | 0.003 | 0.001 | 1.27E-07 |
| 0.001 | 0.001 | 0.003 | 0.001 | 1.12E-07 |
| 0.007 | 0.004 | 0.014 | 0.002 | 5.71E-07 |
| 0.005 | 0.003 | 0.013 | 0.002 | 4.40E-07 |

|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.004 | 0.002 | 0.011 | 0.002 | 3.45E-07 |
| 0.003 | 0.001 | 0.010 | 0.001 | 2.83E-07 |
| 0.002 | 0.001 | 0.009 | 0.001 | 2.45E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 1.99E-07 |
| 0.005 | 0.003 | 0.014 | 0.002 | 4.62E-07 |
| 0.004 | 0.002 | 0.011 | 0.002 | 3.46E-07 |
| 0.003 | 0.001 | 0.009 | 0.001 | 2.70E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.31E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 1.99E-07 |
| 0.002 | 0.001 | 0.003 | 0.001 | 1.33E-07 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.53E-07 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.76E-07 |
| 0.003 | 0.001 | 0.005 | 0.001 | 2.05E-07 |
| 0.003 | 0.002 | 0.006 | 0.002 | 2.42E-07 |
| 0.004 | 0.002 | 0.007 | 0.002 | 2.97E-07 |
| 0.005 | 0.003 | 0.009 | 0.002 | 3.85E-07 |
| 0.002 | 0.001 | 0.003 | 0.001 | 1.32E-07 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.52E-07 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.75E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 2.04E-07 |
| 0.003 | 0.002 | 0.006 | 0.002 | 2.42E-07 |
| 0.006 | 0.003 | 0.015 | 0.002 | 5.17E-07 |
| 0.002 | 0.001 | 0.003 | 0.001 | 1.29E-07 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.49E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 1.73E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 2.03E-07 |
| 0.003 | 0.002 | 0.009 | 0.001 | 3.02E-07 |
| 0.004 | 0.002 | 0.013 | 0.001 | 3.96E-07 |
| 0.005 | 0.003 | 0.020 | 0.002 | 5.47E-07 |
| 0.008 | 0.004 | 0.047 | 0.002 | 1.06E-06 |
| 0.002 | 0.001 | 0.004 | 0.001 | 1.44E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 1.69E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 2.01E-07 |
| 0.003 | 0.001 | 0.008 | 0.001 | 2.43E-07 |
| 0.003 | 0.002 | 0.011 | 0.001 | 3.08E-07 |
| 0.006 | 0.003 | 0.041 | 0.001 | 8.56E-07 |
| 0.001 | 0.001 | 0.003 | 0.001 | 1.19E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 1.93E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.39E-07 |
| 0.003 | 0.001 | 0.013 | 0.001 | 3.21E-07 |
| 0.003 | 0.002 | 0.026 | 0.001 | 5.31E-07 |
| 0.004 | 0.002 | 0.044 | 0.001 | 8.05E-07 |
| 0.005 | 0.002 | 0.060 | 0.001 | 1.06E-06 |
| 0.001 | 0.001 | 0.003 | 0.001 | 1.17E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 1.84E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.26E-07 |
| 0.004 | 0.002 | 0.057 | 0.001 | 9.63E-07 |

|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.011 | 0.006 | 0.055 | 0.002 | 1.30E-06 |
| 0.010 | 0.005 | 0.036 | 0.002 | 1.01E-06 |
| 0.001 | 0.001 | 0.003 | 0.001 | 1.13E-07 |
| 0.001 | 0.001 | 0.004 | 0.001 | 1.27E-07 |
| 0.002 | 0.001 | 0.006 | 0.001 | 1.69E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 2.00E-07 |
| 0.003 | 0.002 | 0.078 | 0.001 | 1.22E-06 |
| 0.003 | 0.002 | 0.103 | 0.001 | 1.56E-06 |
| 0.003 | 0.002 | 0.136 | 0.001 | 2.01E-06 |
| 0.003 | 0.002 | 0.136 | 0.001 | 2.00E-06 |
| 0.003 | 0.002 | 0.068 | 0.001 | 1.08E-06 |
| 0.003 | 0.001 | 0.029 | 0.001 | 5.34E-07 |
| 0.003 | 0.001 | 0.017 | 0.001 | 3.64E-07 |
| 0.002 | 0.001 | 0.011 | 0.001 | 2.63E-07 |
| 0.002 | 0.001 | 0.005 | 0.001 | 1.66E-07 |
| 0.001 | 0.001 | 0.004 | 0.001 | 1.13E-07 |
| 0.001 | 0.001 | 0.004 | 0.001 | 1.27E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 1.71E-07 |
| 0.002 | 0.001 | 0.009 | 0.001 | 2.06E-07 |
| 0.003 | 0.001 | 0.057 | 0.001 | 9.07E-07 |
| 0.003 | 0.001 | 0.072 | 0.001 | 1.12E-06 |
| 0.003 | 0.001 | 0.093 | 0.001 | 1.41E-06 |
| 0.003 | 0.001 | 0.113 | 0.001 | 1.68E-06 |
| 0.003 | 0.001 | 0.086 | 0.001 | 1.31E-06 |
| 0.003 | 0.001 | 0.051 | 0.001 | 8.36E-07 |
| 0.002 | 0.001 | 0.025 | 0.001 | 4.70E-07 |
| 0.002 | 0.001 | 0.017 | 0.001 | 3.45E-07 |
| 0.002 | 0.001 | 0.012 | 0.001 | 2.71E-07 |
| 0.001 | 0.001 | 0.004 | 0.001 | 1.13E-07 |
| 0.001 | 0.001 | 0.004 | 0.001 | 1.26E-07 |
| 0.001 | 0.001 | 0.005 | 0.001 | 1.43E-07 |
| 0.001 | 0.001 | 0.007 | 0.001 | 1.69E-07 |
| 0.002 | 0.001 | 0.009 | 0.001 | 2.05E-07 |
| 0.002 | 0.001 | 0.012 | 0.001 | 2.55E-07 |
| 0.002 | 0.001 | 0.017 | 0.001 | 3.32E-07 |
| 0.002 | 0.001 | 0.025 | 0.001 | 4.43E-07 |
| 0.002 | 0.001 | 0.034 | 0.001 | 5.71E-07 |
| 0.002 | 0.001 | 0.043 | 0.001 | 7.05E-07 |
| 0.002 | 0.001 | 0.053 | 0.001 | 8.47E-07 |
| 0.002 | 0.001 | 0.060 | 0.001 | 9.46E-07 |
| 0.002 | 0.001 | 0.064 | 0.001 | 9.94E-07 |
| 0.002 | 0.001 | 0.058 | 0.001 | 9.09E-07 |
| 0.002 | 0.001 | 0.037 | 0.001 | 6.24E-07 |
| 0.002 | 0.001 | 0.020 | 0.001 | 3.77E-07 |
| 0.002 | 0.001 | 0.014 | 0.001 | 2.88E-07 |
| 0.002 | 0.001 | 0.011 | 0.001 | 2.57E-07 |
| 0.002 | 0.001 | 0.007 | 0.001 | 1.88E-07 |

|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.001 | 0.001 | 0.004 | 0.001 | 1.10E-07 |
| 0.001 | 0.001 | 0.004 | 0.001 | 1.23E-07 |
| 0.001 | 0.001 | 0.005 | 0.001 | 1.42E-07 |
| 0.001 | 0.001 | 0.007 | 0.001 | 1.66E-07 |
| 0.001 | 0.001 | 0.009 | 0.001 | 1.98E-07 |
| 0.002 | 0.001 | 0.011 | 0.001 | 2.41E-07 |
| 0.002 | 0.001 | 0.015 | 0.001 | 3.02E-07 |
| 0.002 | 0.001 | 0.021 | 0.001 | 3.82E-07 |
| 0.002 | 0.001 | 0.027 | 0.001 | 4.72E-07 |
| 0.002 | 0.001 | 0.031 | 0.001 | 5.37E-07 |
| 0.002 | 0.001 | 0.036 | 0.001 | 6.01E-07 |
| 0.002 | 0.001 | 0.038 | 0.001 | 6.18E-07 |
| 0.002 | 0.001 | 0.038 | 0.001 | 6.13E-07 |
| 0.002 | 0.001 | 0.035 | 0.001 | 5.81E-07 |
| 0.002 | 0.001 | 0.024 | 0.001 | 4.29E-07 |
| 0.002 | 0.001 | 0.015 | 0.001 | 2.96E-07 |
| 0.002 | 0.001 | 0.011 | 0.001 | 2.26E-07 |
| 0.002 | 0.001 | 0.008 | 0.001 | 1.90E-07 |
| 0.001 | 0.001 | 0.006 | 0.001 | 1.46E-07 |
| 0.001 | 0.001 | 0.004 | 0.001 | 1.07E-07 |
| 0.001 | 0.001 | 0.004 | 0.001 | 1.13E-07 |
| 0.001 | 0.001 | 0.005 | 0.001 | 1.38E-07 |
| 0.001 | 0.001 | 0.007 | 0.001 | 1.59E-07 |
| 0.001 | 0.001 | 0.008 | 0.001 | 1.87E-07 |
| 0.001 | 0.001 | 0.011 | 0.001 | 2.24E-07 |
| 0.002 | 0.001 | 0.014 | 0.001 | 2.72E-07 |
| 0.002 | 0.001 | 0.018 | 0.001 | 3.34E-07 |
| 0.002 | 0.001 | 0.022 | 0.001 | 3.97E-07 |
| 0.002 | 0.001 | 0.024 | 0.001 | 4.27E-07 |
| 0.002 | 0.001 | 0.026 | 0.001 | 4.53E-07 |
| 0.002 | 0.001 | 0.027 | 0.001 | 4.57E-07 |
| 0.002 | 0.001 | 0.027 | 0.001 | 4.57E-07 |
| 0.002 | 0.001 | 0.026 | 0.001 | 4.52E-07 |
| 0.002 | 0.001 | 0.020 | 0.001 | 3.60E-07 |
| 0.002 | 0.001 | 0.014 | 0.001 | 2.71E-07 |
| 0.001 | 0.001 | 0.010 | 0.001 | 2.09E-07 |
| 0.001 | 0.001 | 0.007 | 0.001 | 1.65E-07 |
| 0.001 | 0.001 | 0.005 | 0.001 | 1.35E-07 |
| 0.001 | 0.001 | 0.005 | 0.001 | 1.31E-07 |
| 0.003 | 0.002 | 0.145 | 0.001 | 2.15E-06 |
| 0.003 | 0.002 | 0.100 | 0.001 | 1.52E-06 |
| 0.002 | 0.001 | 0.009 | 0.001 | 2.36E-07 |
| 0.002 | 0.001 | 0.017 | 0.001 | 3.60E-07 |
| 0.002 | 0.001 | 0.002 | 0.001 | 1.15E-07 |
| 0.008 | 0.004 | 0.019 | 0.002 | 6.58E-07 |
| 0.008 | 0.004 | 0.024 | 0.002 | 7.54E-07 |
| 0.011 | 0.006 | 0.002 | 0.009 | 6.33E-07 |



|       |       |       |       |          |
|-------|-------|-------|-------|----------|
| 0.011 | 0.006 | 0.009 | 0.003 | 6.86E-07 |
| 0.008 | 0.004 | 0.009 | 0.003 | 5.46E-07 |
| 0.003 | 0.002 | 0.011 | 0.001 | 3.20E-07 |
| 0.004 | 0.002 | 0.065 | 0.001 | 1.06E-06 |
| 0.004 | 0.002 | 0.080 | 0.001 | 1.28E-06 |
| 0.008 | 0.004 | 0.083 | 0.002 | 1.57E-06 |
| 0.008 | 0.004 | 0.011 | 0.002 | 5.46E-07 |
| 0.006 | 0.003 | 0.003 | 0.002 | 3.62E-07 |
| 0.005 | 0.003 | 0.002 | 0.002 | 3.05E-07 |
| 0.005 | 0.003 | 0.002 | 0.006 | 3.20E-07 |
| 0.005 | 0.002 | 0.002 | 0.006 | 2.87E-07 |
| 0.005 | 0.003 | 0.002 | 0.006 | 3.06E-07 |
| 0.004 | 0.002 | 0.002 | 0.007 | 2.58E-07 |
| 0.004 | 0.002 | 0.002 | 0.007 | 2.58E-07 |
| 0.006 | 0.003 | 0.002 | 0.010 | 3.79E-07 |
| 0.004 | 0.002 | 0.001 | 0.015 | 3.00E-07 |
| 0.005 | 0.002 | 0.001 | 0.080 | 6.17E-07 |
| 0.006 | 0.003 | 0.001 | 0.015 | 3.85E-07 |

*Manual for the Preparation of Health Risk Assessments* . February.

athing rates (OEHHA Table 5.7).

an unmitigated cancer risk of <1 per million.

Risk Calculation Part 2

HI

| $\sum R1 * C_{DPM}$ |          |       | $C_{DPM}/REL$ |
|---------------------|----------|-------|---------------|
| 0<2                 | 2<9      | Total | unitless      |
| 6.73E-07            | 7.66E-08 | 0.83  | 0.002         |
| 7.93E-07            | 9.03E-08 | 0.98  | 0.002         |

|          |          |      |       |
|----------|----------|------|-------|
| 9.47E-07 | 1.08E-07 | 1.17 | 0.002 |
| 1.16E-06 | 1.33E-07 | 1.44 | 0.003 |
| 1.47E-06 | 1.69E-07 | 1.83 | 0.004 |
| 7.05E-07 | 8.02E-08 | 0.87 | 0.002 |
| 8.35E-07 | 9.51E-08 | 1.03 | 0.002 |
| 9.98E-07 | 1.14E-07 | 1.23 | 0.002 |
| 1.23E-06 | 1.41E-07 | 1.52 | 0.003 |
| 1.59E-06 | 1.83E-07 | 1.96 | 0.004 |
| 8.80E-07 | 1.00E-07 | 1.09 | 0.002 |
| 1.05E-06 | 1.20E-07 | 1.30 | 0.002 |
| 1.30E-06 | 1.49E-07 | 1.61 | 0.003 |
| 1.71E-06 | 1.97E-07 | 2.11 | 0.004 |
| 7.74E-07 | 8.81E-08 | 0.95 | 0.002 |
| 9.24E-07 | 1.05E-07 | 1.14 | 0.002 |
| 1.11E-06 | 1.27E-07 | 1.37 | 0.002 |
| 1.38E-06 | 1.58E-07 | 1.70 | 0.003 |
| 1.87E-06 | 2.15E-07 | 2.30 | 0.004 |
| 5.32E-07 | 6.03E-08 | 0.66 | 0.001 |
| 8.02E-07 | 9.13E-08 | 0.99 | 0.002 |
| 9.58E-07 | 1.09E-07 | 1.18 | 0.002 |
| 1.16E-06 | 1.33E-07 | 1.43 | 0.003 |
| 1.48E-06 | 1.70E-07 | 1.82 | 0.003 |
| 9.89E-07 | 1.13E-07 | 1.22 | 0.002 |
| 1.22E-06 | 1.40E-07 | 1.50 | 0.003 |
| 1.58E-06 | 1.82E-07 | 1.95 | 0.003 |
| 2.27E-06 | 2.62E-07 | 2.78 | 0.004 |
| 8.64E-07 | 9.85E-08 | 1.07 | 0.002 |
| 1.03E-06 | 1.18E-07 | 1.27 | 0.002 |
| 1.29E-06 | 1.47E-07 | 1.58 | 0.003 |
| 1.69E-06 | 1.93E-07 | 2.07 | 0.003 |
| 2.41E-06 | 2.78E-07 | 2.95 | 0.004 |
| 5.98E-07 | 6.80E-08 | 0.74 | 0.001 |
| 6.72E-07 | 7.64E-08 | 0.83 | 0.001 |
| 7.71E-07 | 8.77E-08 | 0.95 | 0.002 |
| 9.03E-07 | 1.03E-07 | 1.11 | 0.002 |
| 1.08E-06 | 1.24E-07 | 1.33 | 0.002 |
| 1.35E-06 | 1.55E-07 | 1.66 | 0.003 |
| 1.77E-06 | 2.03E-07 | 2.16 | 0.003 |
| 2.54E-06 | 2.92E-07 | 3.10 | 0.005 |
| 6.22E-07 | 7.07E-08 | 0.77 | 0.001 |
| 7.00E-07 | 7.96E-08 | 0.86 | 0.002 |
| 8.06E-07 | 9.18E-08 | 0.99 | 0.002 |
| 9.45E-07 | 1.08E-07 | 1.16 | 0.002 |
| 1.13E-06 | 1.29E-07 | 1.39 | 0.002 |
| 1.41E-06 | 1.62E-07 | 1.73 | 0.003 |
| 1.86E-06 | 2.13E-07 | 2.27 | 0.003 |
| 2.70E-06 | 3.11E-07 | 3.29 | 0.005 |

|          |          |      |       |
|----------|----------|------|-------|
| 6.40E-07 | 7.28E-08 | 0.79 | 0.001 |
| 7.27E-07 | 8.27E-08 | 0.89 | 0.002 |
| 8.42E-07 | 9.58E-08 | 1.03 | 0.002 |
| 9.90E-07 | 1.13E-07 | 1.22 | 0.002 |
| 1.19E-06 | 1.36E-07 | 1.46 | 0.002 |
| 1.48E-06 | 1.69E-07 | 1.81 | 0.003 |
| 1.95E-06 | 2.24E-07 | 2.38 | 0.004 |
| 2.85E-06 | 3.29E-07 | 3.47 | 0.005 |
| 6.53E-07 | 7.44E-08 | 0.80 | 0.001 |
| 7.49E-07 | 8.52E-08 | 0.92 | 0.002 |
| 8.73E-07 | 9.94E-08 | 1.07 | 0.002 |
| 1.04E-06 | 1.18E-07 | 1.27 | 0.002 |
| 1.25E-06 | 1.43E-07 | 1.53 | 0.002 |
| 1.55E-06 | 1.78E-07 | 1.90 | 0.003 |
| 2.04E-06 | 2.34E-07 | 2.49 | 0.004 |
| 3.04E-06 | 3.51E-07 | 3.70 | 0.005 |
| 7.67E-07 | 8.74E-08 | 0.94 | 0.002 |
| 8.96E-07 | 1.02E-07 | 1.10 | 0.002 |
| 1.07E-06 | 1.22E-07 | 1.31 | 0.002 |
| 1.30E-06 | 1.49E-07 | 1.60 | 0.002 |
| 1.61E-06 | 1.85E-07 | 1.97 | 0.003 |
| 2.12E-06 | 2.43E-07 | 2.59 | 0.004 |
| 3.34E-06 | 3.85E-07 | 4.07 | 0.005 |
| 9.22E-07 | 1.05E-07 | 1.13 | 0.002 |
| 1.09E-06 | 1.24E-07 | 1.33 | 0.002 |
| 1.33E-06 | 1.51E-07 | 1.62 | 0.002 |
| 1.68E-06 | 1.93E-07 | 2.06 | 0.003 |
| 2.22E-06 | 2.54E-07 | 2.70 | 0.004 |
| 3.76E-06 | 4.34E-07 | 4.57 | 0.006 |
| 1.11E-06 | 1.27E-07 | 1.36 | 0.002 |
| 1.35E-06 | 1.54E-07 | 1.65 | 0.002 |
| 1.73E-06 | 1.97E-07 | 2.11 | 0.003 |
| 2.67E-06 | 3.06E-07 | 3.25 | 0.004 |
| 4.45E-06 | 5.14E-07 | 5.40 | 0.007 |
| 1.39E-06 | 1.58E-07 | 1.69 | 0.002 |
| 1.84E-06 | 2.10E-07 | 2.25 | 0.003 |
| 6.96E-07 | 7.86E-08 | 0.86 | 0.001 |
| 8.12E-07 | 9.20E-08 | 1.00 | 0.002 |
| 9.54E-07 | 1.08E-07 | 1.17 | 0.002 |
| 7.08E-07 | 7.91E-08 | 0.87 | 0.001 |
| 7.15E-07 | 7.94E-08 | 0.88 | 0.001 |
| 8.15E-07 | 9.09E-08 | 1.01 | 0.002 |
| 7.26E-07 | 8.03E-08 | 0.90 | 0.002 |
| 8.16E-07 | 9.06E-08 | 1.01 | 0.002 |
| 9.39E-07 | 1.05E-07 | 1.16 | 0.002 |
| 3.88E-06 | 4.50E-07 | 4.73 | 0.007 |
| 2.59E-06 | 2.99E-07 | 3.16 | 0.005 |

|          |          |      |       |
|----------|----------|------|-------|
| 1.98E-06 | 2.28E-07 | 2.42 | 0.004 |
| 1.62E-06 | 1.86E-07 | 1.99 | 0.003 |
| 1.38E-06 | 1.58E-07 | 1.69 | 0.003 |
| 1.21E-06 | 1.37E-07 | 1.48 | 0.002 |
| 3.71E-06 | 4.30E-07 | 4.53 | 0.007 |
| 2.59E-06 | 2.99E-07 | 3.16 | 0.005 |
| 2.02E-06 | 2.33E-07 | 2.48 | 0.004 |
| 1.67E-06 | 1.92E-07 | 2.05 | 0.003 |
| 1.42E-06 | 1.62E-07 | 1.74 | 0.003 |
| 1.23E-06 | 1.39E-07 | 1.51 | 0.002 |
| 5.41E-06 | 6.29E-07 | 6.60 | 0.010 |
| 3.56E-06 | 4.12E-07 | 4.34 | 0.007 |
| 2.64E-06 | 3.04E-07 | 3.22 | 0.005 |
| 2.11E-06 | 2.42E-07 | 2.58 | 0.004 |
| 1.75E-06 | 2.00E-07 | 2.14 | 0.003 |
| 1.46E-06 | 1.67E-07 | 1.80 | 0.003 |
| 1.24E-06 | 1.41E-07 | 1.53 | 0.002 |
| 4.93E-06 | 5.72E-07 | 6.01 | 0.009 |
| 3.45E-06 | 3.99E-07 | 4.21 | 0.006 |
| 2.66E-06 | 3.06E-07 | 3.25 | 0.005 |
| 2.19E-06 | 2.51E-07 | 2.67 | 0.004 |
| 1.81E-06 | 2.07E-07 | 2.22 | 0.003 |
| 1.49E-06 | 1.69E-07 | 1.82 | 0.003 |
| 1.24E-06 | 1.40E-07 | 1.53 | 0.002 |
| 4.70E-06 | 5.45E-07 | 5.74 | 0.009 |
| 3.39E-06 | 3.91E-07 | 4.14 | 0.006 |
| 2.71E-06 | 3.11E-07 | 3.31 | 0.005 |
| 2.27E-06 | 2.60E-07 | 2.77 | 0.004 |
| 1.82E-06 | 2.07E-07 | 2.22 | 0.003 |
| 1.48E-06 | 1.67E-07 | 1.82 | 0.003 |
| 1.23E-06 | 1.38E-07 | 1.51 | 0.002 |
| 7.58E-06 | 8.81E-07 | 9.22 | 0.013 |
| 4.58E-06 | 5.30E-07 | 5.59 | 0.009 |
| 3.33E-06 | 3.85E-07 | 4.08 | 0.006 |
| 2.75E-06 | 3.16E-07 | 3.36 | 0.005 |
| 2.27E-06 | 2.59E-07 | 2.77 | 0.004 |
| 1.79E-06 | 2.04E-07 | 2.20 | 0.003 |
| 1.46E-06 | 1.65E-07 | 1.79 | 0.003 |
| 1.22E-06 | 1.37E-07 | 1.51 | 0.002 |
| 4.49E-06 | 5.19E-07 | 5.48 | 0.008 |
| 3.30E-06 | 3.81E-07 | 4.04 | 0.006 |
| 2.71E-06 | 3.11E-07 | 3.31 | 0.005 |
| 2.21E-06 | 2.52E-07 | 2.70 | 0.004 |
| 1.77E-06 | 2.01E-07 | 2.17 | 0.003 |
| 1.46E-06 | 1.65E-07 | 1.80 | 0.003 |
| 1.26E-06 | 1.40E-07 | 1.55 | 0.003 |
| 4.43E-06 | 5.13E-07 | 5.41 | 0.008 |

|          |          |      |       |
|----------|----------|------|-------|
| 3.27E-06 | 3.77E-07 | 4.00 | 0.006 |
| 2.69E-06 | 3.08E-07 | 3.29 | 0.005 |
| 2.21E-06 | 2.52E-07 | 2.71 | 0.004 |
| 1.80E-06 | 2.04E-07 | 2.21 | 0.003 |
| 1.52E-06 | 1.71E-07 | 1.87 | 0.003 |
| 1.29E-06 | 1.44E-07 | 1.59 | 0.003 |
| 4.38E-06 | 5.06E-07 | 5.35 | 0.008 |
| 3.25E-06 | 3.73E-07 | 3.97 | 0.006 |
| 2.67E-06 | 3.06E-07 | 3.27 | 0.005 |
| 2.20E-06 | 2.50E-07 | 2.69 | 0.004 |
| 1.81E-06 | 2.05E-07 | 2.23 | 0.003 |
| 1.53E-06 | 1.71E-07 | 1.88 | 0.003 |
| 1.29E-06 | 1.44E-07 | 1.60 | 0.003 |
| 4.35E-06 | 5.02E-07 | 5.31 | 0.008 |
| 3.23E-06 | 3.71E-07 | 3.95 | 0.006 |
| 2.62E-06 | 2.99E-07 | 3.21 | 0.005 |
| 2.18E-06 | 2.47E-07 | 2.68 | 0.004 |
| 1.83E-06 | 2.05E-07 | 2.25 | 0.003 |
| 1.54E-06 | 1.72E-07 | 1.90 | 0.003 |
| 1.30E-06 | 1.44E-07 | 1.61 | 0.003 |
| 4.32E-06 | 4.97E-07 | 5.27 | 0.008 |
| 3.26E-06 | 3.73E-07 | 3.98 | 0.006 |
| 2.64E-06 | 3.01E-07 | 3.24 | 0.005 |
| 2.19E-06 | 2.47E-07 | 2.69 | 0.004 |
| 1.85E-06 | 2.07E-07 | 2.27 | 0.004 |
| 1.55E-06 | 1.72E-07 | 1.91 | 0.003 |
| 1.29E-06 | 1.42E-07 | 1.60 | 0.003 |
| 4.24E-06 | 4.88E-07 | 5.18 | 0.007 |
| 3.23E-06 | 3.69E-07 | 3.96 | 0.006 |
| 2.64E-06 | 3.00E-07 | 3.24 | 0.005 |
| 2.21E-06 | 2.48E-07 | 2.71 | 0.004 |
| 1.88E-06 | 2.09E-07 | 2.31 | 0.004 |
| 1.55E-06 | 1.71E-07 | 1.92 | 0.003 |
| 1.29E-06 | 1.41E-07 | 1.60 | 0.003 |
| 4.20E-06 | 4.82E-07 | 5.12 | 0.007 |
| 3.23E-06 | 3.68E-07 | 3.96 | 0.006 |
| 2.68E-06 | 3.03E-07 | 3.28 | 0.005 |
| 2.26E-06 | 2.53E-07 | 2.78 | 0.004 |
| 1.92E-06 | 2.12E-07 | 2.36 | 0.004 |
| 1.55E-06 | 1.70E-07 | 1.92 | 0.003 |
| 1.31E-06 | 1.42E-07 | 1.63 | 0.003 |
| 3.34E-06 | 3.80E-07 | 4.09 | 0.006 |
| 2.79E-06 | 3.14E-07 | 3.43 | 0.005 |
| 2.46E-06 | 2.74E-07 | 3.03 | 0.005 |
| 2.01E-06 | 2.22E-07 | 2.49 | 0.004 |
| 1.58E-06 | 1.72E-07 | 1.96 | 0.003 |
| 1.36E-06 | 1.46E-07 | 1.69 | 0.003 |

|          |          |      |       |
|----------|----------|------|-------|
| 3.48E-06 | 3.93E-07 | 4.26 | 0.006 |
| 3.07E-06 | 3.44E-07 | 3.77 | 0.006 |
| 2.48E-06 | 2.75E-07 | 3.06 | 0.005 |
| 2.08E-06 | 2.28E-07 | 2.57 | 0.004 |
| 1.75E-06 | 1.89E-07 | 2.17 | 0.004 |
| 1.35E-06 | 1.45E-07 | 1.69 | 0.003 |
| 4.30E-06 | 4.89E-07 | 5.25 | 0.007 |
| 3.51E-06 | 3.96E-07 | 4.31 | 0.006 |
| 3.07E-06 | 3.42E-07 | 3.78 | 0.006 |
| 2.51E-06 | 2.76E-07 | 3.10 | 0.005 |
| 2.09E-06 | 2.27E-07 | 2.59 | 0.004 |
| 1.77E-06 | 1.91E-07 | 2.21 | 0.004 |
| 1.45E-06 | 1.55E-07 | 1.81 | 0.003 |
| 6.02E-06 | 6.89E-07 | 7.33 | 0.010 |
| 4.20E-06 | 4.76E-07 | 5.14 | 0.007 |
| 3.47E-06 | 3.89E-07 | 4.26 | 0.006 |
| 2.89E-06 | 3.19E-07 | 3.56 | 0.006 |
| 2.47E-06 | 2.70E-07 | 3.06 | 0.005 |
| 2.10E-06 | 2.27E-07 | 2.61 | 0.004 |
| 1.75E-06 | 1.87E-07 | 2.19 | 0.004 |
| 1.47E-06 | 1.57E-07 | 1.84 | 0.003 |
| 4.26E-06 | 4.80E-07 | 5.22 | 0.008 |
| 3.38E-06 | 3.76E-07 | 4.16 | 0.006 |
| 2.81E-06 | 3.09E-07 | 3.47 | 0.006 |
| 2.31E-06 | 2.50E-07 | 2.86 | 0.005 |
| 1.94E-06 | 2.08E-07 | 2.42 | 0.004 |
| 1.71E-06 | 1.82E-07 | 2.14 | 0.004 |
| 1.44E-06 | 1.52E-07 | 1.80 | 0.003 |
| 4.49E-06 | 5.04E-07 | 5.51 | 0.008 |
| 3.47E-06 | 3.83E-07 | 4.28 | 0.007 |
| 2.81E-06 | 3.07E-07 | 3.49 | 0.006 |
| 2.29E-06 | 2.47E-07 | 2.85 | 0.005 |
| 1.90E-06 | 2.03E-07 | 2.38 | 0.004 |
| 1.68E-06 | 1.77E-07 | 2.10 | 0.004 |
| 1.41E-06 | 1.48E-07 | 1.77 | 0.003 |
| 4.81E-06 | 5.38E-07 | 5.91 | 0.009 |
| 3.59E-06 | 3.94E-07 | 4.44 | 0.007 |
| 2.93E-06 | 3.17E-07 | 3.64 | 0.006 |
| 2.34E-06 | 2.50E-07 | 2.92 | 0.005 |
| 1.90E-06 | 2.01E-07 | 2.37 | 0.004 |
| 1.65E-06 | 1.73E-07 | 2.06 | 0.004 |
| 1.37E-06 | 1.43E-07 | 1.73 | 0.003 |
| 5.34E-06 | 5.94E-07 | 6.56 | 0.010 |
| 3.88E-06 | 4.23E-07 | 4.80 | 0.008 |
| 3.01E-06 | 3.23E-07 | 3.74 | 0.006 |
| 2.37E-06 | 2.52E-07 | 2.96 | 0.005 |
| 1.90E-06 | 1.99E-07 | 2.38 | 0.004 |

|          |          |      |       |
|----------|----------|------|-------|
| 1.63E-06 | 1.70E-07 | 2.05 | 0.004 |
| 1.29E-06 | 1.34E-07 | 1.63 | 0.003 |
| 4.48E-07 | 5.06E-08 | 0.56 | 0.001 |
| 4.96E-07 | 5.62E-08 | 0.62 | 0.001 |
| 5.50E-07 | 6.23E-08 | 0.69 | 0.002 |
| 6.19E-07 | 7.03E-08 | 0.77 | 0.002 |
| 7.05E-07 | 8.03E-08 | 0.89 | 0.002 |
| 8.12E-07 | 9.28E-08 | 1.03 | 0.003 |
| 9.44E-07 | 1.08E-07 | 1.21 | 0.004 |
| 4.74E-07 | 5.36E-08 | 0.59 | 0.001 |
| 5.29E-07 | 6.00E-08 | 0.66 | 0.002 |
| 5.96E-07 | 6.76E-08 | 0.75 | 0.002 |
| 6.75E-07 | 7.68E-08 | 0.85 | 0.002 |
| 7.78E-07 | 8.88E-08 | 0.98 | 0.003 |
| 9.20E-07 | 1.05E-07 | 1.17 | 0.004 |
| 1.10E-06 | 1.27E-07 | 1.43 | 0.005 |
| 5.02E-07 | 5.67E-08 | 0.62 | 0.001 |
| 5.73E-07 | 6.49E-08 | 0.71 | 0.001 |
| 6.51E-07 | 7.39E-08 | 0.81 | 0.002 |
| 7.43E-07 | 8.46E-08 | 0.93 | 0.002 |
| 8.68E-07 | 9.92E-08 | 1.10 | 0.003 |
| 1.07E-06 | 1.23E-07 | 1.39 | 0.005 |
| 1.37E-06 | 1.57E-07 | 1.80 | 0.008 |
| 5.20E-07 | 5.89E-08 | 0.64 | 0.001 |
| 6.00E-07 | 6.79E-08 | 0.74 | 0.001 |
| 6.96E-07 | 7.91E-08 | 0.86 | 0.002 |
| 8.06E-07 | 9.18E-08 | 1.01 | 0.002 |
| 9.68E-07 | 1.11E-07 | 1.24 | 0.004 |
| 1.35E-06 | 1.55E-07 | 1.81 | 0.009 |
| 1.92E-06 | 2.21E-07 | 2.60 | 0.015 |
| 5.36E-07 | 6.06E-08 | 0.66 | 0.001 |
| 6.19E-07 | 7.02E-08 | 0.76 | 0.001 |
| 7.19E-07 | 8.17E-08 | 0.89 | 0.002 |
| 8.42E-07 | 9.60E-08 | 1.05 | 0.002 |
| 1.04E-06 | 1.19E-07 | 1.33 | 0.004 |
| 5.58E-07 | 6.32E-08 | 0.69 | 0.001 |
| 6.46E-07 | 7.33E-08 | 0.80 | 0.001 |
| 7.50E-07 | 8.52E-08 | 0.93 | 0.002 |
| 8.88E-07 | 1.01E-07 | 1.11 | 0.003 |
| 1.15E-06 | 1.32E-07 | 1.49 | 0.006 |
| 5.84E-07 | 6.62E-08 | 0.72 | 0.001 |
| 6.76E-07 | 7.68E-08 | 0.84 | 0.002 |
| 7.94E-07 | 9.04E-08 | 0.99 | 0.002 |
| 9.67E-07 | 1.10E-07 | 1.22 | 0.003 |
| 1.32E-06 | 1.52E-07 | 1.70 | 0.006 |
| 2.26E-06 | 2.61E-07 | 3.00 | 0.015 |
| 6.18E-07 | 7.01E-08 | 0.76 | 0.001 |



|          |          |      |       |
|----------|----------|------|-------|
| 7.20E-07 | 8.19E-08 | 0.89 | 0.002 |
| 8.62E-07 | 9.82E-08 | 1.07 | 0.002 |
| 1.07E-06 | 1.22E-07 | 1.34 | 0.003 |
| 1.42E-06 | 1.63E-07 | 1.80 | 0.005 |
| 6.55E-07 | 7.44E-08 | 0.81 | 0.002 |
| 7.68E-07 | 8.75E-08 | 0.95 | 0.002 |
| 9.26E-07 | 1.06E-07 | 1.15 | 0.002 |
| 1.16E-06 | 1.32E-07 | 1.44 | 0.003 |
| 1.50E-06 | 1.73E-07 | 1.89 | 0.005 |
| 6.93E-07 | 7.88E-08 | 0.86 | 0.002 |
| 8.17E-07 | 9.31E-08 | 1.01 | 0.002 |
| 9.86E-07 | 1.13E-07 | 1.22 | 0.003 |
| 1.23E-06 | 1.41E-07 | 1.53 | 0.003 |
| 1.59E-06 | 1.83E-07 | 1.98 | 0.005 |
| 2.10E-06 | 2.42E-07 | 2.63 | 0.006 |
| 2.22E-06 | 2.57E-07 | 2.95 | 0.015 |
| 2.43E-06 | 2.82E-07 | 3.19 | 0.014 |
| 1.26E-06 | 1.45E-07 | 1.63 | 0.006 |
| 1.07E-06 | 1.23E-07 | 1.37 | 0.005 |
| 1.20E-06 | 1.38E-07 | 1.54 | 0.005 |
| 1.41E-06 | 1.63E-07 | 1.74 | 0.003 |
| 1.49E-06 | 1.71E-07 | 1.83 | 0.003 |
| 1.33E-06 | 1.53E-07 | 1.63 | 0.003 |
| 2.89E-06 | 3.35E-07 | 3.56 | 0.007 |
| 5.20E-06 | 6.04E-07 | 6.32 | 0.009 |
| 3.11E-06 | 3.61E-07 | 3.79 | 0.005 |
| 5.47E-06 | 6.36E-07 | 6.64 | 0.009 |
| 3.37E-06 | 3.91E-07 | 4.10 | 0.006 |
| 2.62E-06 | 2.75E-07 | 3.28 | 0.006 |
| 1.79E-06 | 1.84E-07 | 2.26 | 0.004 |
| 1.41E-06 | 1.44E-07 | 1.79 | 0.004 |
| 1.23E-06 | 1.24E-07 | 1.55 | 0.003 |
| 2.48E-06 | 2.59E-07 | 3.12 | 0.006 |
| 1.69E-06 | 1.73E-07 | 2.14 | 0.004 |
| 1.35E-06 | 1.37E-07 | 1.70 | 0.003 |
| 1.18E-06 | 1.20E-07 | 1.50 | 0.003 |
| 3.86E-06 | 4.11E-07 | 4.81 | 0.008 |
| 1.66E-06 | 1.71E-07 | 2.10 | 0.004 |
| 1.32E-06 | 1.35E-07 | 1.67 | 0.003 |
| 1.15E-06 | 1.17E-07 | 1.45 | 0.003 |
| 2.26E-06 | 2.34E-07 | 2.84 | 0.005 |
| 1.64E-06 | 1.69E-07 | 2.07 | 0.004 |
| 1.29E-06 | 1.33E-07 | 1.62 | 0.003 |
| 1.10E-06 | 1.14E-07 | 1.39 | 0.003 |
| 3.32E-06 | 3.34E-07 | 4.22 | 0.008 |
| 2.05E-06 | 2.12E-07 | 2.58 | 0.005 |
| 1.59E-06 | 1.65E-07 | 2.00 | 0.004 |

|          |          |      |       |
|----------|----------|------|-------|
| 1.26E-06 | 1.31E-07 | 1.58 | 0.003 |
| 1.06E-06 | 1.11E-07 | 1.33 | 0.003 |
| 3.52E-06 | 3.29E-07 | 4.55 | 0.011 |
| 2.91E-06 | 2.86E-07 | 3.71 | 0.008 |
| 2.36E-06 | 2.39E-07 | 2.99 | 0.006 |
| 1.88E-06 | 1.94E-07 | 2.37 | 0.005 |
| 1.51E-06 | 1.58E-07 | 1.90 | 0.004 |
| 1.24E-06 | 1.30E-07 | 1.55 | 0.003 |
| 1.05E-06 | 1.10E-07 | 1.31 | 0.002 |
| 9.28E-07 | 9.81E-08 | 1.16 | 0.002 |
| 4.01E-06 | 3.25E-07 | 5.37 | 0.016 |
| 3.16E-06 | 2.86E-07 | 4.13 | 0.010 |
| 2.57E-06 | 2.49E-07 | 3.30 | 0.007 |
| 2.11E-06 | 2.13E-07 | 2.68 | 0.005 |
| 1.74E-06 | 1.80E-07 | 2.19 | 0.004 |
| 1.43E-06 | 1.50E-07 | 1.79 | 0.003 |
| 1.20E-06 | 1.27E-07 | 1.50 | 0.003 |
| 1.02E-06 | 1.09E-07 | 1.28 | 0.002 |
| 8.97E-07 | 9.57E-08 | 1.12 | 0.002 |
| 5.09E-06 | 3.09E-07 | 7.20 | 0.027 |
| 3.73E-06 | 2.83E-07 | 5.07 | 0.016 |
| 2.88E-06 | 2.53E-07 | 3.80 | 0.010 |
| 2.31E-06 | 2.22E-07 | 2.97 | 0.007 |
| 1.90E-06 | 1.92E-07 | 2.41 | 0.005 |
| 1.59E-06 | 1.66E-07 | 2.01 | 0.004 |
| 1.35E-06 | 1.42E-07 | 1.69 | 0.003 |
| 1.15E-06 | 1.23E-07 | 1.44 | 0.003 |
| 9.91E-07 | 1.06E-07 | 1.24 | 0.002 |
| 8.71E-07 | 9.36E-08 | 1.09 | 0.002 |
| 2.60E-06 | 2.24E-07 | 3.44 | 0.009 |
| 2.05E-06 | 1.97E-07 | 2.64 | 0.006 |
| 1.72E-06 | 1.74E-07 | 2.18 | 0.004 |
| 1.46E-06 | 1.52E-07 | 1.84 | 0.003 |
| 1.26E-06 | 1.33E-07 | 1.57 | 0.003 |
| 1.09E-06 | 1.17E-07 | 1.36 | 0.002 |
| 9.57E-07 | 1.03E-07 | 1.19 | 0.002 |
| 8.50E-07 | 9.17E-08 | 1.06 | 0.002 |
| 2.34E-06 | 2.03E-07 | 3.09 | 0.008 |
| 1.88E-06 | 1.81E-07 | 2.42 | 0.005 |
| 1.58E-06 | 1.60E-07 | 2.01 | 0.004 |
| 1.36E-06 | 1.41E-07 | 1.71 | 0.003 |
| 1.18E-06 | 1.24E-07 | 1.48 | 0.003 |
| 1.04E-06 | 1.11E-07 | 1.30 | 0.002 |
| 9.24E-07 | 9.94E-08 | 1.15 | 0.002 |
| 8.28E-07 | 8.95E-08 | 1.03 | 0.002 |
| 4.40E-06 | 4.78E-07 | 5.45 | 0.009 |
| 3.17E-06 | 3.39E-07 | 3.95 | 0.007 |

|          |          |      |       |
|----------|----------|------|-------|
| 2.36E-06 | 2.49E-07 | 2.95 | 0.005 |
| 1.84E-06 | 1.92E-07 | 2.32 | 0.004 |
| 1.55E-06 | 1.60E-07 | 1.96 | 0.004 |
| 1.24E-06 | 1.27E-07 | 1.57 | 0.003 |
| 3.30E-06 | 3.52E-07 | 4.11 | 0.007 |
| 2.30E-06 | 2.41E-07 | 2.89 | 0.005 |
| 1.71E-06 | 1.76E-07 | 2.15 | 0.004 |
| 1.41E-06 | 1.44E-07 | 1.79 | 0.004 |
| 1.21E-06 | 1.23E-07 | 1.53 | 0.003 |
| 1.01E-06 | 1.10E-07 | 1.26 | 0.002 |
| 1.18E-06 | 1.28E-07 | 1.46 | 0.002 |
| 1.36E-06 | 1.49E-07 | 1.69 | 0.003 |
| 1.59E-06 | 1.74E-07 | 1.97 | 0.003 |
| 1.89E-06 | 2.06E-07 | 2.33 | 0.004 |
| 2.31E-06 | 2.52E-07 | 2.86 | 0.005 |
| 3.02E-06 | 3.30E-07 | 3.73 | 0.006 |
| 9.86E-07 | 1.07E-07 | 1.22 | 0.002 |
| 1.14E-06 | 1.23E-07 | 1.41 | 0.002 |
| 1.31E-06 | 1.42E-07 | 1.63 | 0.003 |
| 1.52E-06 | 1.65E-07 | 1.89 | 0.003 |
| 1.79E-06 | 1.94E-07 | 2.23 | 0.004 |
| 3.71E-06 | 3.96E-07 | 4.63 | 0.008 |
| 9.58E-07 | 1.04E-07 | 1.19 | 0.002 |
| 1.09E-06 | 1.18E-07 | 1.36 | 0.002 |
| 1.26E-06 | 1.35E-07 | 1.57 | 0.003 |
| 1.46E-06 | 1.57E-07 | 1.82 | 0.003 |
| 2.07E-06 | 2.18E-07 | 2.59 | 0.005 |
| 2.59E-06 | 2.70E-07 | 3.26 | 0.006 |
| 3.43E-06 | 3.52E-07 | 4.33 | 0.008 |
| 5.68E-06 | 5.48E-07 | 7.29 | 0.016 |
| 1.05E-06 | 1.13E-07 | 1.30 | 0.002 |
| 1.20E-06 | 1.29E-07 | 1.50 | 0.003 |
| 1.40E-06 | 1.48E-07 | 1.75 | 0.003 |
| 1.64E-06 | 1.72E-07 | 2.05 | 0.004 |
| 1.96E-06 | 2.02E-07 | 2.47 | 0.005 |
| 4.09E-06 | 3.75E-07 | 5.32 | 0.013 |
| 8.90E-07 | 9.67E-08 | 1.10 | 0.002 |
| 1.32E-06 | 1.40E-07 | 1.65 | 0.003 |
| 1.54E-06 | 1.60E-07 | 1.94 | 0.004 |
| 1.88E-06 | 1.89E-07 | 2.39 | 0.005 |
| 2.47E-06 | 2.24E-07 | 3.22 | 0.008 |
| 3.20E-06 | 2.65E-07 | 4.27 | 0.012 |
| 3.92E-06 | 3.09E-07 | 5.30 | 0.016 |
| 8.69E-07 | 9.41E-08 | 1.08 | 0.002 |
| 1.25E-06 | 1.32E-07 | 1.57 | 0.003 |
| 1.45E-06 | 1.50E-07 | 1.83 | 0.003 |
| 3.22E-06 | 2.35E-07 | 4.42 | 0.014 |

|          |          |      |       |
|----------|----------|------|-------|
| 7.25E-06 | 7.10E-07 | 9.26 | 0.019 |
| 6.52E-06 | 6.74E-07 | 8.20 | 0.015 |
| 7.75E-07 | 8.20E-08 | 0.97 | 0.002 |
| 8.53E-07 | 8.96E-08 | 1.07 | 0.002 |
| 1.05E-06 | 1.08E-07 | 1.33 | 0.003 |
| 1.18E-06 | 1.19E-07 | 1.50 | 0.003 |
| 3.31E-06 | 1.93E-07 | 4.72 | 0.018 |
| 3.94E-06 | 2.05E-07 | 5.71 | 0.023 |
| 4.67E-06 | 2.10E-07 | 6.89 | 0.030 |
| 4.62E-06 | 2.05E-07 | 6.83 | 0.030 |
| 3.11E-06 | 1.95E-07 | 4.38 | 0.016 |
| 2.17E-06 | 1.82E-07 | 2.88 | 0.008 |
| 1.80E-06 | 1.68E-07 | 2.33 | 0.005 |
| 1.50E-06 | 1.49E-07 | 1.91 | 0.004 |
| 1.10E-06 | 1.15E-07 | 1.38 | 0.003 |
| 7.50E-07 | 7.86E-08 | 0.94 | 0.002 |
| 8.18E-07 | 8.50E-08 | 1.03 | 0.002 |
| 1.01E-06 | 1.02E-07 | 1.29 | 0.003 |
| 1.14E-06 | 1.12E-07 | 1.45 | 0.003 |
| 2.68E-06 | 1.72E-07 | 3.75 | 0.014 |
| 3.07E-06 | 1.80E-07 | 4.38 | 0.017 |
| 3.55E-06 | 1.84E-07 | 5.15 | 0.021 |
| 3.97E-06 | 1.84E-07 | 5.83 | 0.025 |
| 3.37E-06 | 1.82E-07 | 4.86 | 0.019 |
| 2.58E-06 | 1.74E-07 | 3.59 | 0.012 |
| 1.92E-06 | 1.62E-07 | 2.55 | 0.007 |
| 1.65E-06 | 1.51E-07 | 2.14 | 0.005 |
| 1.46E-06 | 1.41E-07 | 1.87 | 0.004 |
| 7.24E-07 | 7.52E-08 | 0.91 | 0.002 |
| 7.86E-07 | 8.09E-08 | 0.99 | 0.002 |
| 8.65E-07 | 8.78E-08 | 1.10 | 0.002 |
| 9.64E-07 | 9.59E-08 | 1.23 | 0.003 |
| 1.09E-06 | 1.05E-07 | 1.39 | 0.003 |
| 1.23E-06 | 1.14E-07 | 1.60 | 0.004 |
| 1.43E-06 | 1.25E-07 | 1.89 | 0.005 |
| 1.68E-06 | 1.35E-07 | 2.26 | 0.007 |
| 1.95E-06 | 1.45E-07 | 2.67 | 0.009 |
| 2.23E-06 | 1.54E-07 | 3.08 | 0.011 |
| 2.49E-06 | 1.60E-07 | 3.50 | 0.013 |
| 2.64E-06 | 1.58E-07 | 3.74 | 0.014 |
| 2.70E-06 | 1.58E-07 | 3.86 | 0.015 |
| 2.60E-06 | 1.61E-07 | 3.67 | 0.014 |
| 2.11E-06 | 1.55E-07 | 2.89 | 0.009 |
| 1.56E-06 | 1.33E-07 | 2.07 | 0.006 |
| 1.39E-06 | 1.28E-07 | 1.80 | 0.004 |
| 1.35E-06 | 1.29E-07 | 1.74 | 0.004 |
| 1.11E-06 | 1.11E-07 | 1.41 | 0.003 |

|          |          |      |       |
|----------|----------|------|-------|
| 6.94E-07 | 7.15E-08 | 0.88 | 0.002 |
| 7.51E-07 | 7.67E-08 | 0.95 | 0.002 |
| 8.28E-07 | 8.32E-08 | 1.05 | 0.002 |
| 9.17E-07 | 9.02E-08 | 1.17 | 0.003 |
| 1.02E-06 | 9.81E-08 | 1.32 | 0.003 |
| 1.15E-06 | 1.07E-07 | 1.50 | 0.004 |
| 1.31E-06 | 1.15E-07 | 1.73 | 0.005 |
| 1.50E-06 | 1.24E-07 | 2.01 | 0.006 |
| 1.70E-06 | 1.32E-07 | 2.31 | 0.007 |
| 1.85E-06 | 1.38E-07 | 2.52 | 0.008 |
| 1.93E-06 | 1.36E-07 | 2.67 | 0.009 |
| 1.92E-06 | 1.31E-07 | 2.67 | 0.009 |
| 1.90E-06 | 1.28E-07 | 2.64 | 0.009 |
| 1.88E-06 | 1.33E-07 | 2.59 | 0.009 |
| 1.57E-06 | 1.23E-07 | 2.12 | 0.006 |
| 1.26E-06 | 1.09E-07 | 1.66 | 0.004 |
| 1.10E-06 | 1.03E-07 | 1.43 | 0.003 |
| 1.04E-06 | 1.01E-07 | 1.33 | 0.003 |
| 8.68E-07 | 8.77E-08 | 1.10 | 0.002 |
| 6.62E-07 | 6.78E-08 | 0.84 | 0.002 |
| 7.05E-07 | 7.25E-08 | 0.89 | 0.002 |
| 7.88E-07 | 7.85E-08 | 1.00 | 0.002 |
| 8.68E-07 | 8.49E-08 | 1.11 | 0.002 |
| 9.61E-07 | 9.17E-08 | 1.24 | 0.003 |
| 1.07E-06 | 9.91E-08 | 1.40 | 0.003 |
| 1.20E-06 | 1.07E-07 | 1.58 | 0.004 |
| 1.35E-06 | 1.14E-07 | 1.80 | 0.005 |
| 1.50E-06 | 1.20E-07 | 2.02 | 0.006 |
| 1.55E-06 | 1.21E-07 | 2.10 | 0.006 |
| 1.57E-06 | 1.18E-07 | 2.14 | 0.007 |
| 1.53E-06 | 1.12E-07 | 2.10 | 0.007 |
| 1.53E-06 | 1.12E-07 | 2.10 | 0.007 |
| 1.58E-06 | 1.19E-07 | 2.15 | 0.007 |
| 1.38E-06 | 1.12E-07 | 1.85 | 0.005 |
| 1.16E-06 | 1.01E-07 | 1.53 | 0.004 |
| 1.01E-06 | 9.36E-08 | 1.31 | 0.003 |
| 8.91E-07 | 8.65E-08 | 1.14 | 0.003 |
| 7.93E-07 | 7.97E-08 | 1.01 | 0.002 |
| 8.14E-07 | 8.33E-08 | 1.03 | 0.002 |
| 5.03E-06 | 2.30E-07 | 7.41 | 0.032 |
| 3.92E-06 | 2.11E-07 | 5.65 | 0.023 |
| 1.43E-06 | 1.46E-07 | 1.81 | 0.004 |
| 1.77E-06 | 1.65E-07 | 2.30 | 0.005 |
| 9.20E-07 | 1.02E-07 | 1.14 | 0.002 |
| 4.82E-06 | 5.17E-07 | 6.00 | 0.010 |
| 5.24E-06 | 5.53E-07 | 6.54 | 0.011 |
| 6.29E-06 | 7.29E-07 | 7.65 | 0.011 |

|          |          |      |       |
|----------|----------|------|-------|
| 6.35E-06 | 7.19E-07 | 7.75 | 0.011 |
| 4.72E-06 | 5.28E-07 | 5.79 | 0.008 |
| 2.04E-06 | 2.11E-07 | 2.57 | 0.005 |
| 3.37E-06 | 2.34E-07 | 4.66 | 0.016 |
| 3.89E-06 | 2.57E-07 | 5.43 | 0.019 |
| 6.59E-06 | 5.65E-07 | 8.72 | 0.023 |
| 4.54E-06 | 5.02E-07 | 5.58 | 0.008 |
| 3.60E-06 | 4.14E-07 | 4.37 | 0.006 |
| 2.98E-06 | 3.42E-07 | 3.62 | 0.005 |
| 3.04E-06 | 3.51E-07 | 3.72 | 0.006 |
| 2.67E-06 | 3.08E-07 | 3.27 | 0.005 |
| 2.89E-06 | 3.33E-07 | 3.53 | 0.005 |
| 2.34E-06 | 2.69E-07 | 2.86 | 0.005 |
| 2.30E-06 | 2.65E-07 | 2.83 | 0.005 |
| 3.49E-06 | 4.03E-07 | 4.27 | 0.007 |
| 2.37E-06 | 2.73E-07 | 2.94 | 0.006 |
| 2.61E-06 | 3.03E-07 | 3.53 | 0.020 |
| 3.39E-06 | 3.94E-07 | 4.17 | 0.008 |

AERMOD ( :91): C:\Lakes\A

AERMET ( 1 34):

MODELING IONS USED: Re

PLOT FILE OF ANNUAL

FOR A TOTAL OF 53

FORM AT: (3(1X,F13.5

| X         | Y         | Lookup               | ARLN1   | PAREA1  | PAREA2  |
|-----------|-----------|----------------------|---------|---------|---------|
| 689212.05 | 4283551.6 | 689212.05_4283551.57 | 0.43025 | 0.26073 | 0.09352 |
| 689262.05 | 4283551.6 | 689262.05_4283551.57 | 0.47193 | 0.30767 | 0.10408 |
| 689312.05 | 4283551.6 | 689312.05_4283551.57 | 0.59882 | 0.36818 | 0.11542 |
| 689362.05 | 4283551.6 | 689362.05_4283551.57 | 0.78694 | 0.45175 | 0.1284  |
| 689412.05 | 4283551.6 | 689412.05_4283551.57 | 1.06246 | 0.57582 | 0.1433  |
| 689212.05 | 4283601.6 | 689212.05_4283601.57 | 0.40812 | 0.27321 | 0.09697 |
| 689262.05 | 4283601.6 | 689262.05_4283601.57 | 0.44414 | 0.32394 | 0.10815 |
| 689312.05 | 4283601.6 | 689312.05_4283601.57 | 0.58906 | 0.38799 | 0.11882 |
| 689362.05 | 4283601.6 | 689362.05_4283601.57 | 0.74731 | 0.48058 | 0.13297 |
| 689412.05 | 4283601.6 | 689412.05_4283601.57 | 0.97764 | 0.62184 | 0.14949 |
| 689262.05 | 4283651.6 | 689262.05_4283651.57 | 0.41601 | 0.34175 | 0.11387 |
| 689312.05 | 4283651.6 | 689312.05_4283651.57 | 0.56137 | 0.4098  | 0.12406 |
| 689362.05 | 4283651.6 | 689362.05_4283651.57 | 0.72591 | 0.50757 | 0.13703 |
| 689412.05 | 4283651.6 | 689412.05_4283651.57 | 0.89437 | 0.67039 | 0.1563  |
| 689212.05 | 4283701.6 | 689212.05_4283701.57 | 0.35525 | 0.29994 | 0.10612 |
| 689262.05 | 4283701.6 | 689262.05_4283701.57 | 0.4138  | 0.3587  | 0.11832 |
| 689312.05 | 4283701.6 | 689312.05_4283701.57 | 0.53494 | 0.43254 | 0.12891 |
| 689362.05 | 4283701.6 | 689362.05_4283701.57 | 0.6854  | 0.53907 | 0.14151 |
| 689412.05 | 4283701.6 | 689412.05_4283701.57 | 0.83803 | 0.73172 | 0.1615  |
| 689062.05 | 4283751.6 | 689062.05_4283751.57 | 0.30954 | 0.20522 | 0.084   |
| 689212.05 | 4283751.6 | 689212.05_4283751.57 | 0.37807 | 0.31084 | 0.10806 |
| 689262.05 | 4283751.6 | 689262.05_4283751.57 | 0.42595 | 0.37227 | 0.11982 |
| 689312.05 | 4283751.6 | 689312.05_4283751.57 | 0.55149 | 0.45128 | 0.13028 |
| 689362.05 | 4283751.6 | 689362.05_4283751.57 | 0.64788 | 0.57755 | 0.14683 |
| 689262.05 | 4283801.6 | 689262.05_4283801.57 | 0.47458 | 0.38434 | 0.12053 |
| 689312.05 | 4283801.6 | 689312.05_4283801.57 | 0.54274 | 0.47544 | 0.13443 |
| 689362.05 | 4283801.6 | 689362.05_4283801.57 | 0.6239  | 0.61916 | 0.1526  |
| 689412.05 | 4283801.6 | 689412.05_4283801.57 | 0.72472 | 0.89177 | 0.17666 |
| 689212.05 | 4283851.6 | 689212.05_4283851.57 | 0.42529 | 0.33531 | 0.11376 |
| 689262.05 | 4283851.6 | 689262.05_4283851.57 | 0.47913 | 0.40217 | 0.12498 |
| 689312.05 | 4283851.6 | 689312.05_4283851.57 | 0.52749 | 0.50092 | 0.13944 |
| 689362.05 | 4283851.6 | 689362.05_4283851.57 | 0.58738 | 0.65867 | 0.15807 |
| 689412.05 | 4283851.6 | 689412.05_4283851.57 | 0.69603 | 0.94631 | 0.17904 |
| 689062.05 | 4283901.6 | 689062.05_4283901.57 | 0.24942 | 0.2315  | 0.08792 |
| 689112.05 | 4283901.6 | 689112.05_4283901.57 | 0.31404 | 0.2602  | 0.09718 |
| 689162.05 | 4283901.6 | 689162.05_4283901.57 | 0.36327 | 0.29872 | 0.10736 |
| 689212.05 | 4283901.6 | 689212.05_4283901.57 | 0.40987 | 0.35033 | 0.11822 |
| 689262.05 | 4283901.6 | 689262.05_4283901.57 | 0.45608 | 0.42154 | 0.13048 |
| 689312.05 | 4283901.6 | 689312.05_4283901.57 | 0.49299 | 0.52685 | 0.14542 |
| 689362.05 | 4283901.6 | 689362.05_4283901.57 | 0.56773 | 0.69113 | 0.16244 |
| 689412.05 | 4283901.6 | 689412.05_4283901.57 | 0.65978 | 0.99552 | 0.18327 |
| 689062.05 | 4283951.6 | 689062.05_4283951.57 | 0.23383 | 0.24068 | 0.08883 |
| 689112.05 | 4283951.6 | 689112.05_4283951.57 | 0.29719 | 0.27113 | 0.09912 |
| 689162.05 | 4283951.6 | 689162.05_4283951.57 | 0.33481 | 0.31248 | 0.11117 |
| 689212.05 | 4283951.6 | 689212.05_4283951.57 | 0.37982 | 0.36659 | 0.12323 |
| 689262.05 | 4283951.6 | 689262.05_4283951.57 | 0.42498 | 0.44081 | 0.13625 |
| 689312.05 | 4283951.6 | 689312.05_4283951.57 | 0.4706  | 0.55019 | 0.15122 |

|           |           |                      |         |         |         |
|-----------|-----------|----------------------|---------|---------|---------|
| 689362.05 | 4283951.6 | 689362.05_4283951.57 | 0.52751 | 0.72689 | 0.16957 |
| 689412.05 | 4283951.6 | 689412.05_4283951.57 | 0.60071 | 1.05816 | 0.19296 |
| 689062.05 | 4284001.6 | 689062.05_4284001.57 | 0.24077 | 0.24802 | 0.08859 |
| 689112.05 | 4284001.6 | 689112.05_4284001.57 | 0.28569 | 0.28166 | 0.10037 |
| 689162.05 | 4284001.6 | 689162.05_4284001.57 | 0.30658 | 0.32628 | 0.11472 |
| 689212.05 | 4284001.6 | 689212.05_4284001.57 | 0.33396 | 0.38437 | 0.12925 |
| 689262.05 | 4284001.6 | 689262.05_4284001.57 | 0.38162 | 0.46155 | 0.14308 |
| 689312.05 | 4284001.6 | 689312.05_4284001.57 | 0.43468 | 0.57534 | 0.15857 |
| 689362.05 | 4284001.6 | 689362.05_4284001.57 | 0.49345 | 0.76116 | 0.17761 |
| 689412.05 | 4284001.6 | 689412.05_4284001.57 | 0.54916 | 1.11891 | 0.20362 |
| 689062.05 | 4284051.6 | 689062.05_4284051.57 | 0.26126 | 0.25333 | 0.08822 |
| 689112.05 | 4284051.6 | 689112.05_4284051.57 | 0.27944 | 0.29029 | 0.10089 |
| 689162.05 | 4284051.6 | 689162.05_4284051.57 | 0.28513 | 0.33846 | 0.11728 |
| 689212.05 | 4284051.6 | 689212.05_4284051.57 | 0.30079 | 0.40216 | 0.1354  |
| 689262.05 | 4284051.6 | 689262.05_4284051.57 | 0.34219 | 0.48554 | 0.15214 |
| 689312.05 | 4284051.6 | 689312.05_4284051.57 | 0.39342 | 0.6047  | 0.16848 |
| 689362.05 | 4284051.6 | 689362.05_4284051.57 | 0.4561  | 0.79722 | 0.18729 |
| 689412.05 | 4284051.6 | 689412.05_4284051.57 | 0.49699 | 1.19369 | 0.21827 |
| 689112.05 | 4284101.6 | 689112.05_4284101.57 | 0.26384 | 0.29752 | 0.10225 |
| 689162.05 | 4284101.6 | 689162.05_4284101.57 | 0.27433 | 0.34765 | 0.11862 |
| 689212.05 | 4284101.6 | 689212.05_4284101.57 | 0.29213 | 0.41388 | 0.13808 |
| 689262.05 | 4284101.6 | 689262.05_4284101.57 | 0.31818 | 0.50649 | 0.15999 |
| 689312.05 | 4284101.6 | 689312.05_4284101.57 | 0.36768 | 0.62829 | 0.17673 |
| 689362.05 | 4284101.6 | 689362.05_4284101.57 | 0.42816 | 0.8289  | 0.19654 |
| 689412.05 | 4284101.6 | 689412.05_4284101.57 | 0.44209 | 1.31208 | 0.24325 |
| 689162.05 | 4284151.6 | 689162.05_4284151.57 | 0.25393 | 0.35776 | 0.12239 |
| 689212.05 | 4284151.6 | 689212.05_4284151.57 | 0.2875  | 0.42194 | 0.13953 |
| 689262.05 | 4284151.6 | 689262.05_4284151.57 | 0.30598 | 0.51585 | 0.16216 |
| 689312.05 | 4284151.6 | 689312.05_4284151.57 | 0.33815 | 0.65569 | 0.18739 |
| 689362.05 | 4284151.6 | 689362.05_4284151.57 | 0.39776 | 0.86627 | 0.20754 |
| 689412.05 | 4284151.6 | 689412.05_4284151.57 | 0.40059 | 1.47648 | 0.2689  |
| 689212.05 | 4284201.6 | 689212.05_4284201.57 | 0.26621 | 0.4325  | 0.14469 |
| 689262.05 | 4284201.6 | 689262.05_4284201.57 | 0.29509 | 0.52489 | 0.16551 |
| 689312.05 | 4284201.6 | 689312.05_4284201.57 | 0.32261 | 0.67212 | 0.19362 |
| 689362.05 | 4284201.6 | 689362.05_4284201.57 | 0.32863 | 1.04161 | 0.25421 |
| 689412.05 | 4284201.6 | 689412.05_4284201.57 | 0.34666 | 1.75191 | 0.25754 |
| 689262.05 | 4284251.6 | 689262.05_4284251.57 | 0.27099 | 0.53802 | 0.17426 |
| 689312.05 | 4284251.6 | 689312.05_4284251.57 | 0.2892  | 0.7156  | 0.21343 |
| 689062.05 | 4284301.6 | 689062.05_4284301.57 | 0.20234 | 0.26782 | 0.12282 |
| 689112.05 | 4284301.6 | 689112.05_4284301.57 | 0.20487 | 0.31315 | 0.13218 |
| 689162.05 | 4284301.6 | 689162.05_4284301.57 | 0.21671 | 0.36901 | 0.14354 |
| 689062.05 | 4284451.6 | 689062.05_4284451.57 | 0.18832 | 0.26929 | 0.16844 |
| 689062.05 | 4284501.6 | 689062.05_4284501.57 | 0.17415 | 0.2703  | 0.18894 |
| 689112.05 | 4284501.6 | 689112.05_4284501.57 | 0.18922 | 0.30947 | 0.19658 |
| 689062.05 | 4284551.6 | 689062.05_4284551.57 | 0.15716 | 0.2733  | 0.21147 |
| 689112.05 | 4284551.6 | 689112.05_4284551.57 | 0.17623 | 0.30846 | 0.21984 |
| 689162.05 | 4284551.6 | 689162.05_4284551.57 | 0.19468 | 0.35649 | 0.23141 |
| 689969.65 | 4283460.3 | 689969.65_4283460.34 | 1.06165 | 1.53146 | 0.14967 |
| 690019.65 | 4283460.3 | 690019.65_4283460.34 | 0.7102  | 1.01726 | 0.1532  |
| 690069.65 | 4283460.3 | 690069.65_4283460.34 | 0.51995 | 0.77568 | 0.15855 |
| 690119.65 | 4283460.3 | 690119.65_4283460.34 | 0.40898 | 0.63336 | 0.16531 |
| 690169.65 | 4283460.3 | 690169.65_4283460.34 | 0.33314 | 0.53728 | 0.17228 |
| 690219.65 | 4283460.3 | 690219.65_4283460.34 | 0.28344 | 0.46817 | 0.17969 |
| 689969.65 | 4283510.3 | 689969.65_4283510.34 | 1.06742 | 1.46556 | 0.15834 |
| 690019.65 | 4283510.3 | 690019.65_4283510.34 | 0.74276 | 1.01826 | 0.16337 |



|           |           |                      |         |         |         |
|-----------|-----------|----------------------|---------|---------|---------|
| 690069.65 | 4283510.3 | 690069.65_4283510.34 | 0.57464 | 0.79258 | 0.1713  |
| 690119.65 | 4283510.3 | 690119.65_4283510.34 | 0.46435 | 0.65239 | 0.17951 |
| 690169.65 | 4283510.3 | 690169.65_4283510.34 | 0.37254 | 0.55188 | 0.18692 |
| 690219.65 | 4283510.3 | 690219.65_4283510.34 | 0.30322 | 0.47438 | 0.19368 |
| 689919.65 | 4283560.3 | 689919.65_4283560.34 | 1.63173 | 2.14079 | 0.16424 |
| 689969.65 | 4283560.3 | 689969.65_4283560.34 | 1.05751 | 1.40356 | 0.16855 |
| 690019.65 | 4283560.3 | 690019.65_4283560.34 | 0.84323 | 1.03547 | 0.17772 |
| 690069.65 | 4283560.3 | 690069.65_4283560.34 | 0.60219 | 0.82454 | 0.18747 |
| 690119.65 | 4283560.3 | 690119.65_4283560.34 | 0.449   | 0.68013 | 0.1965  |
| 690169.65 | 4283560.3 | 690169.65_4283560.34 | 0.36893 | 0.56764 | 0.20352 |
| 690219.65 | 4283560.3 | 690219.65_4283560.34 | 0.32239 | 0.47967 | 0.20917 |
| 689919.65 | 4283610.3 | 689919.65_4283610.34 | 1.58888 | 1.94681 | 0.17553 |
| 689969.65 | 4283610.3 | 689969.65_4283610.34 | 1.07997 | 1.35759 | 0.18169 |
| 690019.65 | 4283610.3 | 690019.65_4283610.34 | 0.80667 | 1.04352 | 0.19275 |
| 690069.65 | 4283610.3 | 690069.65_4283610.34 | 0.53247 | 0.85527 | 0.20567 |
| 690119.65 | 4283610.3 | 690119.65_4283610.34 | 0.39243 | 0.70462 | 0.21665 |
| 690169.65 | 4283610.3 | 690169.65_4283610.34 | 0.37599 | 0.57484 | 0.2206  |
| 690219.65 | 4283610.3 | 690219.65_4283610.34 | 0.34456 | 0.47688 | 0.22431 |
| 689919.65 | 4283660.3 | 689919.65_4283660.34 | 1.56671 | 1.85708 | 0.18874 |
| 689969.65 | 4283660.3 | 689969.65_4283660.34 | 1.11738 | 1.33235 | 0.19715 |
| 690019.65 | 4283660.3 | 690019.65_4283660.34 | 0.72421 | 1.06049 | 0.21064 |
| 690069.65 | 4283660.3 | 690069.65_4283660.34 | 0.42839 | 0.88435 | 0.23019 |
| 690119.65 | 4283660.3 | 690119.65_4283660.34 | 0.40342 | 0.705   | 0.2338  |
| 690169.65 | 4283660.3 | 690169.65_4283660.34 | 0.40542 | 0.57032 | 0.23712 |
| 690219.65 | 4283660.3 | 690219.65_4283660.34 | 0.3371  | 0.47025 | 0.24013 |
| 689869.65 | 4283710.3 | 689869.65_4283710.34 | 1.87275 | 3.00031 | 0.20275 |
| 689919.65 | 4283710.3 | 689919.65_4283710.34 | 1.51338 | 1.80645 | 0.20368 |
| 689969.65 | 4283710.3 | 689969.65_4283710.34 | 1.10156 | 1.31015 | 0.21352 |
| 690019.65 | 4283710.3 | 690019.65_4283710.34 | 0.63459 | 1.0767  | 0.23136 |
| 690069.65 | 4283710.3 | 690069.65_4283710.34 | 0.41814 | 0.88332 | 0.25024 |
| 690119.65 | 4283710.3 | 690119.65_4283710.34 | 0.43913 | 0.6944  | 0.25046 |
| 690169.65 | 4283710.3 | 690169.65_4283710.34 | 0.42494 | 0.56069 | 0.25463 |
| 690219.65 | 4283710.3 | 690219.65_4283710.34 | 0.33496 | 0.46696 | 0.25912 |
| 689919.65 | 4283760.3 | 689919.65_4283760.34 | 1.38192 | 1.76879 | 0.21977 |
| 689969.65 | 4283760.3 | 689969.65_4283760.34 | 1.06953 | 1.29623 | 0.2323  |
| 690019.65 | 4283760.3 | 690019.65_4283760.34 | 0.64148 | 1.06039 | 0.25058 |
| 690069.65 | 4283760.3 | 690069.65_4283760.34 | 0.47578 | 0.8579  | 0.26431 |
| 690119.65 | 4283760.3 | 690119.65_4283760.34 | 0.45668 | 0.68308 | 0.27019 |
| 690169.65 | 4283760.3 | 690169.65_4283760.34 | 0.41089 | 0.56147 | 0.27752 |
| 690219.65 | 4283760.3 | 690219.65_4283760.34 | 0.35035 | 0.47802 | 0.28641 |
| 689919.65 | 4283810.3 | 689919.65_4283810.34 | 1.28427 | 1.74635 | 0.23909 |
| 689969.65 | 4283810.3 | 689969.65_4283810.34 | 1.02148 | 1.28236 | 0.25342 |
| 690019.65 | 4283810.3 | 690019.65_4283810.34 | 0.64238 | 1.0497  | 0.27352 |
| 690069.65 | 4283810.3 | 690069.65_4283810.34 | 0.44756 | 0.85888 | 0.29088 |
| 690119.65 | 4283810.3 | 690119.65_4283810.34 | 0.39988 | 0.69535 | 0.29947 |
| 690169.65 | 4283810.3 | 690169.65_4283810.34 | 0.34297 | 0.58079 | 0.31068 |
| 690219.65 | 4283810.3 | 690219.65_4283810.34 | 0.30202 | 0.48997 | 0.31816 |
| 689919.65 | 4283860.3 | 689919.65_4283860.34 | 1.16411 | 1.72331 | 0.26081 |
| 689969.65 | 4283860.3 | 689969.65_4283860.34 | 0.95849 | 1.27172 | 0.27806 |
| 690019.65 | 4283860.3 | 690019.65_4283860.34 | 0.64203 | 1.04036 | 0.30018 |
| 690069.65 | 4283860.3 | 690069.65_4283860.34 | 0.44997 | 0.85145 | 0.31856 |
| 690119.65 | 4283860.3 | 690119.65_4283860.34 | 0.37768 | 0.69673 | 0.33043 |
| 690169.65 | 4283860.3 | 690169.65_4283860.34 | 0.31637 | 0.58311 | 0.34265 |
| 690219.65 | 4283860.3 | 690219.65_4283860.34 | 0.2906  | 0.48898 | 0.3471  |
| 689919.65 | 4283910.3 | 689919.65_4283910.34 | 1.07444 | 1.70862 | 0.28754 |

|           |           |                      |         |         |         |
|-----------|-----------|----------------------|---------|---------|---------|
| 689969.65 | 4283910.3 | 689969.65_4283910.34 | 0.88495 | 1.26268 | 0.30696 |
| 690019.65 | 4283910.3 | 690019.65_4283910.34 | 0.65616 | 1.01784 | 0.32856 |
| 690069.65 | 4283910.3 | 690069.65_4283910.34 | 0.46202 | 0.8428  | 0.35003 |
| 690119.65 | 4283910.3 | 690119.65_4283910.34 | 0.34945 | 0.69932 | 0.36757 |
| 690169.65 | 4283910.3 | 690169.65_4283910.34 | 0.29171 | 0.5842  | 0.37879 |
| 690219.65 | 4283910.3 | 690219.65_4283910.34 | 0.26971 | 0.48994 | 0.38098 |
| 689919.65 | 4283960.3 | 689919.65_4283960.34 | 0.95391 | 1.69378 | 0.31933 |
| 689969.65 | 4283960.3 | 689969.65_4283960.34 | 0.7747  | 1.2706  | 0.34326 |
| 690019.65 | 4283960.3 | 690019.65_4283960.34 | 0.58509 | 1.02391 | 0.36716 |
| 690069.65 | 4283960.3 | 690069.65_4283960.34 | 0.43584 | 0.8412  | 0.38958 |
| 690119.65 | 4283960.3 | 690119.65_4283960.34 | 0.32552 | 0.70389 | 0.41318 |
| 690169.65 | 4283960.3 | 690169.65_4283960.34 | 0.27279 | 0.58425 | 0.41902 |
| 690219.65 | 4283960.3 | 690219.65_4283960.34 | 0.27249 | 0.48404 | 0.41202 |
| 689919.65 | 4284010.3 | 689919.65_4284010.34 | 0.85406 | 1.66217 | 0.35531 |
| 689969.65 | 4284010.3 | 689969.65_4284010.34 | 0.70789 | 1.25766 | 0.38265 |
| 690019.65 | 4284010.3 | 690019.65_4284010.34 | 0.53958 | 1.02135 | 0.41051 |
| 690069.65 | 4284010.3 | 690069.65_4284010.34 | 0.39701 | 0.84567 | 0.43948 |
| 690119.65 | 4284010.3 | 690119.65_4284010.34 | 0.3076  | 0.71141 | 0.46844 |
| 690169.65 | 4284010.3 | 690169.65_4284010.34 | 0.26483 | 0.58383 | 0.46358 |
| 690219.65 | 4284010.3 | 690219.65_4284010.34 | 0.27161 | 0.47938 | 0.44682 |
| 689919.65 | 4284060.3 | 689919.65_4284060.34 | 0.75239 | 1.64027 | 0.39986 |
| 689969.65 | 4284060.3 | 689969.65_4284060.34 | 0.63211 | 1.25415 | 0.43014 |
| 690019.65 | 4284060.3 | 690019.65_4284060.34 | 0.47338 | 1.03033 | 0.46551 |
| 690069.65 | 4284060.3 | 690069.65_4284060.34 | 0.35521 | 0.86042 | 0.50662 |
| 690119.65 | 4284060.3 | 690119.65_4284060.34 | 0.28483 | 0.72228 | 0.53282 |
| 690169.65 | 4284060.3 | 690169.65_4284060.34 | 0.26738 | 0.5802  | 0.50867 |
| 690219.65 | 4284060.3 | 690219.65_4284060.34 | 0.2329  | 0.48373 | 0.49462 |
| 689969.65 | 4284110.3 | 689969.65_4284110.34 | 0.50176 | 1.29286 | 0.49521 |
| 690019.65 | 4284110.3 | 690019.65_4284110.34 | 0.38412 | 1.07033 | 0.55347 |
| 690069.65 | 4284110.3 | 690069.65_4284110.34 | 0.30521 | 0.93414 | 0.61589 |
| 690119.65 | 4284110.3 | 690119.65_4284110.34 | 0.26375 | 0.75541 | 0.6194  |
| 690169.65 | 4284110.3 | 690169.65_4284110.34 | 0.25187 | 0.58452 | 0.56948 |
| 690219.65 | 4284110.3 | 690219.65_4284110.34 | 0.20095 | 0.49798 | 0.56328 |
| 689969.65 | 4284160.3 | 689969.65_4284160.34 | 0.40678 | 1.33954 | 0.58563 |
| 690019.65 | 4284160.3 | 690019.65_4284160.34 | 0.32475 | 1.17001 | 0.67729 |
| 690069.65 | 4284160.3 | 690069.65_4284160.34 | 0.27716 | 0.93531 | 0.69168 |
| 690119.65 | 4284160.3 | 690119.65_4284160.34 | 0.24028 | 0.77544 | 0.70027 |
| 690169.65 | 4284160.3 | 690169.65_4284160.34 | 0.214   | 0.64465 | 0.68791 |
| 690219.65 | 4284160.3 | 690219.65_4284160.34 | 0.20174 | 0.49388 | 0.60209 |
| 689919.65 | 4284210.3 | 689919.65_4284210.34 | 0.48393 | 1.6666  | 0.60056 |
| 689969.65 | 4284210.3 | 689969.65_4284210.34 | 0.37112 | 1.34764 | 0.67595 |
| 690019.65 | 4284210.3 | 690019.65_4284210.34 | 0.30462 | 1.16545 | 0.77094 |
| 690069.65 | 4284210.3 | 690069.65_4284210.34 | 0.26631 | 0.93879 | 0.78244 |
| 690119.65 | 4284210.3 | 690119.65_4284210.34 | 0.23536 | 0.774   | 0.77764 |
| 690169.65 | 4284210.3 | 690169.65_4284210.34 | 0.20779 | 0.6503  | 0.75012 |
| 690219.65 | 4284210.3 | 690219.65_4284210.34 | 0.18336 | 0.5268  | 0.67975 |
| 689869.65 | 4284260.3 | 689869.65_4284260.34 | 0.54917 | 2.34607 | 0.62819 |
| 689919.65 | 4284260.3 | 689919.65_4284260.34 | 0.4952  | 1.62062 | 0.68307 |
| 689969.65 | 4284260.3 | 689969.65_4284260.34 | 0.36511 | 1.32393 | 0.7587  |
| 690019.65 | 4284260.3 | 690019.65_4284260.34 | 0.30736 | 1.08663 | 0.82733 |
| 690069.65 | 4284260.3 | 690069.65_4284260.34 | 0.26724 | 0.9187  | 0.87169 |
| 690119.65 | 4284260.3 | 690119.65_4284260.34 | 0.241   | 0.77213 | 0.86043 |
| 690169.65 | 4284260.3 | 690169.65_4284260.34 | 0.20438 | 0.63784 | 0.79959 |
| 690219.65 | 4284260.3 | 690219.65_4284260.34 | 0.17363 | 0.53311 | 0.71729 |
| 689919.65 | 4284310.3 | 689919.65_4284310.34 | 0.46296 | 1.63605 | 0.79541 |

|           |           |                      |         |         |         |
|-----------|-----------|----------------------|---------|---------|---------|
| 689969.65 | 4284310.3 | 689969.65_4284310.34 | 0.39667 | 1.28067 | 0.85397 |
| 690019.65 | 4284310.3 | 690019.65_4284310.34 | 0.32115 | 1.05104 | 0.89607 |
| 690069.65 | 4284310.3 | 690069.65_4284310.34 | 0.28551 | 0.85138 | 0.89195 |
| 690119.65 | 4284310.3 | 690119.65_4284310.34 | 0.24586 | 0.70752 | 0.86851 |
| 690169.65 | 4284310.3 | 690169.65_4284310.34 | 0.20227 | 0.61919 | 0.83271 |
| 690219.65 | 4284310.3 | 690219.65_4284310.34 | 0.16773 | 0.5177  | 0.73592 |
| 689919.65 | 4284360.3 | 689919.65_4284360.34 | 0.40603 | 1.71605 | 0.9499  |
| 689969.65 | 4284360.3 | 689969.65_4284360.34 | 0.37611 | 1.305   | 0.99578 |
| 690019.65 | 4284360.3 | 690019.65_4284360.34 | 0.32392 | 1.04488 | 1.00717 |
| 690069.65 | 4284360.3 | 690069.65_4284360.34 | 0.28406 | 0.84041 | 0.96693 |
| 690119.65 | 4284360.3 | 690119.65_4284360.34 | 0.24252 | 0.68992 | 0.90611 |
| 690169.65 | 4284360.3 | 690169.65_4284360.34 | 0.19755 | 0.60388 | 0.86383 |
| 690219.65 | 4284360.3 | 690219.65_4284360.34 | 0.16529 | 0.5047  | 0.75967 |
| 689919.65 | 4284410.3 | 689919.65_4284410.34 | 0.38219 | 1.83096 | 1.13402 |
| 689969.65 | 4284410.3 | 689969.65_4284410.34 | 0.36429 | 1.34333 | 1.15856 |
| 690019.65 | 4284410.3 | 690019.65_4284410.34 | 0.29336 | 1.08012 | 1.15446 |
| 690069.65 | 4284410.3 | 690069.65_4284410.34 | 0.25622 | 0.85246 | 1.06708 |
| 690119.65 | 4284410.3 | 690119.65_4284410.34 | 0.22775 | 0.68361 | 0.96055 |
| 690169.65 | 4284410.3 | 690169.65_4284410.34 | 0.1908  | 0.58819 | 0.898   |
| 690219.65 | 4284410.3 | 690219.65_4284410.34 | 0.1625  | 0.48786 | 0.78498 |
| 689919.65 | 4284460.3 | 689919.65_4284460.34 | 0.36415 | 2.02245 | 1.35729 |
| 689969.65 | 4284460.3 | 689969.65_4284460.34 | 0.32465 | 1.44124 | 1.36579 |
| 690019.65 | 4284460.3 | 690019.65_4284460.34 | 0.27511 | 1.10021 | 1.28568 |
| 690069.65 | 4284460.3 | 690069.65_4284460.34 | 0.2401  | 0.85831 | 1.15581 |
| 690119.65 | 4284460.3 | 690119.65_4284460.34 | 0.20935 | 0.67882 | 1.02841 |
| 690169.65 | 4284460.3 | 690169.65_4284460.34 | 0.17873 | 0.57976 | 0.94548 |
| 690219.65 | 4284460.3 | 690219.65_4284460.34 | 0.15209 | 0.45491 | 0.78959 |
| 689243.81 | 4283030.6 | 689243.81_4283030.64 | 0.33914 | 0.17229 | 0.07898 |
| 689293.81 | 4283030.6 | 689293.81_4283030.64 | 0.39126 | 0.19123 | 0.08416 |
| 689343.81 | 4283030.6 | 689343.81_4283030.64 | 0.46928 | 0.21225 | 0.08754 |
| 689393.81 | 4283030.6 | 689393.81_4283030.64 | 0.60239 | 0.23946 | 0.09086 |
| 689443.81 | 4283030.6 | 689443.81_4283030.64 | 0.84854 | 0.27358 | 0.0927  |
| 689493.81 | 4283030.6 | 689493.81_4283030.64 | 1.24518 | 0.31594 | 0.09343 |
| 689543.81 | 4283030.6 | 689543.81_4283030.64 | 1.75786 | 0.36866 | 0.09427 |
| 689243.81 | 4283080.6 | 689243.81_4283080.64 | 0.37954 | 0.1824  | 0.08074 |
| 689293.81 | 4283080.6 | 689293.81_4283080.64 | 0.47238 | 0.2042  | 0.08606 |
| 689343.81 | 4283080.6 | 689343.81_4283080.64 | 0.56454 | 0.23025 | 0.09096 |
| 689393.81 | 4283080.6 | 689393.81_4283080.64 | 0.70348 | 0.26145 | 0.09447 |
| 689443.81 | 4283080.6 | 689443.81_4283080.64 | 1.03123 | 0.30235 | 0.0967  |
| 689493.81 | 4283080.6 | 689493.81_4283080.64 | 1.67889 | 0.35869 | 0.09799 |
| 689543.81 | 4283080.6 | 689543.81_4283080.64 | 2.55667 | 0.43158 | 0.09849 |
| 689243.81 | 4283130.6 | 689243.81_4283130.64 | 0.33314 | 0.19325 | 0.08475 |
| 689293.81 | 4283130.6 | 689293.81_4283130.64 | 0.37234 | 0.22105 | 0.09263 |
| 689343.81 | 4283130.6 | 689343.81_4283130.64 | 0.51575 | 0.25171 | 0.09737 |
| 689393.81 | 4283130.6 | 689393.81_4283130.64 | 0.80691 | 0.28818 | 0.10015 |
| 689443.81 | 4283130.6 | 689443.81_4283130.64 | 1.30125 | 0.33773 | 0.10166 |
| 689493.81 | 4283130.6 | 689493.81_4283130.64 | 2.5716  | 0.41868 | 0.10258 |
| 689543.81 | 4283130.6 | 689543.81_4283130.64 | 4.27861 | 0.53612 | 0.10277 |
| 689243.81 | 4283180.6 | 689243.81_4283180.64 | 0.26516 | 0.20041 | 0.08757 |
| 689293.81 | 4283180.6 | 689293.81_4283180.64 | 0.32422 | 0.23136 | 0.09649 |
| 689343.81 | 4283180.6 | 689343.81_4283180.64 | 0.44502 | 0.26923 | 0.10376 |
| 689393.81 | 4283180.6 | 689393.81_4283180.64 | 0.82176 | 0.31259 | 0.10584 |
| 689443.81 | 4283180.6 | 689443.81_4283180.64 | 1.74296 | 0.37707 | 0.10693 |
| 689493.81 | 4283180.6 | 689493.81_4283180.64 | 5.16993 | 0.52756 | 0.10762 |
| 689543.81 | 4283180.6 | 689543.81_4283180.64 | 8.46208 | 0.75384 | 0.10771 |

|           |           |                      |         |         |         |
|-----------|-----------|----------------------|---------|---------|---------|
| 689243.81 | 4283230.6 | 689243.81_4283230.64 | 0.25449 | 0.20645 | 0.0891  |
| 689293.81 | 4283230.6 | 689293.81_4283230.64 | 0.28997 | 0.23902 | 0.09895 |
| 689343.81 | 4283230.6 | 689343.81_4283230.64 | 0.3911  | 0.27813 | 0.10655 |
| 689393.81 | 4283230.6 | 689393.81_4283230.64 | 0.716   | 0.32678 | 0.10972 |
| 689443.81 | 4283230.6 | 689443.81_4283230.64 | 1.82553 | 0.406   | 0.11159 |
| 689243.81 | 4283280.6 | 689243.81_4283280.64 | 0.26878 | 0.21522 | 0.0906  |
| 689293.81 | 4283280.6 | 689293.81_4283280.64 | 0.30331 | 0.2496  | 0.10068 |
| 689343.81 | 4283280.6 | 689343.81_4283280.64 | 0.43291 | 0.29022 | 0.10812 |
| 689393.81 | 4283280.6 | 689393.81_4283280.64 | 0.8531  | 0.34495 | 0.11278 |
| 689443.81 | 4283280.6 | 689443.81_4283280.64 | 2.71837 | 0.44863 | 0.11562 |
| 689243.81 | 4283330.6 | 689243.81_4283330.64 | 0.29793 | 0.2255  | 0.09149 |
| 689293.81 | 4283330.6 | 689293.81_4283330.64 | 0.38899 | 0.26164 | 0.10054 |
| 689343.81 | 4283330.6 | 689343.81_4283330.64 | 0.63324 | 0.30783 | 0.10824 |
| 689393.81 | 4283330.6 | 689393.81_4283330.64 | 1.20662 | 0.37628 | 0.11501 |
| 689443.81 | 4283330.6 | 689443.81_4283330.64 | 2.94359 | 0.51675 | 0.12063 |
| 689493.81 | 4283330.6 | 689493.81_4283330.64 | 7.84795 | 0.88837 | 0.12302 |
| 689243.81 | 4283380.6 | 689243.81_4283380.64 | 0.33372 | 0.23878 | 0.09298 |
| 689293.81 | 4283380.6 | 689293.81_4283380.64 | 0.43471 | 0.27897 | 0.1025  |
| 689343.81 | 4283380.6 | 689343.81_4283380.64 | 0.6331  | 0.33453 | 0.11278 |
| 689393.81 | 4283380.6 | 689393.81_4283380.64 | 1.12158 | 0.41561 | 0.12139 |
| 689443.81 | 4283380.6 | 689443.81_4283380.64 | 2.24201 | 0.55426 | 0.12837 |
| 689243.81 | 4283430.6 | 689243.81_4283430.64 | 0.38186 | 0.25349 | 0.09492 |
| 689293.81 | 4283430.6 | 689293.81_4283430.64 | 0.4896  | 0.2978  | 0.10493 |
| 689343.81 | 4283430.6 | 689343.81_4283430.64 | 0.67848 | 0.35969 | 0.1162  |
| 689393.81 | 4283430.6 | 689393.81_4283430.64 | 1.07007 | 0.45045 | 0.12733 |
| 689443.81 | 4283430.6 | 689443.81_4283430.64 | 1.80947 | 0.58837 | 0.13727 |
| 689243.81 | 4283480.6 | 689243.81_4283480.64 | 0.40876 | 0.26845 | 0.09708 |
| 689293.81 | 4283480.6 | 689293.81_4283480.64 | 0.51283 | 0.31715 | 0.10751 |
| 689343.81 | 4283480.6 | 689343.81_4283480.64 | 0.71555 | 0.38342 | 0.11904 |
| 689393.81 | 4283480.6 | 689393.81_4283480.64 | 1.0348  | 0.47971 | 0.1314  |
| 689443.81 | 4283480.6 | 689443.81_4283480.64 | 1.55861 | 0.62204 | 0.14346 |
| 689493.81 | 4283480.6 | 689493.81_4283480.64 | 2.22364 | 0.82529 | 0.15464 |
| 689584.29 | 4283182   | 689584.29_4283182    | 7.81803 | 0.87638 | 0.10803 |
| 689626.46 | 4283180.8 | 689626.46_4283180.77 | 7.12234 | 0.96038 | 0.10751 |
| 689581.46 | 4283081.8 | 689581.46_4283081.75 | 3.09108 | 0.49338 | 0.09834 |
| 689586.89 | 4283032.1 | 689586.89_4283032.14 | 2.17659 | 0.41885 | 0.09398 |
| 689628.89 | 4283033.2 | 689628.89_4283033.23 | 2.54808 | 0.46991 | 0.09411 |
| 690123.39 | 4283039.1 | 690123.39_4283039.13 | 0.83898 | 0.55376 | 0.10209 |
| 690123.39 | 4283089.1 | 690123.39_4283089.13 | 0.81654 | 0.58373 | 0.10779 |
| 690173.39 | 4283089.1 | 690173.39_4283089.13 | 0.61771 | 0.51951 | 0.11266 |
| 689923.39 | 4283139.1 | 689923.39_4283139.13 | 1.97323 | 1.14146 | 0.10438 |
| 689950.32 | 4283366.6 | 689950.32_4283366.56 | 1.15666 | 2.05737 | 0.13467 |
| 690000.32 | 4283366.6 | 690000.32_4283366.56 | 0.73343 | 1.22846 | 0.13999 |
| 689946.72 | 4283397.8 | 689946.72_4283397.81 | 1.10528 | 2.16442 | 0.13962 |
| 689990.74 | 4283392   | 689990.74_4283391.96 | 0.76175 | 1.3303  | 0.14308 |
| 690047.5  | 4284607.9 | 690047.5_4284607.9   | 0.21594 | 0.93571 | 1.42284 |
| 690097.5  | 4284607.9 | 690097.5_4284607.9   | 0.20305 | 0.6276  | 1.15219 |
| 690147.5  | 4284607.9 | 690147.5_4284607.9   | 0.18392 | 0.49068 | 0.95612 |
| 690197.5  | 4284607.9 | 690197.5_4284607.9   | 0.15947 | 0.42361 | 0.86129 |
| 690047.5  | 4284657.9 | 690047.5_4284657.9   | 0.21548 | 0.8817  | 1.43226 |
| 690097.5  | 4284657.9 | 690097.5_4284657.9   | 0.20069 | 0.58777 | 1.13325 |
| 690147.5  | 4284657.9 | 690147.5_4284657.9   | 0.18069 | 0.46732 | 0.91784 |
| 690197.5  | 4284657.9 | 690197.5_4284657.9   | 0.15391 | 0.40923 | 0.82627 |
| 689997.5  | 4284707.9 | 689997.5_4284707.9   | 0.21851 | 1.39821 | 1.84796 |
| 690097.5  | 4284707.9 | 690097.5_4284707.9   | 0.19317 | 0.58103 | 1.09354 |

|           |           |                      |         |         |          |
|-----------|-----------|----------------------|---------|---------|----------|
| 690147.5  | 4284707.9 | 690147.5_4284707.9   | 0.17477 | 0.46034 | 0.87041  |
| 690197.5  | 4284707.9 | 690197.5_4284707.9   | 0.15044 | 0.39921 | 0.76057  |
| 690047.5  | 4284757.9 | 690047.5_4284757.9   | 0.1922  | 0.79713 | 1.35801  |
| 690097.5  | 4284757.9 | 690097.5_4284757.9   | 0.18051 | 0.57575 | 1.03301  |
| 690147.5  | 4284757.9 | 690147.5_4284757.9   | 0.17003 | 0.4527  | 0.80515  |
| 690197.5  | 4284757.9 | 690197.5_4284757.9   | 0.14931 | 0.38763 | 0.67198  |
| 689947.5  | 4284807.9 | 689947.5_4284807.9   | 0.19665 | 1.13689 | 2.49983  |
| 690047.5  | 4284807.9 | 690047.5_4284807.9   | 0.18065 | 0.72104 | 1.26873  |
| 690097.5  | 4284807.9 | 690097.5_4284807.9   | 0.16838 | 0.56071 | 0.95432  |
| 690147.5  | 4284807.9 | 690147.5_4284807.9   | 0.16065 | 0.44588 | 0.73553  |
| 690197.5  | 4284807.9 | 690197.5_4284807.9   | 0.14681 | 0.37699 | 0.5933   |
| 689897.5  | 4284857.9 | 689897.5_4284857.9   | 0.19622 | 1.12199 | 3.72949  |
| 689947.5  | 4284857.9 | 689947.5_4284857.9   | 0.18558 | 0.97409 | 2.45781  |
| 689997.5  | 4284857.9 | 689997.5_4284857.9   | 0.17845 | 0.8152  | 1.65878  |
| 690047.5  | 4284857.9 | 690047.5_4284857.9   | 0.17003 | 0.6612  | 1.16847  |
| 690097.5  | 4284857.9 | 690097.5_4284857.9   | 0.15873 | 0.53746 | 0.86919  |
| 690147.5  | 4284857.9 | 690147.5_4284857.9   | 0.14726 | 0.44298 | 0.674    |
| 690197.5  | 4284857.9 | 690197.5_4284857.9   | 0.13668 | 0.37553 | 0.54322  |
| 690247.5  | 4284857.9 | 690247.5_4284857.9   | 0.12392 | 0.33399 | 0.47295  |
| 689847.5  | 4284907.9 | 689847.5_4284907.9   | 0.18916 | 1.10673 | 6.58118  |
| 689897.5  | 4284907.9 | 689897.5_4284907.9   | 0.18381 | 0.97425 | 3.82946  |
| 689947.5  | 4284907.9 | 689947.5_4284907.9   | 0.17746 | 0.84813 | 2.35832  |
| 689997.5  | 4284907.9 | 689997.5_4284907.9   | 0.16988 | 0.72667 | 1.53477  |
| 690047.5  | 4284907.9 | 690047.5_4284907.9   | 0.15919 | 0.61169 | 1.067    |
| 690097.5  | 4284907.9 | 690097.5_4284907.9   | 0.15135 | 0.51018 | 0.7812   |
| 690147.5  | 4284907.9 | 690147.5_4284907.9   | 0.13911 | 0.43307 | 0.60664  |
| 690197.5  | 4284907.9 | 690197.5_4284907.9   | 0.12919 | 0.37108 | 0.4918   |
| 690247.5  | 4284907.9 | 690247.5_4284907.9   | 0.11986 | 0.32602 | 0.41786  |
| 689797.5  | 4284957.9 | 689797.5_4284957.9   | 0.18288 | 1.05204 | 13.10279 |
| 689847.5  | 4284957.9 | 689847.5_4284957.9   | 0.17583 | 0.96432 | 6.99986  |
| 689897.5  | 4284957.9 | 689897.5_4284957.9   | 0.1711  | 0.86034 | 3.86502  |
| 689947.5  | 4284957.9 | 689947.5_4284957.9   | 0.16718 | 0.75449 | 2.19647  |
| 689997.5  | 4284957.9 | 689997.5_4284957.9   | 0.16247 | 0.65418 | 1.38657  |
| 690047.5  | 4284957.9 | 690047.5_4284957.9   | 0.1525  | 0.56361 | 0.95582  |
| 690097.5  | 4284957.9 | 690097.5_4284957.9   | 0.14288 | 0.48515 | 0.70221  |
| 690147.5  | 4284957.9 | 690147.5_4284957.9   | 0.13384 | 0.41766 | 0.54399  |
| 690197.5  | 4284957.9 | 690197.5_4284957.9   | 0.12495 | 0.36155 | 0.44122  |
| 690247.5  | 4284957.9 | 690247.5_4284957.9   | 0.11583 | 0.31863 | 0.37545  |
| 689897.5  | 4285007.9 | 689897.5_4285007.9   | 0.16197 | 0.76309 | 3.65127  |
| 689947.5  | 4285007.9 | 689947.5_4285007.9   | 0.16159 | 0.67174 | 1.9388   |
| 689997.5  | 4285007.9 | 689997.5_4285007.9   | 0.15552 | 0.59369 | 1.23252  |
| 690047.5  | 4285007.9 | 690047.5_4285007.9   | 0.14781 | 0.51886 | 0.85937  |
| 690097.5  | 4285007.9 | 690097.5_4285007.9   | 0.14077 | 0.45249 | 0.63815  |
| 690147.5  | 4285007.9 | 690147.5_4285007.9   | 0.13117 | 0.39736 | 0.49819  |
| 690197.5  | 4285007.9 | 690197.5_4285007.9   | 0.12128 | 0.35062 | 0.40685  |
| 690247.5  | 4285007.9 | 690247.5_4285007.9   | 0.11157 | 0.31223 | 0.34742  |
| 689897.5  | 4285057.9 | 689897.5_4285057.9   | 0.1479  | 0.69182 | 3.22771  |
| 689947.5  | 4285057.9 | 689947.5_4285057.9   | 0.14656 | 0.61642 | 1.79623  |
| 689997.5  | 4285057.9 | 689997.5_4285057.9   | 0.14582 | 0.54411 | 1.15643  |
| 690047.5  | 4285057.9 | 690047.5_4285057.9   | 0.14187 | 0.48094 | 0.81642  |
| 690097.5  | 4285057.9 | 690097.5_4285057.9   | 0.13728 | 0.42367 | 0.61012  |
| 690147.5  | 4285057.9 | 690147.5_4285057.9   | 0.12824 | 0.37739 | 0.47874  |
| 690197.5  | 4285057.9 | 690197.5_4285057.9   | 0.11792 | 0.33844 | 0.39267  |
| 690247.5  | 4285057.9 | 690247.5_4285057.9   | 0.10806 | 0.30462 | 0.33539  |
| 689970.15 | 4284514.1 | 689970.15_4284514.09 | 0.27091 | 1.6292  | 1.6268   |

|           |           |                      |         |         |         |
|-----------|-----------|----------------------|---------|---------|---------|
| 690020.15 | 4284514.1 | 690020.15_4284514.09 | 0.24527 | 1.15458 | 1.43611 |
| 690070.15 | 4284514.1 | 690070.15_4284514.09 | 0.21944 | 0.84707 | 1.23163 |
| 690120.15 | 4284514.1 | 690120.15_4284514.09 | 0.19599 | 0.65226 | 1.0815  |
| 690170.15 | 4284514.1 | 690170.15_4284514.09 | 0.17117 | 0.54572 | 0.97743 |
| 690220.15 | 4284514.1 | 690220.15_4284514.09 | 0.14958 | 0.43273 | 0.81125 |
| 690020.15 | 4284564.1 | 690020.15_4284564.09 | 0.23051 | 1.19893 | 1.54025 |
| 690070.15 | 4284564.1 | 690070.15_4284564.09 | 0.20821 | 0.82066 | 1.28891 |
| 690120.15 | 4284564.1 | 690120.15_4284564.09 | 0.19391 | 0.59997 | 1.07507 |
| 690170.15 | 4284564.1 | 690170.15_4284564.09 | 0.17176 | 0.4915  | 0.95459 |
| 690220.15 | 4284564.1 | 690220.15_4284564.09 | 0.1526  | 0.41874 | 0.83251 |
| 689216.55 | 4284759   | 689216.55_4284758.96 | 0.17116 | 0.37618 | 0.35525 |
| 689266.55 | 4284759   | 689266.55_4284758.96 | 0.1782  | 0.43743 | 0.40503 |
| 689316.55 | 4284759   | 689316.55_4284758.96 | 0.18964 | 0.50841 | 0.46183 |
| 689366.55 | 4284759   | 689366.55_4284758.96 | 0.20383 | 0.59327 | 0.53773 |
| 689416.55 | 4284759   | 689416.55_4284758.96 | 0.21678 | 0.70252 | 0.64351 |
| 689466.55 | 4284759   | 689466.55_4284758.96 | 0.22704 | 0.85809 | 0.80077 |
| 689516.55 | 4284759   | 689516.55_4284758.96 | 0.23346 | 1.12407 | 1.03865 |
| 689216.55 | 4284809   | 689216.55_4284808.96 | 0.16304 | 0.3647  | 0.37069 |
| 689266.55 | 4284809   | 689266.55_4284808.96 | 0.17021 | 0.42026 | 0.43194 |
| 689316.55 | 4284809   | 689316.55_4284808.96 | 0.1805  | 0.4846  | 0.50108 |
| 689366.55 | 4284809   | 689366.55_4284808.96 | 0.19332 | 0.56159 | 0.5903  |
| 689416.55 | 4284809   | 689416.55_4284808.96 | 0.20598 | 0.65982 | 0.72221 |
| 689566.55 | 4284809   | 689566.55_4284808.96 | 0.2226  | 1.34995 | 1.72164 |
| 689216.55 | 4284859   | 689216.55_4284858.96 | 0.15532 | 0.35328 | 0.37262 |
| 689266.55 | 4284859   | 689266.55_4284858.96 | 0.1647  | 0.40111 | 0.44276 |
| 689316.55 | 4284859   | 689316.55_4284858.96 | 0.17298 | 0.46128 | 0.53195 |
| 689366.55 | 4284859   | 689366.55_4284858.96 | 0.18315 | 0.53365 | 0.64323 |
| 689466.55 | 4284859   | 689466.55_4284858.96 | 0.20246 | 0.74312 | 1.07005 |
| 689516.55 | 4284859   | 689516.55_4284858.96 | 0.20537 | 0.91904 | 1.52684 |
| 689566.55 | 4284859   | 689566.55_4284858.96 | 0.20744 | 1.19777 | 2.25809 |
| 689666.55 | 4284859   | 689666.55_4284858.96 | 0.21619 | 1.86476 | 5.336   |
| 689266.55 | 4284909   | 689266.55_4284908.96 | 0.15809 | 0.38444 | 0.43261 |
| 689316.55 | 4284909   | 689316.55_4284908.96 | 0.16625 | 0.43875 | 0.53675 |
| 689366.55 | 4284909   | 689366.55_4284908.96 | 0.17489 | 0.50517 | 0.67814 |
| 689416.55 | 4284909   | 689416.55_4284908.96 | 0.18413 | 0.58602 | 0.8782  |
| 689466.55 | 4284909   | 689466.55_4284908.96 | 0.19186 | 0.68841 | 1.22733 |
| 689616.55 | 4284909   | 689616.55_4284908.96 | 0.19874 | 1.2786  | 4.69499 |
| 689216.55 | 4284959   | 689216.55_4284958.96 | 0.14135 | 0.32931 | 0.33182 |
| 689366.55 | 4284959   | 689366.55_4284958.96 | 0.1681  | 0.47516 | 0.67041 |
| 689416.55 | 4284959   | 689416.55_4284958.96 | 0.17669 | 0.54545 | 0.91962 |
| 689466.55 | 4284959   | 689466.55_4284958.96 | 0.17793 | 0.64428 | 1.42022 |
| 689516.55 | 4284959   | 689516.55_4284958.96 | 0.18104 | 0.76151 | 2.96137 |
| 689566.55 | 4284959   | 689566.55_4284958.96 | 0.18398 | 0.90363 | 4.98685 |
| 689616.55 | 4284959   | 689616.55_4284958.96 | 0.18666 | 1.05197 | 6.86951 |
| 689216.55 | 4285009   | 689216.55_4285008.96 | 0.13388 | 0.32047 | 0.33764 |
| 689366.55 | 4285009   | 689366.55_4285008.96 | 0.15878 | 0.45064 | 0.6454  |
| 689416.55 | 4285009   | 689416.55_4285008.96 | 0.16559 | 0.51131 | 0.88315 |
| 689566.55 | 4285009   | 689566.55_4285008.96 | 0.17128 | 0.80027 | 6.50572 |
| 689712.61 | 4284806.3 | 689712.61_4284806.28 | 0.2313  | 2.4171  | 6.2836  |
| 689665.5  | 4284822.9 | 689665.5_4284822.91  | 0.22802 | 2.29365 | 4.03835 |
| 689153.77 | 4285125.1 | 689153.77_4285125.11 | 0.10584 | 0.27927 | 0.38944 |
| 689203.77 | 4285125.1 | 689203.77_4285125.11 | 0.11154 | 0.30528 | 0.45991 |
| 689303.77 | 4285125.1 | 689303.77_4285125.11 | 0.12485 | 0.36744 | 0.68295 |
| 689353.77 | 4285125.1 | 689353.77_4285125.11 | 0.13182 | 0.40465 | 0.87517 |
| 689603.77 | 4285125.1 | 689603.77_4285125.11 | 0.14917 | 0.65713 | 8.91359 |

|           |           |                      |         |         |          |
|-----------|-----------|----------------------|---------|---------|----------|
| 689653.77 | 4285125.1 | 689653.77_4285125.11 | 0.14929 | 0.69717 | 11.73884 |
| 689703.77 | 4285125.1 | 689703.77_4285125.11 | 0.14579 | 0.71535 | 15.42403 |
| 689803.77 | 4285125.1 | 689803.77_4285125.11 | 0.14103 | 0.69786 | 15.40201 |
| 689853.77 | 4285125.1 | 689853.77_4285125.11 | 0.13578 | 0.66521 | 7.71166  |
| 689903.77 | 4285125.1 | 689903.77_4285125.11 | 0.12846 | 0.62012 | 3.26582  |
| 689953.77 | 4285125.1 | 689953.77_4285125.11 | 0.12272 | 0.57182 | 1.9349   |
| 690003.77 | 4285125.1 | 690003.77_4285125.11 | 0.12319 | 0.50756 | 1.21172  |
| 690103.77 | 4285125.1 | 690103.77_4285125.11 | 0.12422 | 0.39287 | 0.61719  |
| 689153.77 | 4285175.1 | 689153.77_4285175.11 | 0.10193 | 0.26766 | 0.41441  |
| 689203.77 | 4285175.1 | 689203.77_4285175.11 | 0.10554 | 0.28953 | 0.48594  |
| 689303.77 | 4285175.1 | 689303.77_4285175.11 | 0.1189  | 0.34795 | 0.74526  |
| 689353.77 | 4285175.1 | 689353.77_4285175.11 | 0.12622 | 0.38032 | 0.96854  |
| 689603.77 | 4285175.1 | 689603.77_4285175.11 | 0.14081 | 0.58627 | 6.44946  |
| 689653.77 | 4285175.1 | 689653.77_4285175.11 | 0.14049 | 0.61448 | 8.20567  |
| 689703.77 | 4285175.1 | 689703.77_4285175.11 | 0.13717 | 0.62736 | 10.60803 |
| 689753.77 | 4285175.1 | 689753.77_4285175.11 | 0.13192 | 0.6279  | 12.81715 |
| 689803.77 | 4285175.1 | 689803.77_4285175.11 | 0.13102 | 0.61938 | 9.73143  |
| 689853.77 | 4285175.1 | 689853.77_4285175.11 | 0.12502 | 0.59292 | 5.84345  |
| 689903.77 | 4285175.1 | 689903.77_4285175.11 | 0.11582 | 0.55215 | 2.8627   |
| 689953.77 | 4285175.1 | 689953.77_4285175.11 | 0.11123 | 0.5156  | 1.88622  |
| 690003.77 | 4285175.1 | 690003.77_4285175.11 | 0.11185 | 0.48081 | 1.3268   |
| 689153.77 | 4285225.1 | 689153.77_4285225.11 | 0.09825 | 0.25595 | 0.43487  |
| 689203.77 | 4285225.1 | 689203.77_4285225.11 | 0.10179 | 0.27536 | 0.5035   |
| 689253.77 | 4285225.1 | 689253.77_4285225.11 | 0.10696 | 0.2989  | 0.60721  |
| 689303.77 | 4285225.1 | 689303.77_4285225.11 | 0.11364 | 0.32662 | 0.76671  |
| 689353.77 | 4285225.1 | 689353.77_4285225.11 | 0.12102 | 0.35713 | 1.00548  |
| 689403.77 | 4285225.1 | 689403.77_4285225.11 | 0.12503 | 0.38967 | 1.3648   |
| 689453.77 | 4285225.1 | 689453.77_4285225.11 | 0.12856 | 0.42452 | 1.94401  |
| 689503.77 | 4285225.1 | 689503.77_4285225.11 | 0.13208 | 0.46068 | 2.80476  |
| 689553.77 | 4285225.1 | 689553.77_4285225.11 | 0.1324  | 0.49503 | 3.80899  |
| 689603.77 | 4285225.1 | 689603.77_4285225.11 | 0.13239 | 0.52411 | 4.8744   |
| 689653.77 | 4285225.1 | 689653.77_4285225.11 | 0.12956 | 0.54485 | 6.02541  |
| 689703.77 | 4285225.1 | 689703.77_4285225.11 | 0.12596 | 0.53971 | 6.8675   |
| 689753.77 | 4285225.1 | 689753.77_4285225.11 | 0.12252 | 0.53673 | 7.27733  |
| 689803.77 | 4285225.1 | 689803.77_4285225.11 | 0.12198 | 0.54993 | 6.53553  |
| 689853.77 | 4285225.1 | 689853.77_4285225.11 | 0.11614 | 0.5279  | 4.19699  |
| 689903.77 | 4285225.1 | 689903.77_4285225.11 | 0.10585 | 0.45173 | 2.27377  |
| 689953.77 | 4285225.1 | 689953.77_4285225.11 | 0.10248 | 0.43606 | 1.55786  |
| 690003.77 | 4285225.1 | 690003.77_4285225.11 | 0.10375 | 0.44098 | 1.29421  |
| 690053.77 | 4285225.1 | 690053.77_4285225.11 | 0.09584 | 0.37948 | 0.83061  |
| 689153.77 | 4285275.1 | 689153.77_4285275.11 | 0.09423 | 0.24356 | 0.43599  |
| 689203.77 | 4285275.1 | 689203.77_4285275.11 | 0.09796 | 0.26104 | 0.50748  |
| 689253.77 | 4285275.1 | 689253.77_4285275.11 | 0.10382 | 0.28329 | 0.62388  |
| 689303.77 | 4285275.1 | 689303.77_4285275.11 | 0.10927 | 0.30726 | 0.77702  |
| 689353.77 | 4285275.1 | 689353.77_4285275.11 | 0.11498 | 0.33404 | 0.99264  |
| 689403.77 | 4285275.1 | 689403.77_4285275.11 | 0.11983 | 0.36279 | 1.30369  |
| 689453.77 | 4285275.1 | 689453.77_4285275.11 | 0.12318 | 0.39257 | 1.75357  |
| 689503.77 | 4285275.1 | 689503.77_4285275.11 | 0.12531 | 0.42249 | 2.36668  |
| 689553.77 | 4285275.1 | 689553.77_4285275.11 | 0.12536 | 0.44956 | 3.06905  |
| 689603.77 | 4285275.1 | 689603.77_4285275.11 | 0.12367 | 0.46977 | 3.57555  |
| 689653.77 | 4285275.1 | 689653.77_4285275.11 | 0.11925 | 0.4642  | 4.1225   |
| 689703.77 | 4285275.1 | 689703.77_4285275.11 | 0.11434 | 0.44527 | 4.29918  |
| 689753.77 | 4285275.1 | 689753.77_4285275.11 | 0.11126 | 0.43714 | 4.27425  |
| 689803.77 | 4285275.1 | 689803.77_4285275.11 | 0.11081 | 0.4517  | 3.97925  |
| 689853.77 | 4285275.1 | 689853.77_4285275.11 | 0.10632 | 0.4186  | 2.77319  |

|           |           |                      |         |         |          |
|-----------|-----------|----------------------|---------|---------|----------|
| 689903.77 | 4285275.1 | 689903.77_4285275.11 | 0.09879 | 0.3697  | 1.75184  |
| 689953.77 | 4285275.1 | 689953.77_4285275.11 | 0.09438 | 0.34972 | 1.20624  |
| 690003.77 | 4285275.1 | 690003.77_4285275.11 | 0.09244 | 0.34417 | 0.91731  |
| 690053.77 | 4285275.1 | 690053.77_4285275.11 | 0.0868  | 0.29868 | 0.63062  |
| 689153.77 | 4285325.1 | 689153.77_4285325.11 | 0.0903  | 0.23098 | 0.43394  |
| 689203.77 | 4285325.1 | 689203.77_4285325.11 | 0.09398 | 0.24683 | 0.45567  |
| 689253.77 | 4285325.1 | 689253.77_4285325.11 | 0.09964 | 0.26737 | 0.62279  |
| 689303.77 | 4285325.1 | 689303.77_4285325.11 | 0.10469 | 0.28895 | 0.75944  |
| 689353.77 | 4285325.1 | 689353.77_4285325.11 | 0.10948 | 0.3124  | 0.94308  |
| 689403.77 | 4285325.1 | 689403.77_4285325.11 | 0.11388 | 0.33758 | 1.20472  |
| 689453.77 | 4285325.1 | 689453.77_4285325.11 | 0.11681 | 0.36294 | 1.5608   |
| 689503.77 | 4285325.1 | 689503.77_4285325.11 | 0.11913 | 0.3885  | 2.02789  |
| 689553.77 | 4285325.1 | 689553.77_4285325.11 | 0.11872 | 0.41004 | 2.51801  |
| 689603.77 | 4285325.1 | 689603.77_4285325.11 | 0.11622 | 0.41081 | 2.76928  |
| 689653.77 | 4285325.1 | 689653.77_4285325.11 | 0.11254 | 0.40281 | 3.00199  |
| 689703.77 | 4285325.1 | 689703.77_4285325.11 | 0.10773 | 0.38229 | 3.07865  |
| 689753.77 | 4285325.1 | 689753.77_4285325.11 | 0.10569 | 0.38203 | 3.07802  |
| 689803.77 | 4285325.1 | 689803.77_4285325.11 | 0.10668 | 0.40492 | 2.9911   |
| 689853.77 | 4285325.1 | 689853.77_4285325.11 | 0.10136 | 0.37996 | 2.27018  |
| 689903.77 | 4285325.1 | 689903.77_4285325.11 | 0.09563 | 0.34474 | 1.58852  |
| 689953.77 | 4285325.1 | 689953.77_4285325.11 | 0.09031 | 0.31859 | 1.12403  |
| 690003.77 | 4285325.1 | 690003.77_4285325.11 | 0.08601 | 0.29471 | 0.80488  |
| 690053.77 | 4285325.1 | 690053.77_4285325.11 | 0.08251 | 0.27126 | 0.59763  |
| 690103.77 | 4285325.1 | 690103.77_4285325.11 | 0.08197 | 0.28357 | 0.54268  |
| 689653.19 | 4285078.7 | 689653.19_4285078.65 | 0.15883 | 0.78221 | 16.46428 |
| 689596.53 | 4285079.8 | 689596.53_4285079.83 | 0.15811 | 0.71928 | 11.31303 |
| 689417.31 | 4285054.4 | 689417.31_4285054.43 | 0.1513  | 0.49648 | 0.99402  |
| 689465.48 | 4285057.4 | 689465.48_4285057.44 | 0.15375 | 0.56255 | 1.91235  |
| 689160.76 | 4284611.2 | 689160.76_4284611.23 | 0.1844  | 0.34682 | 0.25921  |
| 689595.79 | 4284809.2 | 689595.79_4284809.16 | 0.22555 | 1.7604  | 2.12495  |
| 689614.28 | 4284828   | 689614.28_4284828.01 | 0.22185 | 1.88306 | 2.69702  |
| 689880.93 | 4283885.3 | 689880.93_4283885.33 | 1.25138 | 2.48181 | 0.26706  |
| 689878.21 | 4284393.2 | 689878.21_4284393.24 | 0.41019 | 2.45008 | 1.00471  |
| 689919.3  | 4284393.5 | 689919.3_4284393.48  | 0.38304 | 1.79658 | 1.07092  |
| 690067.31 | 4284711.8 | 690067.31_4284711.79 | 0.20067 | 0.71683 | 1.26995  |
| 689854.2  | 4285030.1 | 689854.2_4285030.1   | 0.1596  | 0.79559 | 7.33273  |
| 689832.17 | 4285004.4 | 689832.17_4285004.36 | 0.16759 | 0.87675 | 9.05566  |
| 689709.9  | 4284847.9 | 689709.9_4284847.93  | 0.2179  | 1.92266 | 9.43563  |
| 689566.83 | 4284730.6 | 689566.83_4284730.6  | 0.2479  | 1.71005 | 1.27472  |
| 689380.2  | 4284259.8 | 689380.2_4284259.82  | 0.31326 | 1.41023 | 0.28447  |
| 689367.58 | 4284231.4 | 689367.58_4284231.36 | 0.31676 | 1.16432 | 0.26727  |
| 689441.09 | 4283793   | 689441.09_4283793    | 0.8153  | 1.19671 | 0.18999  |
| 689436.64 | 4283733.9 | 689436.64_4283733.85 | 0.8225  | 1.04969 | 0.19095  |
| 689439.11 | 4283767.8 | 689439.11_4283767.76 | 0.8084  | 1.13404 | 0.19093  |
| 689436.64 | 4283689.1 | 689436.64_4283689.05 | 0.89142 | 0.91593 | 0.1817   |
| 689444.06 | 4283650.4 | 689444.06_4283650.43 | 0.96625 | 0.90247 | 0.18287  |
| 689500.74 | 4283585.6 | 689500.74_4283585.58 | 1.38232 | 1.37336 | 0.18991  |
| 689505.94 | 4283507.9 | 689505.94_4283507.86 | 2.12207 | 0.9305  | 0.16141  |
| 689546.04 | 4283356.6 | 689546.04_4283356.63 | 10.9784 | 1.03026 | 0.12652  |
| 689912.61 | 4283166   | 689912.61_4283166.04 | 2.07501 | 1.34183 | 0.10704  |
| CONCUNIT  | 1/m^3     | CONCUNIT             | ug_/m^3 |         |          |
| DEPUNIT   | g/ ^2     | DEPUNIT              | g/m_^2  |         |          |



AERMOD ( 19 91): C:\Lakes\ERMOD View\rado Oaks-newEVA\Dorado Oak s-newEVA .isc  
AERMET ( 14134):  
MODELING OPTIONS USED: IgDFault COI ELEV FLGP OL RURA L  
PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: URBAN/RESIDENTIAL/INDUSTRIAL/TRANSPORTATION/AVIATION/OTHER  
FOR A TOTAL OF 7 RECEPTORS.  
FORM AT: (3(1X,F13.),3(1X,F8.2), 2X,A6,2X,A8, 2X,I8.8, 2X,A8)  
X Y AVERAGE COI ZELEV ZHILL ZFLAG AVE GRP

| X         | Y          | AVERAGE COI ZELEV | ZHILL  | ZFLAG  | AVE        | GRP   |
|-----------|------------|-------------------|--------|--------|------------|-------|
| 689212.05 | 4283551.57 | 0.43025           | 529.56 | 529.56 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4283551.57 | 0.47193           | 533    | 533    | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4283551.57 | 0.59882           | 534.01 | 534.01 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4283551.57 | 0.78694           | 534.99 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4283551.57 | 1.06246           | 536.9  | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4283601.57 | 0.40812           | 531    | 534.74 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4283601.57 | 0.44414           | 534.44 | 534.44 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4283601.57 | 0.58906           | 534.18 | 534.18 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4283601.57 | 0.74731           | 535.56 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4283601.57 | 0.97764           | 537.51 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4283651.57 | 0.41601           | 536.79 | 536.79 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4283651.57 | 0.56137           | 535.84 | 535.84 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4283651.57 | 0.72591           | 535.52 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4283651.57 | 0.89437           | 538.25 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4283701.57 | 0.35525           | 534.89 | 537.25 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4283701.57 | 0.4138            | 537.42 | 537.42 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4283701.57 | 0.53494           | 536.64 | 536.64 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4283701.57 | 0.6854            | 535.6  | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4283701.57 | 0.83803           | 538.09 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689062.05 | 4283751.57 | 0.30954           | 524.69 | 524.69 | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4283751.57 | 0.37807           | 532.54 | 537.46 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4283751.57 | 0.42595           | 535.39 | 537.34 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4283751.57 | 0.55149           | 534.12 | 534.12 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4283751.57 | 0.64788           | 536.06 | 550.26 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4283801.57 | 0.47458           | 530.56 | 537.34 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4283801.57 | 0.54274           | 533.57 | 533.57 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4283801.57 | 0.6239            | 536.5  | 536.5  | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4283801.57 | 0.72472           | 539.35 | 539.35 | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4283851.57 | 0.42529           | 527.68 | 527.68 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4283851.57 | 0.47913           | 530.07 | 530.07 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4283851.57 | 0.52749           | 533.41 | 533.41 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4283851.57 | 0.58738           | 536.38 | 536.38 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4283851.57 | 0.69603           | 537.57 | 537.57 | 1.5 ANNUAL | ARLN2 |
| 689062.05 | 4283901.57 | 0.24942           | 529.18 | 537.59 | 1.5 ANNUAL | ARLN2 |
| 689112.05 | 4283901.57 | 0.31404           | 525.89 | 525.89 | 1.5 ANNUAL | ARLN2 |
| 689162.05 | 4283901.57 | 0.36327           | 526.45 | 526.45 | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4283901.57 | 0.40987           | 528.48 | 528.48 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4283901.57 | 0.45608           | 530.89 | 530.89 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4283901.57 | 0.49299           | 533.73 | 533.73 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4283901.57 | 0.56773           | 534.94 | 534.94 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4283901.57 | 0.65978           | 535.89 | 550.67 | 1.5 ANNUAL | ARLN2 |
| 689062.05 | 4283951.57 | 0.23383           | 531.16 | 537.67 | 1.5 ANNUAL | ARLN2 |
| 689112.05 | 4283951.57 | 0.29719           | 528.46 | 528.46 | 1.5 ANNUAL | ARLN2 |
| 689162.05 | 4283951.57 | 0.33481           | 529.69 | 529.69 | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4283951.57 | 0.37982           | 530.6  | 530.6  | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4283951.57 | 0.42498           | 531.75 | 531.75 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4283951.57 | 0.4706            | 533.24 | 533.24 | 1.5 ANNUAL | ARLN2 |

|           |            |         |        |        |            |       |
|-----------|------------|---------|--------|--------|------------|-------|
| 689362.05 | 4283951.57 | 0.52751 | 535.08 | 550.67 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4283951.57 | 0.60071 | 536.97 | 552.43 | 1.5 ANNUAL | ARLN2 |
| 689062.05 | 4284001.57 | 0.24077 | 530.3  | 538.14 | 1.5 ANNUAL | ARLN2 |
| 689112.05 | 4284001.57 | 0.28569 | 529.81 | 529.81 | 1.5 ANNUAL | ARLN2 |
| 689162.05 | 4284001.57 | 0.30658 | 532.37 | 532.37 | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4284001.57 | 0.33396 | 533.97 | 533.97 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4284001.57 | 0.38162 | 533.78 | 533.78 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4284001.57 | 0.43468 | 533.99 | 562.89 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4284001.57 | 0.49345 | 535.31 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4284001.57 | 0.54916 | 537.89 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689062.05 | 4284051.57 | 0.26126 | 526.88 | 538.14 | 1.5 ANNUAL | ARLN2 |
| 689112.05 | 4284051.57 | 0.27944 | 529.56 | 532.13 | 1.5 ANNUAL | ARLN2 |
| 689162.05 | 4284051.57 | 0.28513 | 533.7  | 533.7  | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4284051.57 | 0.30079 | 536.64 | 536.64 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4284051.57 | 0.34219 | 537.12 | 537.12 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4284051.57 | 0.39342 | 536.45 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4284051.57 | 0.4561  | 536.14 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4284051.57 | 0.49699 | 539.65 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689112.05 | 4284101.57 | 0.26384 | 530.03 | 535.62 | 1.5 ANNUAL | ARLN2 |
| 689162.05 | 4284101.57 | 0.27433 | 533.6  | 533.6  | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4284101.57 | 0.29213 | 536.48 | 536.48 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4284101.57 | 0.31818 | 538.78 | 538.78 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4284101.57 | 0.36768 | 537.21 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4284101.57 | 0.42816 | 536.19 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4284101.57 | 0.44209 | 542.83 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689162.05 | 4284151.57 | 0.25393 | 535.82 | 535.82 | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4284151.57 | 0.2875  | 535.45 | 535.45 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4284151.57 | 0.30598 | 537.46 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4284151.57 | 0.33815 | 539    | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4284151.57 | 0.39776 | 537.02 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4284151.57 | 0.40059 | 544.98 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689212.05 | 4284201.57 | 0.26621 | 537.24 | 537.24 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4284201.57 | 0.29509 | 536.75 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4284201.57 | 0.32261 | 538.69 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689362.05 | 4284201.57 | 0.32863 | 546.1  | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689412.05 | 4284201.57 | 0.34666 | 551.74 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689262.05 | 4284251.57 | 0.27099 | 538.99 | 562.89 | 1.5 ANNUAL | ARLN2 |
| 689312.05 | 4284251.57 | 0.2892  | 542.56 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689062.05 | 4284301.57 | 0.20234 | 532.67 | 532.67 | 1.5 ANNUAL | ARLN2 |
| 689112.05 | 4284301.57 | 0.20487 | 536.78 | 536.78 | 1.5 ANNUAL | ARLN2 |
| 689162.05 | 4284301.57 | 0.21671 | 538.53 | 538.53 | 1.5 ANNUAL | ARLN2 |
| 689062.05 | 4284451.57 | 0.18832 | 531.02 | 536.85 | 1.5 ANNUAL | ARLN2 |
| 689062.05 | 4284501.57 | 0.17415 | 533.31 | 535.53 | 1.5 ANNUAL | ARLN2 |
| 689112.05 | 4284501.57 | 0.18922 | 532.5  | 532.5  | 1.5 ANNUAL | ARLN2 |
| 689062.05 | 4284551.57 | 0.15716 | 537.07 | 537.07 | 1.5 ANNUAL | ARLN2 |
| 689112.05 | 4284551.57 | 0.17623 | 534.33 | 534.33 | 1.5 ANNUAL | ARLN2 |
| 689162.05 | 4284551.57 | 0.19468 | 533.1  | 533.1  | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4283460.34 | 1.06165 | 507.01 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283460.34 | 0.71102 | 492.39 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4283460.34 | 0.51995 | 484.49 | 551.4  | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283460.34 | 0.40898 | 486.32 | 563.68 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283460.34 | 0.33314 | 490.92 | 563.68 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283460.34 | 0.28344 | 499.06 | 551.4  | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4283510.34 | 1.06742 | 497.46 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283510.34 | 0.74276 | 488.83 | 550.78 | 1.5 ANNUAL | ARLN2 |

|           |            |         |        |        |            |       |
|-----------|------------|---------|--------|--------|------------|-------|
| 690069.65 | 4283510.34 | 0.57464 | 495.55 | 550.47 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283510.34 | 0.46435 | 501.98 | 543.27 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283510.34 | 0.37254 | 504.5  | 550.47 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283510.34 | 0.30322 | 504.32 | 550.47 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4283560.34 | 1.63173 | 500.59 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4283560.34 | 1.05751 | 491.02 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283560.34 | 0.84323 | 505.09 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4283560.34 | 0.60219 | 514.17 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283560.34 | 0.449   | 518.23 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283560.34 | 0.36893 | 515.75 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283560.34 | 0.32239 | 508.35 | 550.47 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4283610.34 | 1.58888 | 498.55 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4283610.34 | 1.07997 | 496.27 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283610.34 | 0.80667 | 512.4  | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4283610.34 | 0.53247 | 525.28 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283610.34 | 0.39243 | 528.65 | 538.51 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283610.34 | 0.37599 | 519.44 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283610.34 | 0.34456 | 503.1  | 551.4  | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4283660.34 | 1.56671 | 499.92 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4283660.34 | 1.11738 | 504.28 | 538.82 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283660.34 | 0.72421 | 521.19 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4283660.34 | 0.42839 | 533.88 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283660.34 | 0.40342 | 528.27 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283660.34 | 0.40542 | 515.1  | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283660.34 | 0.3371  | 493.19 | 577.58 | 1.5 ANNUAL | ARLN2 |
| 689869.65 | 4283710.34 | 1.87275 | 523.96 | 527.99 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4283710.34 | 1.51338 | 501.37 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4283710.34 | 1.10156 | 506.06 | 539.3  | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283710.34 | 0.63459 | 527.62 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4283710.34 | 0.41814 | 534.47 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283710.34 | 0.43913 | 523.3  | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283710.34 | 0.42494 | 506.65 | 550.47 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283710.34 | 0.33496 | 489.26 | 602.25 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4283760.34 | 1.38192 | 498.71 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4283760.34 | 1.06953 | 508.33 | 552.12 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283760.34 | 0.64148 | 526.17 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4283760.34 | 0.47578 | 528.49 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283760.34 | 0.45668 | 517.84 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283760.34 | 0.41089 | 508.22 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283760.34 | 0.35035 | 507.28 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4283810.34 | 1.28427 | 500.38 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4283810.34 | 1.02148 | 509.18 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283810.34 | 0.64238 | 526.12 | 538.72 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4283810.34 | 0.44756 | 530.76 | 530.76 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283810.34 | 0.39988 | 525.93 | 531.2  | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283810.34 | 0.34297 | 525.2  | 525.2  | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283810.34 | 0.30202 | 522.63 | 527.67 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4283860.34 | 1.16411 | 500.23 | 563.99 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4283860.34 | 0.95849 | 511.01 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283860.34 | 0.64203 | 526.53 | 526.53 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4283860.34 | 0.44997 | 530.48 | 530.48 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283860.34 | 0.37768 | 528.36 | 528.36 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283860.34 | 0.31637 | 528.39 | 528.39 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283860.34 | 0.2906  | 523.99 | 530.72 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4283910.34 | 1.07444 | 505.05 | 562.94 | 1.5 ANNUAL | ARLN2 |

|           |            |         |        |        |            |       |
|-----------|------------|---------|--------|--------|------------|-------|
| 689969.65 | 4283910.34 | 0.88495 | 513.65 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283910.34 | 0.65616 | 523.37 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4283910.34 | 0.46202 | 529.8  | 529.8  | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283910.34 | 0.34945 | 531.52 | 531.52 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283910.34 | 0.29171 | 530.94 | 530.94 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283910.34 | 0.26971 | 527.58 | 527.58 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4283960.34 | 0.95391 | 510.72 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4283960.34 | 0.7747  | 521.03 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4283960.34 | 0.58509 | 527.86 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4283960.34 | 0.43584 | 531.46 | 550.99 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4283960.34 | 0.32552 | 534.98 | 534.98 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4283960.34 | 0.27279 | 532.81 | 537.82 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4283960.34 | 0.27249 | 525.19 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4284010.34 | 0.85406 | 512.8  | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4284010.34 | 0.70789 | 522.22 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4284010.34 | 0.53958 | 529.6  | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4284010.34 | 0.39701 | 534.57 | 552.12 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4284010.34 | 0.3076  | 537.97 | 537.97 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4284010.34 | 0.26483 | 534.28 | 551.55 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4284010.34 | 0.27161 | 524.43 | 564.77 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4284060.34 | 0.75239 | 517.74 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4284060.34 | 0.63211 | 524.5  | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4284060.34 | 0.47338 | 533.27 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4284060.34 | 0.35521 | 538.63 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4284060.34 | 0.28483 | 540.3  | 552.12 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4284060.34 | 0.26738 | 534.39 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4284060.34 | 0.2329  | 531.98 | 564.22 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4284110.34 | 0.50176 | 532.66 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4284110.34 | 0.38412 | 540.2  | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4284110.34 | 0.30521 | 545.03 | 552    | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4284110.34 | 0.26375 | 543.76 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4284110.34 | 0.25187 | 537.37 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4284110.34 | 0.20095 | 539.23 | 551.07 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4284160.34 | 0.40678 | 539    | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4284160.34 | 0.32475 | 546.12 | 551.38 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4284160.34 | 0.27716 | 551.03 | 551.03 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4284160.34 | 0.24028 | 550.52 | 550.52 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4284160.34 | 0.214   | 545.48 | 551.96 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4284160.34 | 0.20174 | 539.66 | 564.42 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4284210.34 | 0.48393 | 530.87 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4284210.34 | 0.37112 | 539.95 | 552.08 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4284210.34 | 0.30462 | 545.98 | 551.35 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4284210.34 | 0.26631 | 550.41 | 550.41 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4284210.34 | 0.23536 | 549.97 | 549.97 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4284210.34 | 0.20779 | 547.83 | 549.53 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4284210.34 | 0.18336 | 544.9  | 564.22 | 1.5 ANNUAL | ARLN2 |
| 689869.65 | 4284260.34 | 0.54917 | 520.14 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4284260.34 | 0.4952  | 524.4  | 552.14 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4284260.34 | 0.36511 | 537.15 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4284260.34 | 0.30736 | 541.61 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4284260.34 | 0.26724 | 544.61 | 551.67 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4284260.34 | 0.241   | 546.11 | 546.11 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4284260.34 | 0.20438 | 546.3  | 563.68 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4284260.34 | 0.17363 | 547.85 | 564.32 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4284310.34 | 0.46296 | 523.32 | 563.68 | 1.5 ANNUAL | ARLN2 |

|           |            |         |        |        |            |       |
|-----------|------------|---------|--------|--------|------------|-------|
| 689969.65 | 4284310.34 | 0.39667 | 529.44 | 562.73 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4284310.34 | 0.32115 | 536.25 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4284310.34 | 0.28551 | 538.25 | 563.68 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4284310.34 | 0.24586 | 541.32 | 564.25 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4284310.34 | 0.20227 | 545.48 | 564.32 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4284310.34 | 0.16773 | 549.16 | 564.35 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4284360.34 | 0.40603 | 527.45 | 552.14 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4284360.34 | 0.37611 | 528.54 | 563.78 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4284360.34 | 0.32392 | 532.77 | 564.06 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4284360.34 | 0.28406 | 535.72 | 564.32 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4284360.34 | 0.24252 | 539.82 | 564.35 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4284360.34 | 0.19755 | 545.24 | 564.32 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4284360.34 | 0.16529 | 548.82 | 564.41 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4284410.34 | 0.38219 | 527.07 | 527.07 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4284410.34 | 0.36429 | 526.11 | 602.25 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4284410.34 | 0.29336 | 535.45 | 535.63 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4284410.34 | 0.25622 | 537.95 | 563.78 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4284410.34 | 0.22775 | 540.49 | 564.32 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4284410.34 | 0.1908  | 545.4  | 564.32 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4284410.34 | 0.1625  | 548.47 | 601.86 | 1.5 ANNUAL | ARLN2 |
| 689919.65 | 4284460.34 | 0.36415 | 524.64 | 602.25 | 1.5 ANNUAL | ARLN2 |
| 689969.65 | 4284460.34 | 0.32465 | 529.09 | 602.25 | 1.5 ANNUAL | ARLN2 |
| 690019.65 | 4284460.34 | 0.27511 | 535.26 | 537.89 | 1.5 ANNUAL | ARLN2 |
| 690069.65 | 4284460.34 | 0.2401  | 539.45 | 539.45 | 1.5 ANNUAL | ARLN2 |
| 690119.65 | 4284460.34 | 0.20935 | 542.19 | 602.25 | 1.5 ANNUAL | ARLN2 |
| 690169.65 | 4284460.34 | 0.17873 | 547.11 | 602.25 | 1.5 ANNUAL | ARLN2 |
| 690219.65 | 4284460.34 | 0.15209 | 551.32 | 602.25 | 1.5 ANNUAL | ARLN2 |
| 689243.81 | 4283030.64 | 0.33914 | 530.88 | 530.88 | 1.5 ANNUAL | ARLN2 |
| 689293.81 | 4283030.64 | 0.39126 | 529.46 | 529.46 | 1.5 ANNUAL | ARLN2 |
| 689343.81 | 4283030.64 | 0.46928 | 525.17 | 536.56 | 1.5 ANNUAL | ARLN2 |
| 689393.81 | 4283030.64 | 0.60239 | 525.12 | 525.12 | 1.5 ANNUAL | ARLN2 |
| 689443.81 | 4283030.64 | 0.84854 | 524.98 | 524.98 | 1.5 ANNUAL | ARLN2 |
| 689493.81 | 4283030.64 | 1.24518 | 524.32 | 524.32 | 1.5 ANNUAL | ARLN2 |
| 689543.81 | 4283030.64 | 1.75786 | 525.16 | 525.16 | 1.5 ANNUAL | ARLN2 |
| 689243.81 | 4283080.64 | 0.37954 | 531.25 | 531.25 | 1.5 ANNUAL | ARLN2 |
| 689293.81 | 4283080.64 | 0.47238 | 529.07 | 537.17 | 1.5 ANNUAL | ARLN2 |
| 689343.81 | 4283080.64 | 0.56454 | 527.74 | 537.55 | 1.5 ANNUAL | ARLN2 |
| 689393.81 | 4283080.64 | 0.70348 | 526.5  | 537.55 | 1.5 ANNUAL | ARLN2 |
| 689443.81 | 4283080.64 | 1.03123 | 526.2  | 527.36 | 1.5 ANNUAL | ARLN2 |
| 689493.81 | 4283080.64 | 1.67889 | 526.65 | 526.65 | 1.5 ANNUAL | ARLN2 |
| 689543.81 | 4283080.64 | 2.55667 | 526.02 | 526.02 | 1.5 ANNUAL | ARLN2 |
| 689243.81 | 4283130.64 | 0.33314 | 534.77 | 534.77 | 1.5 ANNUAL | ARLN2 |
| 689293.81 | 4283130.64 | 0.37234 | 535.63 | 535.63 | 1.5 ANNUAL | ARLN2 |
| 689343.81 | 4283130.64 | 0.51575 | 534.08 | 537.42 | 1.5 ANNUAL | ARLN2 |
| 689393.81 | 4283130.64 | 0.80691 | 531.63 | 531.63 | 1.5 ANNUAL | ARLN2 |
| 689443.81 | 4283130.64 | 1.30125 | 529.14 | 529.14 | 1.5 ANNUAL | ARLN2 |
| 689493.81 | 4283130.64 | 2.5716  | 527.9  | 527.9  | 1.5 ANNUAL | ARLN2 |
| 689543.81 | 4283130.64 | 4.27861 | 526.15 | 526.15 | 1.5 ANNUAL | ARLN2 |
| 689243.81 | 4283180.64 | 0.26516 | 536.01 | 536.01 | 1.5 ANNUAL | ARLN2 |
| 689293.81 | 4283180.64 | 0.32422 | 537.11 | 537.11 | 1.5 ANNUAL | ARLN2 |
| 689343.81 | 4283180.64 | 0.44502 | 537.22 | 537.22 | 1.5 ANNUAL | ARLN2 |
| 689393.81 | 4283180.64 | 0.82176 | 534.34 | 534.34 | 1.5 ANNUAL | ARLN2 |
| 689443.81 | 4283180.64 | 1.74296 | 531.36 | 531.36 | 1.5 ANNUAL | ARLN2 |
| 689493.81 | 4283180.64 | 5.16993 | 529.32 | 529.32 | 1.5 ANNUAL | ARLN2 |
| 689543.81 | 4283180.64 | 8.46208 | 527.27 | 527.27 | 1.5 ANNUAL | ARLN2 |

|           |            |         |        |        |            |       |
|-----------|------------|---------|--------|--------|------------|-------|
| 689243.81 | 4283230.64 | 0.25449 | 535.82 | 535.82 | 1.5 ANNUAL | ARLN2 |
| 689293.81 | 4283230.64 | 0.28997 | 537.32 | 537.32 | 1.5 ANNUAL | ARLN2 |
| 689343.81 | 4283230.64 | 0.3911  | 537.15 | 537.15 | 1.5 ANNUAL | ARLN2 |
| 689393.81 | 4283230.64 | 0.716   | 534.6  | 534.6  | 1.5 ANNUAL | ARLN2 |
| 689443.81 | 4283230.64 | 1.82553 | 531.93 | 531.93 | 1.5 ANNUAL | ARLN2 |
| 689243.81 | 4283280.64 | 0.26878 | 535.51 | 535.51 | 1.5 ANNUAL | ARLN2 |
| 689293.81 | 4283280.64 | 0.30331 | 536.93 | 536.93 | 1.5 ANNUAL | ARLN2 |
| 689343.81 | 4283280.64 | 0.43291 | 536.13 | 536.13 | 1.5 ANNUAL | ARLN2 |
| 689393.81 | 4283280.64 | 0.8531  | 533.93 | 533.93 | 1.5 ANNUAL | ARLN2 |
| 689443.81 | 4283280.64 | 2.71837 | 531.24 | 531.24 | 1.5 ANNUAL | ARLN2 |
| 689243.81 | 4283330.64 | 0.29793 | 534.37 | 534.37 | 1.5 ANNUAL | ARLN2 |
| 689293.81 | 4283330.64 | 0.38899 | 534.76 | 534.76 | 1.5 ANNUAL | ARLN2 |
| 689343.81 | 4283330.64 | 0.63324 | 533.41 | 533.41 | 1.5 ANNUAL | ARLN2 |
| 689393.81 | 4283330.64 | 1.20662 | 531.98 | 531.98 | 1.5 ANNUAL | ARLN2 |
| 689443.81 | 4283330.64 | 2.94359 | 531.69 | 531.69 | 1.5 ANNUAL | ARLN2 |
| 689493.81 | 4283330.64 | 7.84795 | 529.94 | 529.94 | 1.5 ANNUAL | ARLN2 |
| 689243.81 | 4283380.64 | 0.33372 | 533.68 | 533.68 | 1.5 ANNUAL | ARLN2 |
| 689293.81 | 4283380.64 | 0.43471 | 534.32 | 534.32 | 1.5 ANNUAL | ARLN2 |
| 689343.81 | 4283380.64 | 0.6331  | 535    | 535    | 1.5 ANNUAL | ARLN2 |
| 689393.81 | 4283380.64 | 1.12158 | 534.7  | 535.45 | 1.5 ANNUAL | ARLN2 |
| 689443.81 | 4283380.64 | 2.24201 | 534.75 | 535.85 | 1.5 ANNUAL | ARLN2 |
| 689243.81 | 4283430.64 | 0.38186 | 533.36 | 533.36 | 1.5 ANNUAL | ARLN2 |
| 689293.81 | 4283430.64 | 0.4896  | 534.26 | 534.26 | 1.5 ANNUAL | ARLN2 |
| 689343.81 | 4283430.64 | 0.67848 | 535.27 | 535.27 | 1.5 ANNUAL | ARLN2 |
| 689393.81 | 4283430.64 | 1.07007 | 536.17 | 536.17 | 1.5 ANNUAL | ARLN2 |
| 689443.81 | 4283430.64 | 1.80947 | 537.27 | 537.27 | 1.5 ANNUAL | ARLN2 |
| 689243.81 | 4283480.64 | 0.40876 | 533.09 | 533.09 | 1.5 ANNUAL | ARLN2 |
| 689293.81 | 4283480.64 | 0.51283 | 534.21 | 534.21 | 1.5 ANNUAL | ARLN2 |
| 689343.81 | 4283480.64 | 0.71555 | 534.93 | 534.93 | 1.5 ANNUAL | ARLN2 |
| 689393.81 | 4283480.64 | 1.0348  | 536.06 | 550.7  | 1.5 ANNUAL | ARLN2 |
| 689443.81 | 4283480.64 | 1.55861 | 537.64 | 550.76 | 1.5 ANNUAL | ARLN2 |
| 689493.81 | 4283480.64 | 2.22364 | 539.69 | 550.7  | 1.5 ANNUAL | ARLN2 |
| 689584.29 | 4283182    | 7.81803 | 525.58 | 525.58 | 1.5 ANNUAL | ARLN2 |
| 689626.46 | 4283180.77 | 7.12234 | 519.89 | 527.35 | 1.5 ANNUAL | ARLN2 |
| 689581.46 | 4283081.75 | 3.09108 | 522.81 | 525.66 | 1.5 ANNUAL | ARLN2 |
| 689586.89 | 4283032.14 | 2.17659 | 520.25 | 525.64 | 1.5 ANNUAL | ARLN2 |
| 689628.89 | 4283033.23 | 2.54808 | 514.93 | 526.85 | 1.5 ANNUAL | ARLN2 |
| 690123.39 | 4283039.13 | 0.83898 | 502.42 | 515.39 | 1.5 ANNUAL | ARLN2 |
| 690123.39 | 4283089.13 | 0.81654 | 504.85 | 515.62 | 1.5 ANNUAL | ARLN2 |
| 690173.39 | 4283089.13 | 0.61771 | 513.46 | 513.61 | 1.5 ANNUAL | ARLN2 |
| 689923.39 | 4283139.13 | 1.97323 | 519.16 | 519.16 | 1.5 ANNUAL | ARLN2 |
| 689950.32 | 4283366.56 | 1.15666 | 521.49 | 529.62 | 1.5 ANNUAL | ARLN2 |
| 690000.32 | 4283366.56 | 0.73343 | 525.34 | 525.34 | 1.5 ANNUAL | ARLN2 |
| 689946.72 | 4283397.81 | 1.10528 | 522.25 | 529.64 | 1.5 ANNUAL | ARLN2 |
| 689990.74 | 4283391.96 | 0.76175 | 524.47 | 526.53 | 1.5 ANNUAL | ARLN2 |
| 690047.5  | 4284607.9  | 0.21594 | 537.17 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690097.5  | 4284607.9  | 0.20305 | 537.61 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690147.5  | 4284607.9  | 0.18392 | 539.87 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690197.5  | 4284607.9  | 0.15947 | 544.63 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690047.5  | 4284657.9  | 0.21548 | 534.61 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690097.5  | 4284657.9  | 0.20069 | 535.78 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690147.5  | 4284657.9  | 0.18069 | 538.41 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690197.5  | 4284657.9  | 0.15391 | 544.27 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 689997.5  | 4284707.9  | 0.21851 | 533.29 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690097.5  | 4284707.9  | 0.19317 | 535.32 | 603.34 | 1.5 ANNUAL | ARLN2 |

|           |            |         |        |        |            |       |
|-----------|------------|---------|--------|--------|------------|-------|
| 690147.5  | 4284707.9  | 0.17477 | 537.81 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690197.5  | 4284707.9  | 0.15044 | 543.18 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690047.5  | 4284757.9  | 0.1922  | 535.23 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690097.5  | 4284757.9  | 0.18051 | 536.4  | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690147.5  | 4284757.9  | 0.17003 | 536.99 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690197.5  | 4284757.9  | 0.14931 | 541.31 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 689947.5  | 4284807.9  | 0.19665 | 536.71 | 536.71 | 1.5 ANNUAL | ARLN2 |
| 690047.5  | 4284807.9  | 0.18065 | 535.92 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690097.5  | 4284807.9  | 0.16838 | 537.61 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690147.5  | 4284807.9  | 0.16065 | 537.73 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690197.5  | 4284807.9  | 0.14681 | 539.99 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 689897.5  | 4284857.9  | 0.19622 | 536.76 | 536.76 | 1.5 ANNUAL | ARLN2 |
| 689947.5  | 4284857.9  | 0.18558 | 537.24 | 537.24 | 1.5 ANNUAL | ARLN2 |
| 689997.5  | 4284857.9  | 0.17845 | 536.94 | 536.94 | 1.5 ANNUAL | ARLN2 |
| 690047.5  | 4284857.9  | 0.17003 | 536.64 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690097.5  | 4284857.9  | 0.15873 | 538.34 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690147.5  | 4284857.9  | 0.14726 | 540.07 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690197.5  | 4284857.9  | 0.13668 | 541.59 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690247.5  | 4284857.9  | 0.12392 | 544.85 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 689847.5  | 4284907.9  | 0.18916 | 538.64 | 538.64 | 1.5 ANNUAL | ARLN2 |
| 689897.5  | 4284907.9  | 0.18381 | 537.77 | 537.77 | 1.5 ANNUAL | ARLN2 |
| 689947.5  | 4284907.9  | 0.17746 | 537.08 | 537.08 | 1.5 ANNUAL | ARLN2 |
| 689997.5  | 4284907.9  | 0.16988 | 537.13 | 537.13 | 1.5 ANNUAL | ARLN2 |
| 690047.5  | 4284907.9  | 0.15919 | 537.74 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690097.5  | 4284907.9  | 0.15135 | 538.55 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690147.5  | 4284907.9  | 0.13911 | 540.93 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690197.5  | 4284907.9  | 0.12919 | 542.51 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690247.5  | 4284907.9  | 0.11986 | 544.49 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 689797.5  | 4284957.9  | 0.18288 | 539.55 | 539.55 | 1.5 ANNUAL | ARLN2 |
| 689847.5  | 4284957.9  | 0.17583 | 540.19 | 540.19 | 1.5 ANNUAL | ARLN2 |
| 689897.5  | 4284957.9  | 0.1711  | 539.27 | 539.27 | 1.5 ANNUAL | ARLN2 |
| 689947.5  | 4284957.9  | 0.16718 | 537.89 | 537.89 | 1.5 ANNUAL | ARLN2 |
| 689997.5  | 4284957.9  | 0.16247 | 537.13 | 537.13 | 1.5 ANNUAL | ARLN2 |
| 690047.5  | 4284957.9  | 0.1525  | 537.72 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690097.5  | 4284957.9  | 0.14288 | 539.34 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690147.5  | 4284957.9  | 0.13384 | 540.89 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690197.5  | 4284957.9  | 0.12495 | 542.29 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690247.5  | 4284957.9  | 0.11583 | 544.24 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 689897.5  | 4285007.9  | 0.16197 | 539.86 | 539.86 | 1.5 ANNUAL | ARLN2 |
| 689947.5  | 4285007.9  | 0.16159 | 537.26 | 537.26 | 1.5 ANNUAL | ARLN2 |
| 689997.5  | 4285007.9  | 0.15552 | 537.14 | 537.14 | 1.5 ANNUAL | ARLN2 |
| 690047.5  | 4285007.9  | 0.14781 | 537.14 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690097.5  | 4285007.9  | 0.14077 | 537.99 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690147.5  | 4285007.9  | 0.13117 | 539.94 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690197.5  | 4285007.9  | 0.12128 | 541.95 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690247.5  | 4285007.9  | 0.11157 | 544.25 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 689897.5  | 4285057.9  | 0.1479  | 541.78 | 547.75 | 1.5 ANNUAL | ARLN2 |
| 689947.5  | 4285057.9  | 0.14656 | 539.62 | 562.37 | 1.5 ANNUAL | ARLN2 |
| 689997.5  | 4285057.9  | 0.14582 | 537.63 | 562.37 | 1.5 ANNUAL | ARLN2 |
| 690047.5  | 4285057.9  | 0.14187 | 537.14 | 589.12 | 1.5 ANNUAL | ARLN2 |
| 690097.5  | 4285057.9  | 0.13728 | 537.19 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690147.5  | 4285057.9  | 0.12824 | 539.16 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690197.5  | 4285057.9  | 0.11792 | 541.58 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690247.5  | 4285057.9  | 0.10806 | 544.06 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 689970.15 | 4284514.09 | 0.27091 | 535.22 | 537.9  | 1.5 ANNUAL | ARLN2 |

|           |            |         |        |        |            |       |
|-----------|------------|---------|--------|--------|------------|-------|
| 690020.15 | 4284514.09 | 0.24527 | 538.37 | 538.37 | 1.5 ANNUAL | ARLN2 |
| 690070.15 | 4284514.09 | 0.21944 | 540.11 | 602.25 | 1.5 ANNUAL | ARLN2 |
| 690120.15 | 4284514.09 | 0.19599 | 542.8  | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690170.15 | 4284514.09 | 0.17117 | 547.04 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690220.15 | 4284514.09 | 0.14958 | 550.47 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690020.15 | 4284564.09 | 0.23051 | 538.57 | 538.57 | 1.5 ANNUAL | ARLN2 |
| 690070.15 | 4284564.09 | 0.20821 | 540.15 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690120.15 | 4284564.09 | 0.19391 | 540.79 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690170.15 | 4284564.09 | 0.17176 | 544.31 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 690220.15 | 4284564.09 | 0.1526  | 547.27 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 689216.55 | 4284758.96 | 0.17116 | 535.39 | 535.39 | 1.5 ANNUAL | ARLN2 |
| 689266.55 | 4284758.96 | 0.1782  | 537.06 | 537.06 | 1.5 ANNUAL | ARLN2 |
| 689316.55 | 4284758.96 | 0.18964 | 536.91 | 536.91 | 1.5 ANNUAL | ARLN2 |
| 689366.55 | 4284758.96 | 0.20383 | 535.98 | 535.98 | 1.5 ANNUAL | ARLN2 |
| 689416.55 | 4284758.96 | 0.21678 | 536.01 | 536.01 | 1.5 ANNUAL | ARLN2 |
| 689466.55 | 4284758.96 | 0.22704 | 536.56 | 536.56 | 1.5 ANNUAL | ARLN2 |
| 689516.55 | 4284758.96 | 0.23346 | 537.28 | 537.28 | 1.5 ANNUAL | ARLN2 |
| 689216.55 | 4284808.96 | 0.16304 | 535.86 | 535.86 | 1.5 ANNUAL | ARLN2 |
| 689266.55 | 4284808.96 | 0.17021 | 537.23 | 537.23 | 1.5 ANNUAL | ARLN2 |
| 689316.55 | 4284808.96 | 0.1805  | 537.23 | 537.23 | 1.5 ANNUAL | ARLN2 |
| 689366.55 | 4284808.96 | 0.19332 | 536.51 | 536.51 | 1.5 ANNUAL | ARLN2 |
| 689416.55 | 4284808.96 | 0.20598 | 536.17 | 536.17 | 1.5 ANNUAL | ARLN2 |
| 689566.55 | 4284808.96 | 0.2226  | 538.51 | 538.51 | 1.5 ANNUAL | ARLN2 |
| 689216.55 | 4284858.96 | 0.15532 | 536.46 | 536.46 | 1.5 ANNUAL | ARLN2 |
| 689266.55 | 4284858.96 | 0.1647  | 536.42 | 536.42 | 1.5 ANNUAL | ARLN2 |
| 689316.55 | 4284858.96 | 0.17298 | 537.1  | 537.1  | 1.5 ANNUAL | ARLN2 |
| 689366.55 | 4284858.96 | 0.18315 | 537.27 | 537.27 | 1.5 ANNUAL | ARLN2 |
| 689466.55 | 4284858.96 | 0.20246 | 537.37 | 537.37 | 1.5 ANNUAL | ARLN2 |
| 689516.55 | 4284858.96 | 0.20537 | 538.75 | 538.75 | 1.5 ANNUAL | ARLN2 |
| 689566.55 | 4284858.96 | 0.20744 | 539.75 | 539.75 | 1.5 ANNUAL | ARLN2 |
| 689666.55 | 4284858.96 | 0.21619 | 538.58 | 538.58 | 1.5 ANNUAL | ARLN2 |
| 689266.55 | 4284908.96 | 0.15809 | 536.38 | 536.38 | 1.5 ANNUAL | ARLN2 |
| 689316.55 | 4284908.96 | 0.16625 | 536.86 | 536.86 | 1.5 ANNUAL | ARLN2 |
| 689366.55 | 4284908.96 | 0.17489 | 537.48 | 537.48 | 1.5 ANNUAL | ARLN2 |
| 689416.55 | 4284908.96 | 0.18413 | 537.67 | 537.67 | 1.5 ANNUAL | ARLN2 |
| 689466.55 | 4284908.96 | 0.19186 | 537.65 | 537.65 | 1.5 ANNUAL | ARLN2 |
| 689616.55 | 4284908.96 | 0.19874 | 540.33 | 540.33 | 1.5 ANNUAL | ARLN2 |
| 689216.55 | 4284958.96 | 0.14135 | 537.22 | 549.49 | 1.5 ANNUAL | ARLN2 |
| 689366.55 | 4284958.96 | 0.1681  | 537.23 | 537.23 | 1.5 ANNUAL | ARLN2 |
| 689416.55 | 4284958.96 | 0.17669 | 537.26 | 537.26 | 1.5 ANNUAL | ARLN2 |
| 689466.55 | 4284958.96 | 0.17793 | 539.97 | 539.97 | 1.5 ANNUAL | ARLN2 |
| 689516.55 | 4284958.96 | 0.18104 | 540.7  | 540.7  | 1.5 ANNUAL | ARLN2 |
| 689566.55 | 4284958.96 | 0.18398 | 540.97 | 540.97 | 1.5 ANNUAL | ARLN2 |
| 689616.55 | 4284958.96 | 0.18666 | 541.19 | 541.19 | 1.5 ANNUAL | ARLN2 |
| 689216.55 | 4285008.96 | 0.13388 | 539.29 | 539.29 | 1.5 ANNUAL | ARLN2 |
| 689366.55 | 4285008.96 | 0.15878 | 538.57 | 538.57 | 1.5 ANNUAL | ARLN2 |
| 689416.55 | 4285008.96 | 0.16559 | 538.22 | 548.48 | 1.5 ANNUAL | ARLN2 |
| 689566.55 | 4285008.96 | 0.17128 | 542.84 | 542.84 | 1.5 ANNUAL | ARLN2 |
| 689712.61 | 4284806.28 | 0.2313  | 537.24 | 537.24 | 1.5 ANNUAL | ARLN2 |
| 689665.5  | 4284822.91 | 0.22802 | 537.58 | 537.58 | 1.5 ANNUAL | ARLN2 |
| 689153.77 | 4285125.11 | 0.10584 | 546.88 | 546.88 | 1.5 ANNUAL | ARLN2 |
| 689203.77 | 4285125.11 | 0.11154 | 547.16 | 547.16 | 1.5 ANNUAL | ARLN2 |
| 689303.77 | 4285125.11 | 0.12485 | 546.19 | 546.19 | 1.5 ANNUAL | ARLN2 |
| 689353.77 | 4285125.11 | 0.13182 | 545.84 | 545.84 | 1.5 ANNUAL | ARLN2 |
| 689603.77 | 4285125.11 | 0.14917 | 546.36 | 546.36 | 1.5 ANNUAL | ARLN2 |



|           |            |         |        |        |            |       |
|-----------|------------|---------|--------|--------|------------|-------|
| 689653.77 | 4285125.11 | 0.14929 | 546.88 | 546.88 | 1.5 ANNUAL | ARLN2 |
| 689703.77 | 4285125.11 | 0.14579 | 548.13 | 548.13 | 1.5 ANNUAL | ARLN2 |
| 689803.77 | 4285125.11 | 0.14103 | 546.79 | 546.79 | 1.5 ANNUAL | ARLN2 |
| 689853.77 | 4285125.11 | 0.13578 | 547.33 | 547.33 | 1.5 ANNUAL | ARLN2 |
| 689903.77 | 4285125.11 | 0.12846 | 548.27 | 548.27 | 1.5 ANNUAL | ARLN2 |
| 689953.77 | 4285125.11 | 0.12272 | 546.64 | 562.17 | 1.5 ANNUAL | ARLN2 |
| 690003.77 | 4285125.11 | 0.12319 | 543.82 | 562.55 | 1.5 ANNUAL | ARLN2 |
| 690103.77 | 4285125.11 | 0.12422 | 539.54 | 589.12 | 1.5 ANNUAL | ARLN2 |
| 689153.77 | 4285175.11 | 0.10193 | 547.57 | 547.57 | 1.5 ANNUAL | ARLN2 |
| 689203.77 | 4285175.11 | 0.10554 | 549.41 | 549.41 | 1.5 ANNUAL | ARLN2 |
| 689303.77 | 4285175.11 | 0.1189  | 547.49 | 547.49 | 1.5 ANNUAL | ARLN2 |
| 689353.77 | 4285175.11 | 0.12622 | 546.38 | 546.38 | 1.5 ANNUAL | ARLN2 |
| 689603.77 | 4285175.11 | 0.14081 | 547.53 | 547.53 | 1.5 ANNUAL | ARLN2 |
| 689653.77 | 4285175.11 | 0.14049 | 548.26 | 548.26 | 1.5 ANNUAL | ARLN2 |
| 689703.77 | 4285175.11 | 0.13717 | 549.55 | 549.55 | 1.5 ANNUAL | ARLN2 |
| 689753.77 | 4285175.11 | 0.13192 | 549.68 | 561.21 | 1.5 ANNUAL | ARLN2 |
| 689803.77 | 4285175.11 | 0.13102 | 547.91 | 561.96 | 1.5 ANNUAL | ARLN2 |
| 689853.77 | 4285175.11 | 0.12502 | 549    | 562.37 | 1.5 ANNUAL | ARLN2 |
| 689903.77 | 4285175.11 | 0.11582 | 551.59 | 562.17 | 1.5 ANNUAL | ARLN2 |
| 689953.77 | 4285175.11 | 0.11123 | 550.86 | 562.37 | 1.5 ANNUAL | ARLN2 |
| 690003.77 | 4285175.11 | 0.11185 | 547.4  | 563.2  | 1.5 ANNUAL | ARLN2 |
| 689153.77 | 4285225.11 | 0.09825 | 548.23 | 548.23 | 1.5 ANNUAL | ARLN2 |
| 689203.77 | 4285225.11 | 0.10179 | 549.82 | 549.82 | 1.5 ANNUAL | ARLN2 |
| 689253.77 | 4285225.11 | 0.10696 | 549.75 | 549.75 | 1.5 ANNUAL | ARLN2 |
| 689303.77 | 4285225.11 | 0.11364 | 548.54 | 548.54 | 1.5 ANNUAL | ARLN2 |
| 689353.77 | 4285225.11 | 0.12102 | 546.86 | 546.86 | 1.5 ANNUAL | ARLN2 |
| 689403.77 | 4285225.11 | 0.12503 | 547.47 | 547.47 | 1.5 ANNUAL | ARLN2 |
| 689453.77 | 4285225.11 | 0.12856 | 547.58 | 547.58 | 1.5 ANNUAL | ARLN2 |
| 689503.77 | 4285225.11 | 0.13208 | 546.85 | 546.85 | 1.5 ANNUAL | ARLN2 |
| 689553.77 | 4285225.11 | 0.1324  | 548.05 | 548.05 | 1.5 ANNUAL | ARLN2 |
| 689603.77 | 4285225.11 | 0.13239 | 549.25 | 549.25 | 1.5 ANNUAL | ARLN2 |
| 689653.77 | 4285225.11 | 0.12956 | 550.38 | 562.2  | 1.5 ANNUAL | ARLN2 |
| 689703.77 | 4285225.11 | 0.12596 | 552.04 | 562.2  | 1.5 ANNUAL | ARLN2 |
| 689753.77 | 4285225.11 | 0.12252 | 552.5  | 562.19 | 1.5 ANNUAL | ARLN2 |
| 689803.77 | 4285225.11 | 0.12198 | 550.34 | 562.19 | 1.5 ANNUAL | ARLN2 |
| 689853.77 | 4285225.11 | 0.11614 | 551.71 | 562.37 | 1.5 ANNUAL | ARLN2 |
| 689903.77 | 4285225.11 | 0.10585 | 556.17 | 562.28 | 1.5 ANNUAL | ARLN2 |
| 689953.77 | 4285225.11 | 0.10248 | 554.54 | 562.37 | 1.5 ANNUAL | ARLN2 |
| 690003.77 | 4285225.11 | 0.10375 | 550    | 563.77 | 1.5 ANNUAL | ARLN2 |
| 690053.77 | 4285225.11 | 0.09584 | 553.16 | 562.98 | 1.5 ANNUAL | ARLN2 |
| 689153.77 | 4285275.11 | 0.09423 | 549.46 | 549.46 | 1.5 ANNUAL | ARLN2 |
| 689203.77 | 4285275.11 | 0.09796 | 550.54 | 550.54 | 1.5 ANNUAL | ARLN2 |
| 689253.77 | 4285275.11 | 0.10382 | 549.45 | 549.45 | 1.5 ANNUAL | ARLN2 |
| 689303.77 | 4285275.11 | 0.10927 | 549.07 | 549.07 | 1.5 ANNUAL | ARLN2 |
| 689353.77 | 4285275.11 | 0.11498 | 548.34 | 548.34 | 1.5 ANNUAL | ARLN2 |
| 689403.77 | 4285275.11 | 0.11983 | 547.84 | 547.84 | 1.5 ANNUAL | ARLN2 |
| 689453.77 | 4285275.11 | 0.12318 | 547.81 | 547.81 | 1.5 ANNUAL | ARLN2 |
| 689503.77 | 4285275.11 | 0.12531 | 547.96 | 547.96 | 1.5 ANNUAL | ARLN2 |
| 689553.77 | 4285275.11 | 0.12536 | 549.32 | 549.32 | 1.5 ANNUAL | ARLN2 |
| 689603.77 | 4285275.11 | 0.12367 | 551.84 | 551.84 | 1.5 ANNUAL | ARLN2 |
| 689653.77 | 4285275.11 | 0.11925 | 554.37 | 561.65 | 1.5 ANNUAL | ARLN2 |
| 689703.77 | 4285275.11 | 0.11434 | 558.02 | 561.95 | 1.5 ANNUAL | ARLN2 |
| 689753.77 | 4285275.11 | 0.11126 | 558.83 | 561.96 | 1.5 ANNUAL | ARLN2 |
| 689803.77 | 4285275.11 | 0.11081 | 556.02 | 559.45 | 1.5 ANNUAL | ARLN2 |
| 689853.77 | 4285275.11 | 0.10632 | 558.28 | 558.28 | 1.5 ANNUAL | ARLN2 |

|           |            |         |        |        |            |       |
|-----------|------------|---------|--------|--------|------------|-------|
| 689903.77 | 4285275.11 | 0.09879 | 561.62 | 561.62 | 1.5 ANNUAL | ARLN2 |
| 689953.77 | 4285275.11 | 0.09438 | 561.18 | 561.18 | 1.5 ANNUAL | ARLN2 |
| 690003.77 | 4285275.11 | 0.09244 | 558.72 | 558.72 | 1.5 ANNUAL | ARLN2 |
| 690053.77 | 4285275.11 | 0.0868  | 561.16 | 561.16 | 1.5 ANNUAL | ARLN2 |
| 689153.77 | 4285325.11 | 0.0903  | 550.87 | 550.87 | 1.5 ANNUAL | ARLN2 |
| 689203.77 | 4285325.11 | 0.09398 | 551.71 | 551.71 | 1.5 ANNUAL | ARLN2 |
| 689253.77 | 4285325.11 | 0.09964 | 550.44 | 550.44 | 1.5 ANNUAL | ARLN2 |
| 689303.77 | 4285325.11 | 0.10469 | 550.06 | 550.06 | 1.5 ANNUAL | ARLN2 |
| 689353.77 | 4285325.11 | 0.10948 | 549.72 | 549.72 | 1.5 ANNUAL | ARLN2 |
| 689403.77 | 4285325.11 | 0.11388 | 549.19 | 549.19 | 1.5 ANNUAL | ARLN2 |
| 689453.77 | 4285325.11 | 0.11681 | 549.25 | 549.25 | 1.5 ANNUAL | ARLN2 |
| 689503.77 | 4285325.11 | 0.11913 | 549.02 | 549.02 | 1.5 ANNUAL | ARLN2 |
| 689553.77 | 4285325.11 | 0.11872 | 550.74 | 550.74 | 1.5 ANNUAL | ARLN2 |
| 689603.77 | 4285325.11 | 0.11622 | 554.08 | 554.08 | 1.5 ANNUAL | ARLN2 |
| 689653.77 | 4285325.11 | 0.11254 | 557.81 | 557.81 | 1.5 ANNUAL | ARLN2 |
| 689703.77 | 4285325.11 | 0.10773 | 561.6  | 561.6  | 1.5 ANNUAL | ARLN2 |
| 689753.77 | 4285325.11 | 0.10569 | 561.32 | 561.32 | 1.5 ANNUAL | ARLN2 |
| 689803.77 | 4285325.11 | 0.10668 | 557.19 | 557.19 | 1.5 ANNUAL | ARLN2 |
| 689853.77 | 4285325.11 | 0.10136 | 558.79 | 559.98 | 1.5 ANNUAL | ARLN2 |
| 689903.77 | 4285325.11 | 0.09563 | 561.23 | 561.23 | 1.5 ANNUAL | ARLN2 |
| 689953.77 | 4285325.11 | 0.09031 | 562.11 | 562.11 | 1.5 ANNUAL | ARLN2 |
| 690003.77 | 4285325.11 | 0.08601 | 562.47 | 562.47 | 1.5 ANNUAL | ARLN2 |
| 690053.77 | 4285325.11 | 0.08251 | 562.76 | 562.76 | 1.5 ANNUAL | ARLN2 |
| 690103.77 | 4285325.11 | 0.08197 | 557.6  | 562.73 | 1.5 ANNUAL | ARLN2 |
| 689653.19 | 4285078.65 | 0.15883 | 545.28 | 545.28 | 1.5 ANNUAL | ARLN2 |
| 689596.53 | 4285079.83 | 0.15811 | 544.73 | 544.73 | 1.5 ANNUAL | ARLN2 |
| 689417.31 | 4285054.43 | 0.1513  | 542.59 | 549.22 | 1.5 ANNUAL | ARLN2 |
| 689465.48 | 4285057.44 | 0.15375 | 543.96 | 548.14 | 1.5 ANNUAL | ARLN2 |
| 689160.76 | 4284611.23 | 0.1844  | 533.56 | 533.56 | 1.5 ANNUAL | ARLN2 |
| 689595.79 | 4284809.16 | 0.22555 | 538.38 | 538.38 | 1.5 ANNUAL | ARLN2 |
| 689614.28 | 4284828.01 | 0.22185 | 538.53 | 538.53 | 1.5 ANNUAL | ARLN2 |
| 689880.93 | 4283885.33 | 1.25138 | 512.72 | 562.51 | 1.5 ANNUAL | ARLN2 |
| 689878.21 | 4284393.24 | 0.41019 | 526.73 | 537.47 | 1.5 ANNUAL | ARLN2 |
| 689919.3  | 4284393.48 | 0.38304 | 528.52 | 528.52 | 1.5 ANNUAL | ARLN2 |
| 690067.31 | 4284711.79 | 0.20067 | 534.58 | 603.34 | 1.5 ANNUAL | ARLN2 |
| 689854.2  | 4285030.1  | 0.1596  | 541.82 | 541.82 | 1.5 ANNUAL | ARLN2 |
| 689832.17 | 4285004.36 | 0.16759 | 541.12 | 541.12 | 1.5 ANNUAL | ARLN2 |
| 689709.9  | 4284847.93 | 0.2179  | 538.26 | 538.26 | 1.5 ANNUAL | ARLN2 |
| 689566.83 | 4284730.6  | 0.2479  | 537.2  | 537.2  | 1.5 ANNUAL | ARLN2 |
| 689380.2  | 4284259.82 | 0.31326 | 547.59 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689367.58 | 4284231.36 | 0.31676 | 547.29 | 562.94 | 1.5 ANNUAL | ARLN2 |
| 689441.09 | 4283793    | 0.8153  | 540.33 | 540.33 | 1.5 ANNUAL | ARLN2 |
| 689436.64 | 4283733.85 | 0.8225  | 543.4  | 550.19 | 1.5 ANNUAL | ARLN2 |
| 689439.11 | 4283767.76 | 0.8084  | 541.84 | 547.9  | 1.5 ANNUAL | ARLN2 |
| 689436.64 | 4283689.05 | 0.89142 | 542.64 | 550.73 | 1.5 ANNUAL | ARLN2 |
| 689444.06 | 4283650.43 | 0.96625 | 543.87 | 550.78 | 1.5 ANNUAL | ARLN2 |
| 689500.74 | 4283585.58 | 1.38232 | 550.23 | 550.23 | 1.5 ANNUAL | ARLN2 |
| 689505.94 | 4283507.86 | 2.12207 | 540.29 | 550.76 | 1.5 ANNUAL | ARLN2 |
| 689546.04 | 4283356.63 | 10.9784 | 526.73 | 550.7  | 1.5 ANNUAL | ARLN2 |
| 689912.61 | 4283166.04 | 2.07501 | 520.34 | 526.34 | 1.5 ANNUAL | ARLN2 |

CONCUNIT ug/m^3

DEPUNIT g/m ^2























AERMOD ( : 91): C:\Lake ERMOD Vie rado Oaks\I rado Oak s.isc

6/15/2020

AERMET ( 1 34):

15:31:41

MODELING IONS USED: gDEFAULT C ELEV FLGP OL RURA L

PLOT FILE OF AN VALUES AVI GED ACROS 5 YEARS FOR SO URCE GRO UP: PAREA1

FOR A TOTAL OF 7 RECEPTORS.

FORM AT: (3(1X,F1),3(1X,F8.2), 2X,A6,2X,A8, 2X,18.8, 2X,A8)

| X | Y | AVERAGE CIZELEV | ZHILL | ZFLAG | AVE | GRP | NUM YRS | NET ID |
|---|---|-----------------|-------|-------|-----|-----|---------|--------|
|---|---|-----------------|-------|-------|-----|-----|---------|--------|

|           |           |         |        |        |            |        |   |  |
|-----------|-----------|---------|--------|--------|------------|--------|---|--|
| 689212.05 | 4283551.6 | 0.26073 | 529.56 | 529.56 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689262.05 | 4283551.6 | 0.30767 | 533    | 533    | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689312.05 | 4283551.6 | 0.36818 | 534.01 | 534.01 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689362.05 | 4283551.6 | 0.45175 | 534.99 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689412.05 | 4283551.6 | 0.57582 | 536.9  | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689212.05 | 4283601.6 | 0.27321 | 531    | 534.74 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689262.05 | 4283601.6 | 0.32394 | 534.44 | 534.44 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689312.05 | 4283601.6 | 0.38799 | 534.18 | 534.18 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689362.05 | 4283601.6 | 0.48058 | 535.56 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689412.05 | 4283601.6 | 0.62184 | 537.51 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689262.05 | 4283651.6 | 0.34175 | 536.79 | 536.79 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689312.05 | 4283651.6 | 0.4098  | 535.84 | 535.84 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689362.05 | 4283651.6 | 0.50757 | 535.52 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689412.05 | 4283651.6 | 0.67039 | 538.25 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689212.05 | 4283701.6 | 0.29994 | 534.89 | 537.25 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689262.05 | 4283701.6 | 0.3587  | 537.42 | 537.42 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689312.05 | 4283701.6 | 0.43254 | 536.64 | 536.64 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689362.05 | 4283701.6 | 0.53907 | 535.6  | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689412.05 | 4283701.6 | 0.73172 | 538.09 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689062.05 | 4283751.6 | 0.20522 | 524.69 | 524.69 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689212.05 | 4283751.6 | 0.31084 | 532.54 | 537.46 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689262.05 | 4283751.6 | 0.37227 | 535.39 | 537.34 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689312.05 | 4283751.6 | 0.45128 | 534.12 | 534.12 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689362.05 | 4283751.6 | 0.57755 | 536.06 | 550.26 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689262.05 | 4283801.6 | 0.38434 | 530.56 | 537.34 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689312.05 | 4283801.6 | 0.47544 | 533.57 | 533.57 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689362.05 | 4283801.6 | 0.61916 | 536.5  | 536.5  | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689412.05 | 4283801.6 | 0.89177 | 539.35 | 539.35 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689212.05 | 4283851.6 | 0.33531 | 527.68 | 527.68 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689262.05 | 4283851.6 | 0.40217 | 530.07 | 530.07 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689312.05 | 4283851.6 | 0.50092 | 533.41 | 533.41 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689362.05 | 4283851.6 | 0.65867 | 536.38 | 536.38 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689412.05 | 4283851.6 | 0.94631 | 537.57 | 537.57 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689062.05 | 4283901.6 | 0.2315  | 529.18 | 537.59 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689112.05 | 4283901.6 | 0.2602  | 525.89 | 525.89 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689162.05 | 4283901.6 | 0.29872 | 526.45 | 526.45 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689212.05 | 4283901.6 | 0.35033 | 528.48 | 528.48 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689262.05 | 4283901.6 | 0.42154 | 530.89 | 530.89 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689312.05 | 4283901.6 | 0.52685 | 533.73 | 533.73 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689362.05 | 4283901.6 | 0.69113 | 534.94 | 534.94 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689412.05 | 4283901.6 | 0.99552 | 535.89 | 550.67 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689062.05 | 4283951.6 | 0.24068 | 531.16 | 537.67 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689112.05 | 4283951.6 | 0.27113 | 528.46 | 528.46 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689162.05 | 4283951.6 | 0.31248 | 529.69 | 529.69 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689212.05 | 4283951.6 | 0.36659 | 530.6  | 530.6  | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689262.05 | 4283951.6 | 0.44081 | 531.75 | 531.75 | 1.5 ANNUAL | PAREA1 | 5 |  |
| 689312.05 | 4283951.6 | 0.55019 | 533.24 | 533.24 | 1.5 ANNUAL | PAREA1 | 5 |  |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 689362.05 | 4283951.6 | 0.72689 | 535.08 | 550.67 | 1.5 ANNUAL | PAREA1 | 5 |
| 689412.05 | 4283951.6 | 1.05816 | 536.97 | 552.43 | 1.5 ANNUAL | PAREA1 | 5 |
| 689062.05 | 4284001.6 | 0.24802 | 530.3  | 538.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 689112.05 | 4284001.6 | 0.28166 | 529.81 | 529.81 | 1.5 ANNUAL | PAREA1 | 5 |
| 689162.05 | 4284001.6 | 0.32628 | 532.37 | 532.37 | 1.5 ANNUAL | PAREA1 | 5 |
| 689212.05 | 4284001.6 | 0.38437 | 533.97 | 533.97 | 1.5 ANNUAL | PAREA1 | 5 |
| 689262.05 | 4284001.6 | 0.46155 | 533.78 | 533.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 689312.05 | 4284001.6 | 0.57534 | 533.99 | 562.89 | 1.5 ANNUAL | PAREA1 | 5 |
| 689362.05 | 4284001.6 | 0.76116 | 535.31 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689412.05 | 4284001.6 | 1.11891 | 537.89 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689062.05 | 4284051.6 | 0.25333 | 526.88 | 538.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 689112.05 | 4284051.6 | 0.29029 | 529.56 | 532.13 | 1.5 ANNUAL | PAREA1 | 5 |
| 689162.05 | 4284051.6 | 0.33846 | 533.7  | 533.7  | 1.5 ANNUAL | PAREA1 | 5 |
| 689212.05 | 4284051.6 | 0.40216 | 536.64 | 536.64 | 1.5 ANNUAL | PAREA1 | 5 |
| 689262.05 | 4284051.6 | 0.48554 | 537.12 | 537.12 | 1.5 ANNUAL | PAREA1 | 5 |
| 689312.05 | 4284051.6 | 0.6047  | 536.45 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689362.05 | 4284051.6 | 0.79722 | 536.14 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689412.05 | 4284051.6 | 1.19369 | 539.65 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689112.05 | 4284101.6 | 0.29752 | 530.03 | 535.62 | 1.5 ANNUAL | PAREA1 | 5 |
| 689162.05 | 4284101.6 | 0.34765 | 533.6  | 533.6  | 1.5 ANNUAL | PAREA1 | 5 |
| 689212.05 | 4284101.6 | 0.41388 | 536.48 | 536.48 | 1.5 ANNUAL | PAREA1 | 5 |
| 689262.05 | 4284101.6 | 0.50649 | 538.78 | 538.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 689312.05 | 4284101.6 | 0.62829 | 537.21 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689362.05 | 4284101.6 | 0.8289  | 536.19 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689412.05 | 4284101.6 | 1.31208 | 542.83 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689162.05 | 4284151.6 | 0.35776 | 535.82 | 535.82 | 1.5 ANNUAL | PAREA1 | 5 |
| 689212.05 | 4284151.6 | 0.42194 | 535.45 | 535.45 | 1.5 ANNUAL | PAREA1 | 5 |
| 689262.05 | 4284151.6 | 0.51585 | 537.46 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689312.05 | 4284151.6 | 0.65569 | 539    | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689362.05 | 4284151.6 | 0.86627 | 537.02 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689412.05 | 4284151.6 | 1.47648 | 544.98 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689212.05 | 4284201.6 | 0.4325  | 537.24 | 537.24 | 1.5 ANNUAL | PAREA1 | 5 |
| 689262.05 | 4284201.6 | 0.52489 | 536.75 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689312.05 | 4284201.6 | 0.67212 | 538.69 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689362.05 | 4284201.6 | 1.04161 | 546.1  | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689412.05 | 4284201.6 | 1.75191 | 551.74 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689262.05 | 4284251.6 | 0.53802 | 538.99 | 562.89 | 1.5 ANNUAL | PAREA1 | 5 |
| 689312.05 | 4284251.6 | 0.7156  | 542.56 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689062.05 | 4284301.6 | 0.26782 | 532.67 | 532.67 | 1.5 ANNUAL | PAREA1 | 5 |
| 689112.05 | 4284301.6 | 0.31315 | 536.78 | 536.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 689162.05 | 4284301.6 | 0.36901 | 538.53 | 538.53 | 1.5 ANNUAL | PAREA1 | 5 |
| 689062.05 | 4284451.6 | 0.26929 | 531.02 | 536.85 | 1.5 ANNUAL | PAREA1 | 5 |
| 689062.05 | 4284501.6 | 0.2703  | 533.31 | 535.53 | 1.5 ANNUAL | PAREA1 | 5 |
| 689112.05 | 4284501.6 | 0.30947 | 532.5  | 532.5  | 1.5 ANNUAL | PAREA1 | 5 |
| 689062.05 | 4284551.6 | 0.2733  | 537.07 | 537.07 | 1.5 ANNUAL | PAREA1 | 5 |
| 689112.05 | 4284551.6 | 0.30846 | 534.33 | 534.33 | 1.5 ANNUAL | PAREA1 | 5 |
| 689162.05 | 4284551.6 | 0.35649 | 533.1  | 533.1  | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4283460.3 | 1.53146 | 507.01 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283460.3 | 1.01726 | 492.39 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4283460.3 | 0.77568 | 484.49 | 551.4  | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283460.3 | 0.63336 | 486.32 | 563.68 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283460.3 | 0.53728 | 490.92 | 563.68 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283460.3 | 0.46817 | 499.06 | 551.4  | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4283510.3 | 1.46556 | 497.46 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283510.3 | 1.01826 | 488.83 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 690069.65 | 4283510.3 | 0.79258 | 495.55 | 550.47 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283510.3 | 0.65239 | 501.98 | 543.27 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283510.3 | 0.55188 | 504.5  | 550.47 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283510.3 | 0.47438 | 504.32 | 550.47 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4283560.3 | 2.14079 | 500.59 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4283560.3 | 1.40356 | 491.02 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283560.3 | 1.03547 | 505.09 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4283560.3 | 0.82454 | 514.17 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283560.3 | 0.68013 | 518.23 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283560.3 | 0.56764 | 515.75 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283560.3 | 0.47967 | 508.35 | 550.47 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4283610.3 | 1.94681 | 498.55 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4283610.3 | 1.35759 | 496.27 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283610.3 | 1.04352 | 512.4  | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4283610.3 | 0.85527 | 525.28 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283610.3 | 0.70462 | 528.65 | 538.51 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283610.3 | 0.57484 | 519.44 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283610.3 | 0.47688 | 503.1  | 551.4  | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4283660.3 | 1.85708 | 499.92 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4283660.3 | 1.33235 | 504.28 | 538.82 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283660.3 | 1.06049 | 521.19 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4283660.3 | 0.88435 | 533.88 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283660.3 | 0.705   | 528.27 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283660.3 | 0.57032 | 515.1  | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283660.3 | 0.47025 | 493.19 | 577.58 | 1.5 ANNUAL | PAREA1 | 5 |
| 689869.65 | 4283710.3 | 3.00031 | 523.96 | 527.99 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4283710.3 | 1.80645 | 501.37 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4283710.3 | 1.31015 | 506.06 | 539.3  | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283710.3 | 1.0767  | 527.62 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4283710.3 | 0.88332 | 534.47 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283710.3 | 0.6944  | 523.3  | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283710.3 | 0.56069 | 506.65 | 550.47 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283710.3 | 0.46696 | 489.26 | 602.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4283760.3 | 1.76879 | 498.71 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4283760.3 | 1.29623 | 508.33 | 552.12 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283760.3 | 1.06039 | 526.17 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4283760.3 | 0.8579  | 528.49 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283760.3 | 0.68308 | 517.84 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283760.3 | 0.56147 | 508.22 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283760.3 | 0.47802 | 507.28 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4283810.3 | 1.74635 | 500.38 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4283810.3 | 1.28236 | 509.18 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283810.3 | 1.0497  | 526.12 | 538.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4283810.3 | 0.85888 | 530.76 | 530.76 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283810.3 | 0.69535 | 525.93 | 531.2  | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283810.3 | 0.58079 | 525.2  | 525.2  | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283810.3 | 0.48997 | 522.63 | 527.67 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4283860.3 | 1.72331 | 500.23 | 563.99 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4283860.3 | 1.27172 | 511.01 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283860.3 | 1.04036 | 526.53 | 526.53 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4283860.3 | 0.85145 | 530.48 | 530.48 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283860.3 | 0.69673 | 528.36 | 528.36 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283860.3 | 0.58311 | 528.39 | 528.39 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283860.3 | 0.48898 | 523.99 | 530.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4283910.3 | 1.70862 | 505.05 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 689969.65 | 4283910.3 | 1.26268 | 513.65 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283910.3 | 1.01784 | 523.37 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4283910.3 | 0.8428  | 529.8  | 529.8  | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283910.3 | 0.69932 | 531.52 | 531.52 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283910.3 | 0.5842  | 530.94 | 530.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283910.3 | 0.48994 | 527.58 | 527.58 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4283960.3 | 1.69378 | 510.72 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4283960.3 | 1.2706  | 521.03 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4283960.3 | 1.02391 | 527.86 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4283960.3 | 0.8412  | 531.46 | 550.99 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4283960.3 | 0.70389 | 534.98 | 534.98 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4283960.3 | 0.58425 | 532.81 | 537.82 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4283960.3 | 0.48404 | 525.19 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4284010.3 | 1.66217 | 512.8  | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4284010.3 | 1.25766 | 522.22 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4284010.3 | 1.02135 | 529.6  | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4284010.3 | 0.84567 | 534.57 | 552.12 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4284010.3 | 0.71141 | 537.97 | 537.97 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4284010.3 | 0.58383 | 534.28 | 551.55 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4284010.3 | 0.47938 | 524.43 | 564.77 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4284060.3 | 1.64027 | 517.74 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4284060.3 | 1.25415 | 524.5  | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4284060.3 | 1.03033 | 533.27 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4284060.3 | 0.86042 | 538.63 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4284060.3 | 0.72228 | 540.3  | 552.12 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4284060.3 | 0.5802  | 534.39 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4284060.3 | 0.48373 | 531.98 | 564.22 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4284110.3 | 1.29286 | 532.66 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4284110.3 | 1.07033 | 540.2  | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4284110.3 | 0.93414 | 545.03 | 552    | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4284110.3 | 0.75541 | 543.76 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4284110.3 | 0.58452 | 537.37 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4284110.3 | 0.49798 | 539.23 | 551.07 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4284160.3 | 1.33954 | 539    | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4284160.3 | 1.17001 | 546.12 | 551.38 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4284160.3 | 0.93531 | 551.03 | 551.03 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4284160.3 | 0.77544 | 550.52 | 550.52 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4284160.3 | 0.64465 | 545.48 | 551.96 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4284160.3 | 0.49388 | 539.66 | 564.42 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4284210.3 | 1.6666  | 530.87 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4284210.3 | 1.34764 | 539.95 | 552.08 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4284210.3 | 1.16545 | 545.98 | 551.35 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4284210.3 | 0.93879 | 550.41 | 550.41 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4284210.3 | 0.774   | 549.97 | 549.97 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4284210.3 | 0.6503  | 547.83 | 549.53 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4284210.3 | 0.5268  | 544.9  | 564.22 | 1.5 ANNUAL | PAREA1 | 5 |
| 689869.65 | 4284260.3 | 2.34607 | 520.14 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4284260.3 | 1.62062 | 524.4  | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4284260.3 | 1.32393 | 537.15 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4284260.3 | 1.08663 | 541.61 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4284260.3 | 0.9187  | 544.61 | 551.67 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4284260.3 | 0.77213 | 546.11 | 546.11 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4284260.3 | 0.63784 | 546.3  | 563.68 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4284260.3 | 0.53311 | 547.85 | 564.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4284310.3 | 1.63605 | 523.32 | 563.68 | 1.5 ANNUAL | PAREA1 | 5 |



|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 689969.65 | 4284310.3 | 1.28067 | 529.44 | 562.73 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4284310.3 | 1.05104 | 536.25 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4284310.3 | 0.85138 | 538.25 | 563.68 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4284310.3 | 0.70752 | 541.32 | 564.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4284310.3 | 0.61919 | 545.48 | 564.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4284310.3 | 0.5177  | 549.16 | 564.35 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4284360.3 | 1.71605 | 527.45 | 552.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4284360.3 | 1.305   | 528.54 | 563.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4284360.3 | 1.04488 | 532.77 | 564.06 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4284360.3 | 0.84041 | 535.72 | 564.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4284360.3 | 0.68992 | 539.82 | 564.35 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4284360.3 | 0.60388 | 545.24 | 564.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4284360.3 | 0.5047  | 548.82 | 564.41 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4284410.3 | 1.83096 | 527.07 | 527.07 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4284410.3 | 1.34333 | 526.11 | 602.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4284410.3 | 1.08012 | 535.45 | 535.63 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4284410.3 | 0.85246 | 537.95 | 563.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4284410.3 | 0.68361 | 540.49 | 564.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4284410.3 | 0.58819 | 545.4  | 564.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4284410.3 | 0.48786 | 548.47 | 601.86 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.65 | 4284460.3 | 2.02245 | 524.64 | 602.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 689969.65 | 4284460.3 | 1.44124 | 529.09 | 602.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 690019.65 | 4284460.3 | 1.10021 | 535.26 | 537.89 | 1.5 ANNUAL | PAREA1 | 5 |
| 690069.65 | 4284460.3 | 0.85831 | 539.45 | 539.45 | 1.5 ANNUAL | PAREA1 | 5 |
| 690119.65 | 4284460.3 | 0.67882 | 542.19 | 602.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 690169.65 | 4284460.3 | 0.57976 | 547.11 | 602.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 690219.65 | 4284460.3 | 0.45491 | 551.32 | 602.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 689243.81 | 4283030.6 | 0.17229 | 530.88 | 530.88 | 1.5 ANNUAL | PAREA1 | 5 |
| 689293.81 | 4283030.6 | 0.19123 | 529.46 | 529.46 | 1.5 ANNUAL | PAREA1 | 5 |
| 689343.81 | 4283030.6 | 0.21225 | 525.17 | 536.56 | 1.5 ANNUAL | PAREA1 | 5 |
| 689393.81 | 4283030.6 | 0.23946 | 525.12 | 525.12 | 1.5 ANNUAL | PAREA1 | 5 |
| 689443.81 | 4283030.6 | 0.27358 | 524.98 | 524.98 | 1.5 ANNUAL | PAREA1 | 5 |
| 689493.81 | 4283030.6 | 0.31594 | 524.32 | 524.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 689543.81 | 4283030.6 | 0.36866 | 525.16 | 525.16 | 1.5 ANNUAL | PAREA1 | 5 |
| 689243.81 | 4283080.6 | 0.1824  | 531.25 | 531.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 689293.81 | 4283080.6 | 0.2042  | 529.07 | 537.17 | 1.5 ANNUAL | PAREA1 | 5 |
| 689343.81 | 4283080.6 | 0.23025 | 527.74 | 537.55 | 1.5 ANNUAL | PAREA1 | 5 |
| 689393.81 | 4283080.6 | 0.26145 | 526.5  | 537.55 | 1.5 ANNUAL | PAREA1 | 5 |
| 689443.81 | 4283080.6 | 0.30235 | 526.2  | 527.36 | 1.5 ANNUAL | PAREA1 | 5 |
| 689493.81 | 4283080.6 | 0.35869 | 526.65 | 526.65 | 1.5 ANNUAL | PAREA1 | 5 |
| 689543.81 | 4283080.6 | 0.43158 | 526.02 | 526.02 | 1.5 ANNUAL | PAREA1 | 5 |
| 689243.81 | 4283130.6 | 0.19325 | 534.77 | 534.77 | 1.5 ANNUAL | PAREA1 | 5 |
| 689293.81 | 4283130.6 | 0.22105 | 535.63 | 535.63 | 1.5 ANNUAL | PAREA1 | 5 |
| 689343.81 | 4283130.6 | 0.25171 | 534.08 | 537.42 | 1.5 ANNUAL | PAREA1 | 5 |
| 689393.81 | 4283130.6 | 0.28818 | 531.63 | 531.63 | 1.5 ANNUAL | PAREA1 | 5 |
| 689443.81 | 4283130.6 | 0.33773 | 529.14 | 529.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 689493.81 | 4283130.6 | 0.41868 | 527.9  | 527.9  | 1.5 ANNUAL | PAREA1 | 5 |
| 689543.81 | 4283130.6 | 0.53612 | 526.15 | 526.15 | 1.5 ANNUAL | PAREA1 | 5 |
| 689243.81 | 4283180.6 | 0.20041 | 536.01 | 536.01 | 1.5 ANNUAL | PAREA1 | 5 |
| 689293.81 | 4283180.6 | 0.23136 | 537.11 | 537.11 | 1.5 ANNUAL | PAREA1 | 5 |
| 689343.81 | 4283180.6 | 0.26923 | 537.22 | 537.22 | 1.5 ANNUAL | PAREA1 | 5 |
| 689393.81 | 4283180.6 | 0.31259 | 534.34 | 534.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689443.81 | 4283180.6 | 0.37707 | 531.36 | 531.36 | 1.5 ANNUAL | PAREA1 | 5 |
| 689493.81 | 4283180.6 | 0.52756 | 529.32 | 529.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 689543.81 | 4283180.6 | 0.75384 | 527.27 | 527.27 | 1.5 ANNUAL | PAREA1 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 689243.81 | 4283230.6 | 0.20645 | 535.82 | 535.82 | 1.5 ANNUAL | PAREA1 | 5 |
| 689293.81 | 4283230.6 | 0.23902 | 537.32 | 537.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 689343.81 | 4283230.6 | 0.27813 | 537.15 | 537.15 | 1.5 ANNUAL | PAREA1 | 5 |
| 689393.81 | 4283230.6 | 0.32678 | 534.6  | 534.6  | 1.5 ANNUAL | PAREA1 | 5 |
| 689443.81 | 4283230.6 | 0.406   | 531.93 | 531.93 | 1.5 ANNUAL | PAREA1 | 5 |
| 689243.81 | 4283280.6 | 0.21522 | 535.51 | 535.51 | 1.5 ANNUAL | PAREA1 | 5 |
| 689293.81 | 4283280.6 | 0.2496  | 536.93 | 536.93 | 1.5 ANNUAL | PAREA1 | 5 |
| 689343.81 | 4283280.6 | 0.29022 | 536.13 | 536.13 | 1.5 ANNUAL | PAREA1 | 5 |
| 689393.81 | 4283280.6 | 0.34495 | 533.93 | 533.93 | 1.5 ANNUAL | PAREA1 | 5 |
| 689443.81 | 4283280.6 | 0.44863 | 531.24 | 531.24 | 1.5 ANNUAL | PAREA1 | 5 |
| 689243.81 | 4283330.6 | 0.2255  | 534.37 | 534.37 | 1.5 ANNUAL | PAREA1 | 5 |
| 689293.81 | 4283330.6 | 0.26164 | 534.76 | 534.76 | 1.5 ANNUAL | PAREA1 | 5 |
| 689343.81 | 4283330.6 | 0.30783 | 533.41 | 533.41 | 1.5 ANNUAL | PAREA1 | 5 |
| 689393.81 | 4283330.6 | 0.37628 | 531.98 | 531.98 | 1.5 ANNUAL | PAREA1 | 5 |
| 689443.81 | 4283330.6 | 0.51675 | 531.69 | 531.69 | 1.5 ANNUAL | PAREA1 | 5 |
| 689493.81 | 4283330.6 | 0.88837 | 529.94 | 529.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689243.81 | 4283380.6 | 0.23878 | 533.68 | 533.68 | 1.5 ANNUAL | PAREA1 | 5 |
| 689293.81 | 4283380.6 | 0.27897 | 534.32 | 534.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 689343.81 | 4283380.6 | 0.33453 | 535    | 535    | 1.5 ANNUAL | PAREA1 | 5 |
| 689393.81 | 4283380.6 | 0.41561 | 534.7  | 535.45 | 1.5 ANNUAL | PAREA1 | 5 |
| 689443.81 | 4283380.6 | 0.55426 | 534.75 | 535.85 | 1.5 ANNUAL | PAREA1 | 5 |
| 689243.81 | 4283430.6 | 0.25349 | 533.36 | 533.36 | 1.5 ANNUAL | PAREA1 | 5 |
| 689293.81 | 4283430.6 | 0.2978  | 534.26 | 534.26 | 1.5 ANNUAL | PAREA1 | 5 |
| 689343.81 | 4283430.6 | 0.35969 | 535.27 | 535.27 | 1.5 ANNUAL | PAREA1 | 5 |
| 689393.81 | 4283430.6 | 0.45045 | 536.17 | 536.17 | 1.5 ANNUAL | PAREA1 | 5 |
| 689443.81 | 4283430.6 | 0.58837 | 537.27 | 537.27 | 1.5 ANNUAL | PAREA1 | 5 |
| 689243.81 | 4283480.6 | 0.26845 | 533.09 | 533.09 | 1.5 ANNUAL | PAREA1 | 5 |
| 689293.81 | 4283480.6 | 0.31715 | 534.21 | 534.21 | 1.5 ANNUAL | PAREA1 | 5 |
| 689343.81 | 4283480.6 | 0.38342 | 534.93 | 534.93 | 1.5 ANNUAL | PAREA1 | 5 |
| 689393.81 | 4283480.6 | 0.47971 | 536.06 | 550.7  | 1.5 ANNUAL | PAREA1 | 5 |
| 689443.81 | 4283480.6 | 0.62204 | 537.64 | 550.76 | 1.5 ANNUAL | PAREA1 | 5 |
| 689493.81 | 4283480.6 | 0.82529 | 539.69 | 550.7  | 1.5 ANNUAL | PAREA1 | 5 |
| 689584.29 | 4283182   | 0.87638 | 525.58 | 525.58 | 1.5 ANNUAL | PAREA1 | 5 |
| 689626.46 | 4283180.8 | 0.96038 | 519.89 | 527.35 | 1.5 ANNUAL | PAREA1 | 5 |
| 689581.46 | 4283081.8 | 0.49338 | 522.81 | 525.66 | 1.5 ANNUAL | PAREA1 | 5 |
| 689586.89 | 4283032.1 | 0.41885 | 520.25 | 525.64 | 1.5 ANNUAL | PAREA1 | 5 |
| 689628.89 | 4283033.2 | 0.46991 | 514.93 | 526.85 | 1.5 ANNUAL | PAREA1 | 5 |
| 690123.39 | 4283039.1 | 0.55376 | 502.42 | 515.39 | 1.5 ANNUAL | PAREA1 | 5 |
| 690123.39 | 4283089.1 | 0.58373 | 504.85 | 515.62 | 1.5 ANNUAL | PAREA1 | 5 |
| 690173.39 | 4283089.1 | 0.51951 | 513.46 | 513.61 | 1.5 ANNUAL | PAREA1 | 5 |
| 689923.39 | 4283139.1 | 1.14146 | 519.16 | 519.16 | 1.5 ANNUAL | PAREA1 | 5 |
| 689950.32 | 4283366.6 | 2.05737 | 521.49 | 529.62 | 1.5 ANNUAL | PAREA1 | 5 |
| 690000.32 | 4283366.6 | 1.22846 | 525.34 | 525.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689946.72 | 4283397.8 | 2.16442 | 522.25 | 529.64 | 1.5 ANNUAL | PAREA1 | 5 |
| 689990.74 | 4283392   | 1.3303  | 524.47 | 526.53 | 1.5 ANNUAL | PAREA1 | 5 |
| 690047.5  | 4284607.9 | 0.93571 | 537.17 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690097.5  | 4284607.9 | 0.6276  | 537.61 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690147.5  | 4284607.9 | 0.49068 | 539.87 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690197.5  | 4284607.9 | 0.42361 | 544.63 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690047.5  | 4284657.9 | 0.8817  | 534.61 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690097.5  | 4284657.9 | 0.58777 | 535.78 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690147.5  | 4284657.9 | 0.46732 | 538.41 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690197.5  | 4284657.9 | 0.40923 | 544.27 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689997.5  | 4284707.9 | 1.39821 | 533.29 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690097.5  | 4284707.9 | 0.58103 | 535.32 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 690147.5  | 4284707.9 | 0.46034 | 537.81 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690197.5  | 4284707.9 | 0.39921 | 543.18 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690047.5  | 4284757.9 | 0.79713 | 535.23 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690097.5  | 4284757.9 | 0.57575 | 536.4  | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690147.5  | 4284757.9 | 0.4527  | 536.99 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690197.5  | 4284757.9 | 0.38763 | 541.31 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689947.5  | 4284807.9 | 1.13689 | 536.71 | 536.71 | 1.5 ANNUAL | PAREA1 | 5 |
| 690047.5  | 4284807.9 | 0.72104 | 535.92 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690097.5  | 4284807.9 | 0.56071 | 537.61 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690147.5  | 4284807.9 | 0.44588 | 537.73 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690197.5  | 4284807.9 | 0.37699 | 539.99 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689897.5  | 4284857.9 | 1.12199 | 536.76 | 536.76 | 1.5 ANNUAL | PAREA1 | 5 |
| 689947.5  | 4284857.9 | 0.97409 | 537.24 | 537.24 | 1.5 ANNUAL | PAREA1 | 5 |
| 689997.5  | 4284857.9 | 0.8152  | 536.94 | 536.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 690047.5  | 4284857.9 | 0.6612  | 536.64 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690097.5  | 4284857.9 | 0.53746 | 538.34 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690147.5  | 4284857.9 | 0.44298 | 540.07 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690197.5  | 4284857.9 | 0.37553 | 541.59 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690247.5  | 4284857.9 | 0.33399 | 544.85 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689847.5  | 4284907.9 | 1.10673 | 538.64 | 538.64 | 1.5 ANNUAL | PAREA1 | 5 |
| 689897.5  | 4284907.9 | 0.97425 | 537.77 | 537.77 | 1.5 ANNUAL | PAREA1 | 5 |
| 689947.5  | 4284907.9 | 0.84813 | 537.08 | 537.08 | 1.5 ANNUAL | PAREA1 | 5 |
| 689997.5  | 4284907.9 | 0.72667 | 537.13 | 537.13 | 1.5 ANNUAL | PAREA1 | 5 |
| 690047.5  | 4284907.9 | 0.61169 | 537.74 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690097.5  | 4284907.9 | 0.51018 | 538.55 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690147.5  | 4284907.9 | 0.43307 | 540.93 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690197.5  | 4284907.9 | 0.37108 | 542.51 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690247.5  | 4284907.9 | 0.32602 | 544.49 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689797.5  | 4284957.9 | 1.05204 | 539.55 | 539.55 | 1.5 ANNUAL | PAREA1 | 5 |
| 689847.5  | 4284957.9 | 0.96432 | 540.19 | 540.19 | 1.5 ANNUAL | PAREA1 | 5 |
| 689897.5  | 4284957.9 | 0.86034 | 539.27 | 539.27 | 1.5 ANNUAL | PAREA1 | 5 |
| 689947.5  | 4284957.9 | 0.75449 | 537.89 | 537.89 | 1.5 ANNUAL | PAREA1 | 5 |
| 689997.5  | 4284957.9 | 0.65418 | 537.13 | 537.13 | 1.5 ANNUAL | PAREA1 | 5 |
| 690047.5  | 4284957.9 | 0.56361 | 537.72 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690097.5  | 4284957.9 | 0.48515 | 539.34 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690147.5  | 4284957.9 | 0.41766 | 540.89 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690197.5  | 4284957.9 | 0.36155 | 542.29 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690247.5  | 4284957.9 | 0.31863 | 544.24 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689897.5  | 4285007.9 | 0.76309 | 539.86 | 539.86 | 1.5 ANNUAL | PAREA1 | 5 |
| 689947.5  | 4285007.9 | 0.67174 | 537.26 | 537.26 | 1.5 ANNUAL | PAREA1 | 5 |
| 689997.5  | 4285007.9 | 0.59369 | 537.14 | 537.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 690047.5  | 4285007.9 | 0.51886 | 537.14 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690097.5  | 4285007.9 | 0.45249 | 537.99 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690147.5  | 4285007.9 | 0.39736 | 539.94 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690197.5  | 4285007.9 | 0.35062 | 541.95 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690247.5  | 4285007.9 | 0.31223 | 544.25 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689897.5  | 4285057.9 | 0.69182 | 541.78 | 547.75 | 1.5 ANNUAL | PAREA1 | 5 |
| 689947.5  | 4285057.9 | 0.61642 | 539.62 | 562.37 | 1.5 ANNUAL | PAREA1 | 5 |
| 689997.5  | 4285057.9 | 0.54411 | 537.63 | 562.37 | 1.5 ANNUAL | PAREA1 | 5 |
| 690047.5  | 4285057.9 | 0.48094 | 537.14 | 589.12 | 1.5 ANNUAL | PAREA1 | 5 |
| 690097.5  | 4285057.9 | 0.42367 | 537.19 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690147.5  | 4285057.9 | 0.37739 | 539.16 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690197.5  | 4285057.9 | 0.33844 | 541.58 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690247.5  | 4285057.9 | 0.30462 | 544.06 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689970.15 | 4284514.1 | 1.6292  | 535.22 | 537.9  | 1.5 ANNUAL | PAREA1 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 690020.15 | 4284514.1 | 1.15458 | 538.37 | 538.37 | 1.5 ANNUAL | PAREA1 | 5 |
| 690070.15 | 4284514.1 | 0.84707 | 540.11 | 602.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 690120.15 | 4284514.1 | 0.65226 | 542.8  | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690170.15 | 4284514.1 | 0.54572 | 547.04 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690220.15 | 4284514.1 | 0.43273 | 550.47 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690020.15 | 4284564.1 | 1.19893 | 538.57 | 538.57 | 1.5 ANNUAL | PAREA1 | 5 |
| 690070.15 | 4284564.1 | 0.82066 | 540.15 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690120.15 | 4284564.1 | 0.59997 | 540.79 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690170.15 | 4284564.1 | 0.4915  | 544.31 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 690220.15 | 4284564.1 | 0.41874 | 547.27 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689216.55 | 4284759   | 0.37618 | 535.39 | 535.39 | 1.5 ANNUAL | PAREA1 | 5 |
| 689266.55 | 4284759   | 0.43743 | 537.06 | 537.06 | 1.5 ANNUAL | PAREA1 | 5 |
| 689316.55 | 4284759   | 0.50841 | 536.91 | 536.91 | 1.5 ANNUAL | PAREA1 | 5 |
| 689366.55 | 4284759   | 0.59327 | 535.98 | 535.98 | 1.5 ANNUAL | PAREA1 | 5 |
| 689416.55 | 4284759   | 0.70252 | 536.01 | 536.01 | 1.5 ANNUAL | PAREA1 | 5 |
| 689466.55 | 4284759   | 0.85809 | 536.56 | 536.56 | 1.5 ANNUAL | PAREA1 | 5 |
| 689516.55 | 4284759   | 1.12407 | 537.28 | 537.28 | 1.5 ANNUAL | PAREA1 | 5 |
| 689216.55 | 4284809   | 0.3647  | 535.86 | 535.86 | 1.5 ANNUAL | PAREA1 | 5 |
| 689266.55 | 4284809   | 0.42026 | 537.23 | 537.23 | 1.5 ANNUAL | PAREA1 | 5 |
| 689316.55 | 4284809   | 0.4846  | 537.23 | 537.23 | 1.5 ANNUAL | PAREA1 | 5 |
| 689366.55 | 4284809   | 0.56159 | 536.51 | 536.51 | 1.5 ANNUAL | PAREA1 | 5 |
| 689416.55 | 4284809   | 0.65982 | 536.17 | 536.17 | 1.5 ANNUAL | PAREA1 | 5 |
| 689566.55 | 4284809   | 1.34995 | 538.51 | 538.51 | 1.5 ANNUAL | PAREA1 | 5 |
| 689216.55 | 4284859   | 0.35328 | 536.46 | 536.46 | 1.5 ANNUAL | PAREA1 | 5 |
| 689266.55 | 4284859   | 0.40111 | 536.42 | 536.42 | 1.5 ANNUAL | PAREA1 | 5 |
| 689316.55 | 4284859   | 0.46128 | 537.1  | 537.1  | 1.5 ANNUAL | PAREA1 | 5 |
| 689366.55 | 4284859   | 0.53365 | 537.27 | 537.27 | 1.5 ANNUAL | PAREA1 | 5 |
| 689466.55 | 4284859   | 0.74312 | 537.37 | 537.37 | 1.5 ANNUAL | PAREA1 | 5 |
| 689516.55 | 4284859   | 0.91904 | 538.75 | 538.75 | 1.5 ANNUAL | PAREA1 | 5 |
| 689566.55 | 4284859   | 1.19777 | 539.75 | 539.75 | 1.5 ANNUAL | PAREA1 | 5 |
| 689666.55 | 4284859   | 1.86476 | 538.58 | 538.58 | 1.5 ANNUAL | PAREA1 | 5 |
| 689266.55 | 4284909   | 0.38444 | 536.38 | 536.38 | 1.5 ANNUAL | PAREA1 | 5 |
| 689316.55 | 4284909   | 0.43875 | 536.86 | 536.86 | 1.5 ANNUAL | PAREA1 | 5 |
| 689366.55 | 4284909   | 0.50517 | 537.48 | 537.48 | 1.5 ANNUAL | PAREA1 | 5 |
| 689416.55 | 4284909   | 0.58602 | 537.67 | 537.67 | 1.5 ANNUAL | PAREA1 | 5 |
| 689466.55 | 4284909   | 0.68841 | 537.65 | 537.65 | 1.5 ANNUAL | PAREA1 | 5 |
| 689616.55 | 4284909   | 1.2786  | 540.33 | 540.33 | 1.5 ANNUAL | PAREA1 | 5 |
| 689216.55 | 4284959   | 0.32931 | 537.22 | 549.49 | 1.5 ANNUAL | PAREA1 | 5 |
| 689366.55 | 4284959   | 0.47516 | 537.23 | 537.23 | 1.5 ANNUAL | PAREA1 | 5 |
| 689416.55 | 4284959   | 0.54545 | 537.26 | 537.26 | 1.5 ANNUAL | PAREA1 | 5 |
| 689466.55 | 4284959   | 0.64428 | 539.97 | 539.97 | 1.5 ANNUAL | PAREA1 | 5 |
| 689516.55 | 4284959   | 0.76151 | 540.7  | 540.7  | 1.5 ANNUAL | PAREA1 | 5 |
| 689566.55 | 4284959   | 0.90363 | 540.97 | 540.97 | 1.5 ANNUAL | PAREA1 | 5 |
| 689616.55 | 4284959   | 1.05197 | 541.19 | 541.19 | 1.5 ANNUAL | PAREA1 | 5 |
| 689216.55 | 4285009   | 0.32047 | 539.29 | 539.29 | 1.5 ANNUAL | PAREA1 | 5 |
| 689366.55 | 4285009   | 0.45064 | 538.57 | 538.57 | 1.5 ANNUAL | PAREA1 | 5 |
| 689416.55 | 4285009   | 0.51131 | 538.22 | 548.48 | 1.5 ANNUAL | PAREA1 | 5 |
| 689566.55 | 4285009   | 0.80027 | 542.84 | 542.84 | 1.5 ANNUAL | PAREA1 | 5 |
| 689712.61 | 4284806.3 | 2.4171  | 537.24 | 537.24 | 1.5 ANNUAL | PAREA1 | 5 |
| 689665.5  | 4284822.9 | 2.29365 | 537.58 | 537.58 | 1.5 ANNUAL | PAREA1 | 5 |
| 689153.77 | 4285125.1 | 0.27927 | 546.88 | 546.88 | 1.5 ANNUAL | PAREA1 | 5 |
| 689203.77 | 4285125.1 | 0.30528 | 547.16 | 547.16 | 1.5 ANNUAL | PAREA1 | 5 |
| 689303.77 | 4285125.1 | 0.36744 | 546.19 | 546.19 | 1.5 ANNUAL | PAREA1 | 5 |
| 689353.77 | 4285125.1 | 0.40465 | 545.84 | 545.84 | 1.5 ANNUAL | PAREA1 | 5 |
| 689603.77 | 4285125.1 | 0.65713 | 546.36 | 546.36 | 1.5 ANNUAL | PAREA1 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 689653.77 | 4285125.1 | 0.69717 | 546.88 | 546.88 | 1.5 ANNUAL | PAREA1 | 5 |
| 689703.77 | 4285125.1 | 0.71535 | 548.13 | 548.13 | 1.5 ANNUAL | PAREA1 | 5 |
| 689803.77 | 4285125.1 | 0.69786 | 546.79 | 546.79 | 1.5 ANNUAL | PAREA1 | 5 |
| 689853.77 | 4285125.1 | 0.66521 | 547.33 | 547.33 | 1.5 ANNUAL | PAREA1 | 5 |
| 689903.77 | 4285125.1 | 0.62012 | 548.27 | 548.27 | 1.5 ANNUAL | PAREA1 | 5 |
| 689953.77 | 4285125.1 | 0.57182 | 546.64 | 562.17 | 1.5 ANNUAL | PAREA1 | 5 |
| 690003.77 | 4285125.1 | 0.50756 | 543.82 | 562.55 | 1.5 ANNUAL | PAREA1 | 5 |
| 690103.77 | 4285125.1 | 0.39287 | 539.54 | 589.12 | 1.5 ANNUAL | PAREA1 | 5 |
| 689153.77 | 4285175.1 | 0.26766 | 547.57 | 547.57 | 1.5 ANNUAL | PAREA1 | 5 |
| 689203.77 | 4285175.1 | 0.28953 | 549.41 | 549.41 | 1.5 ANNUAL | PAREA1 | 5 |
| 689303.77 | 4285175.1 | 0.34795 | 547.49 | 547.49 | 1.5 ANNUAL | PAREA1 | 5 |
| 689353.77 | 4285175.1 | 0.38032 | 546.38 | 546.38 | 1.5 ANNUAL | PAREA1 | 5 |
| 689603.77 | 4285175.1 | 0.58627 | 547.53 | 547.53 | 1.5 ANNUAL | PAREA1 | 5 |
| 689653.77 | 4285175.1 | 0.61448 | 548.26 | 548.26 | 1.5 ANNUAL | PAREA1 | 5 |
| 689703.77 | 4285175.1 | 0.62736 | 549.55 | 549.55 | 1.5 ANNUAL | PAREA1 | 5 |
| 689753.77 | 4285175.1 | 0.6279  | 549.68 | 561.21 | 1.5 ANNUAL | PAREA1 | 5 |
| 689803.77 | 4285175.1 | 0.61938 | 547.91 | 561.96 | 1.5 ANNUAL | PAREA1 | 5 |
| 689853.77 | 4285175.1 | 0.59292 | 549    | 562.37 | 1.5 ANNUAL | PAREA1 | 5 |
| 689903.77 | 4285175.1 | 0.55215 | 551.59 | 562.17 | 1.5 ANNUAL | PAREA1 | 5 |
| 689953.77 | 4285175.1 | 0.5156  | 550.86 | 562.37 | 1.5 ANNUAL | PAREA1 | 5 |
| 690003.77 | 4285175.1 | 0.48081 | 547.4  | 563.2  | 1.5 ANNUAL | PAREA1 | 5 |
| 689153.77 | 4285225.1 | 0.25595 | 548.23 | 548.23 | 1.5 ANNUAL | PAREA1 | 5 |
| 689203.77 | 4285225.1 | 0.27536 | 549.82 | 549.82 | 1.5 ANNUAL | PAREA1 | 5 |
| 689253.77 | 4285225.1 | 0.2989  | 549.75 | 549.75 | 1.5 ANNUAL | PAREA1 | 5 |
| 689303.77 | 4285225.1 | 0.32662 | 548.54 | 548.54 | 1.5 ANNUAL | PAREA1 | 5 |
| 689353.77 | 4285225.1 | 0.35713 | 546.86 | 546.86 | 1.5 ANNUAL | PAREA1 | 5 |
| 689403.77 | 4285225.1 | 0.38967 | 547.47 | 547.47 | 1.5 ANNUAL | PAREA1 | 5 |
| 689453.77 | 4285225.1 | 0.42452 | 547.58 | 547.58 | 1.5 ANNUAL | PAREA1 | 5 |
| 689503.77 | 4285225.1 | 0.46068 | 546.85 | 546.85 | 1.5 ANNUAL | PAREA1 | 5 |
| 689553.77 | 4285225.1 | 0.49503 | 548.05 | 548.05 | 1.5 ANNUAL | PAREA1 | 5 |
| 689603.77 | 4285225.1 | 0.52411 | 549.25 | 549.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 689653.77 | 4285225.1 | 0.54485 | 550.38 | 562.2  | 1.5 ANNUAL | PAREA1 | 5 |
| 689703.77 | 4285225.1 | 0.53971 | 552.04 | 562.2  | 1.5 ANNUAL | PAREA1 | 5 |
| 689753.77 | 4285225.1 | 0.53673 | 552.5  | 562.19 | 1.5 ANNUAL | PAREA1 | 5 |
| 689803.77 | 4285225.1 | 0.54993 | 550.34 | 562.19 | 1.5 ANNUAL | PAREA1 | 5 |
| 689853.77 | 4285225.1 | 0.5279  | 551.71 | 562.37 | 1.5 ANNUAL | PAREA1 | 5 |
| 689903.77 | 4285225.1 | 0.45173 | 556.17 | 562.28 | 1.5 ANNUAL | PAREA1 | 5 |
| 689953.77 | 4285225.1 | 0.43606 | 554.54 | 562.37 | 1.5 ANNUAL | PAREA1 | 5 |
| 690003.77 | 4285225.1 | 0.44098 | 550    | 563.77 | 1.5 ANNUAL | PAREA1 | 5 |
| 690053.77 | 4285225.1 | 0.37948 | 553.16 | 562.98 | 1.5 ANNUAL | PAREA1 | 5 |
| 689153.77 | 4285275.1 | 0.24356 | 549.46 | 549.46 | 1.5 ANNUAL | PAREA1 | 5 |
| 689203.77 | 4285275.1 | 0.26104 | 550.54 | 550.54 | 1.5 ANNUAL | PAREA1 | 5 |
| 689253.77 | 4285275.1 | 0.28329 | 549.45 | 549.45 | 1.5 ANNUAL | PAREA1 | 5 |
| 689303.77 | 4285275.1 | 0.30726 | 549.07 | 549.07 | 1.5 ANNUAL | PAREA1 | 5 |
| 689353.77 | 4285275.1 | 0.33404 | 548.34 | 548.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689403.77 | 4285275.1 | 0.36279 | 547.84 | 547.84 | 1.5 ANNUAL | PAREA1 | 5 |
| 689453.77 | 4285275.1 | 0.39257 | 547.81 | 547.81 | 1.5 ANNUAL | PAREA1 | 5 |
| 689503.77 | 4285275.1 | 0.42249 | 547.96 | 547.96 | 1.5 ANNUAL | PAREA1 | 5 |
| 689553.77 | 4285275.1 | 0.44956 | 549.32 | 549.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 689603.77 | 4285275.1 | 0.46977 | 551.84 | 551.84 | 1.5 ANNUAL | PAREA1 | 5 |
| 689653.77 | 4285275.1 | 0.4642  | 554.37 | 561.65 | 1.5 ANNUAL | PAREA1 | 5 |
| 689703.77 | 4285275.1 | 0.44527 | 558.02 | 561.95 | 1.5 ANNUAL | PAREA1 | 5 |
| 689753.77 | 4285275.1 | 0.43714 | 558.83 | 561.96 | 1.5 ANNUAL | PAREA1 | 5 |
| 689803.77 | 4285275.1 | 0.4517  | 556.02 | 559.45 | 1.5 ANNUAL | PAREA1 | 5 |
| 689853.77 | 4285275.1 | 0.4186  | 558.28 | 558.28 | 1.5 ANNUAL | PAREA1 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 689903.77 | 4285275.1 | 0.3697  | 561.62 | 561.62 | 1.5 ANNUAL | PAREA1 | 5 |
| 689953.77 | 4285275.1 | 0.34972 | 561.18 | 561.18 | 1.5 ANNUAL | PAREA1 | 5 |
| 690003.77 | 4285275.1 | 0.34417 | 558.72 | 558.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 690053.77 | 4285275.1 | 0.29868 | 561.16 | 561.16 | 1.5 ANNUAL | PAREA1 | 5 |
| 689153.77 | 4285325.1 | 0.23098 | 550.87 | 550.87 | 1.5 ANNUAL | PAREA1 | 5 |
| 689203.77 | 4285325.1 | 0.24683 | 551.71 | 551.71 | 1.5 ANNUAL | PAREA1 | 5 |
| 689253.77 | 4285325.1 | 0.26737 | 550.44 | 550.44 | 1.5 ANNUAL | PAREA1 | 5 |
| 689303.77 | 4285325.1 | 0.28895 | 550.06 | 550.06 | 1.5 ANNUAL | PAREA1 | 5 |
| 689353.77 | 4285325.1 | 0.3124  | 549.72 | 549.72 | 1.5 ANNUAL | PAREA1 | 5 |
| 689403.77 | 4285325.1 | 0.33758 | 549.19 | 549.19 | 1.5 ANNUAL | PAREA1 | 5 |
| 689453.77 | 4285325.1 | 0.36294 | 549.25 | 549.25 | 1.5 ANNUAL | PAREA1 | 5 |
| 689503.77 | 4285325.1 | 0.3885  | 549.02 | 549.02 | 1.5 ANNUAL | PAREA1 | 5 |
| 689553.77 | 4285325.1 | 0.41004 | 550.74 | 550.74 | 1.5 ANNUAL | PAREA1 | 5 |
| 689603.77 | 4285325.1 | 0.41081 | 554.08 | 554.08 | 1.5 ANNUAL | PAREA1 | 5 |
| 689653.77 | 4285325.1 | 0.40281 | 557.81 | 557.81 | 1.5 ANNUAL | PAREA1 | 5 |
| 689703.77 | 4285325.1 | 0.38229 | 561.6  | 561.6  | 1.5 ANNUAL | PAREA1 | 5 |
| 689753.77 | 4285325.1 | 0.38203 | 561.32 | 561.32 | 1.5 ANNUAL | PAREA1 | 5 |
| 689803.77 | 4285325.1 | 0.40492 | 557.19 | 557.19 | 1.5 ANNUAL | PAREA1 | 5 |
| 689853.77 | 4285325.1 | 0.37996 | 558.79 | 559.98 | 1.5 ANNUAL | PAREA1 | 5 |
| 689903.77 | 4285325.1 | 0.34474 | 561.23 | 561.23 | 1.5 ANNUAL | PAREA1 | 5 |
| 689953.77 | 4285325.1 | 0.31859 | 562.11 | 562.11 | 1.5 ANNUAL | PAREA1 | 5 |
| 690003.77 | 4285325.1 | 0.29471 | 562.47 | 562.47 | 1.5 ANNUAL | PAREA1 | 5 |
| 690053.77 | 4285325.1 | 0.27126 | 562.76 | 562.76 | 1.5 ANNUAL | PAREA1 | 5 |
| 690103.77 | 4285325.1 | 0.28357 | 557.6  | 562.73 | 1.5 ANNUAL | PAREA1 | 5 |
| 689653.19 | 4285078.7 | 0.78221 | 545.28 | 545.28 | 1.5 ANNUAL | PAREA1 | 5 |
| 689596.53 | 4285079.8 | 0.71928 | 544.73 | 544.73 | 1.5 ANNUAL | PAREA1 | 5 |
| 689417.31 | 4285054.4 | 0.49648 | 542.59 | 549.22 | 1.5 ANNUAL | PAREA1 | 5 |
| 689465.48 | 4285057.4 | 0.56255 | 543.96 | 548.14 | 1.5 ANNUAL | PAREA1 | 5 |
| 689160.76 | 4284611.2 | 0.34682 | 533.56 | 533.56 | 1.5 ANNUAL | PAREA1 | 5 |
| 689595.79 | 4284809.2 | 1.7604  | 538.38 | 538.38 | 1.5 ANNUAL | PAREA1 | 5 |
| 689614.28 | 4284828   | 1.88306 | 538.53 | 538.53 | 1.5 ANNUAL | PAREA1 | 5 |
| 689880.93 | 4283885.3 | 2.48181 | 512.72 | 562.51 | 1.5 ANNUAL | PAREA1 | 5 |
| 689878.21 | 4284393.2 | 2.45008 | 526.73 | 537.47 | 1.5 ANNUAL | PAREA1 | 5 |
| 689919.3  | 4284393.5 | 1.79658 | 528.52 | 528.52 | 1.5 ANNUAL | PAREA1 | 5 |
| 690067.31 | 4284711.8 | 0.71683 | 534.58 | 603.34 | 1.5 ANNUAL | PAREA1 | 5 |
| 689854.2  | 4285030.1 | 0.79559 | 541.82 | 541.82 | 1.5 ANNUAL | PAREA1 | 5 |
| 689832.17 | 4285004.4 | 0.87675 | 541.12 | 541.12 | 1.5 ANNUAL | PAREA1 | 5 |
| 689709.9  | 4284847.9 | 1.92266 | 538.26 | 538.26 | 1.5 ANNUAL | PAREA1 | 5 |
| 689566.83 | 4284730.6 | 1.71005 | 537.2  | 537.2  | 1.5 ANNUAL | PAREA1 | 5 |
| 689380.2  | 4284259.8 | 1.41023 | 547.59 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689367.58 | 4284231.4 | 1.16432 | 547.29 | 562.94 | 1.5 ANNUAL | PAREA1 | 5 |
| 689441.09 | 4283793   | 1.19671 | 540.33 | 540.33 | 1.5 ANNUAL | PAREA1 | 5 |
| 689436.64 | 4283733.9 | 1.04969 | 543.4  | 550.19 | 1.5 ANNUAL | PAREA1 | 5 |
| 689439.11 | 4283767.8 | 1.13404 | 541.84 | 547.9  | 1.5 ANNUAL | PAREA1 | 5 |
| 689436.64 | 4283689.1 | 0.91593 | 542.64 | 550.73 | 1.5 ANNUAL | PAREA1 | 5 |
| 689444.06 | 4283650.4 | 0.90247 | 543.87 | 550.78 | 1.5 ANNUAL | PAREA1 | 5 |
| 689500.74 | 4283585.6 | 1.37336 | 550.23 | 550.23 | 1.5 ANNUAL | PAREA1 | 5 |
| 689505.94 | 4283507.9 | 0.9305  | 540.29 | 550.76 | 1.5 ANNUAL | PAREA1 | 5 |
| 689546.04 | 4283356.6 | 1.03026 | 526.73 | 550.7  | 1.5 ANNUAL | PAREA1 | 5 |
| 689912.61 | 4283166   | 1.34183 | 520.34 | 526.34 | 1.5 ANNUAL | PAREA1 | 5 |

CONCUNIT | /m^3

DEPUNIT g/ ^2

AERMOD ( : 91): C:\Lake ERMOD Vie rado Oaks\I rado Oak s.isc

6/15/2020

AERMET ( 1 34):

15:31:41

MODELING IONS USED: gDEFAULT C ELEV FLGP OL RURA L

PLOT FILE OF AN VALUES AVI GED ACROS 5 YEARS FOR SO URCE GRO UP: PAREA2

FOR A TOTAL OF 7 RECEPTORS.

FORM AT: (3(1X,F1),3(1X,F8.2), 2X,A6,2X,A8, 2X,18.8, 2X,A8)

X Y AVERAGE CIZELEV ZHILL ZFLAG AVE GRP NUM YRS NET ID

| X         | Y         | AVERAGE CIZELEV | ZHILL  | ZFLAG  | AVE        | GRP    | NUM YRS | NET ID |
|-----------|-----------|-----------------|--------|--------|------------|--------|---------|--------|
| 689212.05 | 4283551.6 | 0.09352         | 529.56 | 529.56 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689262.05 | 4283551.6 | 0.10408         | 533    | 533    | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689312.05 | 4283551.6 | 0.11542         | 534.01 | 534.01 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689362.05 | 4283551.6 | 0.1284          | 534.99 | 550.78 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689412.05 | 4283551.6 | 0.1433          | 536.9  | 550.78 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689212.05 | 4283601.6 | 0.09697         | 531    | 534.74 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689262.05 | 4283601.6 | 0.10815         | 534.44 | 534.44 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689312.05 | 4283601.6 | 0.11882         | 534.18 | 534.18 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689362.05 | 4283601.6 | 0.13297         | 535.56 | 550.78 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689412.05 | 4283601.6 | 0.14949         | 537.51 | 550.78 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689262.05 | 4283651.6 | 0.11387         | 536.79 | 536.79 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689312.05 | 4283651.6 | 0.12406         | 535.84 | 535.84 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689362.05 | 4283651.6 | 0.13703         | 535.52 | 550.78 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689412.05 | 4283651.6 | 0.1563          | 538.25 | 550.78 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689212.05 | 4283701.6 | 0.10612         | 534.89 | 537.25 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689262.05 | 4283701.6 | 0.11832         | 537.42 | 537.42 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689312.05 | 4283701.6 | 0.12891         | 536.64 | 536.64 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689362.05 | 4283701.6 | 0.14151         | 535.6  | 550.78 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689412.05 | 4283701.6 | 0.1615          | 538.09 | 550.78 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689062.05 | 4283751.6 | 0.084           | 524.69 | 524.69 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689212.05 | 4283751.6 | 0.10806         | 532.54 | 537.46 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689262.05 | 4283751.6 | 0.11982         | 535.39 | 537.34 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689312.05 | 4283751.6 | 0.13028         | 534.12 | 534.12 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689362.05 | 4283751.6 | 0.14683         | 536.06 | 550.26 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689262.05 | 4283801.6 | 0.12053         | 530.56 | 537.34 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689312.05 | 4283801.6 | 0.13443         | 533.57 | 533.57 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689362.05 | 4283801.6 | 0.1526          | 536.5  | 536.5  | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689412.05 | 4283801.6 | 0.17666         | 539.35 | 539.35 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689212.05 | 4283851.6 | 0.11376         | 527.68 | 527.68 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689262.05 | 4283851.6 | 0.12498         | 530.07 | 530.07 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689312.05 | 4283851.6 | 0.13944         | 533.41 | 533.41 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689362.05 | 4283851.6 | 0.15807         | 536.38 | 536.38 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689412.05 | 4283851.6 | 0.17904         | 537.57 | 537.57 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689062.05 | 4283901.6 | 0.08792         | 529.18 | 537.59 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689112.05 | 4283901.6 | 0.09718         | 525.89 | 525.89 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689162.05 | 4283901.6 | 0.10736         | 526.45 | 526.45 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689212.05 | 4283901.6 | 0.11822         | 528.48 | 528.48 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689262.05 | 4283901.6 | 0.13048         | 530.89 | 530.89 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689312.05 | 4283901.6 | 0.14542         | 533.73 | 533.73 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689362.05 | 4283901.6 | 0.16244         | 534.94 | 534.94 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689412.05 | 4283901.6 | 0.18327         | 535.89 | 550.67 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689062.05 | 4283951.6 | 0.08883         | 531.16 | 537.67 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689112.05 | 4283951.6 | 0.09912         | 528.46 | 528.46 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689162.05 | 4283951.6 | 0.11117         | 529.69 | 529.69 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689212.05 | 4283951.6 | 0.12323         | 530.6  | 530.6  | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689262.05 | 4283951.6 | 0.13625         | 531.75 | 531.75 | 1.5 ANNUAL | PAREA2 | 5       |        |
| 689312.05 | 4283951.6 | 0.15122         | 533.24 | 533.24 | 1.5 ANNUAL | PAREA2 | 5       |        |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 689362.05 | 4283951.6 | 0.16957 | 535.08 | 550.67 | 1.5 ANNUAL | PAREA2 | 5 |
| 689412.05 | 4283951.6 | 0.19296 | 536.97 | 552.43 | 1.5 ANNUAL | PAREA2 | 5 |
| 689062.05 | 4284001.6 | 0.08859 | 530.3  | 538.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 689112.05 | 4284001.6 | 0.10037 | 529.81 | 529.81 | 1.5 ANNUAL | PAREA2 | 5 |
| 689162.05 | 4284001.6 | 0.11472 | 532.37 | 532.37 | 1.5 ANNUAL | PAREA2 | 5 |
| 689212.05 | 4284001.6 | 0.12925 | 533.97 | 533.97 | 1.5 ANNUAL | PAREA2 | 5 |
| 689262.05 | 4284001.6 | 0.14308 | 533.78 | 533.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 689312.05 | 4284001.6 | 0.15857 | 533.99 | 562.89 | 1.5 ANNUAL | PAREA2 | 5 |
| 689362.05 | 4284001.6 | 0.17761 | 535.31 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689412.05 | 4284001.6 | 0.20362 | 537.89 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689062.05 | 4284051.6 | 0.08822 | 526.88 | 538.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 689112.05 | 4284051.6 | 0.10089 | 529.56 | 532.13 | 1.5 ANNUAL | PAREA2 | 5 |
| 689162.05 | 4284051.6 | 0.11728 | 533.7  | 533.7  | 1.5 ANNUAL | PAREA2 | 5 |
| 689212.05 | 4284051.6 | 0.1354  | 536.64 | 536.64 | 1.5 ANNUAL | PAREA2 | 5 |
| 689262.05 | 4284051.6 | 0.15214 | 537.12 | 537.12 | 1.5 ANNUAL | PAREA2 | 5 |
| 689312.05 | 4284051.6 | 0.16848 | 536.45 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689362.05 | 4284051.6 | 0.18729 | 536.14 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689412.05 | 4284051.6 | 0.21827 | 539.65 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689112.05 | 4284101.6 | 0.10225 | 530.03 | 535.62 | 1.5 ANNUAL | PAREA2 | 5 |
| 689162.05 | 4284101.6 | 0.11862 | 533.6  | 533.6  | 1.5 ANNUAL | PAREA2 | 5 |
| 689212.05 | 4284101.6 | 0.13808 | 536.48 | 536.48 | 1.5 ANNUAL | PAREA2 | 5 |
| 689262.05 | 4284101.6 | 0.15999 | 538.78 | 538.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 689312.05 | 4284101.6 | 0.17673 | 537.21 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689362.05 | 4284101.6 | 0.19654 | 536.19 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689412.05 | 4284101.6 | 0.24325 | 542.83 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689162.05 | 4284151.6 | 0.12239 | 535.82 | 535.82 | 1.5 ANNUAL | PAREA2 | 5 |
| 689212.05 | 4284151.6 | 0.13953 | 535.45 | 535.45 | 1.5 ANNUAL | PAREA2 | 5 |
| 689262.05 | 4284151.6 | 0.16216 | 537.46 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689312.05 | 4284151.6 | 0.18739 | 539    | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689362.05 | 4284151.6 | 0.20754 | 537.02 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689412.05 | 4284151.6 | 0.2689  | 544.98 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689212.05 | 4284201.6 | 0.14469 | 537.24 | 537.24 | 1.5 ANNUAL | PAREA2 | 5 |
| 689262.05 | 4284201.6 | 0.16551 | 536.75 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689312.05 | 4284201.6 | 0.19362 | 538.69 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689362.05 | 4284201.6 | 0.25421 | 546.1  | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689412.05 | 4284201.6 | 0.25754 | 551.74 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689262.05 | 4284251.6 | 0.17426 | 538.99 | 562.89 | 1.5 ANNUAL | PAREA2 | 5 |
| 689312.05 | 4284251.6 | 0.21343 | 542.56 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689062.05 | 4284301.6 | 0.12282 | 532.67 | 532.67 | 1.5 ANNUAL | PAREA2 | 5 |
| 689112.05 | 4284301.6 | 0.13218 | 536.78 | 536.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 689162.05 | 4284301.6 | 0.14354 | 538.53 | 538.53 | 1.5 ANNUAL | PAREA2 | 5 |
| 689062.05 | 4284451.6 | 0.16844 | 531.02 | 536.85 | 1.5 ANNUAL | PAREA2 | 5 |
| 689062.05 | 4284501.6 | 0.18894 | 533.31 | 535.53 | 1.5 ANNUAL | PAREA2 | 5 |
| 689112.05 | 4284501.6 | 0.19658 | 532.5  | 532.5  | 1.5 ANNUAL | PAREA2 | 5 |
| 689062.05 | 4284551.6 | 0.21147 | 537.07 | 537.07 | 1.5 ANNUAL | PAREA2 | 5 |
| 689112.05 | 4284551.6 | 0.21984 | 534.33 | 534.33 | 1.5 ANNUAL | PAREA2 | 5 |
| 689162.05 | 4284551.6 | 0.23141 | 533.1  | 533.1  | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4283460.3 | 0.14967 | 507.01 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283460.3 | 0.1532  | 492.39 | 550.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4283460.3 | 0.15855 | 484.49 | 551.4  | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283460.3 | 0.16531 | 486.32 | 563.68 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283460.3 | 0.17228 | 490.92 | 563.68 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283460.3 | 0.17969 | 499.06 | 551.4  | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4283510.3 | 0.15834 | 497.46 | 550.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283510.3 | 0.16337 | 488.83 | 550.78 | 1.5 ANNUAL | PAREA2 | 5 |



|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 690069.65 | 4283510.3 | 0.1713  | 495.55 | 550.47 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283510.3 | 0.17951 | 501.98 | 543.27 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283510.3 | 0.18692 | 504.5  | 550.47 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283510.3 | 0.19368 | 504.32 | 550.47 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4283560.3 | 0.16424 | 500.59 | 550.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4283560.3 | 0.16855 | 491.02 | 550.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283560.3 | 0.17772 | 505.09 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4283560.3 | 0.18747 | 514.17 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283560.3 | 0.1965  | 518.23 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283560.3 | 0.20352 | 515.75 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283560.3 | 0.20917 | 508.35 | 550.47 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4283610.3 | 0.17553 | 498.55 | 550.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4283610.3 | 0.18169 | 496.27 | 550.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283610.3 | 0.19275 | 512.4  | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4283610.3 | 0.20567 | 525.28 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283610.3 | 0.21665 | 528.65 | 538.51 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283610.3 | 0.2206  | 519.44 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283610.3 | 0.22431 | 503.1  | 551.4  | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4283660.3 | 0.18874 | 499.92 | 550.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4283660.3 | 0.19715 | 504.28 | 538.82 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283660.3 | 0.21064 | 521.19 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4283660.3 | 0.23019 | 533.88 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283660.3 | 0.2338  | 528.27 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283660.3 | 0.23712 | 515.1  | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283660.3 | 0.24013 | 493.19 | 577.58 | 1.5 ANNUAL | PAREA2 | 5 |
| 689869.65 | 4283710.3 | 0.20275 | 523.96 | 527.99 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4283710.3 | 0.20368 | 501.37 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4283710.3 | 0.21352 | 506.06 | 539.3  | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283710.3 | 0.23136 | 527.62 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4283710.3 | 0.25024 | 534.47 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283710.3 | 0.25046 | 523.3  | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283710.3 | 0.25463 | 506.65 | 550.47 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283710.3 | 0.25912 | 489.26 | 602.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4283760.3 | 0.21977 | 498.71 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4283760.3 | 0.2323  | 508.33 | 552.12 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283760.3 | 0.25058 | 526.17 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4283760.3 | 0.26431 | 528.49 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283760.3 | 0.27019 | 517.84 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283760.3 | 0.27752 | 508.22 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283760.3 | 0.28641 | 507.28 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4283810.3 | 0.23909 | 500.38 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4283810.3 | 0.25342 | 509.18 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283810.3 | 0.27352 | 526.12 | 538.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4283810.3 | 0.29088 | 530.76 | 530.76 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283810.3 | 0.29947 | 525.93 | 531.2  | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283810.3 | 0.31068 | 525.2  | 525.2  | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283810.3 | 0.31816 | 522.63 | 527.67 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4283860.3 | 0.26081 | 500.23 | 563.99 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4283860.3 | 0.27806 | 511.01 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283860.3 | 0.30018 | 526.53 | 526.53 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4283860.3 | 0.31856 | 530.48 | 530.48 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283860.3 | 0.33043 | 528.36 | 528.36 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283860.3 | 0.34265 | 528.39 | 528.39 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283860.3 | 0.3471  | 523.99 | 530.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4283910.3 | 0.28754 | 505.05 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 689969.65 | 4283910.3 | 0.30696 | 513.65 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283910.3 | 0.32856 | 523.37 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4283910.3 | 0.35003 | 529.8  | 529.8  | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283910.3 | 0.36757 | 531.52 | 531.52 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283910.3 | 0.37879 | 530.94 | 530.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283910.3 | 0.38098 | 527.58 | 527.58 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4283960.3 | 0.31933 | 510.72 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4283960.3 | 0.34326 | 521.03 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4283960.3 | 0.36716 | 527.86 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4283960.3 | 0.38958 | 531.46 | 550.99 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4283960.3 | 0.41318 | 534.98 | 534.98 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4283960.3 | 0.41902 | 532.81 | 537.82 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4283960.3 | 0.41202 | 525.19 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4284010.3 | 0.35531 | 512.8  | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4284010.3 | 0.38265 | 522.22 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4284010.3 | 0.41051 | 529.6  | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4284010.3 | 0.43948 | 534.57 | 552.12 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4284010.3 | 0.46844 | 537.97 | 537.97 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4284010.3 | 0.46358 | 534.28 | 551.55 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4284010.3 | 0.44682 | 524.43 | 564.77 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4284060.3 | 0.39986 | 517.74 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4284060.3 | 0.43014 | 524.5  | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4284060.3 | 0.46551 | 533.27 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4284060.3 | 0.50662 | 538.63 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4284060.3 | 0.53282 | 540.3  | 552.12 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4284060.3 | 0.50867 | 534.39 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4284060.3 | 0.49462 | 531.98 | 564.22 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4284110.3 | 0.49521 | 532.66 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4284110.3 | 0.55347 | 540.2  | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4284110.3 | 0.61589 | 545.03 | 552    | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4284110.3 | 0.6194  | 543.76 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4284110.3 | 0.56948 | 537.37 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4284110.3 | 0.56328 | 539.23 | 551.07 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4284160.3 | 0.58563 | 539    | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4284160.3 | 0.67729 | 546.12 | 551.38 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4284160.3 | 0.69168 | 551.03 | 551.03 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4284160.3 | 0.70027 | 550.52 | 550.52 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4284160.3 | 0.68791 | 545.48 | 551.96 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4284160.3 | 0.60209 | 539.66 | 564.42 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4284210.3 | 0.60056 | 530.87 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4284210.3 | 0.67595 | 539.95 | 552.08 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4284210.3 | 0.77094 | 545.98 | 551.35 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4284210.3 | 0.78244 | 550.41 | 550.41 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4284210.3 | 0.77764 | 549.97 | 549.97 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4284210.3 | 0.75012 | 547.83 | 549.53 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4284210.3 | 0.67975 | 544.9  | 564.22 | 1.5 ANNUAL | PAREA2 | 5 |
| 689869.65 | 4284260.3 | 0.62819 | 520.14 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4284260.3 | 0.68307 | 524.4  | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4284260.3 | 0.7587  | 537.15 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4284260.3 | 0.82733 | 541.61 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4284260.3 | 0.87169 | 544.61 | 551.67 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4284260.3 | 0.86043 | 546.11 | 546.11 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4284260.3 | 0.79959 | 546.3  | 563.68 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4284260.3 | 0.71729 | 547.85 | 564.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4284310.3 | 0.79541 | 523.32 | 563.68 | 1.5 ANNUAL | PAREA2 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 689969.65 | 4284310.3 | 0.85397 | 529.44 | 562.73 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4284310.3 | 0.89607 | 536.25 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4284310.3 | 0.89195 | 538.25 | 563.68 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4284310.3 | 0.86851 | 541.32 | 564.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4284310.3 | 0.83271 | 545.48 | 564.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4284310.3 | 0.73592 | 549.16 | 564.35 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4284360.3 | 0.9499  | 527.45 | 552.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4284360.3 | 0.99578 | 528.54 | 563.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4284360.3 | 1.00717 | 532.77 | 564.06 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4284360.3 | 0.96693 | 535.72 | 564.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4284360.3 | 0.90611 | 539.82 | 564.35 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4284360.3 | 0.86383 | 545.24 | 564.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4284360.3 | 0.75967 | 548.82 | 564.41 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4284410.3 | 1.13402 | 527.07 | 527.07 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4284410.3 | 1.15856 | 526.11 | 602.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4284410.3 | 1.15446 | 535.45 | 535.63 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4284410.3 | 1.06708 | 537.95 | 563.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4284410.3 | 0.96055 | 540.49 | 564.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4284410.3 | 0.898   | 545.4  | 564.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4284410.3 | 0.78498 | 548.47 | 601.86 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.65 | 4284460.3 | 1.35729 | 524.64 | 602.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 689969.65 | 4284460.3 | 1.36579 | 529.09 | 602.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 690019.65 | 4284460.3 | 1.28568 | 535.26 | 537.89 | 1.5 ANNUAL | PAREA2 | 5 |
| 690069.65 | 4284460.3 | 1.15581 | 539.45 | 539.45 | 1.5 ANNUAL | PAREA2 | 5 |
| 690119.65 | 4284460.3 | 1.02841 | 542.19 | 602.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 690169.65 | 4284460.3 | 0.94548 | 547.11 | 602.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 690219.65 | 4284460.3 | 0.78959 | 551.32 | 602.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 689243.81 | 4283030.6 | 0.07898 | 530.88 | 530.88 | 1.5 ANNUAL | PAREA2 | 5 |
| 689293.81 | 4283030.6 | 0.08416 | 529.46 | 529.46 | 1.5 ANNUAL | PAREA2 | 5 |
| 689343.81 | 4283030.6 | 0.08754 | 525.17 | 536.56 | 1.5 ANNUAL | PAREA2 | 5 |
| 689393.81 | 4283030.6 | 0.09086 | 525.12 | 525.12 | 1.5 ANNUAL | PAREA2 | 5 |
| 689443.81 | 4283030.6 | 0.0927  | 524.98 | 524.98 | 1.5 ANNUAL | PAREA2 | 5 |
| 689493.81 | 4283030.6 | 0.09343 | 524.32 | 524.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 689543.81 | 4283030.6 | 0.09427 | 525.16 | 525.16 | 1.5 ANNUAL | PAREA2 | 5 |
| 689243.81 | 4283080.6 | 0.08074 | 531.25 | 531.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 689293.81 | 4283080.6 | 0.08606 | 529.07 | 537.17 | 1.5 ANNUAL | PAREA2 | 5 |
| 689343.81 | 4283080.6 | 0.09096 | 527.74 | 537.55 | 1.5 ANNUAL | PAREA2 | 5 |
| 689393.81 | 4283080.6 | 0.09447 | 526.5  | 537.55 | 1.5 ANNUAL | PAREA2 | 5 |
| 689443.81 | 4283080.6 | 0.0967  | 526.2  | 527.36 | 1.5 ANNUAL | PAREA2 | 5 |
| 689493.81 | 4283080.6 | 0.09799 | 526.65 | 526.65 | 1.5 ANNUAL | PAREA2 | 5 |
| 689543.81 | 4283080.6 | 0.09849 | 526.02 | 526.02 | 1.5 ANNUAL | PAREA2 | 5 |
| 689243.81 | 4283130.6 | 0.08475 | 534.77 | 534.77 | 1.5 ANNUAL | PAREA2 | 5 |
| 689293.81 | 4283130.6 | 0.09263 | 535.63 | 535.63 | 1.5 ANNUAL | PAREA2 | 5 |
| 689343.81 | 4283130.6 | 0.09737 | 534.08 | 537.42 | 1.5 ANNUAL | PAREA2 | 5 |
| 689393.81 | 4283130.6 | 0.10015 | 531.63 | 531.63 | 1.5 ANNUAL | PAREA2 | 5 |
| 689443.81 | 4283130.6 | 0.10166 | 529.14 | 529.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 689493.81 | 4283130.6 | 0.10258 | 527.9  | 527.9  | 1.5 ANNUAL | PAREA2 | 5 |
| 689543.81 | 4283130.6 | 0.10277 | 526.15 | 526.15 | 1.5 ANNUAL | PAREA2 | 5 |
| 689243.81 | 4283180.6 | 0.08757 | 536.01 | 536.01 | 1.5 ANNUAL | PAREA2 | 5 |
| 689293.81 | 4283180.6 | 0.09649 | 537.11 | 537.11 | 1.5 ANNUAL | PAREA2 | 5 |
| 689343.81 | 4283180.6 | 0.10376 | 537.22 | 537.22 | 1.5 ANNUAL | PAREA2 | 5 |
| 689393.81 | 4283180.6 | 0.10584 | 534.34 | 534.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689443.81 | 4283180.6 | 0.10693 | 531.36 | 531.36 | 1.5 ANNUAL | PAREA2 | 5 |
| 689493.81 | 4283180.6 | 0.10762 | 529.32 | 529.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 689543.81 | 4283180.6 | 0.10771 | 527.27 | 527.27 | 1.5 ANNUAL | PAREA2 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 689243.81 | 4283230.6 | 0.0891  | 535.82 | 535.82 | 1.5 ANNUAL | PAREA2 | 5 |
| 689293.81 | 4283230.6 | 0.09895 | 537.32 | 537.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 689343.81 | 4283230.6 | 0.10655 | 537.15 | 537.15 | 1.5 ANNUAL | PAREA2 | 5 |
| 689393.81 | 4283230.6 | 0.10972 | 534.6  | 534.6  | 1.5 ANNUAL | PAREA2 | 5 |
| 689443.81 | 4283230.6 | 0.11159 | 531.93 | 531.93 | 1.5 ANNUAL | PAREA2 | 5 |
| 689243.81 | 4283280.6 | 0.0906  | 535.51 | 535.51 | 1.5 ANNUAL | PAREA2 | 5 |
| 689293.81 | 4283280.6 | 0.10068 | 536.93 | 536.93 | 1.5 ANNUAL | PAREA2 | 5 |
| 689343.81 | 4283280.6 | 0.10812 | 536.13 | 536.13 | 1.5 ANNUAL | PAREA2 | 5 |
| 689393.81 | 4283280.6 | 0.11278 | 533.93 | 533.93 | 1.5 ANNUAL | PAREA2 | 5 |
| 689443.81 | 4283280.6 | 0.11562 | 531.24 | 531.24 | 1.5 ANNUAL | PAREA2 | 5 |
| 689243.81 | 4283330.6 | 0.09149 | 534.37 | 534.37 | 1.5 ANNUAL | PAREA2 | 5 |
| 689293.81 | 4283330.6 | 0.10054 | 534.76 | 534.76 | 1.5 ANNUAL | PAREA2 | 5 |
| 689343.81 | 4283330.6 | 0.10824 | 533.41 | 533.41 | 1.5 ANNUAL | PAREA2 | 5 |
| 689393.81 | 4283330.6 | 0.11501 | 531.98 | 531.98 | 1.5 ANNUAL | PAREA2 | 5 |
| 689443.81 | 4283330.6 | 0.12063 | 531.69 | 531.69 | 1.5 ANNUAL | PAREA2 | 5 |
| 689493.81 | 4283330.6 | 0.12302 | 529.94 | 529.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689243.81 | 4283380.6 | 0.09298 | 533.68 | 533.68 | 1.5 ANNUAL | PAREA2 | 5 |
| 689293.81 | 4283380.6 | 0.1025  | 534.32 | 534.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 689343.81 | 4283380.6 | 0.11278 | 535    | 535    | 1.5 ANNUAL | PAREA2 | 5 |
| 689393.81 | 4283380.6 | 0.12139 | 534.7  | 535.45 | 1.5 ANNUAL | PAREA2 | 5 |
| 689443.81 | 4283380.6 | 0.12837 | 534.75 | 535.85 | 1.5 ANNUAL | PAREA2 | 5 |
| 689243.81 | 4283430.6 | 0.09492 | 533.36 | 533.36 | 1.5 ANNUAL | PAREA2 | 5 |
| 689293.81 | 4283430.6 | 0.10493 | 534.26 | 534.26 | 1.5 ANNUAL | PAREA2 | 5 |
| 689343.81 | 4283430.6 | 0.1162  | 535.27 | 535.27 | 1.5 ANNUAL | PAREA2 | 5 |
| 689393.81 | 4283430.6 | 0.12733 | 536.17 | 536.17 | 1.5 ANNUAL | PAREA2 | 5 |
| 689443.81 | 4283430.6 | 0.13727 | 537.27 | 537.27 | 1.5 ANNUAL | PAREA2 | 5 |
| 689243.81 | 4283480.6 | 0.09708 | 533.09 | 533.09 | 1.5 ANNUAL | PAREA2 | 5 |
| 689293.81 | 4283480.6 | 0.10751 | 534.21 | 534.21 | 1.5 ANNUAL | PAREA2 | 5 |
| 689343.81 | 4283480.6 | 0.11904 | 534.93 | 534.93 | 1.5 ANNUAL | PAREA2 | 5 |
| 689393.81 | 4283480.6 | 0.1314  | 536.06 | 550.7  | 1.5 ANNUAL | PAREA2 | 5 |
| 689443.81 | 4283480.6 | 0.14346 | 537.64 | 550.76 | 1.5 ANNUAL | PAREA2 | 5 |
| 689493.81 | 4283480.6 | 0.15464 | 539.69 | 550.7  | 1.5 ANNUAL | PAREA2 | 5 |
| 689584.29 | 4283182   | 0.10803 | 525.58 | 525.58 | 1.5 ANNUAL | PAREA2 | 5 |
| 689626.46 | 4283180.8 | 0.10751 | 519.89 | 527.35 | 1.5 ANNUAL | PAREA2 | 5 |
| 689581.46 | 4283081.8 | 0.09834 | 522.81 | 525.66 | 1.5 ANNUAL | PAREA2 | 5 |
| 689586.89 | 4283032.1 | 0.09398 | 520.25 | 525.64 | 1.5 ANNUAL | PAREA2 | 5 |
| 689628.89 | 4283033.2 | 0.09411 | 514.93 | 526.85 | 1.5 ANNUAL | PAREA2 | 5 |
| 690123.39 | 4283039.1 | 0.10209 | 502.42 | 515.39 | 1.5 ANNUAL | PAREA2 | 5 |
| 690123.39 | 4283089.1 | 0.10779 | 504.85 | 515.62 | 1.5 ANNUAL | PAREA2 | 5 |
| 690173.39 | 4283089.1 | 0.11266 | 513.46 | 513.61 | 1.5 ANNUAL | PAREA2 | 5 |
| 689923.39 | 4283139.1 | 0.10438 | 519.16 | 519.16 | 1.5 ANNUAL | PAREA2 | 5 |
| 689950.32 | 4283366.6 | 0.13467 | 521.49 | 529.62 | 1.5 ANNUAL | PAREA2 | 5 |
| 690000.32 | 4283366.6 | 0.13999 | 525.34 | 525.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689946.72 | 4283397.8 | 0.13962 | 522.25 | 529.64 | 1.5 ANNUAL | PAREA2 | 5 |
| 689990.74 | 4283392   | 0.14308 | 524.47 | 526.53 | 1.5 ANNUAL | PAREA2 | 5 |
| 690047.5  | 4284607.9 | 1.42284 | 537.17 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690097.5  | 4284607.9 | 1.15219 | 537.61 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690147.5  | 4284607.9 | 0.95612 | 539.87 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690197.5  | 4284607.9 | 0.86129 | 544.63 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690047.5  | 4284657.9 | 1.43226 | 534.61 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690097.5  | 4284657.9 | 1.13325 | 535.78 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690147.5  | 4284657.9 | 0.91784 | 538.41 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690197.5  | 4284657.9 | 0.82627 | 544.27 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689997.5  | 4284707.9 | 1.84796 | 533.29 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690097.5  | 4284707.9 | 1.09354 | 535.32 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |

|           |           |          |        |        |            |        |   |
|-----------|-----------|----------|--------|--------|------------|--------|---|
| 690147.5  | 4284707.9 | 0.87041  | 537.81 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690197.5  | 4284707.9 | 0.76057  | 543.18 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690047.5  | 4284757.9 | 1.35801  | 535.23 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690097.5  | 4284757.9 | 1.03301  | 536.4  | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690147.5  | 4284757.9 | 0.80515  | 536.99 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690197.5  | 4284757.9 | 0.67198  | 541.31 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689947.5  | 4284807.9 | 2.49983  | 536.71 | 536.71 | 1.5 ANNUAL | PAREA2 | 5 |
| 690047.5  | 4284807.9 | 1.26873  | 535.92 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690097.5  | 4284807.9 | 0.95432  | 537.61 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690147.5  | 4284807.9 | 0.73553  | 537.73 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690197.5  | 4284807.9 | 0.5933   | 539.99 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689897.5  | 4284857.9 | 3.72949  | 536.76 | 536.76 | 1.5 ANNUAL | PAREA2 | 5 |
| 689947.5  | 4284857.9 | 2.45781  | 537.24 | 537.24 | 1.5 ANNUAL | PAREA2 | 5 |
| 689997.5  | 4284857.9 | 1.65878  | 536.94 | 536.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 690047.5  | 4284857.9 | 1.16847  | 536.64 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690097.5  | 4284857.9 | 0.86919  | 538.34 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690147.5  | 4284857.9 | 0.674    | 540.07 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690197.5  | 4284857.9 | 0.54322  | 541.59 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690247.5  | 4284857.9 | 0.47295  | 544.85 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689847.5  | 4284907.9 | 6.58118  | 538.64 | 538.64 | 1.5 ANNUAL | PAREA2 | 5 |
| 689897.5  | 4284907.9 | 3.82946  | 537.77 | 537.77 | 1.5 ANNUAL | PAREA2 | 5 |
| 689947.5  | 4284907.9 | 2.35832  | 537.08 | 537.08 | 1.5 ANNUAL | PAREA2 | 5 |
| 689997.5  | 4284907.9 | 1.53477  | 537.13 | 537.13 | 1.5 ANNUAL | PAREA2 | 5 |
| 690047.5  | 4284907.9 | 1.067    | 537.74 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690097.5  | 4284907.9 | 0.7812   | 538.55 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690147.5  | 4284907.9 | 0.60664  | 540.93 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690197.5  | 4284907.9 | 0.4918   | 542.51 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690247.5  | 4284907.9 | 0.41786  | 544.49 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689797.5  | 4284957.9 | 13.10279 | 539.55 | 539.55 | 1.5 ANNUAL | PAREA2 | 5 |
| 689847.5  | 4284957.9 | 6.99986  | 540.19 | 540.19 | 1.5 ANNUAL | PAREA2 | 5 |
| 689897.5  | 4284957.9 | 3.86502  | 539.27 | 539.27 | 1.5 ANNUAL | PAREA2 | 5 |
| 689947.5  | 4284957.9 | 2.19647  | 537.89 | 537.89 | 1.5 ANNUAL | PAREA2 | 5 |
| 689997.5  | 4284957.9 | 1.38657  | 537.13 | 537.13 | 1.5 ANNUAL | PAREA2 | 5 |
| 690047.5  | 4284957.9 | 0.95582  | 537.72 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690097.5  | 4284957.9 | 0.70221  | 539.34 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690147.5  | 4284957.9 | 0.54399  | 540.89 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690197.5  | 4284957.9 | 0.44122  | 542.29 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690247.5  | 4284957.9 | 0.37545  | 544.24 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689897.5  | 4285007.9 | 3.65127  | 539.86 | 539.86 | 1.5 ANNUAL | PAREA2 | 5 |
| 689947.5  | 4285007.9 | 1.9388   | 537.26 | 537.26 | 1.5 ANNUAL | PAREA2 | 5 |
| 689997.5  | 4285007.9 | 1.23252  | 537.14 | 537.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 690047.5  | 4285007.9 | 0.85937  | 537.14 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690097.5  | 4285007.9 | 0.63815  | 537.99 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690147.5  | 4285007.9 | 0.49819  | 539.94 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690197.5  | 4285007.9 | 0.40685  | 541.95 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690247.5  | 4285007.9 | 0.34742  | 544.25 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689897.5  | 4285057.9 | 3.22771  | 541.78 | 547.75 | 1.5 ANNUAL | PAREA2 | 5 |
| 689947.5  | 4285057.9 | 1.79623  | 539.62 | 562.37 | 1.5 ANNUAL | PAREA2 | 5 |
| 689997.5  | 4285057.9 | 1.15643  | 537.63 | 562.37 | 1.5 ANNUAL | PAREA2 | 5 |
| 690047.5  | 4285057.9 | 0.81642  | 537.14 | 589.12 | 1.5 ANNUAL | PAREA2 | 5 |
| 690097.5  | 4285057.9 | 0.61012  | 537.19 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690147.5  | 4285057.9 | 0.47874  | 539.16 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690197.5  | 4285057.9 | 0.39267  | 541.58 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690247.5  | 4285057.9 | 0.33539  | 544.06 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689970.15 | 4284514.1 | 1.6268   | 535.22 | 537.9  | 1.5 ANNUAL | PAREA2 | 5 |

|           |           |         |        |        |            |        |   |
|-----------|-----------|---------|--------|--------|------------|--------|---|
| 690020.15 | 4284514.1 | 1.43611 | 538.37 | 538.37 | 1.5 ANNUAL | PAREA2 | 5 |
| 690070.15 | 4284514.1 | 1.23163 | 540.11 | 602.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 690120.15 | 4284514.1 | 1.0815  | 542.8  | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690170.15 | 4284514.1 | 0.97743 | 547.04 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690220.15 | 4284514.1 | 0.81125 | 550.47 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690020.15 | 4284564.1 | 1.54025 | 538.57 | 538.57 | 1.5 ANNUAL | PAREA2 | 5 |
| 690070.15 | 4284564.1 | 1.28891 | 540.15 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690120.15 | 4284564.1 | 1.07507 | 540.79 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690170.15 | 4284564.1 | 0.95459 | 544.31 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 690220.15 | 4284564.1 | 0.83251 | 547.27 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689216.55 | 4284759   | 0.35525 | 535.39 | 535.39 | 1.5 ANNUAL | PAREA2 | 5 |
| 689266.55 | 4284759   | 0.40503 | 537.06 | 537.06 | 1.5 ANNUAL | PAREA2 | 5 |
| 689316.55 | 4284759   | 0.46183 | 536.91 | 536.91 | 1.5 ANNUAL | PAREA2 | 5 |
| 689366.55 | 4284759   | 0.53773 | 535.98 | 535.98 | 1.5 ANNUAL | PAREA2 | 5 |
| 689416.55 | 4284759   | 0.64351 | 536.01 | 536.01 | 1.5 ANNUAL | PAREA2 | 5 |
| 689466.55 | 4284759   | 0.80077 | 536.56 | 536.56 | 1.5 ANNUAL | PAREA2 | 5 |
| 689516.55 | 4284759   | 1.03865 | 537.28 | 537.28 | 1.5 ANNUAL | PAREA2 | 5 |
| 689216.55 | 4284809   | 0.37069 | 535.86 | 535.86 | 1.5 ANNUAL | PAREA2 | 5 |
| 689266.55 | 4284809   | 0.43194 | 537.23 | 537.23 | 1.5 ANNUAL | PAREA2 | 5 |
| 689316.55 | 4284809   | 0.50108 | 537.23 | 537.23 | 1.5 ANNUAL | PAREA2 | 5 |
| 689366.55 | 4284809   | 0.5903  | 536.51 | 536.51 | 1.5 ANNUAL | PAREA2 | 5 |
| 689416.55 | 4284809   | 0.72221 | 536.17 | 536.17 | 1.5 ANNUAL | PAREA2 | 5 |
| 689566.55 | 4284809   | 1.72164 | 538.51 | 538.51 | 1.5 ANNUAL | PAREA2 | 5 |
| 689216.55 | 4284859   | 0.37262 | 536.46 | 536.46 | 1.5 ANNUAL | PAREA2 | 5 |
| 689266.55 | 4284859   | 0.44276 | 536.42 | 536.42 | 1.5 ANNUAL | PAREA2 | 5 |
| 689316.55 | 4284859   | 0.53195 | 537.1  | 537.1  | 1.5 ANNUAL | PAREA2 | 5 |
| 689366.55 | 4284859   | 0.64323 | 537.27 | 537.27 | 1.5 ANNUAL | PAREA2 | 5 |
| 689466.55 | 4284859   | 1.07005 | 537.37 | 537.37 | 1.5 ANNUAL | PAREA2 | 5 |
| 689516.55 | 4284859   | 1.52684 | 538.75 | 538.75 | 1.5 ANNUAL | PAREA2 | 5 |
| 689566.55 | 4284859   | 2.25809 | 539.75 | 539.75 | 1.5 ANNUAL | PAREA2 | 5 |
| 689666.55 | 4284859   | 5.336   | 538.58 | 538.58 | 1.5 ANNUAL | PAREA2 | 5 |
| 689266.55 | 4284909   | 0.43261 | 536.38 | 536.38 | 1.5 ANNUAL | PAREA2 | 5 |
| 689316.55 | 4284909   | 0.53675 | 536.86 | 536.86 | 1.5 ANNUAL | PAREA2 | 5 |
| 689366.55 | 4284909   | 0.67814 | 537.48 | 537.48 | 1.5 ANNUAL | PAREA2 | 5 |
| 689416.55 | 4284909   | 0.8782  | 537.67 | 537.67 | 1.5 ANNUAL | PAREA2 | 5 |
| 689466.55 | 4284909   | 1.22733 | 537.65 | 537.65 | 1.5 ANNUAL | PAREA2 | 5 |
| 689616.55 | 4284909   | 4.69499 | 540.33 | 540.33 | 1.5 ANNUAL | PAREA2 | 5 |
| 689216.55 | 4284959   | 0.33182 | 537.22 | 549.49 | 1.5 ANNUAL | PAREA2 | 5 |
| 689366.55 | 4284959   | 0.67041 | 537.23 | 537.23 | 1.5 ANNUAL | PAREA2 | 5 |
| 689416.55 | 4284959   | 0.91962 | 537.26 | 537.26 | 1.5 ANNUAL | PAREA2 | 5 |
| 689466.55 | 4284959   | 1.42022 | 539.97 | 539.97 | 1.5 ANNUAL | PAREA2 | 5 |
| 689516.55 | 4284959   | 2.96137 | 540.7  | 540.7  | 1.5 ANNUAL | PAREA2 | 5 |
| 689566.55 | 4284959   | 4.98685 | 540.97 | 540.97 | 1.5 ANNUAL | PAREA2 | 5 |
| 689616.55 | 4284959   | 6.86951 | 541.19 | 541.19 | 1.5 ANNUAL | PAREA2 | 5 |
| 689216.55 | 4285009   | 0.33764 | 539.29 | 539.29 | 1.5 ANNUAL | PAREA2 | 5 |
| 689366.55 | 4285009   | 0.6454  | 538.57 | 538.57 | 1.5 ANNUAL | PAREA2 | 5 |
| 689416.55 | 4285009   | 0.88315 | 538.22 | 548.48 | 1.5 ANNUAL | PAREA2 | 5 |
| 689566.55 | 4285009   | 6.50572 | 542.84 | 542.84 | 1.5 ANNUAL | PAREA2 | 5 |
| 689712.61 | 4284806.3 | 6.2836  | 537.24 | 537.24 | 1.5 ANNUAL | PAREA2 | 5 |
| 689665.5  | 4284822.9 | 4.03835 | 537.58 | 537.58 | 1.5 ANNUAL | PAREA2 | 5 |
| 689153.77 | 4285125.1 | 0.38944 | 546.88 | 546.88 | 1.5 ANNUAL | PAREA2 | 5 |
| 689203.77 | 4285125.1 | 0.45991 | 547.16 | 547.16 | 1.5 ANNUAL | PAREA2 | 5 |
| 689303.77 | 4285125.1 | 0.68295 | 546.19 | 546.19 | 1.5 ANNUAL | PAREA2 | 5 |
| 689353.77 | 4285125.1 | 0.87517 | 545.84 | 545.84 | 1.5 ANNUAL | PAREA2 | 5 |
| 689603.77 | 4285125.1 | 8.91359 | 546.36 | 546.36 | 1.5 ANNUAL | PAREA2 | 5 |

|           |           |          |        |        |            |        |   |
|-----------|-----------|----------|--------|--------|------------|--------|---|
| 689653.77 | 4285125.1 | 11.73884 | 546.88 | 546.88 | 1.5 ANNUAL | PAREA2 | 5 |
| 689703.77 | 4285125.1 | 15.42403 | 548.13 | 548.13 | 1.5 ANNUAL | PAREA2 | 5 |
| 689803.77 | 4285125.1 | 15.40201 | 546.79 | 546.79 | 1.5 ANNUAL | PAREA2 | 5 |
| 689853.77 | 4285125.1 | 7.71166  | 547.33 | 547.33 | 1.5 ANNUAL | PAREA2 | 5 |
| 689903.77 | 4285125.1 | 3.26582  | 548.27 | 548.27 | 1.5 ANNUAL | PAREA2 | 5 |
| 689953.77 | 4285125.1 | 1.9349   | 546.64 | 562.17 | 1.5 ANNUAL | PAREA2 | 5 |
| 690003.77 | 4285125.1 | 1.21172  | 543.82 | 562.55 | 1.5 ANNUAL | PAREA2 | 5 |
| 690103.77 | 4285125.1 | 0.61719  | 539.54 | 589.12 | 1.5 ANNUAL | PAREA2 | 5 |
| 689153.77 | 4285175.1 | 0.41441  | 547.57 | 547.57 | 1.5 ANNUAL | PAREA2 | 5 |
| 689203.77 | 4285175.1 | 0.48594  | 549.41 | 549.41 | 1.5 ANNUAL | PAREA2 | 5 |
| 689303.77 | 4285175.1 | 0.74526  | 547.49 | 547.49 | 1.5 ANNUAL | PAREA2 | 5 |
| 689353.77 | 4285175.1 | 0.96854  | 546.38 | 546.38 | 1.5 ANNUAL | PAREA2 | 5 |
| 689603.77 | 4285175.1 | 6.44946  | 547.53 | 547.53 | 1.5 ANNUAL | PAREA2 | 5 |
| 689653.77 | 4285175.1 | 8.20567  | 548.26 | 548.26 | 1.5 ANNUAL | PAREA2 | 5 |
| 689703.77 | 4285175.1 | 10.60803 | 549.55 | 549.55 | 1.5 ANNUAL | PAREA2 | 5 |
| 689753.77 | 4285175.1 | 12.81715 | 549.68 | 561.21 | 1.5 ANNUAL | PAREA2 | 5 |
| 689803.77 | 4285175.1 | 9.73143  | 547.91 | 561.96 | 1.5 ANNUAL | PAREA2 | 5 |
| 689853.77 | 4285175.1 | 5.84345  | 549    | 562.37 | 1.5 ANNUAL | PAREA2 | 5 |
| 689903.77 | 4285175.1 | 2.8627   | 551.59 | 562.17 | 1.5 ANNUAL | PAREA2 | 5 |
| 689953.77 | 4285175.1 | 1.88622  | 550.86 | 562.37 | 1.5 ANNUAL | PAREA2 | 5 |
| 690003.77 | 4285175.1 | 1.3268   | 547.4  | 563.2  | 1.5 ANNUAL | PAREA2 | 5 |
| 689153.77 | 4285225.1 | 0.43487  | 548.23 | 548.23 | 1.5 ANNUAL | PAREA2 | 5 |
| 689203.77 | 4285225.1 | 0.5035   | 549.82 | 549.82 | 1.5 ANNUAL | PAREA2 | 5 |
| 689253.77 | 4285225.1 | 0.60721  | 549.75 | 549.75 | 1.5 ANNUAL | PAREA2 | 5 |
| 689303.77 | 4285225.1 | 0.76671  | 548.54 | 548.54 | 1.5 ANNUAL | PAREA2 | 5 |
| 689353.77 | 4285225.1 | 1.00548  | 546.86 | 546.86 | 1.5 ANNUAL | PAREA2 | 5 |
| 689403.77 | 4285225.1 | 1.3648   | 547.47 | 547.47 | 1.5 ANNUAL | PAREA2 | 5 |
| 689453.77 | 4285225.1 | 1.94401  | 547.58 | 547.58 | 1.5 ANNUAL | PAREA2 | 5 |
| 689503.77 | 4285225.1 | 2.80476  | 546.85 | 546.85 | 1.5 ANNUAL | PAREA2 | 5 |
| 689553.77 | 4285225.1 | 3.80899  | 548.05 | 548.05 | 1.5 ANNUAL | PAREA2 | 5 |
| 689603.77 | 4285225.1 | 4.8744   | 549.25 | 549.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 689653.77 | 4285225.1 | 6.02541  | 550.38 | 562.2  | 1.5 ANNUAL | PAREA2 | 5 |
| 689703.77 | 4285225.1 | 6.8675   | 552.04 | 562.2  | 1.5 ANNUAL | PAREA2 | 5 |
| 689753.77 | 4285225.1 | 7.27733  | 552.5  | 562.19 | 1.5 ANNUAL | PAREA2 | 5 |
| 689803.77 | 4285225.1 | 6.53553  | 550.34 | 562.19 | 1.5 ANNUAL | PAREA2 | 5 |
| 689853.77 | 4285225.1 | 4.19699  | 551.71 | 562.37 | 1.5 ANNUAL | PAREA2 | 5 |
| 689903.77 | 4285225.1 | 2.27377  | 556.17 | 562.28 | 1.5 ANNUAL | PAREA2 | 5 |
| 689953.77 | 4285225.1 | 1.55786  | 554.54 | 562.37 | 1.5 ANNUAL | PAREA2 | 5 |
| 690003.77 | 4285225.1 | 1.29421  | 550    | 563.77 | 1.5 ANNUAL | PAREA2 | 5 |
| 690053.77 | 4285225.1 | 0.83061  | 553.16 | 562.98 | 1.5 ANNUAL | PAREA2 | 5 |
| 689153.77 | 4285275.1 | 0.43599  | 549.46 | 549.46 | 1.5 ANNUAL | PAREA2 | 5 |
| 689203.77 | 4285275.1 | 0.50748  | 550.54 | 550.54 | 1.5 ANNUAL | PAREA2 | 5 |
| 689253.77 | 4285275.1 | 0.62388  | 549.45 | 549.45 | 1.5 ANNUAL | PAREA2 | 5 |
| 689303.77 | 4285275.1 | 0.77702  | 549.07 | 549.07 | 1.5 ANNUAL | PAREA2 | 5 |
| 689353.77 | 4285275.1 | 0.99264  | 548.34 | 548.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689403.77 | 4285275.1 | 1.30369  | 547.84 | 547.84 | 1.5 ANNUAL | PAREA2 | 5 |
| 689453.77 | 4285275.1 | 1.75357  | 547.81 | 547.81 | 1.5 ANNUAL | PAREA2 | 5 |
| 689503.77 | 4285275.1 | 2.36668  | 547.96 | 547.96 | 1.5 ANNUAL | PAREA2 | 5 |
| 689553.77 | 4285275.1 | 3.06905  | 549.32 | 549.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 689603.77 | 4285275.1 | 3.57555  | 551.84 | 551.84 | 1.5 ANNUAL | PAREA2 | 5 |
| 689653.77 | 4285275.1 | 4.1225   | 554.37 | 561.65 | 1.5 ANNUAL | PAREA2 | 5 |
| 689703.77 | 4285275.1 | 4.29918  | 558.02 | 561.95 | 1.5 ANNUAL | PAREA2 | 5 |
| 689753.77 | 4285275.1 | 4.27425  | 558.83 | 561.96 | 1.5 ANNUAL | PAREA2 | 5 |
| 689803.77 | 4285275.1 | 3.97925  | 556.02 | 559.45 | 1.5 ANNUAL | PAREA2 | 5 |
| 689853.77 | 4285275.1 | 2.77319  | 558.28 | 558.28 | 1.5 ANNUAL | PAREA2 | 5 |

|           |           |          |        |        |            |        |   |
|-----------|-----------|----------|--------|--------|------------|--------|---|
| 689903.77 | 4285275.1 | 1.75184  | 561.62 | 561.62 | 1.5 ANNUAL | PAREA2 | 5 |
| 689953.77 | 4285275.1 | 1.20624  | 561.18 | 561.18 | 1.5 ANNUAL | PAREA2 | 5 |
| 690003.77 | 4285275.1 | 0.91731  | 558.72 | 558.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 690053.77 | 4285275.1 | 0.63062  | 561.16 | 561.16 | 1.5 ANNUAL | PAREA2 | 5 |
| 689153.77 | 4285325.1 | 0.43394  | 550.87 | 550.87 | 1.5 ANNUAL | PAREA2 | 5 |
| 689203.77 | 4285325.1 | 0.45567  | 551.71 | 551.71 | 1.5 ANNUAL | PAREA2 | 5 |
| 689253.77 | 4285325.1 | 0.62279  | 550.44 | 550.44 | 1.5 ANNUAL | PAREA2 | 5 |
| 689303.77 | 4285325.1 | 0.75944  | 550.06 | 550.06 | 1.5 ANNUAL | PAREA2 | 5 |
| 689353.77 | 4285325.1 | 0.94308  | 549.72 | 549.72 | 1.5 ANNUAL | PAREA2 | 5 |
| 689403.77 | 4285325.1 | 1.20472  | 549.19 | 549.19 | 1.5 ANNUAL | PAREA2 | 5 |
| 689453.77 | 4285325.1 | 1.5608   | 549.25 | 549.25 | 1.5 ANNUAL | PAREA2 | 5 |
| 689503.77 | 4285325.1 | 2.02789  | 549.02 | 549.02 | 1.5 ANNUAL | PAREA2 | 5 |
| 689553.77 | 4285325.1 | 2.51801  | 550.74 | 550.74 | 1.5 ANNUAL | PAREA2 | 5 |
| 689603.77 | 4285325.1 | 2.76928  | 554.08 | 554.08 | 1.5 ANNUAL | PAREA2 | 5 |
| 689653.77 | 4285325.1 | 3.00199  | 557.81 | 557.81 | 1.5 ANNUAL | PAREA2 | 5 |
| 689703.77 | 4285325.1 | 3.07865  | 561.6  | 561.6  | 1.5 ANNUAL | PAREA2 | 5 |
| 689753.77 | 4285325.1 | 3.07802  | 561.32 | 561.32 | 1.5 ANNUAL | PAREA2 | 5 |
| 689803.77 | 4285325.1 | 2.9911   | 557.19 | 557.19 | 1.5 ANNUAL | PAREA2 | 5 |
| 689853.77 | 4285325.1 | 2.27018  | 558.79 | 559.98 | 1.5 ANNUAL | PAREA2 | 5 |
| 689903.77 | 4285325.1 | 1.58852  | 561.23 | 561.23 | 1.5 ANNUAL | PAREA2 | 5 |
| 689953.77 | 4285325.1 | 1.12403  | 562.11 | 562.11 | 1.5 ANNUAL | PAREA2 | 5 |
| 690003.77 | 4285325.1 | 0.80488  | 562.47 | 562.47 | 1.5 ANNUAL | PAREA2 | 5 |
| 690053.77 | 4285325.1 | 0.59763  | 562.76 | 562.76 | 1.5 ANNUAL | PAREA2 | 5 |
| 690103.77 | 4285325.1 | 0.54268  | 557.6  | 562.73 | 1.5 ANNUAL | PAREA2 | 5 |
| 689653.19 | 4285078.7 | 16.46428 | 545.28 | 545.28 | 1.5 ANNUAL | PAREA2 | 5 |
| 689596.53 | 4285079.8 | 11.31303 | 544.73 | 544.73 | 1.5 ANNUAL | PAREA2 | 5 |
| 689417.31 | 4285054.4 | 0.99402  | 542.59 | 549.22 | 1.5 ANNUAL | PAREA2 | 5 |
| 689465.48 | 4285057.4 | 1.91235  | 543.96 | 548.14 | 1.5 ANNUAL | PAREA2 | 5 |
| 689160.76 | 4284611.2 | 0.25921  | 533.56 | 533.56 | 1.5 ANNUAL | PAREA2 | 5 |
| 689595.79 | 4284809.2 | 2.12495  | 538.38 | 538.38 | 1.5 ANNUAL | PAREA2 | 5 |
| 689614.28 | 4284828   | 2.69702  | 538.53 | 538.53 | 1.5 ANNUAL | PAREA2 | 5 |
| 689880.93 | 4283885.3 | 0.26706  | 512.72 | 562.51 | 1.5 ANNUAL | PAREA2 | 5 |
| 689878.21 | 4284393.2 | 1.00471  | 526.73 | 537.47 | 1.5 ANNUAL | PAREA2 | 5 |
| 689919.3  | 4284393.5 | 1.07092  | 528.52 | 528.52 | 1.5 ANNUAL | PAREA2 | 5 |
| 690067.31 | 4284711.8 | 1.26995  | 534.58 | 603.34 | 1.5 ANNUAL | PAREA2 | 5 |
| 689854.2  | 4285030.1 | 7.33273  | 541.82 | 541.82 | 1.5 ANNUAL | PAREA2 | 5 |
| 689832.17 | 4285004.4 | 9.05566  | 541.12 | 541.12 | 1.5 ANNUAL | PAREA2 | 5 |
| 689709.9  | 4284847.9 | 9.43563  | 538.26 | 538.26 | 1.5 ANNUAL | PAREA2 | 5 |
| 689566.83 | 4284730.6 | 1.27472  | 537.2  | 537.2  | 1.5 ANNUAL | PAREA2 | 5 |
| 689380.2  | 4284259.8 | 0.28447  | 547.59 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689367.58 | 4284231.4 | 0.26727  | 547.29 | 562.94 | 1.5 ANNUAL | PAREA2 | 5 |
| 689441.09 | 4283793   | 0.18999  | 540.33 | 540.33 | 1.5 ANNUAL | PAREA2 | 5 |
| 689436.64 | 4283733.9 | 0.19095  | 543.4  | 550.19 | 1.5 ANNUAL | PAREA2 | 5 |
| 689439.11 | 4283767.8 | 0.19093  | 541.84 | 547.9  | 1.5 ANNUAL | PAREA2 | 5 |
| 689436.64 | 4283689.1 | 0.1817   | 542.64 | 550.73 | 1.5 ANNUAL | PAREA2 | 5 |
| 689444.06 | 4283650.4 | 0.18287  | 543.87 | 550.78 | 1.5 ANNUAL | PAREA2 | 5 |
| 689500.74 | 4283585.6 | 0.18991  | 550.23 | 550.23 | 1.5 ANNUAL | PAREA2 | 5 |
| 689505.94 | 4283507.9 | 0.16141  | 540.29 | 550.76 | 1.5 ANNUAL | PAREA2 | 5 |
| 689546.04 | 4283356.6 | 0.12652  | 526.73 | 550.7  | 1.5 ANNUAL | PAREA2 | 5 |
| 689912.61 | 4283166   | 0.10704  | 520.34 | 526.34 | 1.5 ANNUAL | PAREA2 | 5 |

CONCUNIT | /m^3

DEPUNIT g/ ^2



**DORADO OAKS TENTATIVE SUBDIVISION MAP  
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)  
(STATE CLEARINGHOUSE #2019071041)**

**APPENDIX C  
BIOLOGICAL RESOURCES**



California Tree and Landscape Consulting, Inc.



## Arborist Report

**May 28, 2018**

Kevin Sweeney  
2700 South Azusa Ave., Ste 1000  
West Covina, CA 91792

Attention: Mike Foote

**Work location**  
**Dorado Oaks**  
**Diamond Springs, CA 95762**

**Arborist Report for Oak Woodland Resources**

**APN's:**  
**054-402-18**  
**329-301-15**  
**329-301-20**  
**329-310-10**  
**329-310-11**  
**329-310-12**

**Prepared by:**  
**Gordon Mann, Consulting Arborist**

## **Arborist Disclosure Statement**

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

### **Assignment**

The subject Dorado Oaks site is an approximately 144 acre open site surrounded by single family homes on small and large parcels, and open space. The site has three main characteristics, the northwest portion that has been previously cleared, graded and not further developed, a dirt road network down the center that extends into some of the western areas, and oak woodlands and pine woodlands that have been un-maintained. The client contacted our office and requested we provide the information required to satisfy the County of El Dorado's Oak Woodland Resources, determining the oak woodland area, identifying all trees in the woodland area 24 inches in diameter and greater, all Heritage Trees 36 inches in diameter and greater, and any individual oak trees 6 inches and greater located outside of the woodland designation for tree removal and will need mitigation based on the County ORMP Oak Resources requirements and Ordinance No. 5061. This report is the result of onsite inspections performed on January 3, 14, 16, and 29, 2018, and February 1 and 3, 2018, and the use of aerial imagery.

This report is based on the proposal under the current County ORMP ordinance No. 5061 and mitigation requirements.

The site was visited and walked with Charles Hughes of Sycamore Environmental Consultants, Inc., the biologist that was determining the vegetation types, wetlands, and extent of the oak woodlands. We viewed and confirmed the vegetation types and extent of the oak woodlands.

### **Assignment limits**

All the trees were observed while standing on the ground. Data collected is limited to a visual ground inspection. The aerial image was provided by CTA Engineering and Surveying. Ground inspections and measurements were used to insure the accuracy of the inspection data. The survey data calculations were performed by CTA Engineering and Surveying, and assumed to be accurate.

### **Current Existing Tree Status (general)**

The site is general north-south orientation entering on Faith Lane from Pleasant Valley Road from the north, and bordered on the east by Fowler Lane, bordered on the west by Tullis Mine Road and Crystal Drive, Justine Avenue, Crown Point Drive, Griffith Drive, and Antares Road. The site is not rectangular and has several different peninsulas and areas that extend outside of a rectangular shape, and all areas were included in the site visit. The development is required to comply with the El Dorado County ORMP Oak Resources requirements and Ordinance No. 5061.

The site is a mix of vegetation types with Blue Oaks, *Quercus douglasii*, Interior Live Oak, *Quercus wislizenii*, Valley Oak, *Quercus lobata*, Black Oak, *Quercus kelloggii*, and Canyon Live Oak, *Quercus chrysolepis*. The different biological communities were found to be:

California Black Oak Woodland

Valley Oak - Interior Live Oak Woodland

Valley Oak Woodland

Ponderosa Pine – Interior Live Oak Woodland

Canyon Live Oak Woodland

There were a total of 484 trees found to be either individual Oak trees 6 inches in diameter or greater, or oak trees 24 inches in diameter and greater in the project area.

There were 456 trees found to be 24 inches diameter and greater on the Oak Woodland portion of the project area, with 249 trees found to be Heritage Trees, 36 inches in diameter and greater. Of the 249 Heritage Trees, 200 were found to be in Poor condition or worse and would not require mitigation. Of the 49 Heritage Trees that would require mitigation, 22 trees are shown to be impacted by the project for a total mitigation of 947 diameter inches.

There were 28 individual Oak trees found growing in the project area. Of those, 5 trees were found to be 24 inches and greater, and of those 5 trees, 4 were found to be Heritage Trees, 36 inches diameter or greater. Of those 4 Heritage Trees, 2 were found to be in poor condition or worse and would not require mitigation. None of the individual oak trees 24 inches in diameter or greater were shown to be impacted by the project. Nine (9) of the 28 individual oak trees were shown to be impacted by the project for a total of 82 diameter inches.

### **Technical Recommendations**

It is recommended that all tree care follow specifications written in accordance with ANSI A-300 standards. Pruning of the trees should be performed in the outer portion of the canopy to reduce leverage and end weights and allow the center of the canopies to grow and fill in with foliage. It is also recommended that when root pruning, the smallest size roots as possible be pruned, cuts be performed with handsaws, loppers, or chainsaws appropriate for the size of the root being cut. The roots should be exposed by excavating prior to cutting. Roots should be pruned prior to root removal

within the tree protection area to limit the damage and tearing of roots back towards the tree. Root pruning should be overseen by a qualified arborist.

Tree planting should follow the specifications included in Appendix A.

### **General Tree Care and Maintenance**

The appendix information is given so that an onsite landscape manager can properly take care of the retained trees, and newly planted trees. Established native oak trees do not like to have the base of the trunk or their roots and the surrounding soil disturbed or tampered with. Applying or having unintentional landscape water in the root zone can cause catastrophic and negative affects to most species of native oak trees. Newly planted oak trees do need their root balls watered until established and then may need supplemental watering during extended periods of dry or hot weather. It is, therefore, recommended that the landscape be designed using drought tolerant plants that will require little to no watering after establishment. Irrigation should be delivered using an on-surface drip type system that does not require trenching around the oak trees to install. The plants should be spaced at least 6 feet away from the trunk of native oak trees, and the drainage from irrigation should be managed so water does not flow to the trunks of the oak trees. Trees that are growing in high use areas should be inspected by a qualified arborist for tree risk on a routine basis, the frequency depending on site use and tree condition.

### **Observations**

The site was inspected on January 3, 14, 16, and 29, 2018, and February 1 and 3, 2018. All trees were inspected for diameter. On January 3, 2018, the site was walked with Chuck Hughes from Sycamore Environmental Consulting, Inc., and the oak woodland vegetation types and areas were confirmed. Most of the trees on the site have not received any maintenance. On January 14, 16, and 29 and February 1 and 3, 2018, the site was walked by Gordon Mann to inspect the oak trees on the whole site.

The proposed development area is 6,265,349.47square feet, or 143.83 acres. A portion of the site has been previously graded and compacted, and the trees present appear to be mostly re-growth, with a few small oak trees and pines. Other areas of the site are less disturbed or undisturbed and contain Oak Woodland in various forms as confirmed with Sycamore Environmental Consultants, Inc. The total Oak Woodland area was found to be 1,917,985.50 square feet, or 44.03 acres. The total Oak woodland proposed to be impacted is determined to be 1,235,943.53 square feet, or 28.37 acres. The total Oak Woodland canopy was found to be 30.61% of the property. The percent of the oak woodland proposed to be impacted is 64.44%.

In the oak woodland areas, the County requires the oak trees that are 24 inches and greater to be inventoried. The trees that were found to be 24 inches diameter or greater were measured with a diameter tape for accurate diameter measure, tagged, and rated for condition.

Outside of the oak woodland areas, all native oak trees 6 inches in diameter and greater are to inventoried. Those individual trees found to be 5 inches diameter or greater were measured with a diameter tape for accurate diameter measure, and any trees 6 inches in diameter or greater were tagged and rated for condition.

Each diameter tape measured tree was assessed for condition, the number of stems present, and notes explaining the tree characteristics affecting condition were recorded. The tree data is shown on the spreadsheet titled: Dorado Oaks Protected Tree Summary List, Oak Woodland Heritage Trees and Individual Oak Tree List. The spreadsheet is sorted by

There were a total of 484 trees found to be either individual Oak trees or oak trees 24 inches in diameter and greater in the project area.

There were 456 trees found to be 24 inches diameter and greater on the Oak Woodland portion of the proposed project, with 249 trees found to be Heritage Trees, 36 inches in diameter and greater. Of the 249 Heritage Trees, 200 were found to be in Poor condition or worse.

There were 28 individual Oak trees found growing in the non-oak woodland portions of the project area. Of those, 5 trees were found to be 24 inches and greater, and of those 5 trees, 4 were found to be Heritage Trees, 36 inches diameter or greater. Of those 4 Heritage Trees, 2 were found to be in poor condition or worse.

The tree condition rating is a combination of vigor, structure, trunk, branches, trunk flare, live tissue, and defects and decay or pests. It is described in % and range term. The rating scale is:

| <u>Range</u> | <u># Rating</u> | <u>Description</u>  |
|--------------|-----------------|---|
| Excellent    | 81-100          | Found to have none to few defects or decay, and high vigor          |
| Good         | 61-80           | Found to have few defects or decay, and above average vigor         |
| Fair         | 41-60           | Found to have mitigatable defects, limited decay, and average vigor |
| Poor         | 21-40           | Found to have significant defects, decay, and lower vigor           |
| Very poor    | 120             | Found to have significant defects, decay, and low declining vigor   |
| Dead         | 0               | Found to be dead  |

Plus and minus symbols are included in the rating range description on the spreadsheet to show the position of the % rating in the condition range.

The oak canopy area was calculated by CTA Engineering and Surveying using aerial imagery calculating the area of the site considered Oak Woodland. The field inspection confirmed the location of the canopy as shown on the aerial image. The trees included in the inventory were shown in their approximate location on a site plan.

Diameter at Breast Height (DBH) is the industry standard for measuring trunk diameter. For trees with straight trunks and normal taper, the measurement is taken at 4.5 feet above grade. When a swollen area, flare from branching, multiple stems, or other abnormal growth is present, the diameter at 4.5 feet would not be characteristic of the subject tree. Therefore, the measurement is taken at the most appropriate location for determining the reasonable trunk diameter, and the height of the measurement was taken is listed with the diameter measurement if not at 4.5 feet. The initial measurements were taken with a Biltmore Stick. For all trees found to be close to 24 inches diameter or greater, a second more accurate measurement was taken with a diameter tape. For individual oak trees found greater than 5 inches in diameter, a measurement was taken with a diameter tape to confirm the tree diameter and include all trees 6 inches diameter and greater.

The proposed development site is 6,265,349.47 square feet, or 143.83 acres. A portion of the site has been previously graded, and the remaining trees appear to be mostly re-growth, with a few small oak trees and pines. The total Oak Woodland was found to be 1,917,985.50 square feet, or 44.03 acres. The total Oak woodland proposed to be impacted is determined to be 1,235,943.53 square feet, or 28.37 acres. The total Oak Woodland canopy was found to be 30.61% of the property. The percent of the oak woodland proposed to be impacted is 64.44%. The canopy shown on the aerial image was confirmed during the field visits to be an accurate representation.

**Other testing or examination:**

No additional testing or examination was requested at the time of the inspection or found necessary.

**Discussion:**

The project site is approximately 144 acres and contains areas of oak woodland and individual oak trees. Portions of the site were previously cleared and graded, and no further development work was performed, and some trees have naturally re-grown. The site is bordered by a range of small single-family lots, larger single family lots with some open space, open space, and commercial property.

The oak trees on the property were inspected, and the site plan was reviewed to identify those trees that will be impacted by the development. The impacted oak trees that qualify as individual oak trees outside of an oak woodland, all oak woodland canopy area, and Heritage Trees located in the oak woodland and individual oak trees were evaluated for mitigation requirements. Individual Oak trees and Heritage Trees in poor or worse condition were not included in the mitigation calculations.

The El Dorado County Oak Resource Mitigation calculation is based on the area of oak woodland impacted, the percent of oak woodland being impacted, the individual oak trees growing outside of oak woodland being impacted, and Heritage Trees both in oak woodlands and individual trees being impacted. The Oak Woodland Mitigation Ratio is determined by the amount of existing Oak Woodland canopy being impacted. A total of 1,235,943.53 square feet, or 28.37 acres is being impacted, and equals 64.44% of the Oak Woodland being impacted. The mitigation ratio chart for El Dorado County ORMP is:

| Percent of Oak Woodland Impact | Oak Woodland Mitigation Ratio |
|--------------------------------|-------------------------------|
| 0-50%                          | 1:1                           |
| 50.1 – 75%                     | 1.5:1                         |
| 75.1-100%                      | 2:1                           |

The proposed oak woodland impact falls into the Oak Woodland Impact range of 50.1 - 75%. The proposed oak woodland impact requires a 1.5:1 mitigation ratio. The ratio times the proposed impacted acreage results in the total acres required for mitigation. 1.5 ratio X 28.37 impacted acres = 42.56 total acres required for Oak Mitigation.

The proposed 28.37 impacted acres of oak woodland will require mitigation at the cost of \$8,285.00 per acre at the 1.5 acre ratio rate, for a total acreage of 42.56 acres and a mitigation fee of \$352,609.60.

There is an impact to individual oak trees. Nine (9) individual oak trees are proposed to be impacted with a total of 88 diameter inches. Each diameter inch requires \$153 in mitigation fee, for a total mitigation fee of \$13,464.00.

There is an impact to Heritage trees. Twenty (20) Heritage Trees are proposed to be impacted with a total of 874 diameter inches. Each diameter inch requires \$459 in mitigation fee, for a total mitigation fee of \$401,166.00

The total mitigation fee for the proposed project will be \$767,239.60.

The oak woodland mitigation requirements for the project was calculated based on the following information:

**Total area of the project area: 6,265,349.47 square feet, or 143.83 acres**

**Total area of oak woodland: 1,917,985.50 square feet, or 44.03 acres**

**Total percent of existing oak woodland: 30.61%**

**Total area of total oak woodland to be removed: 1,235,943.53 square feet, or 28.37 acres**

**Total percent of oak woodland to be removed: 64.44%**

**Oak Woodland Mitigation Ratio: 1.5:1**

**Total area of Oak Woodland to be mitigated: 42.56 acres**

**Total number and diameter inches of individual oak trees to be removed: 9 trees, 88 diameter inches**

**Total number and diameter inches of Heritage Trees to be removed: 20 trees, 874 diameter inches**

**Total area of pre-mitigated oak canopy to be removed: 0 sq. ft.**

**Total area of oak canopy required to be mitigated: 1,235,943.53 square feet, or 28.37 acres**

**Total Oak Woodland Area Impacted Mitigation: 42.56 acres @ \$8,285 per acre = \$352,609.60**

**Individual Oak tree Impacted Mitigation: 9 trees, 88 inches, \$153 per inch: \$13,464**

**Heritage Tree Impacted Mitigation: 20 trees, 874 inches, \$459 per inch: \$401,166.00**

**Total Amount of Oak Resource Mitigation: \$767,239.60**

There is an existing oak corridor along most of the eastern side of the project property and adjacent properties, the south side of the project property, and the west side of the project property and adjacent properties up to the previously disturbed portion of the property. The proposed oak removal has minimal impact on these corridors, as the project was designed to retain an existing continuous edge canopy of oaks. The proposed roads and homes are located in the previously disturbed areas and the sparsest oak canopy area on the property and will have minimal impact on the remaining oak canopy on the site.

With the proposed mitigation, the proposed project is in compliance with the Ordinance 5061, Oak Resources Conservation. The project plans to pay the Oak Mitigation Fee for project approval.

The project is in compliance with General Plan Policy 7.4.5.2 by preserving native oaks wherever possible by avoiding large expanses of oak woodland, identifying how trees in the vicinity of the project or construction site will be protected and by following approved preservation methods specified in the mitigation measures.



It has been determined that the proposed project would result in less than significant impacts to oak woodland resources with incorporation of mitigation measures listed below.

For long term maintenance and the changes in site use, some pruning should be performed to larger trees along the property line borders, trees that overhang neighboring properties or areas of new roads or public space and will experience new increased uses. The pruning should be performed to remove large dead branches, shorten end weights, and reduce the risk of branch failure.

### **Conclusion:**

The proposed Dorado Oaks project will impact existing oak woodlands and individual oak trees. Per the El Dorado County Oak Resources Conservation Ordinance mitigation will be required for 3 impacts:

1. Oak woodland is proposed to be impacted. There are 28.37 acres of Oak Woodland proposed to be impacted, and this is 64.44% of the total oak woodland area. The mitigation ratio is 1.5 times the acreage impacted, equaling 42.56 acres of oak woodland mitigation required. The cost of the 42.56 acres at \$8,285 per acre amounts to \$352,609.60 in mitigation fees.
2. There are 9 individual oak trees proposed to be impacted with 88 total inches of diameter. The cost for mitigation is \$153 per inch. The cost of the 9 trees is \$13,454.00 in mitigation fees.
3. There are 20 Heritage Trees, trees with a single, or multiple combined, trunk diameter of 36 inches or greater, in fair and better condition, proposed to be impacted. The cost for mitigation is \$459 per inch. The cost of the 20 trees is \$401,166.00.

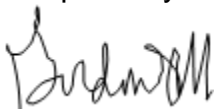
The total mitigation cost of proposed oak impacts is \$767,239.60. The project plans to pay the Oak Mitigation Fee for project approval.

The mitigation proposed will meet the required mitigation based on the El Dorado County ORMP Oak Resources requirements and Ordinance No. 5061.

Please contact Gordon Mann, of California Tree and Landscape Consulting, Inc., if there are any questions about this report.

Disclaimer: Gordon Mann, has analyzed the situation, applied the proper method(s) utilized within the profession, and performed a reasonableness test to support the project tree related decisions. I, nor the employees or subcontractors of California Tree and Landscape Consulting, Inc., may be held liable for the misuse or misinterpretation of this report. As the author of this report, I do hereby certify that all the statements of fact in this report are true, complete, and correct to the best of my knowledge and belief, and that they are made in good faith.

Respectfully submitted,



Gordon Mann

Dorado Oaks, Diamond Springs, CA  
Arborist Report for Oak Resources Management Plan  
ASCA Registered Consulting Arborist #480  
ISA Certified Arborist WE- 0151AM  
ISA TRAQ Qualified Tree Risk Assessor  
California Tree and Landscape Consulting, Inc.  
[Gordon@caltlc.com](mailto:Gordon@caltlc.com)  
650-740-3461

May 28, 2018

Attachments:

- Appendix A Tree Planting Specifications
- Appendix B Nursery Stock and Tree Planting
- Appendix C Tree Protection
- Appendix D Avoiding Damage During Construction
- Resume for Gordon Mann
- Dorado Oaks Protected Tree Summary List sorted by tree number and mitigation
- Dorado Oaks Site Image (titled same as the CTA image to submit)

Appendix A  
Tree Planting Specifications

Trees shall be free of major injury such as scrapes that remove greater than 20% of the bark circumference, a broken central leader, or constrictions from staking or support. The graft, if present, shall be consistent for the production of the cultivar or species. The trunk flare shall be at grade, not buried by soil, and adventitious roots shall not be growing from above the trunk flare.

The tree shall not be root bound in the container, and the trunk diameter relative to the container sizes, within the limits of American National Standards Institute (ANSI) Z-60 Nursery Standards.

Prior to acceptance, upon delivery, trees may be pulled from the container, so the rootball can be inspected for compliance with the specifications. An agreed upon maximum percent of trees may be checked for compliance. The nursery should provide post delivery care specifications to keep the trees in optimum condition until planting.

Tree Planting

**1.0 INSPECT THE TREE**

- 1.1 Carefully remove the soil at the top of the container to locate the trunk flare. Check for girdling roots and damage to the root system and lower trunk.
- 1.2 Until a relationship is established with the supplying nursery, randomly select an acceptable sample for the delivery. Inspect the root system by taking the rootball out of the container, and remove all the soil from the root system. Inspect the inner roots to verify that the roots were properly pruned when moved from the initial container to the next larger size. Keep the root system moist during the check. If the roots were properly pruned during container transfer, and the roots have been kept moist, the tree can be planted as a bare root tree.
- 1.3 If the trees are acceptable, each tree shall be removed from the container prior to digging the hole, and the depth of the rootball from the trunk flare to the bottom of the rootball shall be measured. This measurement, less 1" is the depth the pedestal in the center of the planting hole shall be excavated to.

**2.0 DIG THE HOLE**

- 2.1 Shave and discard grass and weeds from the planting site.
- 2.2 The hole should be a minimum 3 times the diameter of the container diameter.
  - 2.2.1 Square containers shall be dug with a circular hole 3 times the container measurement.
- 2.3 Dig the hole, leaving an undisturbed pedestal in the center that the root ball will be set on.
- 2.4 The pedestal shall be excavated to the depth measurement determined above

**3.0 ROOT BALL PREPARATION**

- 3.1 Loosen and straighten outside and bottom roots prior to placing the rootball on the pedestal. The trunk flare (the point where the trunk meets the roots) should be 1" above ground level.
- 3.2 Winding and girdling roots shall be pruned to either the point they are perpendicular to the root ball, or a point where they can be straightened and placed perpendicular to the rootball.
- 3.3 Keep the roots moist during this process so they do not dry out.

**4.0 BACKFILL**

- 4.1 Hold the tree so the trunk and central leader are in a straight upright position.
- 4.2 Backfill soil with the soil you removed around the base of the pedestal and rootball no higher than 2/3, so the tree stands in the upright position
- 4.3 Tamp the soil to remove air gaps, or fill with water and allow soil to settle and drain. Continue to fill the entire hole with existing soil in layers and tamping, up to finished grade. Backfill soil shall not be placed on top of the rootball.
- 4.4 Build a berm at the outside edge of the rootball. The berm shall be a minimum 3 inches high and wide.
- 4.5 Cover the remainder of the backfill soil outside the berm with a set level of mulch (2 to 4 inches deep).

## **5.0 STAKING**

- 5.1 Remove the nursery stake (the thin stake tied to the trunk) that is secured to the tree.
- 5.2 Install the appropriate number of stakes – for example, two stakes on the windward and leeward side of the tree, set at least 2 feet into the native soil outside the rootball.
  - 5.2.1 If the area is exceptionally windy, high traffic, or when specified, install 3 or 4 stakes spaced evenly around the circumference, outside the rootball.
- 5.3 One tie per stake shall be placed at the lowest point on the trunk where the tree crown stands upright. Ties shall be placed using a “figure 8” crossing pattern wrapped around the trunk and firmly tied or attached to the stake.
  - 5.3.1 Ties shall be loose enough so the tree crown moves up to 3 times the trunk diameter in the wind, and taut enough that the trunk does not rub the stakes during movement.
- 5.4 The stakes shall be cut off above the tie point so branches do not rub the stake above the tie point.
- 5.5 Check the stakes and ties periodically, removing them when the tree is able to stand on its own.
- 5.6 If a leader that should be vertical is drooping, the leader may be temporarily straightened using a bamboo or small diameter wood splint approximately 25% longer than the drooping section of stem, tied to the stem at the top and bottom of the splint to hold the stem vertical. The splint shall be removed prior to girdling or constricting the stem, and may be re-installed as necessary.

## **6.0 MULCH**

- 6.1 Apply a set depth (2 to 4 inches) of wood chips or other organic mulch over the planting hole excavated soil.
- 6.2 Mulch may be placed inside the berm and shall be kept at least 4” away from the trunk flare.
- 6.3 The soil area of the planting hole shall be kept clear of grass and landscape plantings.

## **7.0 WATER/IRRIGATION**

- 7.1 Apply water using a low pressure application, i.e.: trickle from a hose, soaker hose, or bubbler.
- 7.2 Use low water volume to apply the water. Add water long enough to saturate the rootball and planting area.
  - 7.2.1 Lawn sprinklers shall not be considered an acceptable method of applying irrigation to newly planted trees.
- 7.3 The initial watering frequency shall be checked by monitoring the soil moisture. Based on the temperature and humidity, learn how long the soil retains the moisture.
- 7.4 After the soil is below field capacity, and before it dries out, repeat the watering process, every so determined days.
  - 7.4.1 As the weather and seasons change, the irrigation frequency may change. This will be evaluated by checking soil moisture following water application.
    - 7.4.1.1 For example: you may learn irrigation should be applied twice a week during the fall, except in cool or rainy weather. Irrigation may need to be applied every two days during hot dry summer periods.
- 7.5 Irrigation shall be continued for the first three years after planting.
  - 7.5.1 Avoiding drying out the rootball and adjacent soil is critical for tree growth and establishment.

## **8.0 PROTECT THE TRUNK**

- 8.1 Avoid damage from mowers and string trimmers to the tender bark of the young tree.
- 8.2 Maintain a clear area free of vegetation around the trunk in the berm or basin area.
- 8.3 Keep the set depth of mulch (2 to 4 inches) coverage of the area around the tree.
- 8.4 Retain temporary low branches along the trunk to shade and feed the trunk.

## **9.0 PRUNING NEWLY PLANTED TREES**

- 9.1 Broken and dead branches shall be pruned.
- 9.2 A central leader shall be identified and retained if present. If co-dominant leaders are present, they shall be pruned to be shorter than the central leader by 20%.
- 9.3 All low temporary branches on the lower trunk shall be retained, and if needed shortened for clearance.



Detail for #1, #5 and #15 container planting stock

**10. FUTURE CARE**

10.1 During subsequent years, the berm should be enlarged or removed in order to provide water to the increasing root growth. The watering area should target new root growth and projected root growth.

10.2 Pruning should retain a dominant central leader; and retain low temporary branches until trunk bark hardens or remove before branch diameter becomes too large.

Appendix B

Nursery Stock and Tree Planting

Nursery Stock purchase

Trees purchased for the subject project shall be the Genus, species, and cultivar specified in the purchase documents. Trees shall be grown to be free of bound root systems caused by winding roots or kinked roots from a previous smaller container. As trees are moved to larger containers, circling roots shall be either pruned to a point where they can grow straight, straightened in the new container, or removed. Kinked roots shall be pruned to a point where they will grow straight outward or downward.

The trunk and branches shall be of a structure where a central leader is defined, or the central leader can be easily selected. The competing leaders have a smaller diameter, and can be pruned shorter.

## Appendix C

### Tree Protection

The edge of the tree canopy outside of the construction area shall be fenced off with construction fencing, either temporary orange fence or chain link fence. The fence shall be placed as far from the trees as possible, targeting outside the dripline. If the fence cannot be placed outside of the dripline, the project arborist shall determine if the distance is acceptable or some other soil protection is necessary. A certified arborist must approve the placement of the tree fence. The fence will be marked with weather appropriate signage clearly stating the area as "Protected! Do not enter! Tree preservation zone." Sign(s) will be placed on every face or direction of fence line.

When excavating or trenching adjacent to trees, roots 2 inches and greater encountered in the trench shall be cleanly severed at the trench side closest to the tree, and then excavated, so the roots are not torn back towards the tree. Cut exposed roots ends or exposed roots shall be covered with moist soil or moist burlap and kept moist until the soil is backfilled.

No storage of supplies or materials, parking, or other construction activity shall occur within the fenced area. If a construction activity is required within the construction area, specific specifications and mitigation shall be written to cover the work, and the fencing may be entered during the necessary construction activity, then the fencing shall be replaced after the activity is completed for the day.

The construction protection shall remain in place until the project is completed, including landscape activities. Landscape activities shall have specifications that protect the trees during the landscape activities.

Any bare soil around protected trees should be covered with a 4-inch layer of mulch consisting of ground-up tree parts.

If the protected trees appear to show signs of yellowing leaves, dead leaves, or other abnormal appearance, contact the project arborist for inspection and mitigation.

### Long Term Landscape Maintenance Plan and Specifications

#### General

This plan and specifications are intended to promote the optimum landscape growth and lifespan. Individual tree planting in specific sites in the parking lot are intended to provide a large shade canopy over time covering 50% or greater of the parking lot. The border and natural screening plantings are overplanted and intended to fill the space initially, and have the weaker trees removed over time, to create the space and site resources necessary for the remaining trees. Trees initially will be planted on approximate 10 foot centers, with the long term spacing to be approximately 20 foot centers. As trees are thinned, they may be transplanted or removed, as best suited to the remaining trees on the site.

These trees shall be pruned to establish a central leader, to provide the best structure by managing size relationships between parent and subordinate trunk and branches, and to encourage growth into a large shade canopy. These trees shall not be topped or rounded over. Trees may have competing leaders headed back to promote the strong central leader necessary to eliminate co-dominant stems and weak branching.

#### Design Intent

The trees planted around the perimeter and alongside the sidewalk or street are intended to replicate natural areas and to screen the project and adjacent properties. The native oaks shall be more tightly spaced at planting and thinned over time to promote the growth of the final or climax trees on the site. The thinning for spacing shall be performed as the trees get larger and their crowns begin to overlap. When the desired tree crowns are being impacted by an adjacent tree, the adjacent tree should either be pruned or removed, to provide the optimum screening while enhancing the desired tree growth. Pruning shall retain a dominant central leader and for decurrent tree structures, remove competing leaders, and maintain the appropriate size relationships between parent and subordinate trunk and branches.

### Pruning Small Trees

Branches are to be pruned by either reduction, thinning, or raising cuts to achieve the appropriate clearance over the area. The smallest diameter branches should be removed, working from the branch tips towards the center, removing none to minimal interior foliage inside the final outward branch cut. Trees shall be cleaned to remove dead branches, weakly attached branches, and branches where significant damage has occurred by rubbing, animals, insects, or critical disease. All pruning cuts shall be made in accordance with American National Standards Institute (ANSI) A300 Part 1 Pruning Standards and International Society of Arboriculture (ISA) Best Management Practices for Pruning.

On trees up to six inches in diameter, all dead branches greater than one-half inch diameter shall be removed. All weakly attached branches and potential co-dominant branches shall either be reduced by at least 20% or be removed, as most appropriate for the long term structure of the tree. The weakest or most damaged branch of a pair or group of rubbing branches shall be shortened to avoid rubbing, or removed. All temporary branches along the trunk should be retained and shortened to obtain necessary clearance. When either temporary branches exceed one-inch diameter, or the trunk forms mature bark, the temporary branches should be removed.

Stakes shall be installed as necessary to support a straight growing tree, and reduce crooked growth caused by high wind. The trunk shall be supported at the lowest point to keep the crown supported straight, and the portions of the stake above the tie point cut off to avoid rubbing branches. After the tree becomes firmly rooted, and the stake is no longer necessary to support the tree, the stakes shall be removed.

Depending on the location and site needs, clearance should be performed by pruning the smallest branches inward from the branch tips until the permanent branches are in place. Clearance minimums should be set, for example: 7.5' over sidewalks, 10 feet over parking spaces, and 14.5 feet over truck traffic streets. Clearance pruning shall be carefully performed until the permanent branches are identified. Up to 25% of the total foliage on any tree should be the maximum removed during any planned pruning cycle. Follow-up pruning for structure or clearance on young trees can be performed at any time if pruning small amounts of foliage (up to 10%) and retaining the central leader and branch size relationships.

### Pruning Large Trees

Branches are to be pruned by either reduction, thinning, or raising cuts to achieve the appropriate clearance over the area. The smallest diameter branches should be removed, working from the branch tips towards the center, removing none to minimal interior foliage inside the final outward branch cut. Trees shall be cleaned to remove dead branches, weakly attached branches, and branches where significant damage has occurred by rubbing, animals, insects, or critical disease. All pruning cuts shall be made in accordance with American National Standards Institute (ANSI) A300 Part 1 Pruning Standards and International Society of Arboriculture (ISA) Best Management Practices for Pruning.

On trees larger than six inches in diameter, all dead branches greater than one-inch diameter shall be removed. Long heavy branches that are either growing flat or bending down shall have approximately 15% of the end weight reduced, accomplished by a combination of pruning the downward growing branches, shortening long tips, and thinning endweights. If any structural issues are observed by the climber working in the tree, they shall notify the property manager immediately to discuss the tree's needs.

Depending on the location and site needs, clearance should be performed by pruning the smallest branches inward from the branch tips until the permanent branches are in place. Clearance minimums should be set, for example: 7.5' over sidewalks, 10 feet over parking spaces, and 14.5 feet over truck traffic streets. Clearance pruning shall be carefully performed until the permanent branches are identified. Up to 25% of the total foliage on any tree should be the maximum removed during any planned pruning cycle.

Any special site issues for utility clearance or conflicts with other objects shall be managed by early pruning to direct growth away from the target lines, overhead lights, flags, or buildings.

### Thinning of Dense Planting

Many landscape plantings and natural landscape areas are over-planted by installing a greater number of plants at closer spacing than optimum for the full-sized plants. Over time, plants will grow into each other, the crowns will conflict, and the spacing will need to be corrected. Correct spacing is obtained by removing the least desirable plants to meet the final spacing target, within reasonable tolerances.

Dorado Oaks, Diamond Springs, CA

Arborist Report for Oak Resources Management Plan

May 28, 2018

If conflicting plants are all healthy, it won't matter which plants are removed to achieve the spacing distances. Spaced thinning should be performed before the foliar crowns are intertwined or overlapping. The thinning may be performed over two or three cycles as the trees grow over time, depending on the density and desired final spacing.

The trees initially will be planted on approximate 10 foot centers, with the long term spacing to be approximately 20 foot centers. The healthiest and best specimens should be retained on site. As trees are thinned, they may be transplanted or removed, as best suits the remaining trees on the site.



## Appendix D

### Avoiding Tree Damage During Construction

Edited from the 's tree protection guidelines

As cities and suburbs expand, wooded lands are being developed into commercial and residential sites. Homes are constructed in the midst of trees to take advantage of the aesthetic and environmental value of the wooded lots. Wooded properties can be worth as much as 20 percent more than those without trees, and people value the opportunity to live among trees.

Unfortunately, the processes involved with construction can be deadly to nearby trees. Unless the damage is extreme, the trees may not die immediately but could decline over several years. With this delay in symptom development, you may not associate the loss of the tree with the construction.

It is possible to preserve trees on building sites if the right measures are taken. The most important step is to hire a professional arborist during the planning stage. An arborist can help you decide which trees can be saved and can work with the builder to protect the trees throughout each construction phase.

#### How Trees Are Damaged During Construction

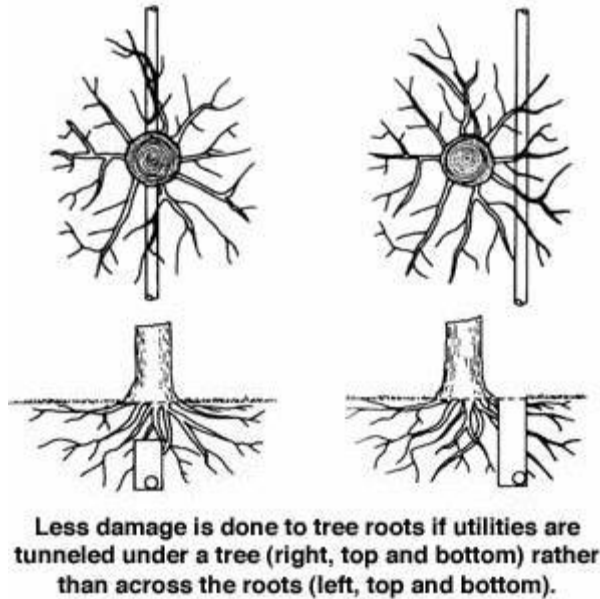
**Physical Injury to Trunk and Crown.** Construction equipment can injure the aboveground portion of a tree by breaking branches, tearing the bark, and wounding the trunk. These injuries are permanent and, if extensive, can be fatal.

**Cutting of Roots.** The digging and trenching that are necessary to construct a house and install underground utilities will likely sever a portion of the roots of many trees in the area. It is easy to appreciate the potential for damage if you understand where roots grow. The roots of a tree are found mostly in the upper 6 to 24 inches of the soil. In a mature tree, the roots extend far from the trunk. In fact, roots typically are found growing a distance of one to three times the height of the tree. The amount of damage a tree can suffer from root loss depends, in part, on how close to the tree the cut is made. Severing one major root can cause the loss of 5 to 20 percent of the root system.



The roots of a tree extend far from the trunk and are found mostly in the upper 6 to 12 inches of soil.

Another problem that may result from root loss caused by digging and trenching is that the potential for the trees to fall over is increased. The roots play a critical role in anchoring a tree. If the major support roots are cut on one side of a tree, the tree may fall or blow over.



Less damage is done to tree roots if utilities are tunneled under a tree rather than across the roots.

**Soil Compaction.** An ideal soil for root growth and development is about 50 percent pore space. These pores—the spaces between soil particles—are filled with water and air. The heavy equipment used in construction compacts the soil and can dramatically reduce the amount of pore space. This compaction not only inhibits root growth and penetration but also decreases oxygen in the soil that is essential to the growth and function of the roots, and water infiltration.

**Smothering Roots by Adding Soil.** Most people are surprised to learn that 90 percent of the fine roots that absorb water and minerals are in the upper 6 to 12 inches of soil. Roots require space, air, and water. Roots grow best where these requirements are met, which is usually near the soil surface. Piling soil over the root system or increasing the grade smothers the roots. It takes only a few inches of added soil to kill a sensitive mature tree.

**Exposure to the Elements.** Trees in a forest grow as a community, protecting each other from the elements. The trees grow tall, with long, straight trunks and high canopies. Removing neighboring trees or opening the shared canopies of trees during construction exposes the remaining trees to sunlight and wind. The higher levels of sunlight may cause sunscald on the trunks and branches. Also, the remaining trees are more prone to breaking from wind or ice loading.

### Getting Advice

Hire a professional arborist in the early planning stage. Many of the trees on your property may be saved if the proper steps are taken. Allow the arborist to meet with you and your building contractor. Your arborist can assess the trees on your property, determine which are healthy and structurally sound, and suggest measures to preserve and protect them.

One of the first decisions is determining which trees are to be preserved and which should be removed. You must consider the species, size, maturity, location, and condition of each tree. The largest, most mature trees are not always the best choices to preserve. Younger, more vigorous trees usually can survive and adapt to the stresses of construction better. Try to maintain diversity of species and ages. Your arborist can advise you about which trees are more sensitive to compaction, grade changes, and root damage.

## Planning

Your arborist and builder should work together in planning the construction. The builder may need to be educated regarding the value of the trees on your property and the importance of saving them. Few builders are aware of the way trees' roots grow and what must be done to protect them.

Sometimes small changes in the placement or design of your house can make a great difference in whether a critical tree will survive. An alternative plan may be more friendly to the root system. For example, bridging over the roots may substitute for a conventional walkway. Because trenching near a tree for utility installation can be damaging, tunneling under the root system may be a good option.

## Erecting Barriers

Because our ability to repair construction damage to trees is limited, it is vital that trees be protected from injury. The single most important action you can take is to set up construction fences around all of the trees that are to remain. The fences should be placed as far out from the trunks of the trees as possible. As a general guideline, allow 1 foot of space from the trunk for each inch of trunk diameter. The intent is not merely to protect the aboveground portions of the trees but also the root systems. Remember that the root systems extend much farther than the drip lines of the trees.

Instruct construction personnel to keep the fenced area clear of building materials, waste, excess soil, and equipment. No digging, trenching, or other soil disturbance such as driving vehicles and equipment over the soil should be allowed in the fenced area.

Protective fences should be erected as far out from the trunks as possible in order to protect the root system prior to the commencement of any site work, including grading, demolition, and grubbing.

## Limiting Access

If at all possible, it is best to allow only one access route on and off the property. All contractors must be instructed where they are permitted to drive and park their vehicles. The construction access drive should be the route for utility wires; underground water, sewer, or storm drain lines; roadways; or the driveway.



**Protective fences should be erected as far out from the trunks as possible in order to protect the root systems.**

Specify storage areas for equipment, soil, and construction materials. Limit areas for burning (if permitted), cement wash-out pits, and construction work zones. These areas should be away from protected trees.

### Specifications

Specifications are to be put in writing. All of the measures intended to protect your trees must be written into the construction specifications. The written specifications should detail exactly what can and cannot be done to and around the trees. Each subcontractor must be made aware of the barriers, limitations, and specified work zones. It is a good idea to post signs as a reminder.

Fines and penalties for violations should be built into the specifications. Not too surprisingly, subcontractors are much more likely to adhere to the tree preservation clauses if their profit is at stake. The severity of the fines should be proportional to the potential damage to the trees and should increase for multiple infractions.

### Maintaining Good Communications

It is important to work together as a team. You may share clear objectives with your arborist and your builder, but one subcontractor can destroy your prudent efforts. Construction damage to trees is often irreversible.

Visit the site at least once a day if possible. Your vigilance will pay off as workers learn to take your wishes seriously. Take photos at every stage of construction. If any infraction of the specifications does occur, it will be important to prove liability.

### Final Stages

It is not unusual to go to great lengths to preserve trees during construction, only to have them injured during landscaping. Installing irrigation systems and roto-tilling planting beds are two ways the root systems of trees can be damaged. Remember also that small increases in grade (as little as 2 to 6 inches) that place additional soil over the roots can be devastating to your trees. ANSI A300

Standards Part 5 states that tree protection shall be in place for the landscape phase of the site development. Landscape tree protection may be different than other construction process tree protection, and a conference with the landscape contractor should be held prior to the commencement of the landscape work. Careful planning and communicating with landscape designers and contractors is just as important as avoiding tree damage during construction.

### Post-Construction Tree Maintenance

Your trees may require several years to adjust to the injury and environmental changes that occur during construction. The better construction impacts are avoided, the less construction stress the trees will experience. Stressed trees are more prone to health problems such as disease and insect infestations. Talk to your arborist about continued maintenance for your trees. Continue to monitor your trees, and have them periodically evaluated for declining health or safety hazards.

Despite the best intentions and most stringent tree preservation measures, your trees still might be injured from the construction process. Your arborist can suggest remedial treatments to help reduce stress and improve the growing conditions around your trees. In addition, the International Society of Arboriculture offers a companion to this brochure titled "Treatment of Trees Damaged by Construction".



Edited from the ISA's tree protection guidelines

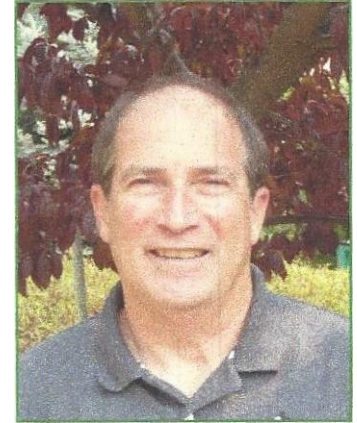


## California Tree and Landscape Consulting, Inc.

### GORDON MANN

#### EDUCATION AND QUALIFICATIONS

- 1977 Bachelor of Science, Forestry, University of Illinois, Champaign.
- 1982 - 1985 Horticulture Courses, College of San Mateo, San Mateo.
- 1984 Certified as an Arborist, WE-0151A, by the International Society of Arboriculture (ISA).
- 2004 Certified as a Municipal Specialist, WE-0151AM, by the ISA.
- 2011 Registered Consulting Arborist, #480, by the American Society of Consulting Arborists (ASCA).
- 2003 Graduate of the ASCA Consulting Academy.
- 2006 Certified as an Urban Forester, #127, by the California Urban Forests Council (CaUFC).
- 2011 TRACE Tree Risk Assessment Certified, continued as an ISA Qualified Tree Risk Assessor (T.R.A.Q.).



#### PROFESSIONAL EXPERIENCE

- 2016 – Present CALIFORNIA TREE AND LANDSCAPE CONSULTING, INC (CalTLC). President and Consulting Arborist.  
Auburn. Mr. Mann provides consultation to private and public clients in health and structure analysis, inventories, management planning for the care of trees, tree appraisal, risk assessment and management, and urban forest management plans.
- 1986 - Present MANN MADE RESOURCES. Owner and Consulting Arborist. Auburn.  
Mr. Mann provides consultation in municipal tree and risk management, public administration, and developing and marketing tree conservation products.
- 2015 – 2017 CITY OF RANCHO CORDOVA, CA. Contract City Arborist.  
Mr. Mann serves as the City's first arborist, developing the tree planting and tree maintenance programs, performing tree inspections, updating ordinances, providing public education, and creating a management plan,
- 1984 – 2007 CITY OF REDWOOD CITY, CA. City Arborist, Arborist, and Public Works Superintendent.  
Mr. Mann developed the Tree Preservation and Sidewalk Repair Program, supervised and managed the tree maintenance program, performed inspections and administered the Tree Preservation Ordinance. Additionally, he oversaw the following Public Works programs: Streets, Sidewalk, Traffic Signals and Streetlights, Parking Meters, Signs and Markings, and Trees.
- 1982 – 1984 CITY OF SAN MATEO, CA. Tree Maintenance Supervisor.  
For the City of San Mateo, Mr. Mann provided supervision and management of the tree maintenance program, and inspection and administration of the Heritage Tree Ordinance.
- 1977 – 1982 VILLAGE OF BROOKFIELD, IL. Village Forester.  
Mr. Mann provided inspection of tree contractors, tree inspections, managed the response to Dutch Elm Disease. He developed an in-house urban forestry program with leadworker, supervision, and management duties to complement the contract program.
- 1979 - Present INTERNATIONAL SOCIETY OF ARBORICULTURE. Member.
  - Board of Directors (2015 - Present)

- True Professional of Arboriculture Award (2011); In recognition of material and substantial contribution to the progress of arboriculture and having given unselfishly to support arboriculture.

- 1982 - Present WESTERN CHAPTER ISA (WCISA). Member.
- Chairman of the Student Committee (2014 - 2017)
  - Member of the Certification Committee (2007 - Present)
  - Chairman of the Municipal Committee (2009 - 2014) • Award of Merit (2016) In recognition of outstanding meritorious service in advancing the principles, ideals and practices of arboriculture.
  - Annual Conference Chair (2012)
  - Certification Proctor (2010 – Present)
  - President (1992 - 1993)
  - Award of Achievement and President's Award (1990)
- 1985 - Present CALIFORNIA URBAN FORESTS COUNCIL (CaUFC). Member; Board Member (2010 - Present)
- 1985 - Present SOCIETY OF MUNICIPAL ARBORISTS (SMA). Member. e Legacy Project of the Year (2015) o In recognition of outstanding meritorious service in advancing the principles, ideals and practices of arboriculture.
- Board Member (2005 - 2007)
- 2001 - Present AMERICAN SOCIETY OF CONSULTING ARBORISTS. Member. e Board of Directors (2006 - 2013)
- President (2012)
- 2001 - Present CAL FIRE. Advisory Position.
- Chairman of the California Urban Forestry Advisory Committee (2014 - 2017)
- 2007 – Present STANDARDS AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI): A300 TREE MAINTENANCE COMMITTEE. SMA Representative and Alternate.
- Alternative Representative for SMA (2004 - 2007; 2012 - Present)
  - Representative for SMA (2007 - 2012)
- 2007 - Present SACRAMENTO TREE FOUNDATION. Member and Employee.
- Co-chair/member of the Technical Advisory Committee (2012 - Present)
  - Urban Forest Services Director (2007 - 2009) e Facilitator of the Regional Ordinance Committee (2007 - 2009)
  - 1988 - 1994 TREE CLIMBING COMPETITION.
    - Chairman for Northern California (1988 - 1992)
    - Chairperson for International (1991 - 1994)

#### PUBLICA TIONS AND LECTURES

Mr. Mann has authored numerous articles in newsletters and magazines such as Western Arborist, Arborist News, City Trees, Tree Care Industry Association, Utility Arborists Association, CityTrees, and Arborists Online, covering a range of topics on Urban Forestry, Tree Care, and Tree Management. He has developed and led the training for several programs with the California Arborist Association. Additionally, Mr. Mann regularly presents at numerous professional association meetings on urban tree management topics.

## **Assumptions and Limiting Conditions**

1. Consultant assumes that any legal description provided to Consultant is correct and that title to property is good and marketable. Consultant assumes no responsibility for legal matters. Consultant assumes all property appraised or evaluated is free and clear, and is under responsible ownership and competent management.
2. Consultant assumes that the property and its use do not violate applicable codes, ordinances, statutes or regulations.
3. Although Consultant has taken care to obtain all information from reliable sources and to verify the data insofar as possible, Consultant does not guarantee and is not responsible for the accuracy of information provided by others.
4. Client may not require Consultant to testify or attend court by reason of any report unless mutually satisfactory contractual arrangements are made, including payment of an additional fee for such Services as described in the Consulting Arborist Agreement.
5. Unless otherwise required by law, possession of this report does not imply right of publication or use for any purpose by any person other than the person to whom it is addressed, without the prior express written consent of the Consultant.
6. Unless otherwise required by law, no part of this report shall be conveyed by any person, including the Client, the public through advertising, public relations, news, sales or other media without the Consultant's prior express written consent.
7. This report and any values expressed herein represent the opinion of the Consultant, and the Consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event or upon any finding to be reported.
8. Sketches, drawings and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by Consultant as to the sufficiency or accuracy of the information.
9. Unless otherwise agreed, (1) information contained in this report covers only the items examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing or coring. Consultant makes no warranty or guarantee, express or implied that the problems or deficiencies of the plans or property in question may not arise in the future.
10. Loss or alteration of any part of this Agreement invalidates the entire report.



## **Certificate of Performance**

I, Gordon Mann, certify that:

I have personally inspected the trees and site referred to in this report, and have stated my findings accurately. The extent of the inspection is stated in the attached report under Assignment;

I have no current or prospective interest in the vegetation, or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved;

The analysis, opinions and conclusions stated herein are my own and are based on current scientific procedures and facts;

My analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices;

No one provided significant professional assistance to me, except as indicated within the report;

My compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client, or any other party, nor upon the results of the assignment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing of the International Society of Arboriculture (ISA) and an ISA Certified Arborist and Municipal Specialist. I am also a Registered Consulting Arborist member in good standing of the American Society of Consulting Arborists. I have been involved in the practice of arboriculture and the care and study of trees for over 39 years.

Signed:



Gordon Mann

Date: May 28, 2018

**BIOLOGICAL RESOURCES ASSESSMENT  
FOR THE**

**±139-ACRE STONEHENGE STUDY AREA**

**EL DORADO COUNTY, CALIFORNIA**



*Prepared for:*

**MR. KEVIN SWEENEY**

2700 South Azusa Avenue  
West Covina, California 91792

*Prepared by:*



110 Maple Street, Auburn, California 95603  
(530) 887-8500

**JUNE 2, 2009**

# TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>INTRODUCTION .....</b>                           | <b>1</b>  |
| Project Location.....                               | 1         |
| Setting.....  | 1         |
| Proposed Project Description.....                   | 1         |
| Objectives of Biological Resources Assessment ..... | 1         |
| <b>METHODS .....</b>                                | <b>1</b>  |
| Literature Review .....                             | 1         |
| Special-Status Species Reports.....                 | 4         |
| Field Surveys .....                                 | 4         |
| <b>SURVEY AND LITERATURE SEARCH RESULTS .....</b>   | <b>5</b>  |
| Geology and Soils .....                             | 5         |
| Hydrology .....                                     | 6         |
| Biological Communities.....                         | 6         |
| Plants.....   | 6         |
| Wildlife .....                                      | 9         |
| Regulated Habitats .....                            | 9         |
| Waters of the U.S.....                              | 9         |
| Streams, Ponds, and Riparian Habitats .....         | 10        |
| Oak Woodland, Oaks and Other Trees .....            | 10        |
| Special-Status Species .....                        | 10        |
| Plants.....   | 13        |
| Wildlife .....                                      | 16        |
| <b>RECOMMENDATIONS .....</b>                        | <b>18</b> |
| Waters of the United States .....                   | 18        |
| Streams, Pond, and Riparian Habitat .....           | 19        |
| Oak Woodland, Oaks and Other Trees .....            | 19        |
| Special-Status Plants .....                         | 19        |
| Special-Status Wildlife .....                       | 19        |
| <b>REFERENCES AND OTHER RESOURCES.....</b>          | <b>21</b> |

## FIGURES

|  |    |
|--|----|
| Figure 1. Site & Vicinity Map .....            | 2  |
| Figure 2. Aerial Photo.....                    | 3  |
| Figure 3. Habitat Map.....                     | 7  |
| Figure 4. Site Photos .....                    | 8  |
| Figure 5. Special-Status Plant Locations ..... | 15 |

## **TABLES**

|   |    |
|---|----|
| Table 1. Biological Communities Present Within the Stonehenge Study Area .....          | 6  |
| Table 2. Special-Status Species That Could Occur Within the Stonehenge Study Area ..... | 11 |

## **APPENDICES**

|   |  |
|---|--|
| Appendix A. Plant Species Observed Within the Stonehenge Study Area                                   |  |
| Appendix B. Wildlife Species Observed Within the Stonehenge Study Area                                |  |
| Appendix C. Special-Status Plant Species Known to Occur in the Region of the Stonehenge Study Area    |  |
| Appendix D. Special-Status Wildlife Species Known to Occur in the Region of the Stonehenge Study Area |  |

**BIOLOGICAL RESOURCES ASSESSMENT  
FOR THE  
±139-ACRE STONEHENGE STUDY AREA**

**INTRODUCTION**

---

**Project Location**

North Fork Associates conducted a biological resources assessment for an approximate 139-acre Stonehenge study area in the community of Diamond Springs, El Dorado County, California. The study area is located just south of the intersection of California Highway 49/Pleasant Valley Road and Faith Lane. The location corresponds to portions of Sections 25, 30, 31, and 36, Township 10N, Range 10E and 11E on the Placerville 7.5 minute United States Geological Survey (USGS) quadrangle (Figure 1). Approximate coordinates of the center of the site are 38.68515° north and 120.81921° west.

**Setting**

The study area is situated in the lower Sierra Nevada foothills at elevations between 1670 and 1845 feet. The property is currently undeveloped except for a series of dirt roads and an El Dorado Irrigation District station structure. Most of the dirt roads bisect the middle of the study area in a north/south direction and are heavily used. Disturbed habitat is present in this area. Oak woodland occurs along the western and eastern boundaries of the study area. Adjacent land use includes residential and open land to the west, undeveloped land to the south, residential to the east, and some mixed residential and commercial use the north of the site (Figure 2).

**Proposed Project Description**

No plans for this site have been developed at this time.

**Objectives of Biological Resources Assessment**

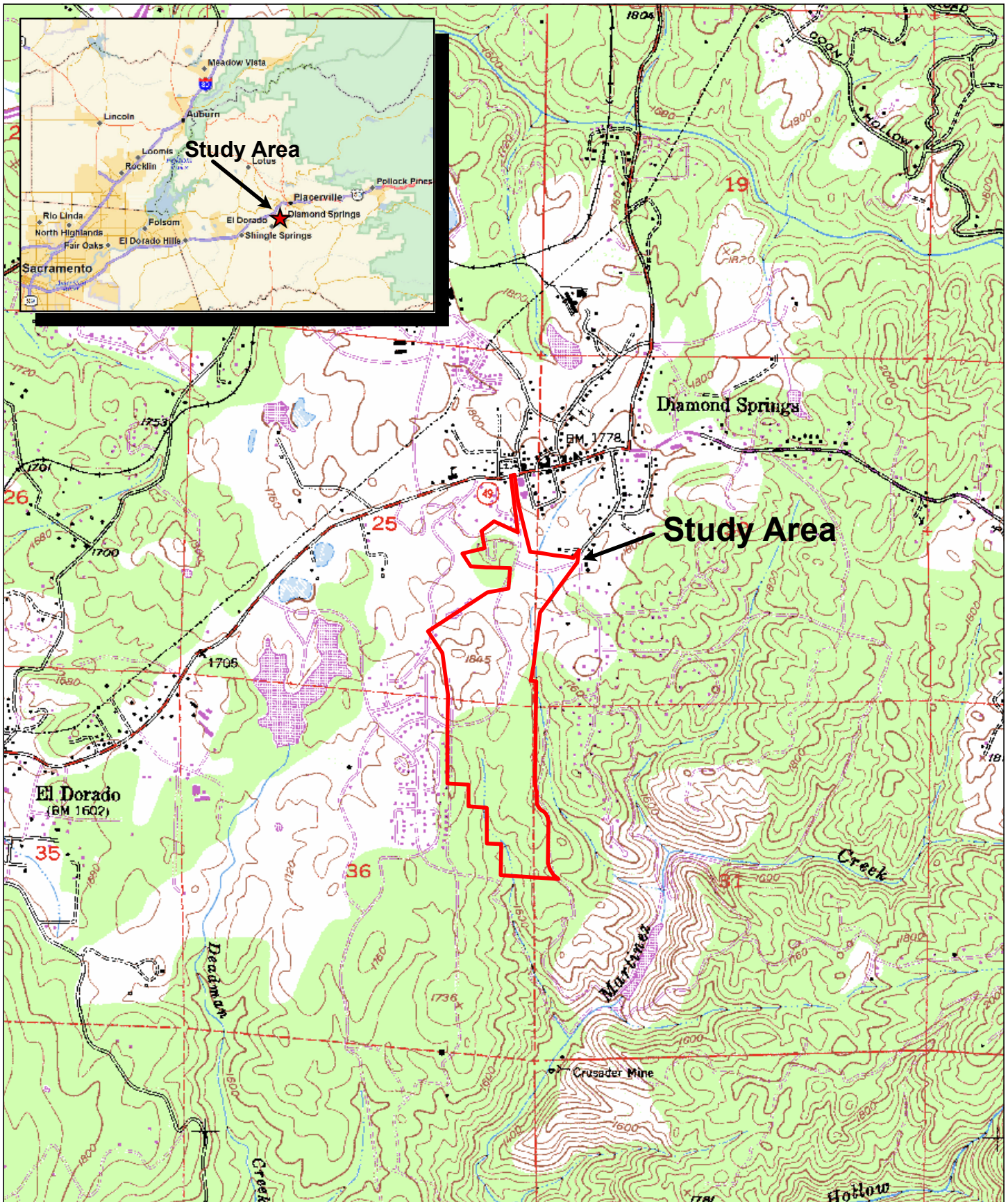
- Identify and describe the biological communities present in the study area.
- Record plant and animal species observed in the study area.
- Evaluate and identify sensitive resources and special-status plant and animal species that could be affected by project activities.
- Provide conclusions and recommendations.

**METHODS**

---

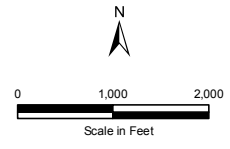
**Literature Review**

A variety of resources were used in this assessment. Aerial photographs and a topographic map of the study area were obtained from Cooper Thorne and Associates,



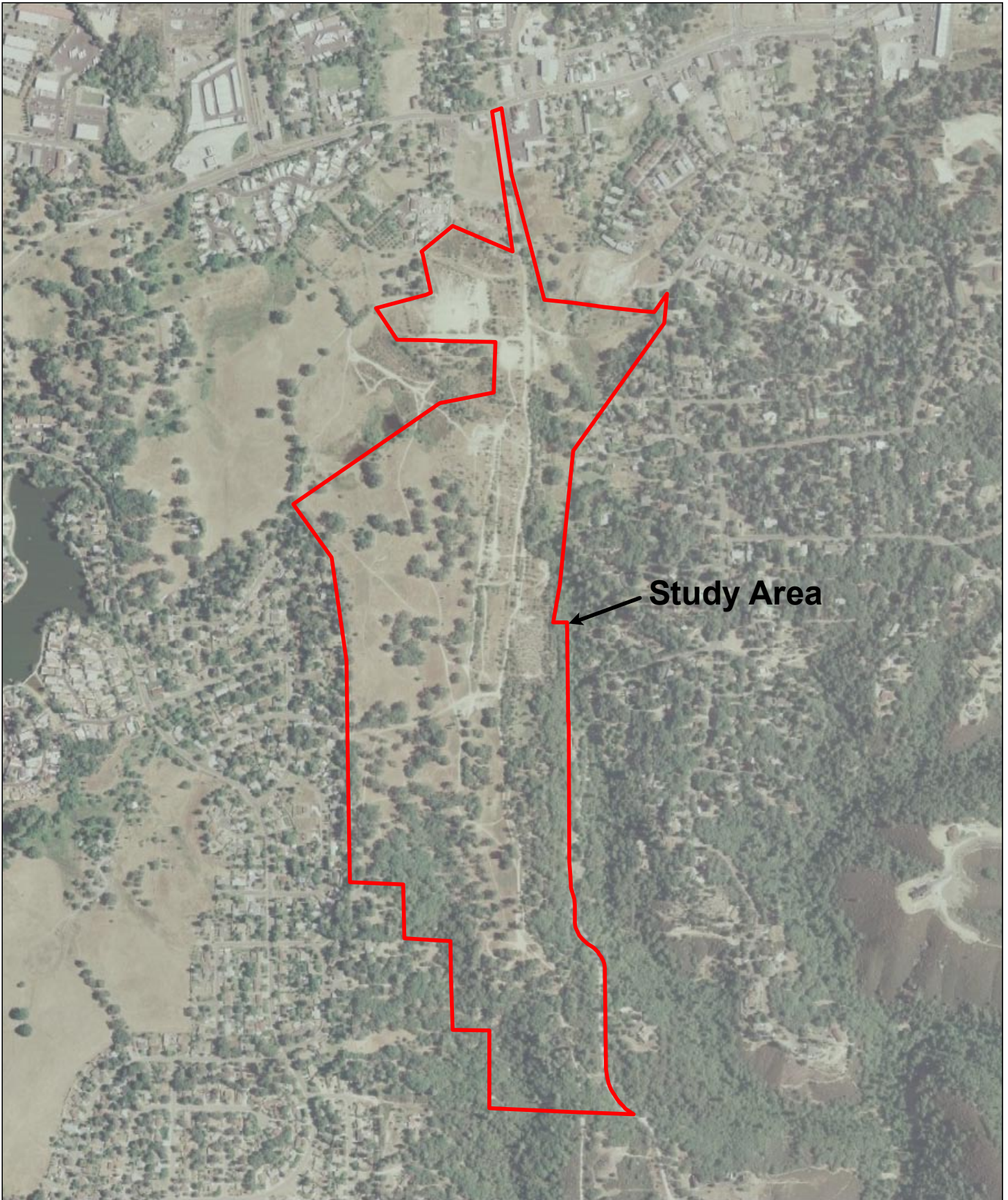
**Study Area**

**Study Area**

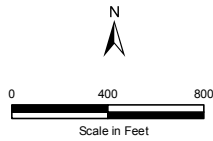


NOTES:  
 Sections 25, 30, 31 & 36  
 Township: 10N  
 Range: 10E & 11E  
 USGS Quad: Placerville, CA

**Figure 1**  
**SITE AND VICINITY**  
*Stonehenge Study Area*  
 El Dorado County, CA



**Study Area**



Aerial Photo Date: 2007 (ESRI)

**Figure 2**

**AERIAL PHOTO**  
*Stonehenge Study Area*  
El Dorado County, CA

Inc. Geological information was taken from the Geologic Map of the Sacramento Quadrangle (California Department of Conservation 1987). Soil information was obtained from the *Soil Survey of El Dorado Area, California* (USDA, NRCS 1974).

Multiple publications were reviewed to provide information on life history, habitat requirements, distribution, and conservation status of regionally occurring animal species. They include published books, peer-reviewed articles, field guides, and the California Wildlife Habitats Relationships Program.

### **Special-Status Species Reports**

North Fork Associates queried the California Natural Diversity Data Base (CNDDDB) for location records for special-status species known to occur in the region surrounding the study area. Quadrangles included in the query were Placerville, Coloma, Garden Valley, Slate Mountain, Shingle Springs, Camino, Latrobe, Fiddletown, and Aukum quadrangles. North Fork Associates biologists also reviewed the special-status species lists for the Placerville USGS quadrangle and El Dorado County created by the U.S. Fish and Wildlife Service (USFWS). The California Native Plant Society (CNPS) Inventory was checked for special-status plants occurring in the area.

For the purposes of this report, special-status species are those that fall into one or more of the following categories, including those:

- listed as endangered or threatened under the federal Endangered Species Act (including candidates and species proposed for listing),
- listed as endangered or threatened under the California Endangered Species Act (including candidates and species proposed for listing),
- designated as rare, protected, or fully protected pursuant to California Fish and Game Code (CDFG),
- designated a Species of Concern by the CDFG,
- defined as rare or endangered under Section 15380 of the California Environmental Quality Act (CEQA), or
- occurring on List 1, 2, or 3 maintained by the California Native Plant Society.

### **Field Surveys**

The field assessment portion of the study was conducted in August 2006, January 2007, May and June 2008, and May 2009 by Pat Britton, Erin Gottschalk-Fisher, Barry Anderson, Gaylene Tupen, and Melissa Hostler. A wetland delineation was also conducted in conjunction with this study. Site surveys assessed habitat conditions and determined the potential for occurrence of special-status plant and wildlife species. Surveys were done floristically and in accordance with California Department of Fish and Game guidelines and each plant species observed was identified to the extent necessary for determining its rarity status. On all visits, surveys consisted of walking the site, recording notes of species observed or their respective sign (nests, burrows, tracks, scat), and assessing habitat conditions. Appendix A is a list of plants observed, and Appendix B is a list of wildlife observed onsite. Plant names are according to *The*



*Jepson Manual* (Hickman 1993), except for changes obtained from the Jepson Interchange, an online database maintained by the University of California and Jepson Herbaria. Standard manuals were used to identify wildlife species observed.

## **SURVEY AND LITERATURE SEARCH RESULTS**

---

### **Geology and Soils**

The geology map for the area shows that soils are derived from Mesozoic granitic: Granodiorite, Upper Jurassic Marine Sedimentary, and Metasedimentary rocks.

Five soil units have been mapped in the study area:

- Diamond Springs very fine sandy loam, 9 to 15 percent slopes
- Diamond Springs very rocky very fine sandy loam, 3 to 50 percent slopes
- Placer Diggings
- Mixed alluvial land
- Mariposa very rocky silt loam, 50 to 70 percent slopes

Diamond Springs soils are acidic Typic Haploxerults derived from igneous rock. The A horizon is relatively shallow, usually nine (9) inches or less, and is usually a loam or sandy loam. The B horizon, nine (9) to 29 inches, is a clay loam that tends to impede the percolation of water. A horizon hues are 10YR and 7.5YR, and chromas are between two (2) and five (5). The B horizon hues are similar, but patches of 5YR soils are also present. B horizon chromas are generally high, two (2) and above. Diamond Springs soils are well-drained and have moderate or moderately slow permeability.

Placer diggings consists of areas of stony, cobbly, and gravelly material, commonly in beds of creeks and other streams, or of areas that have been placer mined and contain enough fine sand or silt to support some grass for grazing. The material that makes up this land type is derived from a mixture of rocks and commonly is stratified or poorly sorted. In some areas where slopes are steep, the material consists of fines from stamp mills or tailings from placer mining. The depth of the soil material is variable, ranging from six (6) inches to more than five (5) feet. Natural drainage varies from place to place.

Mixed alluvial land consists of small areas of recent mixed alluvium adjacent to stream channels. This material is variable in color and is stratified gravelly sandy loam, gravelly loam, and gravelly clay loam that grades into sand and gravel as depth increases. Permeability is moderately rapid to slow. This land type is moderately well drained to somewhat poorly drained. Surface runoff is slow to medium, and the erosion hazard is moderate. The land is subject to frequent flooding in the winter. Mixed alluvial land is used for pasture and range.

Mariposa soils are moderately deep, well drained Typic Haploxerults formed in material weathered from tilted slates and schists. The A horizon is typically shallow at 8 inches or less. Runoff is slow to very rapid and permeability is moderate.

## Hydrology

The Stonehenge study area lies in the Upper Cosumnes (18040013) HUC unit (Cal Water, 1999) and ranges from a ridge in the western portion of the study area to a leveled section in the central portion of the study area to a generally sloped area in the eastern portion of the study area. The main hydrological features of the site are two unnamed streams (one ephemeral and one intermittent) that run along the eastern and southwestern portions of the study area. Both streams eventually empty into Martinez Creek. Martinez Creek is a tributary of the Cosumnes River, which ultimately reaches the San Joaquin River.

## Biological Communities

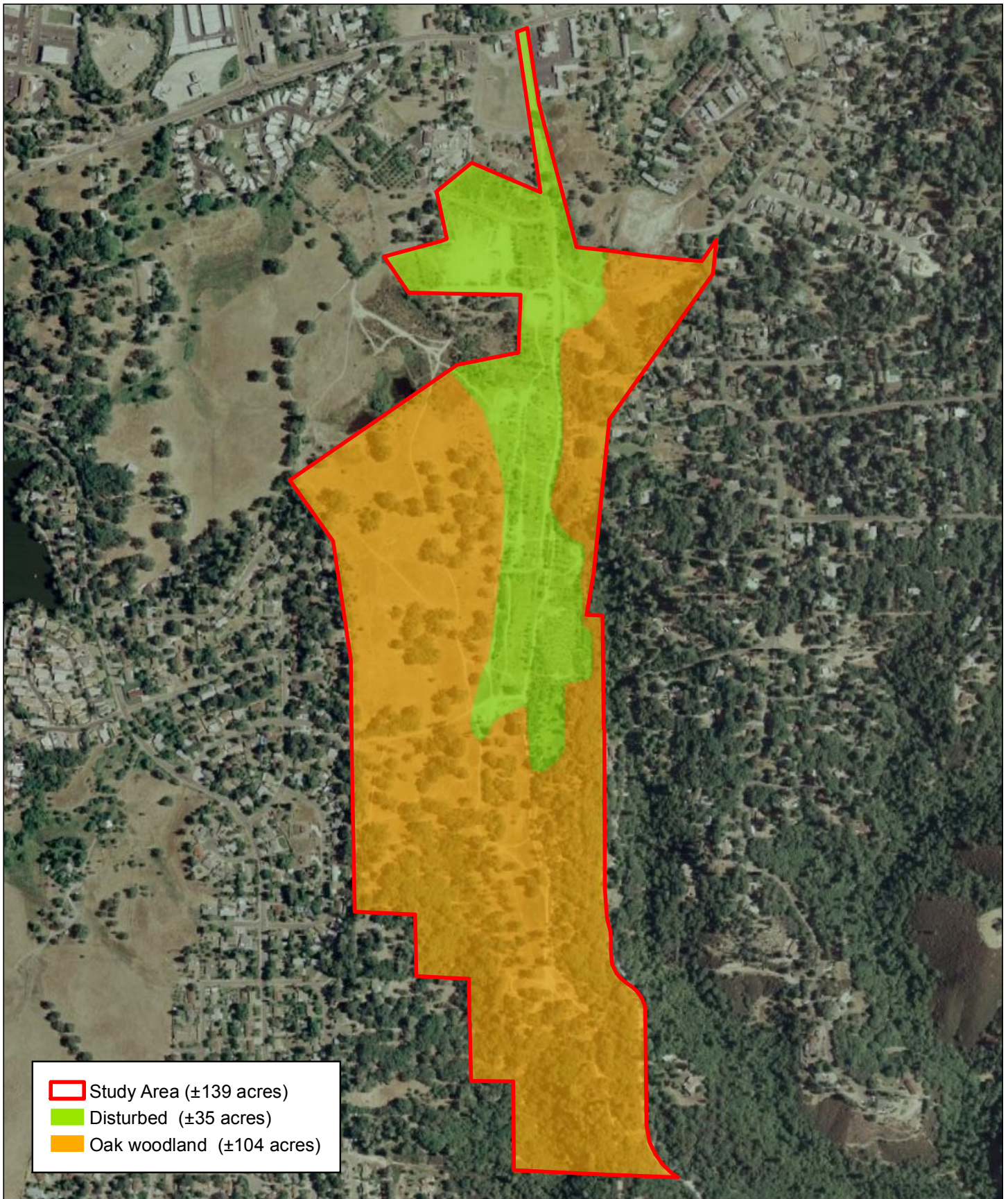
Two biological communities were identified within the study area: oak woodland and disturbed. Small amounts of wetland vegetation are embedded in these larger habitat types, associated with the onsite wetlands and streams. Table 1 presents estimated acreage of each habitat type. Figure 3 is a habitat map and Figure 4 shows photos of the site.

**Table 1.**  
**Biological Communities Present Within the Stonehenge Study Area**

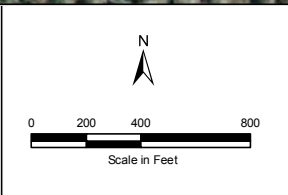
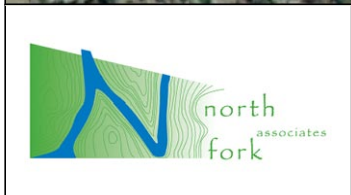
| <b>Biological Community</b> | <b>Estimated Acreage</b> |
|-----------------------------|--------------------------|
| Oak woodland                | 104                      |
| Disturbed                   | 35                       |
| Total                       | 139                      |

### *Plants*

The oak woodland habitat of the study area consists of a variety of oak species, with interior live oak, black oak, and blue oak in the dryer areas and valley oak near the intermittent drainage. Two species of pines, ponderosa pine and foothill pine, are scattered through this habitat type as well. For the most part this habitat type lacks a shrub layer, but does have some scattered areas of varying densities of whiteleaf manzanita, coyote brush, buck brush, Himalayan blackberry and poison oak. In general, the understory is dominated by ruderal grass and forb species including yellow star-thistle, hedgehog dogtail grass, Klamathweed, Spanish-clover, soft chess, medusa-head grass, Italian thistle, vetch, and field hedge-parsley. In the southeastern portion of the study area, a dense chaparral understory is intermixed within the oak woodland habitat composed of smaller interior live oaks, large black oaks, and foothill pines. Chaparral species present in this area include whiteleaf manzanita, chamise, coyote brush, buck brush, and yerba santa. The oak woodland onsite can be classified as blue oak-foothill pine habitat as defined by the El Dorado County Vegetation Bioclassification.



- Study Area (±139 acres)
- Disturbed (±35 acres)
- Oak woodland (±104 acres)



NOTES:  
Aerial Photo Date: 2007 (ESRI)

**Figure 3**  
**HABITAT MAP**  
*Stonehenge Study Area*  
El Dorado County, California



4a. Open oak woodland habitat.

4b. Ruderal grassland habitat.



4c. Intermittent stream located along eastern study area boundary.



Photo Date: August 10 & 30, 2007

## Figure 4

**SITE PHOTOS**  
*Stonehenge Site*  
El Dorado County, California

The disturbed habitat consists of areas with evidence of persistence disturbance. Scattered patches of short-stature ponderosa pines and whiteleaf and Nissenan manzanita shrubs are present throughout. A similar flora as the one found in the oak woodland habitat of ruderal grass and forb species is present in the disturbed habitat. Additionally, several areas within this habitat are unvegetated to sparsely vegetated. Portions of the disturbed habitat can be classified as whiteleaf manzanita chaparral under the El Dorado County Vegetation Bioclassification.

### *Wildlife*

The Stonehenge study area provides important habitat features for wildlife including: nesting sites, escape and thermal cover, and a variety of food sources. In addition, aquatic habitats of the study area, including ponds and intermittent drainages, provide both seasonal and year-round sources of water for wildlife of the area. Woodland communities, such as those located throughout the site, are important for animal cover and provide roosting and nesting opportunities for birds and shelter for mammals. Scattered taller trees of the site provide suitable nesting habitat for raptors such as great horned owl, red-tailed hawk, and red-shouldered hawk.

The following animals were observed in association with grassland and woodland habitats of the study area during the August 2006 and May 2008 field surveys: western scrub-jay, acorn woodpecker, California quail, northern flicker, mourning dove, lesser goldfinch, wren, dark-eyed junco, California towhee, northern mockingbird, house finch, western kingbird, western fence lizard, southern alligator lizard, black-tailed jackrabbit, Western gray squirrel, and California ground squirrel. Sign of mule deer, coyote, raccoon, and Botta's pocket gopher were observed in both woodland and grassland habitats of the site. In addition, turkey vultures were observed soaring over the study area throughout the field surveys. Birds observed within or near the two ponds located along the western study area boundary included: green heron, great egret, great blue heron, red-winged blackbird, killdeer, and mallard.

At the time of the August 25, 2006 field survey, numerous bullfrogs were observed in the two ponds located along the western study area boundary. Three pond turtles were also observed in the eastern-most pond during the field survey. A complete list of species observed during the August 2006 and May 2008 field surveys is provided in Appendix B.

### **Regulated Habitats**

The following habitats are considered regulated by Federal, State, or County laws and ordinances.

#### *Waters of the U.S.*

Waters of the United States in the Stonehenge study area consist of ephemeral streams, intermittent streams, ponds, fringe wetlands, seasonal wetlands, and wetland swales. A wetland delineation for approximately 115 acres of the overall site was conducted in August 2006, January 2007, and June 2008 by North Fork Associates and was verified by the U. S. Army Corps of Engineers (Corps) on August 18, 2008. The additional 24 acres

(to total 139 acres) was surveyed in May 2009 and will be submitted to the Corps for verification.

Per the El Dorado County Interim Interpretive Guidelines, Policy 7.3.3.4 requires a minimum setback of 100 feet from perennial streams, rivers, and lakes, and a 50-foot setback from intermittent streams and wetlands. The project site has water features as described in the El Dorado County Interim Interpretive Guidelines.

#### *Streams, Ponds, and Riparian Habitats*

Ponds, ephemeral streams, and one intermittent stream are present in the study area. Riparian habitat is not associated with any of the water features present onsite.

#### *Oak Woodland, Oaks and Other Trees*

The El Dorado General Plan conservation and open space element (Policy # 7.4.4.4) considers any native oak tree of 6 inches dbh (diameter at breast height) or an aggregate of 10 inches dbh to be a regulated tree. According to the El Dorado County General Plan for new development projects canopy retention values are based upon a baseline aerial photograph analysis of existing canopy and have predetermined retention values based upon existing canopy.

### **Special-Status Species**

Appendix C provides a list of potentially occurring special status plants known to occur in the region surrounding the study area, and Appendix D provides a similar list of special status wildlife. The U.S. Fish and Wildlife Service list for El Dorado County includes species from the Central Valley to the east side of the Sierra Nevada. Species requiring habitats not occurring in or around the study area and species occurring far outside the study area are not considered in Appendix C or Appendix D. Field surveys and the best professional judgment of North Fork Associates biologists were used to further refine the tables in these appendices. In general, plants on the CNPS List 3 are not considered further.

The refined list of status species in the region of the Stonehenge study area includes 15 plants and eight animals (Appendix C and Appendix D, respectively). Of the 15 plant species in Appendix C and eight animal species in Appendix D, eight plants and five animals occur or have some potential to occur because the study area has some areas of suitable habitat or they are known from nearby locations. Table 2 provides a summary of these species, and they are discussed in more detail in the paragraphs following the table.

Table 2. Special-Status Species That Could Occur Within the Stonehenge Study Area

| Species  | Status* |       |       | Habitat  | Potential for Occurrence**   |
|--|---------|-------|-------|--|--|
|  | Federal | State | CNPS  |  |  |
| <b>Plants</b>  |         |       |       |  |  |
| <b>Brandegee's clarkia</b><br><i>Clarkia biloba</i> subsp.<br><i>brandegeae</i>          | -       | -     | 1B.2  | Chaparral and woodlands  | Possible.<br>Suitable habitat occurs in the study area.  |
| <b>El Dorado County mules ears</b><br><i>Wyethia reticulata</i>                          | -       | -     | 1B.2  | Chaparral; cismontane woodland; lower montane coniferous forest; [clay or gabbroic]. | Possible.<br>Suitable habitat occurs in the study area.  |
| <b>Nissenan manzanita</b><br><i>Arctostaphylos nissenana</i>                             | -       | -     | 1B.1  | Closed-cone coniferous forest; chaparral.  | Occurs.  |
| <b>Northern California black walnut</b><br><i>Juglans hindsii</i>                        | -       | -     | 1B.1  | Riparian forests and Riparian woodlands.   | Occurs.  |
| <b>Oval-leaved viburnum</b><br><i>Viburnum ellipticum</i>                                | -       | -     | 2.3   | Chaparral; cismontane woodland; lower montane coniferous forest.                     | Possible. Limited suitable habitat occurs in the study area.   |
| <b>Parry's horkelia</b><br><i>Horkelia parryi</i>  | -       | -     | 1B.2  | Chaparral; cismontane woodland; [especially Ione formation]                          | Possible.<br>Suitable habitat occurs in the study area.  |
| <b>Pine Hill ceanothus</b><br><i>Ceanothus roderickii</i>                                | FE      | CR    | 1B.2  | Chaparral; cismontane woodland; [often serpentinite or gabbroic].                    | Possible.<br>Suitable habitat occurs in the study area.  |
| <b>Pleasant Valley mariposa lily</b><br><i>Calochortus clavatus</i> var.<br><i>avius</i> | -       | -     | 1B.1  | Lower montane coniferous forest, (Josephine silt loam and volcanic)                  | Possible.<br>Suitable habitat occurs in the study area.  |
| Species  | Status* |       |       | Habitat  | Potential for Occurrence**   |
|  | Federal | State | Other |  |  |
| <b>Amphibians</b>  |         |       |       |  |  |
| <b>California red-legged frog</b><br><i>Rana aurora draytonii</i>                        | FT      | CSC   | -     | Ponds and deeper sections of streams with emergent or overhanging vegetation.        | Possible – Potential habitat occurs in association with two ponds along western study area boundary. |

| Species  | Status* |       |      | Habitat  | Potential for Occurrence**  |
|--|---------|-------|------|--|---|
|  | Federal | State | CNPS |  |   |
| <b>Reptiles</b>  |         |       |      |  |   |
| <b>Northwestern pond turtle</b><br><i>Actinemys marmorata marmorata</i>    | -       | CSC   | -    | Ponds, marshes, river, streams and ditches with basking sites and vegetation.                                      | Occurs - Suitable habitat in ponds along western study area boundary. Three turtles observed in eastern-most pond during 2006 field survey. |
| <b>Birds</b>   |         |       |      |  |   |
| <b>Cooper's hawk (nesting)</b><br><i>Accipiter cooperii</i>                | -       | WL    | -    | Dense stands of oak woodland, riparian forest or other forested habitats near water.                               | Possible - Potential nesting and foraging habitat occurs in onsite woodlands.   |
| <b>Tricolored blackbird (nesting colonies)</b><br><i>Agelaius tricolor</i> | -       | CSC   | -    | Open water areas with tall emergent vegetation or in willow and blackberry thickets.                               | Possible- Limited amount of potential nesting habitat occurs near ponds in western portion of site.   |
| <b>Mammals</b>   |         |       |      |  |   |
| <b>Silver-haired bat</b><br><i>Lasionycteris noctivagans</i>               | -       | CSC   | -    | Occurs in coniferous forests, oak woodland and riparian habitats. Roosts in hollow trees, snags, buildings, rocks. | Possible-Limited roosting habitat associated with tree cavities on site. No significant roosting activity expected to occur.                |



| Species | Status* |       |      | Habitat | Potential for Occurrence** |
|---------|---------|-------|------|---------|----------------------------|
|         | Federal | State | CNPS |         |                            |

\*Status Codes:

**Federal**

FE Federal Endangered  
 FT Federal Threatened  
 FP Federal Proposed Species

**State**

CE California Endangered  
 CT California Threatened  
 CR California Rare (plants only)  
 CSC California Species of Concern  
 CFP California Fully Protected  
 WL CDFG "watch list" species

**CNPS**

List 1B Rare, Threatened, or Endangered in California  
 List 2 R, T, or E in California, more common elsewhere  
 1- Seriously threatened in California  
 2- Fairly threatened in California  
 3- Not very threatened in California

\*\*Definitions for the Potential to Occur:

- **None.** Habitat does not occur.
- **Unlikely.** Some habitat may occur, but disturbance or other activities may restrict or eliminate the possibility of the species occurring. Habitat may be very marginal, or the study area may be outside the range of the species.
- **Possible.** Marginal to suitable habitat occurs, and the study area occurs within the range of the species.
- **Likely.** Good habitat occurs, but the species was not observed during surveys.
- **Occurs:** Species was observed during surveys.

**Plants**

Fifteen special status plant species are documented by the CNDDDB (CDFG, 2008) and other pertinent references as occurring in the broader project region (refer to *Appendix C*). Most of the species listed by the CNDDDB as occurring within the region are commonly associated with gabbro soils or serpentine soils which do not occur in the study area. Eight species listed by the CNDDDB were determined to have a low to moderate potential for occurring on site, and are described below.

**Brandege's clarkia** (*Clarkia biloba* subsp. *brandegeae*) is an erect annual member of the evening primrose family (Onagraceae). It has no state or federal status, but it is a CNPS List 1B.2. Brandege's clarkia differs from similar species by having pendant buds, notched petals, and eight stamens. It can be found in oak woodlands in the Sierra foothills from Butte County to El Dorado County. Its common name, farewell-to-spring suggests its late blooming period, usually from May to July.

During the floristic surveys, only the common *Clarkia purpurea* and *Clarkia biloba* ssp. *biloba* were observed and not Brandege's clarkia.

**El Dorado County mules-ears** (*Wyethia reticulata*) is a perennial member of the sunflower family (Asteraceae). It is a CNPS List 1B.2. El Dorado County mules-ears is distinct from other species in the area by lacking basal leaves and having many narrow outer phyllaries. It grows in chaparral, foothill woodland, and sometimes lower montane coniferous forest on clay and gabbro-derived soils. It is endemic to El Dorado County and blooms from May to July.

While suitable habitat occurs in the study area, El Dorado County mules-ear was not observed during the floristic surveys.

**Nissenan manzanita** (*Arctostaphylos nissenana*) is a two- to six-foot shrub in the heath family (Ericaceae) that appears on the CNPS List 1B.1. It differs from the much more common and widespread whiteleaf manzanita (*Arctostaphylos viscida*) in several respects: (1) Nissenan manzanita has a cylindrical rather than a round or ovoid fruit; (2) Nissenan manzanita fruits have two to five stones, whereas whiteleaf manzanita has eight to ten stones; (3) Nissenan branches have fibrous bark as opposed to smooth bark; and (4) Nissenan manzanita is much smaller (two to five feet tall) and more compact than whiteleaf manzanita (three to 15 feet tall). Nissenan and whiteleaf manzanitas hybridize where they grow together. Preferred habitat for the species is closed-cone coniferous forest or chaparral in El Dorado and Tuolumne Counties.

Sixty-two individuals of Nissenan manzanita were observed during the floristic surveys (See Figure 5). Most of the plants occurred within the disturbed habitat. Two individuals were located in oak woodland habitat near the southern study area boundary.

**Oval-leaved viburnum** (*Viburnum ellipticum*) is three- to 12-foot shrub in the honeysuckle family (Caprifoliaceae). It has no state or federal status. It is a CNPS List 2.3, meaning that it is rare in California, but more common elsewhere. It is differentiated from other members of the family by its simple, coarsely dentate leaves. It grows in chaparral, foothill woodlands, and lower montane forests at widely scattered locations in the Sierra Nevada and northern Coast Ranges of California. *Viburnum* is much more common and widespread from Oregon north. Oval-leaved viburnum blooms in May and June.

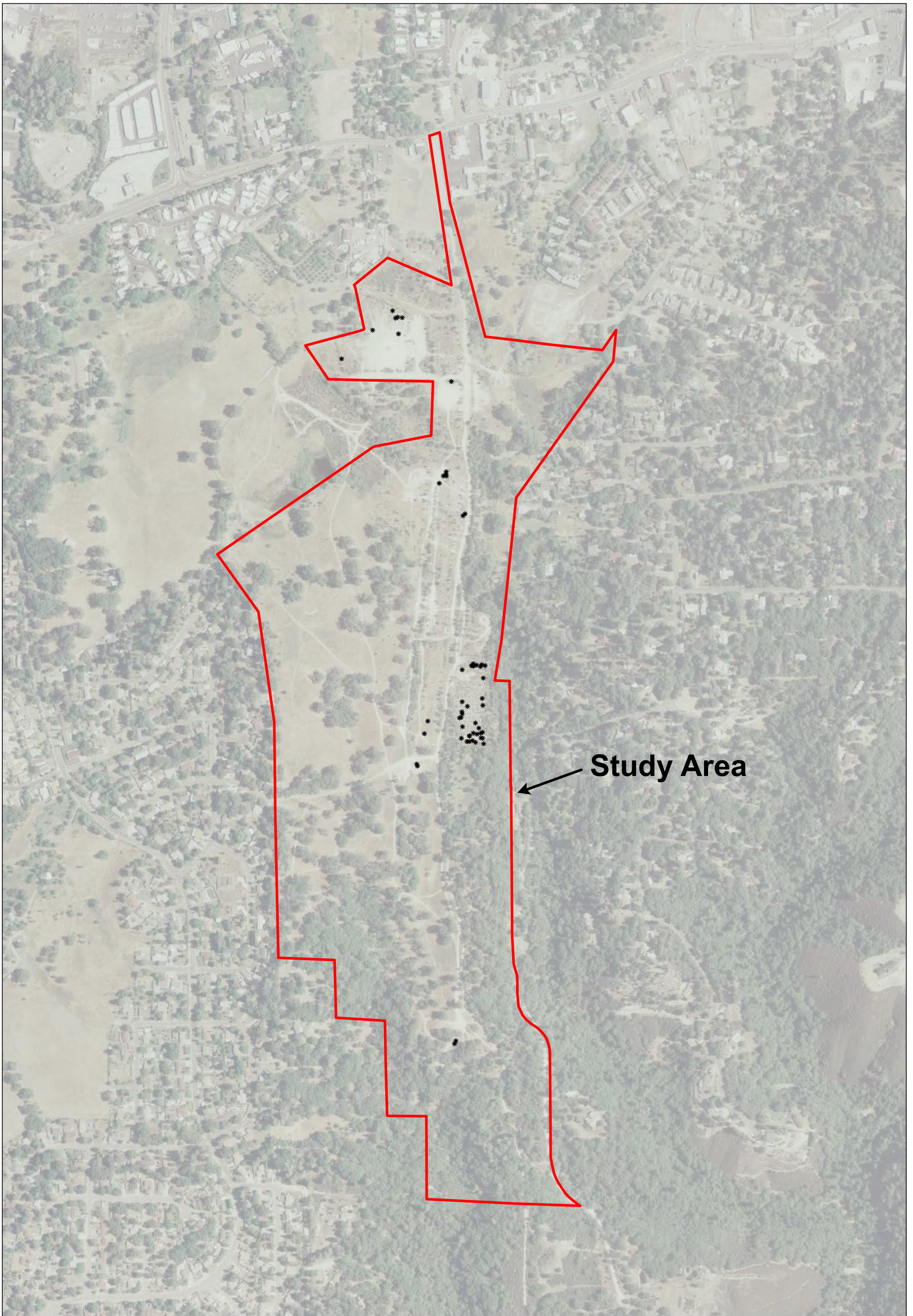
While suitable habitat occurs in the study area, oval-leaved viburnum was not observed during the field study.

**Parry's horkelia** (*Horkelia parryi*) is an aromatic, mat-forming perennial member of the rose family (Rosaceae). It has no state or federal status, but it is listed on CNPS List 1B.2. Parry's horkelia has white flowers typical of similar species, but the pedicels are curved when in fruit. It grows in chaparral and foothill woodlands from El Dorado County to Mariposa County, where it is often associated with the Ione Formation, and it blooms between April and June.

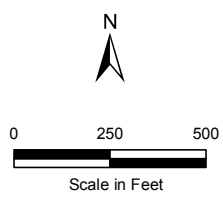
While suitable habitat occurs in the study area, Parry's horkelia was not observed during the floristic surveys.

**Pine Hill ceanothus** (*Ceanothus roderickii*) is a prostrate shrub in the buckthorn family (Rhamnaceae). It is a state-listed rare species and a federally-listed endangered species that also appears on CNPS List 1B.2. It differs from other similar species in having a fully prostrate habit, sub-erect leaves, and white flowers with a blue tinge. In addition, this species is restricted to serpentinite or gabbro soils, and occurs only in the Pine Hill area of El Dorado County. It blooms in May and June.

While suitable habitat occurs in the study area, Pine Hill ceanothus was not observed during the floristic surveys.



Study Area



\* *Arctostaphylos nissenana*  
(62 plants)

Aerial Photo Date: 2007 (ESRI)

**Figure 5**

**SPECIAL-STATUS PLANT LOCATIONS**

*Stonehenge Study Area*

El Dorado County, CA

**Pleasant Valley mariposa lily** (*Calochortus clavatus* var. *avius*) is bulb-forming member of the lily family (Liliaceae). It is listed on CNPS List 1B.1 with no state status. This species has a zigzag stem and yellow or gold petals that lack exterior green stripes. In addition, the nectary is densely covered with knobby hairs. Pleasant Valley mariposa lily grows in mixed oak and pine forests and has a preference for Josephine silt loams. It occurs in the foothills between El Dorado and Mariposa Counties, and it blooms from May to July.

While suitable habitat occurs in the study area, Pleasant Valley mariposa lily was not observed during the field study.

**Northern California black walnut** (*Juglans hindsii*) is a nut-bearing tree in the walnut family (Juglandaceae). This variety is a CNPS List 1B.1 species with no state or federal status. Its smooth shell distinguishes it from the non-native black walnut (*Juglans nigra*), which has a deeply ridged and furrowed shell. Northern California black walnut is known to occur natively at only a few locations. It has been used as rootstock for the cultivated English or Persian walnut (*Juglans regia*), and it now grows fairly widely in the Central Valley and adjacent coast range. It occurs naturally in canyons and creek bottoms, but is more often found now along streams, canals, and other waterways. Although this species was detected in the study area it is likely that it is not a naturally occurring population, but an escaped root stock variety and no mitigation should be required.

### *Wildlife*

**California red-legged frog** (*Rana aurora draytonii*), a federally-listed threatened species and a California species of special concern, historically ranged from Marin County southward to northern Baja California. This species is still locally abundant within portions of the San Francisco Bay area and along the central coast. Only isolated populations of California red-legged frog (CRLF) have been documented in the Sierra Nevada and foothills region. CRLF prefers aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 0.7 meters (2.3 feet), and the presence of fairly sturdy underwater supports such as cattails. The largest densities of CRLF are typically associated with dense stands of overhanging willows and a fringe of sturdy emergent vegetation (USFWS, 2006). CRLF typically breeds from January to July, with peak breeding occurring in February. Eggs are attached to subsurface vegetation, and hatched tadpoles require eleven to twenty weeks to metamorphose.

There are no occurrences of CRLF previously reported from the 9 quadrangle region surrounding the project site (CNDDDB 2008). The closest documented occurrences of CRLF are reported from the east side of Folsom Lake, approximately 15 miles west of the study area (occurrence no. 814) and from just upstream of Weber Reservoir, approximately 7.5 miles east of the project site (occurrence no. 586) (CNDDDB 2008). There is some potential for CRLF to occur in the study area due to the presence of a limited amount of suitable habitat and the site's location within the known range of the species. Suitable habitat is, however, limited to the two ponds located along the western property boundary. The eastern-most pond appears to retain surface water throughout

the dry season and contains good vegetative cover around the perimeter. Both ponds contained numerous bullfrogs, a predator of CRLF, at the time of the August 2006 field survey. However, the presence of bullfrogs does not always exclude CRLF from occurring at a site (USFWS, 2005). While the two on-site ponds provide some habitat components considered suitable for CRLF, the potential for occurrence within the study area is expected to be low due to the distance from other known populations.

**Northwestern pond turtle** (*Actinemys marmorata marmorata*), a California species of special concern, occurs in association with streams, rivers, and ponds containing suitable cover and basking sites. This subspecies can be associated with both permanent and ephemeral water sources, including perennial and intermittent streams. Suitable basking sites along streams or ponds include partially submerged logs, rocks, mats of floating vegetation, or open stream banks. Suitable upland habitat, such as sandy banks or grassy fields, located adjacent to the aquatic habitat is required for egg-laying. Nesting may take place in a variety of soil types from loose sandy soils to compact soils, and in a variety of habitat types. Eggs are laid from March to August, depending on local climate and water conditions. Incubation ranges from 73 to 80 days (Zeiner et al., 1988).

Within the study area, suitable habitat for northwestern pond turtle is limited to the two ponds located along the western study area boundary. During the August 2006 field survey, three pond turtles were observed in the eastern-most of the two ponds. Surface water depth was deeper in the eastern pond at the time of the field survey, and therefore more suitable for turtles. It is expected, however, that turtles could occupy either of the two ponds throughout other times of the year when surface water is deeper. No pond turtles were detected within either of the two ponds during the May 2008 field survey.

**Cooper's hawk** (*Accipiter cooperii*), a California Department of Fish and Game "watch list" species, is a breeding resident throughout most woodland habitats of California. Breeding takes place in dense-canopied trees from foothill pine-oak woodlands up to ponderosa pine forest. Nesting sites are usually located near water. This species hunts in broken woodland and habitat edges, where they catch small birds in the air. They prefer nesting sites in riparian growths of deciduous trees, as in canyon bottoms and on river flood plains, although live oaks are often used. Breeding takes place from March through August, with peak activity occurring in May and June. Cooper's hawk nests are often constructed in deciduous trees in crotches approximately 20 to 50 feet above ground. The nest is a stick platform lined with bark. This species incubates eggs for about 35 days, and young are fledged between 30 to 34 days. Young birds often remain in the vicinity of the nest after they fledge, while they are learning to hunt.

Cooper's hawk was not observed onsite during the field assessment. However, potential foraging and nesting habitat for the species occurs throughout the study area and adjacent woodland areas. This species prefers nesting in riparian woodland habitats, but is also known to nest in oaks near water. The study area may therefore provide marginal quality nesting habitat for this species.

**Tricolored blackbird** (*Agelaius tricolor*) a California species of special concern, is a highly colonial species that primarily nests in freshwater emergent wetlands. Nesting colonies

of this species are considered sensitive by the California Department of Fish and Game. This species generally requires open water, with protected nesting habitat, and suitable foraging areas close to the colony. Breeding and nesting typically take place in dense cattails or tules and may also occur in thickets of willow, blackberry, wild rose, and tall herbs. Nests are usually located a few feet over or near freshwater. Nesting areas must be large enough to support a minimum colony of about 50 pairs (Zeiner et al., 1990a). Colonies may vary in size from about 50 nests to over 20,000 in an area of ten acres or less. The breeding season is typically mid-April through late July. Incubation takes about 11 days, and young leave the nest at about 13 days.

The closest previously documented occurrence of tricolored blackbird nesting is from approximately six miles northwest of the study area, near Gold Hill Road (CNDDDB, 2008). Within the study area, a limited amount of suitable nesting habitat occurs in association with freshwater marsh vegetation and blackberry thickets located adjacent to the two ponds. Based on the presence of suitable nesting habitat, this species is expected to have a reasonable potential for nesting within the study area.

**Silver-haired bat** (*Lasionycteris noctivagans*) is a common species throughout California, but fluctuates significantly in abundance (Zeiner et al., 1990b). It occurs in coastal and montane coniferous forest, oak woodland, and riparian habitats. This species roosts in hollow trees, snags, buildings, rock crevices, in caves, and under bark of trees. Females can form nursery colonies or roost as solitary individuals in hollow trees or dense foliage. Mating primarily occurs in the fall. Young are born from May through July and are weaned at about six weeks (Zeiner et al., 1990b).

There is only one documented occurrence of silver-haired bat in the region surrounding the study area (CNDDDB, 2008). This occurrence is from approximately six miles northeast of the study area along the South Fork of the American River, in an area with dense willow thickets and steep-walled cliffs. The study area may provide periodic foraging habitat for the species and limited suitable roosting habitat for individuals in onsite woodlands. However, no significant roosting activity or nursery colonies are expected to occur on site.

## RECOMMENDATIONS

---

### Waters of the United States

The study area has areas considered waters of the United States. Activities that affect these areas would require a permit from the U.S. Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act. The project would also need to obtain a water quality certification from the Regional Water Quality Control Board pursuant to Section 401 of the federal Clean Water Act. The Corps and the Regional Board would add conditions to the permits that would stipulate the appropriate mitigation, which could include one or more of the following: on site creation, offsite creation, purchase of credits in a mitigation bank, or payments to an in-lieu fund. The precise mitigation and monitoring requirements would depend on the extent of impacts.

## **Streams, Pond, and Riparian Habitat**

Impacts to the bed, bank, or channel of streams or ponds would require a Streambed Alteration Agreement with the California Department of Fish and Game (CDFG). Impacts to the riparian habitat may require a Streambed Alteration Agreement with the CDFG.

## **Oak Woodland, Oaks and Other Trees**

An oak canopy analysis per the El Dorado County General Plan may be required.

## **Special-Status Plants**

Floristic surveys were conducted in accordance to the California Fish and Game guidelines. Approximately 62 Nissenan manzanita individuals were observed during surveys. No other special-status plant species were observed and no further special-status plant surveys are recommended.

## **Special-Status Wildlife**

The two ponds located along the western study area boundary may provide suitable habitat for California red-legged frog. Disturbance of the pond or adjacent vegetation could therefore result in adverse impacts to individuals that may occupy suitable aquatic habitat of the site. Potential disturbance can be avoided, however, through implementation of appropriate protective measures. All disturbance of potential habitat for California red-legged frog, including the two ponds and adjacent vegetation, should be avoided to the extent feasible. In the event that disturbance of aquatic habitat cannot be avoided, a *California Red-legged Frog Habitat Assessment* (USFWS, 2005) should be prepared and submitted to the U.S. Fish and Wildlife Service Sacramento Field Office. The applicant should then contact the U.S. Fish and Wildlife Service to determine if follow-up surveys and avoidance measures are required.

The two ponds located along the western study area boundary provide suitable habitat for northwestern pond turtle. Occurrence of this species was confirmed through direct observation during the August 2006 field survey. Any disturbance of the ponds or adjacent upland habitat should therefore be avoided to the extent feasible. In the event that disturbance cannot be avoided, the California Department of Fish and Game should be contacted immediately to determine appropriate avoidance measures and additional mitigation responsibilities.

Based on the presence of marginal quality nesting and foraging habitat, Cooper's hawk is expected to have some potential for occurring in the study area. Project implementation could therefore result in disturbance of breeding and nesting of this species if construction occurs at any time during the typical breeding season (approximately March 1 through August 31). Nesting of other raptors known from the region, including red-shouldered hawk and red-tailed hawk, could also be adversely affected if construction takes place during the identified breeding/nesting season. Take of any active raptor nest is prohibited under Fish and Game Code Section 3503.5. To avoid take of active raptor nests, pre-construction surveys should be conducted by a qualified biologist no more than 30 days prior to initiation of proposed development

activities. Survey results should then be submitted to the California Department of Fish and Game. If active raptor nests are found on or immediately adjacent to the site, consultation should be initiated with the California Department of Fish and Game to determine appropriate avoidance measures.

Suitable nesting habitat for tricolored blackbird occurs in the vicinity of the two ponds located along the western study area boundary. Depending on the timing of construction, site disturbance could result in disturbance of breeding and nesting activity of this species. According to the California Department of Fish and Game Code 3503, "take" of the nest or eggs of any bird is prohibited, except upon approval from the California Department of Fish and Game. Disturbance of active nests can be avoided during construction through appropriate measures. To the extent feasible, ground disturbance and removal of vegetation should be avoided in the vicinity of the ponds during the typical breeding and nesting period for this species (approximately April through July). If construction activities cannot be avoided during the typical breeding season, the applicant should retain a qualified biologist to conduct a pre-construction survey (approximately one week prior to construction) to determine presence/absence of active nests. If no nesting activities are detected within proposed work areas, construction activities may proceed. If, however, active nests are found, construction should be avoided until after the young have fledged from the nest and achieved independence, or upon approval from the California Department of Fish and Game.



## REFERENCES AND OTHER RESOURCES

---

- Barbour, M.G. and J. Major (eds). 1998. Terrestrial Vegetation of California, Expanded Edition. California Native Plant Society Special Publication Number 9. Sacramento, California.
- California Department of Conservation, Division of Mines and Geology. 1987. Geologic Map of the Sacramento Quadrangle (1:250,000). Sacramento, California.
- California Department of Fish and Game, California Wildlife Habitat Relationships Program. 2000. Complete List of Amphibians, Reptiles, Birds, and Mammals in California. Sacramento, California.
- California Department of Fish and Game, Wildlife and Habitat Data Analysis Branch. 2009. Natural Diversity Data Base Report (CNDDDB). Sacramento, California.
- California Native Plant Society. 2009. Inventory of Rare and Endangered Plants. An online database maintained by the Native Plant Society.
- CalWater: California Interagency Watershed Map of 1999 (The State of California: The California Spatial Information Library, <http://casil.ucdavis.edu/casil/gis.ca.gov/calwater/>, accessed: 2008).
- Clark, W.S. and B.K. Wheeler. 1987. The Peterson Field Guide to Hawks of North America. Houghton Mifflin Company, Boston, Massachusetts.
- Hickman, J. (ed). 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, California.
- Holland, R. F. Preliminary Descriptions of the Terrestrial Natural Communities of California. Unpublished report by the California Department of Fish and Game. Sacramento, California.
- Holland, V.L., and D. J. Keil. 1995. California Vegetation. Kendall/Hunt Publishing Company. Dubuque, Iowa.
- Fix, David and Andy Bezener. 2000. Birds of Northern California. Lone Pine Publishing. Renton, Washington.
- Ingles, Lloyd G. 1965. Mammals of the Pacific States. Stanford University Press. Stanford, California.
- Jameson, E.W., Jr. and H.J. Peeters. 2004. Mammals of California. University of California Press. Berkeley, California.
- National Geographic Society. 1999. Field Guide to the Birds of North America, Third Edition. Washington D.C.

- Sawyer, J.O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society. Sacramento, California.
- Sibley, D.A. 2003. The Sibley Field Guide to Birds of Western North America. Alfred A. Knopf. New York.
- Stebbins, R.C. 1985. A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin Company. Boston, Massachusetts.
- United States Department of Agriculture, NCRS. 1974. Soil Survey of El Dorado Area, California. Sacramento, California.
- United States Fish and Wildlife Service. 2005. Revised Guidance on Site Assessment and Field Surveys for California Red-legged Frog. Sacramento, California.
- United States Fish and Wildlife Service. 2006. Sacramento Fish and Wildlife Office, Species Account: California Red-legged Frog (*Rana aurora draytonii*). Sacramento, California.
- United States Fish and Wildlife Service. 2009. Federal Endangered and Threatened Species that may be affected by Projects in the Placerville, CA USGS 7.5-minute quadrangle. Sacramento, California.
- The University and Jepson Herbaria. 2009. The Jepson Interchange. An online database that updates The Jepson Manual.
- Verner and A. S. Boss, tech. coords. 1980. California wildlife and their habitats: western Sierra Nevada. U.S. Dep. Agric., For. Serv. (Berkeley, Calif.), Gen. Tech. Rep. PSW-37.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1988. California's Wildlife, Volume I. Amphibians and Reptiles. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1990a. California's Wildlife, Volume II: Birds. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1990b. California's Wildlife, Volume III: Mammals. State of California, the Resources Agency, Department of Fish and Game, Sacramento, California.

**Appendix A.**  
**Plant Species Observed Within the Stonehenge Study Area**

---

## Appendix A

### Plant Species Observed Within the Stonehenge Study Area

---

#### Ferns and Allies

---

##### Pteridaceae

*Pentagramma triangularis subsp. triangularis* Goldback fern

#### Gymnosperms

---

##### Pinaceae

*Pinus ponderosa* Pacific ponderosa pine

*Pinus sabiniana* Foothill pine

#### Angiosperms - Dicots

---

##### Amaranthaceae

\**Amaranthus sp.* Amaranthus

##### Anacardiaceae

*Toxicodendron diversilobum* Western poison-oak

##### Apiaceae (Umbelliferae)

\**Anthriscus caucalis* Bur-chervil

\**Daucus carota* Queen Anne's lace

*Daucus pusillus* Rattlesnake weed

*Eryngium castrense* Coyote-thistle

*Sanicula bipinnata* Poison sanicle

*Sanicula bipinnatifida* Purple sanicle

*Sanicula crassicaulis* Gamble weed

\**Torilis arvensis* Field hedge-parsley

##### Apocynaceae

*Asclepias cordifolia* Purple milkweed

*Asclepias sp.* Milkweed

##### Asteraceae (Compositae)

*Achillea millefolium* Common yarrow

*Agoseris grandiflora* Large-flower agoseris

*Agoseris retrorsa* Spear-leaf agoseris

*Agoseris sp.* Agoseris

*Artemisia douglasiana* California mugwort

*Baccharis pilularis* Coyote brush

*Calycadenia sp.* Calycadenia

\**Carduus pycnocephalus* Italian thistle

\**Centaurea solstitialis* Yellow starthistle

*Centromadia fitchii* Fitch's spikeweed

\**Chondrilla juncea* Skeleton weed

\**Cichorium intybus* Chicory

\**Cirsium vulgare* Bull thistle

*Eriophyllum lanatum* Woolly sunflower

---

\* Indicates a non-native species

|  |                        |
|--|------------------------|
| <i>Gnaphalium palustre</i>                       | Western marsh cudweed  |
| <i>Grindelia hirsutula</i>                       | Gumplant               |
| <i>Holocarpha virgata subsp. virgata</i>         | Virgate tarweed        |
| * <i>Hypochaeris glabra</i>                      | Smooth cat's-ear       |
| * <i>Hypochaeris radicata</i>                    | Rough cat's-ear        |
| <i>Jensia rammii</i>                             | Ramm's madia           |
| * <i>Lactuca serriola</i>                        | Prickly lettuce        |
| * <i>Leontodon saxatilis</i>                     | Long-beaked hawkbit    |
| <i>Lessingia nemaclada</i>                       | Lessingia              |
| * <i>Logfia gallica</i>                          | Narrowleaf cottonrose  |
| <i>Madia elegans</i>                             | Common madia           |
| <i>Madia exigua</i>                              | Threadstem madia       |
| <i>Madia gracilis</i>                            | Slender tarweed        |
| <i>Madia subspicata</i>                          | Foothill tarweed       |
| <i>Matricaria discoidea</i>                      | Pineapple-weed         |
| <i>Micropus californicus subsp. californicus</i> | Cottontop              |
| <i>Pseudognaphalium benolens</i>                 | Everlasting            |
| <i>Pseudognaphalium californicum</i>             | California everlasting |
| <i>Psilocarphus brevissimus var. brevissimus</i> | Dwarf woolly-heads     |
| <i>Psilocarphus tenellus var. globiferus</i>     | Round woolly-marbles   |
| <i>Psilocarphus tenellus var. tenellus</i>       | Slender woolly-marbles |
| * <i>Silybum marianum</i>                        | Milk thistle           |
| <i>Solidago velutina subsp. californica</i>      | California goldenrod   |
| * <i>Soliva sessilis</i>                         | Field burrweed         |
| * <i>Sonchus asper</i>                           | Prickly sow-thistle    |
| * <i>Tragopogon dubius</i>                       | Yellow salsify         |
| * <i>Tragopogon porrifolius</i>                  | Common salsify         |
| <i>Wyethia angustifolia</i>                      | Narrowleaf mules ears  |
| <i>Wyethia helenioides</i>                       | Gray mules ears        |
| <i>Wyethia sp.</i>                               | Mule's ears            |
| <i>Xanthium strumarium</i>                       | Cocklebur              |

### **Boraginaceae**

|   |                         |
|---|-------------------------|
| <i>Amsinckia menziesii</i>                      | Common fiddleneck       |
| <i>Eriodictyon californicum</i>                 | California yerba santa  |
| <i>Nemophila heterophylla</i>                   | White nemophila         |
| <i>Pectocarya pusilla</i>                       | Pectocarya              |
| <i>Phacelia sp.</i>                             | Phacelia                |
| <i>Plagiobothrys nothofulvus</i>                | Rusty popcornflower     |
| <i>Plagiobothrys stipitatus var. micranthus</i> | Stipitate popcornflower |

### **Brassicaceae (Cruciferae)**

|  |                      |
|--|----------------------|
| * <i>Hirschfeldia incana</i>           | Short-podded mustard |
| <i>Lepidium oblongum var. oblongum</i> | Wayside peppergrass  |
| * <i>Nasturtium officinale</i>         | Water cress          |
| <i>Rorippa curvisiliqua</i>            | Western yellow cress |
| <i>Thysanocarpus curvipes</i>          | Lacepod              |
| <i>Thysanocarpus radians</i>           | Spoke-pod            |

### **Caprifoliaceae**

|                              |                       |
|------------------------------|-----------------------|
| <i>Lonicera interrupta</i>   | Chaparral honeysuckle |
| <i>Symphoricarpos mollis</i> | Creeping snowberry    |

## Caryophyllaceae

|   |                     |
|---|---------------------|
| * <i>Cerastium glomeratum</i>             | Mouse-ear chickweed |
| * <i>Scleranthus annuus subsp. annuus</i> | Annual knawel       |
| * <i>Silene gallica</i>                   | Windmill-pink       |
| * <i>Spergularia rubra</i>                | Ruby sand-spurrey   |
| * <i>Stellaria media</i>                  | Common chickweed    |

## Convolvulaceae

|                                |               |
|--------------------------------|---------------|
| <i>Calystegia occidentalis</i> | Morning-glory |
| * <i>Convolvulus arvensis</i>  | Bindweed      |

## Crassulaceae

|                           |                  |
|---------------------------|------------------|
| * <i>Crassula tillaea</i> | Mossy pygmy-weed |
|---------------------------|------------------|

## Cucurbitaceae

|                       |                |
|-----------------------|----------------|
| <i>Marah oreganus</i> | Coast man-root |
|-----------------------|----------------|

## Ericaceae

|                                 |                     |
|---------------------------------|---------------------|
| <i>Arctostaphylos nissenana</i> | Nissenan manzanita  |
| <i>Arctostaphylos viscida</i>   | Whiteleaf manzanita |

## Euphorbiaceae

|                             |                |
|-----------------------------|----------------|
| <i>Croton setigerus</i>     | Turkey mullein |
| * <i>Euphorbia lathyris</i> | Caper spurge   |

## Fabaceae (Leguminosae)

|  |                      |
|--|----------------------|
| * <i>Lathyrus cicera</i>                   | Wild-pea             |
| <i>Lathyrus sulphureus var. sulphureus</i> | Snub pea             |
| * <i>Lotus corniculatus</i>                | Birdfoot trefoil     |
| <i>Lotus micranthus</i>                    | Hill lotus           |
| <i>Lotus purshianus var. purshianus</i>    | Spanish-clover       |
| <i>Lupinus albicaulis</i>                  | Pine lupine          |
| <i>Lupinus bicolor</i>                     | Miniature lupine     |
| <i>Lupinus formosus var. robustus</i>      | Lupine               |
| <i>Lupinus nanus</i>                       | Sky lupine           |
| * <i>Medicago polymorpha</i>               | California burclover |
| * <i>Trifolium dubium</i>                  | Little hop clover    |
| * <i>Trifolium glomeratum</i>              | Clover               |
| * <i>Trifolium hirtum</i>                  | Rose clover          |
| * <i>Trifolium repens</i>                  | White clover         |
| * <i>Trifolium subterraneum</i>            | Subterranean clover  |
| <i>Trifolium wormskioldii</i>              | Cow clover           |
| * <i>Vicia hirsuta</i>                     | Tiny vetch           |
| * <i>Vicia sativa</i>                      | Common vetch         |
| * <i>Vicia villosa</i>                     | Winter vetch         |

## Fagaceae

|   |                      |
|---|----------------------|
| <i>Quercus chrysolepis</i>              | Canyon live oak      |
| <i>Quercus douglasii</i>                | Blue oak             |
| <i>Quercus kelloggii</i>                | California black oak |
| <i>Quercus lobata</i>                   | Valley oak           |
| <i>Quercus wislizeni var. wislizeni</i> | Interior live oak    |
| <i>Quercus xmorehus</i>                 | Oracle oak           |

## Gentianaceae

*Zeltnera muehlenbergii*

June centaury

## Geraniaceae

\**Erodium botrys*

Broad-leaf filaree

\**Erodium cicutarium*

Red-stem filaree

\**Erodium moschatum*

White-stem filaree

*Erodium sp.*

Filaree

\**Geranium dissectum*

Cut-leaf geranium

\**Geranium molle*

Dove's-foot geranium

## Hypericaceae

\**Hypericum perforatum*

Klamathweed

## Juglandaceae

*Juglans hindsii*

Northern California black walnut

## Lamiaceae (Labiatae)

\**Mentha pulegium*

Pennyroyal

*Monardella candicans*

Sierra monardella

*Pogogyne serphylloides*

Thyme-like mesamint

*Scutellaria californica*

California skullcap

*Trichostema lanceolatum*

Vinegar weed

## Linaceae

\**Linum usitatissimum*

Common flax

## Lythraceae

\**Lythrum hyssopifolia*

Hyssop loosestrife

## Malvaceae

*Sidalcea malviflora*

Checker mallow

## Myrsinaceae

\**Anagalis arvensis*

Scarlet pimpernel

## Onagraceae

*Clarkia biloba subsp. biloba*

Mule-ear clarkia

*Clarkia purpurea*

Winecup clarkia

*Epilobium brachycarpum*

Summer cottonweed

*Epilobium ciliatum*

Hairy willow-herb

*Epilobium densiflorum*

Dense-flower spike-primrose

*Epilobium torreyi*

Brook spike-primrose

*Ludwigia peploides*

Water-primrose

## Orobanchaceae

*Castilleja attenuata*

Valley tassels

*Castilleja lacera*

Owl's clover

*Triphysaria eriantha*

Butter-and-eggs

## Papaveraceae

*Eschscholzia californica*

California poppy

*Eschscholzia lobbii*

Fryingpan poppy

## Phrymaceae

*Mimulus aurantiacus*

Sticky monkeyflower

*Mimulus guttatus*

Common monkeyflower

## Plantaginaceae

|  |                        |
|--|------------------------|
| <i>Callitriche heterophylla</i> var. <i>heterophylla</i> | Larger water-starwort  |
| <i>Collinsia heterophylla</i>                            | Chinese houses         |
| <i>Gratiola ebracteata</i>                               | Bractless hedge-hyssop |
| * <i>Kickxia elatine</i>                                 | Sharppoint fluvellin   |
| <i>Plantago erecta</i>                                   | Plantain               |
| * <i>Plantago lanceolata</i>                             | English plantain       |

## Polemoniaceae

|   |                          |
|---|--------------------------|
| <i>Allophyllum divaricatum</i>                        | False gilia              |
| <i>Allophyllum gilioides</i> subsp. <i>gilioides</i>  | Blue false gilia         |
| <i>Gilia capitata</i>                                 | Globe gilia              |
| <i>Leptosiphon bicolor</i>                            | Bicolored linanthus      |
| <i>Leptosiphon parviflorus</i>                        | Linanthus                |
| <i>Navarretia intertexta</i> subsp. <i>intertexta</i> | Needle-leaved navarretia |
| <i>Navarretia squarrosa</i>                           | Skunkweed                |

## Polygonaceae

|                              |                 |
|------------------------------|-----------------|
| <i>Eriogonum nudum</i>       | Nude buckwheat  |
| <i>Persicaria</i> sp.        | Smartweed       |
| * <i>Polygonum aviculare</i> | Common knotweed |
| <i>Polygonum</i> sp.         | Polygonum       |
| * <i>Rumex acetosella</i>    | Sheep sorrel    |
| * <i>Rumex crispus</i>       | Curly dock      |
| * <i>Rumex pulcher</i>       | Fiddle dock     |

## Portulacaceae

|                             |                 |
|-----------------------------|-----------------|
| <i>Claytonia perfoliata</i> | Miner's lettuce |
|-----------------------------|-----------------|

## Ranunculaceae

|   |                       |
|---|-----------------------|
| <i>Delphinium hansenii</i> subsp. <i>hansenii</i>     | Hansen's larkspur     |
| <i>Delphinium variegatum</i> subsp. <i>variegatum</i> | Royal larkspur        |
| <i>Ranunculus bonariensis</i> var. <i>trisepalus</i>  | Vernal pool buttercup |
| * <i>Ranunculus muricatus</i>                         | Spiny-fruit buttercup |
| <i>Ranunculus occidentalis</i>                        | Western buttercup     |

## Rhamnaceae

|  |                      |
|--|----------------------|
| <i>Ceanothus cuneatus</i> var. <i>cuneatus</i>       | Buck brush           |
| <i>Ceanothus integerrimus</i>                        | Deer brush           |
| <i>Ceanothus lemmonii</i>                            | Lemmon's ceanothus   |
| <i>Ceanothus tomentosus</i>                          | Woollyleaf ceanothus |
| <i>Frangula californica</i> subsp. <i>tomentella</i> | Hoary coffeeberry    |
| <i>Rhamnus ilicifolia</i>                            | Hollyleaf redberry   |

## Rosaceae

|   |                      |
|---|----------------------|
| <i>Adenostoma fasciculatum</i>                    | Chamise              |
| * <i>Cotoneaster</i> sp.                          | Cotoneaster          |
| <i>Heteromeles arbutifolia</i>                    | Toyon                |
| <i>Horkelia californica</i> subsp. <i>dissita</i> | California honey-dew |
| <i>Potentilla glandulosa</i>                      | Glandular cinquefoil |
| * <i>Prunus cerasifera</i>                        | Cherry plum          |
| * <i>Pyracantha</i> sp.                           | Pyracantha           |
| * <i>Rosa</i> sp.                                 | Wild rose            |
| * <i>Rubus discolor</i>                           | Himalayan blackberry |



**Rubiaceae**

|   |                   |
|---|-------------------|
| * <i>Galium aparine</i>                   | Goose grass       |
| * <i>Galium parisiense</i>                | Wall bedstraw     |
| <i>Galium porrigens</i> var. <i>tenue</i> | Climbing bedstraw |

**Salicaceae**

|  |                      |
|--|----------------------|
| <i>Populus fremontii</i> subsp. <i>fremontii</i> | Fremont cottonwood   |
| <i>Salix exigua</i>                              | Narrow-leaved willow |
| <i>Salix laevigata</i>                           | Red willow           |
| <i>Salix lasiolepis</i>                          | Arroyo willow        |

**Sapindaceae**

|                             |                    |
|-----------------------------|--------------------|
| <i>Aesculus californica</i> | California buckeye |
|-----------------------------|--------------------|

**Saxifragaceae**

|                               |               |
|-------------------------------|---------------|
| <i>Lithophragma affine</i>    | Woodland star |
| <i>Lithophragma bolanderi</i> | Woodland star |

**Scrophulariaceae**

|                                 |                    |
|---------------------------------|--------------------|
| <i>Scrophularia californica</i> | California figwort |
| * <i>Verbascum blattaria</i>    | Moth mullein       |
| * <i>Verbascum thapsus</i>      | Woolly mullein     |

**Simaroubaceae**

|                              |                |
|------------------------------|----------------|
| * <i>Ailanthus altissima</i> | Tree of heaven |
|------------------------------|----------------|

**Solanaceae**

|                        |         |
|------------------------|---------|
| * <i>Nicotiana</i> sp. | Tobacco |
|------------------------|---------|

**Valerianaceae**

|                             |                          |
|-----------------------------|--------------------------|
| <i>Plectritis macrocera</i> | Short-spurred plectritis |
|-----------------------------|--------------------------|

**Verbenaceae**

|  |                 |
|--|-----------------|
| <i>Verbena lasiostachys</i> var. <i>lasiostachys</i> | Western verbena |
|--|-----------------|

**Violaceae**

|   |        |
|---|--------|
| <i>Viola purpurea</i> subsp. <i>quercetorum</i> | Violet |
|---|--------|

**Viscaceae**

|  |                   |
|--|-------------------|
| <i>Phoradendron serotinum</i> subsp. <i>macrophyllum</i> | Bigleaf mistletoe |
| <i>Phoradendron serotinum</i> subsp. <i>tomentosum</i>   | Oak mistletoe     |

**Angiosperms -Monocots**

---

**Agavaceae**

|  |            |
|--|------------|
| <i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i> | Soap plant |
|--|------------|

**Alismataceae**

|                                 |                      |
|---------------------------------|----------------------|
| <i>Alisma plantago-aquatica</i> | Water plantain       |
| <i>Sagittaria latifolia</i>     | Broad-leaf arrowhead |

**Cyperaceae**

|                                |                       |
|--------------------------------|-----------------------|
| <i>Carex barbarae</i>          | Santa Barbara sedge   |
| <i>Carex praegracilis</i>      | Clustered field-sedge |
| <i>Carex</i> sp.               | Sedge                 |
| <i>Cyperus eragrostis</i>      | Tall flatsedge        |
| <i>Eleocharis macrostachya</i> | Creeping spikerush    |

*\*Eleocharis pachycarpa*  
*Schoenoplectus acutus var. occidentalis*

Black sand spikerush  
Hard-stem tule

## Iridaceae

*Sisyrinchium bellum*

Blue-eyed grass

## Juncaceae

*Juncus bufonius*  
*Juncus mexicanus*  
*Juncus occidentalis*  
*Juncus phaeocephalus*  
*Juncus xiphioides*  
*Luzula comosa*

Toad rush  
Mexican rush  
Slender rush  
Brown-headed rush  
Iris-leaf rush  
Common wood-rush

## Juncaginaceae

*Lilaea scilloides*

Flowering quillwort

## Liliaceae

*Calochortus albus*  
*Calochortus monophyllus*

White globe lily  
Yellow mariposa lily

## Poaceae (Gramineae)

*\*Aegilops triuncialis*  
*Agrostis exarata*  
*\*Aira caryophyllea*  
*\*Anthoxanthum odoratum*  
*\*Avena barbata*  
*\*Avena fatua*  
*\*Avena sp.*  
*\*Briza minor*  
*\*Bromus catharticus*  
*\*Bromus diandrus*  
*\*Bromus hordeaceus*  
*\*Bromus inermis subsp. inermis*  
*\*Bromus tectorum*  
*\*Crypsis schoenoides*  
*\*Cynodon dactylon*  
*\*Cynosurus echinatus*  
*\*Dactylis glomerata*  
*Deschampsia danthonioides*  
*Elymus glaucus*  
*Elymus multisetus*  
*\*Gastridium phleoides*  
*\*Glyceria declinata*  
*Glyceria x occidentalis*  
*\*Holcus lanatus*  
*\*Hordeum marinum subsp. gussoneanum*  
*\*Hordeum murinum*  
*\*Lolium multiflorum*  
*Melica californica*  
*Nassella pulchra*  
*\*Phalaris aquatica*  
*\*Poa annua*  
*\*Poa bulbosa subsp. vivipara*

Barbed goatgrass  
Spike redtop  
Silver European hairgrass  
Sweet vernal grass  
Slender wild oat  
Wild oat  
Oat  
Small quaking grass  
Rescue grass  
Ripgut grass  
Soft chess  
Smooth brome  
Cheat grass  
Swamp pricklegrass  
Bermudagrass  
Hedgehog dogtail  
Orchard grass  
Annual hairgrass  
Blue wildrye  
Big squirreltail  
Nit grass  
Waxy mannagrass  
Western mannagrass  
Common velvet grass  
Mediterranean barley  
Foxtail barley  
Italian ryegrass  
California melic  
Purple needlegrass  
Harding grass  
Annual bluegrass  
Bulbous bluegrass

*Poa sp.*

\**Polypogon monspeliensis*

\**Taeniatherum caput-medusae*

\**Vulpia bromoides*

*Vulpia microstachys*

\**Vulpia myuros*

Bluegrass

Annual beard grass

Medusahead

Brome fescue

Small fescue

Rattail fescue

### **Potamogetonaceae**

*Potamogeton sp.*

Pondweed

### **Themidaceae**

*Brodiaea elegans subsp. elegans*

*Dichelostemma capitatum subsp. capitatum*

*Dichelostemma multiflorum*

*Dichelostemma volubile*

*Triteleia hyacinthina*

Harvest brodiaea

Blue dicks

Wild hyacinth

Twining brodiaea

White brodiaea

### **Typhaceae**

*Typha latifolia*

Broad-leaved cattail

**Appendix B.**  
**Wildlife Species Observed Within the Stonehenge Study Area**

---

**Appendix B.**  
**Wildlife Species Observed Within the Stonehenge Study Area**

---

**Amphibians**

---

|                     |                           |
|---------------------|---------------------------|
| Pacific chorus frog | <i>Pseudacris regilla</i> |
| Bullfrog            | <i>Rana catesbeiana</i>   |

---

**Reptiles**

---

|                           |                                      |
|---------------------------|--------------------------------------|
| Northwestern pond turtle  | <i>Actinemys marmorata marmorata</i> |
| Western fence lizard      | <i>Sceloporus occidentalis</i>       |
| Southern alligator lizard | <i>Elgaria multicarinata</i>         |

---

**Birds**

---

|                      |                                |
|----------------------|--------------------------------|
| Great blue heron     | <i>Ardea herodias</i>          |
| Great egret          | <i>Ardea alba</i>              |
| Green heron          | <i>Butorides virescens</i>     |
| Turkey vulture       | <i>Cathartes aura</i>          |
| Mallard              | <i>Anas platyrhynchos</i>      |
| California quail     | <i>Callipepla californica</i>  |
| Killdeer             | <i>Charadrius vociferus</i>    |
| Mourning dove        | <i>Zenaida macroura</i>        |
| Acorn woodpecker     | <i>Melanerpes formicivorus</i> |
| Northern flicker     | <i>Colaptes auratus</i>        |
| Western kingbird     | <i>Tyrannus verticalis</i>     |
| Western scrub-jay    | <i>Aphelocoma californica</i>  |
| American crow        | <i>Corvus brachyrhynchos</i>   |
| Barn swallow         | <i>Hirundo rustica</i>         |
| Oak titmouse         | <i>Baeolophus inornatus</i>    |
| Wrentit              | <i>Chamaea fasciata</i>        |
| Northern mockingbird | <i>Mimus polyglottos</i>       |
| California towhee    | <i>Pipilo crissalis</i>        |
| Dark-eyed junco      | <i>Junco hyemalis</i>          |
| Red-winged blackbird | <i>Agelaius phoeniceus</i>     |
| House finch          | <i>Carpodacus mexicanus</i>    |
| Lesser goldfinch     | <i>Carduelis psaltria</i>      |

---

**Mammals**

---

|                            |                              |
|----------------------------|------------------------------|
| Western gray squirrel      | <i>Sciurus griseus</i>       |
| Black-tailed jackrabbit    | <i>Lepus californicus</i>    |
| California ground squirrel | <i>Spermophilus beecheyi</i> |
| Botta's pocket gopher      | <i>Thomomys bottae</i>       |
| Coyote                     | <i>Canis latrans</i>         |
| Raccoon                    | <i>Procyon lotor</i>         |
| Mule deer                  | <i>Odocoileus hemionus</i>   |

**Appendix C.**  
**Special-Status Plant Species Known to Occur in the Region of the Stonehenge Study Area**

**Appendix C**  
**Special-Status Plant Species Known to Occur in the Region of the Stonehenge Study Area**

| Family                | Taxon                             | Common Name | Status*                                 | Flowering Period | Habitat  | Probability on Project Site                                  |
|-----------------------|-----------------------------------|-------------|---|------------------|--|--|
| <b>Adoxaceae</b>      |                                   |             |   |                  |  |  |
|                       | <i>Viburnum ellipticum</i>        |             | Fed: -<br>State: -<br>CNPS: List 2.3    | May-July         | Chaparral; cismontane woodland;<br>lower montane coniferous forest.                        | Possible. Limited suitable habitat occurs in the study area. |
|                       | Western viburnum                  |             |   |                  |  |  |
| <b>Agavaceae</b>      |                                   |             |   |                  |  |  |
|                       | <i>Chlorogalum grandiflorum</i>   |             | Fed: -<br>State: -<br>CNPS: List 1B.2   | May-June         | Chaparral; cismontane woodland;<br>[serpentinite or gabbroic].                             | None. Habitat does not occur in the study area.              |
|                       | Red Hills soaproot                |             |   |                  |  |  |
| <b>Asteraceae</b>     |                                   |             |   |                  |  |  |
|                       | <i>Packera layneae</i>            |             | Fed: FT<br>State: CR<br>CNPS: List 1B.2 | April-July       | Chaparral; cismontane woodland;<br>[serpentinite or gabbroic].                             | None. Habitat does not occur in the study area.              |
|                       | Layne's ragwort                   |             |   |                  |  |  |
|                       | <i>Wyethia reticulata</i>         |             | Fed: -<br>State: -<br>CNPS: List 1B.2   | May-July         | Chaparral; cismontane woodland;<br>lower montane coniferous forest;<br>[clay or gabbroic]. | Possible. Suitable habitat occurs in the study area.         |
|                       | El Dorado County mules ears       |             |   |                  |  |  |
| <b>Cistaceae</b>      |                                   |             |   |                  |  |  |
|                       | <i>Helianthemum suffrutescens</i> |             | Fed: -<br>State: -<br>CNPS: List 3.2    | April-June       | Chaparral (often serpentinite,<br>gabbroic, or Ione soil).                                 | None. Habitat does not occur in the study area.              |
|                       | Bisbee Peak rush-rose             |             |   |                  |  |  |
| <b>Convolvulaceae</b> |                                   |             |   |                  |  |  |
|                       | <i>Calystegia stebbinsii</i>      |             | Fed: FE<br>State: CE<br>CNPS: List 1B.1 | May-June         | Chaparral (openings); cismontane<br>woodland; [serpentinite or<br>gabbroic].               | None. Habitat does not occur in the study area.              |
|                       | Stebbins' false bindweed          |             |   |                  |  |  |

**Appendix C**  
**Special-Status Plant Species Known to Occur in the Region of the Stonehenge Study Area**

| Family<br>Taxon<br>Common Name                                     | Status*                                 | Flowering Period | Habitat   | Probability on Project Site                          |
|--|---|------------------|---|--|
| <b>Ericaceae</b>   |   |                  |   |  |
| <i>Arctostaphylos nissenana</i><br>Nissenan manzanita              | Fed: -<br>State: -<br>CNPS: List 1B.2   | February-March   | Closed-cone coniferous forest;<br>chaparral.  | Occurs.  |
| <b>Juglandaceae</b>  |   |                  |   |  |
| <i>Juglans hindsii</i><br>Northern California black walnut         | Fed: -<br>State: -<br>CNPS: List 1B.1   | April-May        | Riparian forest; riparian woodland.   | Occurs.  |
| <b>Liliaceae</b>   |   |                  |   |  |
| <i>Allium jepsonii</i><br>Jepson's onion                           | Fed: -<br>State: -<br>CNPS: List 1B.2   | May-August       | Cismontane woodland; lower<br>montane coniferous forest<br>[serpentinite or volcanic]. 300 to<br>1160 meters. | None. Habitat does not occur in the study area.      |
| <i>Calochortus clavatus avius</i><br>Pleasant Valley mariposa lily | Fed: -<br>State: -<br>CNPS: List 1B.2   | May-July         | Lower montane coniferous forest,<br>(Josephine silt loam and volcanic).                                       | Possible. Suitable habitat occurs in the study area. |
| <b>Onagraceae</b>  |   |                  |   |  |
| <i>Clarkia biloba brandegeae</i><br>Brandegee's clarkia            | Fed: -<br>State: -<br>CNPS: List 1B.2   | May-July         | Chaparral; cismontane woodland<br>[often on roadcuts].  | Possible. Suitable habitat occurs in the study area. |
| <b>Rhamnaceae</b>  |   |                  |   |  |
| <i>Ceanothus roderickii</i><br>Pine Hill ceanothus                 | Fed: FE<br>State: CR<br>CNPS: List 1B.2 | May-June         | Chaparral; cismontane woodland;<br>[serpentinite or gabbroic].  | Possible. Suitable habitat occurs in the study area. |



## Appendix C

### Special-Status Plant Species Known to Occur in the Region of the Stonehenge Study Area

| Family<br>Taxon<br>Common Name   | Status*                                 | Flowering Period | Habitat  | Probability on Project Site                          |
|--|---|------------------|--|--|
| <b>Rosaceae</b>  |   |                  |  |  |
| <i>Horkelia parryi</i><br>Parry's horkelia                             | Fed: -<br>State: -<br>CNPS: List 1B.2   | April-June       | Chaparral; cismontane woodland;<br>[especially lone formation].                    | Possible. Suitable habitat occurs in the study area. |
| <b>Rubiaceae</b>   |   |                  |  |  |
| <i>Galium californicum sierrae</i><br>Eldorado bedstraw                | Fed: FE<br>State: CR<br>CNPS: List 1B.2 | May-June         | Chaparral; cismontane woodland;<br>lower montane coniferous forest;<br>[gabbroic]. | None. Habitat does not occur in the study area.      |
| <b>Sterculiaceae</b>   |   |                  |  |  |
| <i>Fremontodendron californicum decumbens</i><br>Pine Hill flannelbush | Fed: FE<br>State: CR<br>CNPS: List 1B.2 | April-June       | Chaparral; cismontane woodland;<br>[gabbroic or serpentinite].                     | None. Habitat does not occur in the study area.      |

#### \*Status

Federal:  
 FE - Federal Endangered  
 FT - Federal Threatened  
 FPE - Federal Proposed Endangered  
 FPT - Federal Proposed Threatened  
 FC - Federal Candidate

State:  
 CE - California Endangered  
 CT - California Threatened  
 CR - California Rare  
 CSC - California Species of Special Concern

CNPS (California Native Plant Society - List.RED Code):  
 List 1A - Extinct  
 List 1B - Plants rare, threatened, or endangered in California and elsewhere  
 List 2 - Plants rare, threatened, or endangered in California, more common elsewhere  
 List 3 - Plants about which more information is needed, a review list  
 List 4 - Plants of limited distribution, a watch list  
 RED Code  
 1 - Seriously endangered (>80% of occurrences threatened)  
 2 - Fairly endangered (20 to 80% of occurrences threatened)  
 3 - Not very endangered (<20% of occurrences threatened)

**Appendix D.**  
**Special-Status Wildlife Species Known to Occur in the Region of the Stonehenge  
Study Area**

**Appendix D.**  
**Special-Status Wildlife Species Known to Occur in the Region of the Stonehenge Study Area**

|   | Status*                           | Habitat  | Probability on Project Site   |
|---|-----------------------------------|--|---|
| <b>Insects</b>  |                                   |  |   |
| Valley elderberry longhorn beetle<br><i>Desmocerus californicus dimorphus</i> | Fed: FT<br>State: -<br>Other: *   | Requires host plant, elderberry ( <i>Sambucus</i> spp.) for most of its life cycle. Shrubs must have stem diameters at ground level of 1.0 inch or greater and shrubs must be found less than 3,000 feet in elevation. Typically riparian and upland associated. | None. No suitable habitat (elderberry plants) present onsite.   |
| <b>Amphibians</b>   |                                   |  |   |
| California red-legged frog<br><i>Rana aurora draytonii</i>                    | Fed: FT<br>State: CSC<br>Other: - | Occurs in lowlands and foothills in deeper pools and slow-moving streams, usually with emergent wetland vegetation. Requires 11-20 weeks of permanent water for larval development.  | Possible. Marginal quality habitat occurs in association with two ponds located along western site boundary. Closest known occurrence is from approximately 12 miles east of the site, along the east side of Folsom Lake.                                |
| Foothill yellow-legged frog<br><i>Rana boylei</i>                             | Fed: -<br>State: CSC<br>Other: *  | Found in partially shaded, shallow streams with rocky substrates. Needs some cobble-sized rocks as a substrate for egg laying. Requires water for 15 weeks for larval transformation.  | Unlikely. No suitable aquatic habitat observed within project site. Closely associated with steeper gradient streams with rocky substrate and some permanent surface water. Closest known occurrence is from Indian Creek, 10 miles northwest of site.    |
| <b>Reptiles</b>   |                                   |  |   |
| Northwestern pond turtle<br><i>Actinemys marmorata marmorata</i>              | Fed: -<br>State: CSC<br>Other: *  | Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires suitable basking sites and upland habitat for egg laying.   | Occurs. Limited area of suitable habitat in two ponds located along western site boundary. Three pond turtles observed in eastern pond during field survey.   |
| California horned lizard<br><i>Phrynosoma coronatum frontale</i>              | Fed: -<br>State: CSC<br>Other: -  | Found in a variety of habitats, but most common in sandy washes with scattered shrubs. Requires open areas for sunning, shrubs for cover, and sandy soil for hiding.   | Unlikely. Marginal quality habitat on site. Prefers open habitats of lowlands, such as sandy washes and flood plains. No individuals observed within project site during field survey. Closest known occurrence is from 9 miles west of the project site. |
| <b>Birds</b>  |                                   |  |   |
| Cooper's hawk<br><i>Accipiter cooperii</i>                                    | Fed: -<br>State: WL<br>Other: -   | Breeds in deciduous, mixed, and coniferous forests. Becoming more common in suburban and urban areas. Occurs in open to interrupted woodland.  | Possible. Suitable foraging and nesting habitat located throughout woodland areas of the project site. Known from project region.   |

## Appendix D.

### Special-Status Wildlife Species Known to Occur in the Region of the Stonehenge Study Area

|  | Status*                          | Habitat  | Probability on Project Site   |
|--|----------------------------------|--|---|
| Northern goshawk<br><i>Accipiter gentilis</i>    | Fed: -<br>State: CSC<br>Other: * | Dense, mature coniferous forests, most typically dense fir stands in the Sierra Nevada mountains.  | Unlikely. No suitable habitat (dense, mature coniferous forest) present on site. Associated with coniferous forests at higher elevations. |
| Tricolored blackbird<br><i>Agelaius tricolor</i> | Fed: -<br>State: CSC<br>Other: * | Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging. | Possible. Limited suitable nesting habitat occurs in vicinity of two ponds located along western site boundary.                           |

#### Mammals

|   |                                  |  |  |
|---|----------------------------------|--|--|
| Silver-haired bat<br><i>Lasionycteris noctivagans</i> | Fed: -<br>State: CSC<br>Other: - | Coniferous forests, oak woodland, and riparian habitats. Roosts in hollow trees, snags, buildings, and rocks. Migratory species. | Possible. Marginal quality habitat occurs in two ponds along western site boundary. Closest known occurrences are from approximately 15 miles west of the site, along east side of Folsom Lake, and 7.5 miles east, just upstream of Weber Reservoir." |
|---|----------------------------------|--|--|

|                |  |  |   |
|----------------|--|--|---|
| <b>*Status</b> | Federal:   | State:   | Other:  |
|                | FE - Federal Endangered<br>FT - Federal Threatened<br>FPE - Federal Proposed Endangered<br>FPT - Federal Proposed Threatened<br>FC - Federal Candidate<br>FPD - Federal Proposed for Delisting | CE - California Endangered<br>CT - California Threatened<br>CR - California Rare<br>CC - California Candidate<br>CFP - California Fully Protected<br>CSC - California Species of Special Concern | Some species have protection under the other designations, such as the California Department of Forestry Sensitive Species, Bureau of Land Management Sensitive Species, U.S.D.A. Forest Service Sensitive Species, and the Migratory Bird Treaty Act. Raptors and their nests are protected by provisions of the California Fish and Game Code. Certain areas, such as wintering areas of the monarch butterfly, may be protected by policies of the California Department of Fish and Game. |

---

Aquatic Resources Delineation Report  
for  
Stonehenge Springs  
El Dorado County, CA

---

SPK-200702110

Prepared by:

*Sycamore Environmental Consultants, Inc.*  
6355 Riverside Blvd., Suite C  
Sacramento, CA 95831  
Phone: 916/ 427-0703  
Contact: Chuck Hughes, M.S.

Prepared for:

*Stonehenge Springs, LLC*  
2700 South Azusa Avenue  
West Covina, CA 91792  
Contact: Mr. Kevin Sweeney

6 February 2018

---

[This page intentionally blank]



Aquatic Resources Delineation Report  
for  
Stonehenge Springs

El Dorado County, CA

---

**Table of Contents**

|   |           |
|---|-----------|
| <b>I. INTRODUCTION.....</b>   | <b>1</b>  |
| A. Purpose.....   | 1         |
| B. Project Location.....  | 1         |
| C. Project Applicant .....  | 1         |
| D. Project Description .....  | 1         |
| E. Previous Delineation Work .....  | 7         |
| <b>II. STUDY METHODS.....</b>   | <b>7</b>  |
| A. Data Sources.....  | 7         |
| B. Survey Dates and Personnel .....   | 8         |
| C. Survey Methods.....  | 8         |
| D. Jurisdictional Data .....  | 8         |
| E. Mapping of Data and Calculation of Acreages.....   | 8         |
| F. Definitions.....   | 9         |
| <b>III. SETTING .....</b>   | <b>10</b> |
| A. Topography .....   | 10        |
| B. Existing Field Conditions.....   | 11        |
| C. Vegetation .....   | 11        |
| D. Existing Level of Disturbance .....  | 11        |
| E. Soils .....  | 11        |
| F. National Wetlands Inventory Map.....   | 12        |
| <b>IV. WATERS AND WETLANDS.....</b>   | <b>15</b> |
| A. Waters .....   | 16        |
| B. Wetlands.....  | 17        |
| <b>V. REGULATORY ANALYSIS AND DISCUSSION .....</b>  | <b>31</b> |
| A. TNWs and Adjacent Wetlands .....   | 31        |
| B. RPWs that flow directly or indirectly into TNWs .....  | 31        |
| C. Non-RPWs that flow directly or indirectly into TNWs .....  | 32        |
| D. Wetlands directly abutting RPWs that flow directly or indirectly into TNWs.....                      | 32        |
| E. Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs ..... | 32        |
| F. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs .....                       | 33        |
| G. Impoundments of waters .....   | 33        |
| H. Isolated (interstate or intrastate) waters, including isolated wetlands.....                         | 33        |
| I. Non-jurisdictional waters .....  | 33        |
| J. Summary of Jurisdictional Acreages .....   | 33        |
| <b>VI. LITERATURE CITED.....</b>  | <b>36</b> |
| <b>VII. REPORT PREPARERS .....</b>  | <b>37</b> |

## **Figures**

|   |    |
|---|----|
| Figure 1. Project Location Map.....           | 3  |
| Figure 2. Aerial Photograph.....              | 5  |
| Figure 3. Soils Map .....                     | 13 |
| Figure 4. Jurisdictional Delineation Map..... | 19 |

## **Tables**

|  |    |
|--|----|
| Table 1. Data Sources.....   | 7  |
| Table 2. Summary of Waters and Wetlands.....                       | 15 |
| Table 3. Rapanos Guidance Correlation of Wetlands and Waters ..... | 34 |

## **Appendices**

|   |  |
|---|--|
| Appendix A. Data Sheets                           |  |
| Appendix B. Photographs                           |  |
| Appendix C. Plant Species Recorded at Data Points |  |
| Appendix D. FEMA Flood Insurance Rate Map (FIRM)  |  |
| Appendix E. Aquatic Resources Table               |  |



## **I. INTRODUCTION**

---

### **A. Purpose**

Sycamore Environmental Consultants, Inc., conducted a delineation of aquatic resources for the Stonehenge Springs Biological Study Area (BSA) in El Dorado County. The purpose of the delineation was to identify wetlands and waters, and identify features that meet the definition of waters of the U.S. Verifications of the extent of waters of the U.S. may be made by the U.S. Army Corps of Engineers (Corps). Ultimate determination of the extent of waters of the U.S. may be determined by the Environmental Protection Agency (EPA).

### **B. Project Location**

The north end of the BSA is at Faith Lane and Highway 49 in Diamond Springs, a census-designated place in El Dorado County, CA. The approximately 144-acre BSA is assessor's parcel numbers 054-402-18, 329-301-15, 329-301-20, 329-310-10, -11, and -12. The BSA is on the Placerville U.S. Geological Survey topographic quad (T10N, R10E, Section 25 and 36; T10N, R11E, Section 30 and 31; Figure 1), and is in the Upper Cosumnes hydrologic unit (18040013). Its centroid is 38.686355° north, 120.819115° west, UTM coordinate 689,690 meters E, 4,284,226 meters N, Zone 10N (WGS84). Figure 2 is an aerial photograph of the BSA.

To access the BSA from Sacramento, take Highway 50 east to the Missouri Flat Road exit. Turn right onto Missouri Flat Road, then left onto Pleasant Valley Rd. In 0.3 miles, Faith Lane, the northern end of the BSA, will be on the right.

### **C. Project Applicant**

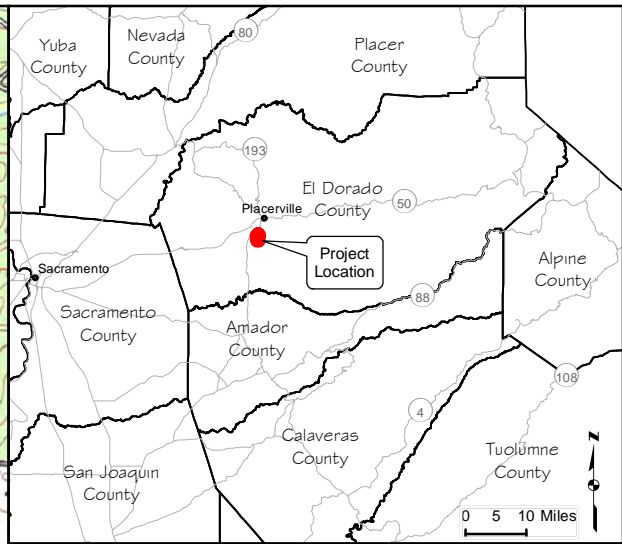
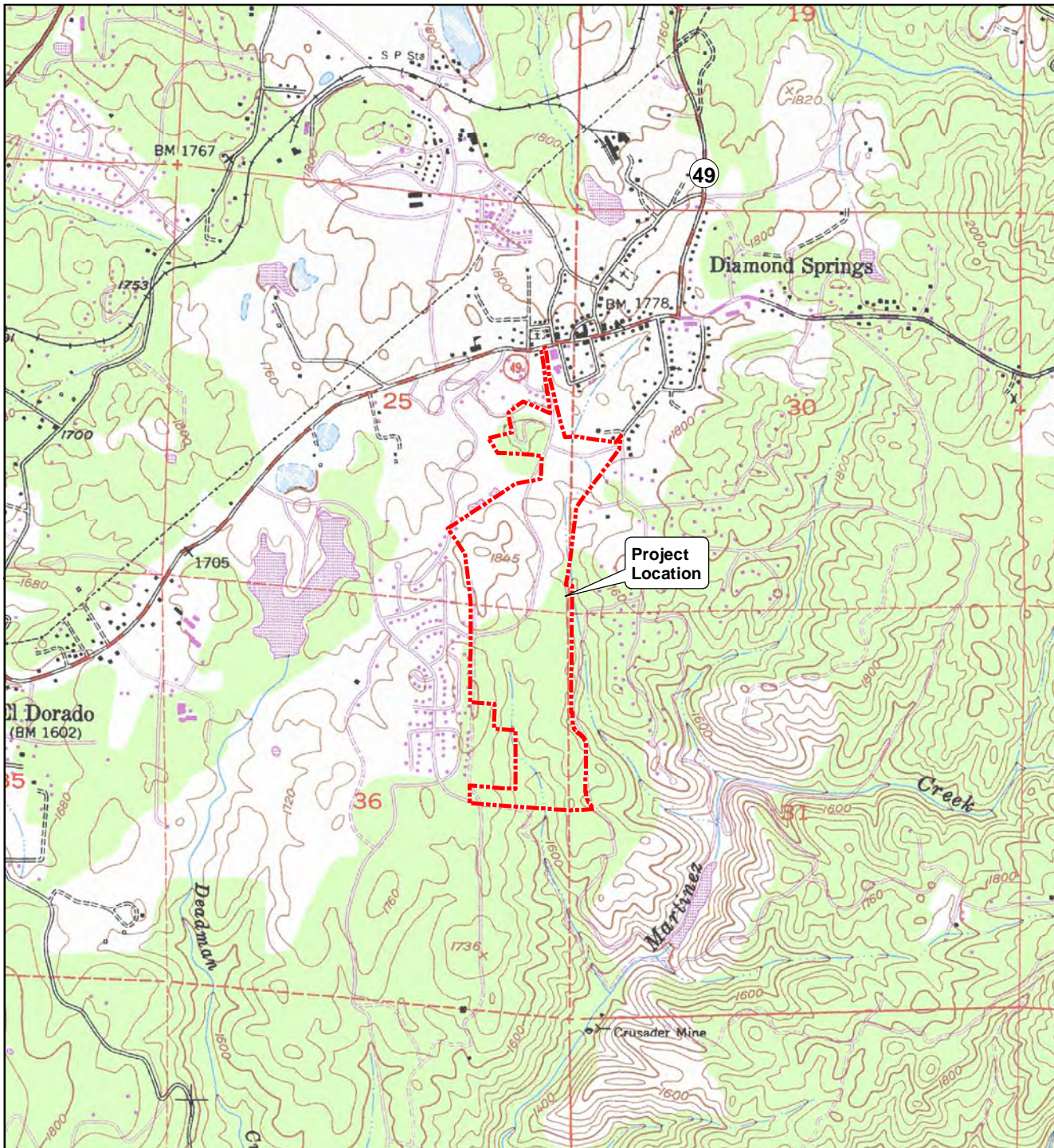
Stonehenge Springs, LLC  
2700 South Azusa Avenue  
West Covina, CA 91792

Contact: Mr. Kevin Sweeney  
Phone: 530/ 893-1515

### **D. Project Description**

The project intends to design a residential subdivision at the site. Project design has not been finalized, and this report does not quantify impacts or propose mitigation.

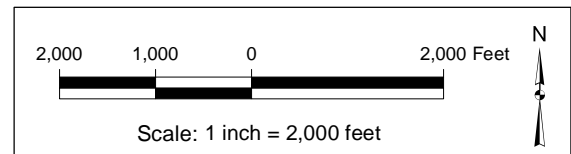
[This page intentionally blank]



Stonehenge Springs  
 El Dorado County, CA  
 6 February 2018

Figure 1. Project Location Map

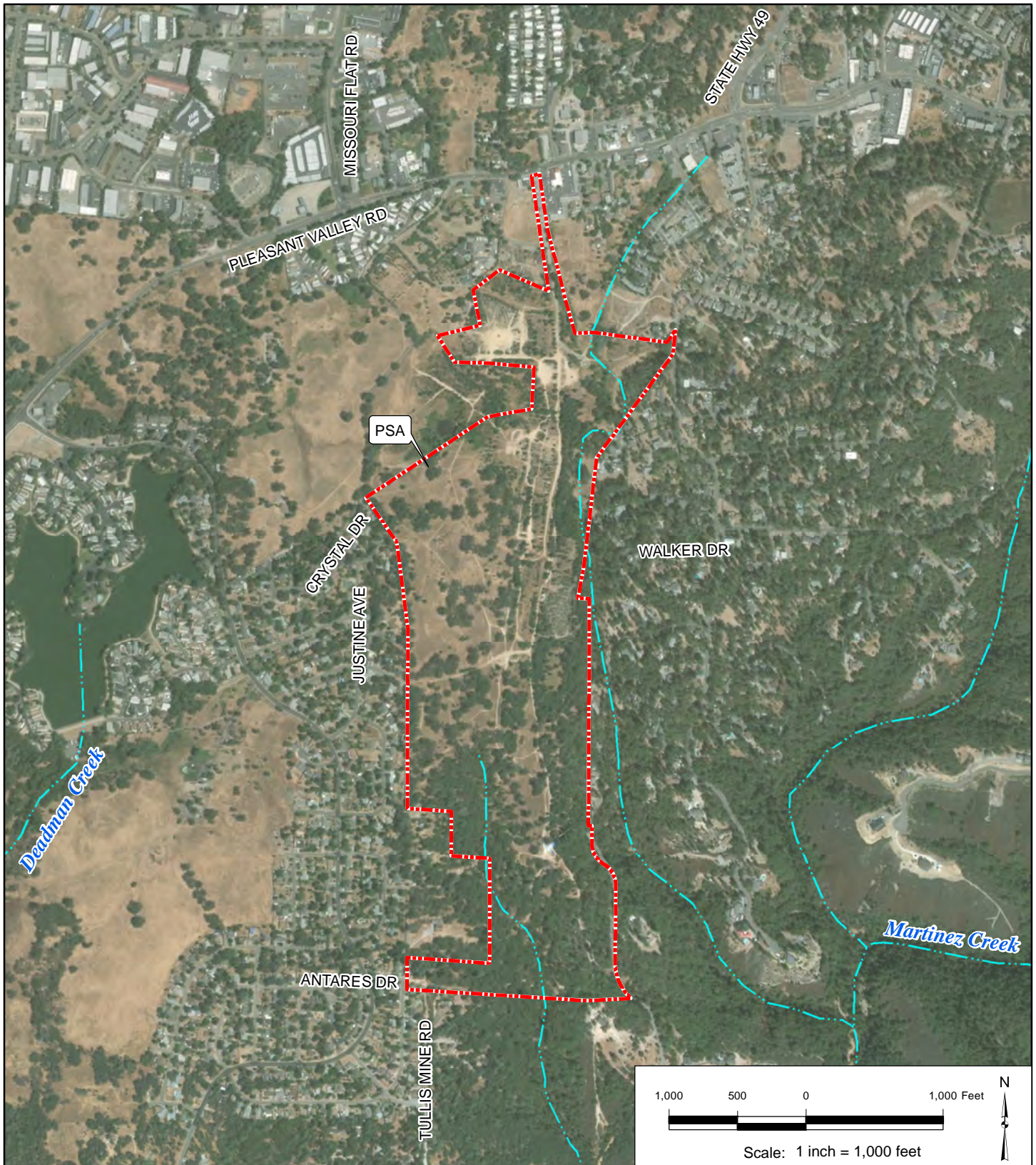
 Project Location



**SYCAMORE**  
 Environmental  
 Consultants, Inc.

Placerville, CA (Revised 1973)  
 CASIL California USGS Digital Raster Graphics (DRG),  
 7.5 Minute (C) Series, Albers Nad83 Mosaics (MrSID)  
 o\_nw0101.sid # o\_nw0102.sid

[This page intentionally blank]



Stonehenge Springs  
 El Dorado County, CA  
 6 February 2018



Project Study Area (PSA)  
 NHD Flowlines



**SYCAMORE**  
 Environmental  
 Consultants, Inc.

Aerial Photograph: 11 July 2016  
 NAIP2016 USDA FSA Imagery  
 ESRI ArcGIS Basemap Layer

USGS National Hydrography  
 Dataset (NHD) Flowlines

Figure 2. Aerial Photograph

[This page intentionally blank]

### E. Previous Delineation Work

A previous determination was verified for the majority of the BSA in a letter dated 18 August 2008 (Corps File #SPK-200702110). That determination covered all of the northern portion of the current BSA, but some of the southern portion of the current BSA was not included. The 2008 verification determined there were 2.97 acres of waters of the U.S., and 0.19 acre of isolated waters. The 0.19 acre of isolated waters consisted of ten small seasonal wetlands that have formed in the previously graded areas of the site. The 2008 delineation report was conducted in part with datasheets and indicators in use prior to the finalization of the Corps' (2008) Arid West delineation manual. The general location of mapped features, including isolated wetlands, verified in 2008 is similar to the current results.

## II. STUDY METHODS

---

### A. Data Sources

Table 1 is a list of data sources compiled for this report.

Table 1. Data Sources

| Data Source   | Data Location/Results  |
|---|--|
| 1. Maps, plans, plots or plat submitted by or on behalf of the applicant  | See Figures 1 through 4.   |
| 2. Data sheets prepared/submitted by or on behalf of the applicant  | See Appendix A.  |
| 3. Corps navigable waters study   | Corps (September 2017).  |
| 4. U.S. Geological Survey Hydrologic Atlas <ul style="list-style-type: none"> <li>• USGS NHD data</li> <li>• USGS 8- and 12-digit HUC maps</li> </ul> | Upper Cosumnes (18040013)<br>Martinez Creek (18400130203)  |
| 5. U.S. Geological Survey map(s)  | Placerville USGS quad, see Figure 1.   |
| 6. USDA Natural Resources Conservation Service Soil Survey  | NRCS 1974, USDA-NRCS 2017a, b; see Figure 3.   |
| 7. National wetlands inventory map(s)   | NWI map for the Placerville quad.  |
| 8. State/Local wetland inventory map(s)   | None known.  |
| 9. FEMA/FIRM maps   | See Appendix D.  |
| 10. 100-year Floodplain Elevation is: (e.g. National Geodetic Vertical Datum of 1929)   | The BSA is determined to be outside the 0.2% annual chance floodplain.   |
| 11. Photographs: <ul style="list-style-type: none"> <li>• Aerial (Name &amp; Date):</li> <li>• Other (Name &amp; Date):</li> </ul>                    | <ul style="list-style-type: none"> <li>• Figure 2, Aerial Photograph, 11 July 2016</li> <li>• Appendix B, Photographs, 2017</li> </ul> |
| 12. Previous determination(s). File no. and date of response letter   | File no. SPK-200702110.<br>Verified 18 August 2008.  |

## **B. Survey Dates and Personnel**

Fieldwork for the jurisdictional delineation was conducted by Chuck Hughes, M.S., and Nicole Desideri, B.S., on 27 June 2017. Chuck Hughes conducted fieldwork on 8 August, 7 September, and 13 September 2017. Nicole Desideri conducted additional fieldwork on 15 September 2017.

## **C. Survey Methods**

This report has been prepared in accordance with the Sacramento District minimum standards (Corps January 2016), U.S. Army Corps of Engineers Wetland Delineation Manual (Corps 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0; Corps 2008), and the guide to OHWM for the western mountains, valleys, and coast (August 2014). The western mountains OHWM guide was used because the regional streams around the BSA are more accurately represented by that guide. The Arid West supplement for wetlands is intended to bring the Corps Manual (Corps 1987) up to date with current knowledge and practice in the region. Use of the Corps Manual in combination with the supplement is intended to improve the accuracy and efficiency of wetland delineation procedures in the Arid West regions. The Arid West Regional Supplement is applicable because the BSA experiences hot, dry summers typical of a Mediterranean climate, and the surrounding landscape is dominated by oak woodland and annual grassland (Corps 2008).

All areas possessing an ordinary high water mark or meeting the three criteria for wetlands were identified and mapped. Hydrophytic classifications of plants were determined from the national list of plant species that occur in wetlands (Lichvar et al. 2016).

## **D. Jurisdictional Data**

The jurisdictional delineation was conducted using the Routine On-Site Determination Method (Corps 1987). Jurisdictional data were recorded using the Wetland Determination Data Form for the Arid West Region (Corps 2008). Soil, vegetation, and hydrology data were recorded at the data points. Data sheets are in Appendix A. Photographs are in Appendix B. Appendix C is a list of plant species recorded at the data points.

## **E. Mapping of Data and Calculation of Acreages**

Waters and wetland boundaries were mapped with a sub-meter accurate global positioning system (GPS). The GPS data were exported to a geographic information system (GIS) shapefile mapping format and overlaid onto a topographic contour map to create Figure 4. Field notes, contours, and aerial photography supplemented GPS data wherever a signal could not be received or terrain prevented access. Acreages were calculated using ESRI® ArcMap™ mapping functions.



## F. Definitions

The Corps and EPA regulate the discharge of dredge and fill material into “waters of the United States” under Section 404 of the Clean Water Act (CWA; 33 U.S.C. 1344). The lateral limits of jurisdiction in waters of the U.S. may be divided into three categories. The categories are the territorial seas, tidal waters, and non-tidal waters [see 33 CFR 328.4 (a), (b), and (c), respectively]. The current regulations defining waters of the U.S. [33 CFR 328.3(a)] and defining features that are excluded [33 CFR 328.3(b)], became effective on 28 August 2015 (80 FR 37054), but has since been stayed by the U.S Sixth Circuit Court of Appeals on 9 October 2015. The definition of waters of the U.S. below, from prior to 28 August 2015, is the definition currently implemented by the Corps while the stay from the Circuit Court is in effect.

Wetlands, where jurisdictional under the CWA, are a subset of waters of the U.S. Wetlands, as defined by the Corps for regulatory purposes, are identified using a three-parameter test that considers whether hydrophytic vegetation, hydric soils, and wetland hydrology are present (Corps 1987, 2008).

The term “waters of the U.S.” is defined at 33 CFR 328.3(a) as:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
  - i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
  - ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under the definition;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial seas;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.
8. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

The term “adjacent” is defined at 33 CFR 328.3(c):

The term *adjacent* means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are “adjacent wetlands.”

The limits of jurisdiction are identified in 33 CFR 328.4 as:

- a. Territorial Seas. The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction a distance of three nautical miles. (See 33 CFR 329.12)
- b. Tidal Waters of the United States. The landward limits of jurisdiction in tidal waters:
  1. Extends to the high tide line, or
  2. When adjacent non-tidal waters of the United States are present, the jurisdiction extends to the limits identified in paragraph (c) of this section.
- c. Non-Tidal Waters of the United States. The limits of jurisdiction in non-tidal waters:
  1. In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or
  2. When adjacent wetlands are present, the jurisdiction extends beyond the ordinary high water mark to the limit of the adjacent wetlands.
  3. When the water of the United States consists only of wetlands the jurisdiction extends to the limit of the wetland.

The term “ordinary high water mark” is defined at 33 CFR 328.3(e):

The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

An ephemeral tributary has flowing water only during and for a short duration after, precipitation events in a typical year. Ephemeral tributary beds are located above the water table year-round. Groundwater is not a source of water for the tributary. Runoff from rainfall is the primary source of water for tributary flow. An intermittent tributary has flowing water during certain times of the year, when groundwater provides water for tributary flow. During dry periods, intermittent tributaries may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow. A perennial tributary has flowing water year-round during a typical year (66 FR 42099).

### **III. SETTING**

---

The BSA is on the south side of Highway 49 in the community of Diamond Springs, California. Much of the BSA is characterized by undeveloped oak woodland. A substantial area of the BSA was graded in the past, prior to 1993. There are two intermittent channels and several ephemeral tributaries flowing through the BSA. The area surrounding the BSA consists of both residential and commercial uses.

#### **A. Topography**

The elevation ranges from approximately 1,690 to 1,825 feet. The terrain is uneven, with gentle to moderate slopes.

## B. Existing Field Conditions

Fieldwork for the jurisdictional delineation was conducted on 27 June – 15 September 2017. Average precipitation through 27 June 2017 at the Placerville National Weather Service (NWS 2017) station is 38.07 inches (rain-year beginning 1 July). As of 27 June 2017, 66.96 inches had been recorded, or 175.9% of normal. The region, including the BSA, had wetter than normal hydrologic conditions during the fieldwork.

## C. Vegetation

Vegetation in the overstory of the BSA consists primarily of oak trees. Valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), and black oak (*Quercus kelloggii*) are the dominant overstory components in most of the BSA. Ponderosa pine (*Pinus ponderosa*) and canyon live oak (*Quercus chrysolepis*) are also common. The shrub layer is dominated by manzanita (*Arctostaphylos viscida*), but toyon (*Heteromeles arbutifolia*), coyote brush (*Baccharis pilularis*) and poison oak (*Toxicodendron diversilobum*) are common as well. The understory is primarily composed of annual grasses and forbs. Dominant species include bromes (*Bromus* sp.), rye grass (*Festuca* [=*Lolium*] *perennis*), wild oat (*Avena* sp.), annual hair grass (*Deschampsia danthonoides*), and rose clover (*Trifolium hirtum*). See section IV for further discussion of vegetation in and along waters and in wetlands. Appendix C contains a list of plant species recorded at the data points.

## D. Existing Level of Disturbance

Much of the north and central areas of the BSA were previously graded for development prior to 1993. Some of the previously graded areas remain mostly bare, with little vegetation. In some areas, young trees and shrubs, particularly ponderosa pine and manzanita, are recolonizing this area. Several dirt roads occur throughout the BSA. Many areas of the BSA have been used as homeless campsites, as well as dumping grounds for car parts, tires and other trash.

## E. Soils

Soil pits were dug to observe the chroma, texture, degree of saturation, and other characteristics. The primary component soils of mapping units in the BSA (Figure 3) are summarized below (NRCS 1974, USDA-NRCS 2017a, b). Reported colors are for moist soil. Placer diggings is identified as hydric across 10 percent of its total acreage in the El Dorado Area by the USDA (2015). None of the other soils are identified as hydric.

Diamond Springs very fine sandy loam, 9 to 15 percent slopes;

Diamond Springs very rocky very fine sandy loam, 3 to 50 percent slopes;

The Diamond Springs series consists of well-drained soils underlain by fine-grained acidic igneous rocks at a depth of 24 to 50 inches. A typical profile has dark brown (10YR 4/3) very fine sandy loam from 0 to 3 inches, yellowish brown (10YR 5/4) loam from 3 to 9 inches, yellowish brown (10YR 5/4) light clay loam from 9 to 14 inches, light yellowish brown (10YR 6/4) clay loam from 14 to 28 inches, very pale brown (10YR 7/4) clay loam from 28 to 36 inches, and very pale brown (10YR 7/4) coarse sandy clay loam that has

brownish-yellow (10YR 6/6) mineral grains from 36 to 40 inches. In Diamond Springs very rocky very fine sandy loam, 3 to 50 percent slopes, approximately 5-25 percent of the surface is rock outcrops. Surface runoff is medium to rapid, and the erosion hazard is slight to high. The soil profile has medium to very strong acidity.

Mariposa very rocky silt loam, 50 to 70 percent slopes:

The Mariposa series consists of well-drained soils that are underlain by vertically tilted schists and slate and contact metamorphic rock. A typical profile has reddish brown (5YR 4/4) gravelly silt loam from 0 to 8 inches, yellowish red (5YR 4/6) gravelly silt loam from 8 to 15 inches, yellowish red (5YR 4/6) gravelly heavy silt loam from 15 to 26 inches, and yellowish brown weathered slate or schist below 26 inches. Surface runoff is rapid and erosion hazard is high.

Mixed alluvial land:

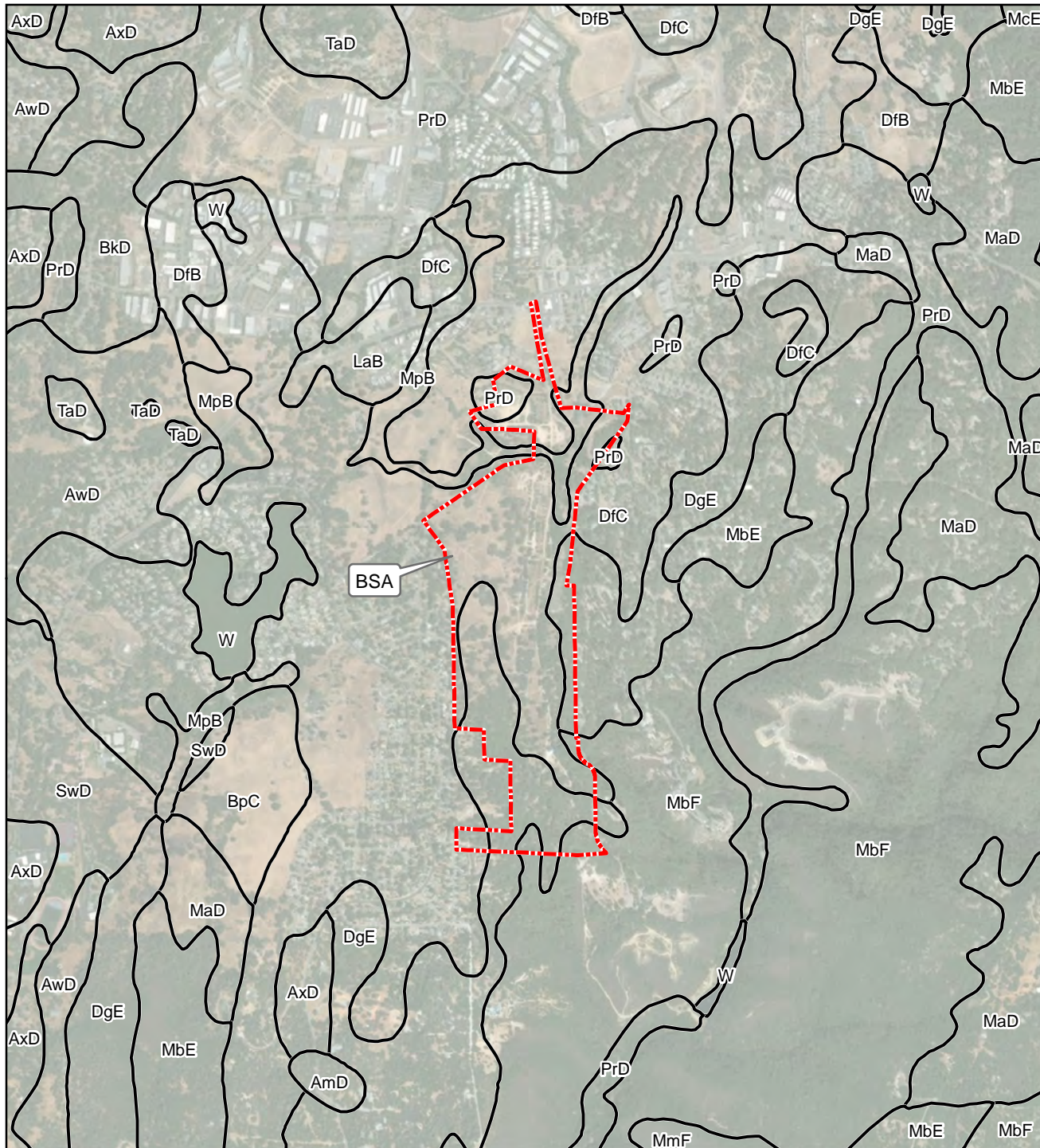
Mixed Alluvial Land consists of small areas of recent mixed alluvium adjacent to stream channels. It is derived from volcanic and sedimentary rock. The color of this soil is variable. Mixed Alluvial Land is stratified gravelly sandy loam, gravelly loam, and gravelly clay loam that grades into sand and gravel as depth increases. Underlying bedrock is found 36 to 40 inches deep. This land type is poorly to moderately well drained, and permeability is moderately rapid to slow. Surface runoff is slow to medium, and the erosion hazard is moderate. This land is subject to frequent flooding in the winter (NRCS 1974; USDA-NRCS 2017).

Placer diggings:

The Placer Diggings soil consists of areas of stony, cobbly and gravelly material. It is commonly found in beds of creeks and other streams on 2 to 15 percent slopes, or of areas that have been placer mined and contain enough fine sand or silt to support some grass for grazing. This material is derived from a mixture of rocks and commonly is stratified or poorly sorted. The depth of the soil is variable, from 6 inches to more than 5 feet deep. Areas in streambeds occasionally are flooded during the rainy season. Surface runoff is low and available water storage is very low (NRCS 1974; 2016b). Placer Diggings may meet hydric soil criteria when it occurs in channels (NRCS 2015).



## **F. National Wetlands Inventory Map**

Channel 1 and Channel 2, two unnamed tributaries to Martinez Creek that occur in the northeast and south of the BSA, are identified as riverine, intermittent, seasonally flooded streambeds (R4SBC) on the NWI map. The pond that occurs along the western edge of the BSA is identified as palustrine, emergent, persistent, and seasonally flooded (PEMIC). There are no other features in the BSA on the NWI map.



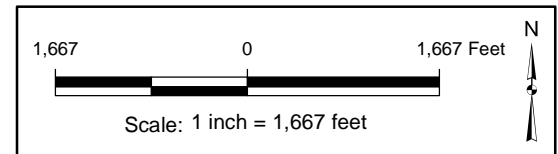
Stonehenge Springs  
 El Dorado County, CA  
 6 February 2018

Figure 3. Soils Map

-  Project Study Area (PSA)
-  Soil Boundary

Soil Mapping Unit

| Symbol | Name  |
|--------|---|
| DfC    | Diamond Springs very fine sandy loam, 9 to 15 percent slopes            |
| DgE    | Diamond Springs very rocky very fine sandy loam, 3 to 50 percent slopes |
| MbF    | Mariposa very rocky silt loam, 50 to 70 percent slopes                  |
| MpB    | Mixed alluvial land   |
| PrD    | Placer diggings   |



**SYCAMORE**  
 Environmental  
 Consultants, Inc.

Soil Survey Geographic (SSURGO) database for  
 El Dorado Area, California, USDA, NRCS  
 URL: <http://SoilDataMart.nrcs.usda.gov/>

Aerial Photo: 13 July 2014  
 NAIP2014 USDA FSA Imagery  
 ArcGIS Imagery Basemap layer

[This page intentionally blank]

## IV. WATERS AND WETLANDS

Waters and wetlands are shown on the jurisdictional delineation map in Figure 4. A summary of acreages by feature is in Table 2 below. On 28 August 2015 a new regulation defining what features are and are not waters of the U.S. became effective (32 CFR 328.3), but was stayed by the U.S Sixth Circuit Court of Appeals on 9 October 2015. An evaluation of waters and wetlands pursuant to the definition of waters of the U.S. and their potential jurisdiction under Section 404 of the Clean Water Act (33 U.S.C. 1344) is in Section V. Section V uses the Waters of the U.S. rule in effect prior to 28 August 2015.

Table 2. Summary of Waters and Wetlands

| Feature                 | Hydrology/ Cowardin Classification | Length (ft)  | Avg. Width (ft) | Area (ac)    |
|-------------------------|------------------------------------|--------------|-----------------|--------------|
| Channel 1 (Eph.)        | Ephemeral/ R4SB3A                  | 118          | 4.0             | 0.011        |
| Channel 1 (Int.)        | Intermittent/ R4SB3C               | 1,500        | 15.8            | 0.545        |
| Channel 1a              | Ephemeral/ R4SB3A                  | 130          | 3.0             | 0.009        |
| Channel 1b              | Ephemeral/ R4SB3A                  | 171          | 2.0             | 0.008        |
| Channel 1c              | Ephemeral/ R4SB3A                  | 290          | 3.0             | 0.020        |
| Channel 1d              | Ephemeral/ R4SB3A                  | 665          | 2.8             | 0.043        |
| Channel 1e              | Ephemeral/ R4SB3A                  | 20           | 1.7             | 0.001        |
| Channel 1f              | Ephemeral/ R4SB3A                  | 35           | 1.5             | 0.001        |
| Channel 2 (Eph.)        | Ephemeral/ R4SB3A                  | 2,130        | 3.5             | 0.170        |
| Channel 2 (Int.)        | Intermittent/ R4SB3C               | 520          | 6.9             | 0.083        |
| Channel 2a              | Ephemeral/ R4SB3A                  | 86           | 3.0             | 0.006        |
| Channel 2b              | Ephemeral/ R4SB3A                  | 380          | 2.6             | 0.023        |
| Channel 2c              | Ephemeral/ R4SB3A                  | 300          | 2.0             | 0.014        |
| Channel 2d              | Ephemeral/ R4SB3A                  | 138          | 2.9             | 0.009        |
| Channel 2e              | Ephemeral/ R4SB3A                  | 350          | 1.0             | 0.008        |
| Channel 2f              | Ephemeral/ R4SB3A                  | 325          | 1.0             | 0.007        |
| Channel 2g              | Ephemeral/ R4SB3A                  | 200          | 1.0             | 0.005        |
| Channel 2h              | Ephemeral/ R4SB3A                  | 340          | 1.0             | 0.008        |
| Channel 2i              | Ephemeral/ R4SB3A                  | 220          | 1.0             | 0.005        |
| Channel 3               | Ephemeral/ R4SB3A                  | 172          | 1.0             | 0.004        |
| Seasonal Pond           | PUBF                               | --           | --              | 0.384        |
| <b>Subtotal Waters:</b> |                                    | <b>8,090</b> | <b>--</b>       | <b>1.364</b> |
| Wetland 1               | PEM1A                              | --           | --              | 0.070        |
| Wetland 2               | PEM1A                              | --           | --              | 0.079        |
| Wetland 3               | PEM1A                              | --           | --              | 0.073        |
| Wetland 4               | PEM1A                              | --           | --              | 0.070        |
| Wetland 5               | PEM1A                              | --           | --              | 0.009        |
| Wetland 6               | PEM1A                              | --           | --              | 0.007        |
| Wetland 7               | PEM1A                              | --           | --              | 0.042        |
| Wetland 8               | PEM1A                              | --           | --              | 0.005        |
| Wetland 9               | PEM1A                              | --           | --              | 0.005        |
| Wetland 10              | PEM1A                              | --           | --              | 0.023        |

Table 2. (Continued)

| Feature                                 | Hydrology/ Cowardin Classification | Length (ft)  | Avg. Width (ft) | Area (ac)    |
|---|------------------------------------|--------------|-----------------|--------------|
| Wetland 11                              | PEM1A                              | --           | --              | 0.041        |
| Wetland 12                              | PEM1A                              | --           | --              | 0.009        |
| Wetland 13                              | PEM1A                              | --           | --              | 0.009        |
| Wetland 14                              | PEM1A                              | --           | --              | 0.012        |
| Wetland 15                              | PEM1A                              | --           | --              | 0.013        |
| Wetland 16                              | PEM1A                              | --           | --              | 0.018        |
| Wetland 17                              | PEM1A                              | --           | --              | 0.018        |
| Wetland 18                              | PEM1A                              | --           | --              | 0.006        |
| Wetland 19                              | PEM1A                              | --           | --              | 0.111        |
| Wetland 20                              | PEM1A                              | --           | --              | 0.004        |
| Wetland 21                              | PEM1A                              | --           | --              | 0.242        |
| Wetland 22                              | PEM1A                              | --           | --              | 0.065        |
| Wetland 23                              | PEM1A                              | --           | --              | 0.093        |
| Wetland 24                              | PEM1A                              | --           | --              | 0.051        |
| Wetland 25                              | PEM1A                              | --           | --              | 0.011        |
| Wetland 26                              | PEM1A                              | --           | --              | 0.034        |
| <b>Subtotal Wetlands:</b>               |                                    | --           | --              | <b>1.120</b> |
| <b>Grand Total Wetlands and Waters:</b> |                                    | <b>8,090</b> | --              | <b>2.484</b> |

### A. Waters

Channels 1 and 1a–f: Channel 1 is an intermittent channel south of Wetland 3, and an ephemeral channel north of Wetland 3. Some of the intermittent reaches of Channel 1 had standing water, or a small amount of surface flow, in September 2017 (see Photo 7, Appendix B). No nearby sources of urban irrigation runoff were identified. The reach of Channel 1 above Wetland 3 was dry. The OHWM was identified based on scoured rock and soil. The substrate is mostly cobble, with some areas of soil or recent fine sediment. There is patchy riparian vegetation along some of Channel 1, consisting mostly of willows (*Salix* sp.) and nonnative invasive Himalayan blackberry (*Rubus armeniacus*). Channel 1 is a tributary to Martinez Creek, 0.3 mile southeast of the BSA.

Channels 1a–f are all ephemeral tributaries to Channel 1. Channel 1d is the largest and enters the BSA from the east through a culvert under Fowler Road. All of these ephemeral tributaries to Channel 1 were dry during delineation fieldwork, as well as dry during separate botanical fieldwork conducted in June 2017. The OHWM for Channels 1a–f was identified based on scoured soil.

Channels 2 and 2a–j: Channel 2 flows south through the southern half of the BSA, and is a tributary to Martinez Creek, 0.3 mile southeast of the BSA. Channel 2 is ephemeral above the tributary Channel 2e. Standing water seeping out from among some small bedrock outcrops was still present near the Channel 2e confluence in late June 2017 (see Photo 4,



Appendix B). By early August 2017, all of Channel 2 was dry. The OHWM was identified based on scoured rock and cobble for the intermittent reach of Channel 2, and on scoured soil and cobble for the ephemeral reach of Channel 2. There is no developed riparian community along Channel 2, although there are a few patches of obligate herbaceous vegetation within the intermittent reach.

Channels 2a–i are all ephemeral tributaries to Channel 2. The OHWM of these channels was identified based on scoured soil. All of these tributaries were dry at the time of August and September delineation fieldwork, as well as dry during separate botanical fieldwork conducted in June 2017.

Channel 3: Channel 3 is an ephemeral channel. The OHWM was identified based mostly on scoured soil. There is no riparian community along Channel 3. Channel 3 was dry during August 2017 delineation fieldwork, as well as dry during separate botanical fieldwork conducted in June 2017. Channel 3 is culverted under Fowler Lane on the east side of the BSA. Farther east and outside of the BSA, Channel 3 is tributary to Channel 1.

Pond: The pond occurs along the western edge of the BSA and is mostly outside the BSA. Two portions of the pond are in the BSA, but are part of the same pond that is connected outside the BSA. A total of 0.384 acre of the pond is within the BSA. Surface water accumulates in the pond up to a depth of several feet. On 13 September 2017, part of the pond off-site still had approximately 1 foot of water. Sycamore Environmental also observed remaining water in the deepest off-site parts of the pond on 12 September and 10 December 2006 for an adjacent project. Based on review of aerial photographs the pond may completely dry out in dry years, but retain some standing water in the deepest parts in wet years (Google, Inc. 2017). The OHWM was identified based on the destruction of terrestrial vegetation and wracking. The pond is the result of an off-site impoundment of a wetland swale.

## **B. Wetlands**

Wetlands 1, 3, and 4: These three wetlands are near the upper reaches of the Channel 1 complex, and they all drain into Channel 1. Wetland 1 is dominated by Baltic rush (*Juncus balticus*, FACW), met the depleted matrix soil indicator, and met the drainage patterns and FAC-neutral test secondary hydrology indicators. Wetlands 3 and 4 are both dominated by whiteroot sedge (*Carex barbarae*, FAC). Wetland 3 met the depleted matrix soil indicator, and both wetlands had sediment deposits. The soil in wetland 4 was problematic because there was deep, recently deposited sand. Hydric soil was assumed in wetland 4 based on vegetation and hydrology indicators.

Wetlands 2, 5–22, and 25: All of these wetlands occur in areas of the BSA that were previously graded for development, or on adjacent dirt roads. The wetlands have since developed in low spots that either do not drain well or do not drain at all. They have substantial bare soil as a result of ongoing vehicle disturbance. Vegetation, where present, is dominated by herbaceous species including spikerush (*Eleocharis macrostachya*, OBL), annual hair grass (*Deschampsia danthonoides*, FACW), loosestrife (*Lythrum portula*, OBL; *L. hyssopifolia*, OBL), and rye grass (*Festuca perennis*; FAC). Soils were generally thin over rock or compacted layers as a result of the past grading. Soil profiles that were present met the redox depressions indicator. The hydrology indicators were biotic crust and FAC-neutral test.

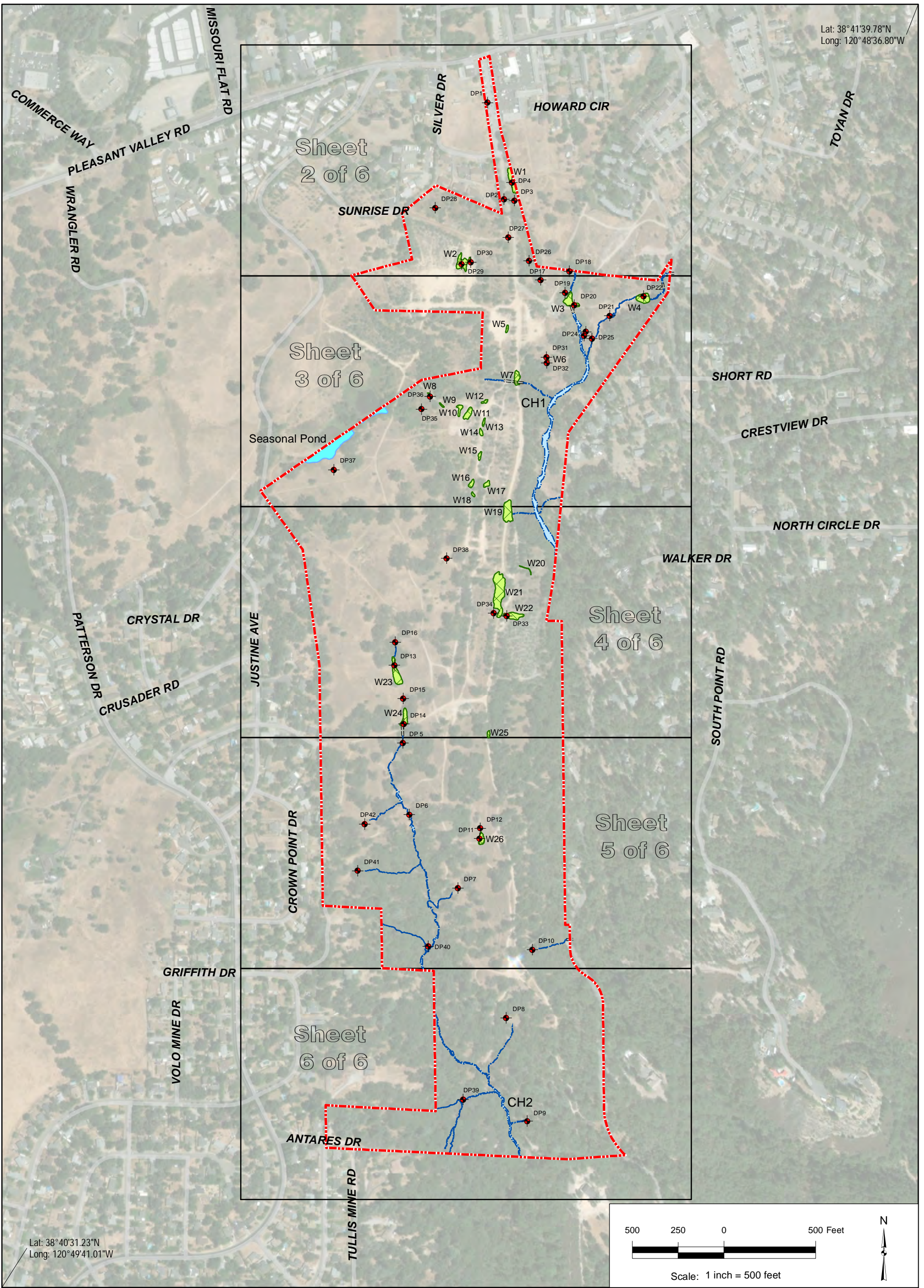
Wetlands 7 and 19 are low spots in dirt roads in previously graded areas. When full, these features would drain into Channels 1c and 1a, respectively.

Wetlands 2, 5, 6, 8–18, 20–22, and 25 are low spots in previously graded areas or dirt roads that do not appear to ever inundate enough to drain to other areas or features in the BSA.

Wetlands 23 and 24: These two wetlands are impoundments along the upper reach of Channel 2. Wetland 23 is a stock pond impounded by an earthen berm across the drainage of Channel 2. No spillway around the berm or culvert through the berm was found. Vegetation was dominated by loosestrife and annual beard grass (*Polypogon monspeliensis*, FACW). Soil met the redox depressions indicator. The hydrology indicators were biotic crust and FAC-neutral test. Wetland 23 may contain up to about 2 feet of inundation when full.

Wetland 24 is below the earthen berm that impounds Wetland 23. Wetland 24 is impounded by a culvert under a dirt road that does not drain well. Vegetation is dominated by rye grass. Soil met the redox depressions indicator. The hydrology indicator was biotic crust. Wetland 23 may inundate up to a few inches in depth due to the poor drainage of the adjacent culvert.

Wetland 26: This wetland is in a natural swale, and when full, drains via sheet flow into Channel 2g. Vegetation is dominated by loosestrife. Soil met the depleted matrix and redox depressions indicators. The hydrology indicators were biotic crust and FAC-neutral test.



Stonehenge Springs  
 El Dorado County, CA  
 6 February 2018

- Project Study Area (PSA)
- ◆ Data Point Location and Number
- Culvert
- Wetland (W)
- Channel (CH)
- Seasonal Pond

Figure 4.  
 Jurisdictional Delineation Map  
 Sheet 1 of 6, Key to Sheets



**SYCAMORE**  
 Environmental  
 Consultants, Inc.

| Date     | Submittal | Delineator(s)            | Agency/Company         |
|----------|-----------|--------------------------|------------------------|
| 6 Feb 18 | Original  | C. Hughes<br>N. Desideri | Sycamore Environmental |

Topographic Basemap: Stonehenge Springs Lotting Exhibit (26 June 2017)  
 CAD file: 05-097-001 CLUSTER- LOT EXHIBIT-V11 06-26-17.dwg  
 by CTA Engineering and Surveying  
 Aerial Photograph: 11 July 2016, NAIP2016 USDA FSA Imagery  
 ESRI ArcGIS Basemap Layer

[This page intentionally blank]



Lat: 38°41'25.61"N  
 Long: 120°49'23.68"W

| Feature                          | Flow         | Length (ft)  | Average Width (ft) | Area (ac)    |
|----------------------------------|--------------|--------------|--------------------|--------------|
| <b>Wetland (W)</b>               |              |              |                    |              |
| W1                               | --           | --           | --                 | 0.070        |
| W2                               | --           | --           | --                 | 0.079        |
| W3                               | --           | --           | --                 | 0.073        |
| W4                               | --           | --           | --                 | 0.070        |
| W5                               | --           | --           | --                 | 0.009        |
| W6                               | --           | --           | --                 | 0.007        |
| W7                               | --           | --           | --                 | 0.042        |
| W8                               | --           | --           | --                 | 0.005        |
| W9                               | --           | --           | --                 | 0.005        |
| W10                              | --           | --           | --                 | 0.023        |
| W11                              | --           | --           | --                 | 0.041        |
| W12                              | --           | --           | --                 | 0.009        |
| W13                              | --           | --           | --                 | 0.009        |
| W14                              | --           | --           | --                 | 0.012        |
| W15                              | --           | --           | --                 | 0.013        |
| W16                              | --           | --           | --                 | 0.018        |
| W17                              | --           | --           | --                 | 0.018        |
| W18                              | --           | --           | --                 | 0.006        |
| W19                              | --           | --           | --                 | 0.111        |
| W20                              | --           | --           | --                 | 0.004        |
| W21                              | --           | --           | --                 | 0.242        |
| W22                              | --           | --           | --                 | 0.065        |
| W23                              | --           | --           | --                 | 0.093        |
| W24                              | --           | --           | --                 | 0.051        |
| W25                              | --           | --           | --                 | 0.011        |
| W26                              | --           | --           | --                 | 0.034        |
| <b>Total Wetlands</b>            | --           | --           | --                 | <b>1.120</b> |
| <b>Channel (CH)</b>              |              |              |                    |              |
| CH1                              | Ephemeral    | 118          | 4.0                | 0.011        |
| CH1                              | Intermittent | 1,500        | 15.8               | 0.545        |
| CH1a                             | Ephemeral    | 130          | 3.0                | 0.009        |
| CH1b                             | Ephemeral    | 171          | 2.0                | 0.008        |
| CH1c                             | Ephemeral    | 290          | 3.0                | 0.020        |
| CH1d                             | Ephemeral    | 665          | 2.8                | 0.043        |
| CH1e                             | Ephemeral    | 20           | 1.7                | 0.001        |
| CH1f                             | Ephemeral    | 35           | 1.5                | 0.001        |
| CH2                              | Ephemeral    | 2,130        | 3.5                | 0.170        |
| CH2                              | Intermittent | 520          | 6.9                | 0.083        |
| CH2a                             | Ephemeral    | 86           | 3.0                | 0.006        |
| CH2b                             | Ephemeral    | 380          | 2.6                | 0.023        |
| CH2c                             | Ephemeral    | 300          | 2.0                | 0.014        |
| CH2d                             | Ephemeral    | 138          | 2.9                | 0.009        |
| CH2e                             | Ephemeral    | 350          | 1.0                | 0.008        |
| CH2f                             | Ephemeral    | 325          | 1.0                | 0.007        |
| CH2g                             | Ephemeral    | 200          | 1.0                | 0.005        |
| CH2h                             | Ephemeral    | 340          | 1.0                | 0.008        |
| CH2i                             | Ephemeral    | 220          | 1.0                | 0.005        |
| CH3                              | Ephemeral    | 172          | 1.0                | 0.004        |
| <b>Total Channels</b>            |              | <b>8,090</b> | --                 | <b>0.980</b> |
| Seasonal Pond                    |              | 0            | 0.0                | 0.384        |
| <b>Total Wetlands and Waters</b> |              | <b>8,090</b> | --                 | <b>2.484</b> |

Stonehenge Springs  
 El Dorado County, CA  
 6 February 2018

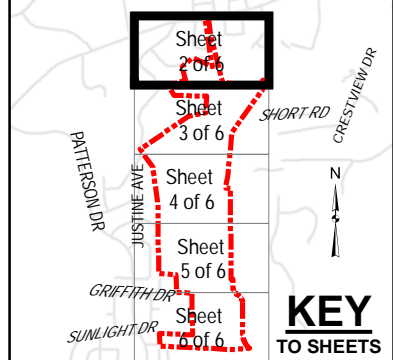
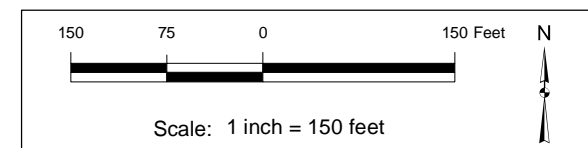


Figure 4.  
 Jurisdictional Delineation Map  
 Sheet 2 of 6

- Matchline - See Sheet 2 of 5**
- Project Study Area (PSA)
  - Wetland (W)
  - Channel (CH)
  - Data Point Location and Number
  - Culvert
  - Photopoint Location and Direction

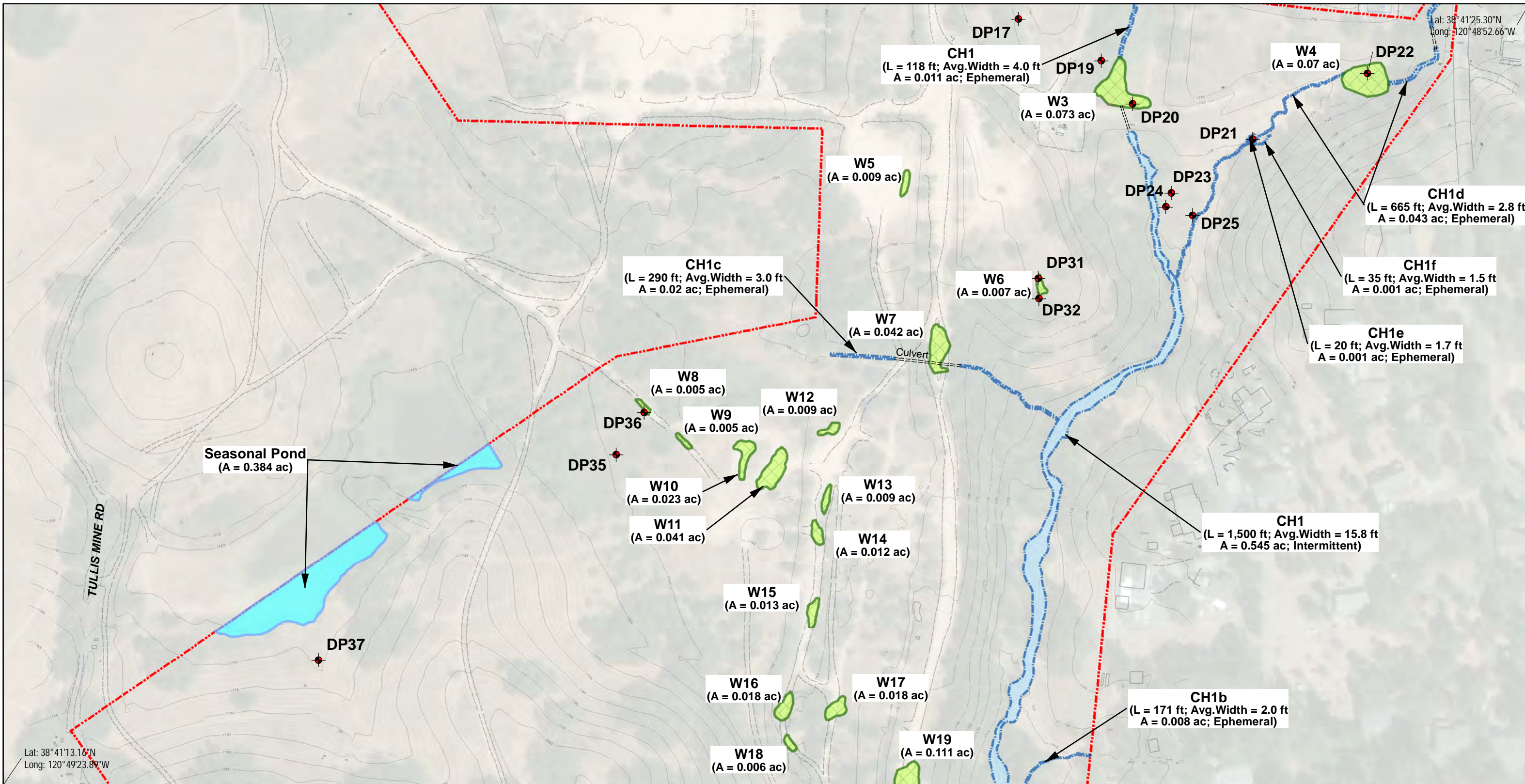


| Date     | Submittal | Delineator(s)            | Agency/Company         |
|----------|-----------|--------------------------|------------------------|
| 6 Feb 18 | Original  | C. Hughes<br>N. Desideri | Sycamore Environmental |



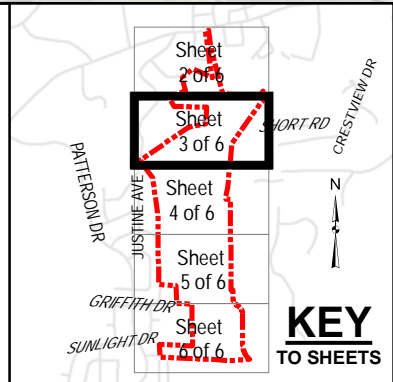
Topographic Basemap:  
 Stonehenge Springs Lotting Exhibit (26 June 2017)  
 CAD file: 05-097-001 CLUSTER- LOT EXHIBIT-V11 06-26-17.dwg  
 by CTA Engineering and Surveying  
 Aerial Photograph:  
 11 July 2016, NAIP2016 USDA FSA Imagery  
 ESRI ArcGIS Basemap Layer

[This page intentionally blank]

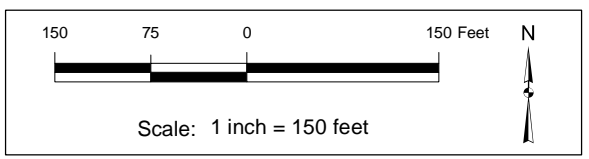


Stonehenge Springs  
 El Dorado County, CA  
 6 February 2018

Figure 4.  
 Jurisdictional Delineation Map  
 Sheet 3 of 6



- Project Study Area (PSA)
- Wetland (W)
- Channel (CH)
- Data Point Location and Number
- Culvert
- Photopoint Location and Direction



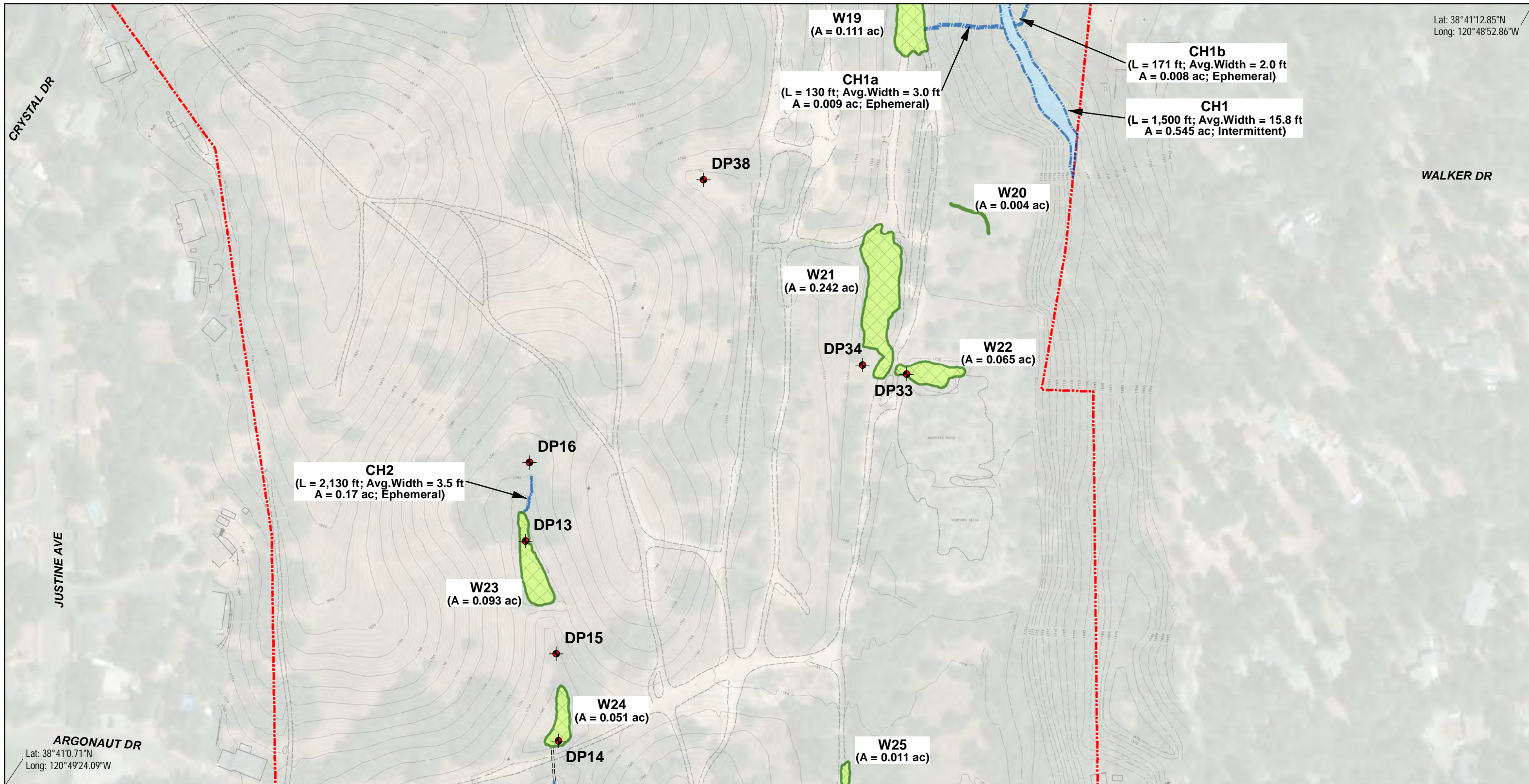
| Date     | Submittal | Delineator(s)            | Agency/Company         |
|----------|-----------|--------------------------|------------------------|
| 6 Feb 18 | Original  | C. Hughes<br>N. Desideri | Sycamore Environmental |



Topographic Basemap:  
 Stonehenge Springs Lotting Exhibit (26 June 2017)  
 CAD file: 05-097-001 CLUSTER- LOT EXHIBIT-V11 06-26-17.dwg  
 by CTA Engineering and Surveying  
 Aerial Photograph:  
 11 July 2016, NAIP2016 USDA FSA Imagery  
 ESRI ArcGIS Basemap Layer

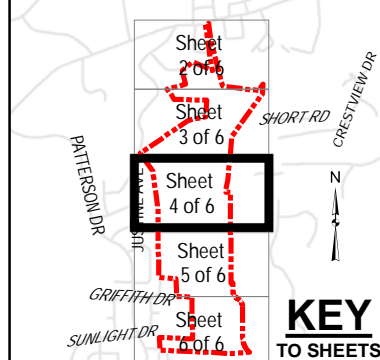
[This page intentionally blank]



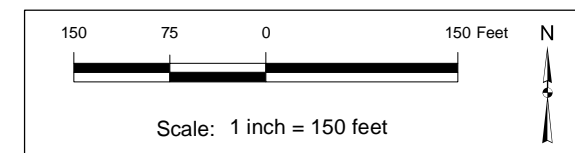


Stonehenge Springs  
El Dorado County, CA  
6 February 2018

Figure 4.  
Jurisdictional Delineation Map  
Sheet 4 of 6



- Project Study Area (PSA)
- Wetland (W)
- Channel (CH)
- Data Point Location and Number
- Culvert
- Photopoint Location and Direction

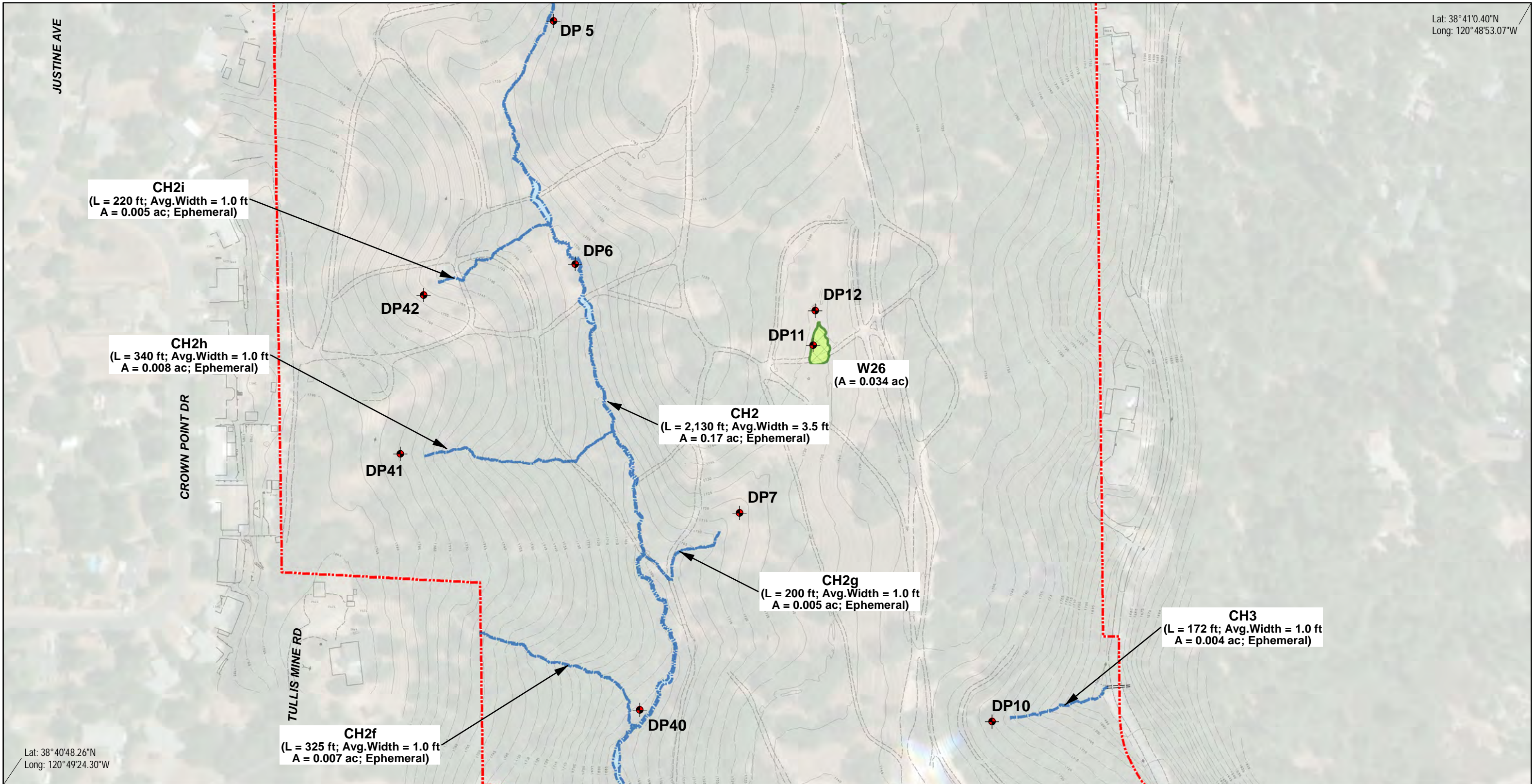


| Date     | Submittal | Delineator(s)            | Agency/Company         |
|----------|-----------|--------------------------|------------------------|
| 6 Feb 18 | Original  | C. Hughes<br>N. Desideri | Sycamore Environmental |



Topographic Basemap:  
Stonehenge Springs Lotting Exhibit (26 June 2017)  
CAD file: 05-097-001 CLUSTER- LOT EXHIBIT-V11 06-26-17.dwg  
by CTA Engineering and Surveying  
Aerial Photograph:  
11 July 2016, NAIP2016 USDA FSA Imagery  
ESRI ArcGIS Basemap Layer

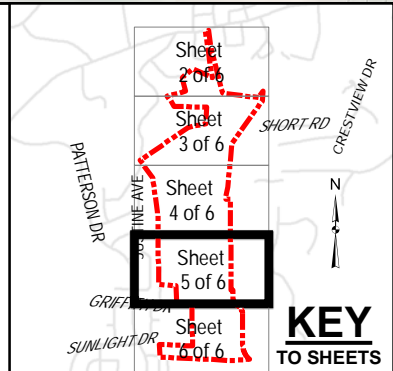
[This page intentionally blank]



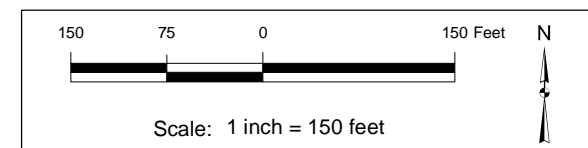
Lat: 38°40'48.26"N  
Long: 120°49'24.30"W

Stonehenge Springs  
El Dorado County, CA  
6 February 2018

Figure 4.  
Jurisdictional Delineation Map  
Sheet 5 of 6



- Project Study Area (PSA)
- Wetland (W)
- Channel (CH)
- Data Point Location and Number
- Culvert
- Photopoint Location and Direction

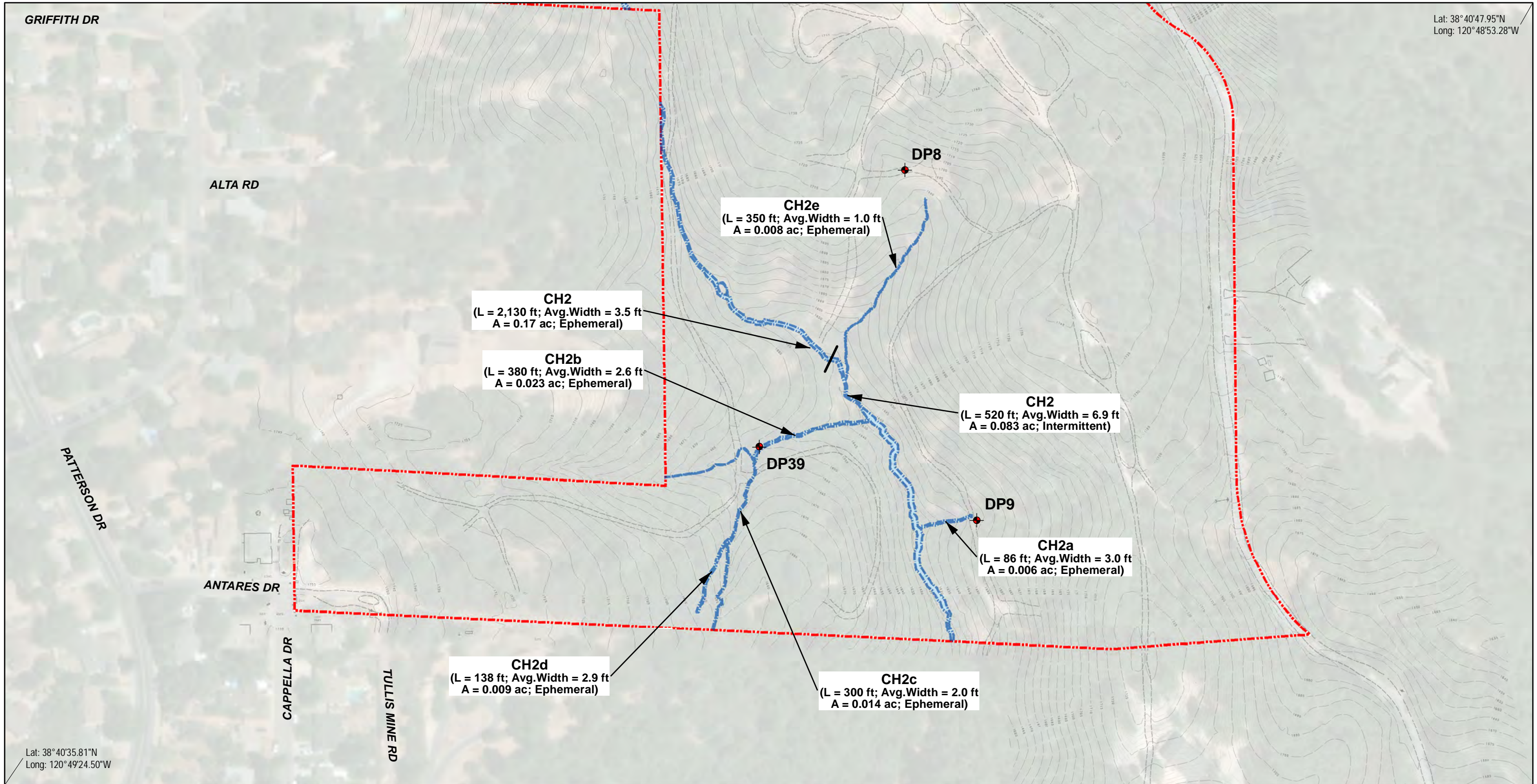


| Date     | Submittal | Delineator(s)            | Agency/Company         |
|----------|-----------|--------------------------|------------------------|
| 6 Feb 18 | Original  | C. Hughes<br>N. Desideri | Sycamore Environmental |



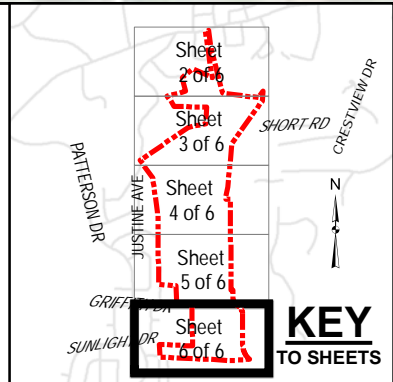
Topographic Basemap:  
Stonehenge Springs Lotting Exhibit (26 June 2017)  
CAD file: 05-097-001 CLUSTER- LOT EXHIBIT-V11 06-26-17.dwg  
by CTA Engineering and Surveying  
Aerial Photograph:  
11 July 2016, NAIP2016 USDA FSA Imagery  
ESRI ArcGIS Basemap Layer

[This page intentionally blank]



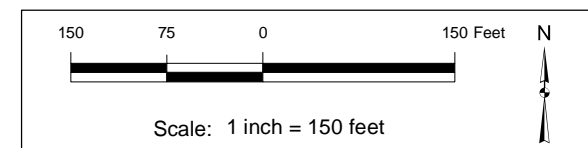
Stonehenge Springs  
El Dorado County, CA  
6 February 2018

Figure 4.  
Jurisdictional Delineation Map  
Sheet 6 of 6



- Project Study Area (PSA)
- Wetland (W)
- Channel (CH)

- Data Point Location and Number
- Culvert
- Photopoint Location and Direction



| Date     | Submittal | Delineator(s)            | Agency/Company         |
|----------|-----------|--------------------------|------------------------|
| 6 Feb 18 | Original  | C. Hughes<br>N. Desideri | Sycamore Environmental |



Topographic Basemap:  
Stonehenge Springs Lotting Exhibit (26 June 2017)  
CAD file: 05-097-001 CLUSTER- LOT EXHIBIT-V11 06-26-17.dwg  
by CTA Engineering and Surveying  
Aerial Photograph:  
11 July 2016, NAIP2016 USDA FSA Imagery  
ESRI ArcGIS Basemap Layer

[This page intentionally blank]

## V. REGULATORY ANALYSIS AND DISCUSSION

---

On 5 June 2007, the Corps issued a memorandum providing guidance on implementation of the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (Corps and EPA 2008). The guidance distinguishes among traditional navigable waters (TNW), relatively permanent waters (RPW), and non-relatively permanent waters (non-RPW). The Corps will routinely exercise jurisdiction over traditional navigable waters, relatively permanent waters, and wetlands adjacent to those waters. The jurisdictional determination for non-relatively permanent waters and their adjacent wetlands (if any) will be based on whether there exists a significant nexus with a traditional navigable water. Factors evaluated by the Corps during the significant nexus evaluation will include ecology, hydrology, and the influence of the water on the "chemical, physical, and biological integrity of downstream traditional navigable waters" (Corps and EPA 2008). The Corps may exert jurisdiction if the findings of the significant nexus evaluation indicate that "the tributary and its adjacent wetlands are likely to have an effect [on downstream traditional navigable waters] that is more than speculative or insubstantial" (Corps and EPA 2008).

The Rapanos memorandum (Corps and EPA 2008) does not affect the Court's decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, No. 99-1178 (January 2001; "SWANCC"), which involved statutory and constitutional challenges to the assertion of CWA jurisdiction over isolated, non-navigable, intrastate waters used as habitat by migratory birds. Isolated wetlands and waters are not subject to Clean Water Act jurisdiction. Table 3 applies the "significant nexus" status of waters in the BSA.

Wetlands and waters not subject to the Corps' jurisdiction may come under the jurisdiction of CDFW and/or the RWQCB. For example, "isolated" wetlands not subject to Section 404 in accordance with the SWANCC decision are subject to regulation by the RWQCB.

### A. TNWs and Adjacent Wetlands

No TNWs or wetlands adjacent to TNWs occur in the BSA.

### B. RPWs that flow directly or indirectly into TNWs

Channel 1, Channel 2, and the pond are RPWs that flow indirectly into TNWs. The intermittent segments of Channel 1 and Channel 2 are identified as seasonally flooded on the NWI map and are considered relatively permanent waters by the Corps. Channel 1 and 2 are tributaries to Martinez Creek south of the BSA. Martinez Creek is a tributary to Deadman Creek, which is a tributary to the Cosumnes River, which is a tributary to the Mokelumne River, which is a TNW.

The pond is identified as permanently flooded on the NWI map. Field observations and review of aeriels suggest that it holds water for most of the year, and is dry for a short period, at least in some years. The pond drains through an off-site wetland swale to the

west into Patterson Lake. Patterson Lake drains to Deadman Creek, which is a tributary to the Cosumnes River, which is a tributary to the Mokelumne River, which is a TNW.

### **C. Non-RPWs that flow directly or indirectly into TNWs**

The ephemeral channels (segments of CH 1 and CH 2, CH 1a-f, CH 2a-i, CH 3) are non-RPWs that flow indirectly into TNWs. All of these channels are ephemeral, and typically only flow in response to precipitation events. Channels 1a-f, the ephemeral segment of Channel 1, and Channel 3 all flow into Channel 1, which indirectly flows into the Mokelumne River, which is a TNW. Channels 2a-i all flow into Channel 2, which indirectly flows into the Mokelumne River, a TNW.

The ephemeral channels do not have “continuous flow at least seasonally (e.g., typically three months)” (Corps December 2008). The jurisdictional determination for non-RPWs is based on whether there exists a significant nexus with a TNW (Corps December 2008). The watershed of the Mokelumne River encompasses approximately 1,397,203 acres. The watershed of the largest ephemeral channel in the BSA (the ephemeral reach of CH 1) encompasses approximately 30 acres. This acreage represents about 2 one-hundred thousandths (0.00002) of the watershed of the Mokelumne River.

The capacity of ephemeral channels in the BSA to carry or reduce pollutants, flood waters, nutrients, or organic carbon is insubstantial relative to the Mokelumne River watershed. The ephemeral channels do not provide habitat for fish or other aquatic species present in the Mokelumne River. The ephemeral channels in the BSA may not have sufficient volume, duration, or frequency of flow to have a significant nexus with the chemical, physical, or biological integrity of the Mokelumne River based on the negligible contributions of the watersheds, and the lack of a relatively permanent hydrologic connection.

### **D. Wetlands directly abutting RPWs that flow directly or indirectly into TNWs**

There are no wetlands directly abutting an RPW that flows directly or indirectly into a TNW in the BSA.

### **E. Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs**

Wetlands 1 and 3 are adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs. These wetlands drain into Channel 1 via sheet flow or a culvert when full. Wetland 3 drains into the intermittent reach of Channel 1 via a culvert.

These small wetlands are over 61 river miles distant from the Mokelumne River, the nearest downstream TNW. They do not support the aquatic habitats or species that occur in the nearest downstream TNW.



Wetland 1 is separated by several hundred feet of uplands from the nearest RPW. Wetland 1 has no more than a speculative or insubstantial effect on the chemical, physical, and biological integrity of the nearest downstream TNW.

Wetland 3 is at the head of the intermittent reach of Channel 1, and the watershed above that point drains through Wetland 3. Much of the watershed above is developed to urban use. Wetland 3 may trap or filter pollutants prior to draining into the intermittent reach of Channel 1.

#### **F. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs**

Wetlands 4, 7, 19, 23, 24, and 26 are adjacent to ephemeral non-RPWs in the BSA. These small wetlands are over 61 river miles distant from the Mokelumne River, the nearest downstream TNW. They do not support the aquatic habitats or species that occur in the nearest downstream TNW. They have no more than a speculative or insubstantial effect on the chemical, physical, and biological integrity of the nearest downstream TNW.

#### **G. Impoundments of waters**

The pond is the result of an off-site impoundment of a wetland swale. The pond contains water at least seasonally and is therefore treated as an RPW above. Wetland 23 is created by an earthen berm across an upland swale. Wetland 23 is treated as a wetland adjacent to a non-RPW above because it is in the watershed of Channel 2.

#### **H. Isolated (interstate or intrastate) waters, including isolated wetlands**

Wetlands 2, 5, 6, 8–18, 20–22, and 25 are low spots in previously graded areas or dirt roads that do not appear to ever inundate enough to drain to other areas or features in the BSA. These wetlands are isolated.

#### **I. Non-jurisdictional waters**

The ephemeral channels, and the wetlands with the exception of Wetland 3, are either isolated or have no more than a speculative or insubstantial nexus to the nearest downstream TNW.

#### **J. Summary of Jurisdictional Acreages**

The intermittent channels and pond are RPWs presumed to have a substantial nexus to the nearest downstream TNW (Corps 2008). Wetland 3 is also presumed to have a substantial nexus because it may trap or filter pollutants from an upstream urbanized area prior to reaching the intermittent reach of Channel 1.

Table 3. Rapanos Guidance Correlation of Wetlands and Waters

| Feature                  | Rapanos Guidance Correlation | Jurisdictional Acreage | Non-Jurisdictional Acreage |
|--------------------------|------------------------------|------------------------|----------------------------|
| Channel 1 (ephemeral)    | Non-RPW                      | --                     | 0.011                      |
| Channel 1 (intermittent) | RPW                          | 0.545                  | --                         |
| Channel 1a               | Non-RPW                      | --                     | 0.009                      |
| Channel 1b               | Non-RPW                      | --                     | 0.008                      |
| Channel 1c               | Non-RPW                      | --                     | 0.020                      |
| Channel 1d               | Non-RPW                      | --                     | 0.043                      |
| Channel 1e               | Non-RPW                      | --                     | 0.001                      |
| Channel 1f               | Non-RPW                      | --                     | 0.001                      |
| Channel 2 (ephemeral)    | Non-RPW                      | --                     | 0.170                      |
| Channel 2 (intermittent) | RPW                          | 0.083                  | --                         |
| Channel 2a               | Non-RPW                      | --                     | 0.006                      |
| Channel 2b               | Non-RPW                      | --                     | 0.023                      |
| Channel 2c               | Non-RPW                      | --                     | 0.014                      |
| Channel 2d               | Non-RPW                      | --                     | 0.009                      |
| Channel 2e               | Non-RPW                      | --                     | 0.008                      |
| Channel 2f               | Non-RPW                      | --                     | 0.007                      |
| Channel 2g               | Non-RPW                      | --                     | 0.005                      |
| Channel 2h               | Non-RPW                      | --                     | 0.008                      |
| Channel 2i               | Non-RPW                      | --                     | 0.005                      |
| Channel 3                | Non-RPW                      | --                     | 0.004                      |
| Pond                     | RPW                          | 0.384                  | --                         |
| Wetland 1                | Wetland adjacent to RPW      | --                     | 0.070                      |
| Wetland 2                | Isolated                     | --                     | 0.079                      |
| Wetland 3                | Wetland adjacent to RPW      | 0.073                  | --                         |
| Wetland 4                | Wetland adjacent to non-RPW  | --                     | 0.070                      |
| Wetland 5                | Isolated                     | --                     | 0.009                      |
| Wetland 6                | Isolated                     | --                     | 0.007                      |
| Wetland 7                | Wetland adjacent to non-RPW  | --                     | 0.042                      |
| Wetland 8                | Isolated                     | --                     | 0.005                      |
| Wetland 9                | Isolated                     | --                     | 0.005                      |
| Wetland 10               | Isolated                     | --                     | 0.023                      |
| Wetland 11               | Isolated                     | --                     | 0.041                      |
| Wetland 12               | Isolated                     | --                     | 0.009                      |
| Wetland 13               | Isolated                     | --                     | 0.009                      |
| Wetland 14               | Isolated                     | --                     | 0.012                      |

Table 3. (Continued)

| Feature       | Rapanos Guidance Correlation | Jurisdictional Acreage | Non-Jurisdictional Acreage |
|---------------|------------------------------|------------------------|----------------------------|
| Wetland 15    | Isolated                     | --                     | 0.013                      |
| Wetland 16    | Isolated                     | --                     | 0.018                      |
| Wetland 17    | Isolated                     | --                     | 0.018                      |
| Wetland 18    | Isolated                     | --                     | 0.006                      |
| Wetland 19    | Wetland adjacent to non-RPW  | --                     | 0.111                      |
| Wetland 20    | Isolated                     | --                     | 0.004                      |
| Wetland 21    | Isolated                     | --                     | 0.242                      |
| Wetland 22    | Isolated                     | --                     | 0.065                      |
| Wetland 23    | Wetland adjacent to non-RPW  | --                     | 0.093                      |
| Wetland 24    | Wetland adjacent to non-RPW  | --                     | 0.051                      |
| Wetland 25    | Isolated                     | --                     | 0.011                      |
| Wetland 26    | Wetland adjacent to non-RPW  | --                     | 0.034                      |
| <b>Total:</b> |                              | <b>1.085</b>           | <b>1.399</b>               |

## **VI. LITERATURE CITED**

---

- California Department of Water Resources (CDWR), California Data Exchange Center. Accessed September 2017. Precipitation Information. [http://cdec.water.ca.gov/snow\\_rain.html](http://cdec.water.ca.gov/snow_rain.html)
- Cowardin, L.M., V. Carter, F.C. Golet, E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Home Page.
- Google, Inc. 2017. Google Earth (Version 7.1.5.1557) [Software]. Available from [www.google.com/earth/](http://www.google.com/earth/)
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 28 April 2016. The National Wetland Plant List: 2017 wetland ratings. *Phytoneuron* 2016-30: 1-17. ISSN 2153 733X
- Natural Resources Conservation Service (NRCS; formerly known as Soil Conservation Service). April 1974. Soil survey of El Dorado Area, California. USDA – Soil Conservation Service.
- U.S. Army Corps of Engineers (Corps). 1987. Corps of Engineers wetland delineation manual, Tech. Rept. Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- U.S. Army Corps of Engineers (Corps). 7 December 2005. Ordinary high water mark identification, Regulatory Guidance Letter No. 05-05.
- U.S. Army Corps of Engineers and Environmental Protection Agency (Corps and EPA). 30 May 2007. U.S. Army Corps of Engineers jurisdictional determination form instructional guidebook. Washington, DC.
- U.S. Army Corps of Engineers (Corps). September 2008. Regional supplement to the Corps of Engineers wetland delineation manual: Arid West region (Version 2.0). Technical Report ERDC/EL TR-08-28. U.S. Army Engineer Research and Development Center, Vicksburg, MS.
- U.S. Army Corps of Engineers and Environmental Protection Agency (Corps and EPA). 2 December 2008. Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States* & *Carabell v. United States*. Washington, DC.
- U.S. Army Corps of Engineers (Corps). August 2014. A guide to ordinary high water mark (OHWM) delineation for non-perennial streams in the western mountains, valleys, and coast region of the United States. Technical Report ERDC/CRREL TR-14-13. U.S. Army Engineer Research and Development Center, Vicksburg, MS.
- U.S. Army Corps of Engineers (Corps). January 2016. Minimum standards for acceptance of aquatic resources delineation reports. Regulatory Branch, U.S. Army Engineer District Sacramento, Sacramento, CA.
- U.S. Army Corps of Engineers (Corps). Accessed September 2017. Navigable waterways in the Sacramento District. <http://www.spk.usace.army.mil/Missions/Regulatory/Jurisdiction/Navigable-Waters-of-the-US/>
- U.S. Department of Agriculture (USDA). December 2015. National hydric soil list.
- U.S. Department of Agriculture and Natural Resource Conservation Service (USDA-NRCS). Accessed September 2017 (2017a). Official soil series descriptions. <https://soilseries.sc.egov.usda.gov/osdname.asp>
- U.S. Department of Agriculture and Natural Resource Conservation Service (USDA-NRCS). Accessed September 2017 (2017b). Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/app/>

## **VII. REPORT PREPARERS**

---

**Chuck Hughes, M.S.**, Plant Biology, Michigan State University, East Lansing, MI. Fifteen years of experience preparing biological/botanical resource evaluations, wetland delineations, arborist reports, impact analyses, and mitigation/restoration plans. He is a Professional Wetland Scientist (#2029), an ISA Certified Arborist (WE-6885A), holds a CDFW Plant Voucher Collecting Permit (2081(a)-12-16-V), is a Principal Scientific Investigator on a CDFW Scientific Collecting Permit (SC-7617), and is on a USFWS recovery permit for listed vernal pool branchiopods (TE799564-4). His bachelor's degree from UC Davis is in environmental horticulture and urban forestry, with an emphasis in plant biodiversity.

Responsibilities: Project manager, fieldwork, report preparation.

**Nicole Desideri, B.S.**, Biological Sciences (concentration in Field and Wildlife Biology), California Polytechnic State University, San Luis Obispo, CA. Ms. Desideri conducts preconstruction and construction monitoring, assists with plant and wildlife surveys, wetland delineations, and assists with preparation of biological resource evaluations, Natural Environment Study reports, permit applications, and other documents used in the CEQA/NEPA process. Serving as both field biologist and technical writer, she conducts database research on special status species' biology, habitat and distribution. She assists with mapping and figure preparation for biological and permitting documents such as project location maps, aerial photograph exhibits, soils maps, biological resource maps, wetlands/waters delineation maps, tree location maps and other supporting graphics. She holds a California Department of Fish and Wildlife Rare, Threatened and Endangered Plant Voucher Collecting Permit (2081(a)-16-107-V) and is an authorized individual on the CDFW Scientific Collecting Permit (SC-7617).

Responsibilities: Fieldwork, Report preparation

**Aramis Respoll, GIS Analyst/ CAD Operator.** Over 20 years of experience in drafting and spatial analysis using AutoCAD and ArcGIS for public and private projects. He prepares figures for biological and permitting documents such as project location maps, aerial photograph exhibits, biological resource maps, CNDDDB proximity maps, wetlands/waters delineation maps, impact analysis maps, tree location maps and other supporting graphics. Mr. Respoll provides geospatial analysis and support for projects involving geodesy, hydrology, watersheds, project impact analysis, CNDDDB occurrences, and critical habitat information. Primary experience evolved from conventional surveying and civil engineering practices to advanced GPS and GIS based technology.

Responsibilities: Figure preparation and spatial analysis.

**Jeffery Little**, Vice President, Sycamore Environmental.

Responsibilities: Principal in charge.

[This page intentionally blank]

# Appendix A

Data Sheets

Stonehenge Springs

---

[This page intentionally blank]



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 6/27/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 1  
 Investigator(s): Chuck Hughes, Nicole Desideri Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Roadside swale Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil  Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil  Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |                     |                              |  |
|---------------------------------|---|--|---------------------|------------------------------|--|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                     |                              |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area |                              |  |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | within a Wetland?   | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Remarks:                        |   |  |                     |                              |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)           | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |   |
|---|------------------|-------------------------|------------------|---|---|
| 1. _____  | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC:   | <u>2</u> (A)  |
| 2. _____  | _____            | _____                   | _____            | Total Number of Dominant Species Across All Strata:   | <u>2</u> (B)  |
| 3. _____  | _____            | _____                   | _____            | Percent of Dominant Species That Are OBL, FACW, or FAC:   | <u>100%</u> (A/B)   |
| 4. _____  | _____            | _____                   | _____            |   |   |
| Total Cover:                                      | <u>-</u>         |                         |                  |   |   |
| <u>Sapling/Shrub Stratum:</u> (Plot size: _____)  |                  |                         |                  | <b>Prevalence Index worksheet:</b>  |   |
| 1. _____  | _____            | _____                   | _____            | Total % Cover of:   | Multiply by:  |
| 2. _____  | _____            | _____                   | _____            | OBL Species:  | _____ x 1 = _____   |
| 3. _____  | _____            | _____                   | _____            | FACW Species:   | _____ x 2 = _____   |
| 4. _____  | _____            | _____                   | _____            | FAC Species:  | _____ x 3 = _____   |
| 5. _____  | _____            | _____                   | _____            | FACU Species:   | _____ x 4 = _____   |
| Total Cover:                                      | <u>-</u>         |                         |                  | UPL Species:  | _____ x 5 = _____   |
| <u>Herb Stratum:</u> (Plot size: <u>2' x 6'</u> ) |                  |                         |                  | Column Totals:  | _____ (A) _____ (B)   |
| 1. <u>Festuca perennis</u>                        | <u>20</u>        | <u>D</u>                | <u>FAC</u>       | Prevalence Index = B/A = _____  |   |
| 2. <u>Cynodon dactylon</u>                        | <u>10</u>        |                         | <u>FACU</u>      | Hydrophytic Vegetation Indicators:  |   |
| 3. <u>Hordeum marinum ssp. gussoneanum</u>        | <u>68</u>        | <u>D</u>                | <u>FAC</u>       | <input checked="" type="checkbox"/> Dominance Test is >50%  |   |
| 4. <u>Holcus lanatus</u>                          | <u>1</u>         |                         | <u>FAC</u>       | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |   |
| 5. <u>Cyperus eragrostis</u>                      | <u>1</u>         |                         | <u>FACW</u>      | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |   |
| 6. _____  | _____            | _____                   | _____            | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |   |
| 7. _____  | _____            | _____                   | _____            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |   |
| 8. _____  | _____            | _____                   | _____            |   |   |
| Total Cover:                                      | <u>100</u>       |                         |                  | Hydrophytic Vegetation Present?   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| <u>Woody Vine Stratum:</u> (Plot size: _____)     |                  |                         |                  |   |   |
| 1. _____  | _____            | _____                   | _____            |   |   |
| 2. _____  | _____            | _____                   | _____            |   |   |
| Total Cover:                                      | <u>-</u>         |                         |                  |   |   |
| % Bare Ground in Herb Stratum                     | <u>0</u>         | % Cover of Biotic Crust | <u>0</u>         |   |   |

Remarks: Disturbed road edge

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |   |                   |                  |           |         |
|--|---------------|-----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-2  | 10 YR 3/2     | 95  | 7.5 YR 4/6     | 5 | C                 | PL               | Silt loam |         |
| 2-10   | 10 YR 3/2     | 100 | --             |   |                   |                  | Silt loam |         |
| >10  |               |     |                |   |                   |                  | gravel    |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

|  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Sandy Redox (S5)           |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Stripped Matrix (S6)       |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   |
| <input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b> | <input type="checkbox"/> Depleted Matrix (F3)       |
| <input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b>         | <input type="checkbox"/> Redox Dark Surface (F6)    |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Redox Depressions (F8)     |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)              | <input type="checkbox"/> Vernal Pools (F9)          |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              |   |

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

|   |
|---|
| <input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b>  |
| <input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b> |
| <input type="checkbox"/> Reduced Vertic (F18)           |
| <input type="checkbox"/> Red Parent Material (TF2)      |
| <input type="checkbox"/> Other (Explain in Remarks)     |

**<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks: Surface horizon too thin to meet F6.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

|   |  |   |
|---|--|---|
| <b>Primary Indicators (minimum of one required; check all that apply)</b> |  | <b>Secondary Indicators (2or more required)</b>                   |
| <input type="checkbox"/> Surface water (A1)                               | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b>       |
| <input type="checkbox"/> High water Table (A2)                            | <input type="checkbox"/> Biotic Crust (B12)                            | <input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b> |
| <input type="checkbox"/> Saturation (A3)                                  | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b>    |
| <input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b>            | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    | <input type="checkbox"/> Drainage Patterns (B10)                  |
| <input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b>      | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2)              |
| <input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b>         | <input type="checkbox"/> Presence of Reduced Iron (C4)                 | <input type="checkbox"/> Crayfish Burrows (C8)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                         | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)   |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)        | <input type="checkbox"/> Thin Muck Surface (C7)                        | <input type="checkbox"/> Shallow Aquitard (D3)                    |
| <input type="checkbox"/> Water-Stained Leaves (B9)                        | <input type="checkbox"/> Other (Explain in Remarks)                    | <input type="checkbox"/> FAC-Neutral test (D5)                    |

**Field Observations:**

|                        |   |                       |
|------------------------|---|-----------------------|
| Surface Water Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Depth (inches): _____ |
| Water Table Present?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Depth (inches): _____ |
| Saturation Present?    | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Depth (inches): _____ |

(includes capillary fringe)

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 6/27/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 2  
 Investigator(s): Chuck Hughes, Nicole Desideri Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: ___5' rad ___)  | Absolute % Cover | Dominant Species?         | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|------------------|---------------------------|------------------|--|
| 1. <u>Quercus lobata</u>                         | 20               | D                         | FACU             | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)   |
| 2. _____   | _____            | _____                     | _____            |  |
| 3. _____   | _____            | _____                     | _____            |  |
| 4. _____   | _____            | _____                     | _____            |  |
| Total Cover:                                     | 20               |                           |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____) |                  |                           |                  |  |
| 1. _____   | _____            | _____                     | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____   | _____            | _____                     | _____            |  |
| 3. _____   | _____            | _____                     | _____            |  |
| 4. _____   | _____            | _____                     | _____            |  |
| 5. _____   | _____            | _____                     | _____            |  |
| Total Cover:                                     | _____            |                           |                  |  |
| <b>Herb Stratum:</b> (Plot size: ___5' rad ___)  |                  |                           |                  |  |
| 1. <u>Phalaris aquatica</u>                      | 8                |                           | FACU             | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Lactuca serriola</u>                       | 5                |                           | FACU             |  |
| 3. <u>Briza minor</u>                            | 1                |                           | FAC              |  |
| 4. <u>Festuca perennis</u>                       | 80               | D                         | FAC              |  |
| 5. <u>Daucus carota</u>                          | 10               |                           | UPL              |  |
| 6. <u>Torilis arvensis</u>                       | 5                |                           | UPL              |  |
| 7. _____   | _____            | _____                     | _____            |  |
| 8. _____   | _____            | _____                     | _____            |  |
| Total Cover:                                     | 109              |                           |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)    |                  |                           |                  |  |
| 1. _____   | _____            | _____                     | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |
| 2. _____   | _____            | _____                     | _____            |  |
| Total Cover:                                     | --               |                           |                  |  |
| % Bare Ground in Herb Stratum 10                 |                  | % Cover of Biotic Crust 0 |                  |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |   |                   |                  |                 |         |
|--|---------------|-----|----------------|---|-------------------|------------------|-----------------|---------|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |                   |                  | Texture         | Remarks |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |                 |         |
| 0-12   | 10 YR 3/3     | 100 | --             |   |                   |                  | Silty clay loam |         |
|  |               |     |                |   |                   |                  |                 |         |
|  |               |     |                |   |                   |                  |                 |         |
|  |               |     |                |   |                   |                  |                 |         |
|  |               |     |                |   |                   |                  |                 |         |
|  |               |     |                |   |                   |                  |                 |         |
|  |               |     |                |   |                   |                  |                 |         |
|  |               |     |                |   |                   |                  |                 |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |   |  |
|--|---|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
|--|---|--|

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

|  |   |
|--|---|
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____ | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|--|---|

Remarks:

**HYDROLOGY**

|   |  |   |
|---|--|---|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply)  |  | Secondary Indicators (2or more required)  |
| <input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b><br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Salt Crust (B11)<br><input type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b><br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input type="checkbox"/> FAC-Neutral test (D5) |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)   | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):  |  |   |
| Remarks:  |  |   |

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 6/27/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 3  
 Investigator(s): Chuck Hughes, Nicole Desideri Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: <u>5'</u> rad _____) | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |
|---|------------------|-------------------------|------------------|---|
| 1. <u>Quercus lobata</u>                              | 85               | D                       | FACU             | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)  |
| 2. _____  | _____            | _____                   | _____            |   |
| 3. _____  | _____            | _____                   | _____            |   |
| 4. _____  | _____            | _____                   | _____            |   |
| Total Cover:  | 85               |                         |                  |   |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____)      |                  |                         |                  | <b>Prevalence Index worksheet:</b>  |
| 1. _____  | _____            | _____                   | _____            | Total % Cover of: _____ Multiply by: _____  |
| 2. _____  | _____            | _____                   | _____            | OBL Species: _____ x 1 = _____  |
| 3. _____  | _____            | _____                   | _____            | FACW Species _____ x 2 = _____  |
| 4. _____  | _____            | _____                   | _____            | FAC Species _____ x 3 = _____   |
| 5. _____  | _____            | _____                   | _____            | FACU Species _____ x 4 = _____  |
| Total Cover:  | -                |                         |                  | UPL Species _____ x 5 = _____   |
| <b>Herb Stratum:</b> (Plot size: <u>5'</u> rad _____) |                  |                         |                  | Column Totals: _____ (A) _____ (B)  |
| 1. <u>Torilis arvensis</u>                            | 10               |                         | UPL              | Prevalence Index = B/A = _____  |
| 2. <u>Vicia sativa</u>                                | 10               |                         | FACU             | <b>Hydrophytic Vegetation Indicators:</b><br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 3. <u>Festuca perennis</u>                            | 70               | D                       | FAC              |   |
| 4. _____  | _____            | _____                   | _____            |   |
| 5. _____  | _____            | _____                   | _____            |   |
| 6. _____  | _____            | _____                   | _____            |   |
| 7. _____  | _____            | _____                   | _____            |   |
| 8. _____  | _____            | _____                   | _____            |   |
| Total Cover:  | 90               |                         |                  |   |
| <b>Woody Vine Stratum:</b> (Plot size: _____)         |                  |                         |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |
| 1. _____  | _____            | _____                   | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| 2. _____  | _____            | _____                   | _____            |   |
| Total Cover:  | _____            |                         |                  |   |
| % Bare Ground in Herb Stratum                         | 20               | % Cover of Biotic Crust | 0                |   |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.)   |               |    |                |   |                   |   |           |         |
|--|---------------|----|----------------|---|-------------------|---|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |   | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup>  |           |         |
| 0-13   | 10 YR 3/2     | 98 | 10 YR 3/4      | 2 | C                 | PL  | Silt loam |         |
| >13  |               |    |                |   |                   |   | rock      |         |
|  |               |    |                |   |                   |   |           |         |
|  |               |    |                |   |                   |   |           |         |
|  |               |    |                |   |                   |   |           |         |
|  |               |    |                |   |                   |   |           |         |
|  |               |    |                |   |                   |   |           |         |
|  |               |    |                |   |                   |   |           |         |
| <sup>1</sup> Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix  |               |    |                |   |                   |   |           |         |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Histosol (A1)</li> <li><input type="checkbox"/> Histic Epipedon (A2)</li> <li><input type="checkbox"/> Black Histic (A3)</li> <li><input type="checkbox"/> Hydrogen Sulfide (A4)</li> <li><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b></li> <li><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b></li> <li><input type="checkbox"/> Depleted Below Dark Surface (A11)</li> <li><input type="checkbox"/> Thick Dark Surface (A12)</li> <li><input type="checkbox"/> Sandy Mucky Mineral (S1)</li> <li><input type="checkbox"/> Sandy Gleyed Matrix (S4)</li> <li><input type="checkbox"/> Sandy Redox (S5)</li> <li><input type="checkbox"/> Stripped Matrix (S6)</li> <li><input type="checkbox"/> Loamy Mucky Mineral (F1)</li> <li><input type="checkbox"/> Loamy Gleyed Matrix (F2)</li> <li><input type="checkbox"/> Depleted Matrix (F3)</li> <li><input type="checkbox"/> Redox Dark Surface (F6)</li> <li><input type="checkbox"/> Depleted Dark Surface (F7)</li> <li><input type="checkbox"/> Redox Depressions (F8)</li> <li><input type="checkbox"/> Vernal Pools (F9)</li> </ul> |               |    |                |   |                   |   |           |         |
| <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b></li> <li><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b></li> <li><input type="checkbox"/> Reduced Vertic (F18)</li> <li><input type="checkbox"/> Red Parent Material (TF2)</li> <li><input type="checkbox"/> Other (Explain in Remarks)</li> </ul> <p style="text-align: right;"><b><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</b></p>  |               |    |                |   |                   |   |           |         |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____   |               |    |                |   |                   | Hydric Soil Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |           |         |
| Remarks: Redox too sparse to meet F6.  |               |    |                |   |                   |   |           |         |

**HYDROLOGY**

| Wetland Hydrology Indicators:   |  |   |
|---|--|---|
| Primary Indicators (minimum of one required; check all that apply)  |  | Secondary Indicators (2or more required)  |
| <input type="checkbox"/> Surface water (A1)   | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b>   |
| <input type="checkbox"/> High water Table (A2)  | <input type="checkbox"/> Biotic Crust (B12)                            | <input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b>                                     |
| <input type="checkbox"/> Saturation (A3)  | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b>  |
| <input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b>  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    | <input type="checkbox"/> Drainage Patterns (B10)  |
| <input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b>  | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2)  |
| <input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b>   | <input type="checkbox"/> Presence of Reduced Iron (C4)                 | <input type="checkbox"/> Crayfish Burrows (C8)  |
| <input type="checkbox"/> Surface Soil Cracks (B6)   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)                                       |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)  | <input type="checkbox"/> Thin Muck Surface (C7)                        | <input type="checkbox"/> Shallow Aquitard (D3)  |
| <input type="checkbox"/> Water-Stained Leaves (B9)  | <input type="checkbox"/> Other (Explain in Remarks)                    | <input type="checkbox"/> FAC-Neutral test (D5)  |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) |  |   |
|   |  | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):  |  |   |
| Remarks:  |  |   |

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 6/27/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 4  
 Investigator(s): Chuck Hughes, Nicole Desideri Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 3  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |                             |  |
|---------------------------------|---|-----------------------------|--|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Remarks:                        |   |                             |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)                        | Absolute % Cover | Dominant Species?                | Indicator Status | <b>Dominance Test worksheet:</b>  |
|--|------------------|----------------------------------|------------------|---|
| 1. _____   | _____            | _____                            | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>1</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)   |
| 2. _____   | _____            | _____                            | _____            |   |
| 3. _____   | _____            | _____                            | _____            |   |
| 4. _____   | _____            | _____                            | _____            |   |
| Total Cover: _____   | _____            |                                  |                  |   |
| <b>Sapling/Shrub Stratum:</b> (Plot size: <u>5'</u> rad _____) |                  |                                  |                  |   |
| 1. <u>Baccharis pilularis</u>                                  | <u>2</u>         | <u>D</u>                         | <u>UPL</u>       | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____   | _____            | _____                            | _____            |   |
| 3. _____   | _____            | _____                            | _____            |   |
| 4. _____   | _____            | _____                            | _____            |   |
| 5. _____   | _____            | _____                            | _____            |   |
| Total Cover: _____   | <u>2</u>         |                                  |                  |   |
| <b>Herb Stratum:</b> (Plot size: <u>5'</u> rad _____)          |                  |                                  |                  |   |
| 1. <u>Juncus balticus</u>                                      | <u>85</u>        | <u>D</u>                         | <u>FACW</u>      | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Torilis arvensis</u>                                     | <u>6</u>         |                                  | <u>UPL</u>       |   |
| 3. <u>Galium aparine</u>                                       | <u>5</u>         |                                  | <u>FACU</u>      |   |
| 4. <u>Asclepias fascicularis</u>                               | <u>5</u>         |                                  | <u>FAC</u>       |   |
| 5. <u>Hypericum perforatum</u>                                 | <u>1</u>         |                                  | <u>FACU</u>      |   |
| 6. <u>Geranium dissectum</u>                                   | <u>2</u>         |                                  | <u>UPL</u>       |   |
| 7. _____   | _____            | _____                            | _____            |   |
| 8. _____   | _____            | _____                            | _____            |   |
| Total Cover: _____   | <u>104</u>       |                                  |                  |   |
| <b>Woody Vine Stratum:</b> (Plot size: _____)                  |                  |                                  |                  |   |
| 1. _____   | _____            | _____                            | _____            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |
| 2. _____   | _____            | _____                            | _____            |   |
| Total Cover: _____   | <u>--</u>        |                                  |                  |   |
| % Bare Ground in Herb Stratum <u>20</u>                        |                  | % Cover of Biotic Crust <u>0</u> |                  | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |

Remarks: shrub layer ignored due to less than 5% cover.

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |    |                   |                  |                 |         |
|--|---------------|-----|----------------|----|-------------------|------------------|-----------------|---------|
| Depth<br>Inches  | Matrix        |     | Redox Features |    |                   |                  | Texture         | Remarks |
|  | Color (moist) | %   | Color (moist)  | %  | Type <sup>1</sup> | Loc <sup>2</sup> |                 |         |
| 0-6  | 10 YR 4/2     | 100 | --             |    |                   |                  | Silty clay loam |         |
| 6-12   | 10 YR 4/2     | 90  | 7.5 YR 3/4     | 10 | C                 | M                | Silty clay loam |         |
|  |               |     |                |    |                   |                  |                 |         |
|  |               |     |                |    |                   |                  |                 |         |
|  |               |     |                |    |                   |                  |                 |         |
|  |               |     |                |    |                   |                  |                 |         |
|  |               |     |                |    |                   |                  |                 |         |
|  |               |     |                |    |                   |                  |                 |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|   |  |   |
|---|--|---|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input checked="" type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Vernal Pools (F9)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) |  | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )<br><input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )<br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks)<br><br><b><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</b> |
|---|--|---|

|  |   |
|--|---|
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____ | <b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|--|---|

Remarks: Other colored rock fragments, in 6-12 inch horizon.

**HYDROLOGY**

|   |  |   |  |  |  |
|---|--|---|--|--|--|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply)  |  |   | Secondary Indicators (2or more required) |  |  |
| <input type="checkbox"/> Surface water (A1)   | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )   |  |  |  |
| <input type="checkbox"/> High water Table (A2)  | <input type="checkbox"/> Biotic Crust (B12)                            | <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )                                   |  |  |  |
| <input type="checkbox"/> Saturation (A3)  | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )                                      |  |  |  |
| <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    | <input checked="" type="checkbox"/> Drainage Patterns (B10)   |  |  |  |
| <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )  | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2)  |  |  |  |
| <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )   | <input type="checkbox"/> Presence of Reduced Iron (C4)                 | <input type="checkbox"/> Crayfish Burrows (C8)  |  |  |  |
| <input type="checkbox"/> Surface Soil Cracks (B6)   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)                                       |  |  |  |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)  | <input type="checkbox"/> Thin Muck Surface (C7)                        | <input type="checkbox"/> Shallow Aquitard (D3)  |  |  |  |
| <input type="checkbox"/> Water-Stained Leaves (B9)  | <input type="checkbox"/> Other (Explain in Remarks)                    | <input checked="" type="checkbox"/> FAC-Neutral test (D5)   |  |  |  |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) |  | <b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |  |  |  |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks: Small swale, ill-defined, draining through this patch of Juncus.



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 5  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very rocky very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |   |
|---------------------------------|---|--|---|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |   |
| Remarks:                        |   |  |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)               | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |
|---|------------------|-------------------------|------------------|---|
| 1. _____  | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>1</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)   |
| 2. _____  | _____            | _____                   | _____            |   |
| 3. _____  | _____            | _____                   | _____            |   |
| 4. _____  | _____            | _____                   | _____            |   |
| Total Cover: _____                                    | --               |                         |                  |   |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____)      |                  |                         |                  |   |
| 1. _____  | _____            | _____                   | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____  | _____            | _____                   | _____            |   |
| 3. _____  | _____            | _____                   | _____            |   |
| 4. _____  | _____            | _____                   | _____            |   |
| 5. _____  | _____            | _____                   | _____            |   |
| Total Cover: _____                                    | --               |                         |                  |   |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad _____) |                  |                         |                  |   |
| 1. <i>Festuca perennis</i>                            | 85               | D                       | FAC              | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <i>Bromus diandrus</i>                             | 3                |                         | UPL              |   |
| 3. <i>Hordeum murinum</i> ssp. <i>leporinum</i>       | 3                |                         | FACU             |   |
| 4. <i>Geranium dissectum</i>                          | 2                |                         | UPL              |   |
| 5. <i>Lythrum hyssopiifolia</i>                       | 1                |                         | OBL              |   |
| 6. <i>Torilis arvensis</i>                            | 1                |                         | UPL              |   |
| 7. _____  | _____            | _____                   | _____            |   |
| 8. _____  | _____            | _____                   | _____            |   |
| Total Cover: _____                                    | 95               |                         |                  |   |
| <b>Woody Vine Stratum:</b> (Plot size: _____)         |                  |                         |                  |   |
| 1. _____  | _____            | _____                   | _____            | Hydrophytic Vegetation Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |
| 2. _____  | _____            | _____                   | _____            |   |
| Total Cover: _____                                    |                  |                         |                  |   |
| % Bare Ground in Herb Stratum                         | 10               | % Cover of Biotic Crust | 0                |   |
| Remarks:  |                  |                         |                  |   |

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |   |                   |                  |           |         |
|--|---------------|-----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-4  | 10 YR 3/3     | 100 | --             |   |                   |                  | Silt loam | Rocky   |
| 4-12   | 7.5 YR 4/4    | 100 | --             |   |                   |                  | Silt loam | Rocky   |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |   |   |   |  |  |
|--|---|---|---|--|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> |   |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> |  |  |
| <input type="checkbox"/> Histosol (A1)   | <input type="checkbox"/> Sandy Redox (S5)           | <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )  |   |  |  |
| <input type="checkbox"/> Histic Epipedon (A2)                                    | <input type="checkbox"/> Stripped Matrix (S6)       | <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) |   |  |  |
| <input type="checkbox"/> Black Histic (A3)                                       | <input type="checkbox"/> Loamy Mucky Mineral (F1)   | <input type="checkbox"/> Reduced Vertic (F18)             |   |  |  |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                                   | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   | <input type="checkbox"/> Red Parent Material (TF2)        |   |  |  |
| <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )                 | <input type="checkbox"/> Depleted Matrix (F3)       | <input type="checkbox"/> Other (Explain in Remarks)       |   |  |  |
| <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )                         | <input type="checkbox"/> Redox Dark Surface (F6)    |   |   |  |  |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)                       | <input type="checkbox"/> Depleted Dark Surface (F7) |   |   |  |  |
| <input type="checkbox"/> Thick Dark Surface (A12)                                | <input type="checkbox"/> Redox Depressions (F8)     |   |   |  |  |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)                                | <input type="checkbox"/> Vernal Pools (F9)          |   |   |  |  |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)                                |   |   |   |  |  |

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

|  |   |
|--|---|
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____ | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|--|---|

Remarks:

**HYDROLOGY**

|  |  |   |
|--|--|---|
| <b>Wetland Hydrology Indicators:</b>                                   |  |   |
| Primary Indicators (minimum of one required; check all that apply)     |  | Secondary Indicators (2or more required)                            |
| <input type="checkbox"/> Surface water (A1)                            | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )       |
| <input type="checkbox"/> High water Table (A2)                         | <input type="checkbox"/> Biotic Crust (B12)                            | <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) |
| <input type="checkbox"/> Saturation (A3)                               | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )    |
| <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )       | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    | <input type="checkbox"/> Drainage Patterns (B10)                    |
| <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2)                |
| <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )    | <input type="checkbox"/> Presence of Reduced Iron (C4)                 | <input type="checkbox"/> Crayfish Burrows (C8)                      |
| <input type="checkbox"/> Surface Soil Cracks (B6)                      | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)     |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)     | <input type="checkbox"/> Thin Muck Surface (C7)                        | <input type="checkbox"/> Shallow Aquitard (D3)                      |
| <input type="checkbox"/> Water-Stained Leaves (B9)                     | <input type="checkbox"/> Other (Explain in Remarks)                    | <input type="checkbox"/> FAC-Neutral test (D5)                      |

|   |   |
|---|---|
| <b>Field Observations:</b>  | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____                             |   |
| Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____                               |   |
| Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) |   |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 6  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very rocky very fine sandy loam NWI Classification: R4SBC

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |  |
|---------------------------------|---|--|--|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |   |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)          | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |
|--|------------------|-------------------------|------------------|---|
| 1. _____   | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>1</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)   |
| 2. _____   | _____            | _____                   | _____            |   |
| 3. _____   | _____            | _____                   | _____            |   |
| 4. _____   | _____            | _____                   | _____            |   |
| Total Cover:                                     | --               |                         |                  |   |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____) |                  |                         |                  |   |
| 1. _____   | _____            | _____                   | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____   | _____            | _____                   | _____            |   |
| 3. _____   | _____            | _____                   | _____            |   |
| 4. _____   | _____            | _____                   | _____            |   |
| 5. _____   | _____            | _____                   | _____            |   |
| Total Cover:                                     | --               |                         |                  |   |
| <b>Herb Stratum:</b> (Plot size: .6' rad _____)  |                  |                         |                  |   |
| 1. <i>Festuca perennis</i>                       | 80               | D                       | FAC              | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <i>Bromus hordeaceus</i>                      | 4                |                         | FACU             |   |
| 3. <i>Carduus pycnocephalus</i>                  | 8                |                         | UPL              |   |
| 4. <i>Mimulus guttatus</i>                       | 4                |                         | OBL              |   |
| 5. <i>Hordeum marinum ssp. gussoneanum</i>       | 2                |                         | FAC              |   |
| 6. _____   | _____            | _____                   | _____            |   |
| 7. _____   | _____            | _____                   | _____            |   |
| 8. _____   | _____            | _____                   | _____            |   |
| Total Cover:                                     | 98               |                         |                  |   |
| <b>Woody Vine Stratum:</b> (Plot size: _____)    |                  |                         |                  |   |
| 1. _____   | _____            | _____                   | _____            | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |
| 2. _____   | _____            | _____                   | _____            |   |
| Total Cover:                                     | --               |                         |                  |   |
| % Bare Ground in Herb Stratum                    | 5                | % Cover of Biotic Crust | 5                |   |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.)                                      |   |                          |                            |   |   |   |           |         |
|---|---|--------------------------|----------------------------|---|---|---|-----------|---------|
| Depth<br>Inches   | Matrix                                  |                          | Redox Features             |   |   |   | Texture   | Remarks |
|   | Color (moist)                           | %                        | Color (moist)              | %   | Type <sup>1</sup>   | Loc <sup>2</sup>  |           |         |
| 0-12  | 10 YR 4/3                               | 100                      | --                         |   |   |   | Silt loam |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
|   |   |                          |                            |   |   |   |           |         |
| <sup>1</sup> Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix |   |                          |                            |   |   |   |           |         |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>  |   |                          |                            |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>                                     |   |           |         |
| <input type="checkbox"/>  | Histosol (A1)                           | <input type="checkbox"/> | Sandy Redox (S5)           | <input type="checkbox"/>  | 1 cm Muck (A9) ( <b>LRR C</b> )   | <b><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</b> |           |         |
| <input type="checkbox"/>  | Histic Epipedon (A2)                    | <input type="checkbox"/> | Stripped Matrix (S6)       | <input type="checkbox"/>  | 2 cm Muck (A10) ( <b>LRR B</b> )  |   |           |         |
| <input type="checkbox"/>  | Black Histic (A3)                       | <input type="checkbox"/> | Loamy Mucky Mineral (F1)   | <input type="checkbox"/>  | Reduced Vertic (F18)  |   |           |         |
| <input type="checkbox"/>  | Hydrogen Sulfide (A4)                   | <input type="checkbox"/> | Loamy Gleyed Matrix (F2)   | <input type="checkbox"/>  | Red Parent Material (TF2)   |   |           |         |
| <input type="checkbox"/>  | Stratified Layers (A5) ( <b>LRR C</b> ) | <input type="checkbox"/> | Depleted Matrix (F3)       | <input type="checkbox"/>  | Other (Explain in Remarks)  |   |           |         |
| <input type="checkbox"/>  | 1 cm Muck (A9) ( <b>LRR D</b> )         | <input type="checkbox"/> | Redox Dark Surface (F6)    | <b><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</b> |   |   |           |         |
| <input type="checkbox"/>  | Depleted Below Dark Surface (A11)       | <input type="checkbox"/> | Depleted Dark Surface (F7) |   |   |   |           |         |
| <input type="checkbox"/>  | Thick Dark Surface (A12)                | <input type="checkbox"/> | Redox Depressions (F8)     |   |   |   |           |         |
| <input type="checkbox"/>  | Sandy Mucky Mineral (S1)                | <input type="checkbox"/> | Vernal Pools (F9)          |   |   |   |           |         |
| <input type="checkbox"/>  | Sandy Gleyed Matrix (S4)                |                          |                            |   |   |   |           |         |
| <input type="checkbox"/>  |   |                          |                            |   |   |   |           |         |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____  |   |                          |                            |   | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |   |           |         |
| Remarks: _____  |   |                          |                            |   |   |   |           |         |

**HYDROLOGY**

| Wetland Hydrology Indicators:   |   |  |   |
|---|---|--|---|
| Primary Indicators (minimum of one required; check all that apply)  |   | Secondary Indicators (2or more required) |   |
| <input type="checkbox"/>  | Surface water (A1)                            | <input type="checkbox"/>                 | Salt Crust (B11)                              |
| <input type="checkbox"/>  | High water Table (A2)                         | <input type="checkbox"/>                 | Biotic Crust (B12)                            |
| <input type="checkbox"/>  | Saturation (A3)                               | <input type="checkbox"/>                 | Aquatic Invertebrates (B13)                   |
| <input type="checkbox"/>  | Water Marks (B1) ( <b>Nonriverine</b> )       | <input type="checkbox"/>                 | Hydrogen Sulfide Odor (C1)                    |
| <input type="checkbox"/>  | Sediment Deposits (B2) ( <b>Nonriverine</b> ) | <input type="checkbox"/>                 | Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/>  | Drift Deposits (B3) ( <b>Nonriverine</b> )    | <input type="checkbox"/>                 | Presence of Reduced Iron (C4)                 |
| <input type="checkbox"/>  | Surface Soil Cracks (B6)                      | <input type="checkbox"/>                 | Recent Iron Reduction in Tilled Soils (C6)    |
| <input type="checkbox"/>  | Inundation Visible on Aerial Imagery (B7)     | <input type="checkbox"/>                 | Thin Muck Surface (C7)                        |
| <input type="checkbox"/>  | Water-Stained Leaves (B9)                     | <input type="checkbox"/>                 | Other (Explain in Remarks)                    |
| <b>Field Observations:</b><br>Surface Water Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) |   |  |   |
| <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |   |  |   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):<br>_____<br>_____<br>_____   |   |  |   |
| Remarks: _____  |   |  |   |

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 7  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex-concave Slope (%): 10  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very rocky very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)                 | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |
|---|------------------|-------------------------|------------------|---|
| 1. _____  | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)  |
| 2. _____  | _____            | _____                   | _____            |   |
| 3. _____  | _____            | _____                   | _____            |   |
| 4. _____  | _____            | _____                   | _____            |   |
| Total Cover:  | --               |                         |                  |   |
| <b><u>Sapling/Shrub Stratum:</u></b> (Plot size: _____) |                  |                         |                  |   |
| 1. _____  | _____            | _____                   | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____  | _____            | _____                   | _____            |   |
| 3. _____  | _____            | _____                   | _____            |   |
| 4. _____  | _____            | _____                   | _____            |   |
| 5. _____  | _____            | _____                   | _____            |   |
| Total Cover:  | --               |                         |                  |   |
| <b><u>Herb Stratum:</u></b> (Plot size: ____6' rad____) |                  |                         |                  |   |
| 1. <i>Festuca perennis</i>                              | 50               | D                       | FAC              | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present. |
| 2. <i>Bromus hordeaceus</i>                             | 25               | D                       | FACU             |   |
| 3. <i>Centaurea solstitialis</i>                        | 10               |                         | UPL              |   |
| 4. <i>Bromus diandrus</i>                               | 20               |                         | UPL              |   |
| 5. _____  | _____            | _____                   | _____            |   |
| 6. _____  | _____            | _____                   | _____            |   |
| 7. _____  | _____            | _____                   | _____            |   |
| 8. _____  | _____            | _____                   | _____            |   |
| Total Cover:  | 105              |                         |                  |   |
| <b><u>Woody Vine Stratum:</u></b> (Plot size: _____)    |                  |                         |                  |   |
| 1. _____  | _____            | _____                   | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| 2. _____  | _____            | _____                   | _____            |   |
| Total Cover:  | --               |                         |                  |   |
| % Bare Ground in Herb Stratum                           | 5                | % Cover of Biotic Crust | 0                |   |
| Remarks:  |                  |                         |                  |   |

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |   |                   |                  |           |         |
|--|---------------|-----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-6  | 10 YR 4/3     | 100 |                |   |                   |                  | Silt loam |         |
| 6-12   | 10 YR 3/3     | 95  | 7.5 YR 4/3     | 5 | C                 | M                | Silt loam |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

|  |   |
|--|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Sandy Redox (S5)           |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Stripped Matrix (S6)       |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   |
| <input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b> | <input type="checkbox"/> Depleted Matrix (F3)       |
| <input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b>         | <input type="checkbox"/> Redox Dark Surface (F6)    |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Redox Depressions (F8)     |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)              | <input type="checkbox"/> Vernal Pools (F9)          |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              |   |

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

|   |
|---|
| <input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b>  |
| <input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b> |
| <input type="checkbox"/> Reduced Vertic (F18)           |
| <input type="checkbox"/> Red Parent Material (TF2)      |
| <input type="checkbox"/> Other (Explain in Remarks)     |

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Matrix insufficiently depleted to meet F6.

**HYDROLOGY**

**Wetland Hydrology Indicators:**

|   |  |   |
|---|--|---|
| <u>Primary Indicators (minimum of one required; check all that apply)</u> |  | <u>Secondary Indicators (2or more required)</u>                   |
| <input type="checkbox"/> Surface water (A1)                               | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b>       |
| <input type="checkbox"/> High water Table (A2)                            | <input type="checkbox"/> Biotic Crust (B12)                            | <input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b> |
| <input type="checkbox"/> Saturation (A3)                                  | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b>    |
| <input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b>            | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    | <input type="checkbox"/> Drainage Patterns (B10)                  |
| <input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b>      | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2)              |
| <input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b>         | <input type="checkbox"/> Presence of Reduced Iron (C4)                 | <input type="checkbox"/> Crayfish Burrows (C8)                    |
| <input type="checkbox"/> Surface Soil Cracks (B6)                         | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)   |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)        | <input type="checkbox"/> Thin Muck Surface (C7)                        | <input type="checkbox"/> Shallow Aquitard (D3)                    |
| <input type="checkbox"/> Water-Stained Leaves (B9)                        | <input type="checkbox"/> Other (Explain in Remarks)                    | <input type="checkbox"/> FAC-Neutral test (D5)                    |

**Field Observations:**

|  |                              |  |                       |   |
|--|------------------------------|--|-----------------------|---|
| Surface Water Present?                             | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Depth (inches): _____ | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Water Table Present?                               | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Depth (inches): _____ |   |
| Saturation Present?<br>(includes capillary fringe) | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Depth (inches): _____ |   |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 8  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Convex-concave Slope (%): 7  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very rocky very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)          | Absolute % Cover | Dominant Species?                | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|------------------|----------------------------------|------------------|--|
| 1. _____   | _____            | _____                            | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>4</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25%</u> (A/B)   |
| 2. _____   | _____            | _____                            | _____            |  |
| 3. _____   | _____            | _____                            | _____            |  |
| 4. _____   | _____            | _____                            | _____            |  |
| Total Cover: _____                               | --               |                                  |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____) |                  |                                  |                  | <b>Prevalence Index worksheet:</b>   |
| 1. _____   | _____            | _____                            | _____            | Total % Cover of: _____ Multiply by: _____   |
| 2. _____   | _____            | _____                            | _____            | OBL Species: _____ x 1 = _____   |
| 3. _____   | _____            | _____                            | _____            | FACW Species _____ x 2 = _____   |
| 4. _____   | _____            | _____                            | _____            | FAC Species _____ x 3 = _____  |
| 5. _____   | _____            | _____                            | _____            | FACU Species _____ x 4 = _____   |
| Total Cover: _____                               | --               |                                  |                  | UPL Species _____ x 5 = _____  |
| <b>Herb Stratum:</b> (Plot size: ____6' rad____) |                  |                                  |                  | Column Totals: _____ (A) _____ (B)   |
| 1. <u>Festuca perennis</u>                       | 10               | D                                | FAC              | Prevalence Index = B/A = _____<br>Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Carduus pycnocephalus</u>                  | 10               | D                                | UPL              |  |
| 3. <u>Cynosurus echinatus</u>                    | 8                | D                                | UPL              |  |
| 4. <u>Bromus hordeaceus</u>                      | 8                | D                                | FACU             |  |
| 5. <u>Trifolium hirtum</u>                       | 5                |                                  | UPL              |  |
| 6. <u>Trifolium glomeratum</u>                   | 3                |                                  | UPL              |  |
| 7. <u>Trifolium dubium</u>                       | 3                |                                  | UPL              |  |
| 8. <u>Centaurea solstitialis</u>                 | 3                |                                  | UPL              |  |
| Total Cover: _____                               | 50               |                                  |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)    |                  |                                  |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.  |
| 1. _____   | _____            | _____                            | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |
| 2. _____   | _____            | _____                            | _____            |  |
| Total Cover: _____                               |                  |                                  |                  |  |
| % Bare Ground in Herb Stratum <u>50</u>          |                  | % Cover of Biotic Crust <u>0</u> |                  |  |
| Remarks:   |                  |                                  |                  |  |

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.)                                      |               |     |                |   |   |                  |   |         |
|---|---------------|-----|----------------|---|---|------------------|---|---------|
| Depth<br>Inches   | Matrix        |     | Redox Features |   |   |                  | Texture   | Remarks |
|   | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup>   | Loc <sup>2</sup> |   |         |
| 0-12  | 10 YR 4/3     | 100 | --             |   |   |                  | Silt loam   |         |
|   |               |     |                |   |   |                  |   |         |
|   |               |     |                |   |   |                  |   |         |
|   |               |     |                |   |   |                  |   |         |
|   |               |     |                |   |   |                  |   |         |
|   |               |     |                |   |   |                  |   |         |
|   |               |     |                |   |   |                  |   |         |
|   |               |     |                |   |   |                  |   |         |
| <sup>1</sup> Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix |               |     |                |   |   |                  |   |         |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>  |               |     |                |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> |                  |   |         |
| <input type="checkbox"/> Histosol (A1)  |               |     |                |   | <input type="checkbox"/> Sandy Redox (S5)                   |                  |   |         |
| <input type="checkbox"/> Histic Epipedon (A2)   |               |     |                |   | <input type="checkbox"/> Stripped Matrix (S6)               |                  |   |         |
| <input type="checkbox"/> Black Histic (A3)  |               |     |                |   | <input type="checkbox"/> Loamy Mucky Mineral (F1)           |                  |   |         |
| <input type="checkbox"/> Hydrogen Sulfide (A4)  |               |     |                |   | <input type="checkbox"/> Loamy Gleyed Matrix (F2)           |                  |   |         |
| <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )  |               |     |                |   | <input type="checkbox"/> Depleted Matrix (F3)               |                  |   |         |
| <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )  |               |     |                |   | <input type="checkbox"/> Redox Dark Surface (F6)            |                  |   |         |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)  |               |     |                |   | <input type="checkbox"/> Depleted Dark Surface (F7)         |                  |   |         |
| <input type="checkbox"/> Thick Dark Surface (A12)   |               |     |                |   | <input type="checkbox"/> Redox Depressions (F8)             |                  |   |         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)   |               |     |                |   | <input type="checkbox"/> Vernal Pools (F9)                  |                  |   |         |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)   |               |     |                |   | <input type="checkbox"/> Other (Explain in Remarks)         |                  |   |         |
| <p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>                       |               |     |                |   |   |                  |   |         |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____  |               |     |                |   |   |                  | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |         |
| Remarks:  |               |     |                |   |   |                  |   |         |

**HYDROLOGY**

| Wetland Hydrology Indicators:   |   |
|---|---|
| Primary Indicators (minimum of one required; check all that apply)  | Secondary Indicators (2or more required)  |
| <input type="checkbox"/> Surface water (A1)   | <input type="checkbox"/> Salt Crust (B11)   |
| <input type="checkbox"/> High water Table (A2)  | <input type="checkbox"/> Biotic Crust (B12)   |
| <input type="checkbox"/> Saturation (A3)  | <input type="checkbox"/> Aquatic Invertebrates (B13)  |
| <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)   |
| <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )  | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)                                |
| <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )   | <input type="checkbox"/> Presence of Reduced Iron (C4)  |
| <input type="checkbox"/> Surface Soil Cracks (B6)   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)                                   |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)  | <input type="checkbox"/> Thin Muck Surface (C7)   |
| <input type="checkbox"/> Water-Stained Leaves (B9)  | <input type="checkbox"/> Other (Explain in Remarks)   |
| <b>Field Observations:</b>  |   |
| Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____                             | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____                               |   |
| Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) |   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):                                      |   |
| Remarks:  |   |



WETLAND DETERMINATION DATA FORM – Arid West Region  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 9  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex-concave Slope (%): 8  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very rocky very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)                      | Absolute % Cover | Dominant Species?                | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|------------------|----------------------------------|------------------|--|
| 1. _____   | _____            | _____                            | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>0</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)  |
| 2. _____   | _____            | _____                            | _____            |  |
| 3. _____   | _____            | _____                            | _____            |  |
| 4. _____   | _____            | _____                            | _____            |  |
| Total Cover: _____   | --               |                                  |                  |  |
| <b><u>Sapling/Shrub Stratum:</u></b> (Plot size: _____)      |                  |                                  |                  |  |
| 1. _____   | _____            | _____                            | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by:<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____   | _____            | _____                            | _____            |  |
| 3. _____   | _____            | _____                            | _____            |  |
| 4. _____   | _____            | _____                            | _____            |  |
| 5. _____   | _____            | _____                            | _____            |  |
| Total Cover: _____   | --               |                                  |                  |  |
| <b><u>Herb Stratum:</u></b> (Plot size: <u>6'</u> rad _____) |                  |                                  |                  |  |
| 1. <u><i>Elymus glaucus</i></u>                              | 15               | D                                | FACU             | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u><i>Cynosurus echinatus</i></u>                         | 25               | D                                | UPL              |  |
| 3. <u><i>Trifolium dubium</i></u>                            | 10               |                                  | UPL              |  |
| 4. <u><i>Bromus hordeaceus</i></u>                           | 10               |                                  | FACU             |  |
| 5. <u><i>Bromus diandrus</i></u>                             | 15               | D                                | UPL              |  |
| 6. <u><i>Galium parisiense</i></u>                           | 2                |                                  | UPL              |  |
| 7. <u><i>Sanicula crassicaulis</i></u>                       | 5                |                                  | UPL              |  |
| 8. <u><i>Luzula comosa</i></u>                               | 2                |                                  | FAC              |  |
| Total Cover: _____   | 84               |                                  |                  |  |
| <b><u>Woody Vine Stratum:</u></b> (Plot size: _____)         |                  |                                  |                  |  |
| 1. _____   | _____            | _____                            | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |
| 2. _____   | _____            | _____                            | _____            |  |
| Total Cover: _____   | --               |                                  |                  |  |
| % Bare Ground in Herb Stratum <u>25</u>                      |                  | % Cover of Biotic Crust <u>0</u> |                  |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |   |                   |                  |           |         |
|--|---------------|-----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-10   | 10 YR 4/3     | 100 | --             |   |                   |                  | Silt loam |         |
| >10  |               |     |                |   |                   |                  | Rock      |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

|  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                           | <input type="checkbox"/> Sandy Redox (S5)           | <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )  |
| <input type="checkbox"/> Histic Epipedon (A2)                    | <input type="checkbox"/> Stripped Matrix (S6)       | <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> ) |
| <input type="checkbox"/> Black Histic (A3)                       | <input type="checkbox"/> Loamy Mucky Mineral (F1)   | <input type="checkbox"/> Reduced Vertic (F18)             |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                   | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   | <input type="checkbox"/> Red Parent Material (TF2)        |
| <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) | <input type="checkbox"/> Depleted Matrix (F3)       | <input type="checkbox"/> Other (Explain in Remarks)       |
| <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )         | <input type="checkbox"/> Redox Dark Surface (F6)    |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)       | <input type="checkbox"/> Depleted Dark Surface (F7) |   |
| <input type="checkbox"/> Thick Dark Surface (A12)                | <input type="checkbox"/> Redox Depressions (F8)     |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)                | <input type="checkbox"/> Vernal Pools (F9)          |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)                |   |   |

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?    Yes     No**

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

|   |   |
|---|---|
| <b>Primary Indicators (minimum of one required; check all that apply)</b> | <b>Secondary Indicators (2or more required)</b>                     |
| <input type="checkbox"/> Surface water (A1)                               | <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )       |
| <input type="checkbox"/> High water Table (A2)                            | <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) |
| <input type="checkbox"/> Saturation (A3)                                  | <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )    |
| <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )          | <input type="checkbox"/> Drainage Patterns (B10)                    |
| <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )    | <input type="checkbox"/> Dry-Season Water Table (C2)                |
| <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )       | <input type="checkbox"/> Crayfish Burrows (C8)                      |
| <input type="checkbox"/> Surface Soil Cracks (B6)                         | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)     |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)        | <input type="checkbox"/> Shallow Aquitard (D3)                      |
| <input type="checkbox"/> Water-Stained Leaves (B9)                        | <input type="checkbox"/> FAC-Neutral test (D5)                      |
| <input type="checkbox"/> Salt Crust (B11)                                 |   |
| <input type="checkbox"/> Biotic Crust (B12)                               |   |
| <input type="checkbox"/> Aquatic Invertebrates (B13)                      |   |
| <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                       |   |
| <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)    |   |
| <input type="checkbox"/> Presence of Reduced Iron (C4)                    |   |
| <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)       |   |
| <input type="checkbox"/> Thin Muck Surface (C7)                           |   |
| <input type="checkbox"/> Other (Explain in Remarks)                       |   |

**Field Observations:**

|   |                       |   |
|---|-----------------------|---|
| Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Depth (inches): _____ | <b>Wetland Hydrology Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></b> |
| Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   | Depth (inches): _____ |   |
| Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>    | Depth (inches): _____ |   |

(includes capillary fringe)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 10  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex-concave Slope (%): 5  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)               | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>   |
|---|------------------|-------------------------|------------------|--|
| 1. _____  | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>0</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)  |
| 2. _____  | _____            | _____                   | _____            |  |
| 3. _____  | _____            | _____                   | _____            |  |
| 4. _____  | _____            | _____                   | _____            |  |
| Total Cover: _____                                    | --               |                         |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____)      |                  |                         |                  |  |
| 1. _____  | _____            | _____                   | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by:<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____  | _____            | _____                   | _____            |  |
| 3. _____  | _____            | _____                   | _____            |  |
| 4. _____  | _____            | _____                   | _____            |  |
| 5. _____  | _____            | _____                   | _____            |  |
| Total Cover: _____                                    | --               |                         |                  |  |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad _____) |                  |                         |                  |  |
| 1. <u>Toxicodendron diversilobum</u>                  | 10               | D                       | FACU             | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Cynosurus echinatus</u>                         | 10               | D                       | UPL              |  |
| 3. <u>Elymus glaucus</u>                              | 3                |                         | FACU             |  |
| 4. <u>Torilis arvensis</u>                            | 1                |                         | UPL              |  |
| 5. <u>Bromus diandrus</u>                             | 1                |                         | UPL              |  |
| 6. _____  | _____            | _____                   | _____            |  |
| 7. _____  | _____            | _____                   | _____            |  |
| 8. _____  | _____            | _____                   | _____            |  |
| Total Cover: _____                                    | 24               |                         |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)         |                  |                         |                  |  |
| 1. _____  | _____            | _____                   | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |
| 2. _____  | _____            | _____                   | _____            |  |
| Total Cover: _____                                    | --               |                         |                  |  |
| % Bare Ground in Herb Stratum                         | 80               | % Cover of Biotic Crust | 0                |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |   |                   |                  |         |         |
|--|---------------|-----|----------------|---|-------------------|------------------|---------|---------|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |                   |                  | Texture | Remarks |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |         |         |
| 0-12   | 10 YR 4/3     | 100 | --             |   |                   |                  |         |         |
|  |               |     |                |   |                   |                  |         |         |
|  |               |     |                |   |                   |                  |         |         |
|  |               |     |                |   |                   |                  |         |         |
|  |               |     |                |   |                   |                  |         |         |
|  |               |     |                |   |                   |                  |         |         |
|  |               |     |                |   |                   |                  |         |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|   |  |
|---|--|
| <p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <p><input type="checkbox"/> Histosol (A1)                                 <input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Histic Epipedon (A2)                        <input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Black Histic (A3)                              <input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)                        <input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b>            <input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b>                    <input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)       <input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)                    <input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)                   <input type="checkbox"/> Vernal Pools (F9)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> | <p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <p><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b></p> <p><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b></p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p><b><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</b></p> |
|---|--|

|   |  |
|---|--|
| <p><b>Restrictive Layer (if present):</b><br/>                 Type: _____<br/>                 Depth (inches): _____</p> | <p><b>Hydric Soil Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></b></p> |
|---|--|

Remarks:

**HYDROLOGY**

|  |  |
|--|--|
| <b>Wetland Hydrology Indicators:</b>   |  |
| <p>Primary Indicators (minimum of one required; check all that apply)</p> <p><input type="checkbox"/> Surface water (A1)                             <input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> High water Table (A2)                        <input type="checkbox"/> Biotic Crust (B12)</p> <p><input type="checkbox"/> Saturation (A3)                                <input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b>           <input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b>   <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b>       <input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)                    <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)                 <input type="checkbox"/> Other (Explain in Remarks)</p> | <p>Secondary Indicators (2or more required)</p> <p><input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b></p> <p><input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b></p> <p><input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b></p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral test (D5)</p> |

|  |  |
|--|--|
| <p><b>Field Observations:</b></p> <p>Surface Water Present?            Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Water Table Present?              Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>Saturation Present?                Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/>    Depth (inches): _____</p> <p>(includes capillary fringe)</p> | <p><b>Wetland Hydrology Present?            Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></b></p> |
|--|--|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 11  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Closed depression in swale Local relief (concave, convex, none): Concave-concave Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |                             |   |
|---------------------------------|---|-----------------------------|---|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Hydric Soil Present?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Is the Sampled Area<br>within a Wetland?      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Remarks:                        |   |                             |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)          | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|------------------|-------------------------|------------------|--|
| 1. _____   | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>1</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)  |
| 2. _____   | _____            | _____                   | _____            |  |
| 3. _____   | _____            | _____                   | _____            |  |
| 4. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | --               |                         |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____) |                  |                         |                  |  |
| 1. _____   | _____            | _____                   | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br><br>Prevalence Index = B/A = _____   |
| 2. _____   | _____            | _____                   | _____            |  |
| 3. _____   | _____            | _____                   | _____            |  |
| 4. _____   | _____            | _____                   | _____            |  |
| 5. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | --               |                         |                  |  |
| <b>Herb Stratum:</b> (Plot size: <u>6' rad</u> ) |                  |                         |                  |  |
| 1. <u><i>Lythrum portula</i></u>                 | <u>70</u>        | <u>D</u>                | <u>OBL</u>       | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present. |
| 2. <u><i>Polygonum aviculare</i></u>             | <u>2</u>         |                         | <u>FAC</u>       |  |
| 3. <u><i>Juncus balticus</i></u>                 | <u>10</u>        |                         | <u>FACW</u>      |  |
| 4. _____   | _____            | _____                   | _____            |  |
| 5. _____   | _____            | _____                   | _____            |  |
| 6. _____   | _____            | _____                   | _____            |  |
| 7. _____   | _____            | _____                   | _____            |  |
| 8. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | <u>82</u>        |                         |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)    |                  |                         |                  |  |
| 1. _____   | _____            | _____                   | _____            | Hydrophytic Vegetation Present?      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |
| 2. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | --               |                         |                  |  |
| % Bare Ground in Herb Stratum                    | <u>10</u>        | % Cover of Biotic Crust | <u>10</u>        |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |   |                   |                  |           |         |
|--|---------------|----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-12   | 10 YR 4/2     | 92 | 7.5 YR 4/6     | 8 | C                 | M                | Silt loam |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |   |  |
|--|---|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input checked="" type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input checked="" type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
|--|---|--|

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

|  |   |
|--|---|
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____ | <b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|--|---|

Remarks:

**HYDROLOGY**

|  |   |
|--|---|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply)   | Secondary Indicators (2or more required)  |
| <input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b><br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9)          | <input type="checkbox"/> Salt Crust (B11)<br><input checked="" type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b><br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input checked="" type="checkbox"/> FAC-Neutral test (D5) |   |

|   |   |
|---|---|
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) | <b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|---|---|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 12  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |   |
|---------------------------------|------------------------------|--|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |   |
| Remarks:                        |                              |  |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)               | Absolute % Cover                 | Dominant Species? | Indicator Status | <b>Dominance Test worksheet:</b>   |
|---|----------------------------------|-------------------|------------------|--|
| 1. _____  | _____                            | _____             | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>0</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>1</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)  |
| 2. _____  | _____                            | _____             | _____            |  |
| 3. _____  | _____                            | _____             | _____            |  |
| 4. _____  | _____                            | _____             | _____            |  |
| Total Cover: _____                                    | --                               |                   |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____)      |                                  |                   |                  |  |
| 1. _____  | _____                            | _____             | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____  | _____                            | _____             | _____            |  |
| 3. _____  | _____                            | _____             | _____            |  |
| 4. _____  | _____                            | _____             | _____            |  |
| 5. _____  | _____                            | _____             | _____            |  |
| Total Cover: _____                                    | --                               |                   |                  |  |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad _____) |                                  |                   |                  |  |
| 1. <u><i>Elymus caput-medusae</i></u>                 | <u>70</u>                        | <u>D</u>          | <u>UPL</u>       | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u><i>Centaurea solstitialis</i></u>               | <u>20</u>                        |                   | <u>UPL</u>       |  |
| 3. <u><i>Bromus hordeaceus</i></u>                    | <u>15</u>                        |                   | <u>FACU</u>      |  |
| 4. <u><i>Aira caryophyllea</i></u>                    | <u>5</u>                         |                   | <u>FACU</u>      |  |
| 5. _____  | _____                            | _____             | _____            |  |
| 6. _____  | _____                            | _____             | _____            |  |
| 7. _____  | _____                            | _____             | _____            |  |
| 8. _____  | _____                            | _____             | _____            |  |
| Total Cover: _____                                    | <u>110</u>                       |                   |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)         |                                  |                   |                  |  |
| 1. _____  | _____                            | _____             | _____            | Hydrophytic Vegetation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| 2. _____  | _____                            | _____             | _____            |  |
| Total Cover: _____                                    | --                               |                   |                  |  |
| % Bare Ground in Herb Stratum <u>5</u>                | % Cover of Biotic Crust <u>0</u> |                   |                  |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.)   |               |     |                |   |   |                  |           |         |   |  |  |  |
|--|---------------|-----|----------------|---|---|------------------|-----------|---------|---|--|--|--|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |   |                  | Texture   | Remarks |   |  |  |  |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup>   | Loc <sup>2</sup> |           |         |   |  |  |  |
| 0-12   | 10 YR 4/3     | 100 | --             |   |   |                  | Silt loam |         |   |  |  |  |
|  |               |     |                |   |   |                  |           |         |   |  |  |  |
|  |               |     |                |   |   |                  |           |         |   |  |  |  |
|  |               |     |                |   |   |                  |           |         |   |  |  |  |
|  |               |     |                |   |   |                  |           |         |   |  |  |  |
|  |               |     |                |   |   |                  |           |         |   |  |  |  |
|  |               |     |                |   |   |                  |           |         |   |  |  |  |
|  |               |     |                |   |   |                  |           |         |   |  |  |  |
|  |               |     |                |   |   |                  |           |         |   |  |  |  |
| <sup>1</sup> Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix  |               |     |                |   |   |                  |           |         |   |  |  |  |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>   |               |     |                |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |                  |           |         |   |  |  |  |
| <input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) |               |     |                |   | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) |                  |           |         | <input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |  |  |  |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____   |               |     |                |   | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   |                  |           |         |   |  |  |  |
| Remarks:   |               |     |                |   | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |                  |           |         |   |  |  |  |

HYDROLOGY

| Wetland Hydrology Indicators:   |  |   |  |
|---|--|---|--|
| Primary Indicators (minimum of one required; check all that apply)  |  | Secondary Indicators (2or more required)  |  |
| <input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Salt Crust (B11)<br><input type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )<br><input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )<br><input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )<br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input type="checkbox"/> FAC-Neutral test (D5) |  |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)   |  | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):<br><br>  |  |   |  |
| Remarks:  |  |   |  |



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 13  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Seasonal pond Local relief (concave, convex, none): Concave-concave Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very rocky very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |                             |                     |   |
|---------------------------------|---|-----------------------------|---------------------|---|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                     |   |
| Hydric Soil Present?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Is the Sampled Area |   |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | within a Wetland?   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Remarks:                        |   |                             |                     |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)               | Absolute % Cover | Dominant Species?                 | Indicator Status | <b>Dominance Test worksheet:</b>  |  |
|---|------------------|-----------------------------------|------------------|---|--|
| 1. _____  | _____            | _____                             | _____            | Number of Dominant Species  |  |
| 2. _____  | _____            | _____                             | _____            | That Are OBL, FACW or FAC: <u>2</u> (A)   |  |
| 3. _____  | _____            | _____                             | _____            | Total Number of Dominant  |  |
| 4. _____  | _____            | _____                             | _____            | Species Across All Strata: <u>2</u> (B)   |  |
| Total Cover: <u>--</u>                                |                  |                                   |                  | Percent of Dominant Species   |  |
|   |                  |                                   |                  | That Are OBL, FACW, or FAC: <u>100%</u> (A/B)   |  |
| <u>Sapling/Shrub Stratum:</u> (Plot size: _____)      | Absolute % Cover | Dominant Species?                 | Indicator Status | <b>Prevalence Index worksheet:</b>  |  |
| 1. _____  | _____            | _____                             | _____            | Total % Cover of: _____ Multiply by: _____  |  |
| 2. _____  | _____            | _____                             | _____            | OBL Species: _____ x 1 = _____  |  |
| 3. _____  | _____            | _____                             | _____            | FACW Species _____ x 2 = _____  |  |
| 4. _____  | _____            | _____                             | _____            | FAC Species _____ x 3 = _____   |  |
| 5. _____  | _____            | _____                             | _____            | FACU Species _____ x 4 = _____  |  |
| Total Cover: <u>--</u>                                |                  |                                   |                  | UPL Species _____ x 5 = _____   |  |
|   |                  |                                   |                  | Column Totals: _____ (A) _____ (B)  |  |
| <u>Herb Stratum:</u> (Plot size: <u>6'</u> rad _____) | Absolute % Cover | Dominant Species?                 | Indicator Status | Prevalence Index = B/A = _____  |  |
| 1. <u><i>Lythrum portula</i></u>                      | <u>15</u>        | <u>D</u>                          | <u>OBL</u>       | Hydrophytic Vegetation Indicators:  |  |
| 2. <u><i>Polygonum monspeliensis</i></u>              | <u>5</u>         | <u>D</u>                          | <u>FACW</u>      | <input checked="" type="checkbox"/> Dominance Test is >50%  |  |
| 3. <u><i>Festuca perennis</i></u>                     | <u>1</u>         |                                   | <u>FAC</u>       | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |  |
| 4. <u><i>Polygonum aviculare</i></u>                  | <u>1</u>         |                                   | <u>FAC</u>       | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |  |
| 5. _____  | _____            | _____                             | _____            | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |  |
| 6. _____  | _____            | _____                             | _____            |   |  |
| 7. _____  | _____            | _____                             | _____            |   |  |
| 8. _____  | _____            | _____                             | _____            |   |  |
| Total Cover: <u>22</u>                                |                  |                                   |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |  |
| <u>Woody Vine Stratum:</u> (Plot size: _____)         | Absolute % Cover | Dominant Species?                 | Indicator Status | Hydrophytic Vegetation Present?   |  |
| 1. _____  | _____            | _____                             | _____            | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |  |
| 2. _____  | _____            | _____                             | _____            |   |  |
| Total Cover: <u>--</u>                                |                  |                                   |                  |   |  |
| % Bare Ground in Herb Stratum <u>60</u>               |                  | % Cover of Biotic Crust <u>20</u> |                  |   |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |   |                   |                  |           |         |
|--|---------------|----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-10   | 10 YR 4/3     | 92 | 7.5 YR 4/6     | 8 | C                 | M                | Silt loam |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

- |  |  |   |
|--|--|---|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> |  | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> |
| <input type="checkbox"/> Histosol (A1)   | <input type="checkbox"/> Sandy Redox (S5)                  | <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )    |
| <input type="checkbox"/> Histic Epipedon (A2)                                    | <input type="checkbox"/> Stripped Matrix (S6)              | <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )   |
| <input type="checkbox"/> Black Histic (A3)                                       | <input type="checkbox"/> Loamy Mucky Mineral (F1)          | <input type="checkbox"/> Reduced Vertic (F18)               |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                                   | <input type="checkbox"/> Loamy Gleyed Matrix (F2)          | <input type="checkbox"/> Red Parent Material (TF2)          |
| <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )                 | <input type="checkbox"/> Depleted Matrix (F3)              | <input type="checkbox"/> Other (Explain in Remarks)         |
| <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )                         | <input type="checkbox"/> Redox Dark Surface (F6)           |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)                       | <input type="checkbox"/> Depleted Dark Surface (F7)        |   |
| <input type="checkbox"/> Thick Dark Surface (A12)                                | <input checked="" type="checkbox"/> Redox Depressions (F8) |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)                                | <input type="checkbox"/> Vernal Pools (F9)                 |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)                                |  |   |

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:

**HYDROLOGY**

- |  |  |   |
|--|--|---|
| <b>Wetland Hydrology Indicators:</b>                                   |  |   |
| Primary Indicators (minimum of one required; check all that apply)     |  | Secondary Indicators (2or more required)                            |
| <input type="checkbox"/> Surface water (A1)                            | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )       |
| <input type="checkbox"/> High water Table (A2)                         | <input checked="" type="checkbox"/> Biotic Crust (B12)                 | <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) |
| <input type="checkbox"/> Saturation (A3)                               | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )    |
| <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )       | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    | <input type="checkbox"/> Drainage Patterns (B10)                    |
| <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2)                |
| <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )    | <input type="checkbox"/> Presence of Reduced Iron (C4)                 | <input type="checkbox"/> Crayfish Burrows (C8)                      |
| <input type="checkbox"/> Surface Soil Cracks (B6)                      | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)     |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)     | <input type="checkbox"/> Thin Muck Surface (C7)                        | <input type="checkbox"/> Shallow Aquitard (D3)                      |
| <input type="checkbox"/> Water-Stained Leaves (B9)                     | <input type="checkbox"/> Other (Explain in Remarks)                    | <input checked="" type="checkbox"/> FAC-Neutral test (D5)           |

**Field Observations:**  
 Surface Water Present?        Yes     No     Depth (inches): \_\_\_\_\_  
 Water Table Present?         Yes     No     Depth (inches): \_\_\_\_\_  
 Saturation Present?           Yes     No     Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?**        Yes     No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 14  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very rocky very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |                             |                     |   |                             |
|---------------------------------|---|-----------------------------|---------------------|---|-----------------------------|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                     |   |                             |
| Hydric Soil Present?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Is the Sampled Area |   |                             |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | within a Wetland?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Remarks:                        |   |                             |                     |   |                             |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)          | Absolute % Cover | Dominant Species?       | Indicator Status  | <b>Dominance Test worksheet:</b>  |                   |
|--|------------------|-------------------------|---|---|-------------------|
| 1. _____   | _____            | _____                   | _____   | Number of Dominant Species That Are OBL, FACW or FAC:   | <u>1</u> (A)      |
| 2. _____   | _____            | _____                   | _____   | Total Number of Dominant Species Across All Strata:   | <u>1</u> (B)      |
| 3. _____   | _____            | _____                   | _____   | Percent of Dominant Species That Are OBL, FACW, or FAC:   | <u>100%</u> (A/B) |
| 4. _____   | _____            | _____                   | _____   |   |                   |
| Total Cover:                                     | <u>--</u>        |                         |   |   |                   |
| <u>Sapling/Shrub Stratum:</u> (Plot size: _____) |                  |                         | <b>Prevalence Index worksheet:</b>  |   |                   |
| 1. _____   | _____            | _____                   | Total % Cover of:   | Multiply by:  |                   |
| 2. _____   | _____            | _____                   | OBL Species:  | _____ x 1 =   | _____             |
| 3. _____   | _____            | _____                   | FACW Species:   | _____ x 2 =   | _____             |
| 4. _____   | _____            | _____                   | FAC Species:  | _____ x 3 =   | _____             |
| 5. _____   | _____            | _____                   | FACU Species:   | _____ x 4 =   | _____             |
| Total Cover:                                     | <u>--</u>        |                         | UPL Species:  | _____ x 5 =   | _____             |
|  |                  |                         | Column Totals:  | _____ (A)   | _____ (B)         |
| <u>Herb Stratum:</u> (Plot size: <u>6' rad</u> ) |                  |                         | Prevalence Index = B/A =  |   |                   |
| 1. <i>Festuca perennis</i>                       | 80               | D                       | FAC   | Hydrophytic Vegetation Indicators:  |                   |
| 2. <i>Juncus balticus</i>                        | 20               |                         | FACW  | <input checked="" type="checkbox"/> Dominance Test is >50%  |                   |
| 3. <i>Bromus hordeaceus</i>                      | 1                |                         | FACU  | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |                   |
| 4. _____   | _____            | _____                   | _____   | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |                   |
| 5. _____   | _____            | _____                   | _____   | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |                   |
| 6. _____   | _____            | _____                   | _____   |   |                   |
| 7. _____   | _____            | _____                   | _____   |   |                   |
| 8. _____   | _____            | _____                   | _____   |   |                   |
| Total Cover:                                     | <u>101</u>       |                         |   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |                   |
| <u>Woody Vine Stratum:</u> (Plot size: _____)    |                  |                         | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |   |                   |
| 1. _____   | _____            | _____                   | _____   |   |                   |
| 2. _____   | _____            | _____                   | _____   |   |                   |
| Total Cover:                                     | <u>--</u>        |                         |   |   |                   |
| % Bare Ground in Herb Stratum                    | 0                | % Cover of Biotic Crust | 5   |   |                   |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |   |                   |                  |           |         |
|--|---------------|----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-12   | 10 YR 4/3     | 94 | 7.5 YR 4/6     | 6 | C                 | M                | Silt loam |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |  |  |
|--|--|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )<br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )<br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input checked="" type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )<br><input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )<br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
|--|--|--|

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

|  |   |
|--|---|
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____ | <b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|--|---|

Remarks:

**HYDROLOGY**

|  |   |  |
|--|---|--|
| <b>Wetland Hydrology Indicators:</b><br><u>Primary Indicators (minimum of one required; check all that apply)</u><br><input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Salt Crust (B11)<br><input checked="" type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) | <u>Secondary Indicators (2or more required)</u><br><input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )<br><input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )<br><input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )<br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input type="checkbox"/> FAC-Neutral test (D5) |
|--|---|--|

|   |   |
|---|---|
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) | <b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|---|---|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 15  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very rocky very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)               | Absolute % Cover | Dominant Species?                | Indicator Status | <b>Dominance Test worksheet:</b>   |
|---|------------------|----------------------------------|------------------|--|
| 1. _____  | _____            | _____                            | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)   |
| 2. _____  | _____            | _____                            | _____            |  |
| 3. _____  | _____            | _____                            | _____            |  |
| 4. _____  | _____            | _____                            | _____            |  |
| Total Cover: _____                                    | --               |                                  |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____)      |                  |                                  |                  |  |
| 1. _____  | _____            | _____                            | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____  | _____            | _____                            | _____            |  |
| 3. _____  | _____            | _____                            | _____            |  |
| 4. _____  | _____            | _____                            | _____            |  |
| 5. _____  | _____            | _____                            | _____            |  |
| Total Cover: _____                                    | --               |                                  |                  |  |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad _____) |                  |                                  |                  |  |
| 1. <u>Festuca perennis</u>                            | 30               | D                                | FAC              | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Bromus hordeaceus</u>                           | 10               |                                  | FACU             |  |
| 3. <u>Mimulus guttatus</u>                            | 5                |                                  | OBL              |  |
| 4. <u>Hordeum marinum ssp. gussoneanum</u>            | 5                |                                  | FAC              |  |
| 5. <u>Centaurea solstitialis</u>                      | 20               | D                                | UPL              |  |
| 6. <u>Elymus caput-medusae</u>                        | 20               | D                                | UPL              |  |
| 7. _____  | _____            | _____                            | _____            |  |
| 8. _____  | _____            | _____                            | _____            |  |
| Total Cover: _____                                    | 90               |                                  |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)         |                  |                                  |                  |  |
| 1. _____  | _____            | _____                            | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |
| 2. _____  | _____            | _____                            | _____            |  |
| Total Cover: _____                                    | --               |                                  |                  |  |
| % Bare Ground in Herb Stratum <u>10</u>               |                  | % Cover of Biotic Crust <u>0</u> |                  |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |   |                   |                  |           |         |
|--|---------------|----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-12   | 10 YR 4/3     | 94 | 7.5 YR 4/6     | 6 | C                 | M                | Silt loam |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |   |   |
|--|---|---|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> |
| <input type="checkbox"/> Histosol (A1)   | <input type="checkbox"/> Sandy Redox (S5)           | <input type="checkbox"/> 1 cm Muck (A9) (LRR C)             |
| <input type="checkbox"/> Histic Epipedon (A2)                                    | <input type="checkbox"/> Stripped Matrix (S6)       | <input type="checkbox"/> 2 cm Muck (A10) (LRR B)            |
| <input type="checkbox"/> Black Histic (A3)                                       | <input type="checkbox"/> Loamy Mucky Mineral (F1)   | <input type="checkbox"/> Reduced Vertic (F18)               |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                                   | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   | <input type="checkbox"/> Red Parent Material (TF2)          |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C)                          | <input type="checkbox"/> Depleted Matrix (F3)       | <input type="checkbox"/> Other (Explain in Remarks)         |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D)                                  | <input type="checkbox"/> Redox Dark Surface (F6)    |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)                       | <input type="checkbox"/> Depleted Dark Surface (F7) |   |
| <input type="checkbox"/> Thick Dark Surface (A12)                                | <input type="checkbox"/> Redox Depressions (F8)     |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)                                | <input type="checkbox"/> Vernal Pools (F9)          |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)                                |   |   |

**<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?    Yes     No**

Remarks:

**HYDROLOGY**

|   |  |
|---|--|
| <b>Wetland Hydrology Indicators:</b>                                      |  |
| <b>Primary Indicators (minimum of one required; check all that apply)</b> | <b>Secondary Indicators (2or more required)</b>                        |
| <input type="checkbox"/> Surface water (A1)                               | <input type="checkbox"/> Salt Crust (B11)                              |
| <input type="checkbox"/> High water Table (A2)                            | <input type="checkbox"/> Biotic Crust (B12)                            |
| <input type="checkbox"/> Saturation (A3)                                  | <input type="checkbox"/> Aquatic Invertebrates (B13)                   |
| <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )          | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    |
| <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )    | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )       | <input type="checkbox"/> Presence of Reduced Iron (C4)                 |
| <input type="checkbox"/> Surface Soil Cracks (B6)                         | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)        | <input type="checkbox"/> Thin Muck Surface (C7)                        |
| <input type="checkbox"/> Water-Stained Leaves (B9)                        | <input type="checkbox"/> Other (Explain in Remarks)                    |

|   |   |
|---|---|
| <b>Field Observations:</b>  | <b>Wetland Hydrology Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></b> |
| Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____                             |   |
| Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____                               |   |
| Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) |   |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 8/8/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 16  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: \_\_\_\_\_  
 Soil Map Unit Name: Diamond Springs very rocky very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: <u>6'</u> rad _____) | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>   |
|---|------------------|-------------------------|------------------|--|
| 1. <u>Quercus lobata</u>                              | 30               | D                       | FACU             | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)   |
| 2. _____  | _____            | _____                   | _____            |  |
| 3. _____  | _____            | _____                   | _____            |  |
| 4. _____  | _____            | _____                   | _____            |  |
| Total Cover:  | 30               |                         |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____)      |                  |                         |                  |  |
| 1. _____  | _____            | _____                   | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____  | _____            | _____                   | _____            |  |
| 3. _____  | _____            | _____                   | _____            |  |
| 4. _____  | _____            | _____                   | _____            |  |
| 5. _____  | _____            | _____                   | _____            |  |
| Total Cover:  | --               |                         |                  |  |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad _____) |                  |                         |                  |  |
| 1. <u>Bromus diandrus</u>                             | 35               | D                       | UPL              | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Geranium dissectum</u>                          | 10               |                         | UPL              |  |
| 3. <u>Festuca perennis</u>                            | 15               | D                       | FAC              |  |
| 4. <u>Torilis arvensis</u>                            | 10               |                         | UPL              |  |
| 5. _____  | _____            | _____                   | _____            |  |
| 6. _____  | _____            | _____                   | _____            |  |
| 7. _____  | _____            | _____                   | _____            |  |
| 8. _____  | _____            | _____                   | _____            |  |
| Total Cover:  | 70               |                         |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)         |                  |                         |                  |  |
| 1. _____  | _____            | _____                   | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |
| 2. _____  | _____            | _____                   | _____            |  |
| Total Cover:  | --               |                         |                  |  |
| % Bare Ground in Herb Stratum                         | 35               | % Cover of Biotic Crust | 0                |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |   |                   |         |           |                  |
|--|---------------|-----|----------------|---|-------------------|---------|-----------|------------------|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |                   | Texture | Remarks   |                  |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> |         |           | Loc <sup>2</sup> |
| 0-12   | 10 YR 4/3     | 100 | --             |   |                   |         | Silt loam |                  |
|  |               |     |                |   |                   |         |           |                  |
|  |               |     |                |   |                   |         |           |                  |
|  |               |     |                |   |                   |         |           |                  |
|  |               |     |                |   |                   |         |           |                  |
|  |               |     |                |   |                   |         |           |                  |
|  |               |     |                |   |                   |         |           |                  |
|  |               |     |                |   |                   |         |           |                  |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |   |  |
|--|---|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
| <b><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</b>  |   |  |

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?    Yes     No**

Remarks:

**HYDROLOGY**

|   |  |   |
|---|--|---|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply)  |  | Secondary Indicators (2or more required)  |
| <input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b><br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Salt Crust (B11)<br><input type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b><br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input type="checkbox"/> FAC-Neutral test (D5) |
| <b>Field Observations:</b><br>Surface Water Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?         Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)  |  | <b>Wetland Hydrology Present?      Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></b>   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):  |  |   |
| Remarks:  |  |   |



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/7/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 17  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Mixed alluvial land NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |  |
|---------------------------------|---|--|--|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |   |  |  |

**VEGETATION**

| <b>Tree Stratum:</b> (Plot size: <u>6'</u> rad)          | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |
|--|------------------|-------------------------|------------------|---|
| 1. <u>Salix exigua</u>                                   | <u>30</u>        | <u>D</u>                | <u>FACW</u>      | Number of Dominant Species That Are OBL, FACW or FAC: <u>3</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)   |
| 2. _____   | _____            | _____                   | _____            |   |
| 3. _____   | _____            | _____                   | _____            |   |
| 4. _____   | _____            | _____                   | _____            |   |
| Total Cover:   | <u>30</u>        |                         |                  |   |
| <b>Sapling/Shrub Stratum:</b> (Plot size: <u>6'</u> rad) |                  |                         |                  |   |
| 1. <u>Rubus armeniacus</u>                               | <u>5</u>         | <u>D</u>                | <u>FAC</u>       | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by:<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____   | _____            | _____                   | _____            |   |
| 3. _____   | _____            | _____                   | _____            |   |
| 4. _____   | _____            | _____                   | _____            |   |
| 5. _____   | _____            | _____                   | _____            |   |
| Total Cover:   | <u>5</u>         |                         |                  |   |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad)          |                  |                         |                  |   |
| 1. <u>Poa pratensis</u>                                  | <u>10</u>        |                         | <u>FAC</u>       | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Festuca perennis</u>                               | <u>60</u>        | <u>D</u>                | <u>FAC</u>       |   |
| 3. <u>Quercus lobata</u> (saplings)                      | <u>1</u>         |                         | <u>FACU</u>      |   |
| 4. <u>Juncus balticus</u>                                | <u>1</u>         |                         | <u>FACW</u>      |   |
| 5. _____   | _____            | _____                   | _____            |   |
| 6. _____   | _____            | _____                   | _____            |   |
| 7. _____   | _____            | _____                   | _____            |   |
| 8. _____   | _____            | _____                   | _____            |   |
| Total Cover:   | <u>72</u>        |                         |                  |   |
| <b>Woody Vine Stratum:</b> (Plot size: _____)            |                  |                         |                  |   |
| 1. _____   | _____            | _____                   | _____            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |
| 2. _____   | _____            | _____                   | _____            |   |
| Total Cover:   | <u>--</u>        |                         |                  |   |
| % Bare Ground in Herb Stratum                            | <u>30</u>        | % Cover of Biotic Crust | <u>--</u>        | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |

Remarks:



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/7/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 18  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Mixed alluvial land NWI Classification: R4SBC

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |                     |   |
|---------------------------------|---|--|---------------------|---|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                     |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area |   |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | within a Wetland?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Remarks:                        |   |  |                     |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: ___6' rad___)          | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |  |
|---|------------------|-------------------------|------------------|---|--|
| 1. <u>Prunus cerasifera</u>                             | 10               | D                       | UPL              | Number of Dominant Species That Are OBL, FACW or FAC: <u>2</u> (A)  |  |
| 2. _____  |                  |                         |                  | Total Number of Dominant Species Across All Strata: <u>3</u> (B)  |  |
| 3. _____  |                  |                         |                  | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)  |  |
| 4. _____  |                  |                         |                  |   |  |
| Total Cover:  | <u>10</u>        |                         |                  |   |  |
| <u>Sapling/Shrub Stratum:</u> (Plot size: ___6' rad___) | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Prevalence Index worksheet:</b>  |  |
| 1. <u>Rubus armeniacus</u>                              | 80               | D                       | FAC              | Total % Cover of: _____ Multiply by: _____  |  |
| 2. <u>Salix exigua</u>                                  | 20               | D                       | FACW             | OBL Species: _____ x 1 = _____  |  |
| 3. _____  |                  |                         |                  | FACW Species: _____ x 2 = _____   |  |
| 4. _____  |                  |                         |                  | FAC Species: _____ x 3 = _____  |  |
| 5. _____  |                  |                         |                  | FACU Species: _____ x 4 = _____   |  |
| Total Cover:  | <u>100</u>       |                         |                  | UPL Species: _____ x 5 = _____  |  |
|   |                  |                         |                  | Column Totals: _____ (A) _____ (B)  |  |
|   |                  |                         |                  | Prevalence Index = B/A = _____  |  |
| <u>Herb Stratum:</u> (Plot size: _____)                 | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Hydrophytic Vegetation Indicators:</b>   |  |
| 1. _____  |                  |                         |                  | <input checked="" type="checkbox"/> Dominance Test is >50%  |  |
| 2. _____  |                  |                         |                  | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |  |
| 3. _____  |                  |                         |                  | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |  |
| 4. _____  |                  |                         |                  | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |  |
| 5. _____  |                  |                         |                  |   |  |
| 6. _____  |                  |                         |                  |   |  |
| 7. _____  |                  |                         |                  |   |  |
| 8. _____  |                  |                         |                  |   |  |
| Total Cover:  | <u>--</u>        |                         |                  |   |  |
| <u>Woody Vine Stratum:</u> (Plot size: _____)           | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Hydrophytic Vegetation Present?</b>  |  |
| 1. _____  |                  |                         |                  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |  |
| 2. _____  |                  |                         |                  |   |  |
| Total Cover:  |                  |                         |                  |   |  |
| % Bare Ground in Herb Stratum                           | 100              | % Cover of Biotic Crust | 0                |   |  |

Remarks:



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/7/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 19  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Mixed alluvial land NWI Classification: R4SBC

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil  Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil  Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |  |
|---------------------------------|---|--|--|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |   |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: <u>6'</u> rad)          | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |
|--|------------------|-------------------------|------------------|---|
| 1. <u>Salix exigua</u>                                   | <u>30</u>        | <u>D</u>                | <u>FACW</u>      | Number of Dominant Species That Are OBL, FACW or FAC: <u>4</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>4</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)  |
| 2. _____   | _____            | _____                   | _____            |   |
| 3. _____   | _____            | _____                   | _____            |   |
| 4. _____   | _____            | _____                   | _____            |   |
| Total Cover:   | <u>30</u>        |                         |                  |   |
| <b>Sapling/Shrub Stratum:</b> (Plot size: <u>6'</u> rad) |                  |                         |                  |   |
| 1. <u>Rubus armeniacus</u>                               | <u>20</u>        | <u>D</u>                | <u>FAC</u>       | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by:<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____   | _____            | _____                   | _____            |   |
| 3. _____   | _____            | _____                   | _____            |   |
| 4. _____   | _____            | _____                   | _____            |   |
| 5. _____   | _____            | _____                   | _____            |   |
| Total Cover:   | <u>20</u>        |                         |                  |   |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad)          |                  |                         |                  |   |
| 1. <u>Juncus balticus</u>                                | <u>25</u>        | <u>D</u>                | <u>FACW</u>      | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Rumex crispus</u>                                  | <u>3</u>         |                         | <u>FAC</u>       |   |
| 3. <u>Festuca perennis</u>                               | <u>15</u>        | <u>D</u>                | <u>FAC</u>       |   |
| 4. <u>Torilis arvensis</u>                               | <u>5</u>         |                         | <u>UPL</u>       |   |
| 5. <u>Polygonum aviculare</u>                            | <u>1</u>         |                         | <u>FAC</u>       |   |
| 6. <u>Bromus hordeaceus</u>                              | <u>3</u>         |                         | <u>FACU</u>      |   |
| 7. _____   | _____            | _____                   | _____            |   |
| 8. _____   | _____            | _____                   | _____            |   |
| Total Cover:   | <u>52</u>        |                         |                  |   |
| <b>Woody Vine Stratum:</b> (Plot size: _____)            |                  |                         |                  |   |
| 1. _____   | _____            | _____                   | _____            | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |
| 2. _____   | _____            | _____                   | _____            |   |
| Total Cover:   | <u>--</u>        |                         |                  |   |
| % Bare Ground in Herb Stratum                            | <u>50</u>        | % Cover of Biotic Crust | <u>--</u>        |   |
| Remarks:   |                  |                         |                  |   |



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/7/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 20  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): concave-concave Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Mixed alluvial land NWI Classification: R4SBC

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |                             |                     |   |                             |
|---------------------------------|---|-----------------------------|---------------------|---|-----------------------------|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                     |   |                             |
| Hydric Soil Present?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Is the Sampled Area |   |                             |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | within a Wetland?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Remarks:                        |   |                             |                     |   |                             |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)                        | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |                     |
|--|------------------|-------------------------|------------------|---|---------------------|
| 1. _____   | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC:   | <u>2</u> (A)        |
| 2. _____   | _____            | _____                   | _____            | Total Number of Dominant Species Across All Strata:   | <u>2</u> (B)        |
| 3. _____   | _____            | _____                   | _____            | Percent of Dominant Species That Are OBL, FACW, or FAC:   | <u>100</u> (A/B)    |
| 4. _____   | _____            | _____                   | _____            |   |                     |
| Total Cover:   | <u>--</u>        |                         |                  |   |                     |
| <u>Sapling/Shrub Stratum:</u> (Plot size: <u>6'</u> rad _____) | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Prevalence Index worksheet:</b>  |                     |
| 1. <u>Rubus armeniacus</u>                                     | <u>15</u>        | <u>D</u>                | <u>FAC</u>       | Total % Cover of:   | Multiply by:        |
| 2. _____   | _____            | _____                   | _____            | OBL Species:  | _____ x 1 = _____   |
| 3. _____   | _____            | _____                   | _____            | FACW Species:   | _____ x 2 = _____   |
| 4. _____   | _____            | _____                   | _____            | FAC Species:  | _____ x 3 = _____   |
| 5. _____   | _____            | _____                   | _____            | FACU Species:   | _____ x 4 = _____   |
| Total Cover:   | <u>15</u>        |                         |                  | UPL Species:  | _____ x 5 = _____   |
|  |                  |                         |                  | Column Totals:  | _____ (A) _____ (B) |
| <u>Herb Stratum:</u> (Plot size: <u>6'</u> rad _____)          | Absolute % Cover | Dominant Species?       | Indicator Status | Prevalence Index = B/A = _____  |                     |
| 1. <u>Carex barbarae</u>                                       | <u>80</u>        | <u>D</u>                | <u>FAC</u>       | Hydrophytic Vegetation Indicators:  |                     |
| 2. <u>Juncus balticus</u>                                      | <u>15</u>        |                         | <u>FACW</u>      | <input checked="" type="checkbox"/> Dominance Test is >50%  |                     |
| 3. _____   | _____            | _____                   | _____            | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |                     |
| 4. _____   | _____            | _____                   | _____            | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |                     |
| 5. _____   | _____            | _____                   | _____            | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |                     |
| 6. _____   | _____            | _____                   | _____            |   |                     |
| 7. _____   | _____            | _____                   | _____            |   |                     |
| 8. _____   | _____            | _____                   | _____            |   |                     |
| Total Cover:   | <u>95</u>        |                         |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |                     |
| <u>Woody Vine Stratum:</u> (Plot size: _____)                  | Absolute % Cover | Dominant Species?       | Indicator Status | Hydrophytic Vegetation Present?   |                     |
| 1. _____   | _____            | _____                   | _____            | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |                     |
| 2. _____   | _____            | _____                   | _____            |   |                     |
| Total Cover:   | <u>--</u>        |                         |                  |   |                     |
| % Bare Ground in Herb Stratum                                  | <u>10</u>        | % Cover of Biotic Crust | <u>0</u>         |   |                     |

Remarks:





**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/7/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 21  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 3  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |                     |                              |  |
|---------------------------------|---|--|---------------------|------------------------------|--|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                     |                              |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area |                              |  |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | within a Wetland?   | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Remarks:                        |   |  |                     |                              |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)          | Absolute % Cover | Dominant Species?                 | Indicator Status | <b>Dominance Test worksheet:</b>  |  |
|--|------------------|-----------------------------------|------------------|---|--|
| 1. _____   | _____            | _____                             | _____            | Number of Dominant Species  |  |
| 2. _____   | _____            | _____                             | _____            | That Are OBL, FACW or FAC: <u>1</u> (A)   |  |
| 3. _____   | _____            | _____                             | _____            | Total Number of Dominant  |  |
| 4. _____   | _____            | _____                             | _____            | Species Across All Strata: <u>1</u> (B)   |  |
| Total Cover: <u>--</u>                           |                  |                                   |                  | Percent of Dominant Species   |  |
|  |                  |                                   |                  | That Are OBL, FACW, or FAC: <u>100%</u> (A/B)   |  |
| <u>Sapling/Shrub Stratum:</u> (Plot size: _____) |                  |                                   |                  | <b>Prevalence Index worksheet:</b>  |  |
| 1. _____   | _____            | _____                             | _____            | Total % Cover of: _____ Multiply by: _____  |  |
| 2. _____   | _____            | _____                             | _____            | OBL Species: _____ x 1 = _____  |  |
| 3. _____   | _____            | _____                             | _____            | FACW Species _____ x 2 = _____  |  |
| 4. _____   | _____            | _____                             | _____            | FAC Species _____ x 3 = _____   |  |
| 5. _____   | _____            | _____                             | _____            | FACU Species _____ x 4 = _____  |  |
| Total Cover: <u>--</u>                           |                  |                                   |                  | UPL Species _____ x 5 = _____   |  |
|  |                  |                                   |                  | Column Totals: _____ (A) _____ (B)  |  |
| <u>Herb Stratum:</u> (Plot size: <u>6' rad</u> ) |                  |                                   |                  | Prevalence Index = B/A = _____  |  |
| 1. <i>Festuca perennis</i>                       | 90               | D                                 | FAC              | Hydrophytic Vegetation Indicators:  |  |
| 2. <i>Rumex conglomeratus</i>                    | 1                |                                   | FACW             | <input checked="" type="checkbox"/> Dominance Test is >50%  |  |
| 3. <i>Hordeum marinum ssp. gussoneanum</i>       | 5                |                                   | FAC              | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |  |
| 4. <i>Bromus hordeaceus</i>                      | 3                |                                   | FACU             | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |  |
| 5. _____   |                  |                                   |                  | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |  |
| 6. _____   |                  |                                   |                  |   |  |
| 7. _____   |                  |                                   |                  |   |  |
| 8. _____   |                  |                                   |                  |   |  |
| Total Cover: <u>99</u>                           |                  |                                   |                  |   |  |
| <u>Woody Vine Stratum:</u> (Plot size: _____)    |                  |                                   |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |  |
| 1. _____   | _____            | _____                             | _____            | Hydrophytic   |  |
| 2. _____   | _____            | _____                             | _____            | Vegetation  |  |
| Total Cover: <u>--</u>                           |                  |                                   |                  | Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |  |
| % Bare Ground in Herb Stratum <u>5</u>           |                  | % Cover of Biotic Crust <u>--</u> |                  |   |  |
| Remarks:   |                  |                                   |                  |   |  |

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |   |                   |                  |           |         |
|--|---------------|-----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-5  | 10YR 4/3      | 100 | --             |   |                   |                  | Silt loam |         |
| 5-12   | 10YR 4/3      | 93  | 7.5YR 3/4      | 7 | C                 | M                | Silt loam |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |   |  |
|--|---|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
|--|---|--|

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

|  |   |
|--|---|
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____ | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|--|---|

Remarks:

**HYDROLOGY**

|   |  |   |  |
|---|--|---|--|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply)  |  | Secondary Indicators (2or more required)  |  |
| <input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b><br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Salt Crust (B11)<br><input type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b><br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input type="checkbox"/> FAC-Neutral test (D5) |  |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)   | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |   |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):  |  |   |  |
| Remarks:  |  |   |  |

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/7/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 22  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |                             |  |
|---------------------------------|---|-----------------------------|--|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| Remarks:                        |   |                             |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)                      | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|------------------|-------------------------|------------------|--|
| 1. _____   | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>2</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)  |
| 2. _____   | _____            | _____                   | _____            |  |
| 3. _____   | _____            | _____                   | _____            |  |
| 4. _____   | _____            | _____                   | _____            |  |
| Total Cover: _____   | --               |                         |                  |  |
| <b><u>Sapling/Shrub Stratum:</u></b> (Plot size: _____)      |                  |                         |                  |  |
| 1. _____   | _____            | _____                   | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br><br>Prevalence Index = B/A = _____   |
| 2. _____   | _____            | _____                   | _____            |  |
| 3. _____   | _____            | _____                   | _____            |  |
| 4. _____   | _____            | _____                   | _____            |  |
| 5. _____   | _____            | _____                   | _____            |  |
| Total Cover: _____   | --               |                         |                  |  |
| <b><u>Herb Stratum:</u></b> (Plot size: <u>6'</u> rad _____) |                  |                         |                  |  |
| 1. <i>Carex barbarae</i>                                     | 50               | D                       | FAC              | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present. |
| 2. <i>Persicaria</i> sp. (at least FACW)                     | 15               | D                       | FACW             |  |
| 3. <i>Rumex conglomeratus</i>                                | 7                |                         | FACW             |  |
| 4. _____   | _____            | _____                   | _____            |  |
| 5. _____   | _____            | _____                   | _____            |  |
| 6. _____   | _____            | _____                   | _____            |  |
| 7. _____   | _____            | _____                   | _____            |  |
| 8. _____   | _____            | _____                   | _____            |  |
| Total Cover: _____   | 72               |                         |                  |  |
| <b><u>Woody Vine Stratum:</u></b> (Plot size: _____)         |                  |                         |                  |  |
| 1. _____   | _____            | _____                   | _____            | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |
| 2. _____   | _____            | _____                   | _____            |  |
| Total Cover: _____   | --               |                         |                  |  |
| % Bare Ground in Herb Stratum                                | 30               | % Cover of Biotic Crust | 0                |  |
| Remarks:   |                  |                         |                  |  |



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/7/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 23  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Mixed alluvial land NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |   |
|---------------------------------|---|--|---|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |   |
| Remarks:                        |   |  |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)               | Absolute % Cover | Dominant Species?          | Indicator Status | <b>Dominance Test worksheet:</b>  |
|---|------------------|----------------------------|------------------|---|
| 1. _____  | _____            | _____                      | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>1</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)   |
| 2. _____  | _____            | _____                      | _____            |   |
| 3. _____  | _____            | _____                      | _____            |   |
| 4. _____  | _____            | _____                      | _____            |   |
| Total Cover: _____                                    | --               |                            |                  |   |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____)      |                  |                            |                  |   |
| 1. _____  | _____            | _____                      | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____  | _____            | _____                      | _____            |   |
| 3. _____  | _____            | _____                      | _____            |   |
| 4. _____  | _____            | _____                      | _____            |   |
| 5. _____  | _____            | _____                      | _____            |   |
| Total Cover: _____                                    | --               |                            |                  |   |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad _____) |                  |                            |                  |   |
| 1. <i>Carex praegracilis</i>                          | 90               | D                          | FACW             | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <i>Juncus balticus</i>                             | 15               |                            | FACW             |   |
| 3. <i>Cirsium vulgare</i>                             | 2                |                            | FACU             |   |
| 4. <i>Carex barbarae</i>                              | 15               |                            | FAC              |   |
| 5. _____  | _____            | _____                      | _____            |   |
| 6. _____  | _____            | _____                      | _____            |   |
| 7. _____  | _____            | _____                      | _____            |   |
| 8. _____  | _____            | _____                      | _____            |   |
| Total Cover: _____                                    | 122              |                            |                  |   |
| <b>Woody Vine Stratum:</b> (Plot size: _____)         |                  |                            |                  |   |
| 1. _____  | _____            | _____                      | _____            | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |
| 2. _____  | _____            | _____                      | _____            |   |
| Total Cover: _____                                    |                  |                            |                  |   |
| % Bare Ground in Herb Stratum --                      |                  | % Cover of Biotic Crust -- |                  |   |
| Remarks:  |                  |                            |                  |   |



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/7/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 24  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Linear-concave Slope (%): 3  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Mixed alluvial land NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |  |
|---------------------------------|---|--|--|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |   |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)                 | Absolute % Cover                  | Dominant Species? | Indicator Status | <b>Dominance Test worksheet:</b>  |
|---|-----------------------------------|-------------------|------------------|---|
| 1. _____  | _____                             | _____             | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>1</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)   |
| 2. _____  | _____                             | _____             | _____            |   |
| 3. _____  | _____                             | _____             | _____            |   |
| 4. _____  | _____                             | _____             | _____            |   |
| Total Cover: _____                                      | --                                |                   |                  |   |
| <b><u>Sapling/Shrub Stratum:</u></b> (Plot size: _____) |                                   |                   |                  |   |
| 1. _____  | _____                             | _____             | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____  | _____                             | _____             | _____            |   |
| 3. _____  | _____                             | _____             | _____            |   |
| 4. _____  | _____                             | _____             | _____            |   |
| 5. _____  | _____                             | _____             | _____            |   |
| Total Cover: _____                                      | --                                |                   |                  |   |
| <b><u>Herb Stratum:</u></b> (Plot size: <u>6' rad</u> ) |                                   |                   |                  |   |
| 1. <u>Juncus balticus</u>                               | 85                                | D                 | FACW             | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Carex barbarae</u>                                | 15                                |                   | FAC              |   |
| 3. _____  | _____                             | _____             | _____            |   |
| 4. _____  | _____                             | _____             | _____            |   |
| 5. _____  | _____                             | _____             | _____            |   |
| 6. _____  | _____                             | _____             | _____            |   |
| 7. _____  | _____                             | _____             | _____            |   |
| 8. _____  | _____                             | _____             | _____            |   |
| Total Cover: _____                                      | 100                               |                   |                  |   |
| <b><u>Woody Vine Stratum:</u></b> (Plot size: _____)    |                                   |                   |                  |   |
| 1. _____  | _____                             | _____             | _____            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |
| 2. _____  | _____                             | _____             | _____            |   |
| Total Cover: _____                                      | --                                |                   |                  |   |
| % Bare Ground in Herb Stratum <u>0</u>                  | % Cover of Biotic Crust <u>--</u> |                   |                  | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |

Remarks:





**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/7/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 25  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Linear-concave Slope (%): 2  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Mixed alluvial land NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |                     |   |
|---------------------------------|---|--|---------------------|---|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                     |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area |   |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | within a Wetland?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Remarks:                        |   |  |                     |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)          | Absolute % Cover                  | Dominant Species? | Indicator Status | <b>Dominance Test worksheet:</b>  |  |
|--|-----------------------------------|-------------------|------------------|---|--|
| 1. _____   | _____                             | _____             | _____            | Number of Dominant Species  |  |
| 2. _____   | _____                             | _____             | _____            | That Are OBL, FACW or FAC: <u>1</u> (A)   |  |
| 3. _____   | _____                             | _____             | _____            | Total Number of Dominant  |  |
| 4. _____   | _____                             | _____             | _____            | Species Across All Strata: <u>1</u> (B)   |  |
| Total Cover: <u>--</u>                           |                                   |                   |                  | Percent of Dominant Species   |  |
|  |                                   |                   |                  | That Are OBL, FACW, or FAC: <u>100</u> (A/B)  |  |
| <u>Sapling/Shrub Stratum:</u> (Plot size: _____) |                                   |                   |                  | <b>Prevalence Index worksheet:</b>  |  |
| 1. _____   | _____                             | _____             | _____            | Total % Cover of: _____ Multiply by: _____  |  |
| 2. _____   | _____                             | _____             | _____            | OBL Species: _____ x 1 = _____  |  |
| 3. _____   | _____                             | _____             | _____            | FACW Species _____ x 2 = _____  |  |
| 4. _____   | _____                             | _____             | _____            | FAC Species _____ x 3 = _____   |  |
| 5. _____   | _____                             | _____             | _____            | FACU Species _____ x 4 = _____  |  |
| Total Cover: <u>--</u>                           |                                   |                   |                  | UPL Species _____ x 5 = _____   |  |
| <u>Herb Stratum:</u> (Plot size: <u>6' rad</u> ) |                                   |                   |                  | Column Totals: _____ (A) _____ (B)  |  |
| 1. <u>Carex praegracilis</u>                     | <u>70</u>                         | <u>D</u>          | <u>FACW</u>      | Prevalence Index = B/A = _____  |  |
| 2. <u>Rumex conglomeratus</u>                    | <u>7</u>                          |                   | <u>FACW</u>      | Hydrophytic Vegetation Indicators:  |  |
| 3. <u>Persicaria sp. (at least FACW)</u>         | <u>3</u>                          |                   | <u>FACW</u>      | <input checked="" type="checkbox"/> Dominance Test is >50%  |  |
| 4. <u>Polygonum aviculare</u>                    | <u>3</u>                          |                   | <u>FAC</u>       | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |  |
| 5. _____   | _____                             | _____             | _____            | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |  |
| 6. _____   | _____                             | _____             | _____            | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |  |
| 7. _____   | _____                             | _____             | _____            |   |  |
| 8. _____   | _____                             | _____             | _____            |   |  |
| Total Cover: <u>83</u>                           |                                   |                   |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |  |
| <u>Woody Vine Stratum:</u> (Plot size: _____)    |                                   |                   |                  | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                         |  |
| 1. _____   | _____                             | _____             | _____            |   |  |
| 2. _____   | _____                             | _____             | _____            |   |  |
| Total Cover: _____                               |                                   |                   |                  |   |  |
| % Bare Ground in Herb Stratum <u>25</u>          | % Cover of Biotic Crust <u>--</u> |                   |                  |   |  |
| Remarks:   |                                   |                   |                  |   |  |

| <b>Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.)</b> |               |     |                |   |                   |                  |           |                      |
|---|---------------|-----|----------------|---|-------------------|------------------|-----------|----------------------|
| Depth<br>Inches   | Matrix        |     | Redox Features |   |                   |                  | Texture   | Remarks              |
|   | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |                      |
| 0-12  | 10YR 4/3      | 100 | --             |   |                   |                  | Silt loam | Rocky below 8 inches |
|   |               |     |                |   |                   |                  |           |                      |
|   |               |     |                |   |                   |                  |           |                      |
|   |               |     |                |   |                   |                  |           |                      |
|   |               |     |                |   |                   |                  |           |                      |
|   |               |     |                |   |                   |                  |           |                      |
|   |               |     |                |   |                   |                  |           |                      |
|   |               |     |                |   |                   |                  |           |                      |
|   |               |     |                |   |                   |                  |           |                      |
|   |               |     |                |   |                   |                  |           |                      |
|   |               |     |                |   |                   |                  |           |                      |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |  |
|--|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
|--|--|

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

|  |   |
|--|---|
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____ | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|--|---|

Remarks:

**HYDROLOGY**

|  |   |
|--|---|
| <b>Wetland Hydrology Indicators:</b>   |   |
| <b>Primary Indicators (minimum of one required; check all that apply)</b><br><input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b><br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <b>Secondary Indicators (2or more required)</b><br><input type="checkbox"/> Salt Crust (B11)<br><input type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)  | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):   |   |
| Remarks:   |   |

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/7/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 26  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Mixed alluvial land NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |                     |   |
|---------------------------------|---|--|---------------------|---|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                     |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area |   |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | within a Wetland?   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Remarks:                        |   |  |                     |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: <u>6'</u> rad)          | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |                  |
|--|------------------|-------------------------|------------------|---|------------------|
| 1. <u>Quercus lobata</u>                                 | 15               | D                       | FACU             | Number of Dominant Species That Are OBL, FACW or FAC:   | <u>4</u> (A)     |
| 2. _____   | _____            | _____                   | _____            | Total Number of Dominant Species Across All Strata:   | <u>6</u> (B)     |
| 3. _____   | _____            | _____                   | _____            | Percent of Dominant Species That Are OBL, FACW, or FAC:   | <u>67%</u> (A/B) |
| 4. _____   | _____            | _____                   | _____            |   |                  |
| Total Cover:   | <u>15</u>        |                         |                  |   |                  |
| <u>Sapling/Shrub Stratum:</u> (Plot size: <u>6'</u> rad) | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Prevalence Index worksheet:</b>  |                  |
| 1. <u>Salix exigua</u>                                   | 5                | D                       | FACW             | Total % Cover of:   | Multiply by:     |
| 2. <u>Rubus armeniacus</u>                               | 10               | D                       | FAC              | OBL Species: _____ x 1 = _____  |                  |
| 3. _____   | _____            | _____                   | _____            | FACW Species _____ x 2 = _____  |                  |
| 4. _____   | _____            | _____                   | _____            | FAC Species _____ x 3 = _____   |                  |
| 5. _____   | _____            | _____                   | _____            | FACU Species _____ x 4 = _____  |                  |
| Total Cover:   | <u>15</u>        |                         |                  | UPL Species _____ x 5 = _____   |                  |
|  |                  |                         |                  | Column Totals: _____ (A) _____ (B)  |                  |
| <u>Herb Stratum:</u> (Plot size: <u>6'</u> rad)          | Absolute % Cover | Dominant Species?       | Indicator Status | Prevalence Index = B/A =  |                  |
| 1. <u>Anthoxanthum odoratum</u>                          | 30               | D                       | FAC              | Hydrophytic Vegetation Indicators:  |                  |
| 2. <u>Cynosurus echinatus</u>                            | 20               | D                       | UPL              | <input checked="" type="checkbox"/> Dominance Test is >50%  |                  |
| 3. <u>Cyperus eragrostis</u>                             | 5                |                         | FACW             | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |                  |
| 4. <u>Festuca perennis</u>                               | 20               | D                       | FAC              | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |                  |
| 5. <u>Carex tumulicola</u>                               | 10               |                         | FACU             | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |                  |
| 6. <u>Rumex crispus</u>                                  | 3                |                         | FAC              |   |                  |
| 7. <u>Elymus caput-medusae</u>                           | 7                |                         | UPL              |   |                  |
| 8. _____   | _____            | _____                   | _____            |   |                  |
| Total Cover:   | <u>95</u>        |                         |                  |   |                  |
| <u>Woody Vine Stratum:</u> (Plot size: _____)            | Absolute % Cover | Dominant Species?       | Indicator Status |   |                  |
| 1. _____   | _____            | _____                   | _____            |   |                  |
| 2. _____   | _____            | _____                   | _____            |   |                  |
| Total Cover:   | _____            |                         |                  |   |                  |
| % Bare Ground in Herb Stratum                            | 20               | % Cover of Biotic Crust | --               |   |                  |
| Remarks:   |                  |                         |                  | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                         |                  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |   |                   |                  |           |         |
|--|---------------|----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-12   | 10YR 4/3      | 92 | 7.5YR 4/6      | 8 | C                 | M                | Silt loam |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |  |
|--|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )<br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )<br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )<br><input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )<br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____   | <b><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</b><br><br><b>Hydric Soil Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></b>   |

Remarks: \_\_\_\_\_

**HYDROLOGY**

|  |   |
|--|---|
| <b>Wetland Hydrology Indicators:</b>   |   |
| <b>Primary Indicators (minimum of one required; check all that apply)</b><br><input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <b>Secondary Indicators (2or more required)</b><br><input type="checkbox"/> Salt Crust (B11)<br><input type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)  | <b>Wetland Hydrology Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></b>   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):<br><br>   |   |
| Remarks: _____   |   |

WETLAND DETERMINATION DATA FORM – Arid West Region  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 27  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Road cut Local relief (concave, convex, none): Linear-concave Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |  |
|---------------------------------|---|--|--|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| Hydric Soil Present?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |   |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)               | Absolute % Cover | Dominant Species?                 | Indicator Status | <b>Dominance Test worksheet:</b>  |
|---|------------------|-----------------------------------|------------------|---|
| 1. _____  | _____            | _____                             | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>1</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)   |
| 2. _____  | _____            | _____                             | _____            |   |
| 3. _____  | _____            | _____                             | _____            |   |
| 4. _____  | _____            | _____                             | _____            |   |
| Total Cover: _____                                    | --               |                                   |                  |   |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____)      |                  |                                   |                  |   |
| 1. _____  | _____            | _____                             | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by:<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____  | _____            | _____                             | _____            |   |
| 3. _____  | _____            | _____                             | _____            |   |
| 4. _____  | _____            | _____                             | _____            |   |
| 5. _____  | _____            | _____                             | _____            |   |
| Total Cover: _____                                    | --               |                                   |                  |   |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad _____) |                  |                                   |                  |   |
| 1. <i>Festuca perennis</i>                            | 55               | D                                 | FAC              | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <i>Elymus caput-medusae</i>                        | 20               |                                   | UPL              |   |
| 3. <i>Bromus hordeaceus</i>                           | 15               |                                   | FACU             |   |
| 4. <i>Juncus balticus</i>                             | 8                |                                   | FACW             |   |
| 5. <i>Cichorium intybus</i>                           | 3                |                                   | FACU             |   |
| 6. <i>Rumex crispus</i>                               | 2                |                                   | FAC              |   |
| 7. <i>Holocarpha virgata</i>                          | 1                |                                   | UPL              |   |
| 8. _____  | _____            | _____                             | _____            |   |
| Total Cover: _____                                    | 104              |                                   |                  |   |
| <b>Woody Vine Stratum:</b> (Plot size: _____)         |                  |                                   |                  |   |
| 1. _____  | _____            | _____                             | _____            | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |
| 2. _____  | _____            | _____                             | _____            |   |
| Total Cover: _____                                    | --               |                                   |                  |   |
| % Bare Ground in Herb Stratum <u>10</u>               |                  | % Cover of Biotic Crust <u>--</u> |                  |   |
| Remarks:  |                  |                                   |                  |   |

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.)   |               |     |                |    |                   |  |           |         |  |  |
|--|---------------|-----|----------------|----|-------------------|--|-----------|---------|--|--|
| Depth<br>Inches  | Matrix        |     | Redox Features |    |                   |  | Texture   | Remarks |  |  |
|  | Color (moist) | %   | Color (moist)  | %  | Type <sup>1</sup> | Loc <sup>2</sup>   |           |         |  |  |
| 0-4  | 10YR 6/2      | 90  | 10YR 5/8       | 10 | C                 | M  | Clay loam | Rocky   |  |  |
| 4-12   | 10YR 3/3      | 100 | --             |    |                   |  | Clay loam |         |  |  |
|  |               |     |                |    |                   |  |           |         |  |  |
|  |               |     |                |    |                   |  |           |         |  |  |
|  |               |     |                |    |                   |  |           |         |  |  |
|  |               |     |                |    |                   |  |           |         |  |  |
|  |               |     |                |    |                   |  |           |         |  |  |
|  |               |     |                |    |                   |  |           |         |  |  |
| <sup>1</sup> Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix  |               |     |                |    |                   |  |           |         |  |  |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )<br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )<br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) |               |     |                |    |                   | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input checked="" type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) |           |         | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )<br><input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )<br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |  |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____   |               |     |                |    |                   | <b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |           |         |  |  |
| Remarks: DP is in an old roadcut and is very disturbed and mixed.  |               |     |                |    |                   |  |           |         |  |  |

**HYDROLOGY**

|   |  |   |   |  |  |
|---|--|---|---|--|--|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply)  |  |   | Secondary Indicators (2or more required)  |  |  |
| <input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Salt Crust (B11)<br><input type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )<br><input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )<br><input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )<br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input type="checkbox"/> FAC-Neutral test (D5) |   |  |  |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)   |  |   | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):<br><br>_____<br>_____  |  |   |   |  |  |
| Remarks:<br><br>_____   |  |   |   |  |  |

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 28  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Graded area Local relief (concave, convex, none): Linear-linear Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Placer diggings NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: <u>6'</u> rad)          | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|------------------|-------------------------|------------------|--|
| 1. <u>Quercus lobata</u>                                 | <u>15</u>        | <u>D</u>                | <u>FACU</u>      | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)   |
| 2. _____   | _____            | _____                   | _____            |  |
| 3. _____   | _____            | _____                   | _____            |  |
| 4. _____   | _____            | _____                   | _____            |  |
| Total Cover:   | <u>15</u>        |                         |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: <u>6'</u> rad) |                  |                         |                  |  |
| 1. <u>Baccharis pilularis</u>                            | <u>5</u>         | <u>D</u>                | <u>UPL</u>       | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____   | _____            | _____                   | _____            |  |
| 3. _____   | _____            | _____                   | _____            |  |
| 4. _____   | _____            | _____                   | _____            |  |
| 5. _____   | _____            | _____                   | _____            |  |
| Total Cover:   | <u>5</u>         |                         |                  |  |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad)          |                  |                         |                  |  |
| 1. <u>Juncus balticus</u>                                | <u>65</u>        | <u>D</u>                | <u>FACW</u>      | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Bromus hordeaceus</u>                              | <u>10</u>        |                         | <u>FACU</u>      |  |
| 3. <u>Torilis arvensis</u>                               | <u>2</u>         |                         | <u>UPL</u>       |  |
| 4. <u>Elymus caput-medusae</u>                           | <u>5</u>         |                         | <u>UPL</u>       |  |
| 5. <u>Aira caryophyllea</u>                              | <u>2</u>         |                         | <u>FACU</u>      |  |
| 6. <u>Cynosurus echinatus</u>                            | <u>4</u>         |                         | <u>UPL</u>       |  |
| 7. <u>Festuca perennis</u>                               | <u>2</u>         |                         | <u>FAC</u>       |  |
| 8. <u>Briza minor</u>                                    | <u>1</u>         |                         | <u>FAC</u>       |  |
| Total Cover:   | <u>91</u>        |                         |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)            |                  |                         |                  |  |
| 1. _____   | _____            | _____                   | _____            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.<br><br>Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| 2. _____   | _____            | _____                   | _____            |  |
| Total Cover:   | <u>--</u>        |                         |                  |  |
| % Bare Ground in Herb Stratum                            | <u>15</u>        | % Cover of Biotic Crust | <u>--</u>        |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |   |                   |                  |           |         |
|--|---------------|-----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-6  | 7.5YR 4/4     | 100 | --             |   |                   |                  | Silt loam |         |
| >6   |               |     |                |   |                   |                  | Rock      |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |
|  |               |     |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |  |
|--|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> )<br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> )<br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )<br><input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )<br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
| <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  |  |

|  |   |
|--|---|
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____ | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|--|---|

Remarks: Data point is in an area previously graded flat, with little soil remaining over bedrock

**HYDROLOGY**

|   |  |   |   |  |  |
|---|--|---|---|--|--|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply)  |  |   | Secondary Indicators (2 or more required)   |  |  |
| <input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )<br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Salt Crust (B11)<br><input type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )<br><input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )<br><input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )<br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input type="checkbox"/> FAC-Neutral test (D5) |   |  |  |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)   |  |   | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):  |  |   |   |  |  |
| Remarks:  |  |   |   |  |  |



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 29  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Graded area Local relief (concave, convex, none): Concave-concave Slope (%): 0  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Placer diggings NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |                             |                     |   |
|--|---|-----------------------------|---------------------|---|
| Hydrophytic Vegetation Present?              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                     |   |
| Hydric Soil Present?                         | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Is the Sampled Area |   |
| Wetland Hydrology Present?                   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | within a Wetland?   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Remarks: DP in depression in disturbed area. |   |                             |                     |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)          | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |                     |
|--|------------------|-------------------------|------------------|---|---------------------|
| 1. _____   | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC:   | <u>3</u> (A)        |
| 2. _____   | _____            | _____                   | _____            | Total Number of Dominant Species Across All Strata:   | <u>3</u> (B)        |
| 3. _____   | _____            | _____                   | _____            | Percent of Dominant Species That Are OBL, FACW, or FAC:   | <u>100</u> (A/B)    |
| 4. _____   | _____            | _____                   | _____            |   |                     |
| Total Cover:                                     | <u>--</u>        |                         |                  |   |                     |
| <u>Sapling/Shrub Stratum:</u> (Plot size: _____) |                  |                         |                  | <b>Prevalence Index worksheet:</b>  |                     |
| 1. _____   | _____            | _____                   | _____            | Total % Cover of:   | Multiply by:        |
| 2. _____   | _____            | _____                   | _____            | OBL Species:  | _____ x 1 = _____   |
| 3. _____   | _____            | _____                   | _____            | FACW Species:   | _____ x 2 = _____   |
| 4. _____   | _____            | _____                   | _____            | FAC Species:  | _____ x 3 = _____   |
| 5. _____   | _____            | _____                   | _____            | FACU Species:   | _____ x 4 = _____   |
| Total Cover:                                     | <u>--</u>        |                         |                  | UPL Species:  | _____ x 5 = _____   |
| <u>Herb Stratum:</u> (Plot size: <u>6' rad</u> ) |                  |                         |                  | Column Totals:  | _____ (A) _____ (B) |
| 1. <u>Eleocharis macrostachya</u>                | <u>10</u>        | <u>D</u>                | <u>OBL</u>       | Prevalence Index = B/A = _____  |                     |
| 2. <u>Poa pratensis</u>                          | <u>7</u>         | <u>D</u>                | <u>FAC</u>       | Hydrophytic Vegetation Indicators:  |                     |
| 3. <u>Juncus dubius</u>                          | <u>3</u>         |                         | <u>FACW</u>      | <input checked="" type="checkbox"/> Dominance Test is >50%  |                     |
| 4. <u>Juncus occidentalis</u>                    | <u>5</u>         | <u>D</u>                | <u>FACW</u>      | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |                     |
| 5. _____   | _____            | _____                   | _____            | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |                     |
| 6. _____   | _____            | _____                   | _____            | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |                     |
| 7. _____   | _____            | _____                   | _____            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |                     |
| 8. _____   | _____            | _____                   | _____            | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                         |                     |
| Total Cover:                                     | <u>25</u>        |                         |                  |   |                     |
| <u>Woody Vine Stratum:</u> (Plot size: _____)    |                  |                         |                  |   |                     |
| 1. _____   | _____            | _____                   | _____            |   |                     |
| 2. _____   | _____            | _____                   | _____            |   |                     |
| Total Cover:                                     | <u>--</u>        |                         |                  |   |                     |
| % Bare Ground in Herb Stratum                    | <u>0</u>         | % Cover of Biotic Crust | <u>75</u>        |   |                     |

Remarks:



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 30  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Graded area Local relief (concave, convex, none): Linear-linear Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Placer diggings NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input type="checkbox"/>            | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)                        | Absolute % Cover | Dominant Species?                | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|------------------|----------------------------------|------------------|--|
| 1. _____   | _____            | _____                            | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)   |
| 2. _____   | _____            | _____                            | _____            |  |
| 3. _____   | _____            | _____                            | _____            |  |
| 4. _____   | _____            | _____                            | _____            |  |
| Total Cover: _____   | --               |                                  |                  |  |
| <u>Sapling/Shrub Stratum:</u> (Plot size: <u>6'</u> rad _____) |                  |                                  |                  | <b>Prevalence Index worksheet:</b>   |
| 1. <u>Arctostaphylos viscida</u>                               | <u>5</u>         | <u>D</u>                         | <u>UPL</u>       | Total % Cover of: _____ Multiply by: _____   |
| 2. _____   | _____            | _____                            | _____            | OBL Species: _____ x 1 = _____   |
| 3. _____   | _____            | _____                            | _____            | FACW Species _____ x 2 = _____   |
| 4. _____   | _____            | _____                            | _____            | FAC Species _____ x 3 = _____  |
| 5. _____   | _____            | _____                            | _____            | FACU Species _____ x 4 = _____   |
| Total Cover: _____   | <u>5</u>         |                                  |                  | UPL Species _____ x 5 = _____  |
| <u>Herb Stratum:</u> (Plot size: <u>6'</u> rad _____)          |                  |                                  |                  | Column Totals: _____ (A) _____ (B)   |
| 1. <u>Arctostaphylos viscida</u>                               | <u>10</u>        | <u>D</u>                         | <u>UPL</u>       | Prevalence Index = B/A = _____   |
| 2. <u>Acmispon americanus</u>                                  | <u>10</u>        | <u>D</u>                         | <u>UPL</u>       | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 3. <u>Poa pratensis</u>  | <u>8</u>         | <u>D</u>                         | <u>FAC</u>       |  |
| 4. <u>Aira caryophyllea</u>                                    | <u>2</u>         |                                  | <u>FACU</u>      |  |
| 5. _____   | _____            | _____                            | _____            |  |
| 6. _____   | _____            | _____                            | _____            |  |
| 7. _____   | _____            | _____                            | _____            |  |
| 8. _____   | _____            | _____                            | _____            |  |
| Total Cover: _____   | <u>30</u>        |                                  |                  |  |
| <u>Woody Vine Stratum:</u> (Plot size: _____)                  |                  |                                  |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.  |
| 1. _____   | _____            | _____                            | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |
| 2. _____   | _____            | _____                            | _____            |  |
| Total Cover: _____   | --               |                                  |                  |  |
| % Bare Ground in Herb Stratum <u>70</u>                        |                  | % Cover of Biotic Crust <u>0</u> |                  |  |

Remarks:

| <b>Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.)</b> |               |   |                |   |                   |                  |         |         |
|---|---------------|---|----------------|---|-------------------|------------------|---------|---------|
| Depth<br>Inches   | Matrix        |   | Redox Features |   |                   |                  | Texture | Remarks |
|   | Color (moist) | % | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |         |         |
|   |               |   |                |   |                   |                  |         |         |
|   |               |   |                |   |                   |                  |         |         |
|   |               |   |                |   |                   |                  |         |         |
|   |               |   |                |   |                   |                  |         |         |
|   |               |   |                |   |                   |                  |         |         |
|   |               |   |                |   |                   |                  |         |         |
|   |               |   |                |   |                   |                  |         |         |
|   |               |   |                |   |                   |                  |         |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |   |  |
|--|---|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
|--|---|--|

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

|  |  |
|--|--|
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____ | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input type="checkbox"/> |
|--|--|

Remarks: Very hard and compacted; hit rock within 2 inches. Could not dig soil pit. This flat area has been graded and bedrock is near surface.

**HYDROLOGY**

|   |  |   |   |  |   |
|---|--|---|---|--|---|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply)  |  |   | Secondary Indicators (2or more required)  |  |   |
| <input type="checkbox"/> Surface water (A1)   | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b>     | <input type="checkbox"/> High water Table (A2)  | <input type="checkbox"/> Biotic Crust (B12)            | <input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b> |
| <input type="checkbox"/> Saturation (A3)  | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b>  | <input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b>  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)    | <input type="checkbox"/> Drainage Patterns (B10)                  |
| <input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b>  | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2)            | <input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b>                                     | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8)                    |
| <input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b>   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9) | <input type="checkbox"/> Surface Soil Cracks (B6)   | <input type="checkbox"/> Thin Muck Surface (C7)        | <input type="checkbox"/> Shallow Aquitard (D3)                    |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)  | <input type="checkbox"/> Other (Explain in Remarks)                    | <input type="checkbox"/> FAC-Neutral test (D5)                  | <input type="checkbox"/> Water-Stained Leaves (B9)  |  |   |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) |  |   | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  |   |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 31  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave-concave Slope (%): 0  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|  |   |                             |   |
|--|---|-----------------------------|---|
| Hydrophytic Vegetation Present?                                  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| Hydric Soil Present?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Is the Sampled Area   |
| Wetland Hydrology Present?                                       | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Remarks: DP in small depression that may pond a few inches deep. |   |                             |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)                      | Absolute % Cover                  | Dominant Species? | Indicator Status | <b>Dominance Test worksheet:</b>  |
|--|-----------------------------------|-------------------|------------------|---|
| 1. _____   | _____                             | _____             | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>1</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)  |
| 2. _____   | _____                             | _____             | _____            |   |
| 3. _____   | _____                             | _____             | _____            |   |
| 4. _____   | _____                             | _____             | _____            |   |
| Total Cover: _____   | --                                |                   |                  |   |
| <b><u>Sapling/Shrub Stratum:</u></b> (Plot size: _____)      |                                   |                   |                  |   |
| 1. _____   | _____                             | _____             | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____   | _____                             | _____             | _____            |   |
| 3. _____   | _____                             | _____             | _____            |   |
| 4. _____   | _____                             | _____             | _____            |   |
| 5. _____   | _____                             | _____             | _____            |   |
| Total Cover: _____   | --                                |                   |                  |   |
| <b><u>Herb Stratum:</u></b> (Plot size: <u>3'</u> rad _____) |                                   |                   |                  |   |
| 1. <u><i>Deschampsia danthonoides</i></u>                    | 15                                | D                 | FACW             | Hydrophytic Vegetation Indicators:<br><input checked="" type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u><i>Hordeum murinum ssp. gussoneanum</i></u>            | 5                                 |                   | FAC              |   |
| 3. <u><i>Holocarpha virgata</i></u>                          | 5                                 |                   | UPL              |   |
| 4. <u><i>Festuca perennis</i></u>                            | 1                                 |                   | FAC              |   |
| 5. _____   | _____                             | _____             | _____            |   |
| 6. _____   | _____                             | _____             | _____            |   |
| 7. _____   | _____                             | _____             | _____            |   |
| 8. _____   | _____                             | _____             | _____            |   |
| Total Cover: _____   | 26                                |                   |                  |   |
| <b><u>Woody Vine Stratum:</u></b> (Plot size: _____)         |                                   |                   |                  |   |
| 1. _____   | _____                             | _____             | _____            | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>   |
| 2. _____   | _____                             | _____             | _____            |   |
| Total Cover: _____   |                                   |                   |                  |   |
| % Bare Ground in Herb Stratum <u>3</u>                       | % Cover of Biotic Crust <u>70</u> |                   |                  |   |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |   |                   |                  |           |         |
|--|---------------|----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-1  | 2.5Y 6/3      | 95 | 10YR 5/6       | 5 | C                 | M                | Silt loam |         |
| >1   |               |    |                |   |                   |                  | Rock      |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |  |  |   |  |  |
|--|--|--|---|--|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Vernal Pools (F9)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) |  |  | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )<br><input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )<br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input checked="" type="checkbox"/> Other (Explain in Remarks) |  |  |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____   |  |  | <b><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</b><br><br><b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |  |  |

Remarks: Very little soil over bedrock. With another inch of soil, this DP would meet the thickness requirement of F8.

**HYDROLOGY**

|  |  |  |  |  |   |
|--|--|--|--|--|---|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply) |  |  | Secondary Indicators (2or more required)                               |  |   |
| <input type="checkbox"/> Surface water (A1)  | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )    | <input type="checkbox"/> High water Table (A2)                         | <input checked="" type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> ) |
| <input type="checkbox"/> Saturation (A3)   | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> ) | <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )       | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)    | <input type="checkbox"/> Drainage Patterns (B10)                    |
| <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )                                     | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2)             | <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> ) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8)                      |
| <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )  | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)  | <input type="checkbox"/> Surface Soil Cracks (B6)                      | <input type="checkbox"/> Thin Muck Surface (C7)        | <input type="checkbox"/> Shallow Aquitard (D3)                      |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)   | <input type="checkbox"/> Other (Explain in Remarks)                    | <input checked="" type="checkbox"/> FAC-Neutral test (D5)        | <input type="checkbox"/> Water-Stained Leaves (B9)                     |  |   |

|   |   |
|---|---|
| <b>Field Observations:</b><br>Surface Water Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) | <b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|---|---|

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 32  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex-linear Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: none

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil  Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil  Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |   |
|---------------------------------|------------------------------|--|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |   |
| Remarks:                        |                              |  |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: ___6' rad___)   | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|------------------|-------------------------|------------------|--|
| 1. <u>Quercus wislizeni</u>                      | 10               | D                       | UPL              | Number of Dominant Species That Are OBL, FACW or FAC: <u>0</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)   |
| 2. _____   | _____            | _____                   | _____            |  |
| 3. _____   | _____            | _____                   | _____            |  |
| 4. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | <u>10</u>        |                         |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____) |                  |                         |                  |  |
| 1. _____   | _____            | _____                   | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by:<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____   | _____            | _____                   | _____            |  |
| 3. _____   | _____            | _____                   | _____            |  |
| 4. _____   | _____            | _____                   | _____            |  |
| 5. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | <u>--</u>        |                         |                  |  |
| <b>Herb Stratum:</b> (Plot size: ___6' rad___)   |                  |                         |                  |  |
| 1. <u>Madia elegans</u>                          | 10               | D                       | UPL              | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Elymus caput-medusae</u>                   | 5                |                         | UPL              |  |
| 3. <u>Bromus diandrus</u>                        | 15               | D                       | UPL              |  |
| 4. <u>Bromus hordeaceus</u>                      | 10               | D                       | FACU             |  |
| 5. <u>Plantago lanceolata</u>                    | 5                |                         | FAC              |  |
| 6. _____   | _____            | _____                   | _____            |  |
| 7. _____   | _____            | _____                   | _____            |  |
| 8. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | <u>45</u>        |                         |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)    |                  |                         |                  |  |
| 1. _____   | _____            | _____                   | _____            | Hydrophytic Vegetation Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| 2. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | _____            |                         |                  |  |
| % Bare Ground in Herb Stratum                    | 55               | % Cover of Biotic Crust | 0                |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |     |                |   |                   |         |           |                  |
|--|---------------|-----|----------------|---|-------------------|---------|-----------|------------------|
| Depth<br>Inches  | Matrix        |     | Redox Features |   |                   | Texture | Remarks   |                  |
|  | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> |         |           | Loc <sup>2</sup> |
| 0-5  | 10YR 5/4      | 100 | --             |   |                   |         | Silt loam |                  |
| >5   |               |     |                |   |                   |         | Rock      |                  |
|  |               |     |                |   |                   |         |           |                  |
|  |               |     |                |   |                   |         |           |                  |
|  |               |     |                |   |                   |         |           |                  |
|  |               |     |                |   |                   |         |           |                  |
|  |               |     |                |   |                   |         |           |                  |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

|  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Sandy Redox (S5)           | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Stripped Matrix (S6)       |   |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1)   |   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   |   |
| <input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b> | <input type="checkbox"/> Depleted Matrix (F3)       |   |
| <input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b>         | <input type="checkbox"/> Redox Dark Surface (F6)    |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Dark Surface (F7) |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Redox Depressions (F8)     |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)              | <input type="checkbox"/> Vernal Pools (F9)          |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              |   |   |

**<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

|   |  |
|---|--|
| <b>Primary Indicators (minimum of one required; check all that apply)</b> | <b>Secondary Indicators (2or more required)</b>                        |
| <input type="checkbox"/> Surface water (A1)                               | <input type="checkbox"/> Salt Crust (B11)                              |
| <input type="checkbox"/> High water Table (A2)                            | <input type="checkbox"/> Biotic Crust (B12)                            |
| <input type="checkbox"/> Saturation (A3)                                  | <input type="checkbox"/> Aquatic Invertebrates (B13)                   |
| <input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b>            | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    |
| <input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b>      | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b>         | <input type="checkbox"/> Presence of Reduced Iron (C4)                 |
| <input type="checkbox"/> Surface Soil Cracks (B6)                         | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)        | <input type="checkbox"/> Thin Muck Surface (C7)                        |
| <input type="checkbox"/> Water-Stained Leaves (B9)                        | <input type="checkbox"/> Other (Explain in Remarks)                    |

**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches): \_\_\_\_\_  
 Water Table Present?    Yes     No     Depth (inches): \_\_\_\_\_  
 Saturation Present?    Yes     No     Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 33  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave-concave Slope (%): 0  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |                             |                     |   |
|---------------------------------|---|-----------------------------|---------------------|---|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                     |   |
| Hydric Soil Present?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Is the Sampled Area |   |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | within a Wetland?   | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Remarks:                        |   |                             |                     |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)          | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>  |                             |
|--|------------------|-------------------------|------------------|---|-----------------------------|
| 1. _____   | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC:   | <u>2</u> (A)                |
| 2. _____   | _____            | _____                   | _____            | Total Number of Dominant Species Across All Strata:   | <u>2</u> (B)                |
| 3. _____   | _____            | _____                   | _____            | Percent of Dominant Species That Are OBL, FACW, or FAC:   | <u>100%</u> (A/B)           |
| 4. _____   | _____            | _____                   | _____            |   |                             |
| Total Cover:                                     | <u>--</u>        |                         |                  |   |                             |
| <u>Sapling/Shrub Stratum:</u> (Plot size: _____) | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Prevalence Index worksheet:</b>  |                             |
| 1. _____   | _____            | _____                   | _____            | Total % Cover of:   | Multiply by:                |
| 2. _____   | _____            | _____                   | _____            | OBL Species: _____ x 1 = _____  |                             |
| 3. _____   | _____            | _____                   | _____            | FACW Species _____ x 2 = _____  |                             |
| 4. _____   | _____            | _____                   | _____            | FAC Species _____ x 3 = _____   |                             |
| 5. _____   | _____            | _____                   | _____            | FACU Species _____ x 4 = _____  |                             |
| Total Cover:                                     | <u>--</u>        |                         |                  | UPL Species _____ x 5 = _____   |                             |
|  |                  |                         |                  | Column Totals: _____ (A) _____ (B)  |                             |
| <u>Herb Stratum:</u> (Plot size: <u>6'</u> rad)  | Absolute % Cover | Dominant Species?       | Indicator Status | Prevalence Index = B/A =  |                             |
| 1. <u><i>Lythrum portula</i></u>                 | <u>30</u>        | <u>D</u>                | <u>OBL</u>       | Hydrophytic Vegetation Indicators:  |                             |
| 2. <u><i>Festuca perennis</i></u>                | <u>20</u>        | <u>D</u>                | <u>FAC</u>       | <input checked="" type="checkbox"/> Dominance Test is >50%  |                             |
| 3. <u><i>Centromadia</i> sp.</u>                 | <u>7</u>         |                         | <u>UPL</u>       | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |                             |
| 4. <u><i>Eryngium castrense</i></u>              | <u>2</u>         |                         | <u>OBL</u>       | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |                             |
| 5. <u><i>Eleocharis macrostachya</i></u>         | <u>2</u>         |                         | <u>OBL</u>       | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |                             |
| 6. <u><i>Polypogon monspeliensis</i></u>         | <u>2</u>         |                         | <u>FACW</u>      |   |                             |
| 7. _____   | _____            | _____                   | _____            |   |                             |
| 8. _____   | _____            | _____                   | _____            |   |                             |
| Total Cover:                                     | <u>63</u>        |                         |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |                             |
| <u>Woody Vine Stratum:</u> (Plot size: _____)    | Absolute % Cover | Dominant Species?       | Indicator Status | Hydrophytic Vegetation Present?   |                             |
| 1. _____   | _____            | _____                   | _____            | Yes <input checked="" type="checkbox"/>   | No <input type="checkbox"/> |
| 2. _____   | _____            | _____                   | _____            |   |                             |
| Total Cover:                                     | <u>--</u>        |                         |                  |   |                             |
| % Bare Ground in Herb Stratum                    | <u>30</u>        | % Cover of Biotic Crust | <u>10</u>        |   |                             |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |   |                   |                  |           |         |
|--|---------------|----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-8  | 2.5Y 6/3      | 93 | 7/5YR 5/6      | 7 | C                 | M/<br>PL         | Silt loam |         |
| >8   |               |    |                |   |                   |                  | rock      |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |  |  |
|--|--|--|
| <p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input checked="" type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) | <p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
|--|--|--|

**<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**

|   |  |
|---|--|
| <p><b>Restrictive Layer (if present):</b><br/>                 Type: _____<br/>                 Depth (inches): _____</p> | <p><b>Hydric Soil Present?</b>    Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p> |
|---|--|

Remarks: Data Point is in a graded area.

**HYDROLOGY**

|   |  |   |  |
|---|--|---|--|
| <p><b>Wetland Hydrology Indicators:</b><br/>                 Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b><br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) |  | <input type="checkbox"/> Salt Crust (B11)<br><input checked="" type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) | <p>Secondary Indicators (2or more required)</p> <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b><br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input checked="" type="checkbox"/> FAC-Neutral test (D5) |
| <p><b>Field Observations:</b><br/>                 Surface Water Present?      Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/><br/>                 Water Table Present?      Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/><br/>                 Saturation Present?      Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/><br/>                 (includes capillary fringe)<br/>                 Depth (inches): _____<br/>                 Depth (inches): _____<br/>                 Depth (inches): _____</p>  |  | <p><b>Wetland Hydrology Present?</b>      Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></p>  |  |
| <p>Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):</p>   |  |   |  |
| <p>Remarks: Algal mat on soil surface</p>   |  |   |  |

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 34  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Road cut Local relief (concave, convex, none): Linear-concave Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |  |
|---------------------------------|---|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| Remarks:                        |   |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: <u>6'</u> rad)  | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|------------------|-------------------------|------------------|--|
| 1. <u>Quercus lobata</u>                         | <u>15</u>        | <u>D</u>                | <u>FACU</u>      | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)   |
| 2. _____   | _____            | _____                   | _____            |  |
| 3. _____   | _____            | _____                   | _____            |  |
| 4. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | <u>15</u>        |                         |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____) |                  |                         |                  |  |
| 1. _____   | _____            | _____                   | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by:<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____   | _____            | _____                   | _____            |  |
| 3. _____   | _____            | _____                   | _____            |  |
| 4. _____   | _____            | _____                   | _____            |  |
| 5. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | <u>--</u>        |                         |                  |  |
| <b>Herb Stratum:</b> (Plot size: <u>6'</u> rad)  |                  |                         |                  |  |
| 1. <u>Festuca perennis</u>                       | <u>70</u>        | <u>D</u>                | <u>FAC</u>       | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Madia elegans</u>                          | <u>5</u>         |                         | <u>UPL</u>       |  |
| 3. <u>Rumex crispus</u>                          | <u>1</u>         |                         | <u>FAC</u>       |  |
| 4. <u>Briza minor</u>                            | <u>3</u>         |                         | <u>FAC</u>       |  |
| 5. <u>Bromus hordeaceus</u>                      | <u>3</u>         |                         | <u>FACU</u>      |  |
| 6. _____   | _____            | _____                   | _____            |  |
| 7. _____   | _____            | _____                   | _____            |  |
| 8. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | <u>82</u>        |                         |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)    |                  |                         |                  |  |
| 1. _____   | _____            | _____                   | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |
| 2. _____   | _____            | _____                   | _____            |  |
| Total Cover:                                     | <u>--</u>        |                         |                  |  |
| % Bare Ground in Herb Stratum                    | <u>10</u>        | % Cover of Biotic Crust | <u>5</u>         |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |   |                   |                  |           |         |
|--|---------------|----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-10   | 10YR 5/4      | 93 | 10YR 5/8       | 7 | C                 | M                | Silt loam |         |
| >10  |               |    |                |   |                   |                  | Rock      |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |   |  |
|--|---|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
| <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  |   |  |

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?    Yes     No**

Remarks: \_\_\_\_\_

**HYDROLOGY**

|   |   |   |  |
|---|---|---|--|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply)  |   | Secondary Indicators (2or more required)  |  |
| <input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b><br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Salt Crust (B11)<br><input checked="" type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b><br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input type="checkbox"/> FAC-Neutral test (D5) |  |
| <b>Field Observations:</b><br>Surface Water Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)   |   | <b>Wetland Hydrology Present?      Yes <input checked="" type="checkbox"/>    No <input type="checkbox"/></b>   |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):  |   |   |  |
| Remarks: Patchy algal crust on surface.   |   |   |  |

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 35  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Meadow Local relief (concave, convex, none): Linear-linear Slope (%): 1  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |  |
|---------------------------------|------------------------------|--|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |  |
| Remarks:                        |                              |  |  |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: <u>6'</u> rad <u>    </u> )                 | Absolute % Cover | Dominant Species?                 | Indicator Status | <b>Dominance Test worksheet:</b>  |
|--|------------------|-----------------------------------|------------------|---|
| 1. <u><i>Pinus ponderosa</i></u>   | <u>5</u>         | <u>D</u>                          | <u>FACU</u>      | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)  |
| 2. _____   | _____            | _____                             | _____            |   |
| 3. _____   | _____            | _____                             | _____            |   |
| 4. _____   | _____            | _____                             | _____            |   |
| Total Cover:   | <u>5</u>         |                                   |                  |   |
| <b><u>Sapling/Shrub Stratum:</u></b> (Plot size: <u>6'</u> rad <u>    </u> ) |                  |                                   |                  |   |
| 1. <u><i>Baccharis pilularis</i></u>   | <u>5</u>         | <u>D</u>                          | <u>UPL</u>       | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____  |
| 2. _____   | _____            | _____                             | _____            |   |
| 3. _____   | _____            | _____                             | _____            |   |
| 4. _____   | _____            | _____                             | _____            |   |
| 5. _____   | _____            | _____                             | _____            |   |
| Total Cover:   | <u>5</u>         |                                   |                  |   |
| <b><u>Herb Stratum:</u></b> (Plot size: <u>6'</u> rad <u>    </u> )          |                  |                                   |                  |   |
| 1. <u><i>Juncus balticus</i></u>   | <u>80</u>        | <u>D</u>                          | <u>FACW</u>      | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)<br><sup>1</sup> Indicators of hydric soil and wetland hydrology must be present. |
| 2. <u><i>Anthoxanthum odoratum</i></u>                                       | <u>15</u>        |                                   | <u>FAC</u>       |   |
| 3. <u><i>Briza minor</i></u>   | <u>1</u>         |                                   | <u>FAC</u>       |   |
| 4. _____   | _____            | _____                             | _____            |   |
| 5. _____   | _____            | _____                             | _____            |   |
| 6. _____   | _____            | _____                             | _____            |   |
| 7. _____   | _____            | _____                             | _____            |   |
| 8. _____   | _____            | _____                             | _____            |   |
| Total Cover:   | <u>96</u>        |                                   |                  |   |
| <b><u>Woody Vine Stratum:</u></b> (Plot size: <u>        </u> )              |                  |                                   |                  |   |
| 1. _____   | _____            | _____                             | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| 2. _____   | _____            | _____                             | _____            |   |
| Total Cover:   | <u>--</u>        |                                   |                  |   |
| % Bare Ground in Herb Stratum <u>5</u>                                       |                  | % Cover of Biotic Crust <u>--</u> |                  |   |
| Remarks:   |                  |                                   |                  |   |

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.)   |               |    |                |   |                   |  |           |         |
|--|---------------|----|----------------|---|-------------------|--|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |  | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup>   |           |         |
| 0-4  | 10YR 6/4      | 97 | 7.5YR 5/8      | 3 | C                 | M  | Silt loam |         |
| >4   |               |    |                |   |                   |  | rocky     |         |
|  |               |    |                |   |                   |  |           |         |
|  |               |    |                |   |                   |  |           |         |
|  |               |    |                |   |                   |  |           |         |
|  |               |    |                |   |                   |  |           |         |
|  |               |    |                |   |                   |  |           |         |
|  |               |    |                |   |                   |  |           |         |
|  |               |    |                |   |                   |  |           |         |
| <sup>1</sup> Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix  |               |    |                |   |                   |  |           |         |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b> <input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b> <input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Vernal Pools (F9)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) |               |    |                |   |                   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |           |         |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____   |               |    |                |   |                   | <b><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</b><br><br><b>Hydric Soil Present?    Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></b>   |           |         |
| Remarks: Soil is thin and contains much weathered rock. Area has likely been graded before, similar to other areas on this site.   |               |    |                |   |                   |  |           |         |

**HYDROLOGY**

| Wetland Hydrology Indicators:  |   |  |   |  |
|--|---|--|---|--|
| Primary Indicators (minimum of one required; check all that apply)   | Secondary Indicators (2or more required)  |  |   |  |
| <input type="checkbox"/> Surface water (A1) <input type="checkbox"/> Salt Crust (B11)<br><input type="checkbox"/> High water Table (A2) <input type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b> <input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b> <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b> <input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b><br><input type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input type="checkbox"/> FAC-Neutral test (D5) |  |   |  |
| <b>Field Observations:</b><br>Surface Water Present?                      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?                        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?                          Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)  |   |  | <b>Wetland Hydrology Present?                      Yes <input type="checkbox"/>    No <input checked="" type="checkbox"/></b> |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):<br><br>_____<br>_____<br>_____  |   |  |   |  |
| Remarks:<br><br>_____<br>_____<br>_____  |   |  |   |  |

**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 36  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Dirt road Local relief (concave, convex, none): Concave-concave Slope (%): 0  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |                             |                     |   |                             |
|---------------------------------|---|-----------------------------|---------------------|---|-----------------------------|
| Hydrophytic Vegetation Present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                     |   |                             |
| Hydric Soil Present?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Is the Sampled Area |   |                             |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | within a Wetland?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Remarks: Low spot in dirt road. |   |                             |                     |   |                             |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)          | Absolute % Cover                 | Dominant Species? | Indicator Status | <b>Dominance Test worksheet:</b>  |  |
|--|----------------------------------|-------------------|------------------|---|--|
| 1. _____   | _____                            | _____             | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)  |  |
| 2. _____   | _____                            | _____             | _____            | Total Number of Dominant Species Across All Strata: <u>1</u> (B)  |  |
| 3. _____   | _____                            | _____             | _____            | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)   |  |
| 4. _____   | _____                            | _____             | _____            |   |  |
| Total Cover:                                     | <u>--</u>                        |                   |                  |   |  |
| <u>Sapling/Shrub Stratum:</u> (Plot size: _____) | Absolute % Cover                 | Dominant Species? | Indicator Status | <b>Prevalence Index worksheet:</b>  |  |
| 1. _____   | _____                            | _____             | _____            | Total % Cover of: _____ Multiply by: _____  |  |
| 2. _____   | _____                            | _____             | _____            | OBL Species: _____ x 1 = _____  |  |
| 3. _____   | _____                            | _____             | _____            | FACW Species _____ x 2 = _____  |  |
| 4. _____   | _____                            | _____             | _____            | FAC Species _____ x 3 = _____   |  |
| 5. _____   | _____                            | _____             | _____            | FACU Species _____ x 4 = _____  |  |
| Total Cover:                                     | <u>--</u>                        |                   |                  | UPL Species _____ x 5 = _____   |  |
| Total Cover:                                     | <u>--</u>                        |                   |                  | Column Totals: _____ (A) _____ (B)  |  |
| <u>Herb Stratum:</u> (Plot size: <u>4' rad</u> ) | Absolute % Cover                 | Dominant Species? | Indicator Status | Prevalence Index = B/A = _____  |  |
| 1. <u>Eleocharis macrostachya</u>                | <u>20</u>                        | <u>D</u>          | <u>OBL</u>       | Hydrophytic Vegetation Indicators:  |  |
| 2. <u>Crypsis schoenoides</u>                    | <u>2</u>                         |                   | <u>FACW</u>      | <input checked="" type="checkbox"/> Dominance Test is >50%  |  |
| 3. <u>Alisma triviale</u>                        | <u>3</u>                         |                   | <u>OBL</u>       | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |  |
| 4. <u>Poa pratensis</u>                          | <u>2</u>                         |                   | <u>FAC</u>       | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |  |
| 5. <u>Kickxia elatine</u>                        | <u>1</u>                         |                   | <u>UPL</u>       | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |  |
| 6. _____   | _____                            | _____             | _____            |   |  |
| 7. _____   | _____                            | _____             | _____            |   |  |
| 8. _____   | _____                            | _____             | _____            |   |  |
| Total Cover:                                     | <u>28</u>                        |                   |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |  |
| <u>Woody Vine Stratum:</u> (Plot size: _____)    | Absolute % Cover                 | Dominant Species? | Indicator Status | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                         |  |
| 1. _____   | _____                            | _____             | _____            |   |  |
| 2. _____   | _____                            | _____             | _____            |   |  |
| Total Cover:                                     | <u>--</u>                        |                   |                  |   |  |
| % Bare Ground in Herb Stratum <u>75</u>          | % Cover of Biotic Crust <u>5</u> |                   |                  |   |  |

Remarks:

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |   |                   |                  |           |         |
|--|---------------|----|----------------|---|-------------------|------------------|-----------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |                  | Texture   | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-5  | 10YR 5/4      | 95 | 7.5YR 5/8      | 5 | C                 | M                | Silt loam |         |
| >5   |               |    |                |   |                   |                  | Rock      |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |
|  |               |    |                |   |                   |                  |           |         |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

Histosol (A1)                                         Sandy Redox (S5)  
 Histic Epipedon (A2)                               Stripped Matrix (S6)  
 Black Histic (A3)                                     Loamy Mucky Mineral (F1)  
 Hydrogen Sulfide (A4)                               Loamy Gleyed Matrix (F2)  
 Stratified Layers (A5) (**LRR C**)                     Depleted Matrix (F3)  
 1 cm Muck (A9) (**LRR D**)                             Redox Dark Surface (F6)  
 Depleted Below Dark Surface (A11)               Depleted Dark Surface (F7)  
 Thick Dark Surface (A12)                           Redox Depressions (F8)  
 Sandy Mucky Mineral (S1)                           Vernal Pools (F9)  
 Sandy Gleyed Matrix (S4)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

1 cm Muck (A9) (**LRR C**)  
 2 cm Muck (A10) (**LRR B**)  
 Reduced Vertic (F18)  
 Red Parent Material (TF2)  
 Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?    Yes     No**

Remarks:

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

Surface water (A1)                                         Salt Crust (B11)  
 High water Table (A2)                                     Biotic Crust (B12)  
 Saturation (A3)     Aquatic Invertebrates (B13)  
 Water Marks (B1) (**Nonriverine**)                     Hydrogen Sulfide Odor (C1)  
 Sediment Deposits (B2) (**Nonriverine**)               Oxidized Rhizospheres along Living Roots (C3)  
 Drift Deposits (B3) (**Nonriverine**)                   Presence of Reduced Iron (C4)  
 Surface Soil Cracks (B6)                                 Recent Iron Reduction in Tilled Soils (C6)  
 Inundation Visible on Aerial Imagery (B7)           Thin Muck Surface (C7)  
 Water-Stained Leaves (B9)                               Other (Explain in Remarks)

Secondary Indicators (2or more required)

Water Marks (B1) (**Riverine**)  
 Sediment Deposits (B2) (**Riverine**)  
 Drift Deposits (B3) (**Riverine**)  
 Drainage Patterns (B10)  
 Dry-Season Water Table (C2)  
 Crayfish Burrows (C8)  
 Saturation Visible-Aerial Imagery (C9)  
 Shallow Aquitard (D3)  
 FAC-Neutral test (D5)

**Field Observations:**

Surface Water Present?      Yes     No     Depth (inches): \_\_\_\_\_  
 Water Table Present?        Yes     No     Depth (inches): \_\_\_\_\_  
 Saturation Present?         Yes     No     Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?    Yes     No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):

Remarks:



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 37  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 3  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |   |
|---------------------------------|------------------------------|--|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |   |
| Remarks:                        |                              |  |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)                 | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>   |
|---|------------------|-------------------------|------------------|--|
| 1. _____  | _____            | _____                   | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)   |
| 2. _____  | _____            | _____                   | _____            |  |
| 3. _____  | _____            | _____                   | _____            |  |
| 4. _____  | _____            | _____                   | _____            |  |
| Total Cover: _____                                      | --               |                         |                  |  |
| <b><u>Sapling/Shrub Stratum:</u></b> (Plot size: _____) |                  |                         |                  |  |
| 1. _____  | _____            | _____                   | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____  | _____            | _____                   | _____            |  |
| 3. _____  | _____            | _____                   | _____            |  |
| 4. _____  | _____            | _____                   | _____            |  |
| 5. _____  | _____            | _____                   | _____            |  |
| Total Cover: _____                                      | --               |                         |                  |  |
| <b><u>Herb Stratum:</u></b> (Plot size: <u>4' rad</u> ) |                  |                         |                  |  |
| 1. <u>Juncus balticus</u>                               | 40               | D                       | FACW             | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Elymus caput-medusae</u>                          | 30               | D                       | UPL              |  |
| 3. <u>Bromus hordeaceus</u>                             | 20               | D                       | FACU             |  |
| 4. <u>Geranium dissectum</u>                            | 5                |                         | UPL              |  |
| 5. _____  | _____            | _____                   | _____            |  |
| 6. _____  | _____            | _____                   | _____            |  |
| 7. _____  | _____            | _____                   | _____            |  |
| 8. _____  | _____            | _____                   | _____            |  |
| Total Cover: _____                                      | 95               |                         |                  |  |
| <b><u>Woody Vine Stratum:</u></b> (Plot size: _____)    |                  |                         |                  |  |
| 1. _____  | _____            | _____                   | _____            | Hydrophytic Vegetation Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| 2. _____  | _____            | _____                   | _____            |  |
| Total Cover: _____                                      | --               |                         |                  |  |
| % Bare Ground in Herb Stratum                           | 10               | % Cover of Biotic Crust | --               |  |
| Remarks:  |                  |                         |                  |  |



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: Stonehenge Springs City/County: El Dorado County Sampling Date: 9/13/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: 38  
 Investigator(s): Chuck Hughes Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Linear-concave Slope (%): 3  
 Subregion (LRR): C Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: Diamond Springs very fine sandy loam NWI Classification: None

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |   |
|---------------------------------|---|--|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |   |
| Remarks:                        |   |  |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____)          | Absolute % Cover                 | Dominant Species? | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|----------------------------------|-------------------|------------------|--|
| 1. _____   | _____                            | _____             | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>3</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)   |
| 2. _____   | _____                            | _____             | _____            |  |
| 3. _____   | _____                            | _____             | _____            |  |
| 4. _____   | _____                            | _____             | _____            |  |
| Total Cover: _____                               | --                               |                   |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____) |                                  |                   |                  |  |
| 1. _____   | _____                            | _____             | _____            | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____   | _____                            | _____             | _____            |  |
| 3. _____   | _____                            | _____             | _____            |  |
| 4. _____   | _____                            | _____             | _____            |  |
| 5. _____   | _____                            | _____             | _____            |  |
| Total Cover: _____                               | --                               |                   |                  |  |
| <b>Herb Stratum:</b> (Plot size: _____)          |                                  |                   |                  |  |
| 1. <i>Festuca perennis</i>                       | 40                               | D                 | FAC              | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <i>Elymus caput-medusae</i>                   | 30                               | D                 | UPL              |  |
| 3. <i>Bromus hordeaceus</i>                      | 25                               | D                 | FACU             |  |
| 4. <i>Trifolium dubium</i>                       | 10                               |                   | UPL              |  |
| 5. _____   | _____                            | _____             | _____            |  |
| 6. _____   | _____                            | _____             | _____            |  |
| 7. _____   | _____                            | _____             | _____            |  |
| 8. _____   | _____                            | _____             | _____            |  |
| Total Cover: _____                               | 105                              |                   |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)    |                                  |                   |                  |  |
| 1. _____   | _____                            | _____             | _____            | Hydrophytic Vegetation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| 2. _____   | _____                            | _____             | _____            |  |
| Total Cover: _____                               | --                               |                   |                  |  |
| % Bare Ground in Herb Stratum <u>5</u>           | % Cover of Biotic Crust <u>5</u> |                   |                  |  |
| Remarks:   |                                  |                   |                  |  |



**WETLAND DETERMINATION DATA FORM – Arid West Region**  
 Routine Wetland Determination  
 (September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: 17047 Stonehenge Springs City/County: El Dorado Co Sampling Date: 9/15/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: DP 39  
 Investigator(s): Nicole Desideri Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): Linear-concave Slope (%): 4-5%  
 Subregion (LRR): See report Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: \_\_\_\_\_ NWI Classification: \_\_\_\_\_

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |   |
|---------------------------------|---|--|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area<br>within a Wetland?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |   |
| Remarks:                        |   |  |   |

**VEGETATION**

| <b>Tree Stratum:</b> (Plot size: ___5'rad ___)          | Absolute % Cover | Dominant Species?       | Indicator Status | <b>Dominance Test worksheet:</b>   |
|---|------------------|-------------------------|------------------|--|
| 1. <u>Quercus lobata</u>                                | <u>20</u>        | <u>D</u>                | <u>FACU</u>      | Number of Dominant Species That Are OBL, FACW or FAC: <u>0</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>4</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)  |
| 2. <u>Quercus kelloggii</u>                             | <u>30</u>        | <u>D</u>                | <u>UPL</u>       |  |
| 3. _____  | _____            | _____                   | _____            |  |
| 4. _____  | _____            | _____                   | _____            |  |
| Total Cover:  | <u>50</u>        |                         |                  |  |
| <b>Sapling/Shrub Stratum:</b> (Plot size: ___5'rad ___) |                  |                         |                  |  |
| 1. <u>Quercus wislizeni</u>                             | <u>5</u>         | <u>D</u>                | <u>UPL</u>       | <b>Prevalence Index worksheet:</b><br>Total % Cover of: _____ Multiply by: _____<br>OBL Species: _____ x 1 = _____<br>FACW Species _____ x 2 = _____<br>FAC Species _____ x 3 = _____<br>FACU Species _____ x 4 = _____<br>UPL Species _____ x 5 = _____<br>Column Totals: _____ (A) _____ (B)<br>Prevalence Index = B/A = _____   |
| 2. _____  | _____            | _____                   | _____            |  |
| 3. _____  | _____            | _____                   | _____            |  |
| 4. _____  | _____            | _____                   | _____            |  |
| 5. _____  | _____            | _____                   | _____            |  |
| Total Cover:  | <u>5</u>         |                         |                  |  |
| <b>Herb Stratum:</b> (Plot size: ___5'rad ___)          |                  |                         |                  |  |
| 1. <u>Cynosurus echinatus</u>                           | <u>1</u>         |                         | <u>UPL</u>       | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 2. <u>Rumex crispus</u>                                 | <u>2</u>         |                         | <u>FAC</u>       |  |
| 3. <u>Torilis arvensis</u>                              | <u>2</u>         |                         | <u>UPL</u>       |  |
| 4. <u>Vinca major</u>                                   | <u>40</u>        | <u>D</u>                | <u>UPL</u>       |  |
| 5. _____  | _____            | _____                   | _____            |  |
| 6. _____  | _____            | _____                   | _____            |  |
| 7. _____  | _____            | _____                   | _____            |  |
| 8. _____  | _____            | _____                   | _____            |  |
| Total Cover:  | <u>45</u>        |                         |                  |  |
| <b>Woody Vine Stratum:</b> (Plot size: _____)           |                  |                         |                  |  |
| 1. _____  | _____            | _____                   | _____            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.<br><br>Hydrophytic Vegetation Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |
| 2. _____  | _____            | _____                   | _____            |  |
| Total Cover:  | _____            |                         |                  |  |
| % Bare Ground in Herb Stratum                           | <u>30</u>        | % Cover of Biotic Crust | <u>0</u>         |  |

Remarks: At confluence of 3 ephemeral channels



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Routine Wetland Determination  
(September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: 17047 Stonehenge Springs City/County: El Dorado Co Sampling Date: 9/15/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: DP 40  
 Investigator(s): Nicole Desideri Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): Concave-linear Slope (%): 2  
 Subregion (LRR): See report Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: \_\_\_\_\_ NWI Classification: \_\_\_\_\_

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil  Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil  Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |                              |  |   |
|---------------------------------|------------------------------|--|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area   |
| Wetland Hydrology Present?      | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Remarks:                        |                              |  |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____ 5'rad _____)      | Absolute % Cover | Dominant Species?                | Indicator Status | <b>Dominance Test worksheet:</b>  |
|--|------------------|----------------------------------|------------------|---|
| 1. <u>Quercus kelloggii</u>                              | 10               | D                                | UPL              | Number of Dominant Species That Are OBL, FACW or FAC: <u>0</u> (A)  |
| 2. <u>Quercus wislizeni</u>                              | 15               | D                                | UPL              | Total Number of Dominant Species Across All Strata: <u>3</u> (B)  |
| 3. _____   |                  |                                  |                  | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)   |
| 4. _____   |                  |                                  |                  |   |
| Total Cover: _____                                       | 25               |                                  |                  |   |
| <b>Sapling/Shrub Stratum:</b> (Plot size: _____ - _____) |                  |                                  |                  | <b>Prevalence Index worksheet:</b>  |
| 1. _____   |                  |                                  |                  | Total % Cover of: _____ Multiply by: _____  |
| 2. _____   |                  |                                  |                  | OBL Species: _____ x 1 = _____  |
| 3. _____   |                  |                                  |                  | FACW Species _____ x 2 = _____  |
| 4. _____   |                  |                                  |                  | FAC Species _____ x 3 = _____   |
| 5. _____   |                  |                                  |                  | FACU Species _____ x 4 = _____  |
| Total Cover: _____                                       | -                |                                  |                  | UPL Species _____ x 5 = _____   |
| <b>Herb Stratum:</b> (Plot size: _____ 5'rad _____)      |                  |                                  |                  | Column Totals: _____ (A) _____ (B)  |
| 1. <u>Carduus pycnocephalus</u>                          | 5                |                                  | UPL              | Prevalence Index = B/A = _____  |
| 2. <u>Cynosurus echinatus</u>                            | 90               | D                                | UPL              | Hydrophytic Vegetation Indicators:  |
| 3. <u>Torilis arvensis</u>                               | 2                |                                  | UPL              | <input type="checkbox"/> Dominance Test is >50%   |
| 4. <u>Elymus triticoides</u>                             | 10               |                                  | UPL              | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |
| 5. <u>Briza minor</u>                                    | 1                |                                  | FAC              | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |
| 6. _____   |                  |                                  |                  | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 7. _____   |                  |                                  |                  |   |
| 8. _____   |                  |                                  |                  |   |
| Total Cover: _____                                       | 108              |                                  |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |
| <b>Woody Vine Stratum:</b> (Plot size: _____ - _____)    |                  |                                  |                  | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                         |
| 1. _____   |                  |                                  |                  |   |
| 2. _____   |                  |                                  |                  |   |
| Total Cover: _____                                       |                  |                                  |                  |   |
| % Bare Ground in Herb Stratum <u>5</u>                   |                  | % Cover of Biotic Crust <u>0</u> |                  |   |
| Remarks:   |                  |                                  |                  |   |

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |    |                   |                  |         |                               |
|--|---------------|----|----------------|----|-------------------|------------------|---------|-------------------------------|
| Depth<br>Inches  | Matrix        |    | Redox Features |    |                   |                  | Texture | Remarks                       |
|  | Color (moist) | %  | Color (moist)  | %  | Type <sup>1</sup> | Loc <sup>2</sup> |         |                               |
| 0-4  | 7.5YR 3/2     | 97 | 7.5 YR 5/8     | 3  | C                 | M                | loam    | Restrictive layer – see notes |
| 4+   | 10 YR 5/3     | 90 | 7.5YR 5/8      | 10 | C                 | M                | rock    |                               |
|  |               |    |                |    |                   |                  |         |                               |
|  |               |    |                |    |                   |                  |         |                               |
|  |               |    |                |    |                   |                  |         |                               |
|  |               |    |                |    |                   |                  |         |                               |
|  |               |    |                |    |                   |                  |         |                               |
|  |               |    |                |    |                   |                  |         |                               |

<sup>1</sup>Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

|  |   |  |
|--|---|--|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5) <b>(LRR C)</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR D)</b><br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Sandy Mucky Mineral (S1)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Vernal Pools (F9) | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) <b>(LRR C)</b><br><input type="checkbox"/> 2 cm Muck (A10) <b>(LRR B)</b><br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |
|--|---|--|

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

|  |   |
|--|---|
| <b>Restrictive Layer (if present):</b><br>Type: <u>rock</u><br>Depth (inches): <u>4 inches</u> | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|--|---|

Remarks: Broke off some chunks of rock and took color data

**HYDROLOGY**

|   |  |  |  |
|---|--|--|--|
| <b>Wetland Hydrology Indicators:</b><br>Primary Indicators (minimum of one required; check all that apply)  |  | Secondary Indicators (2or more required)   |  |
| <input type="checkbox"/> Surface water (A1)<br><input type="checkbox"/> High water Table (A2)<br><input type="checkbox"/> Saturation (A3)<br><input type="checkbox"/> Water Marks (B1) <b>(Nonriverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Nonriverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Nonriverine)</b><br><input type="checkbox"/> Surface Soil Cracks (B6)<br><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)<br><input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Salt Crust (B11)<br><input type="checkbox"/> Biotic Crust (B12)<br><input type="checkbox"/> Aquatic Invertebrates (B13)<br><input type="checkbox"/> Hydrogen Sulfide Odor (C1)<br><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)<br><input type="checkbox"/> Presence of Reduced Iron (C4)<br><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)<br><input type="checkbox"/> Thin Muck Surface (C7)<br><input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Water Marks (B1) <b>(Riverine)</b><br><input type="checkbox"/> Sediment Deposits (B2) <b>(Riverine)</b><br><input type="checkbox"/> Drift Deposits (B3) <b>(Riverine)</b><br><input checked="" type="checkbox"/> Drainage Patterns (B10)<br><input type="checkbox"/> Dry-Season Water Table (C2)<br><input type="checkbox"/> Crayfish Burrows (C8)<br><input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)<br><input type="checkbox"/> Shallow Aquitard (D3)<br><input type="checkbox"/> FAC-Neutral test (D5) |  |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe)   |  | <b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):<br><br>Remarks: Grass matted down.   |  |  |  |



**WETLAND DETERMINATION DATA FORM – Arid West Region**

Routine Wetland Determination  
(September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: 17047 Stonehenge Springs City/County: El Dorado Co Sampling Date: 9/15/17  
 Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: DP 41  
 Investigator(s): Nicole Desideri Section, Township, Range: See report  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): linear Slope (%): 5  
 Subregion (LRR): See report Lat: See report Long: See report Datum: See report  
 Soil Map Unit Name: \_\_\_\_\_ NWI Classification: \_\_\_\_\_

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)  
 Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |   |
|---------------------------------|---|--|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area   |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Remarks:                        |   |  |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____ 5'rad _____)             | Absolute % Cover | Dominant Species?                | Indicator Status | <b>Dominance Test worksheet:</b>  |
|---|------------------|----------------------------------|------------------|---|
| 1. <u>Quercus kelloggii</u>                                     | 40               | D                                | UPL              | Number of Dominant Species That Are OBL, FACW or FAC: <u>1</u> (A)  |
| 2. <u>Quercus lobata</u>  | 20               | D                                | FACU             | Total Number of Dominant Species Across All Strata: <u>3</u> (B)  |
| 3. _____  |                  |                                  |                  | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)  |
| 4. _____  |                  |                                  |                  |   |
| Total Cover: _____  | 60               |                                  |                  |   |
| <b><u>Sapling/Shrub Stratum:</u></b> (Plot size: _____ - _____) |                  |                                  |                  | <b>Prevalence Index worksheet:</b>  |
| 1. _____  |                  |                                  |                  | Total % Cover of: _____ Multiply by: _____  |
| 2. _____  |                  |                                  |                  | OBL Species: _____ x 1 = _____  |
| 3. _____  |                  |                                  |                  | FACW Species _____ x 2 = _____  |
| 4. _____  |                  |                                  |                  | FAC Species _____ x 3 = _____   |
| 5. _____  |                  |                                  |                  | FACU Species _____ x 4 = _____  |
| Total Cover: _____  | -                |                                  |                  | UPL Species _____ x 5 = _____   |
| <b><u>Herb Stratum:</u></b> (Plot size: _____ 5'rad _____)      |                  |                                  |                  | Column Totals: _____ (A) _____ (B)  |
| 1. <u>Cynosurus echinatus</u>                                   | 10               |                                  | UPL              | Prevalence Index = B/A = _____  |
| 2. <u>Deschampsia danthanoides</u>                              | 15               |                                  | FACW             | Hydrophytic Vegetation Indicators:  |
| 3. <u>Festuca perennis</u>                                      | 80               | D                                | FAC              | <input type="checkbox"/> Dominance Test is >50%   |
| 4. <u>Carduus pycnocephalus</u>                                 | 2                |                                  | UPL              | <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>  |
| 5. <u>Hordeum murinum</u>                                       | 2                |                                  | FACU             | <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |
| 6. <u>Toxicodendron diversilobum</u>                            | 1                |                                  | FACU             | <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 7. <u>Torilis arvensis</u>                                      | 1                |                                  | UPL              |   |
| 8. _____  |                  |                                  |                  |   |
| Total Cover: _____  | 121              |                                  |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.   |
| <b><u>Woody Vine Stratum:</u></b> (Plot size: _____ - _____)    |                  |                                  |                  | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                         |
| 1. _____  |                  |                                  |                  |   |
| 2. _____  |                  |                                  |                  |   |
| Total Cover: _____  |                  |                                  |                  |   |
| % Bare Ground in Herb Stratum <u>1</u>                          |                  | % Cover of Biotic Crust <u>0</u> |                  |   |
| Remarks:  |                  |                                  |                  |   |

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.)   |               |    |                |   |                   |  |         |         |
|--|---------------|----|----------------|---|-------------------|--|---------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |                   |  | Texture | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup>   |         |         |
| 0-12   | 7.5YR 3/4     | 97 | 7.5YR 6/8      | 3 | C                 | M  | loam    |         |
|  |               |    |                |   |                   |  |         |         |
|  |               |    |                |   |                   |  |         |         |
|  |               |    |                |   |                   |  |         |         |
|  |               |    |                |   |                   |  |         |         |
|  |               |    |                |   |                   |  |         |         |
|  |               |    |                |   |                   |  |         |         |
|  |               |    |                |   |                   |  |         |         |
|  |               |    |                |   |                   |  |         |         |
| <sup>1</sup> Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix  |               |    |                |   |                   |  |         |         |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b><br><input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1)<br><input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Vernal Pools (F9)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4) |               |    |                |   |                   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b><br><input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )<br><input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )<br><input type="checkbox"/> Reduced Vertic (F18)<br><input type="checkbox"/> Red Parent Material (TF2)<br><input type="checkbox"/> Other (Explain in Remarks) |         |         |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____   |               |    |                |   |                   | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |         |         |
| Remarks: _____   |               |    |                |   |                   |  |         |         |

**HYDROLOGY**

| Wetland Hydrology Indicators:   |  |   |  |
|---|--|---|--|
| Primary Indicators (minimum of one required; check all that apply)  |  | Secondary Indicators (2or more required)  |  |
| <input type="checkbox"/> Surface water (A1)   | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )   |  |
| <input type="checkbox"/> High water Table (A2)  | <input type="checkbox"/> Biotic Crust (B12)                            | <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )                                   |  |
| <input type="checkbox"/> Saturation (A3)  | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )                                      |  |
| <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )  | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    | <input type="checkbox"/> Drainage Patterns (B10)  |  |
| <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )  | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2)  |  |
| <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )   | <input checked="" type="checkbox"/> Presence of Reduced Iron (C4)      | <input type="checkbox"/> Crayfish Burrows (C8)  |  |
| <input type="checkbox"/> Surface Soil Cracks (B6)   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)                                       |  |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)  | <input type="checkbox"/> Thin Muck Surface (C7)                        | <input type="checkbox"/> Shallow Aquitard (D3)  |  |
| <input type="checkbox"/> Water-Stained Leaves (B9)  | <input type="checkbox"/> Other (Explain in Remarks)                    | <input type="checkbox"/> FAC-Neutral test (D5)  |  |
| <b>Field Observations:</b><br>Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____<br>(includes capillary fringe) |  | <b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available):  |  |   |  |
| Remarks: _____  |  |   |  |

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Routine Wetland Determination

(September 2008 V2.0 COE Arid West Wetlands Delineation Manual)

Project/Site: 17047 Stonehenge Springs City/County: El Dorado Co Sampling Date: 9/15/17

Applicant/Owner: Stonehenge Springs LLC State: CA Sampling Point: DP 42

Investigator(s): Nicole Desideri Section, Township, Range: See report

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): linear Slope (%): 7%

Subregion (LRR): See report Lat: See report Long: See report Datum: See report

Soil Map Unit Name: \_\_\_\_\_ NWI Classification: \_\_\_\_\_

Are climatic/hydrologic conditions on the site typical for this time of the year? Yes  No  (If no, explain in remarks.)

Are Vegetation  Soil , Or Hydrology  Significantly disturbed? Are "Normal Circumstances" present? Yes  No

Are Vegetation  Soil , Or Hydrology  Naturally problematic? (If needed, explain any answers in remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

|                                 |   |  |   |
|---------------------------------|---|--|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |   |
| Hydric Soil Present?            | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | Is the Sampled Area   |
| Wetland Hydrology Present?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Remarks:                        |   |  |   |

**VEGETATION**

| <u>Tree Stratum:</u> (Plot size: _____ - _____)          | Absolute % Cover                 | Dominant Species? | Indicator Status | <b>Dominance Test worksheet:</b>   |
|--|----------------------------------|-------------------|------------------|--|
| 1. _____   | _____                            | _____             | _____            | Number of Dominant Species That Are OBL, FACW or FAC: <u>0</u> (A)<br>Total Number of Dominant Species Across All Strata: <u>2</u> (B)<br>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)  |
| 2. _____   | _____                            | _____             | _____            |  |
| 3. _____   | _____                            | _____             | _____            |  |
| 4. _____   | _____                            | _____             | _____            |  |
| Total Cover: _____                                       | -                                |                   |                  |  |
| <u>Sapling/Shrub Stratum:</u> (Plot size: _____ - _____) |                                  |                   |                  | <b>Prevalence Index worksheet:</b>   |
| 1. _____   | _____                            | _____             | _____            | Total % Cover of: _____ Multiply by: _____   |
| 2. _____   | _____                            | _____             | _____            | OBL Species: _____ x 1 = _____   |
| 3. _____   | _____                            | _____             | _____            | FACW Species _____ x 2 = _____   |
| 4. _____   | _____                            | _____             | _____            | FAC Species _____ x 3 = _____  |
| 5. _____   | _____                            | _____             | _____            | FACU Species _____ x 4 = _____   |
| Total Cover: _____                                       | -                                |                   |                  | UPL Species _____ x 5 = _____  |
| <u>Herb Stratum:</u> (Plot size: _____ 5'rad _____)      |                                  |                   |                  | Column Totals: _____ (A) _____ (B)   |
| 1. <i>Centaurea solstitialis</i>                         | 12                               |                   | UPL              | Prevalence Index = B/A = _____   |
| 2. <i>Trifolium hirtum</i>                               | 40                               | D                 | UPL              |  |
| 3. <i>Avena sp.</i>                                      | 60                               | D                 | UPL              | Hydrophytic Vegetation Indicators:<br><input type="checkbox"/> Dominance Test is >50%<br><input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup><br><input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)<br><input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 4. <i>Elymus triticoides</i>                             | 1                                |                   | UPL              |  |
| 5. <i>Deschampsia danthonioides</i>                      | 2                                |                   | FACW             |  |
| 6. _____   | _____                            | _____             | _____            |  |
| 7. _____   | _____                            | _____             | _____            |  |
| 8. _____   | _____                            | _____             | _____            |  |
| Total Cover: _____                                       | 115                              |                   |                  |  |
| <u>Woody Vine Stratum:</u> (Plot size: _____ - _____)    |                                  |                   |                  |  |
| 1. _____   | _____                            | _____             | _____            |  |
| 2. _____   | _____                            | _____             | _____            | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>  |
| Total Cover: _____                                       | -                                |                   |                  |  |
| % Bare Ground in Herb Stratum <u>8</u>                   | % Cover of Biotic Crust <u>0</u> |                   |                  |  |
| Remarks:   |                                  |                   |                  |  |

| Profile Description: (Describe the depth needed to document the Indicator or confirm the absence of Indicators.) |               |    |                |   |   |   |         |         |
|--|---------------|----|----------------|---|---|---|---------|---------|
| Depth<br>Inches  | Matrix        |    | Redox Features |   |   |   | Texture | Remarks |
|  | Color (moist) | %  | Color (moist)  | % | Type <sup>1</sup>   | Loc <sup>2</sup>  |         |         |
| 0-10   | 7.5YR3/3      | 97 | 7.5YR3/1       | 2 | D   | M   | loam    |         |
| 0-10   |               |    | 5YR5/8         | 1 | C   | M   | loam    |         |
|  |               |    |                |   |   |   |         |         |
|  |               |    |                |   |   |   |         |         |
|  |               |    |                |   |   |   |         |         |
|  |               |    |                |   |   |   |         |         |
|  |               |    |                |   |   |   |         |         |
|  |               |    |                |   |   |   |         |         |
|  |               |    |                |   |   |   |         |         |
| <sup>1</sup> Type : C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains            |               |    |                |   | <sup>2</sup> Location: PL=Pore Lining, M=Matrix   |   |         |         |
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>                                 |               |    |                |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |   |         |         |
| <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Redox (S5)                                 |               |    |                |   | <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR C</b> )  |   |         |         |
| <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Stripped Matrix (S6)                      |               |    |                |   | <input type="checkbox"/> 2 cm Muck (A10) ( <b>LRR B</b> )   |   |         |         |
| <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Loamy Mucky Mineral (F1)                     |               |    |                |   | <input type="checkbox"/> Reduced Vertic (F18)   |   |         |         |
| <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Loamy Gleyed Matrix (F2)                 |               |    |                |   | <input type="checkbox"/> Red Parent Material (TF2)  |   |         |         |
| <input type="checkbox"/> Stratified Layers (A5) ( <b>LRR C</b> ) <input type="checkbox"/> Depleted Matrix (F3)   |               |    |                |   | <input type="checkbox"/> Other (Explain in Remarks)   |   |         |         |
| <input type="checkbox"/> 1 cm Muck (A9) ( <b>LRR D</b> ) <input type="checkbox"/> Redox Dark Surface (F6)        |               |    |                |   | <b><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</b> |   |         |         |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Dark Surface (F7)   |               |    |                |   |   |   |         |         |
| <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Depressions (F8)                |               |    |                |   |   |   |         |         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Vernal Pools (F9)                     |               |    |                |   |   |   |         |         |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)  |               |    |                |   |   |   |         |         |
| <b>Restrictive Layer (if present):</b><br>Type: _____<br>Depth (inches): _____                                   |               |    |                |   |   | <b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |         |         |
| Remarks:   |               |    |                |   |   |   |         |         |

**HYDROLOGY**

| <b>Wetland Hydrology Indicators:</b>   |  |   |  |
|--|--|---|--|
| Primary Indicators (minimum of one required; check all that apply)   |  | Secondary Indicators (2or more required)  |  |
| <input type="checkbox"/> Surface water (A1)  | <input type="checkbox"/> Salt Crust (B11)                              | <input type="checkbox"/> Water Marks (B1) ( <b>Riverine</b> )   |  |
| <input type="checkbox"/> High water Table (A2)   | <input type="checkbox"/> Biotic Crust (B12)                            | <input type="checkbox"/> Sediment Deposits (B2) ( <b>Riverine</b> )                                   |  |
| <input type="checkbox"/> Saturation (A3)   | <input type="checkbox"/> Aquatic Invertebrates (B13)                   | <input type="checkbox"/> Drift Deposits (B3) ( <b>Riverine</b> )                                      |  |
| <input type="checkbox"/> Water Marks (B1) ( <b>Nonriverine</b> )   | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                    | <input type="checkbox"/> Drainage Patterns (B10)  |  |
| <input type="checkbox"/> Sediment Deposits (B2) ( <b>Nonriverine</b> )                                     | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2)  |  |
| <input type="checkbox"/> Drift Deposits (B3) ( <b>Nonriverine</b> )  | <input checked="" type="checkbox"/> Presence of Reduced Iron (C4)      | <input type="checkbox"/> Crayfish Burrows (C8)  |  |
| <input type="checkbox"/> Surface Soil Cracks (B6)  | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)    | <input type="checkbox"/> Saturation Visible-Aerial Imagery (C9)                                       |  |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)   | <input type="checkbox"/> Thin Muck Surface (C7)                        | <input type="checkbox"/> Shallow Aquitard (D3)  |  |
| <input type="checkbox"/> Water-Stained Leaves (B9)   | <input type="checkbox"/> Other (Explain in Remarks)                    | <input type="checkbox"/> FAC-Neutral test (D5)  |  |
| <b>Field Observations:</b>   |  | <b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |  |
| Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>              | Depth (inches): _____  |   |  |
| Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                | Depth (inches): _____  |   |  |
| Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                 | Depth (inches): _____  |   |  |
| (includes capillary fringe)  |  |   |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, if available): |  |   |  |
| Remarks:   |  |   |  |

## Appendix B

### Photographs

#### Stonehenge Springs

---



Photo 1. View of the valley oak woodland community in the center of the BSA. Stonehenge Springs is characterized by oak woodlands, grassland, dirt roads and disturbed areas (13 June 2017).



Photo 2. View west of ephemeral Channel 2g. Oak woodlands surround this channel bed composed of cobble, gravel and bedrock (8 August 2017).



Photo 3. View looking downstream of the intermittent section of Channel 2, on the south side of the BSA (8 August 2017).



Photo 4. View of Channel 2, with standing water seeping out from among small bedrock outcrops, near the confluence of Channel 2e (27 June 2017).



Photo 5. View looking south at Wetland 23. The shovel is at DP 13 (8 August 2017).



Photo 6. View west of Wetland 3. The shovel is at DP 20 (7 September 2017).



Photo 7. View northwest of the intermittent portion of Channel 1. Water was present during fieldwork in this reach (7 September 2017).



Photo 8. View of the pond on the northwest side of the BSA. The pond had shallow water during fieldwork (13 September 2017).





Photo 9. View northeast of Wetland 2. The shovel is at DP 29. This wetland is part of the large area in the northern part of the BSA that was previously graded, and contains low spots with poor drainage.

[This page intentionally blank]

## Appendix C

### Plant Species Recorded at Data Points

#### Stonehenge Springs

| Family                | Scientific Name                                    | Common Name                 | Stratum <sup>1</sup> | Indicator <sup>2</sup> |
|-----------------------|--|-----------------------------|----------------------|------------------------|
| <b>GYMNOSPERMS</b>    |  |                             |                      |                        |
| <b>Pinaceae</b>       | <i>Pinus ponderosa</i>                             | Ponderosa pine              | T                    | FACU                   |
| <b>EUDICOTS</b>       |  |                             |                      |                        |
| <b>Anacardiaceae</b>  | <i>Toxicodendron diversilobum</i>                  | Poison oak                  | H                    | FACU                   |
| <b>Apiaceae</b>       | <i>Daucus carota</i>                               | Carrot, Queen Anne's lace   | H                    | UPL                    |
|                       | <i>Eryngium castrense</i>                          | Great Valley coyote-thistle | H                    | OBL                    |
|                       | <i>Sanicula crassicaulis</i>                       | Sanicula                    | H                    | UPL                    |
|                       | <i>Torilis arvensis</i>                            | Hedge parsley               | H                    | UPL                    |
| <b>Apocynaceae</b>    | <i>Asclepias fascicularis</i>                      | Narrow-leaf milkweed        | H                    | FAC                    |
|                       | <i>Vinca major</i>                                 | Greater periwinkle          | H                    | UPL                    |
| <b>Asteraceae</b>     | <i>Baccharis pilularis</i>                         | Coyote brush                | S                    | UPL                    |
|                       | <i>Carduus pycnocephalus</i>                       | Italian thistle             | H                    | UPL                    |
|                       | <i>Centaurea solstitialis</i>                      | Yellow star thistle         | H                    | UPL                    |
|                       | <i>Centromadia</i> sp.                             | Spikeweed                   | H                    | UPL                    |
|                       | <i>Cichorium intybus</i>                           | Chicory                     | H                    | FACU                   |
|                       | <i>Cirsium vulgare</i>                             | Bull thistle                | H                    | FACU                   |
|                       | <i>Holocarpha virgata</i>                          | Tarweed, tarplant           | H                    | UPL                    |
|                       | <i>Lactuca serriola</i>                            | Prickly lettuce             | H                    | FACU                   |
|                       | <i>Madia elegans</i>                               | Common madia                | H                    | UPL                    |
| <b>Ericaceae</b>      | <i>Arctostaphylos viscida</i>                      | Manzanita                   | S/H                  | UPL                    |
| <b>Fabaceae</b>       | <i>Acmispon americanus</i>                         | Deervetch, deerweed         | H                    | UPL                    |
|                       | <i>Trifolium dubium</i>                            | Little hop clover           | H                    | UPL                    |
|                       | <i>Trifolium glomeratum</i>                        | Clover                      | H                    | UPL                    |
|                       | <i>Trifolium hirtum</i>                            | Rose clover                 | H                    | UPL                    |
|                       | <i>Vicia sativa</i>                                | Vetch                       | H                    | FACU                   |
| <b>Fagaceae</b>       | <i>Quercus kelloggii</i>                           | Black oak                   | T                    | UPL                    |
|                       | <i>Quercus lobata</i>                              | Valley oak                  | T                    | FACU                   |
|                       | <i>Quercus wislizeni</i>                           | Interior live oak           | T/S                  | UPL                    |
| <b>Geraniaceae</b>    | <i>Geranium dissectum</i>                          | Cranesbill, geranium        | H                    | UPL                    |
| <b>Hypericaceae</b>   | <i>Hypericum perforatum</i> ssp. <i>perforatum</i> | Klamathweed                 | H                    | FACU                   |
| <b>Lythraceae</b>     | <i>Lythrum hyssopifolia</i>                        | Loosestrife                 | H                    | OBL                    |
|                       | <i>Lythrum portula</i>                             | Loosestrife                 | H                    | OBL                    |
| <b>Phrymaceae</b>     | <i>Mimulus guttatus</i>                            | Monkeyflower                | H                    | OBL                    |
| <b>Plantaginaceae</b> | <i>Kickxia elatine</i>                             | Kickxia                     | H                    | UPL                    |
|                       | <i>Plantago lanceolata</i>                         | English plantain            | H                    | FAC                    |
| <b>Polygonaceae</b>   | <i>Persicaria</i> sp.                              | Smartweed                   | H                    | FACW                   |
|                       | <i>Polygonum aviculare</i>                         | Knotweed                    | H                    | FAC                    |
|                       | <i>Rumex conglomeratus</i>                         | Dock                        | H                    | FACW                   |
|                       | <i>Rumex crispus</i>                               | Curly dock                  | H                    | FAC                    |
| <b>Rosaceae</b>       | <i>Prunus cerasifera</i>                           | Cherry plum                 | T                    | UPL                    |
|                       | <i>Rubus armeniacus</i>                            | Himalayan blackberry        | S                    | FAC                    |
| <b>Rubiaceae</b>      | <i>Galium aparine</i>                              | Goose grass                 | H                    | FACU                   |
|                       | <i>Galium parisiense</i>                           | Wall bedstraw               | H                    | UPL                    |
| <b>Salicaceae</b>     | <i>Salix exigua</i>                                | Willow                      | T/S                  | FACW                   |

| MONOCOTS            |  |                                |   |      |
|---------------------|--|--------------------------------|---|------|
| <b>Alismataceae</b> | <i>Alisma triviale</i>                             | Water-plantain                 | H | OBL  |
| <b>Cyperaceae</b>   | <i>Carex barbarae</i>                              | Whiteroot sedge                | H | FAC  |
|                     | <i>Carex praeegracilis</i>                         | Black creeper or freeway sedge | H | FACW |
|                     | <i>Carex tumulicola</i>                            | Foothill sedge                 | H | FACU |
|                     | <i>Cyperus eragrostis</i>                          | Nutsedge                       | H | FACW |
|                     | <i>Eleocharis macrostachya</i>                     | Spikerush                      | H | OBL  |
| <b>Juncaceae</b>    | <i>Juncus balticus</i>                             | Baltic rush                    | H | FACW |
|                     | <i>Juncus dubius</i>                               | Mariposa rush                  | H | FACW |
|                     | <i>Juncus occidentalis</i>                         | Western rush                   | H | FACW |
|                     | <i>Luzula comosa</i>                               | Hairy wood rush                | H | FAC  |
| <b>Poaceae</b>      | <i>Aira caryophyllea</i>                           | Silver hair grass              | H | FACU |
|                     | <i>Anthoxanthum odoratum</i>                       | Sweet vernal grass             | H | FAC  |
|                     | <i>Avena</i> sp.                                   | Wild oat                       | H | UPL  |
|                     | <i>Briza minor</i>                                 | Annual quaking grass           | H | FAC  |
|                     | <i>Bromus diandrus</i>                             | Ripgut grass                   | H | UPL  |
|                     | <i>Bromus hordeaceus</i>                           | Soft chess                     | H | FACU |
|                     | <i>Crypsis schoenoides</i>                         | Swamp prickly grass            | H | FACW |
|                     | <i>Cynodon dactylon</i>                            | Bermuda grass                  | H | FACU |
|                     | <i>Cynosurus echinatus</i>                         | Hedgehog dog-tail              | H | UPL  |
|                     | <i>Deschampsia danthonoides</i>                    | Annual hair grass              | H | FACW |
|                     | <i>Elymus caput-medusae</i>                        | Medusa head                    | H | UPL  |
|                     | <i>Elymus glaucus</i>                              | Blue or Western wild rye       | H | FACU |
|                     | <i>Elymus triticoides</i>                          | Beardless wild rye             | H | UPL  |
|                     | <i>Festuca perennis</i> (= <i>Lolium perenne</i> ) | Rye grass                      | H | FAC  |
|                     | <i>Holcus lanatus</i>                              | Velvet grass                   | H | FAC  |
|                     | <i>Hordeum marinum</i> ssp. <i>gussoneanum</i>     | Mediterranean barley           | H | FAC  |
|                     | <i>Hordeum murinum</i> ssp. <i>leporinum</i>       | Hare barley                    | H | FACU |
|                     | <i>Phalaris aquatica</i>                           | Harding grass                  | H | FACU |
|                     | <i>Poa pratensis</i>                               | Kentucky blue grass            | H | FAC  |
|                     | <i>Polypogon monspeliensis</i>                     | Annual beard grass             | H | FACW |

<sup>1</sup> H=herb; S=shrub; T=tree, WV=woody vine.

<sup>2</sup> Indicators from 2016 NWPL for the Arid West Region. Plant species not on the 2016 NWPL treated as UPL. Indicators for plants that could not be identified to species were assigned based on their most likely identity.

# Appendix D

## FEMA Flood Insurance Rate Map (FIRM)

### Stonehenge Springs

---

[This page intentionally blank]

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding...

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and Floodway Data are provided...

Coastal Base Flood Elevations shown on this map apply only inland of 0.7 North American Vertical Datum of 1988 (NAVD)...

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations...

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report...

The projection used in the preparation of this map was California State Plane, Zone II. The horizontal datum was NAD83 (GRS80) spheroid...

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations...

NCS Information Services NCSA, NVNS212 National Geographic Survey, BSMC-3, #2022 1315 East-West Highway Silver Spring, Maryland 20910-3282 (301) 713-3242

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geographic Survey at (301) 713-3242...

Base map information shown on this FIRM was derived from multiple sources. This information was compiled from the U.S. Geological Survey, 1989 and 1993, El Dorado County Surveyor Office, 2005; National Geographic Survey, 2005; California Department of Forestry, 2004, and U.S. Bureau of Reclamation, 2003...

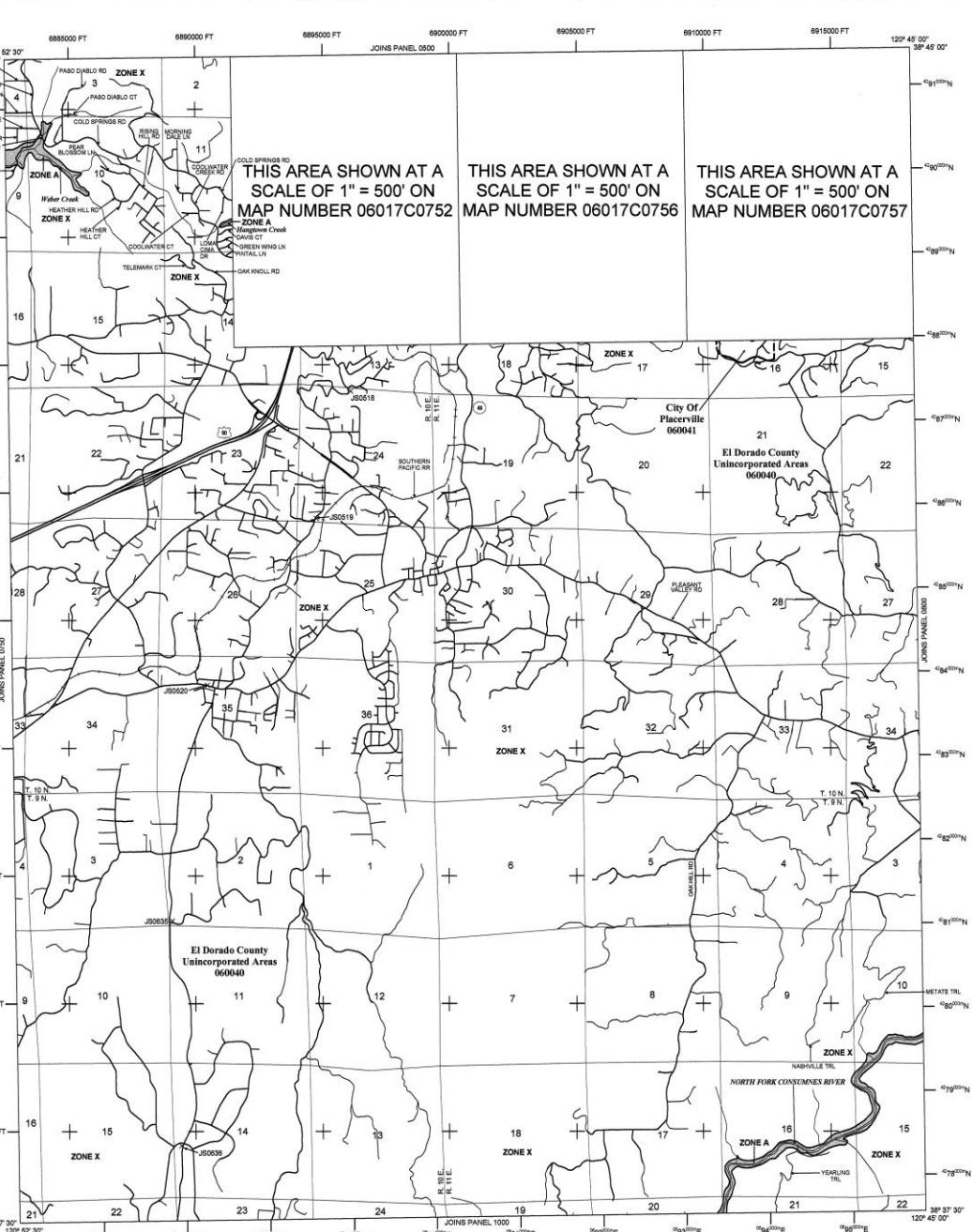
This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations...

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of Communities Table containing National Flood Insurance Program data for each community as well as a listing of the panels on which each community is located.

Contact the FEMA Map Service Center at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and their website at http://www.fema.gov.

If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-366-2627) or visit the FEMA website at http://www.fema.gov.



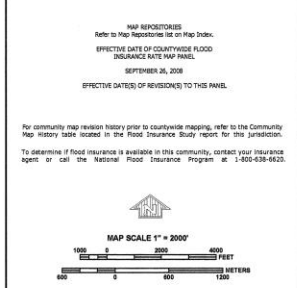
THIS AREA SHOWN AT A SCALE OF 1" = 500' ON MAP NUMBER 06017C0752

THIS AREA SHOWN AT A SCALE OF 1" = 500' ON MAP NUMBER 06017C0756

THIS AREA SHOWN AT A SCALE OF 1" = 500' ON MAP NUMBER 06017C0757

LEGEND

- SPECIAL FLOOD HAZARD AREAS (SFHA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
ZONE A No Base Flood Elevations determined.
ZONE AH Flood depths of 1 to 3 feet (usually street or ponding); Base Flood Elevations determined.
ZONE AO Flood depths of 1 to 3 feet (usually street flow on sloping terrain); Base Flood Elevations determined.
ZONE AR Special Flood Hazard Areas determined relative to the 1% annual chance flood by a flood control system that was subsequently determined to be infeasible; the 1% annual chance flood is being retained to provide protection from the 1% annual chance or greater flood.
ZONE AR9 Area to be protected from 1% annual chance flood by a Federal Flood Protection System under construction; no Base Flood Elevations determined.
ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.



NFIP PANEL 0775E FIRM FLOOD INSURANCE RATE MAP EL DORADO COUNTY, CALIFORNIA AND INCORPORATED AREAS PANEL 775 OF 1125 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS: COMMUNITY NUMBER PANEL BUZZIX
EL DORADO COUNTY 06040 0775 E
PLACERVILLE, CITY OF 06041 0775 E
MAP NUMBER 06017C075E
EFFECTIVE DATE SEPTEMBER 26, 2008

[This page intentionally blank]



# Appendix E

## Aquatic Resources Table

### Stonehenge Springs

---

[This page intentionally blank]

| Waters Name              | State      | Cowardin_Code | HGM_Code | Meas_Type | Amounts | Units | Waters_Type | Latitude    | Longitude   | Local_Waterway |
|--------------------------|------------|---------------|----------|-----------|---------|-------|-------------|-------------|-------------|----------------|
| Channel 1 (ephemeral)    | CALIFORNIA | R4SB3A        |          | Area      | 0.011   | ACRE  | DELINEATE   | 38.69029756 | -120.816878 | Datum is WGS84 |
| Channel 1 (intermittent) | CALIFORNIA | R4SB3C        |          | Area      | 0.545   | ACRE  | DELINEATE   | 38.68792618 | -120.817469 |                |
| Channel 1a               | CALIFORNIA | R4SB3A        |          | Area      | 0.009   | ACRE  | DELINEATE   | 38.68683746 | -120.817877 |                |
| Channel 1b               | CALIFORNIA | R4SB3A        |          | Area      | 0.008   | ACRE  | DELINEATE   | 38.68702765 | -120.817434 |                |
| Channel 1c               | CALIFORNIA | R4SB3A        |          | Area      | 0.02    | ACRE  | DELINEATE   | 38.68866367 | -120.817540 |                |
| Channel 1d               | CALIFORNIA | R4SB3A        |          | Area      | 0.043   | ACRE  | DELINEATE   | 38.69002047 | -120.815790 |                |
| Channel 1e               | CALIFORNIA | R4SB3A        |          | Area      | 0.001   | ACRE  | DELINEATE   | 38.68978575 | -120.816216 |                |
| Channel 1f               | CALIFORNIA | R4SB3A        |          | Area      | 0.001   | ACRE  | DELINEATE   | 38.68975940 | -120.816136 |                |
| Channel 2 (ephemeral)    | CALIFORNIA | R4SB3A        |          | Area      | 0.17    | ACRE  | DELINEATE   | 38.68179672 | -120.820014 |                |
| Channel 2 (intermittent) | CALIFORNIA | R4SB3C        |          | Area      | 0.083   | ACRE  | DELINEATE   | 38.67781489 | -120.818404 |                |
| Channel 2a               | CALIFORNIA | R4SB3A        |          | Area      | 0.006   | ACRE  | DELINEATE   | 38.67772452 | -120.818150 |                |
| Channel 2b               | CALIFORNIA | R4SB3A        |          | Area      | 0.023   | ACRE  | DELINEATE   | 38.67808145 | -120.819076 |                |
| Channel 2c               | CALIFORNIA | R4SB3A        |          | Area      | 0.014   | ACRE  | DELINEATE   | 38.67763409 | -120.819347 |                |
| Channel 2d               | CALIFORNIA | R4SB3A        |          | Area      | 0.009   | ACRE  | DELINEATE   | 38.67750723 | -120.819464 |                |
| Channel 2e               | CALIFORNIA | R4SB3A        |          | Area      | 0.008   | ACRE  | DELINEATE   | 38.67875585 | -120.818476 |                |
| Channel 2f               | CALIFORNIA | R4SB3A        |          | Area      | 0.007   | ACRE  | DELINEATE   | 38.68057532 | -120.820246 |                |
| Channel 2g               | CALIFORNIA | R4SB3A        |          | Area      | 0.005   | ACRE  | DELINEATE   | 38.68106259 | -120.819597 |                |
| Channel 2h               | CALIFORNIA | R4SB3A        |          | Area      | 0.008   | ACRE  | DELINEATE   | 38.68147288 | -120.820478 |                |
| Channel 2i               | CALIFORNIA | R4SB3A        |          | Area      | 0.005   | ACRE  | DELINEATE   | 38.68239444 | -120.820610 |                |
| Channel 3                | CALIFORNIA | R4SB3A        |          | Area      | 0.004   | ACRE  | DELINEATE   | 38.68036412 | -120.817420 |                |
| Seasonal Pond            | CALIFORNIA | PUBF          |          | Area      | 0.384   | ACRE  | DELINEATE   | 38.68798529 | -120.821363 |                |
| Wetland 1                | CALIFORNIA | PEM1A         |          | Area      | 0.07    | ACRE  | DELINEATE   | 38.69181877 | -120.818028 |                |
| Wetland 2                | CALIFORNIA | PEM1A         |          | Area      | 0.079   | ACRE  | DELINEATE   | 38.69060468 | -120.818994 |                |
| Wetland 3                | CALIFORNIA | PEM1A         |          | Area      | 0.073   | ACRE  | DELINEATE   | 38.69001924 | -120.816938 |                |
| Wetland 4                | CALIFORNIA | PEM1A         |          | Area      | 0.07    | ACRE  | DELINEATE   | 38.69003371 | -120.815555 |                |
| Wetland 5                | CALIFORNIA | PEM1A         |          | Area      | 0.009   | ACRE  | DELINEATE   | 38.68960256 | -120.818164 |                |
| Wetland 6                | CALIFORNIA | PEM1A         |          | Area      | 0.007   | ACRE  | DELINEATE   | 38.68914179 | -120.817403 |                |
| Wetland 7                | CALIFORNIA | PEM1A         |          | Area      | 0.042   | ACRE  | DELINEATE   | 38.68886764 | -120.817986 |                |
| Wetland 8                | CALIFORNIA | PEM1A         |          | Area      | 0.005   | ACRE  | DELINEATE   | 38.68862749 | -120.819660 |                |
| Wetland 9                | CALIFORNIA | PEM1A         |          | Area      | 0.005   | ACRE  | DELINEATE   | 38.68847315 | -120.819433 |                |
| Wetland 10               | CALIFORNIA | PEM1A         |          | Area      | 0.023   | ACRE  | DELINEATE   | 38.68839639 | -120.819091 |                |
| Wetland 11               | CALIFORNIA | PEM1A         |          | Area      | 0.041   | ACRE  | DELINEATE   | 38.68834330 | -120.818933 |                |
| Wetland 12               | CALIFORNIA | PEM1A         |          | Area      | 0.009   | ACRE  | DELINEATE   | 38.68851787 | -120.818610 |                |
| Wetland 13               | CALIFORNIA | PEM1A         |          | Area      | 0.009   | ACRE  | DELINEATE   | 38.68820863 | -120.818632 |                |
| Wetland 14               | CALIFORNIA | PEM1A         |          | Area      | 0.012   | ACRE  | DELINEATE   | 38.68805923 | -120.818686 |                |
| Wetland 15               | CALIFORNIA | PEM1A         |          | Area      | 0.013   | ACRE  | DELINEATE   | 38.68770583 | -120.818717 |                |
| Wetland 16               | CALIFORNIA | PEM1A         |          | Area      | 0.018   | ACRE  | DELINEATE   | 38.68729161 | -120.818886 |                |
| Wetland 17               | CALIFORNIA | PEM1A         |          | Area      | 0.018   | ACRE  | DELINEATE   | 38.68728162 | -120.818593 |                |
| Wetland 18               | CALIFORNIA | PEM1A         |          | Area      | 0.006   | ACRE  | DELINEATE   | 38.68713046 | -120.818855 |                |

|            |            |       |      |            |           |             |             |
|------------|------------|-------|------|------------|-----------|-------------|-------------|
| Wetland 19 | CALIFORNIA | PEM1A | Area | 0.111 ACRE | DELINEATE | 38.68686778 | -120.818194 |
| Wetland 20 | CALIFORNIA | PEM1A | Area | 0.004 ACRE | DELINEATE | 38.68599263 | -120.817866 |
| Wetland 21 | CALIFORNIA | PEM1A | Area | 0.242 ACRE | DELINEATE | 38.68564280 | -120.818382 |
| Wetland 22 | CALIFORNIA | PEM1A | Area | 0.065 ACRE | DELINEATE | 38.68530056 | -120.818113 |
| Wetland 23 | CALIFORNIA | PEM1A | Area | 0.093 ACRE | DELINEATE | 38.68448265 | -120.820355 |
| Wetland 24 | CALIFORNIA | PEM1A | Area | 0.051 ACRE | DELINEATE | 38.68379803 | -120.820229 |
| Wetland 25 | CALIFORNIA | PEM1A | Area | 0.011 ACRE | DELINEATE | 38.68353456 | -120.818618 |
| Wetland 26 | CALIFORNIA | PEM1A | Area | 0.034 ACRE | DELINEATE | 38.68197121 | -120.818781 |

A-temporarily flooded (a few days/weeks in growing season)

C-seasonally flooded (at least a month in growing season)

---

Biological Resources Evaluation  
and  
Botanical Survey  
for the  
Stonehenge Springs Project  
El Dorado County, CA

---

Prepared by:

*Sycamore Environmental Consultants, Inc.*  
6355 Riverside Blvd., Suite C  
Sacramento, CA 95831  
Phone: 916/ 427-0703  
Contact: Chuck Hughes, M.S.

Prepared for:

*Stonehenge Springs, LLC*  
2700 South Azusa Avenue  
West Covina, CA 91792  
Contact: Mr. Kevin Sweeney

8 May 2018

---

[This page intentionally blank]



Biological Resources Evaluation  
and  
Botanical Survey  
for the  
Stonehenge Springs Project

El Dorado County, CA

---

**Table of Contents**

**I. SUMMARY OF FINDINGS AND CONCLUSIONS.....1**

**II. INTRODUCTION.....3**

A. Purpose of Report .....3

B. Project Location.....3

C. Project Applicant .....3

D. Project Description .....3

**III. STUDY METHODS.....9**

A. Studies Conducted .....9

B. Literature Search.....9

C. Field Survey Methods.....9

    1. Survey History, Dates, and Personnel.....9

    2. Precipitation Conditions.....10

    3. Biological Survey.....10

    4. Botanical Survey .....10

D. Mapping.....11

E. Problems Encountered and Limitations That May Influence Results .....11

**IV. ENVIRONMENTAL SETTING.....11**

A. Soils .....11

B. Biological Communities .....19

    1. California Black Oak Woodland .....25

    2. California Annual Grassland.....25

    3. Young Ponderosa Pine Woodland – Disturbed.....25

    4. Valley Oak – Interior Live Oak Woodland.....25

    5. Valley Oak Woodland.....25

    6. Ponderosa Pine – Interior Live Oak Woodland.....26

    7. Canyon Live Oak Woodland.....26

    8. Sandbar Willow Scrub .....26

    9. Wetlands.....26

    10. Channels.....26

    11. Seasonal Pond .....27

    12. Roads.....27

C. The Existing Level of Disturbance.....27

**V. BIOLOGICAL RESOURCES IN THE STUDY AREA.....28**

A. Determination of Special-Status Species in the Study Area.....28

B. Special-Status Species not in the Project Study Area.....28

|  |           |
|--|-----------|
| C. Evaluation of Special-Status Wildlife Species ..... | 29        |
| 1. Reptiles.....                                       | 29        |
| 2. Birds.....  | 31        |
| D. Evaluation of Special-Status Plants.....            | 31        |
| E. Evaluation of Sensitive Natural Communities.....    | 38        |
| <b>VI. LITERATURE CITED.....</b>                       | <b>40</b> |
| <b>VII. PREPARERS .....</b>                            | <b>43</b> |

### Figures

|   |    |
|---|----|
| Figure 1. Project Location Map .....                  | 5  |
| Figure 2. Aerial Photograph .....                     | 7  |
| Figure 3. Soils Map.....                              | 13 |
| Figure 4. Aerial Photograph .....                     | 15 |
| Figure 5. Biological Resources Map.....               | 21 |
| Figure 6. Nissenan Manzanita Shrub Location Map ..... | 33 |

### Tables

|  |    |
|--|----|
| Table 1. Biological Communities.....                         | 19 |
| Table 2. Special-Status Species and Natural Communities..... | 28 |

### Appendices

|  |  |
|--|--|
| Appendix A. Database Queries                     |  |
| Appendix B. Species Evaluated Table              |  |
| Appendix C. Plant and Wildlife Species Observed  |  |
| Appendix D. Photographs                          |  |
| Appendix E. CNDDDB Report for Nissenan manzanita |  |



## **I. SUMMARY OF FINDINGS AND CONCLUSIONS**

---

This biological resources evaluation (BRE) was prepared for the Stonehenge Springs Project located in the unincorporated community of Diamond Springs in El Dorado County, CA. The approximately 143.83-acre Biological Study Area (BSA) consists mostly of oak woodland, grassland, and previously disturbed areas.

The BSA provides potential habitat for some species of special-status wildlife and plants that are considered during project review under the California Environmental Quality Act (CEQA). The BSA provides potential habitat for coast horned lizard. Western pond turtle could occur seasonally in the pond. Both coast horned lizard and western pond turtle are California Species of Special Concern. The BSA provides nesting habitat for birds regulated by State Fish and Game Code and listed under the Federal Migratory Bird Treaty Act (MBTA).

The BSA provides habitat for four special-status plant species. A botanical survey was conducted according to California Department of Fish and Wildlife guidelines. Three of the plant species were not found. A total of 88 shrubs of one of the species, Nissenan manzanita, were counted in the BSA.

Several natural communities occur in the BSA that are regulated under State and Federal law, or considered during CEQA review. Oak woodlands and trees are regulated by the County Oak Resources Management Plan. Waters and wetlands are regulated by State and Federal law, and impacts to them requires permitting. Impacts are also considered under CEQA. Sandbar willow scrub is a sensitive community in the BSA considered during CEQA review.

[This page intentionally blank]

## **II. INTRODUCTION**

---

### **A. Purpose of Report**

The purpose of this report is to document baseline biological resources in the BSA. This report may be used in support of permit applications and in the California Environmental Quality Act (CEQA) review process. Project design is in preparation and biological impacts will be prepared separately.

### **B. Project Location**

The BSA is in Diamond Springs, an unincorporated community in El Dorado County, CA. The approximately 143.83-acre BSA is assessor's parcel numbers 054-402-18, 329-301-15, 329-301-20, 329-310-10, -11, and -12. The BSA is on the Placerville U.S. Geological Survey topographic quad (T10N, R10E, Section 25 and 36; T10N, R11E, Section 30 and 31; Figure 1), and is in the Upper Cosumnes hydrologic unit (18040013). Its centroid is 38.686355° north, 120.819115° west, UTM coordinate 689,690 meters E, 4,284,226 meters N, Zone 10S (WGS84). Figure 2 is an aerial photograph of the BSA and surrounding area.

El Dorado County parcel data indicates that the BSA is located in County rare plant mitigation zone 2, which is defined as the El Dorado Irrigation District Service Area. The BSA is outside the U.S. Fish and Wildlife Service (USFWS) recovery boundary for the Pine Hill plants (USFWS August 2002). The BSA is located outside the El Dorado County Important Biological Corridor (IBC) and Ecological Preserve (EP) overlay areas (El Dorado County 2004b).

### **C. Project Applicant**

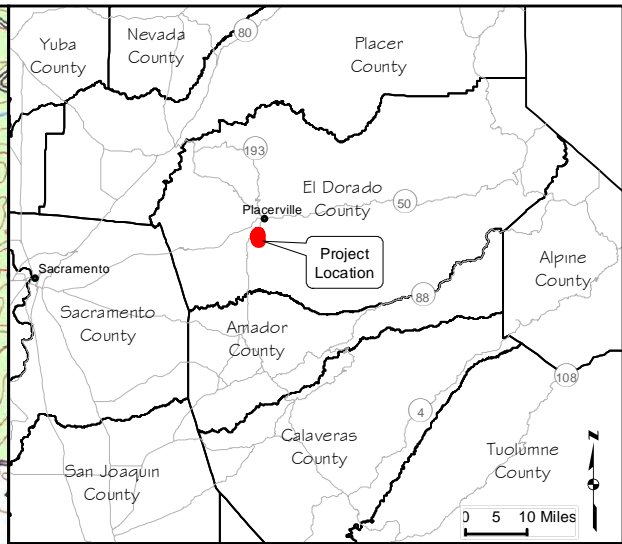
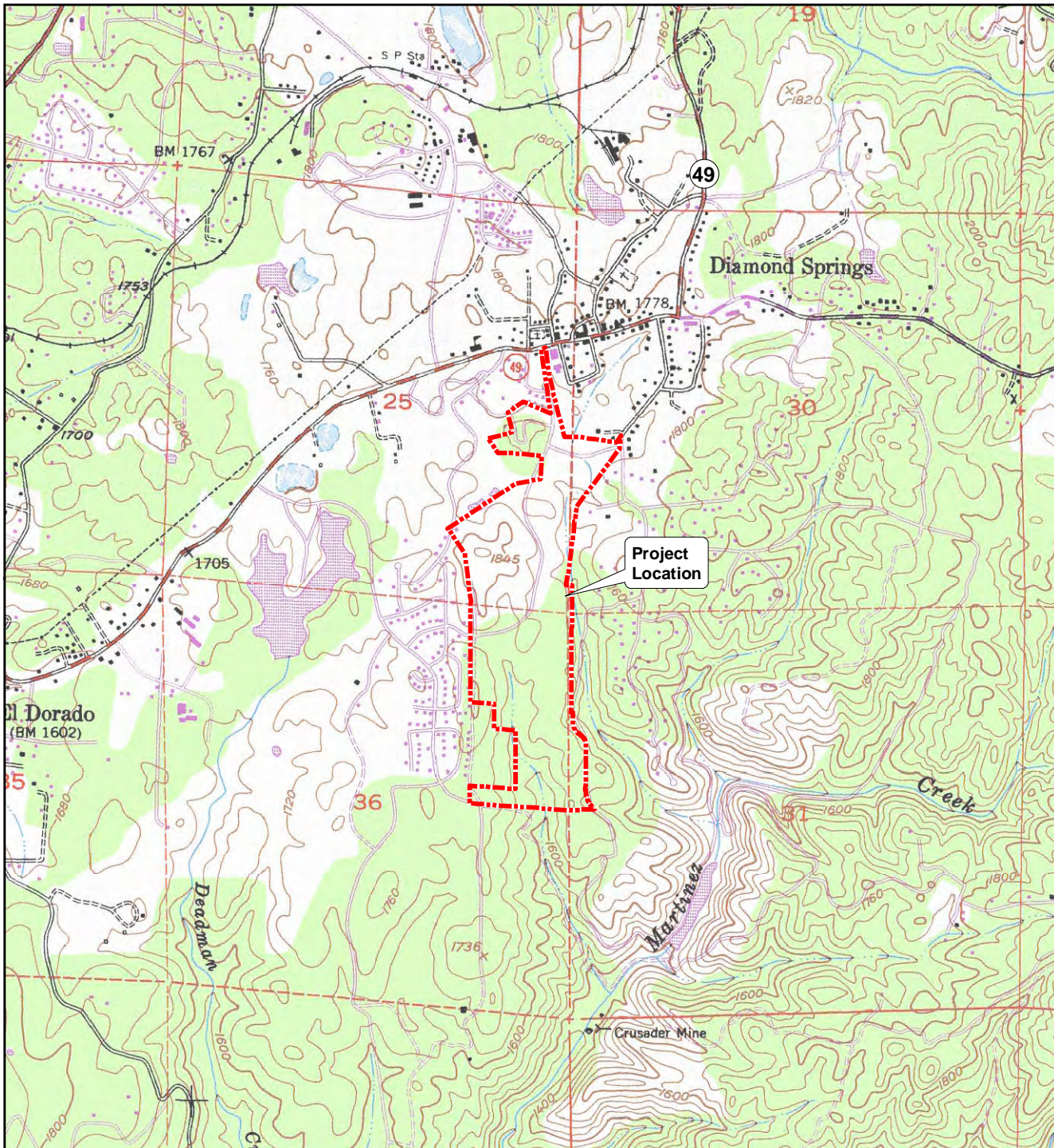
Stonehenge Springs, LLC  
2700 South Azusa Avenue  
West Covina, CA 91792

Contact: Mr. Kevin Sweeney  
Phone: 530/ 893-1515

### **D. Project Description**

The project intends to design a residential subdivision at the site. Project design has not been finalized, and this report does not quantify impacts or propose mitigation.

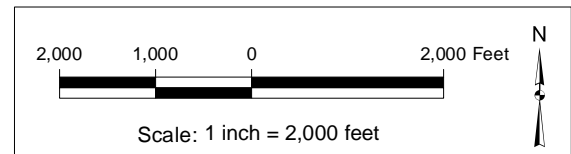
[This page intentionally blank]



Stonehenge Springs  
 El Dorado County, CA  
 8 May 2018

Figure 1. Project Location Map

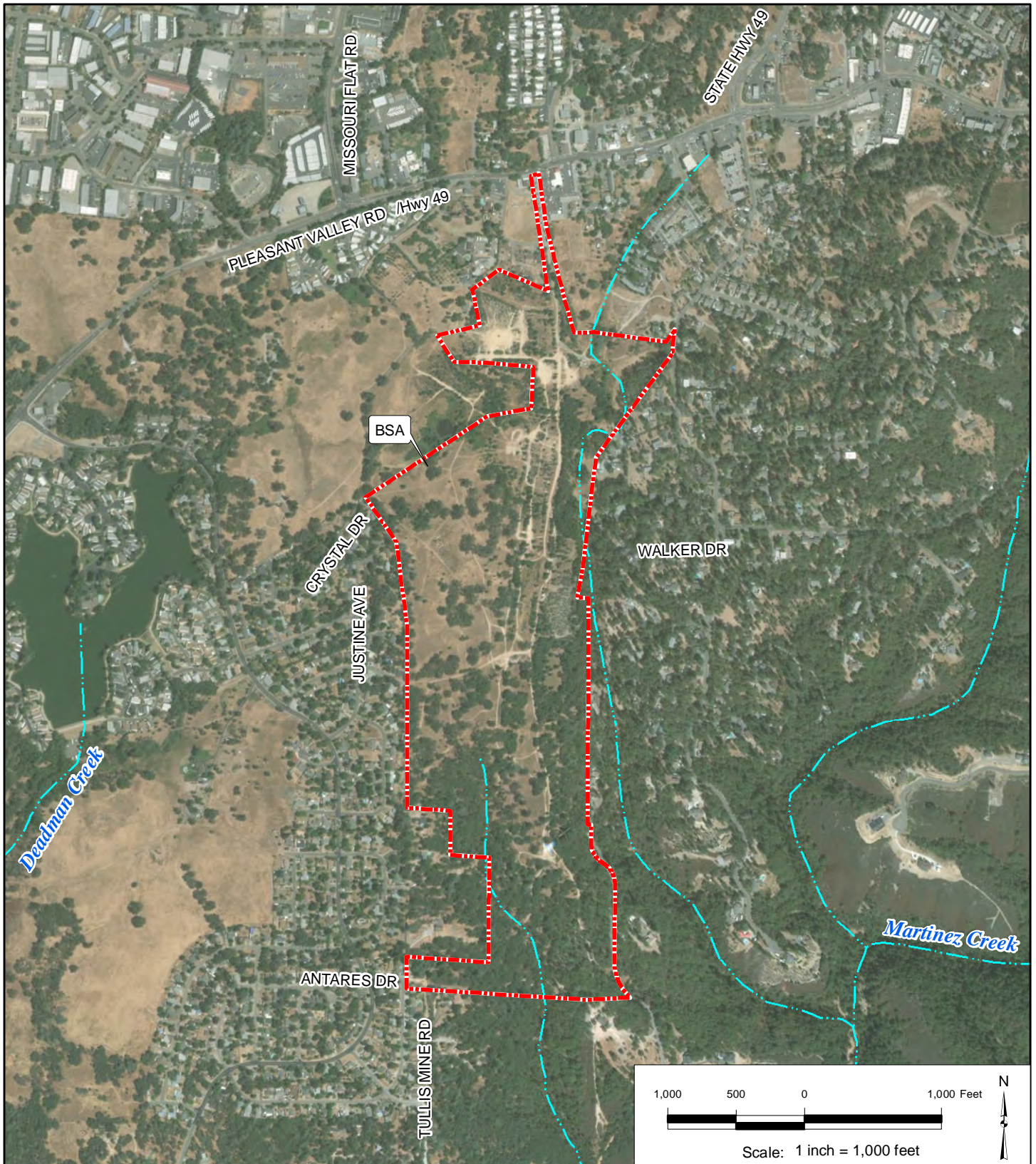
 Project Location



**SYCAMORE**  
 Environmental  
 Consultants, Inc.

Placerville, CA (Revised 1973)  
 CASIL California USGS Digital Raster Graphics (DRG),  
 7.5 Minute (C) Series, Albers Nad83 Mosaics (MrSID)  
 o\_nw0101.sid # o\_nw0102.sid

[This page intentionally blank]



Stonehenge Springs  
 El Dorado County, CA  
 8 May 2018



Biological Study Area (BSA)  
 NHD Flowlines



**SYCAMORE**  
 Environmental  
 Consultants, Inc.

Aerial Photograph:  
 7 August 2016 / 3 September 2016  
 NAIP2016 USDA FSA Imagery  
 ESRI ArcGIS Basemap Layer

USGS National Hydrography  
 Dataset (NHD) Flowlines

Figure 2. Aerial Photograph

[This page intentionally blank]



### **III. STUDY METHODS**

---

#### **A. Studies Conducted**

An evaluation of biological resources was conducted to determine whether any special-status plant or wildlife species, their habitat, or sensitive habitats occur in the BSA. Data on known special-status species and habitats in the area was obtained from state and federal agencies. Maps and aerial photographs of the BSA and surrounding area were reviewed. An aquatic resources delineation (Sycamore Environmental 2018), reconnaissance wildlife survey, and appropriately-timed floristic botanical survey were conducted to determine what habitat types were present. The field surveys, map review, and a review of the biology of evaluated species and habitats were used to determine the special-status species and sensitive habitats that could occur in the BSA.

Special-status species in this report are those listed under the federal or state endangered species acts, under the California Native Plant Protection Act, as a California species of special concern or fully protected by the California Department of Fish and Wildlife (CDFW), that are Ranked 1 or 2 by the California Native Plant Society's Inventory of Rare and Endangered Plants of California (CNPS 2016), or are rare plants listed in the El Dorado County Ordinance Code §130.71.030. Special-status natural communities are waters, wetlands, riparian communities, any natural community ranked S1, S2, or S3 by CDFW (2018), and any community identified as sensitive in the El Dorado County General Plan EIR (2004a).

#### **B. Literature Search**

Sycamore Environmental obtained a list from the U.S. Fish and Wildlife Service (USFWS) that identifies federal-listed species that could potentially occur in or be affected by a project in the BSA. The California Natural Diversity Database (CNDDDB) and the California Native Plant Society (CNPS) Inventory were queried for the Placerville quad and eight surrounding USGS quads to determine known records of special-status species that occur in the vicinity of the BSA. The CNDDDB tracks some species that have not been designated by CDFW as a California species of special concern and do not otherwise meet the criteria for special-status species in this BRE. These species are not evaluated in this BRE. The results of the database queries are in Appendix A.

#### **C. Field Survey Methods**

##### **1. Survey History, Dates, and Personnel**

North Fork Associates (2009) prepared a biological resources assessment for most of the current BSA based on fieldwork conducted between 2006 and 2009. A special-status plant, Nissenan manzanita, was identified in the North Fork Associates report. Both the 2009 findings, and the current findings, are discussed in the context of Nissenan manzanita below in Section V.D.

Fieldwork for this BRE was conducted by Chuck Hughes, M.S., and Nicole Desideri on 13, 14, and 27 June 2017. The site was also visited on four days in August and September during an aquatic resources delineation, which is separately documented (Sycamore Environmental 2018).

## **2. Precipitation Conditions**

Historic average precipitation for the nearby Placerville gauge from 1 July through 31 May is 37.66 inches (CDEC 2018). From 1 July 2016 through 31 May 2017 the Placerville gauge reported 72.13 inches of precipitation. Precipitation for the rain-year at the time of the surveys was about 191% of normal at the nearby Placerville Gauge.

## **3. Biological Survey**

The general biological survey consisted of walking through the BSA while assessing potential habitat for special-status species and sensitive communities. Wildlife species and vegetation communities were identified and recorded. A list of plant and wildlife species observed in the BSA is in Appendix C. Photographs of the BSA are in Appendix D.

## **4. Botanical Survey**

The botanical survey followed the guidelines set forth by USFWS (1996) and CDFW (2009). The botanical survey complies with newer CDFW (2018) guidelines written after the fieldwork was conducted, which are similar to the 2009 guidelines. The June 2017 fieldwork was conducted during the published blooming period of special-status plants with potential to occur in the BSA, with the exception of Nissenan manzanita. Manzanitas generally bloom very early in the season, and the blooming period of Nissenan manzanita is February through March (CNPS 2016). However, Nissenan manzanita is best distinguished from the other manzanita in the BSA by bark characteristics, inflorescence bracts, and to a lesser extent by leaf size. The gray, shredding bark of Nissenan manzanita was clearly distinguishable from the red, smooth bark of the more common manzanita in the BSA (Appendix D, photo 4). The botanical survey was conducted during the evident and identifiable period of Nissenan manzanita.

Systematic transects were walked throughout the BSA to search for all vascular plant species present. Frequent deviations were made from the transects to search areas of different microhabitat, areas that were more likely to support special-status plants, or identify additional plant species. Approximately 36 person-hours were spent in the field during the June 2017 surveys. An additional 8 person-hours were spent keying plants collected in the field. All vascular plants found in the BSA were identified to the taxonomic level necessary to determine legal status. A list of all vascular plants observed in the BSA is in Appendix C. Scientific nomenclature follows the Jepson Flora Project (2018), based on

Baldwin *et al.* (2012). A CNDDDB field survey form for Nissenan manzanita was completed and submitted to CDFW (Appendix E).

#### **D. Mapping**

An aerial photograph acquired from Google Earth Pro (2016) provided the base layer for Figures 4, 5, and 6. Waters and wetland boundaries were mapped with a sub-meter accurate global positioning system (GPS) and were imported from the aquatic resources delineation (Sycamore Environmental 2018). Aerial photographs and field notes were used to estimate the boundaries of upland biological communities. Areas mapped as oak woodlands have a minimum of 10% cover of oak tree canopy, consistent with the new County Oak Resources Management Plan (ORMP) adopted in 2017. Acreages were calculated using ArcMap functions.

#### **E. Problems Encountered and Limitations That May Influence Results**

This BRE is intended to identify baseline biological resources to support review of a project under the California Environmental Quality Act (CEQA). The surveys conducted for this BRE are not intended to meet the documentation requirements of any published agency protocol or guideline surveys for special-status wildlife. A survey according to agency protocol for plants was conducted. No other problems or limitations were encountered during the fieldwork that would influence the results.

### **IV. ENVIRONMENTAL SETTING**

---

The BSA is in the community of Diamond Springs in the Sierra Nevada Mountains. The elevation ranges from approximately 1,620 to 1,840 feet. Most of the BSA is characterized by oak woodland, with ponderosa pine common in some areas. A substantial area (roughly 25 acres) in the northern portion of the BSA was graded prior to 1993. There are two intermittent channels and several ephemeral tributaries. The area surrounding the BSA consists of areas developed to residential and commercial uses, and undeveloped land with similar vegetation.

#### **A. Soils**

The primary component soils of mapping units in the BSA (Figure 3) are summarized below (NRCS 1974, USDA-NRCS 2017a, b). Reported colors are for moist soil.

Diamond Springs very fine sandy loam, 9–15% slopes;

Diamond Springs very rocky very fine sandy loam, 3–50% slopes:

The Diamond Springs series consists of well-drained soils underlain by fine-grained acidic igneous rocks at a depth of 24 to 50 inches. A typical profile has dark brown (10YR 4/3) very fine sandy loam from 0 to 3 inches, yellowish brown (10YR 5/4) loam from 3 to 9 inches, yellowish brown (10YR 5/4) light clay loam from 9 to 14 inches, light yellowish brown (10YR 6/4) clay loam from 14 to 28 inches, very pale brown (10YR 7/4) clay loam from 28 to 36 inches, and very pale brown (10YR 7/4) coarse sandy clay loam that has brownish-yellow (10YR 6/6) mineral grains from 36 to 40 inches. In Diamond Springs very rocky very fine sandy loam approximately 5–25 percent of the surface is rock outcrops. Surface runoff is medium to rapid, and the erosion hazard is slight to high. The soil profile has moderate to very strong acidity in the top 12 inches.

Mariposa very rocky silt loam, 50–70% slopes:

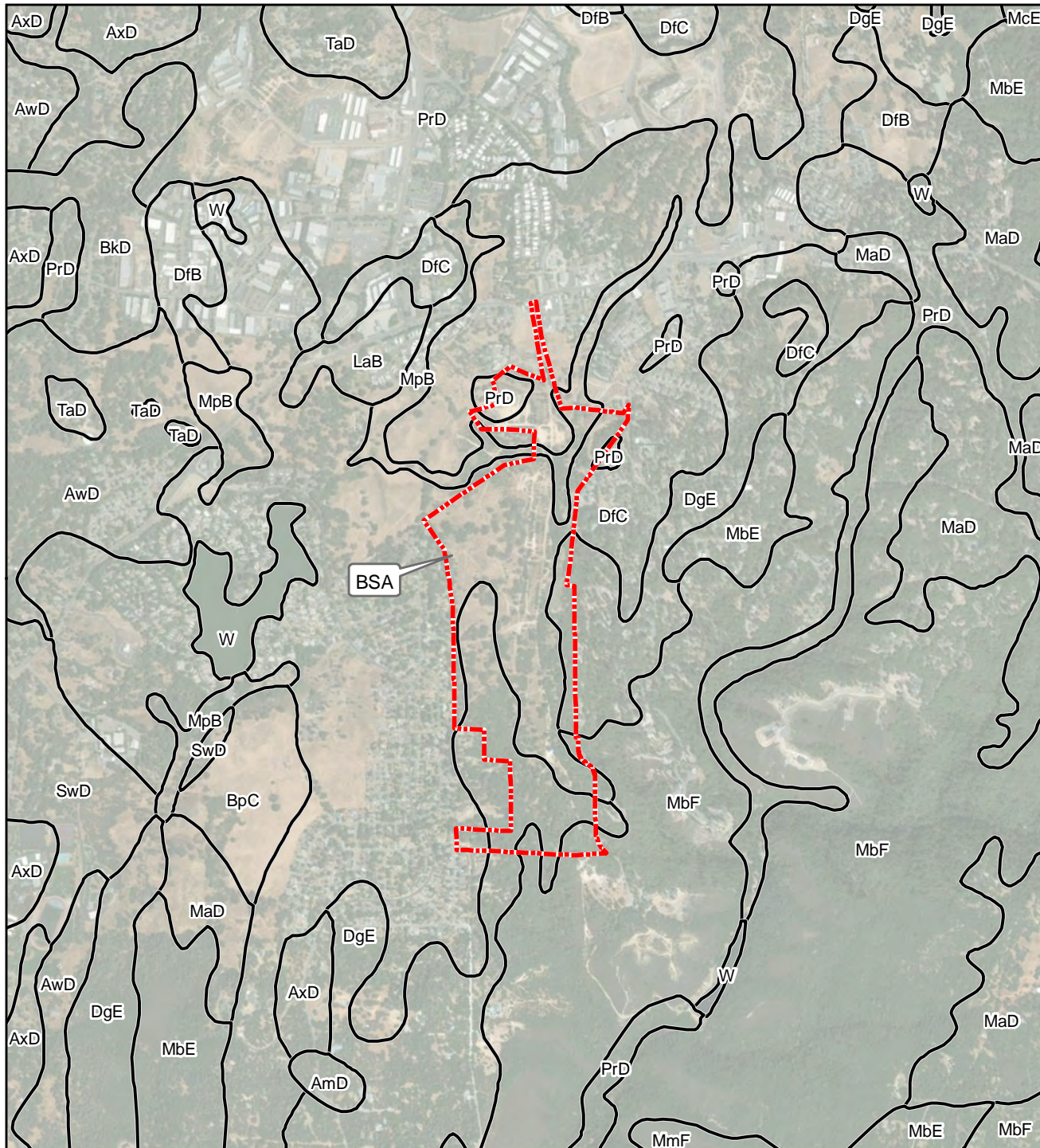
The Mariposa series consists of well-drained soils that are underlain by vertically tilted schists and slate and contact metamorphic rock. A typical profile has reddish brown (5YR 4/4) gravelly silt loam from 0 to 8 inches, yellowish red (5YR 4/6) gravelly silt loam from 8 to 15 inches, yellowish red (5YR 4/6) gravelly heavy silt loam from 15 to 26 inches, and yellowish brown weathered slate or schist below 26 inches. Surface runoff is rapid and erosion hazard is high. The soil profile has moderate acidity in the top 12 inches.

Mixed alluvial land:

Mixed alluvial land consists of small areas of recent mixed alluvium adjacent to stream channels. It is derived from volcanic and sedimentary rock. The color of this soil is variable. Mixed alluvial land is stratified gravelly sandy loam, gravelly loam, and gravelly clay loam that grades into sand and gravel as depth increases. Underlying bedrock is found 36 to 40 inches deep. This land type is poorly to moderately well drained, and permeability is moderately rapid to slow. Surface runoff is slow to medium, and the erosion hazard is moderate. This land is subject to frequent flooding in the winter (NRCS 1974; USDA-NRCS 2017a).



Placer diggings:

Placer diggings consists of areas of stony, cobbly and gravelly material. It is commonly found in beds of creeks and other streams on 2 to 15 percent slopes, or of areas that have been placer mined and contain enough fine sand or silt to support some grass for grazing. This material is derived from a mixture of rocks and commonly is stratified or poorly sorted. The depth is variable, from 6 inches to more than 5 feet deep. Areas in streambeds occasionally are flooded during the rainy season. Surface runoff is low and available water storage is very low (NRCS 1974; 2017b).



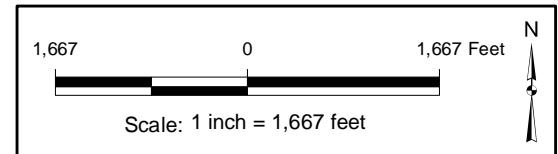
Stonehenge Springs  
 El Dorado County, CA  
 8 May 2018

Figure 3. Soils Map

-  Biological Study Area (BSA)
-  Soil Boundary

Soil Mapping Unit

| Symbol | Name  |
|--------|---|
| DfC    | Diamond Springs very fine sandy loam, 9 to 15 percent slopes            |
| DgE    | Diamond Springs very rocky very fine sandy loam, 3 to 50 percent slopes |
| MbF    | Mariposa very rocky silt loam, 50 to 70 percent slopes                  |
| MpB    | Mixed alluvial land   |
| PrD    | Placer diggings   |



**SYCAMORE**  
 Environmental  
 Consultants, Inc.

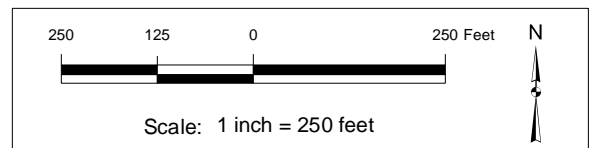
Soil Survey Geographic (SSURGO) database for  
 El Dorado Area, California, USDA, NRCS  
 URL: <http://SoilDataMart.nrcs.usda.gov/>

Aerial Photo: 13 July 2014  
 NAIP2014 USDA FSA Imagery  
 ArcGIS Imagery Basemap layer

[This page intentionally blank]



Stonehenge Springs  
 El Dorado County, CA  
 8 May 2018



 Biological Study Area (BSA)

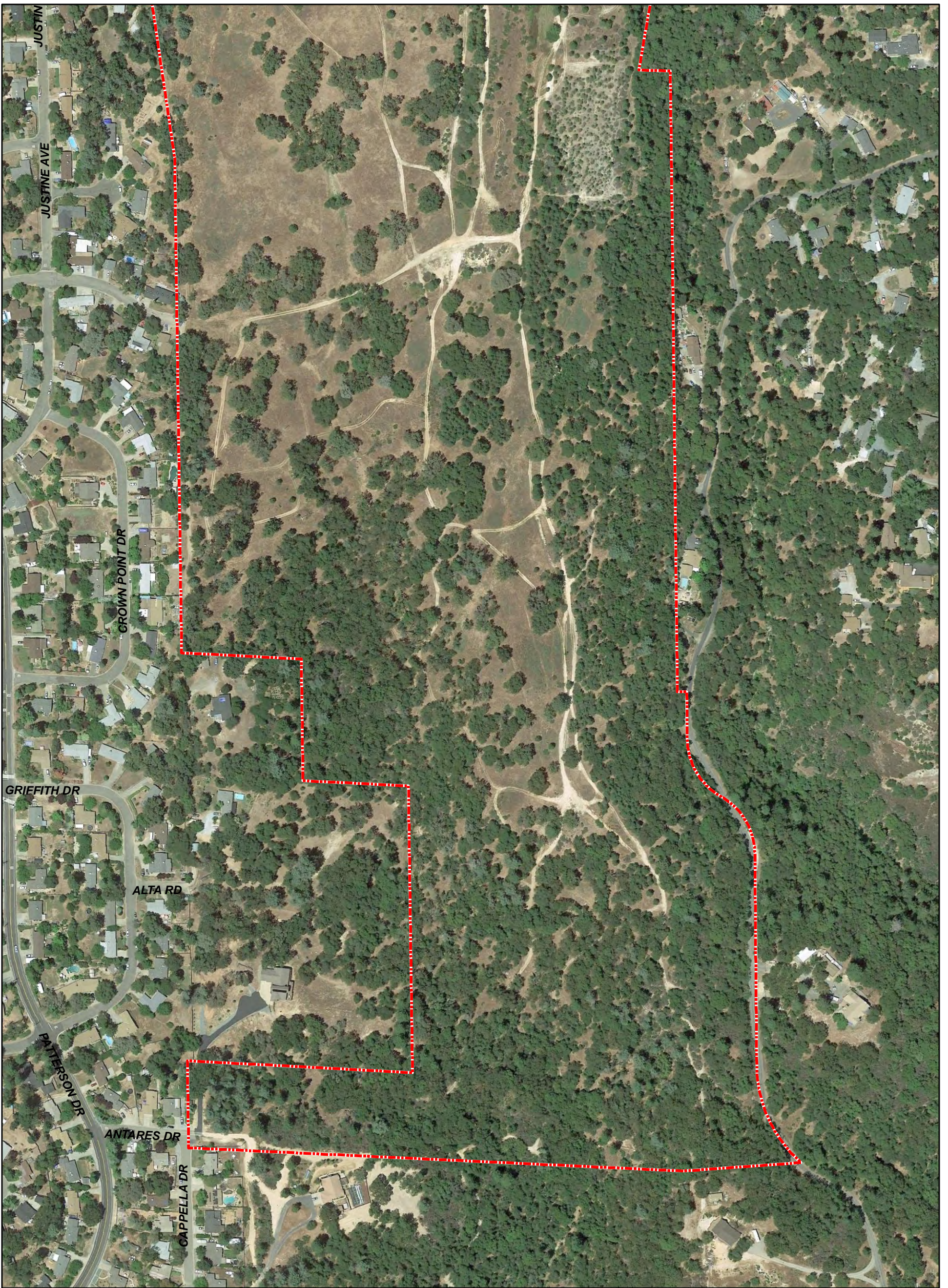
Figure 4.  
 Aerial Photograph  
 Sheet 1 of 2, (North)

 **SYCAMORE**  
 Environmental  
 Consultants, Inc.

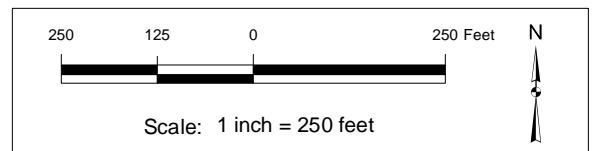
Aerial Photograph: 28 June 2017  
 Google Earth Aerial Imagery

[This page intentionally blank]





Stonehenge Springs  
 El Dorado County, CA  
 8 May 2018



 Biological Study Area (BSA)

Figure 4.  
 Aerial Photograph  
 Sheet 2 of 2, (South)



Aerial Photograph: 28 June 2017  
 Google Earth Aerial Imagery

[This page intentionally blank]

## B. Biological Communities

Biological communities are defined by species composition and relative abundance. The biological communities described below correlate where applicable with the California Natural Community List (CDFW 2018) and the El Dorado County General Plan EIR (2004a). The communities were identified based on Sawyer *et al.* (2009). Communities are identified at the alliance level. The list of sensitive associations within each alliance was checked to see if any occur (CDFW 2018). Biological communities are mapped on Figure 5 and listed in Table 1. Representative photographs of the BSA are in Appendix D.

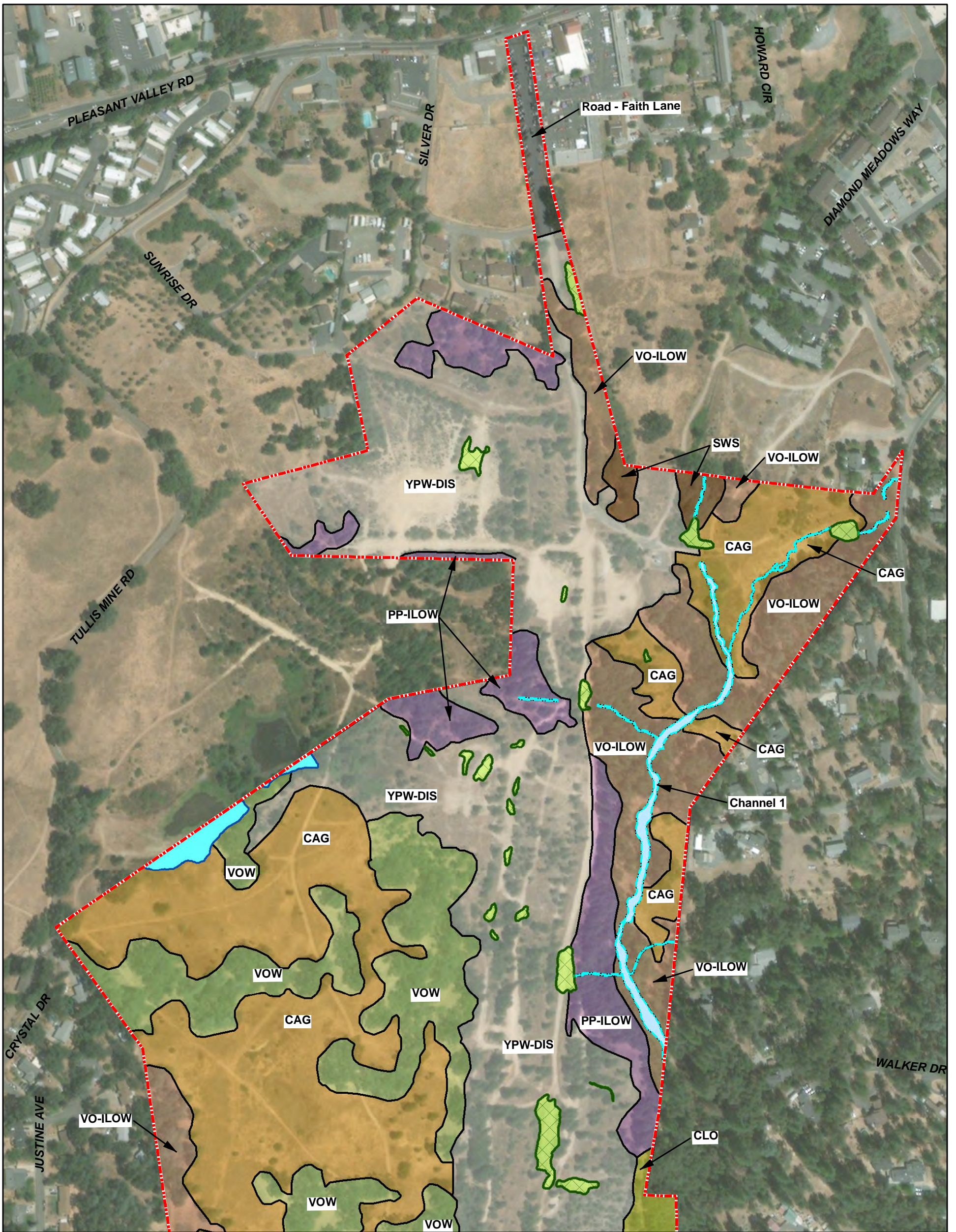
Table 1. Biological Communities.

| Biological Community Common Name<br>(Scientific Name [CDFW Code] <sup>1</sup> )                          | El Dorado County<br>Major Habitat Type <sup>2</sup> | Area (ac)     |
|--|---|---------------|
| California Black Oak Woodland<br>( <i>Quercus kelloggii</i> [71.010.00])                                 | Montane Hardwood                                    | 33.30         |
| California Annual Grassland<br>( <i>Avena spp. – Bromus spp.</i> [42.027.00])                            | Annual Grassland                                    | 31.12         |
| Young Ponderosa Pine Woodland – Disturbed<br>( <i>Pinus ponderosa</i> [87.010.00])                       | --  | 28.71         |
| Valley Oak – Interior Live Oak Woodland<br>( <i>Quercus lobata – Quercus wislizeni</i> [71.040.12])      | Valley Oak Woodland                                 | 19.91         |
| Valley Oak Woodland<br>( <i>Quercus lobata</i> [71.040.00])  | Valley Oak Woodland                                 | 13.14         |
| Ponderosa Pine – Interior Live Oak Woodland<br>( <i>Quercus wislizeni – Pinus ponderosa</i> [71.080.15]) | Montane Hardwood-<br>Conifer                        | 8.64          |
| Canyon Live Oak Woodland<br>( <i>Quercus chrysolepis</i> [71.050.00])                                    | Montane Hardwood                                    | 4.28          |
| Sandbar Willow Scrub<br>( <i>Salix exigua</i> [61.209.01])   | Valley Foothill Riparian                            | 0.58          |
| Wetlands   | --  | 1.12          |
| Channels   | --  | 0.98          |
| Seasonal Pond  | --  | 0.38          |
| Roads  | Urban   | 1.68          |
| <b>Total:</b>  |   | <b>143.83</b> |

<sup>1</sup> Sawyer *et al.* 2009, CDFW 2018

<sup>2</sup> El Dorado County 2004a

[This page intentionally blank]

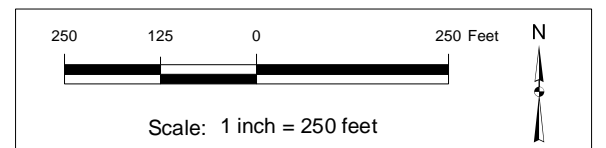


Stonehenge Springs  
El Dorado County, CA  
8 May 2018

Figure 5.  
Biological Resources Map  
Sheet 1 of 2, (North)

| Color                    | Acronym | Biological Communities                                | Acreage       |
|--------------------------|---------|---|---------------|
|                          | CBO     | California Black Oak Woodland (CBO)                   | 33.30         |
|                          | CAG     | California Annual Grassland (CAG)                     | 31.12         |
|                          | YPW-DIS | Young Ponderosa Pine Woodland - Disturbed (YPW-DIS)   | 28.71         |
|                          | VO-ILOW | Valley Oak - Interior Live Oak Woodland (VO-ILOW)     | 19.91         |
|                          | VOW     | Valley Oak Woodland (VOW)                             | 13.14         |
|                          | PP-ILOW | Ponderosa Pine - Interior Live Oak Woodland (PP-ILOW) | 8.64          |
|                          | CLO     | Canyon Live Oak Woodland (CLO)                        | 4.28          |
|                          | SWS     | Sandbar Willow Scrub (SWS)                            | 0.58          |
|                          | --      | Roads   | 1.68          |
| <b>Aquatic Resources</b> |         |   |               |
|                          | --      | Wetlands  | 1.12          |
|                          | --      | Channels  | 0.98          |
|                          | --      | Seasonal Pond   | 0.38          |
|                          |         | <b>Total</b>  | <b>143.83</b> |

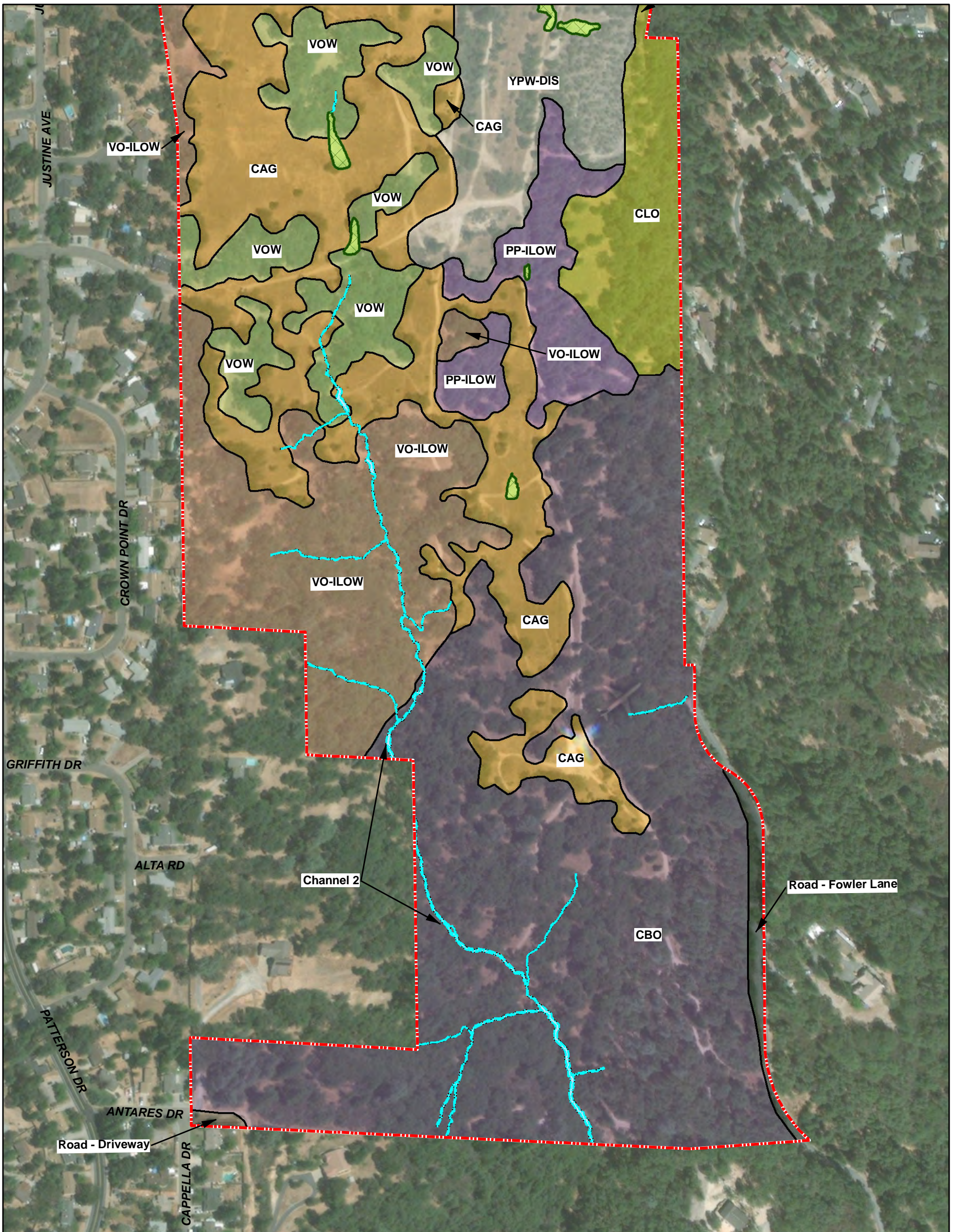
Project Study Area (PSA)  
 Biological Community Boundary



**SYCAMORE**  
Environmental  
Consultants, Inc.

Aerial Photograph: 7 August 2016/ 3 September 2016  
NAIP2016 USDA FSA Imagery  
ESRI ArcGIS Basemap Layer

[This page intentionally blank]

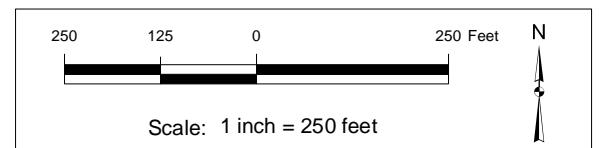


Stonehenge Springs  
El Dorado County, CA  
8 May 2018

Figure 5.  
Biological Resources Map  
Sheet 2 of 2, (South)

| Color                    | Acronym | Biological Communities                                | Acreage       |
|--------------------------|---------|---|---------------|
|                          | CBO     | California Black Oak Woodland (CBO)                   | 33.30         |
|                          | CAG     | California Annual Grassland (CAG)                     | 31.12         |
|                          | YPW-DIS | Young Ponderosa Pine Woodland - Disturbed (YPW-DIS)   | 28.71         |
|                          | VO-ILOW | Valley Oak - Interior Live Oak Woodland (VO-ILOW)     | 19.91         |
|                          | VOW     | Valley Oak Woodland (VOW)                             | 13.14         |
|                          | PP-ILOW | Ponderosa Pine - Interior Live Oak Woodland (PP-ILOW) | 8.64          |
|                          | CLO     | Canyon Live Oak Woodland (CLO)                        | 4.28          |
|                          | SWS     | Sandbar Willow Scrub (SWS)                            | 0.58          |
|                          | --      | Roads   | 1.68          |
| <b>Aquatic Resources</b> |         |   |               |
|                          | --      | Wetlands  | 1.12          |
|                          | --      | Channels  | 0.98          |
|                          | --      | Seasonal Pond   | 0.38          |
|                          |         | <b>Total</b>  | <b>143.83</b> |

Project Study Area (PSA)  
 Biological Community Boundary



**SYCAMORE**  
Environmental  
Consultants, Inc.

Aerial Photograph: 7 August 2016/ 3 September 2016  
NAIP2016 USDA FSA Imagery  
ESRI ArcGIS Basemap Layer

[This page intentionally blank]



### **1. California Black Oak Woodland**

California black oaks (*Quercus kelloggii*) are dominant in the woodland at the south end of the BSA. Other common trees in this community include interior live oak (*Q. wislizeni*), valley oak (*Q. lobata*), and foothill pine (*Pinus sabiniana*). The canopy is mostly closed, although some small open patches occur. The understory shrub layer is patchy, and where present is dominated by poison oak (*Toxicodendron diversilobum*), and chamise (*Adenostoma fasciculatum*) in more open areas. The herb layer is dominated by native and nonnative grasses, and mostly native forbs.

### **2. California Annual Grassland**

California annual grassland is an upland, herbaceous community dominated by nonnative grasses including wild oat (*Avena* sp.), ripgut grass (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and medusa-head (*Elymus caput-medusae*). Trees and shrubs are sparse and widely spaced.

### **3. Young Ponderosa Pine Woodland – Disturbed**

This community encompasses most of an area that was graded for development prior to 1993. Since that time substantial woody vegetation has grown back in much of the area, although some of the area remains mostly unvegetated. Tree cover is dominated by ponderosa pine (*Pinus ponderosa*), with interior live oak in lesser abundance. Nearly all of the trees are young and have grown back since the grading. Shrubs are sporadic and consist mostly of coyote brush (*Baccharis pilularis*) and manzanita (*Arctostaphylos viscida* ssp. *viscida*). Herbs consist mostly of nonnative grasses and forbs similar to the California annual grassland, with patches of rye grass (*Festuca perennis*) present in some areas.

### **4. Valley Oak – Interior Live Oak Woodland**

This community is dominated by valley oak and interior live oak. In the BSA the canopy is mostly closed, although some open areas of with low vegetation similar to the California annual grassland occur. The shrub layer is patchy, and where present is dominated by poison oak. Other common shrubs include buckbrush (*Ceanothus cuneatus*), California coffee berry (*Frangula californica* ssp. *tomentella*), and hollyleaf redberry (*Rhamnus ilicifolia*).

### **5. Valley Oak Woodland**

This community is dominated almost entirely by valley oak trees. In most places the trees are well spaced and are large. The canopy is partially open. Shrubs are relatively sparse in this community and where present are dominated by poison oak. Herbaceous vegetation similar to California annual grassland is present in most areas.

## **6. Ponderosa Pine – Interior Live Oak Woodland**

This community has a nearly closed canopy of ponderosa pine, with interior live oak sub-dominant. Some of this area was graded for development prior to 1993, but has since grown back with thick woody vegetation. The shrub layer is patchy and dominated by poison oak where present. Much of this community has deep shade at ground level and the herbaceous layer is sparse. Some more open areas have herbaceous vegetation similar to California annual grassland, with more Baltic rush (*Juncus balticus*) present.

## **7. Canyon Live Oak Woodland**

This community has a nearly closed canopy dominated by canyon live oak (*Quercus chrysolepis*). Interior live oak is also common. The shrub layer is patchy and generally sparse. Where present it is dominated by poison oak. Much of this community has deep shade at ground level and the herbaceous layer is sparse.

## **8. Sandbar Willow Scrub**

This upland community is along two small drainages in the northern end of the BSA. It is dominated by sandbar willow (*Salix exigua*) and the nonnative invasive Himalayan blackberry (*Rubus armeniacus*). The herb layer is mostly absent, and where present is dominated by nonnative annual grasses.

## **9. Wetlands**

Wetlands in the BSA have seasonal hydrology and are dominated by hydrophytic vegetation capable of withstanding the summer dry season. Vegetation is herbaceous and dominated by Baltic rush, whiteroot sedge (*Carex barbarae*), spikerush (*Eleocharis macrostachya*), annual hair grass (*Deschampsia danthonoides*), loosestrife (*Lythrum portula*), rye grass (*Festuca perennis*), and annual beard grass (*Polypogon monspeliensis*). Many wetlands occur in low spots in previously graded areas or dirt roads. These wetlands have substantial cover of bare soil. Wetlands are further described in the aquatic resources delineation report (Sycamore Environmental 6 February 2018).

## **10. Channels**

Most of the channels in the BSA are ephemeral and flow only for brief periods of up to a few days after storm events. The ephemeral channel beds consist mostly of scoured soil and there is no riparian vegetation community or aquatic wildlife.

The lower reaches of Channels 1 and 2 are small intermittent channels. They have a groundwater component to flow and contain water into the spring and summer, although they are dry throughout most of the summer and autumn. Scattered riparian vegetation is present in the streambeds or along the immediate streambanks. Many areas of the intermittent streams in the BSA are dominated by nonnative invasive Himalayan blackberry. The intermittent streams in the BSA are too small to support fish or most aquatic wildlife,

although they may be a seasonal water source for upland wildlife. Channels are further described in the aquatic resources delineation report (Sycamore Environmental 6 February 2018).

### **11. Seasonal Pond**

A seasonal pond is partially in, but mostly outside of, the BSA. Surface water accumulates in the pond up to a depth of several feet. On 13 September 2017, part of the pond off-site still had approximately 1 foot of water. Sycamore Environmental also observed remaining water in the deepest off-site parts of the pond on 12 September and 10 December 2006 for an adjacent project. Based on review of aerial photographs the pond may completely dry out in dry years, but retain some standing water in the deepest parts in wet years (Google, Inc. 2017). The pond is the result of an off-site impoundment of a wetland swale.

Some deeper parts of the pond are vegetated with aquatic emergent vegetation such as spikerush. Some pond margins in the BSA are thickly vegetated with willows and Himalayan blackberry. The pond supports some aquatic wildlife such as bullfrogs. The pond is further described in the aquatic resources delineation report (Sycamore Environmental 6 February 2018).

### **12. Roads**

This area includes mostly paved roads including Faith Lane and Fowler Lane, and includes the disturbed road shoulders.

## **C. The Existing Level of Disturbance**

Much of the northern half of the site, the area mapped as young ponderosa pine woodland – disturbed, was graded for development prior to 1993. Many young ponderosa pines have grown back. Substantial bare areas and dirt roads that experience ongoing disturbance from off-road vehicles remain. The soil has been significantly disturbed, and in some places scraped down to bedrock. There is also a sewer utility facility of about 0.04 acre in this area.

Many dirt roads occur throughout the BSA. There is also substantial disturbance from homeless camps. Most of the Channel 1 corridor has been heavily invaded by Himalayan blackberry, a perennial vine with severe ecological impacts (Cal-IPC 2016). Overall, the level of disturbance is greater in the northern half of the BSA than the south.

## V. BIOLOGICAL RESOURCES IN THE STUDY AREA

### A. Determination of Special-Status Species in the Study Area

USFWS file data, CNDDDB/CNPS records, and field surveys were used to determine the special-status species that could occur in the BSA (Appendix A). A field survey was conducted to determine whether habitat for special-status species identified in the file data is present in the BSA. Special-status species for which suitable habitat is present in the BSA are listed in Table 2.

Table 2. Special-Status Species and Natural Communities.

| Special-Status Species  | Common Name              | Federal Status <sup>a</sup> | State Status <sup>a</sup> & other codes <sup>b</sup> | Source <sup>c</sup> | Habitat Present? / Species Observed? |
|---|--------------------------|-----------------------------|--|---------------------|--------------------------------------|
| <b>Reptiles</b>   |                          |                             |  |                     |                                      |
| <i>Emys marmorata</i>   | Western pond turtle      | --                          | SSC  | 2                   | Yes/No                               |
| <i>Phrynosoma blainvillii</i>   | Coast (CA) horned lizard | --                          | SSC  | 2                   | Yes/No                               |
| <b>Birds</b>  |                          |                             |  |                     |                                      |
| Nesting Birds (MBTA or CA regulated)  |                          | --                          | --   | 3                   | Yes/Yes                              |
| <b>Plants</b> / CNPS List <sup>b</sup>  |                          |                             |  |                     |                                      |
| <i>Arctostaphylos nissenana</i>   | Nissenan manzanita       | --                          | --/1B.2  | 2, 3                | Yes/Yes                              |
| <i>Carex cyrtostachya</i>   | Sierra arching sedge     | --                          | --/1B.2  | 2                   | Yes/No                               |
| <i>Horkelia parryi</i>  | Parry's horkelia         | --                          | --/1B.2  | 2                   | Yes/No                               |
| <i>Viburnum ellipticum</i>  | Oval-leaved viburnum     | --                          | --/2B.3  | 2                   | Yes/No                               |
| <b>Natural Communities</b>  |                          |                             |  |                     |                                      |
| Oak Woodlands and Trees   |                          | --                          | --   | 3                   | Yes/Yes                              |
| Waters and Wetlands (Including Sacramento-San Joaquin foothill/valley ephemeral stream) |                          | --                          | --   | 3                   | Yes/Yes                              |
| Sandbar Willow Scrub  |                          | --                          | --   | 3                   | Yes/Yes                              |

<sup>a</sup> **Listing Status:** Federal status determined from USFWS letter. State status determined from CDFW (2016a, b, c, d). Codes used in table are: **E** = Endangered; **T** = Threatened; **P** = Proposed; **C** = Candidate; **R** = California Rare; \* = Possibly extinct.

<sup>b</sup> **Other Codes:** Other codes determined from USFWS letter; CDFW (2016a, b, c, and d). Codes used in table are as follows:  
 SSC = CDFW Species of Special Concern; **FP** = CDFW Fully Protected; **Prot** = CDFW Protected; **CH** = Critical habitat designated.  
**CNPS List** (plants only): **1A** = Presumed Extinct in CA; **1B** = Rare or Endangered (R/E) in CA and elsewhere; **2** = R/E in CA and more common elsewhere; **3** = Need more information; **4** = Plants of limited distribution  
**CNPS List Decimal Extensions:** **.1** = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); **.2** = Fairly endangered in CA (20-80% of occurrences threatened); **.3** = Not very endangered in CA (< 20% of occurrences threatened or no current threats known).

<sup>c</sup> **Source:** **1** = USFWS letter. **2** = CNDDDB. **3** = Observed or included by Sycamore Environmental.

### B. Special-Status Species not in the Project Study Area

Special-status species for which suitable habitat is not present, or whose distributional limits preclude the possibility of their occurrence in the BSA, are not discussed in Section V of this report. An evaluation of these species is in Appendix B.

## C. Evaluation of Special-Status Wildlife Species

### 1. Reptiles

#### **Western Pond Turtle (WPT; *Emys marmorata*)**

**HABITAT AND BIOLOGY:** WPT are a CDFW species of special concern (CDFW 2016c). WPT prefer aquatic habitats with abundant vegetative cover and exposed basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. WPT are associated with permanent or nearly permanent water in a wide variety of habitat types, normally in ponds, lakes, streams, irrigation ditches, or permanent pools along intermittent streams (CWHR 2016). This species will also temporarily use semi-permanent or ephemeral water bodies, including stock ponds, vernal pools, and seasonal wetlands (Thomson *et al.* 2016). They are omnivorous generalists and opportunistic predators that prey upon small insects, aquatic invertebrates, fish, frogs, snakes, and small mammals. They also eat aquatic plant material and carrion (Stebbins 2003).

Two distinct habitats may be used for oviposition. Along large slow-moving streams, eggs are deposited in nests constructed in sandy banks. Along foothill streams, females may climb hillsides, sometimes traveling over 330 feet to find a suitable nest site. Upland nesting habitat must have soils that are loose enough for nest excavation, with infrequent or low intensity disturbance so that nests are not disturbed (Thomson *et al.* 2016). Soil must usually be at least 4 inches deep for nesting. WPT lay 3 to 11 eggs from March to August depending on local conditions. The eggs incubate for approximately 73 to 80 days (CWHR 2016).

**RANGE:** WPT occur throughout northern California west of the Sierra Nevada (Stebbins 2003) from sea level to about 4,700 feet (CWHR 2016).

**KNOWN RECORDS:** There are 7 CNDDDB records in the 9-quad area centered on the BSA. The nearest record is approximately two miles northeast of the BSA in habitat described as a freshwater pond, dominated by cattails; surrounded by willows, blackberry vines, rushes, native grasses, and toyon. Three adults and 2 juveniles were observed on 16 May 2001 through 2002.

**HABITAT PRESENT IN THE BSA:** The pond in the BSA provides marginal potential habitat for WPT. The pond has large seasonal variations in water level and may dry out completely in some years based on aerial photographs. Even in wet years, the pond dries down to about a foot of remaining water. WPT could occur in the pond seasonally. WPT may not be able survive at the pond year-round. The pond is not along a channel or ditch that provides connectivity to other WPT habitat. The pond is marginal WPT habitat due to its seasonal nature and poor connectivity. The channels in the BSA are too small to provide habitat for WPT.

**DISCUSSION:** WPT was not observed in the BSA during the general biological field surveys, but could occur in the pond. Avoiding the pond could avoid impacts to WPT.

**Coast (=California) Horned Lizard (*Phrynosoma blainvillii*)**

**HABITAT AND BIOLOGY:** Coast horned lizard is a CDFW species of special concern (CDFW 2016c). They may occur in valley-foothill hardwood, conifer, riparian, pine-cypress, juniper, and annual grassland habitats. Within these habitats, they especially use sandy areas, washes, floodplains, and wind-blown deposits. Coast horned lizards forage on the ground in open areas, usually between shrubs and often near ant nests. Coast horned lizards burrow into loose soil to avoid extreme heat and predators. Periods of inactivity and winter hibernation are spent burrowed into the soil under surface objects such as logs or rocks, in mammal burrows, or in crevices (CWHR 2015).

Coast horned lizard tends not to persist where the argentine ant invades (Suarez *et al.* 2000, Suarez and Case 2002). All four records of coast horned lizard in El Dorado County are in areas of chaparral. Areas of chaparral are generally dominated in both the herb and shrub layers by native plants that co-occur with native ant populations. Coast horned lizards eat native ants.

The reproductive season for coast horned lizard varies from year to year and geographically depending on local conditions. Egg-laying in southern California has been reported from late May through June (CWHR 2015).

**RANGE:** Coast horned lizards occur in the Sierra Nevada foothills from Butte county to Kern county and throughout the central and southern California coast. The elevation range extends up to 4,000 feet in the Sierra Nevada foothills and up to 6,000 feet in the mountains of southern California, though they are primarily found below 2,000 feet in the north and 3,000 feet in the south (CWHR 2015). Coast horned lizards have a spotty distribution from Shasta Lake southward along the edges of the Sacramento Valley into much of the south Coast Ranges, San Joaquin valley, and Sierra Nevada foothills to northern Los Angeles, Santa Barbara and Ventura counties (Jennings and Hayes 1994).

**KNOWN RECORDS:** There are four CNDDDB records in the 9-quad area centered on the BSA. The nearest record is approximately 7.6 miles west of the BSA in habitat described as northern gabbroic mixed chaparral on rescue series soils. Two individuals were observed in April 2005.

**HABITAT PRESENT IN THE BSA:** The BSA provides marginal potential habitat for coast horned lizard. Coast horned lizards are more likely to occur in areas of dense native shrubs, which are patchy throughout the BSA, including some areas under tree canopy.

**DISCUSSION:** Coast horned lizard was not observed during the general biological surveys in 2008 or 2017. Coast horned lizards are camouflaged well and are not easily seen. The BSA provides potential habitat for coast horned lizard, but the habitat is not unique or regionally scarce.

## 2. Birds

### Nesting Birds Listed Under the MBTA or Regulated by CA Fish and Game Code

California Fish and Game Code §3503 protects most birds and their nests. CA Fish and Game Code §3503.5 further protects all birds in the orders Falconiformes and Strigiformes (collectively known as birds of prey). Birds of prey include raptors, falcons, and owls. The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) also protects most birds and their nests, including most non-migratory birds in California. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any bird listed in 50 CFR Part 10 including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations. Any disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds, is restricted under the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a 'take' of the species under federal law.

**HABITAT PRESENT IN THE BSA:** The BSA provides potential nesting habitat for birds listed under the MBTA or regulated by California Fish and Game Code. Depending on the species, birds may nest on trees, shrubs, in or on the ground, and on artificial structures such as buildings, poles, and signs.

**DISCUSSION:** Bird species observed in the BSA are identified in Appendix C. Active nests could become established prior to construction. The nesting season is typically considered to be 15 February to 31 August for most bird species. Avoidance of vegetation removal during that time period, and surveys and avoidance of nests during that time period, could minimize impacts to nesting birds.

### D. Evaluation of Special-Status Plants

#### Nissenan Manzanita (*Arctostaphylos nissenana*)

**HABITAT AND BIOLOGY:** Nissenan manzanita is an evergreen shrub found on rocky soil and ridges in closed-cone coniferous forest or chaparral habitats from about 1,475 to 5,400 feet. It typically blooms from February through March (CNPS 2016, Jepson 2018).

**RANGE:** Nissenan manzanita is known from three counties (Placer, El Dorado, and Tuolumne) in the northern Sierra Nevada Mountains and central Sierra Nevada foothills (CNPS 2016, Jepson 2018).

**KNOWN RECORDS:** There are 15 CNDDDB records in the 9-quad area centered at the BSA. North Fork Associates prepared a Biological Resources Assessment, including a botanical survey, for most of the current BSA in 2009. North Fork reported 62 Nissenan manzanita plants from the site. Sycamore Environmental visited the site briefly in 2013, made a collection of Nissenan manzanita that was deposited at the UC Davis herbarium, and became CNDDDB Occurrence 14 in the BSA. CNDDDB Occurrence 1 is much larger and is near the BSA to the east and south.

**HABITAT PRESENT IN THE BSA:** The BSA provides habitat for Nissenan manzanita. A total of 88 Nissenan manzanita shrubs were counted in the BSA during the botanical survey in 2017 (Figure 6). A CNDDDB report is in Appendix E. The locations of the shrubs are very similar to the locations observed by North Fork in 2009.

**DISCUSSION:** Nearly all of the Nissenan manzanita in the BSA is growing in the areas that were graded for development prior to 1993. Nissenan manzanita seeds likely germinated after the disturbance. Nissenan manzanita that are not avoided by work in the BSA could be propagated to reduce impacts. Propagation by seed is the mostly likely method for this species. Nissenan manzanita in the BSA is not a good candidate for transplantation because it is growing in rocky areas where excavation without severe root damage is unlikely.

### **Sierra Arching Sedge (*Carex cyrtostachya*)**

**HABITAT AND BIOLOGY:** Sierra arching sedge is a perennial herb found in wet meadows, marshes, seasonally wet outcrops, seeps, swales, riparian margins, and floodplain terraces from about 2,000 to 4,500 feet in elevation. It blooms May through August (CNPS 2016, Jepson 2018).

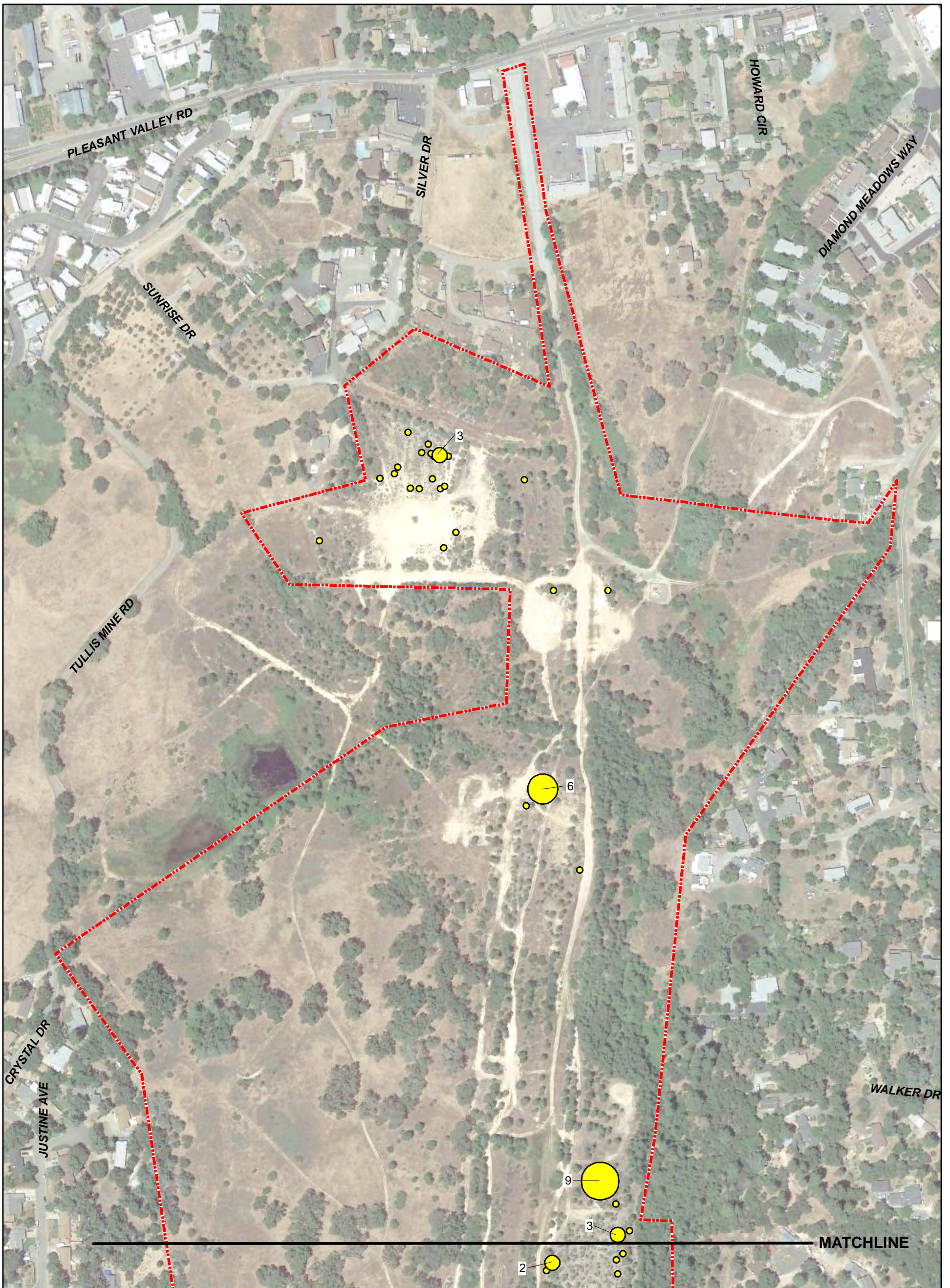
**RANGE:** Sierra arching sedge is known from three counties (Butte, El Dorado, and Yuba) in the northern Sierra Nevada Mountains (CNPS 2016, Jepson 2018).

**KNOWN RECORDS:** There is one CNDDDB record in the 9-quad area centered on the BSA. The record occurs approximately 12.3 miles north of the BSA in habitat described as a narrow Creekside strip of riparian woodland through open serpentine chaparral dominated by *Quercus durata* with scattered gray pine, *Fraxinus*, *Acer macrophyllum*, *Alnus rhombifolia*, *Aster oregonensis* and *Artemisia*. Over 30 clumps were observed in 2007.

**HABITAT PRESENT IN THE BSA:** The margins of seasonally wet areas in the BSA, including the pond and Channel 1, may provide potential habitat for Sierra arching sedge.

**DISCUSSION:** Sierra arching sedge was not observed in the BSA during the botanical surveys in 2008 and 2017.





Stonehenge Springs  
 El Dorado County, CA  
 8 May 2018

- Biological Study Area (BSA)
- Single Manzanita Shrubs
- Multiple Manzanita Shrubs (number of shrubs)

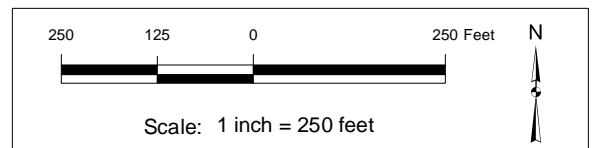


Figure 6.  
 Nissenan Manzanita (*Arctostaphylos nissenana*)  
 Shrub Location Map  
 Sheet 1 of 2, (North)

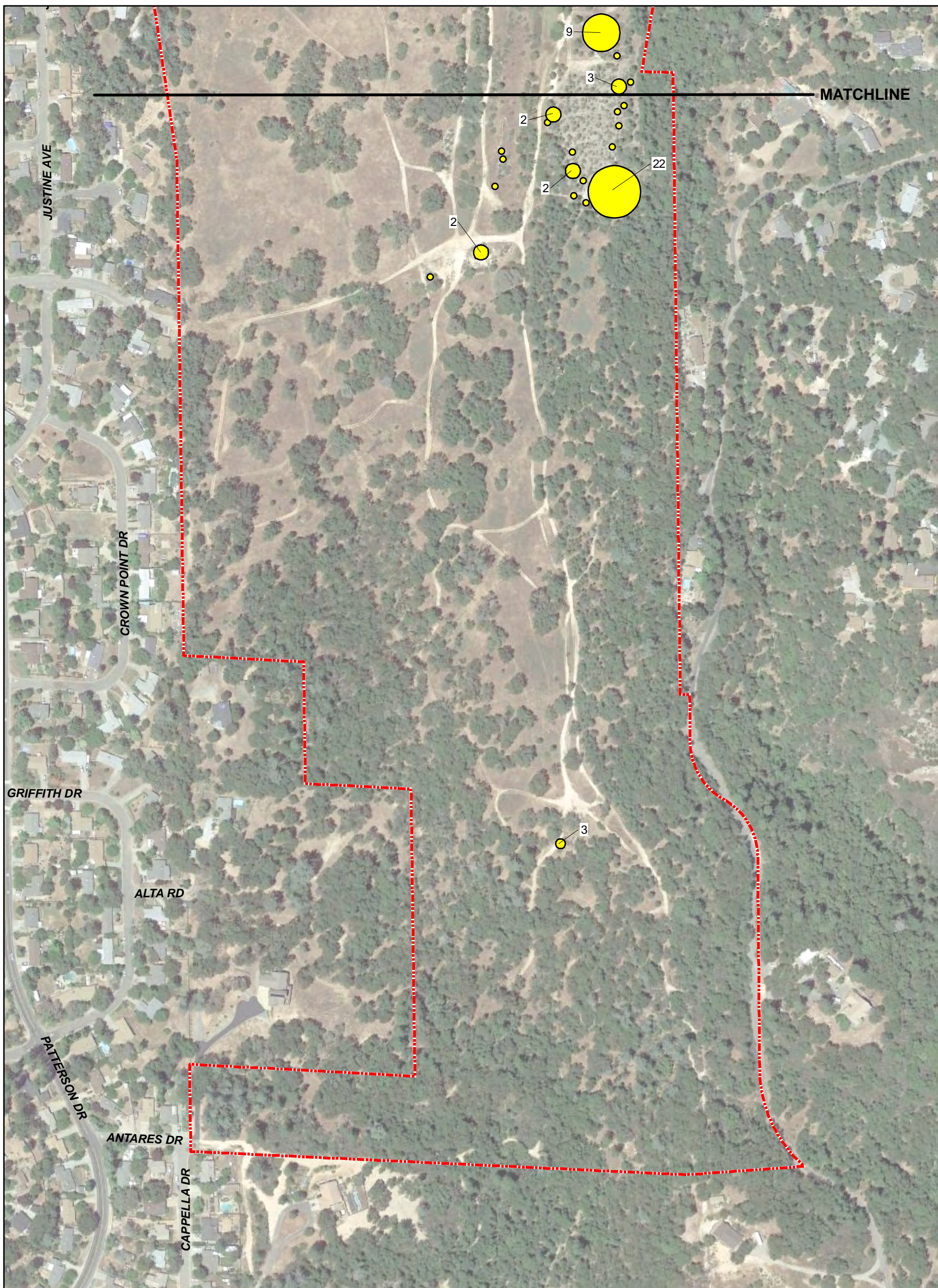
Total Manzanita Count: 88 Shrubs



**SYCAMORE**  
 Environmental  
 Consultants, Inc.

Aerial Photograph: 28 June 2017  
 Google Earth Aerial Imagery

[This page intentionally blank]

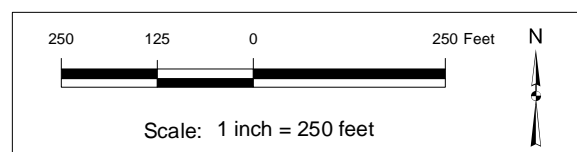


Stonehenge Springs  
 El Dorado County, CA  
 8 May 2018

- Biological Study Area (BSA)
- Single Manzanita Shrubs
- Multiple Manzanita Shrubs (number of shrubs)

Figure 6.  
 Nissenan Manzanita (*Arctostaphylos nissenana*)  
 Shrub Location Map  
 Sheet 2 of 2, (South)

Total Manzanita Count: 88 Shrubs



Aerial Photograph: 28 June 2017  
 Google Earth Aerial Imagery

[This page intentionally blank]

### **Parry's Horkelia (*Horkelia parryi*)**

**HABITAT AND BIOLOGY:** Parry's horkelia is a perennial herb found in chaparral and cismontane woodland, especially of the Ione formation, from about 250 to 3,400 feet in elevation. It blooms April through June (CNPS 2016, Jepson 2018).

**RANGE:** Parry's horkelia is known from the northern and central Sierra Nevada foothills (CNPS 2016, Jepson 2018).

**KNOWN RECORDS:** There are 13 CNDDDB records in the 9-quad area centered on the BSA. The nearest record occurs approximately 2 miles northeast of the BSA. The record is a 1923 collection, with the exact location unknown and mapped as best guess in the vicinity of Placerville. The nearest detailed record occurs 10.5 miles northeast of the BSA in habitat described as along an abandoned OHV trail among thick shrubs, California black oak, Douglas fir, whiteleaf manzanita, and Nissenan manzanita. A total of 150 plants were observed in 2015, following a burn in the King Fire in 2014.

**HABITAT PRESENT IN THE BSA:** The upland areas of the BSA may provide potential habitat for Parry's horkelia.

**DISCUSSION:** Parry's horkelia was not observed in the BSA during the botanical surveys in 2008 and 2017.

### **Oval-leaved Viburnum (*Viburnum ellipticum*)**

**HABITAT AND BIOLOGY:** Oval-leaved viburnum is a deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 700 to 4,600 feet (CNPS 2016). Jepson (2018) describes it as occurring above 980 feet in chaparral or yellow-pine forest, generally on north facing slopes. It blooms May through August (CNPS 2016, Jepson 2018).

**RANGE:** Known from the north coast, Klamath ranges, north Coast Ranges, Bay Area, and northern/central Sierra Nevada foothills (Jepson 2018).

**KNOWN RECORDS:** There is one CNDDDB record in the 9-quad area centered on the BSA. The record is a 1901 collection mapped approximately 2 miles northeast of the BSA. The exact location of the record is unknown, so it is mapped as best guess in the vicinity of Placerville.

**HABITAT PRESENT IN THE BSA:** The BSA may provide potential habitat for oval-leaved viburnum.

**DISCUSSION:** Oval-leaved viburnum was not observed in the BSA during the botanical surveys in 2008 and 2017.

## **E. Evaluation of Sensitive Natural Communities**

### **Oak Woodlands and Trees**

There are about 79.27 acres of oak woodlands in the BSA. Areas mapped as oak woodland have at least 10% canopy cover, consistent with the Oak Resources Management Plan (ORMP) adopted by the County in October 2017. Sparser individual oak trees occur outside of areas mapped as oak woodlands, mostly in the disturbed area of young ponderosa pine woodland. Of the overall oak woodlands in the BSA, about 33.05 acres are valley oak woodland, which is classified as sensitive habitat in the El Dorado County General Plan EIR (2004a) and the ORMP.

**DISCUSSION:** The ORMP regulates oak woodlands, individual oak trees outside of oak woodlands, and heritage trees. Oak woodlands, areas with at least 10% cover of oak canopy, are regulated by acreage. Individual oak trees outside oak woodlands, of at least six inches dbh, are regulated by size. Heritage oaks, of at least 36 inches dbh, are regulated by size at a higher mitigation ratio, both inside and outside of oak woodlands. Mitigation may occur based on on-site replacement, off-site replacement or preservation, or payment of an in-lieu fee. The oak resources analysis is a stand-alone report that is being prepared separately.

### **Waters and Wetlands (Including Sacramento-San Joaquin foothill/valley ephemeral stream)**

There are about 2.48 acres of channels, wetlands, and a seasonal pond in the BSA. An Aquatic Resources Delineation Report (ARDR) was prepared separately (Sycamore Environmental 2018). The ARDR was prepared to specifications of the U.S. Army Corps of Engineers (Corps).

Portions of Channels 1 and 2 in the BSA are intermittent, meaning groundwater is a source of flow at least seasonally. The other channels are ephemeral, meaning surface runoff is the sole source of flow. The sensitive natural community known as “Sacramento-San Joaquin foothill/valley ephemeral stream” appears on the CNDDDB query in Appendix A. CNDDDB classifies “ephemeral” streams differently than the Corps. Under the CNDDDB classification, ephemeral streams support the larval development of some aquatic invertebrates and amphibians. Under the Corps definition, ephemeral streams flow only for a few hours or days after precipitation events and hence cannot support such larval development. A stream defined by CNDDDB as “ephemeral” would be classified as “intermittent” or even “perennial” under the Corps definition. The streams labeled “ephemeral” in the ARDR follow the Corps classification and hence do not meet the criteria of a Sacramento-San Joaquin foothill/valley ephemeral stream. The intermittent streams in the ARDR, portions of Channels 1 and 2, do meet the definition.

**DISCUSSION:** Fill of waters and wetlands generally requires a permit under Sections 404 and 401 of the federal Clean Water Act. A formal wetland delineation has been prepared for the BSA. The Corps Section 404 permitting process requires mitigation for all waters of the U.S. filled under a “no net loss” policy.

The California Department of Fish and Wildlife (CDFW) regulates intermittent and ephemeral channels under the Streambed Alteration program (§1600 CA Fish and Game Code). CDFW approves mitigation under the Streambed Alteration program on a project-specific basis based upon design impacts.

El Dorado County General Plan Policy 7.3.3.4 and its implementing zoning code (§130.30.030(G)) identify parameters for setbacks from intermittent creeks and wetlands. Ephemeral channels are not included. Part of the purpose of the setbacks is to avoid riparian habitat. The zoning code specifies that discretionary projects shall avoid and minimize impacts “to the maximum extent practicable.” The areas in the BSA subject to consideration under the County code are wetlands, the seasonal pond, and the intermittent channels. Intermittent and perennial channels are defined in County zoning code §130.80.020.

The wetlands in the BSA are mostly highly disturbed and result from poor drainage in parts of the area that was previously graded for development, or result from the construction of dirt roads. Only wetland 26 appears to be a naturally-occurring feature. The seasonal wetlands are dry most of the year, have no riparian vegetation outside the wetland, and offer little value for wildlife. No setback is necessary for the seasonal wetlands.

The pond contains water for much of the year, and perhaps the entire year in wet years. Scattered native willows occur along the pond margin, although the margin is largely covered by nonnative invasive Himalayan blackberry. A setback of 25 feet from the pond would retain most of the adjacent riparian vegetation.

Portions of Channels 1 and 2 are small intermittent channels. Native riparian vegetation is scattered or absent along these small channels. Nonnative invasive Himalayan blackberry dominates along much of Channel 1. A setback of 25 feet from the intermittent channels would retain most of the adjacent riparian vegetation.

### **Sandbar Willow Scrub**

The sandbar willow scrub in the BSA is classified as valley foothill riparian, a sensitive habitat in the El Dorado County General Plan EIR (2004a). The sandbar willow scrub did not meet wetland criteria, but does occur in a low area, and part of it is along Channel 1. The sandbar willow scrub is dominated by sandbar willow and nonnative invasive Himalayan blackberry.

**DISCUSSION:** If the sandbar willow scrub is not avoided by the Project, there may be opportunities for on-site mitigation in open space areas.

## VI. LITERATURE CITED

---

- Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, eds. 2012. The Jepson manual: Vascular plants of California, 2nd Ed. University of California Press, Berkeley, CA.
- Barry, S.J. and G.M. Fellers. 15 September 2013. History and status of the California red-legged frog (*Rana draytonii*) in the Sierra Nevada, California, USA. *Herpetological Conservation and Biology* 8(2): 456-502.
- California Data Exchange Center (CDEC). Accessed 2 January 2018. Real-Time and historic average precipitation data from the Placerville Gauge (PCV). California Department of Water Resources, Sacramento, CA. [http://cdec.water.ca.gov/cgi-progs/staMeta?station\\_id=PCV](http://cdec.water.ca.gov/cgi-progs/staMeta?station_id=PCV)
- California Department of Fish and Wildlife (CDFW). 24 November 2009. Protocols for surveying and evaluating impacts to special status native plant populations and natural communities. California Natural Resources Agency, CA Department of Fish and Game, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). February 2010. (2010a). Report to the Fish and Game Commission: A status review of the fisher (*Martes pennanti*) in California. Prepared by the California Department of Fish and Game, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). October 2016 (2016a). Special vascular plants, bryophytes, and lichens list. Quarterly publication. Natural Diversity Database, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). October 2016 (2016b). State and federally listed endangered, threatened, and rare plants of California. Biogeographic Data Branch, CNDDDB, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). October 2016 (2016c). Special animals. Periodic publication. Natural Diversity Database, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). October 2016 (2016d). State and federally listed endangered and threatened animals of California. Biogeographic Data Branch, CNDDDB, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). 24 January 2018. California natural community list. Biogeographic Data Branch, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). 20 March 2018. Protocols for surveying and evaluating impacts to special status native plant populations and sensitive natural communities. California Natural Resources Agency, CA Department of Fish and Wildlife.
- California Invasive Plant Council (Cal-IPC). Accessed November 2016. Invasive plant inventory (online version). California Invasive Plant Council, Berkeley, CA. <http://www.cal-ipc.org/paf/>
- California Native Plant Society (CNPS). Accessed October 2016. Inventory of rare and endangered plants (Version v8-02). California Native Plant Society, Sacramento, CA. <http://www.cnps.org/inventory>
- California Wildlife Habitat Relationships (CWHR) Program. Accessed 2016. California Wildlife Habitat Relationships System, life history account and range map for various wildlife species. Updated from Zeiner, D.C. et al 1988-1990. CWHR Program, California Department of Fish and Game, Sacramento, CA. <http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx>
- Cook, D. 1997. Biology of the California red-legged frog: A synopsis. *Transactions of the Western Section of The Wildlife Society* 33:79-82.
- Dodd, C.K. 2013. *Frogs of the United States and Canada. Volume 2.* John Hopkins University Press, Baltimore, Maryland.
- El Dorado County. January 2004, Certified 19 July 2004 (2004a). El Dorado County general plan, final environmental impact report (EIR). Resolution No. 234-2004, State Clearinghouse No. 2001082030. Prepared by EDAW.
- El Dorado County. Adopted 19 July 2004 (2004b). El Dorado County general plan, a plan for managed growth and open roads; a plan for quality neighborhoods and traffic relief. El Dorado County Planning Department, Placerville, CA.



- El Dorado County. September 2017. Oak Resources Management Plan. El Dorado County Community Development Agency, Long Range Planning Division.
- Fellers, G.M. 2005. *Rana draytonii* Baird and Girard 1852, California red-legged frog. Amphibian declines: the conservation status of United States species. University of California Press, Berkeley, California. Pages 552-554.
- Fellers, G. M. and P. M. Kleeman. 2007. California red-legged frog (*Rana draytonii*) movement and habitat use: implications for conservation. *Journal of Herpetology* 41(2):276–286.
- Fellers, G.M., A.E. Launer, G. Rathbun, and S. Bobzien. 2001. Overwintering tadpoles in the California red-legged frog (*Rana aurora draytonii*). *Herpetological Review* 32(3): 156-157.
- Google, Inc. October 2016. Google Earth Pro (Version 7.1.7.2600) [Software]. Available from [www.google.com/earth/](http://www.google.com/earth/)
- Hamilton, W.J. 2004. The 2004 Tricolored Blackbird Management Recommendations and 2005 Survey Priorities. California Resource Management Institute, Sacramento, CA.
- Hayes, M. P. and M. R. Jennings. 1988. Habitat correlates of distribution of the California red-legged frog (*Rana aurora draytonii*) and the foothill yellow-legged frog (*Rana boylei*): implications for management. USDA Forest Service Rocky Mountain Forest and Range Experiment Station. General technical report.
- Jameson, E. W. Jr. and H. J. Peeters. 2004. Mammals of California. Revised Edition. University of California Press, Berkeley, CA.
- Jennings, M. R. and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. California Department of Fish and Game, Rancho Cordova, CA.
- Jepson Flora Project (Jepson). Accessed April-May 2018. Jepson online interchange for California floristics. <http://ucjeps.berkeley.edu/interchange.html>
- Moyle, P. B. 2002. Inland fishes of California. University of California Press, Berkeley, CA.
- Moyle, P. B. and J. P. Ellison. 1991. A conservation-oriented classification system for the inland waters of California. *California Fish and Game* 77:161-180.
- Natural Resources Conservation Service (NRCS; formerly known as Soil Conservation Service). April 1974. Soil survey of El Dorado Area, California. USDA – Soil Conservation Service.
- North Fork Associates. 2 June 2009. Biological resources assessment for the ±139-acre Stonehenge study area. Prepared for Mr. Kevin Sweeney.
- Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California vegetation, 2<sup>nd</sup> ed. California Native Plant Society, Sacramento, CA.
- Shuford, W. D. and T. Gardali, eds. 2008. California bird species of special concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, CA and California Department of Fish and Game, Sacramento, CA.
- Stebbins, R. C. 2003. A field guide to western reptiles and amphibians. Houghton Mifflin Company, Boston, MA.
- Suarez, A.V., J.Q. Richmond and T.J. Case. 2000. Prey selection of horned lizards following the invasion of Argentine ants in southern California. *Ecological Applications* 10(3): 711-725.
- Suarez, A.V. and T.J. Case. 2002. Bottom-up effects on persistence of a specialist predator: ant invasions and horned lizards. *Ecological Applications* 12(1): 291- 298. Technology Associates. 20 April 2009.
- Sycamore Environmental Consultants, Inc. 6 February 2018. Aquatic resources delineation report for Stonehenge Springs, El Dorado County, CA. Prepared for Stonehenge Springs, LLC.
- Thomson, R.C., A.N. Wright, and H.B. Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. Co-published by University of CA and CA Dept. of Fish and Wildlife. University of California Press, Oakland, CA.
- U.S. Department of Agriculture and Natural Resource Conservation Service (USDA-NRCS). Accessed September 2017 (2017a). Official soil series descriptions. <https://soilseries.sc.egov.usda.gov/osdname.asp>
- U.S. Department of Agriculture and Natural Resource Conservation Service (USDA-NRCS). Accessed September 2017 (2017b). Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/app/>

- U.S. Fish and Wildlife Service (USFWS). 1994. Endangered and threatened wildlife and plants; critical habitat determination for the Delta smelt. Sacramento Fish and Wildlife Office, Sacramento, CA.
- U.S. Fish and Wildlife Service (USFWS). 1996. Guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants. Sacramento Fish and Wildlife Office, Sacramento, CA.
- U.S. Fish and Wildlife Service (USFWS). 23 May 1996. Endangered and threatened wildlife and plants; determination of threatened status for the California red-legged frog. Final Rule; Federal Register 61(101):25813-25833, 50 CFR Part 17.
- U.S. Fish and Wildlife Service (USFWS). June 2001. Gulf of Maine Watershed Habitat Analysis: Northern Goshawk Habitat Model. U.S. Fish and Wildlife Service Gulf of Maine Program, Falmouth, ME. [http://www.fws.gov/r5gomp/gom/habitatstudy/metadata/northern\\_goshawk\\_model.htm](http://www.fws.gov/r5gomp/gom/habitatstudy/metadata/northern_goshawk_model.htm)
- U.S. Fish and Wildlife Service (USFWS). 28 May 2002. Recovery plan for the California red-legged frog (*Rana aurora draytonii*). Region 1, U.S. Fish and Wildlife Service, Portland, OR.
- U.S. Fish and Wildlife Service (USFWS). 30 August 2002. Recovery plan for Gabbro soil plants of the Central Sierra Nevada Foothills. Portland, OR.
- U.S. Fish and Wildlife Service (USFWS). 17 March 2010. Endangered and threatened wildlife and plants: revised designation of critical habitat for California red-legged frog; final rule. Federal Register 75 (51): 12816-12959; 50 CFR Part 17. U.S. Fish and Wildlife Service, Sacramento, CA.
- U.S. Forest Service (USFS). November 2009. Biological evaluation for sensitive plants and other botanical resources. Stanislaus National Forest Motorized Travel Management Plan. U.S. Forest Service, Pacific Southwest Region. [http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5112613.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5112613.pdf)

## VII. PREPARERS

---

**Chuck Hughes, M.S.**, Plant Biology, Michigan State University. Over 15 years experience preparing biological/botanical resource evaluations, wetland delineations, arborist reports, impact analyses, and mitigation/restoration plans. He is a Professional Wetland Scientist (#2029), an ISA Certified Arborist (WE-6885A), holds a California Department of Fish and Wildlife Rare, Threatened and Endangered Plant Voucher Collecting Permit (2081(a)-14-072-V), is a Principal Scientific Investigator on the CDFW Scientific Collecting Permit (SC-7617), and is authorized individual on a USFWS recovery permit for listed vernal pool branchiopods (TE799564-4). His bachelor's degree from UC Davis is in environmental horticulture and urban forestry, with an emphasis in plant biodiversity.

Responsibilities: Fieldwork and report preparation.

**Nicole Desideri, B.S.**, Biological Sciences (concentration in Field and Wildlife Biology), California Polytechnic State University. Conducts monitoring, plant and wildlife surveys, and assists with preparation of Biological Resource Evaluations, Natural Environment Study reports, permit applications, and documents used in the CEQA/NEPA process. Serves as both field biologist and technical report writer, and conducts database research on special status species' biology, habitat and distribution. She holds a California Department of Fish and Wildlife Rare, Threatened and Endangered Plant Voucher Collecting Permit (2081(a)-16-107-V) and is an authorized individual on the CDFW Scientific Collecting Permit (SC-7617). Responsibilities: Fieldwork and report preparation.

**Cody Aylward, M.S.**, Natural Resources (concentration in Wildlife Science), University of Vermont. Conducts biological surveys, assists with preparation of Biological Resource Evaluations, Natural Environment Study reports, Biological Assessments, Sensitive Species Site Assessments, and reports used in the CEQA/NEPA process. He holds a California Department of Fish and Wildlife Rare, Threatened and Endangered Plant Voucher Collecting Permit (#2081(a)-17-102-v) and is an authorized individual on the CDFW Scientific Collecting Permit (SC-7617). He has professional experience using DNA-based wildlife detection techniques. His bachelor's degree from the University of Vermont is in Zoology. Responsibilities: Report preparation.

**Aramis Respoll, GIS Analyst/ CAD Operator.** Over 20 years experience in drafting and spatial analysis using AutoCAD and ArcGIS. He prepares figures for biological and permitting documents such as project location maps, aerial photographs, biological resource maps, wetlands/waters delineation maps, impact analysis maps, tree location maps and other supporting graphics. Mr. Respoll provides geospatial analysis and support involving geodesy, hydrology, watershed studies, project impact analysis, CNDDDB species, and critical habitat and mitigation information. Primary experience evolved from conventional surveying and civil engineering practices to advanced GPS and GIS based technology. Responsibilities: Figure preparation and spatial analysis.

**Jeffery Little**, Vice President, Sycamore Environmental.

Responsibilities: Principal in charge.

[This page intentionally blank]

# **APPENDIX A.**

## Database Queries

---



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Sacramento Fish And Wildlife Office  
Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:

November 16, 2017

Consultation Code: 08ESMF00-2018-SLI-0446

Event Code: 08ESMF00-2018-E-01190

Project Name: Stonehenge Springs

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

### **Sacramento Fish And Wildlife Office**

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

---



## Project Summary

Consultation Code: 08ESMF00-2018-SLI-0446

Event Code: 08ESMF00-2018-E-01190

Project Name: Stonehenge Springs

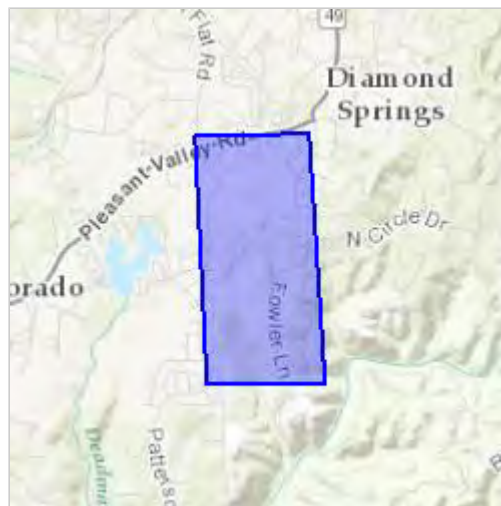
Project Type: DEVELOPMENT

Project Description: Residential development

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/38.68514073341554N120.81823843199895W>



Counties: El Dorado, CA

## Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

### Amphibians

| NAME  | STATUS     |
|---|------------|
| California Red-legged Frog <i>Rana draytonii</i><br>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a> | Threatened |

### Fishes

| NAME   | STATUS     |
|--|------------|
| Delta Smelt <i>Hypomesus transpacificus</i><br>There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a> | Threatened |

### Flowering Plants

| NAME   | STATUS     |
|--|------------|
| Layne's Butterweed <i>Senecio layneae</i><br>No critical habitat has been designated for this species.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/4062">https://ecos.fws.gov/ecp/species/4062</a> | Threatened |

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

---



# Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Shingle Springs (3812068) OR Coloma (3812078) OR Garden Valley (3812077) OR Slate Mtn. (3812076) OR Placerville (3812067) OR Camino (3812066) OR Latrobe (3812058) OR Fiddletown (3812057) OR Aukum (3812056))

Table with 7 columns: Species, Element Code, Federal Status, State Status, Global Rank, State Rank, Rare Plant Rank/CDFW SSC or FP. Rows include species like Accipiter gentilis, Agelaius tricolor, Allium jepsonii, etc.



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



| <b>Species</b>   | <b>Element Code</b> | <b>Federal Status</b> | <b>State Status</b>  | <b>Global Rank</b> | <b>State Rank</b> | <b>Rare Plant Rank/CDFW SSC or FP</b> |
|--|---------------------|-----------------------|----------------------|--------------------|-------------------|---------------------------------------|
| <b><i>Cosumnoperla hypocreana</i></b><br>Cosumnes stripetail   | IIPLE23020          | None                  | None                 | G2                 | S2                |                                       |
| <b><i>Crocانthemum suffrutescens</i></b><br>Bisbee Peak rush-rose  | PDCIS020F0          | None                  | None                 | G2?Q               | S2?               | 3.2                                   |
| <b><i>Emys marmorata</i></b><br>western pond turtle  | ARAAD02030          | None                  | None                 | G3G4               | S3                | SSC                                   |
| <b><i>Erethizon dorsatum</i></b><br>North American porcupine   | AMAFJ01010          | None                  | None                 | G5                 | S3                |                                       |
| <b><i>Fremontodendron decumbens</i></b><br>Pine Hill flannelbush   | PDSTE03030          | Endangered            | Rare                 | G1                 | S1                | 1B.2                                  |
| <b><i>Galium californicum ssp. sierrae</i></b><br>El Dorado bedstraw   | PDRUB0N0E7          | Endangered            | Rare                 | G5T1               | S1                | 1B.2                                  |
| <b><i>Horkelia parryi</i></b><br>Parry's horkelia  | PDROS0W0C0          | None                  | None                 | G2                 | S2                | 1B.2                                  |
| <b><i>Lasionycteris noctivagans</i></b><br>silver-haired bat   | AMACC02010          | None                  | None                 | G5                 | S3S4              |                                       |
| <b><i>Myotis yumanensis</i></b><br>Yuma myotis   | AMACC01020          | None                  | None                 | G5                 | S4                |                                       |
| <b><i>Packera layneae</i></b><br>Layne's ragwort   | PDAST8H1V0          | Threatened            | Rare                 | G2                 | S2                | 1B.2                                  |
| <b><i>Pekania pennanti</i></b><br>fisher - West Coast DPS  | AMAJF01021          | None                  | Candidate Threatened | G5T2T3Q            | S2S3              | SSC                                   |
| <b><i>Phrynosoma blainvillii</i></b><br>coast horned lizard  | ARACF12100          | None                  | None                 | G3G4               | S3S4              | SSC                                   |
| <b><i>Rana boylei</i></b><br>foothill yellow-legged frog   | AAABH01050          | None                  | Candidate Threatened | G3                 | S3                | SSC                                   |
| <b><i>Rana draytonii</i></b><br>California red-legged frog   | AAABH01022          | Threatened            | None                 | G2G3               | S2S3              | SSC                                   |
| <b><i>Riparia riparia</i></b><br>bank swallow  | ABPAU08010          | None                  | Threatened           | G5                 | S2                |                                       |
| <b><i>Sacramento-San Joaquin Foothill/Valley Ephemeral Stream</i></b><br>Sacramento-San Joaquin Foothill/Valley Ephemeral Stream | CARA2130CA          | None                  | None                 | GNR                | SNR               |                                       |
| <b><i>Strix nebulosa</i></b><br>great gray owl   | ABNSB12040          | None                  | Endangered           | G5                 | S1                |                                       |
| <b><i>Viburnum ellipticum</i></b><br>oval-leaved viburnum  | PDCPR07080          | None                  | None                 | G4G5               | S3?               | 2B.3                                  |
| <b><i>Wyethia reticulata</i></b><br>El Dorado County mule ears   | PDAST9X0D0          | None                  | None                 | G2                 | S2                | 1B.2                                  |

**Record Count: 37**

## Plant List

16 matches found. Click on scientific name for details

| Search Criteria  |
|--|
| California Rare Plant Rank is one of [1A, 1B, 2A, 2B], Found in Quads 3812078, 3812077, 3812076, 3812068, 3812067, 3812066, 3812058 3812057 and 3812056; |

[Modify Search Criteria](#)
[Export to Excel](#)
[Modify Columns](#)
[Modify Sort](#)
[Display Photos](#)

| Scientific Name                                  | Common Name                   | Family         | Lifeform                   | Blooming Period | CA Rare Plant Rank | State Rank | Global Rank |
|--|-------------------------------|----------------|----------------------------|-----------------|--------------------|------------|-------------|
| <a href="#">Allium jepsonii</a>                  | Jepson's onion                | Alliaceae      | perennial bulbiferous herb | Apr-Aug         | 1B.2               | S2         | G2          |
| <a href="#">Arctostaphylos nissenana</a>         | Nissenan manzanita            | Ericaceae      | perennial evergreen shrub  | Feb-Mar         | 1B.2               | S1         | G1          |
| <a href="#">Calochortus clavatus var. avius</a>  | Pleasant Valley mariposa lily | Liliaceae      | perennial bulbiferous herb | May-Jul         | 1B.2               | S2         | G4T2        |
| <a href="#">Calystegia stebbinsii</a>            | Stebbins' morning-glory       | Convolvulaceae | perennial rhizomatous herb | Apr-Jul         | 1B.1               | S1         | G1          |
| <a href="#">Calystegia vanzuukiae</a>            | Van Zuuk's morning-glory      | Convolvulaceae | perennial rhizomatous herb | May-Aug         | 1B.3               | S2         | G2Q         |
| <a href="#">Carex cyrtostachya</a>               | Sierra arching sedge          | Cyperaceae     | perennial herb             | May-Aug         | 1B.2               | S2         | G2          |
| <a href="#">Carex xerophila</a>                  | chaparral sedge               | Cyperaceae     | perennial herb             | Mar-Jun         | 1B.2               | S2         | G2          |
| <a href="#">Ceanothus roderickii</a>             | Pine Hill ceanothus           | Rhamnaceae     | perennial evergreen shrub  | Apr-Jun         | 1B.1               | S1         | G1          |
| <a href="#">Chlorogalum grandiflorum</a>         | Red Hills soaproot            | Agavaceae      | perennial bulbiferous herb | May-Jun         | 1B.2               | S3         | G3          |
| <a href="#">Erigeron miser</a>                   | starved daisy                 | Asteraceae     | perennial herb             | Jun-Oct         | 1B.3               | S3?        | G3?         |
| <a href="#">Fremontodendron decumbens</a>        | Pine Hill flannelbush         | Malvaceae      | perennial evergreen shrub  | Apr-Jul         | 1B.2               | S1         | G1          |
| <a href="#">Galium californicum ssp. sierrae</a> | El Dorado bedstraw            | Rubiaceae      | perennial herb             | May-Jun         | 1B.2               | S1         | G5T1        |
| <a href="#">Horkelia parryi</a>                  | Parry's horkelia              | Rosaceae       | perennial herb             | Apr-Sep         | 1B.2               | S2         | G2          |
| <a href="#">Packera layneae</a>                  | Layne's ragwort               | Asteraceae     | perennial herb             | Apr-Aug         | 1B.2               | S2         | G2          |
| <a href="#">Viburnum ellipticum</a>              | oval-leaved viburnum          | Adoxaceae      | perennial deciduous shrub  | May-Jun         | 2B.3               | S3?        | G4G5        |
| <a href="#">Wyethia reticulata</a>               | El Dorado County mule ears    | Asteraceae     | perennial herb             | Apr-Aug         | 1B.2               | S2         | G2          |

### Suggested Citation

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 08 May 2018].

#### Search the Inventory

[Simple Search](#)  
[Advanced Search](#)  
[Glossary](#)

#### Information

[About the Inventory](#)  
[About the Rare Plant Program](#)  
[CNPS Home Page](#)  
[About CNPS](#)  
[Join CNPS](#)

#### Contributors

[The Calflora Database](#)  
[The California Lichen Society](#)  
[California Natural Diversity Database](#)  
[The Jepson Flora Project](#)  
[The Consortium of California Herbaria](#)  
[CalPhotos](#)

#### Questions and Comments

[rareplants@cnps.org](mailto:rareplants@cnps.org)

[This page intentionally blank]

## APPENDIX B.

### Species Evaluated Table

Special-Status Species from USFWS Letter, CNDDDB Data, CNPS Data

| Special-Status Species/<br>Common Name              | Federal<br>Status <sup>a, b</sup> | State<br>Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur in the BSA   |
|---|-----------------------------------|---------------------------------|---------------------|---|---|
| <b>Fish</b>   |                                   |                                 |                     |   |   |
| <i>Hypomesus transpacificus</i><br>Delta smelt      | T, CH                             | E                               | 1                   | Euryhaline (tolerant of a wide salinity range) species that spawns in freshwater dead-end sloughs and shallow edge-waters of channels of the Delta (USFWS 1994). Confined to the San Francisco Estuary, principally in the Delta and Suisun Bay. Currently found only from the San Pablo Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo cos. Can be washed into San Pablo Bay during high-outflow periods, but do not establish permanent populations there (Moyle 2002).  | No. The BSA is outside the range and there is no suitable habitat. The BSA is not in critical habitat.  |
| <b>Amphibians</b>                                   |                                   |                                 |                     |   |   |
| <i>Rana boylei</i><br>Foothill yellow-legged frog   | --                                | CT, SSC                         | 2                   | Found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types. Egg clusters are attached to gravel or rocks in moving water near stream margins. This species is rarely encountered (even on rainy nights) far from permanent water. Its elevation range extends from near sea level to 6,370 ft in the Sierra (CWHR 2016).  | No. The intermittent channels hydroperiod is insufficient.  |
| <i>Rana draytonii</i><br>California red-legged frog | T, CH                             | SSC                             | 1, 2                | Inhabits ponds, quiet pools of streams, marshes, and riparian areas with dense, shrubby, or emergent vegetation. Requires permanent or nearly permanent pools for larval development (CWHR 2016; USFWS 2010). May use ephemeral water bodies for breeding if permanent water is nearby (Thomson <i>et al.</i> 2016). The range of CA red-legged frog extends from near sea level to approximately 5,200 ft, though nearly all sightings have occurred below 3,500 ft. CA red-legged frog was probably extirpated from the floor of the Central Valley before 1960 (USFWS May 2002). | No. The channels in the BSA do not have sufficient water or flow regimes to provide breeding habitat. There are no known breeding populations within dispersal distance. The pond in the BSA has a large bullfrog population. |
| <b>Reptiles</b>                                     |                                   |                                 |                     |   |   |
| <i>Emys marmorata</i><br>Western pond turtle        | --                                | SSC                             | 2                   | Occurs in suitable aquatic habitat throughout CA, west of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries from near sea level to approximately 4,690 ft. Associated with permanent or nearly permanent water in a wide variety of habitats with basking sites such as submerged logs, rocks, mats of floating vegetation, or open mud banks (CWHR 2016).  | Yes. See discussion.  |

| Special-Status Species/<br>Common Name                            | Federal<br>Status <sup>a, b</sup> | State<br>Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur in the BSA   |
|---|-----------------------------------|---------------------------------|---------------------|--|---|
| <i>Phrynosoma blainvillii</i><br>Coast (California) horned lizard | --                                | SSC                             | 2                   | Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats, especially sandy areas, washes, flood plains and wind-blown deposits. Basks in the early morning (CWHR 2016). Needs loose or sandy soil for burrowing and reproduction. Needs open areas for thermoregulation and shrub cover or kangaroo rat burrows for refugia. Negatively associated with non-native Argentine ant ( <i>Linepithema humile</i> ) presence; positively associated with presence of native ants, and chaparral vegetation (Thomson <i>et al.</i> 2016). Occurs in the Sierra Nevada foothills from Butte Co. to Kern Co. and throughout the central and southern California coast. Found up to 4,000 ft in the northern end of its range and 6,000 ft in the southern end (CWHR 2016).   | Yes. See discussion.  |
| <b>Birds</b>  |                                   |                                 |                     |  |   |
| <i>Accipiter gentilis</i><br>Northern goshawk                     | --                                | SSC                             | 2                   | Breeds in the North Coast Ranges, Sierra Nevada, Klamath, Cascade, and Warner Mountains. Also breeds in the Piños, San Jacinto, San Bernardino, and White Mtns. Remains yearlong in breeding areas as an uncommon resident. Prefers middle and higher elevations in mature, dense conifer forests. Habitat requirements include meadows and riparian habitat. Casual in winter along north coast, throughout foothills, and in northern deserts, where it may be found in pinyon-juniper and low-elevation riparian habitats. Usually nests near water on north slopes, in the densest parts of vegetation stands, staying close to openings (CWHR 2016). In the west side Ponderosa pine zone, northern goshawks are known to nest down to approximately 2,500 ft. Nest stands consistently have larger trees, greater canopy cover, and relatively more open understories than stands lacking nests (Shuford and Gardali 2008). Goshawks generally do not nest near areas of human habitation or paved roads (USFWS 2001). | No. There are no dense mature conifer groves. The BSA is below the nesting elevation range. |
| <i>Agelaius tricolor</i><br>Tricolored blackbird                  | --                                | SSC                             | 2                   | Mostly a resident in California. Common locally throughout the Central Valley and in coastal districts from Sonoma Co. south. Breeds near freshwater, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, tall herbs, and wild rose. Highly colonial; nesting area must be large enough to support a minimum colony of about 50 pairs (CWHR 2016). Chooses areas with widespread water and large, thick patches of vegetation for colonies to reduce predation (Hamilton 2004).   | No. There is no suitable nesting habitat.   |
| <i>Riparia riparia</i><br>Bank swallow                            | --                                | T                               | 2                   | Found primarily west of CA deserts in riparian and other lowland habitats during the spring-fall period. In summer, restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine textured sandy soils, into which it digs nesting holes. About 75% of the breeding population in CA occurs along banks of the Sacramento and Feather Rivers in the northern Central Valley. Other colonies are known from the central coast from Monterey to San Mateo cos., and in northeastern California in Shasta, Siskiyou, Lassen, Plumas, and Modoc cos. Breeding colonies can have between 10 and 1,500, but typically between 100 and 200, nesting pairs (CWHR 2016).  | No. There is no suitable nesting habitat.   |



| Special-Status Species/<br>Common Name             | Federal<br>Status <sup>a, b</sup> | State<br>Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur in the BSA  |
|--|-----------------------------------|---------------------------------|---------------------|--|--|
| <i>Strix nebulosa</i><br>Great gray owl            | --                                | E                               | 2                   | Occurs between 4,500 and 7,500 ft in the Sierra Nevada in the vicinity of Quincy in Plumas Co. south to Yosemite. Occasionally reported in Northwestern CA in winter and in the Warner Mtns. in summer. Breeds in old-growth red fir, mixed conifer, and lodgepole pine habitats in the vicinity of wet meadows. Uses trees in dense forest stands for roosting cover and small trees and snags in or bordering meadows for hunting perches. Nests in large, broken-topped snags 25 to 72 ft above the ground. Often uses old hawk or eagle nests (CWHR 2016). Nesting sites are of concern to CDFW (2016c).   | No. The BSA is below the elevation range. There is no old-growth coniferous forest suitable for nesting habitat. |
| <b>Mammals</b>                                     |                                   |                                 |                     |  |  |
| <i>Pekania pennanti</i><br>Fisher – West Coast DPS | FT                                | CT/ SSC                         | 2                   | Uncommon permanent resident of the Sierra Nevada, Cascades, Klamath Mountains, and the North Coast Ranges (CWHR 2016). Occurs above 3,200 ft in the Sierra Nevada and Cascades (Jameson and Peeters 2004). Today, fisher distribution in CA is represented by two populations: northwestern California and the southern Sierra Nevada. Fishers apparently no longer inhabit the area between the Pit River in the northern Sierra Nevada/Cascades to the Merced River in the southern Sierra Nevada; a separation of approximately 270 miles. There is little empirical evidence that fishers previously inhabited this gap in the Sierra Nevada (CDFW 2010a). Occurs in intermediate- to large-stages of coniferous forest and deciduous-riparian habitat with high percent canopy closure. Canopy closure must be greater than 50% to be suitable habitat. Dens in a variety of protected cavities, brush piles, logs, and upturned trees. Hollow logs, trees, and snags are especially important. Mostly nocturnal and crepuscular, with some diurnal activity (CWHR 2016). | No. There is no mature conifer forest with >50% canopy cover. The BSA occurs below the elevation range.          |
| <i>Antrozous pallidus</i><br>Pallid bat            | --                                | --                              | 2                   | Occupies a wide variety of habitats including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. The species is most common in open, dry habitats with rocky areas for roosting. It feeds on a wide variety of insects and arachnids, foraging over open ground, usually 1.6 to 8 ft above level ground. Day roosts in caves, crevices, mines, and occasionally buildings and in hollow trees. Roost must protect bats from high temperatures. Night roosts may be in more open sites, such as porches and open buildings. Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Locally common in low elevations in CA, it occurs throughout CA except for the high Sierra Nevada from Shasta to Kern counties, and the northwestern corner of the state from Del Norte and western Siskiyou counties to northern Mendocino County. It is a yearlong resident in most of the range (CHWR 2016).  | No. There are no suitable rock outcrops/cliffs, or mature conifer forests likely to have suitable hollow trees.  |
| <b>Plants / CNPS<sup>d</sup></b>                   |                                   |                                 |                     |  |  |
| <i>Allium jepsonii</i><br>Jepson's onion           | --                                | --/ 1B.2                        | 2                   | Bulbiferous herb found in serpentine or volcanic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 984 to 4,331 ft. Known from Butte, El Dorado, Placer, and Tuolumne cos. Blooms April through August (Baldwin <i>et al.</i> 2012; CNPS 2016).  | No. There are no suitable soils.   |

| Special-Status Species/<br>Common Name   | Federal<br>Status <sup>a, b</sup> | State<br>Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur in the BSA   |
|--|-----------------------------------|---------------------------------|---------------------|--|---|
| <i>Arctostaphylos nissenana</i><br>Nissenan manzanita                          | --                                | --/ 1B.2                        | 2                   | Perennial evergreen shrub found on highly acidic rocky (slate and shale) soils. Often associated with closed-cone conifer forest and chaparral from about 1,475 to 5,400 ft (USFS 2009, CNPS 2016, Jepson 2018). Known from approximately 15 occurrences in Placer, El Dorado and Tuolumne cos. Blooms February through March (Baldwin <i>et al.</i> 2012; CNPS 2016). | Yes. See discussion.  |
| <i>Calochortus clavatus</i> var. <i>avius</i><br>Pleasant Valley mariposa lily | --                                | --/1B.2                         | 2                   | Perennial bulbiferous herb found in openings of lower montane, mixed conifer forests, on Josephine silt loam and volcanic soils from 1,000 to 5,900 ft (USFS 2009 and CNPS 2016). Known from Amador, Calaveras, El Dorado, and Placer cos. Presumed extirpated from Mariposa Co. Blooms May through July (CNPS 2016).  | No. There is no suitable habitat and soil.  |
| <i>Calystegia stebbinsii</i><br>Stebbins' morning-glory                        | E                                 | E/ 1B.1                         | 2                   | Perennial rhizomatous herb found in serpentine or gabbroic soils in openings in chaparral and cismontane woodland from 607 to 3,576 ft. Known from El Dorado and Nevada cos. Blooms April through July (Baldwin <i>et al.</i> 2012, CNPS 2016).  | No. There are no suitable soils.  |
| <i>Calystegia vanzuukiae</i><br>Van Zuuk's morning-glory                       | --                                | --/1B.3                         | 2                   | Perennial rhizomatous herb found in gabbroic or serpentinite soils in chaparral and cismontane woodlands from 1,640 to 3,870 ft. Known only from the Central Sierra Nevada foothills, from El Dorado and Placer cos. Blooms May through August (CNPS 2016).  | No. There are no suitable soils.  |
| <i>Carex cyrtostachya</i><br>Sierra arching sedge                              | --                                | --/1B.2                         | 2                   | Perennial herb found in mesic lower montane coniferous forest, meadows and seeps, marshes and swamps, and riparian forest margins from 2,000 to 4,460 ft. Known from Butte, El Dorado, and Yuba cos. Blooms May through August (CNPS 2016).  | Yes. See discussion.  |
| <i>Carex xerophila</i><br>Chaparral sedge                                      | --                                | --/1B.2                         | 2                   | Perennial herb found in serpentinite or gabbroic soil in chaparral, cismontane woodland, and lower montane coniferous forest from 1,445 to 2,530 ft. Known from Butte, El Dorado, Nevada and Yuba cos. Blooms March through June (CNPS 2016).  | No. There are no suitable soils.  |
| <i>Ceanothus roderickii</i><br>Pine Hill ceanothus                             | E                                 | R/ 1B.1                         | 2                   | Perennial evergreen shrub found on serpentine or gabbroic soils in chaparral and cismontane woodland from 804 to 3,576 ft. Known from less than 10 occurrences in El Dorado Co. Blooms April through June (Baldwin <i>et al.</i> 2012, CNPS 2016).   | No. There are no suitable soils.  |
| <i>Chlorogalum grandiflorum</i><br>Red Hills soaproot                          | --                                | --/ 1B.2                        | 2                   | Perennial bulbiferous herb found in serpentine, gabbroic, and other soils in chaparral, cismontane woodland, and lower montane coniferous forest from 800 to 5,540 ft. Known from Amador, Butte, Calaveras, El Dorado, Placer, and Tuolumne cos. Blooms May through June (Baldwin <i>et al.</i> 2012, CNPS 2016).  | No. There are no suitable soils. In El Dorado County this species is known from the gabbro soils of the Pine Hill formation, elsewhere in the County. |
| <i>Erigeron miser</i><br>Starved daisy   | --                                | --/1B.3                         | 2                   | Perennial herb found on rocky substrates in upper montane coniferous forest from 6,000 to 8,600 ft. This species is endemic to CA, and found in Lassen, Mono, Nevada and Placer Cos. Blooms June through October (CNPS 2016).  | No. The BSA is below the elevation range and there is no suitable habitat.  |
| <i>Fremontodendron decumbens</i><br>Pine Hill flannelbush                      | E                                 | R/ 1B.2                         | 2                   | Perennial evergreen shrub found on rocky, gabbroic, and serpentine soil in chaparral and cismontane woodland from 1,394 to 2,494 ft. Known from 10 occurrences in El Dorado, Nevada, and Yuba cos. Uncertain about distribution or identity in Nevada and Yuba cos. Blooms April through July (Baldwin <i>et al.</i> 2012, CNPS 2016).                                 | No. There are no suitable soils.  |

| Special-Status Species/<br>Common Name                               | Federal<br>Status <sup>a, b</sup> | State<br>Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur in the BSA    |
|--|-----------------------------------|---------------------------------|---------------------|--|----------------------------------|
| <i>Galium californicum</i> ssp. <i>sierrae</i><br>El Dorado bedstraw | E                                 | R/ 1B.2                         | 2                   | Perennial herb found on gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 328 to 1,920 ft. Known from fewer than 20 occurrences in El Dorado Co. (CNPS 2016). Blooms March through July (Baldwin <i>et al.</i> 2012).   | No. There are no suitable soils. |
| <i>Horkelia parryi</i><br>Parry's horkelia                           | --                                | --/ 1B.2                        | 2                   | Perennial herb found on Ione formation and in other soils in chaparral and cismontane woodland from 260 to 3,510 ft. Known from Amador, Calaveras, El Dorado, and Mariposa cos. Blooms April through September (Baldwin <i>et al.</i> 2012, CNPS 2016). Jepson (2018) describes the habitat as open chaparral.   | Yes. See discussion.             |
| <i>Packera</i> (= <i>Senecio</i> ) <i>layneae</i><br>Layne's ragwort | T                                 | R/ 1B.2                         | 1, 2                | Perennial herb found in rocky, serpentine, or gabbroic soils in chaparral and cismontane woodland from 650 to 3,560 ft. Known from Butte, El Dorado, Placer, Tuolumne, and Yuba cos. Blooms April through August (Baldwin <i>et al.</i> 2012, CNPS 2016).  | No. There are no suitable soils. |
| <i>Viburnum ellipticum</i><br>Oval-leaved viburnum                   | --                                | --/ 2B.3                        | 2                   | Deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 700 to 4,600 ft. Known from Alameda, Contra Costa, El Dorado, Fresno, Glenn, Humboldt, Lake, Mendocino, Mariposa, Napa, Placer, Shasta, Solano, Sonoma, and Tehama cos. Blooms May through August (Baldwin <i>et al.</i> 2012, CNPS 2016). Jepson (2018) describes the habitat as chaparral, yellow-pine forest, generally on north-facing slopes. | Yes. See discussion.             |
| <i>Wyethia reticulata</i><br>El Dorado County mule ears              | --                                | --/ 1B.2                        | 2                   | Perennial rhizomatous herb found on clay or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 600 to 2,100 ft. Known from El Dorado and Yuba cos. Blooms April through August (Baldwin <i>et al.</i> 2012, CNPS 2016).  | No. There are no suitable soils. |

| Special-Status Species/<br>Common Name                     | Federal<br>Status <sup>a, b</sup> | State<br>Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur in the BSA  |
|--|-----------------------------------|---------------------------------|---------------------|--|--|
| <b>Natural Communities</b>                                 |                                   |                                 |                     |  |  |
| Central Valley drainage<br>hardhead/ squawfish stream      | --                                | --                              | 2                   | Hardhead occur in low- to mid-elevation streams in the main Sacramento-San Joaquin drainage and in the Russian River. Their range extends from the Kern River in Kern County, in the south, to the Pit River in Modoc County in the north. In the San Joaquin drainage, the species is scattered in tributary streams and absent from valley reaches of the San Joaquin River. In the Sacramento drainage, the hardhead is present in most large tributary streams as well as in the Sacramento River. Hardhead are typically found in undisturbed areas of larger low- to mid-elevation streams, although they are also found in the mainstem Sacramento River at low elevations and in its tributaries to about 4,920 ft. They prefer clear, deep (>32 inches) pools and runs with sand-gravel-boulder substrates and slow velocities. Hardhead are always found in association with Sacramento pikeminnow (squawfish) and usually with Sacramento sucker. They tend to be absent from streams where introduced species, especially centrarchids (sunfish), predominate and from streams that have been severely altered by human activity. Sacramento pikeminnow occur in clear rivers and creeks of central California and occur in small numbers in the Sacramento-San Joaquin Delta. They are most characteristic of low- to mid-elevation streams with deep pools, slow runs, and undercut banks, and overhanging vegetation. They are most abundant in lightly disturbed, tree-lined reaches that also contain other native fish (Moyle 2002). | No. This community does not occur. The intermittent channels in the BSA are too small to support this community. |
| Central Valley drainage resident<br>rainbow trout stream   | --                                | --                              | 2                   | Rainbow trout occur in low order (high elevation) cold streams with a high gradient. These streams are dominated by rainbow trout and often riffle sculpin (Moyle and Ellison 1991).   | No. This community does not occur. The intermittent channels in the BSA are too small to support this community. |
| Sacramento-San Joaquin<br>foothill/valley ephemeral stream | --                                | --                              | 2                   | Low elevation streams that flow primarily in response to winter and spring rainfall. Found in oak woodland/ valley grassland areas. Some water may be present in semi-permanent bedrock pools. Streams have a distinct succession of invertebrates and may be important spawning areas for Sierran treefrogs ( <i>Pseudacris sierra</i> ) and newts ( <i>Taricha</i> spp.; Moyle and Ellison 1991).  | Yes. See discussion.   |

<sup>a</sup> **Listing Status:** **E** = Endangered; **T** = Threatened; **P** = Proposed; **C** = Candidate; **R** = California Rare; **D** = Delisted; \* = Possibly extinct.

<sup>b</sup> **Other Codes:** **SSC** = CA Species of Special Concern; **FP** = CA Fully Protected; **Prot** = CA Protected; **CH** = Critical habitat designated.

**CNPS Rank:** (plants only): **1A** = Presumed Extinct in CA; **1B** = Rare or Endangered (R/E) in CA and elsewhere; **2** = R/E in CA and more common elsewhere; **3** = Need more information; **4** = Plants of limited distribution

**CNPS List Decimal Extensions:** **.1** = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); **.2** = Fairly endangered in CA (20-80% of occurrences threatened); **.3** = Not very endangered in CA (< 20% of occurrences threatened or no current threats known).

<sup>c</sup> **Source:** **1** = USFWS letter. **2** = CNDDB/CNPS. **3** = Observed or included by Sycamore Environmental.

[This page intentionally blank]

## APPENDIX C.

### Plant and Wildlife Species Observed

#### Stonehenge Springs El Dorado County, CA

##### Plant Species Observed.

| Family  | Scientific Name   | Common Name                 | N/I <sup>1</sup> | Cal-IPC  | Year observed |      |
|---|---|-----------------------------|------------------|----------|---------------|------|
|   |   |                             |                  |          | 2008          | 2017 |
| <b>FERNS</b>                                  |   |                             |                  |          |               |      |
| <b>Dryopteridaceae</b>                        | <i>Dryopteris arguta</i>  | Wood fern                   | N                |          |               | X    |
| <b>Pteridaceae</b>                            | <i>Pentagramma triangularis</i>                                 | Goldback fern               | N                |          | X             | X    |
| <b>CONIFERS</b>                               |   |                             |                  |          |               |      |
| <b>Cupressaceae</b>                           | <i>Calocedrus decurrens</i> <sup>3</sup>                        | Incense cedar               | N                |          |               | X    |
| <b>Pinaceae</b>                               | <i>Pinus ponderosa</i>  | Ponderosa pine              | N                |          | X             | X    |
|   | <i>Pinus sabiniana</i>  | Foothill pine               | N                |          | X             | X    |
|   | <i>Pseudotsuga menziesii</i> var. <i>menziesii</i> <sup>3</sup> | Douglas-fir                 | N                |          |               | X    |
| <b>EUDICOTS</b>                               |   |                             |                  |          |               |      |
| <b>Amaranthaceae</b>                          | <i>Amaranthus</i> sp.   | Tumbleweed                  | I                |          | X             |      |
| <b>Anacardiaceae</b>                          | <i>Toxicodendron diversilobum</i>                               | Western poison oak          | N                |          | X             | X    |
| <b>Apiaceae</b>                               | <i>Anthriscus caucalis</i>                                      | Bur-chervil                 | I                |          | X             |      |
|   | <i>Daucus carota</i>  | Carrot, Queen Anne's lace   | I                |          | X             | X    |
|   | <i>Daucus pusillus</i>  | Daucus                      | N                |          | X             | X    |
|   | <i>Eryngium castrense</i>                                       | Great Valley coyote-thistle | N                |          | X             | X    |
|   | <i>Sanicula bipinnata</i>                                       | Poison sanicle              | N                |          | X             |      |
|   | <i>Sanicula bipinnatifida</i>                                   | Purple sanicle              | N                |          | X             | X    |
|   | <i>Sanicula crassicaulis</i>                                    | Sanicula                    | N                |          | X             | X    |
|   | <i>Torilis arvensis</i>   | Hedge parsley               | I                | Moderate | X             | X    |
| <b>Apocynaceae</b>                            | <i>Asclepias cordifolia</i>                                     | Purple milkweed             | N                |          | X             | X    |
|   | <i>Asclepias fascicularis</i>                                   | Narrow-leaf milkweed        | N                |          | X             | X    |
|   | <i>Vinca major</i>  | Greater periwinkle          | I                | Moderate |               | X    |
| <b>Asteraceae</b>                             | <i>Achillea millefolium</i>                                     | Yarrow                      | N                |          | X             | X    |
|   | <i>Agoseris grandiflora</i>                                     | Agoseris                    | N                |          | X             | X    |
|   | <i>Agoseris retrorsa</i>  | Agoseris                    | N                |          | X             | X    |
|   | <i>Agoseris</i> sp.   | Agoseris                    | N                |          | X             |      |
|   | <i>Ambrosia psilostachya</i>                                    | Western ragweed             | N                |          |               | X    |
|   | <i>Anaphalis margaritacea</i>                                   | Pearly everlasting          | N                |          |               | X    |
|   | <i>Anthemis cotula</i>  | Mayweed                     | I                |          |               | X    |
|   | <i>Artemisia douglasiana</i>                                    | Mugwort                     | N                |          | X             | X    |
|   | <i>Baccharis pilularis</i>                                      | Coyote brush                | N                |          | X             | X    |
|   | <i>Calycadenia</i> sp.  | Calycadenia                 | N                |          | X             |      |
|   | <i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>          | Italian thistle             | I                | Moderate | X             | X    |
|   | <i>Centaurea solstitialis</i>                                   | Yellow star-thistle         | I                | High     | X             | X    |
|   | <i>Centromadia fitchii</i>                                      | Spikeweed                   | N                |          | X             | X    |
|   | <i>Centromadia</i> sp.  | Tarweed                     | N                |          |               | X    |
|   | <i>Chondrilla juncea</i>  | Skeleton weed               | I                | Moderate | X             | X    |
|   | <i>Cichorium intybus</i>  | Chicory                     | I                |          | X             | X    |
|   | <i>Cirsium vulgare</i>  | Thistle                     | I                |          | X             | X    |
|   | <i>Erigeron canadensis</i>                                      | Horseweed                   | N                |          |               | X    |
|   | <i>Erigeron foliosus</i> var. <i>foliosus</i>                   | Leafy fleabane              | N                |          |               | X    |
|   | <i>Eriophyllum lanatum</i>                                      | Common woolly sunflower     | N                |          | X             | X    |
| <i>Gnaphalium palustre</i>                    | Western marsh cudweed   | N                           |                  | X        |               |      |
| <i>Grindelia hirsutula</i>                    | Gumplant  | N                           |                  | X        | X             |      |
| <i>Holocarpha virgata</i> ssp. <i>virgata</i> | Tarweed, tarplant   | N                           |                  | X        | X             |      |
| <i>Hypochaeris glabra</i>                     | Smooth cat's-ear  | I                           | Limited          | X        |               |      |
| <i>Hypochaeris radicata</i>                   | Rough cat's-ear   | I                           | Moderate         | X        | X             |      |
| <i>Jensia rammii</i>                          | Tarweed, tarplant   | N                           |                  | X        |               |      |

| Family                 | Scientific Name  | Common Name              | N/I <sup>1</sup> | Cal-IPC  | Year observed |      |
|------------------------|--|--------------------------|------------------|----------|---------------|------|
|                        |  |                          |                  |          | 2008          | 2017 |
|                        | <i>Lactuca saligna</i>                                   | Lettuce                  | I                |          |               | X    |
|                        | <i>Lactuca serriola</i>                                  | Prickly lettuce          | I                |          | X             | X    |
|                        | <i>Leontodon saxatilis</i>                               | Hairy hawkbit            | I                |          | X             | X    |
|                        | <i>Lessingia nemaclada</i>                               | Lessingia                | N                |          | X             |      |
|                        | <i>Logfia gallica</i>                                    | Daggerleaf cottonrose    | I                |          | X             | X    |
|                        | <i>Madia elegans</i>                                     | Common madia             | N                |          | X             | X    |
|                        | <i>Madia exigua</i>                                      | Tarweed, tarplant        | N                |          | X             | X    |
|                        | <i>Madia gracilis</i>                                    | Gumweed                  | N                |          | X             |      |
|                        | <i>Madia subspicata</i>                                  | Tarweed, tarplant        | N                |          | X             | X    |
|                        | <i>Matricaria discoidea</i>                              | Pineapple weed           | I                |          | X             | X    |
|                        | <i>Micropus californicus</i> ssp. <i>californicus</i>    | Cottontop                | N                |          | X             |      |
|                        | <i>Pseudognaphalium</i> sp.                              | Cudweed, everlasting     | --               |          |               | X    |
|                        | <i>Pseudognaphalium beneolens</i>                        | Cudweed, everlasting     | N                |          | X             |      |
|                        | <i>Pseudognaphalium californicum</i>                     | Cudweed, everlasting     | N                |          | X             |      |
|                        | <i>Psilocarphus breccissimus</i> var. <i>brevissimus</i> | Delta woolly-marbles     | N                |          | X             |      |
|                        | <i>Psilocarphus tenellus</i> var. <i>globiferus</i>      | Slender woolly-marbles   | N                |          | X             |      |
|                        | <i>Psilocarphus tenellus</i> var. <i>tenellus</i>        | Slender woolly-marbles   | N                |          | X             | X    |
|                        | <i>Silybum marianum</i>                                  | Milk thistle             | I                | Limited  | X             | X    |
|                        | <i>Solidago velutina</i> ssp. <i>californica</i>         | California goldenrod     | N                |          | X             | X    |
|                        | <i>Soliva sessilis</i>                                   | Soliva                   | I                |          | X             | X    |
|                        | <i>Sonchus asper</i>                                     | Prickly sow thistle      | I                |          | X             | X    |
|                        | <i>Tragopogon</i> sp.                                    | Goat's beard, salsify    | I                |          |               | X    |
|                        | <i>Tragopogon dubius</i>                                 | Yellow salsify           | I                |          | X             |      |
|                        | <i>Tragopogon porrifolius</i>                            | Salsify, oyster plant    | I                |          | X             |      |
|                        | <i>Wyethia</i> sp.                                       | Mule's ears              | N                |          | X             |      |
|                        | <i>Wyethia angustifolia</i>                              | Mule's ears              | N                |          | X             | X    |
|                        | <i>Wyethia helenioides</i>                               | Mule's ears              | N                |          | X             | X    |
|                        | <i>Xanthium strumarium</i>                               | Cocklebur                | N                |          | X             | X    |
| <b>Bignoniaceae</b>    | <i>Catalpa</i> sp.                                       | Southern catalpa         | I                |          |               | X    |
| <b>Boraginaceae</b>    | <i>Amsinckia menziesii</i>                               | Common fiddleneck        | N                |          | X             | X    |
|                        | <i>Eriodictyon californicum</i>                          | California yerba santa   | N                |          | X             | X    |
|                        | <i>Myosotis discolor</i>                                 | Changing forget-me-not   | I                |          |               | X    |
|                        | <i>Nemophila heterophylla</i>                            | White nemophila          | N                |          | X             | X    |
|                        | <i>Pectocarya pusilla</i>                                | Pectocarya               | N                |          | X             |      |
|                        | <i>Phacelia</i> sp.                                      | Phacelia                 | N                |          | X             |      |
|                        | <i>Plagiobothrys nothofulvus</i>                         | Rusty popcorn flower     | N                |          | X             | X    |
|                        | <i>Plagiobothrys stipitatus</i> var. <i>micranthus</i>   | Stipitate popcorn flower | N                |          | X             | X    |
| <b>Brassicaceae</b>    | <i>Hirschfeldia incana</i>                               | Summer mustard           | I                | Moderate | X             |      |
|                        | <i>Lepidium oblongum</i> var. <i>oblongum</i>            | Peppergrass, peppergrass | N                |          | X             |      |
|                        | <i>Nasturtium officinale</i>                             | Water cress              | I                |          | X             | X    |
|                        | <i>Rorippa curvisiliqua</i>                              | Yellow cress             | N                |          | X             | X    |
|                        | <i>Sisymbrium officinale</i>                             | Hedge mustard            | I                |          |               | X    |
|                        | <i>Thysanocarpus curvipes</i>                            | Lacepod, fringedpod      | N                |          | X             |      |
|                        | <i>Thysanocarpus radians</i>                             | Lacepod, fringedpod      | N                |          | X             |      |
| <b>Campanulaceae</b>   | <i>Heterocodon rariflorum</i>                            | Heterocodon              | N                |          |               | X    |
| <b>Caprifoliaceae</b>  | <i>Lonicera interrupta</i>                               | Honeysuckle              | N                |          | X             | X    |
|                        | <i>Symphoricarpos mollis</i>                             | Snowberry                | N                |          | X             |      |
| <b>Caryophyllaceae</b> | <i>Cerastium glomeratum</i>                              | Mouse-ear chickweed      | I                |          | X             | X    |
|                        | <i>Scleranthus annuus</i> ssp. <i>annuus</i>             | Knawel                   | I                |          | X             |      |
|                        | <i>Silene gallica</i>                                    | Small-flower catchfly    | I                |          | X             | X    |
|                        | <i>Spergularia rubra</i>                                 | Red sand-spurrey         | I                |          | X             | X    |
|                        | <i>Stellaria media</i>                                   | Common chickweed         | I                |          | X             | X    |
| <b>Convolvulaceae</b>  | <i>Calystegia occidentalis</i>                           | Morning-glory            | N                |          | X             | X    |
|                        | <i>Convolvulus arvensis</i>                              | Bindweed                 | I                |          | X             | X    |
| <b>Crassulaceae</b>    | <i>Crassula tillaea</i>                                  | Crassula                 | I                |          | X             | X    |

| Family               | Scientific Name  | Common Name              | N/I <sup>1</sup> | Cal-IPC  | Year observed |      |
|----------------------|--|--------------------------|------------------|----------|---------------|------|
|                      |  |                          |                  |          | 2008          | 2017 |
| <b>Cucurbitaceae</b> | <i>Marah oregana</i>                                       | Coast man-root           | N                |          | X             | X    |
| <b>Ericaceae</b>     | <i>Arctostaphylos nissenana</i> <sup>4</sup>               | Nissenan manzanita       | N                |          | X             | X    |
|                      | <i>Arctostaphylos viscida</i> ssp. <i>viscida</i>          | Manzanita                | N                |          | X             | X    |
| <b>Euphorbiaceae</b> | <i>Croton setigerus</i>                                    | Turkey-mullein           | N                |          | X             | X    |
|                      | <i>Euphorbia lathyris</i>                                  | Caper spurge             | I                |          | X             | X    |
| <b>Fabaceae</b>      | <i>Acmispon americanus</i> var. <i>americanus</i>          | Deervetch                | N                |          | X             | X    |
|                      | <i>Acmispon brachycarpus</i>                               | Deervetch                | N                |          |               | X    |
|                      | <i>Acmispon parviflorus</i>                                | Deervetch                | N                |          | X             | X    |
|                      | <i>Lathyrus cicera</i>                                     | Wild pea                 | I                |          | X             | X    |
|                      | <i>Lathyrus latifolius</i>                                 | Perennial sweet pea      | N                |          |               | X    |
|                      | <i>Lathyrus sulphureus</i> var. <i>sulphureus</i>          | Wild pea                 | N                |          | X             |      |
|                      | <i>Lotus corniculatus</i>                                  | Bird's-foot trefoil      | I                |          | X             |      |
|                      | <i>Lupinus albicaulis</i>                                  | Lupine                   | N                |          | X             |      |
|                      | <i>Lupinus bicolor</i>                                     | Miniature lupine         | N                |          | X             | X    |
|                      | <i>Lupinus formosus</i> var. <i>robustus</i>               | Lupine                   | N                |          | X             |      |
|                      | <i>Lupinus nanus</i>                                       | Lupine                   | N                |          | X             |      |
|                      | <i>Medicago polymorpha</i>                                 | California burclover     | I                | Limited  | X             |      |
|                      | <i>Trifolium ciliolatum</i>                                | Foothill clover          | N                |          |               | X    |
|                      | <i>Trifolium dubium</i>                                    | Little hop clover        | I                |          | X             | X    |
|                      | <i>Trifolium glomeratum</i>                                | Clustered clover         | I                |          | X             | X    |
|                      | <i>Trifolium hirtum</i>                                    | Rose clover              | I                | Limited  | X             | X    |
|                      | <i>Trifolium microcephalum</i>                             | Small-head clover        | N                |          |               | X    |
|                      | <i>Trifolium repens</i>                                    | White clover             | I                |          | X             |      |
|                      | <i>Trifolium subterraneum</i>                              | Subterranean clover      | I                |          | X             | X    |
|                      | <i>Trifolium wormskoldii</i>                               | Cow clover               | N                |          | X             |      |
| <i>Vicia hirsuta</i> | Vetch  | I                        |                  | X        |               |      |
| <i>Vicia sativa</i>  | Spring vetch   | I                        |                  | X        | X             |      |
| <i>Vicia villosa</i> | Hairy vetch, winter vetch                                  | I                        |                  | X        | X             |      |
| <b>Fagaceae</b>      | <i>Quercus berberidifolia</i>                              | Scrub oak                | N                |          |               | X    |
|                      | <i>Quercus chrysolepis</i>                                 | Canyon live oak          | N                |          | X             | X    |
|                      | <i>Quercus douglasii</i>                                   | Blue oak                 | N                |          | X             | X    |
|                      | <i>Quercus kelloggii</i>                                   | California black oak     | N                |          | X             | X    |
|                      | <i>Quercus lobata</i>                                      | Valley oak, roble        | N                |          | X             | X    |
|                      | <i>Quercus wislizeni</i> var. <i>wislizeni</i>             | Interior live oak        | N                |          | X             | X    |
|                      | <i>Quercus x morehus</i>                                   | Oracle oak               | N                |          | X             | X    |
| <b>Gentianaceae</b>  | <i>Zeltnera muehlenbergii</i>                              | Monterey centaury        | N                |          | X             | X    |
| <b>Geraniaceae</b>   | <i>Erodium botrys</i>                                      | Storksbill, filaree      | I                |          | X             |      |
|                      | <i>Erodium cicutarium</i>                                  | Redstem filaree          | I                | Limited  | X             |      |
|                      | <i>Erodium moschatum</i>                                   | Greenstem filaree        | I                |          | X             |      |
|                      | <i>Erodium</i> sp.   | Storksbill, filaree      | --               |          | X             |      |
|                      | <i>Geranium dissectum</i>                                  | Cranesbill, geranium     | I                | Limited  | X             | X    |
|                      | <i>Geranium molle</i>                                      | Cranesbill, geranium     | I                |          | X             |      |
| <b>Hypericaceae</b>  | <i>Hypericum perforatum</i> ssp. <i>perforatum</i>         | Klamathweed              | I                | Moderate | X             | X    |
| <b>Juglandaceae</b>  | <i>Juglans hindsii</i>                                     | Northern CA black walnut | N                |          | X             | X    |
| <b>Lamiaceae</b>     | <i>Marrubium vulgare</i>                                   | Horehound                | I                | Limited  |               | X    |
|                      | <i>Melissa officinalis</i>                                 | Lemon balm               | I                |          |               | X    |
|                      | <i>Mentha pulegium</i>                                     | Pennyroyal               | I                | Moderate | X             | X    |
|                      | <i>Monardella candicans</i> <sup>4,5</sup>                 | Sierra monardella        | N                |          | X             | X    |
|                      | <i>Monardella villosa</i> ssp. <i>villosa</i> <sup>4</sup> | Coyote mint              | N                |          |               | X    |
|                      | <i>Pogogyne serpylloides</i>                               | Thymeleaf beardstyle     | N                |          | X             |      |
|                      | <i>Scutellaria californica</i>                             | California skullcap      | N                |          | X             | X    |
|                      | <i>Trichostema lanceolatum</i>                             | Vinegar weed             | N                |          | X             | X    |
| <b>Linaceae</b>      | <i>Linum usitatissimum</i>                                 | Flax                     | I                |          | X             |      |
| <b>Lythraceae</b>    | <i>Lythrum hyssopifolia</i>                                | Loosestrife              | I                | Limited  | X             | X    |
|                      | <i>Lythrum portula</i>                                     | Loosestrife              | I                |          |               | X    |
| <b>Malvaceae</b>     | <i>Malva</i> sp.   | Mallow                   | --               |          |               | X    |

| Family                | Scientific Name                                      | Common Name              | N/I <sup>1</sup> | Cal-IPC  | Year observed |      |
|-----------------------|--|--------------------------|------------------|----------|---------------|------|
|                       |  |                          |                  |          | 2008          | 2017 |
|                       | <i>Sidalcea malviflora</i>                           | Checkerbloom             | N                |          | X             | X    |
| <b>Montiaceae</b>     | <i>Claytonia perfoliata</i>                          | Miner's lettuce          | N                |          |               |      |
| <b>Myrsinaceae</b>    | <i>Anagallis arvensis</i>                            | Scarlet pimpernel        | I                |          | X             |      |
| <b>Onagraceae</b>     | <i>Clarkia biloba</i> ssp. <i>biloba</i>             | Clarkia                  | N                |          | X             | X    |
|                       | <i>Clarkia purpurea</i>                              | Clarkia                  | N                |          | X             | X    |
|                       | <i>Epilobium brachycarpum</i>                        | Willowherb               | N                |          | X             | X    |
|                       | <i>Epilobium ciliatum</i>                            | Willowherb               | N                |          | X             | X    |
|                       | <i>Epilobium densiflorum</i>                         | Willowherb               | N                |          | X             |      |
|                       | <i>Epilobium torreyi</i>                             | Willowherb               | N                |          | X             | X    |
|                       | <i>Ludwigia peploides</i>                            | Water primrose           | I                |          | X             |      |
| <b>Orobanchaceae</b>  | <i>Castilleja attenuata</i>                          | Valley tassels           | N                |          | X             | X    |
|                       | <i>Castilleja lacera</i>                             | Paintbrush, owl's-clover | N                |          | X             | X    |
|                       | <i>Parentucellia viscosa</i>                         | Parentucellia            | I                | Limited  |               | X    |
|                       | <i>Triphysaria eriantha</i>                          | Butter-and-eggs          | N                |          | X             | X    |
| <b>Oxalidaceae</b>    | <i>Oxalis micrantha</i>                              | Dwarf wood-sorrel        | I                |          |               | X    |
| <b>Papaveraceae</b>   | <i>Eschscholzia californica</i>                      | California poppy         | N                |          | X             | X    |
|                       | <i>Eschscholzia lobbia</i>                           | Frying pans              | N                |          | X             |      |
| <b>Phrymaceae</b>     | <i>Mimulus aurantiacus</i>                           | Monkeyflower             | N                |          | X             | X    |
|                       | <i>Mimulus guttatus</i>                              | Monkeyflower             | N                |          | X             | X    |
| <b>Plantaginaceae</b> | <i>Callitriche heterophylla</i> var. <i>het.</i>     | Water-starwort           | N                |          | X             | X    |
|                       | <i>Collinsia heterophylla</i>                        | Chinese-houses           | N                |          | X             | X    |
|                       | <i>Gratiola ebracteata</i>                           | Bractless hedge-hyssop   | N                |          | X             | X    |
|                       | <i>Kickxia elatine</i>                               | Kickxia                  | I                |          | X             | X    |
|                       | <i>Plantago erecta</i>                               | Plantain                 | N                |          | X             | X    |
|                       | <i>Plantago lanceolata</i>                           | English plantain         | I                | Limited  | X             | X    |
|                       | <i>Veronica arvensis</i>                             | Speedwell, brooklime     | I                |          |               | X    |
|                       | <i>Veronica peregrina</i> ssp. <i>xalapensis</i>     | Purslane speedwell       | N                |          |               | X    |
| <b>Polemoniaceae</b>  | <i>Allophyllum divaricatum</i>                       | Allophyllum              | N                |          | X             |      |
|                       | <i>Allophyllum gilioides</i> ssp. <i>gilioides</i>   | Allophyllum              | N                |          | X             |      |
|                       | <i>Gilia capitata</i>                                | Bluehead gilia           | N                |          | X             |      |
|                       | <i>Leptosiphon bicolor</i>                           | Leptosiphon              | N                |          | X             | X    |
|                       | <i>Leptosiphon parviflorus</i>                       | Leptosiphon              | N                |          | X             |      |
|                       | <i>Navarretia intertexta</i> ssp. <i>intertexta</i>  | Navarretia               | N                |          | X             | X    |
|                       | <i>Navarretia pubescens</i>                          | Navarretia               | N                |          |               | X    |
|                       | <i>Navarretia squarrosa</i>                          | skunkweed                | N                |          | X             |      |
| <b>Polygalaceae</b>   | <i>Polygala californica</i>                          | California milkwort      | N                |          |               | X    |
| <b>Polygonaceae</b>   | <i>Eriogonum nudum</i>                               | Wild buckwheat           | N                |          | X             |      |
|                       | <i>Persicaria</i> sp.                                | Smartweed                | --               |          | X             | X    |
|                       | <i>Polygonum</i> sp.                                 | Knotweed                 | --               |          | X             |      |
|                       | <i>Polygonum aviculare</i>                           | Knotweed, knotgrass      | I                |          | X             | X    |
|                       | <i>Rumex acetosella</i>                              | Sheep sorrel             | I                | Moderate | X             | X    |
|                       | <i>Rumex conglomeratus</i>                           | Dock                     | I                |          |               | X    |
|                       | <i>Rumex crispus</i>                                 | Curly dock               | I                | Limited  | X             | X    |
|                       | <i>Rumex pulcher</i>                                 | Fiddle dock              | I                |          | X             | X    |
| <b>Portulacaceae</b>  | <i>Portulaca oleracea</i>                            | Purslane                 | I                |          |               | X    |
| <b>Ranunculaceae</b>  | <i>Delphinium hansenii</i> ssp. <i>hansenii</i>      | Hansen's larkspur        | N                |          | X             |      |
|                       | <i>Delphinium variegatum</i> ssp. <i>var.</i>        | Royal larkspur           | N                |          | X             | X    |
|                       | <i>Ranunculus bonariensis</i> var. <i>trisepalus</i> | Buttercup                | N                |          | X             | X    |
|                       | <i>Ranunculus muricatus</i>                          | Buttercup                | I                |          | X             |      |
|                       | <i>Ranunculus occidentalis</i>                       | Buttercup                | N                |          | X             |      |
| <b>Rhamnaceae</b>     | <i>Ceanothus cuneatus</i> var. <i>cuneatus</i>       | Buckbrush                | N                |          | X             | X    |
|                       | <i>Ceanothus integerrimus</i>                        | Deer brush               | N                |          | X             | X    |
|                       | <i>Ceanothus lemmonii</i>                            | California-lilac         | N                |          | X             |      |
|                       | <i>Ceanothus tomentosus</i>                          | California-lilac         | N                |          | X             |      |
|                       | <i>Frangula californica</i> ssp. <i>tomentella</i>   | California coffee berry  | N                |          | X             | X    |
|                       | <i>Rhamnus ilicifolia</i>                            | Hollyleaf redberry       | N                |          | X             | X    |
| <b>Rosaceae</b>       | <i>Adenostoma fasciculatum</i>                       | Chamise                  | N                |          | X             | X    |



| Family                  | Scientific Name  | Common Name             | N/I <sup>1</sup> | Cal-IPC  | Year observed |      |
|-------------------------|--|-------------------------|------------------|----------|---------------|------|
|                         |  |                         |                  |          | 2008          | 2017 |
|                         | <i>Cotoneaster</i> sp.                                   | Cotoneaster             | I                |          | X             |      |
|                         | <i>Dryocallis glandulosa</i>                             | Woodbeauty              | N                |          | X             | X    |
|                         | <i>Heteromeles arbutifolia</i>                           | Christmas berry, toyon  | N                |          | X             | X    |
|                         | <i>Horkelia californica</i> var. <i>elata</i>            | Horkelia                | N                |          | X             |      |
|                         | <i>Prunus cerasifera</i>                                 | Cherry plum             | I                | Limited  | X             | X    |
|                         | <i>Pyracantha</i> sp.                                    | Firethorn               | I                |          | X             | X    |
|                         | <i>Rosa californica</i>                                  | California rose         | N                |          | X             | X    |
|                         | <i>Rubus armeniacus</i>                                  | Himalayan blackberry    | I                | High     | X             | X    |
| <b>Rubiaceae</b>        | <i>Galium aparine</i>                                    | Goose grass             | N                |          | X             | X    |
|                         | <i>Galium parisiense</i>                                 | Wall bedstraw           | I                |          | X             | X    |
|                         | <i>Galium porrigens</i> var. <i>tenue</i>                | Climbing bedstraw       | N                |          | X             | X    |
| <b>Salicaceae</b>       | <i>Populus fremontii</i> ssp. <i>fremontii</i>           | Fremont cottonwood      | N                |          | X             |      |
|                         | <i>Salix exigua</i>                                      | Willow                  | N                |          | X             | X    |
|                         | <i>Salix laevigata</i>                                   | Red willow              | N                |          | X             |      |
|                         | <i>Salix lasiolepis</i>                                  | Arroyo willow           | N                |          | X             | X    |
| <b>Sapindaceae</b>      | <i>Aesculus californica</i>                              | California buckeye      | N                |          | X             | X    |
| <b>Saxifragaceae</b>    | <i>Lithophragma affine</i>                               | Woodland star           | N                |          | X             |      |
|                         | <i>Lithophragma bolanderi</i>                            | Woodland star           | N                |          | X             |      |
| <b>Scrophulariaceae</b> | <i>Scrophularia californica</i>                          | California figwort      | N                |          | X             |      |
|                         | <i>Verbascum blattaria</i>                               | Moth mullein            | I                |          | X             | X    |
|                         | <i>Verbascum thapsus</i>                                 | Woolly mullein          | I                | Limited  | X             | X    |
| <b>Simaroubaceae</b>    | <i>Ailanthus altissima</i>                               | Tree of heaven          | I                | Moderate | X             | X    |
| <b>Solanaceae</b>       | <i>Nicotiana</i> sp.                                     | Tobacco                 | --               |          | X             | X    |
| <b>Valerianaceae</b>    | <i>Plectritis macrocera</i>                              | Plectritis              | N                |          | X             |      |
| <b>Verbenaceae</b>      | <i>Verbena lasiostachys</i> var. <i>lasiostachys</i>     | Vervain                 | N                |          | X             | X    |
| <b>Violaceae</b>        | <i>Viola purpurea</i> ssp. <i>quercetorum</i>            | Violet                  | N                |          | X             | X    |
| <b>Viscaceae</b>        | <i>Phoradendron leucarpum</i> ssp. <i>macrophyllum</i>   | American mistletoe      | N                |          | X             |      |
|                         | <i>Phoradendron leucarpum</i> ssp. <i>tomentosum</i>     | American mistletoe      | N                |          | X             | X    |
| <b>Zygophyllaceae</b>   | <i>Tribulus terrestris</i>                               | Puncture vine, caltrop  | I                |          |               | X    |
| <b>MONOCOTS</b>         |  |                         |                  |          |               |      |
| <b>Agavaceae</b>        | <i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i> | Soaproot                | N                |          | X             | X    |
| <b>Alismataceae</b>     | <i>Alisma triviale</i>                                   | Water-plantain          | N                |          | X             | X    |
|                         | <i>Sagittaria latifolia</i>                              | Arrowhead               | N                |          | X             |      |
| <b>Cyperaceae</b>       | <i>Carex</i> sp.   | Sedge                   | --               |          | X             |      |
|                         | <i>Carex barbara</i>                                     | Whiteroot sedge         | N                |          | X             | X    |
|                         | <i>Carex fracta</i>                                      | Fragile-sheathed sedge  | N                |          |               | X    |
|                         | <i>Carex praegracilis</i>                                | Black creeper           | N                |          | X             | X    |
|                         | <i>Carex tumulicola</i>                                  | Foothill sedge          | N                |          |               | X    |
|                         | <i>Cyperus eragrostis</i>                                | Nutsedge                | N                |          | X             | X    |
|                         | <i>Eleocharis macrostachya</i>                           | Spikerush               | N                |          | X             | X    |
|                         | <i>Eleocharis pachycarpa</i>                             | Spikerush               | I                |          | X             | X    |
|                         | <i>Schoenoplectus acutus</i> var. <i>occidentalis</i>    | Common tule             | N                |          | X             |      |
| <b>Iridaceae</b>        | <i>Sisyrinchium bellum</i>                               | Western blue-eyed-grass | N                |          | X             |      |
| <b>Juncaceae</b>        | <i>Juncus balticus</i>                                   | Baltic rush             | N                |          |               | X    |
|                         | <i>Juncus bufonius</i>                                   | Toad rush               | N                |          | X             | X    |
|                         | <i>Juncus dubius</i>                                     | Mariposa rush           | N                |          |               | X    |
|                         | <i>Juncus mexicanus</i>                                  | Mexican rush            | N                |          | X             |      |
|                         | <i>Juncus occidentalis</i>                               | Western rush            | N                |          | X             | X    |
|                         | <i>Juncus patens</i>                                     | Spreading rush          | N                |          |               | X    |
|                         | <i>Juncus phaeocephalus</i>                              | Rush                    | N                |          | X             | X    |
|                         | <i>Juncus xiphioides</i>                                 | Iris-leaved rush        | N                |          | X             |      |
|                         | <i>Luzula comosa</i>                                     | Hairy wood rush         | N                |          | X             | X    |
| <b>Juncaginaceae</b>    | <i>Triglochin scilloides</i>                             | Flowering-quillwort     | N                |          | X             | X    |
| <b>Liliaceae</b>        | <i>Calochortus albus</i>                                 | White globe lily        | N                |          | X             |      |

| Family                  | Scientific Name                                 | Common Name              | N/I <sup>1</sup> | Cal-IPC  | Year observed |      |
|-------------------------|---|--------------------------|------------------|----------|---------------|------|
|                         |   |                          |                  |          | 2008          | 2017 |
|                         | <i>Calochortus luteus</i>                       | Calochortus              | N                |          |               | X    |
|                         | <i>Calochortus monophyllus</i>                  | Yellow star-tulip        | N                |          | X             |      |
| <b>Orchidaceae</b>      | <i>Piperia elongata</i>                         | Chaparral orchid         | N                |          |               | X    |
| <b>Poaceae</b>          | <i>Aegilops triuncialis</i>                     | Barbed goat grass        | I                | High     | X             | X    |
|                         | <i>Agrostis exarata</i>                         | Spike bent grass         | N                |          | X             | X    |
|                         | <i>Aira caryophyllea</i>                        | Silver hair grass        | I                |          | X             | X    |
|                         | <i>Anthoxanthum odoratum</i>                    | Sweet vernal grass       | I                | Moderate | X             | X    |
|                         | <i>Avena barbata</i>                            | Slender wild oat         | I                | Moderate | X             | X    |
|                         | <i>Avena fatua</i>                              | Wild oat                 | I                | Moderate | X             |      |
|                         | <i>Briza minor</i>                              | Small quaking grass      | I                |          | X             | X    |
|                         | <i>Bromus catharticus</i>                       | Brome, chess             | I                |          | X             | X    |
|                         | <i>Bromus diandrus</i>                          | Ripgut grass             | I                | Moderate | X             | X    |
|                         | <i>Bromus hordeaceus</i>                        | Soft chess               | I                | Limited  | X             | X    |
|                         | <i>Bromus inermis</i>                           | Smooth brome             | I                |          | X             |      |
|                         | <i>Bromus madritensis</i> ssp. <i>rubens</i>    | Brome, chess             | I                |          |               | X    |
|                         | <i>Bromus tectorum</i>                          | Cheat grass, downy chess | I                | High     | X             |      |
|                         | <i>Crypsis schoenoides</i>                      | Swamp prickly grass      | I                |          | X             | X    |
|                         | <i>Cynodon dactylon</i>                         | Bermuda grass            | I                | Moderate | X             | X    |
|                         | <i>Cynosurus echinatus</i>                      | Bristly dogtail grass    | I                | Moderate | X             | X    |
|                         | <i>Dactylis glomerata</i>                       | Orchard grass            | I                | Limited  | X             |      |
|                         | <i>Deschampsia danthonoides</i>                 | Annual hair grass        | N                |          | X             | X    |
|                         | <i>Elymus caput-medusae</i>                     | Medusa head              | I                | High     | X             | X    |
|                         | <i>Elymus glaucus</i>                           | Blue or western wild-rye | N                |          | X             | X    |
|                         | <i>Elymus multisetus</i>                        | Big squirreltail         | N                |          | X             |      |
|                         | <i>Elymus triticoides</i>                       | Beardless wild rye       | N                |          |               | X    |
|                         | <i>Festuca bromoides</i>                        | Brome fescue             | I                |          | X             | X    |
|                         | <i>Festuca microstachys</i>                     | Fescue, rye grass        | N                |          | X             |      |
|                         | <i>Festuca myuros</i>                           | Rattail sixweeks grass   | I                | Moderate | X             |      |
|                         | <i>Festuca perennis</i>                         | Rye grass                | I                | Moderate | X             | X    |
|                         | <i>Gastridium phleoides</i>                     | Nit grass                | I                |          | X             | X    |
|                         | <i>Glyceria declinata</i>                       | Low manna grass          | I                | Moderate | X             |      |
|                         | <i>Glyceria x occidentalis</i>                  | Western manna grass      | I                |          | X             |      |
|                         | <i>Holcus lanatus</i>                           | Common velvet grass      | I                | Moderate | X             | X    |
|                         | <i>Hordeum marinum</i> ssp. <i>gussoneanum</i>  | Mediterranean barley     | I                | Moderate | X             | X    |
|                         | <i>Hordeum murinum</i> ssp. <i>leporinum</i>    | Hare barley              | I                | Moderate | X             | X    |
|                         | <i>Melica californica</i>                       | California melic         | N                |          | X             | X    |
|                         | <i>Melica torreyana</i>                         | Torrey's melic           | N                |          |               | X    |
|                         | <i>Paspalum distichum</i>                       | Knot grass               | N                |          |               | X    |
|                         | <i>Phalaris aquatica</i>                        | Harding grass            | I                | Moderate | X             | X    |
|                         | <i>Poa</i> sp.                                  | Blue grass               | --               |          | X             |      |
|                         | <i>Poa annua</i>                                | Annual blue grass        | I                |          | X             | X    |
|                         | <i>Poa bulbosa</i> ssp. <i>vivipara</i>         | Blue grass               | I                |          | X             | X    |
|                         | <i>Poa pratensis</i> ssp. <i>pratensis</i>      | Kentucky blue grass      | I                | Limited  |               | X    |
|                         | <i>Polypogon monspeliensis</i>                  | Annual beard grass       | I                | Limited  | X             | X    |
|                         | <i>Stipa pulchra</i>                            | Purple needle grass      | N                |          | X             |      |
| <b>Potamogetonaceae</b> | <i>Potamogeton</i> sp.                          | Pondweed                 | N                |          | X             |      |
| <b>Themidaceae</b>      | <i>Brodiaea elegans</i> ssp. <i>elegans</i>     | Harvest brodiaea         | N                |          | X             | X    |
|                         | <i>Dichelostemma capitatum</i> ssp. <i>cap.</i> | Blue dicks               | N                |          | X             |      |
|                         | <i>Dichelostemma multiflorum</i>                | Wild hyacinth            | N                |          | X             | X    |
|                         | <i>Dichelostemma volubile</i>                   | Twining brodiaea         | N                |          | X             | X    |
|                         | <i>Triteleia hyacinthina</i>                    | White brodiaea           | N                |          | X             |      |
| <b>Typhaceae</b>        | <i>Typha latifolia</i>                          | Broad-leaved cattail     | N                |          | X             |      |

<sup>1</sup> N = Native to CA; I = Introduced.

<sup>2</sup> Degree of negative ecological impact (Cal-IPC 2017).

<sup>3</sup> Sapling

<sup>4</sup> Specimen was collected and deposited at the UC Davis Herbarium

<sup>5</sup> *Monardella candicans* is a CNPS Rank 4.3 species.

Wildlife Species Observed.

| COMMON NAME             | SCIENTIFIC NAME                |
|-------------------------|--------------------------------|
| <b>BIRDS</b>            |                                |
| Acorn woodpecker        | <i>Melanerpes formicivorus</i> |
| American crow           | <i>Corvus brachyrhynchos</i>   |
| American robin          | <i>Turdus migratorius</i>      |
| Anna's hummingbird      | <i>Calypte anna</i>            |
| California quail        | <i>Callipepla californica</i>  |
| California thrasher     | <i>Toxostoma redivivum</i>     |
| Eurasian collared dove  | <i>Streptopelia decaocto</i>   |
| Northern mockingbird    | <i>Mimus polyglottos</i>       |
| Red-winged blackbird    | <i>Agelaius phoeniceus</i>     |
| Turkey vulture          | <i>Cathartes aura</i>          |
| Western scrub-jay       | <i>Aphelocoma californica</i>  |
| Wild turkey             | <i>Meleagris gallopavo</i>     |
| Wrentit                 | <i>Chamaea fasciata</i>        |
| <b>MAMMALS</b>          |                                |
| Black-tailed jackrabbit | <i>Lepus californicus</i>      |
| Mule deer               | <i>Odocoileus hemionus</i>     |
| Western gray squirrel   | <i>Sciurus griseus</i>         |
| <b>REPTILES</b>         |                                |
| Western fence lizard    | <i>Sceloporus occidentalis</i> |

[This page intentionally blank]

## APPENDIX D.

### Photographs

---



Photo 1. View of the young ponderosa pine – disturbed community in the BSA that was graded for development over 25 years ago. This is one of the denser areas of young pines (13 June 2017).



Photo 2. View of a more barren area of the young ponderosa pine – disturbed community. The larger shrub in the foreground is Nissenan manzanita. The other smaller shrubs are the more common manzanita (13 June 2017).



Photo 3. A Nissenan manzanita (arrow) growing next to the more common manzanita. Nissenan manzanita tends to grow as a shorter, broader shrub (13 June 2017).



Photo 4. A close-up of the grayish-red, shredding bark of Nissenan manzanita. The more common manzanita has smooth red bark that peels cleanly as it grows (13 June 2017).



Photo 5. View of valley oak woodland from near the top of a hill in the north end of the BSA (13 June 2017).



Photo 6. View of Channel 2 in California black oak woodland in the south end of the BSA (27 June 2017).



Photo 7. View of sandbar willow scrub (17 September 2017).



Photo 8. View north of seasonal wetland 26, the low spot around the shovel (8 August 2017).





Photo 9. View north of the deepest part of the pond in the BSA. Most of the pond is outside of the BSA on adjacent property (13 September 2017).



Photo 10. View of an ephemeral channel in valley oak – interior live oak woodland (15 September 2017).

[This page intentionally blank]

## **APPENDIX E.**

### CNDDDB Report for Nissenan manzanita

---

# CNDDDB Online Field Survey Form Report



California Natural Diversity Database  
Department of Fish and Wildlife  
1416 9th Street, Suite 1266  
Sacramento, CA 95814  
Fax: 916.324.0475  
[cnddb@wildlife.ca.gov](mailto:cnddb@wildlife.ca.gov)  
[www.dfg.ca.gov/biogeodata/cnddb/](http://www.dfg.ca.gov/biogeodata/cnddb/)



Source code HUG17F0002  
Quad code 3812067  
Occ. no. \_\_\_\_\_  
EO index no. \_\_\_\_\_  
Map index no. \_\_\_\_\_

This data has been reported to the CNDDDB, but may not have been evaluated by the CNDDDB staff

**Scientific name:** *Arctostaphylos nissenana*

**Common name:** Nissenan manzanita

**Date of field work (mm-dd-yyyy):** 06-27-2017

**Comment about field work date(s):**

## OBSERVER INFORMATION

**Observer:** Charles Hughes

**Affiliation:** Sycamore Environmental

**Address:** Sycamore Environmental 6355 Riverside Blvd, Suite C, Sacramento, CA 95831

**Email:** [chuck.hughes@sycamoreenv.com](mailto:chuck.hughes@sycamoreenv.com)

**Phone:** (916) 427-0703

**Other observers:** Nicole Desideri

## DETERMINATION

**Keyed in:** Jepson Manual, 2nd Edition

**Compared w/ specimen at:**

**Compared w/ image in:** Cal Photos

**By another person:**

**Other:** *A. nissenana* also reported from site by a 2009 botanical survey.

**Identification explanation:**

**Identification confidence:** Very confident

**Species found:** Yes If not found, why not?

**Level of survey effort:** Botanical survey consistent with CDFW 2009 Protocols.

**Total number of individuals:** 88

**Collection?** Yes

**Collection number:** Hughes 472

**Museum/Herbarium:** UC Davis (Collection not delivered yet)

## PLANT INFORMATION

|                   |            |           |          |
|-------------------|------------|-----------|----------|
| <b>Phenology:</b> | 90 %       | 1 %       | 9 %      |
|                   | vegetative | flowering | fruiting |

## SITE INFORMATION

**Habitat description:** Plants are growing primarily in an area that was graded for development more than 20 years ago but never built. Most of the woody plants sprouting in the graded area are *Pinus ponderosa*, *Arctostaphylos viscida*, *Baccharis pilularis*, and *Arctostaphylos nissenana*. *A. nissenana* at this site appears to prefer the areas areas that were graded down to near bedrock. Areas with deeper soil, or natural slopes, have few *A. nissenana* plants.

**Slope:** Near level

Land owner/manager: Private

**Aspect:**

**Site condition + population viability:** Fair

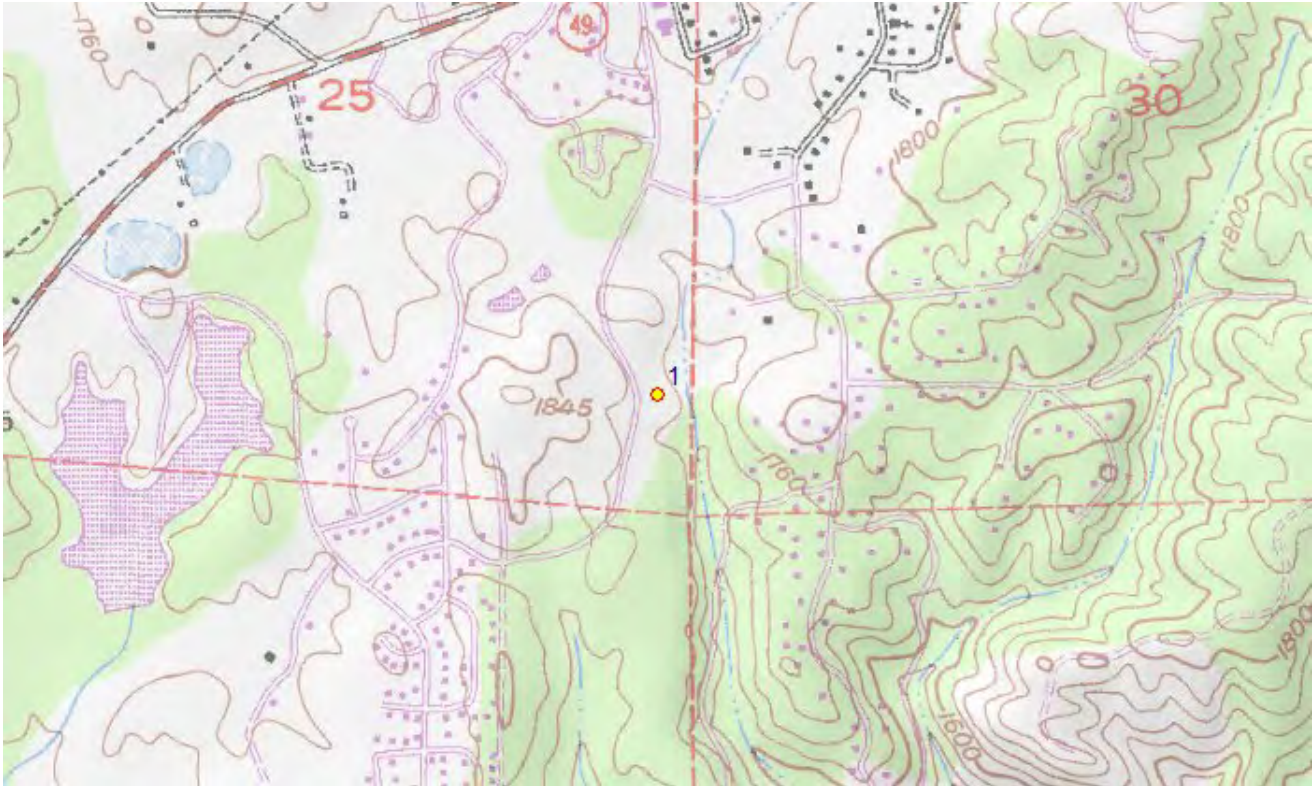
**Immediate & surrounding land use:** Mostly residential and commercial uses on the north, mostly natural oak woodland on the south.

**Visible disturbances:** The area where most of the *A. nissenana* is growing was graded over 20 years ago, and has thin remaining soil over rock. Currently, off-road vehicles continue to disturb the area but have little direct effect on established *A. nissenana*.

**Threats:** Development.

**General comments:**

**MAP INFORMATION**



| ID | County             | 24K Quadrangle  | Elev. (ft) | Latitude NAD83 | Longitude NAD83 | UTM E NAD83 | UTM N NAD83 | UTM Zone |
|----|--------------------|-----------------|------------|----------------|-----------------|-------------|-------------|----------|
|    | El Dorado          | Placerville     | -9999      | 38.68630       | -120.81808      | 689777      | 4284226     | 10       |
| 1  | Public Land Survey | Feature Comment |            |                |                 |             |             |          |
|    | M T10N R10E 25     |                 |            |                |                 |             |             |          |

**The mapped feature is accurate within:** 100 m

**Source of mapped feature:** Point placed manually based on separate map of GPS'd points

**Mapping notes:**

**Location/directions comments:**

**Attachment(s):** [17047StonehengeSprings\\_Fig6BotanicalResMap\(11x17\)\\_Shts1-2\\_v3.pdf](#), The attached map has more specific *A. nissenana* locations.

[This page intentionally blank]

**DORADO OAKS TENTATIVE SUBDIVISION MAP  
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)  
(STATE CLEARINGHOUSE #2019071041)**

**APPENDIX D  
CULTURAL RESOURCES**

## Cultural Resources Appendices

### NOTE TO REVIEWERS:

Cultural resources survey reports contain sensitive information concerning the locations of identified cultural and historic resources that are protected under federal and state law. For this reason, the cultural resources reports referred to in the Draft EIR are not available to the general public. Cultural resources professionals, tribal representatives, and other persons with a need-to-know concerning the specific details of project site's cultural resources should contact the following person for more information:

Tom Purciel, Associate Planner  
2850 Fairlane Court  
Placerville, CA 95667  
Telephone: (530) 621-5355  
dorado\_oaks@edcgov.us



**DORADO OAKS TENTATIVE SUBDIVISION MAP  
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)  
(STATE CLEARINGHOUSE #2019071041)**

**APPENDIX E  
GEOLOGY AND SOILS**



## TECHNICAL MEMORANDUM

**Date:** September 27, 2018  
**To:** El Dorado County  
**From:** Brian Hammer  
**CC:** Greg Stedfield  
**Subject:** Dorado Oaks Drainage and Storm Water Quality Technical Memo for Tentative Map

---

### Introduction

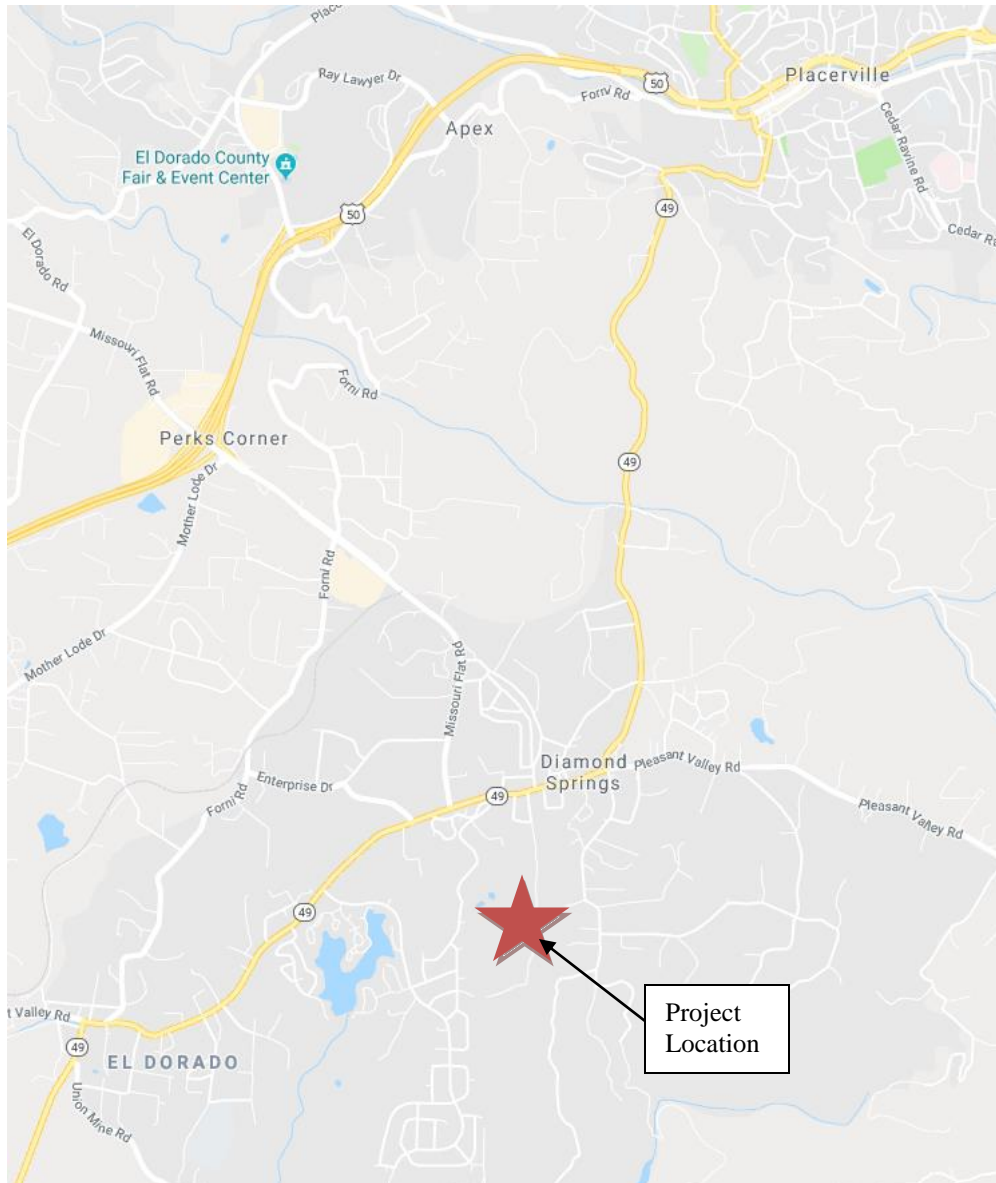
This Technical Memorandum (TM) is a technical drainage assessment for the Dorado Oaks proposed development and provides a tentative map level of analysis for the proposed storm drainage infrastructure and storm water quality facilities.

The contributory area analyzed herein is comprised of approximately 501 acres of which approximately 70 acres are developed with the remainder consisting of off-site and on-site contributory areas not developed for this project. See Appendix A for existing and developed watershed Maps.

The purpose of this technical memo is to:

- Present technical storm drainage and stormwater quality calculations for the proposed project development.
- Conclude that the proposed infrastructure is sufficient to serve the planned development.

The data, modeling, and exhibits herein are based upon the NGVD 29 datum. No previous studies were utilized in the preparation of this report.

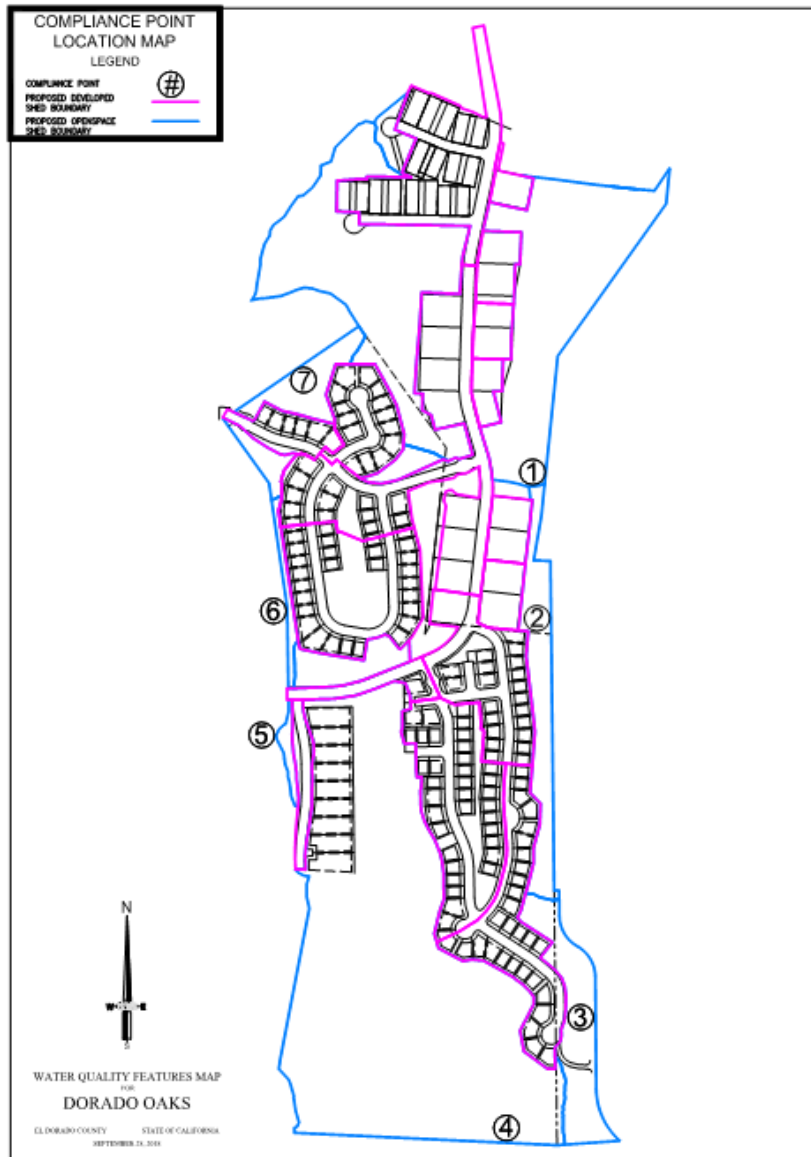


**Figure 1. Project Location**

### Model Assumptions and Design Criteria

HEC-HMS was used to calculate runoff and to perform hydraulic calculations. The site discharges primarily to the south and east of the project with two small watersheds discharging to the West. There are two ridgelines in the project which results in a drainage path to the center of the project which continues south and a drainage path to the west of the project. There are five points of compliance for the project which can be seen on Figure 2. The path to the center and south is considered a single location in which the developed flow will be compared to the existing flows. The west slope of the project drains to compliance point 1 and 2. Compliance point 2 does not collect to a single point at the property line and therefore the flows leaving the site will be summed up and compared against the developed flows leaving the site to the west.

Due to the slope of the watershed it is assumed there will be no backwater condition placed on the swale outfalls.



**Figure 2. Compliance Point Locations**

The hydrologic input and criteria used for the development of this study are summarized below:

- The site consists of USGS Soil Type C Soils (See Figure 3 Below).
- The percent impervious rates used are as follows:
  - Roadway: 95%
  - Single Family Lots:
  - T-Court Lots:
  - Apartments or Condominiums:
  - Open Space or Existing: 2%

The hydraulic input and criteria used for the development of this study are summarized below:

- The following Manning's 'n' values were used:

- Pipes 0.015
- Gutters 0.015
- Asphalt Street Section 0.019
- Minimum pipe velocity of 2.0fps
- Minimum pipe diameter of 12"
- Data was input with information matching the tentative map grading plans.
- The 10-year hydraulic grade line shall stay at a minimum 1-foot below all manhole rims and inlet grates.
- The 100-year event shall be greater than 1 foot below adjacent finished pad elevations.
- 10-year and 100-year mitigation will be achieved for the development.
- Water Quality Swales and Basins will mitigate for the development impacts. No LID is assumed in the sizing of these facilities. If LID is proposed in the improvement plans these water quality features can be reduced in size.

Exhibit 1 displays the sheds, proposed pipe system, and pertinent results. The hydrologic data and parameters that were used to develop the runoff are included in Appendix A.

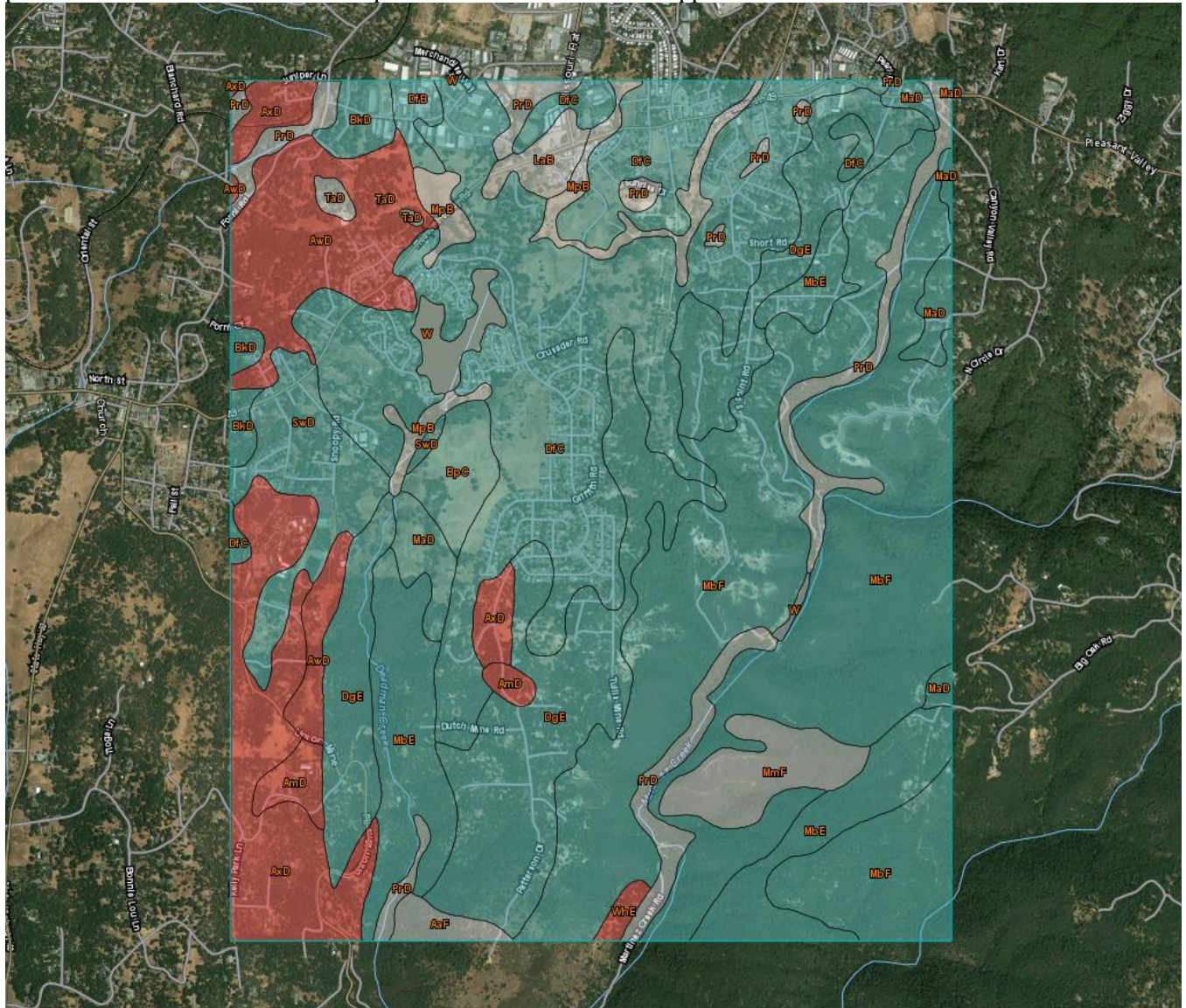


Figure 3. USGS Soil Map (Type C Soils)

### 10-Year Analysis and Results

The 10-year event for existing and proposed conditions was analyzed in HEC-HMS. Table 1 shows the resultant peak flows at each compliance point and the difference in flow leaving the site. The complete data and results are attached as Appendix B.

**Table 1. 10-Year Peak Flows**

| Point of Compliance | Existing (cfs) | Proposed (cfs) | Difference (cfs) |
|---------------------|----------------|----------------|------------------|
| 1                   | 347            | 330            | -17              |
| 2                   | 17             | 13.7           | -3.3             |
| 3                   | 48             | 16             | -32              |
| 4                   | 87             | 87             | 0                |
| 5                   | 4.4            | 12.4           | 8                |
| 6                   | 19             | 13.6           | -5.4             |
| Total               | 522.4          | 472.7          | -49.7            |

### 100-Year Analysis and Results

The 100-year event for existing and proposed conditions was analyzed in HEC-HMS. Table 2 shows the resultant peak flows at each compliance point and the difference in flow leaving the site. The complete data and results are attached as Appendix C.

**Table 2. 100-Year Peak Flows**

| Point of Compliance | Existing (cfs) | Proposed (cfs) | Difference (cfs) |
|---------------------|----------------|----------------|------------------|
| 1                   | 575            | 546            | -29              |
| 2                   | 28             | 21.9           | -6.1             |
| 3                   | 77.6           | 26             | -51.6            |
| 4                   | 141            | 142            | 1                |
| 5                   | 7              | 20.9           | 13.9             |
| 6                   | 19             | 20.7           | 1.7              |
| Total               | 847.6          | 777.5          | -70.1            |

### Storm Water Quality and Hydromodification

The Dorado Oaks proposed development projects create more than one acre of impervious surface. Due to this, it is required to provide storm water treatment for the 85th percentile event.

The first line of defense in maintaining storm water quality is to keep polluted water from commingling with clean water through the use of Source Controls. This can be done using structural and operational measures at the pollutant source. At this time in the development process source control measures are not yet implemented. It is anticipated that source control measures will be proposed for the apartment and T-lot development products. For the tentative map design, it is assumed no source control is proposed to show the largest size of water quality features.

Additionally, several Low Impact Development strategies are anticipated to reduce the post-development flows. These strategies remove pollutants from runoff, attenuate peak flows, and reduce runoff volume. The proposed LID measures include tree planting, disconnected impervious areas, bioretention facilities, and a vegetated swale. Similar to source controls, the LID features anticipated to be installed were not assumed to provide water quality or hydromodification reductions. This results in the greatest sized

facilities for purposes of land allocation. These facilities can be reduced at the improvement plan level analysis when LID feature locations and quantities are finalized.

No LID measures are proposed for off-site areas that contribute to the project's outfall nor for the interim graded pervious areas (future roadway).

The swale was sized to treat the entire stormwater quality flow without accounting for the tree planting, disconnected impervious areas, and bioretention facilities. Appendix D contains the calculations for sizing of the water quality swales which will adequately treat the development.

### Conclusion

The results of the analysis performed for this Technical Memorandum demonstrate that the proposed improvements can be satisfactorily treated and conveyed within the proposed drainage facilities without damage to structures or downstream receiving waters. Further detail on the storm drain system, swale grading, final basin grading, and culverts will be provided with the improvement plan submittal.

# Appendix A



# EXISTING SHED MAP

## LEGEND

EXISTING SHED BOUNDARY 






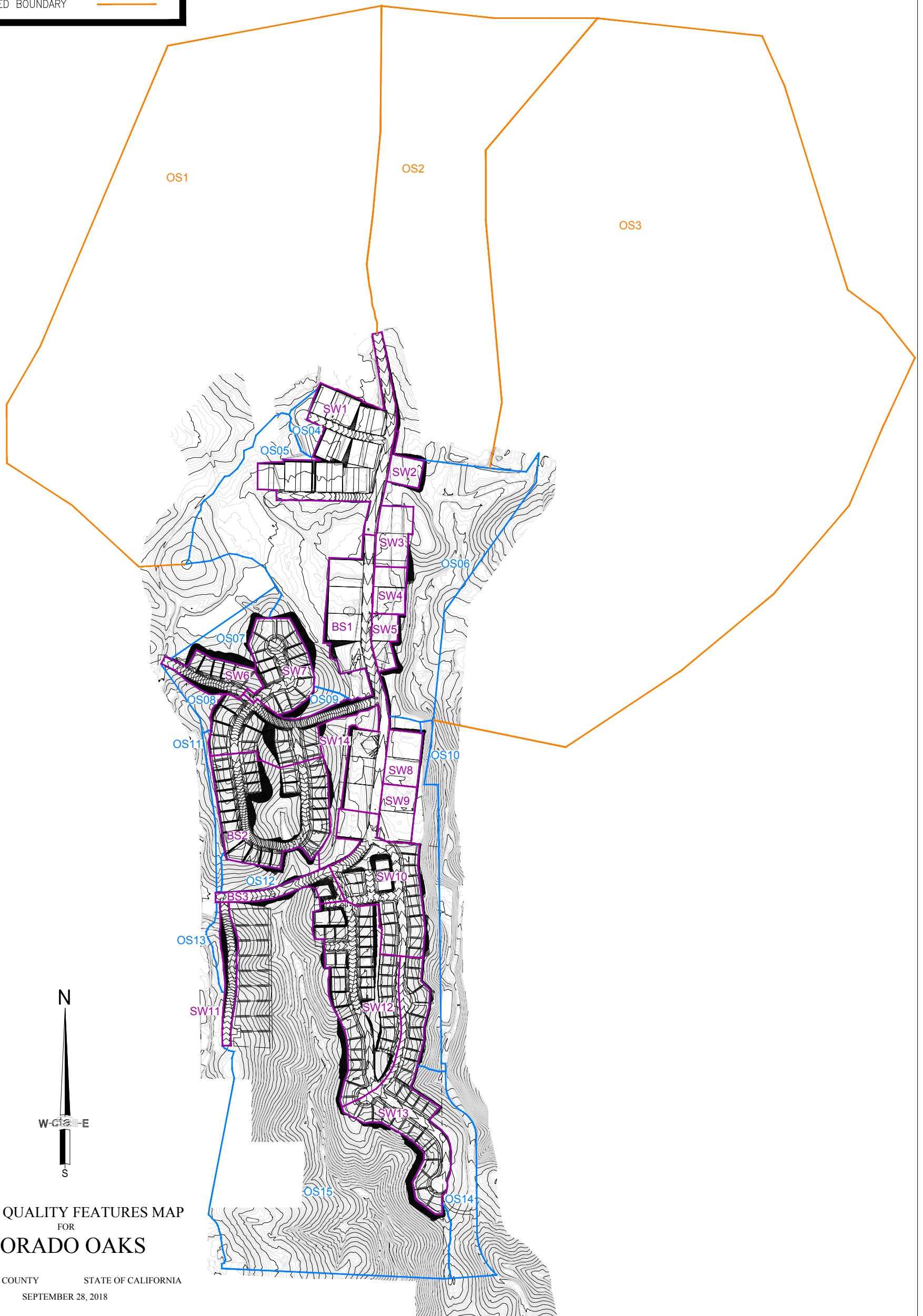
## WATER QUALITY FEATURES MAP FOR DORADO OAKS

EL DORADO COUNTY STATE OF CALIFORNIA  
SEPTEMBER 28, 2018

# PROPOSED SHED MAP

## LEGEND

- PROPOSED DEVELOPED SHED BOUNDARY 
- PROPOSED OPENSOURCE SHED BOUNDARY 
- EXISTING SHED BOUNDARY 



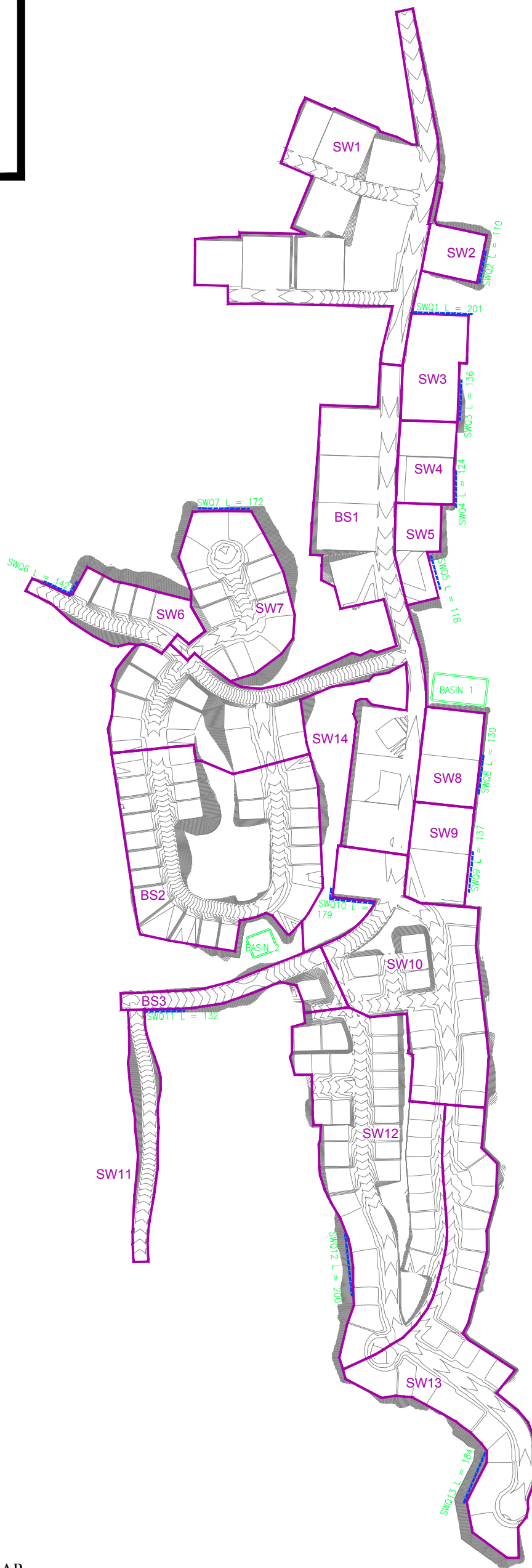
### WATER QUALITY FEATURES MAP FOR DORADO OAKS

EL DORADO COUNTY STATE OF CALIFORNIA  
SEPTEMBER 28, 2018

# PROPOSED DRAINAGE FEATURES MAP

## LEGEND

- STORMWATER QUALITY SWALE ---
- DETENTION BASIN ---
- PROPOSED DEVELOPED  
SHED BOUNDARY ---



## WATER QUALITY FEATURES MAP FOR DORADO OAKS

EL DORADO COUNTY STATE OF CALIFORNIA  
SEPTEMBER 28, 2018

# COMPLIANCE POINT LOCATION MAP

## LEGEND

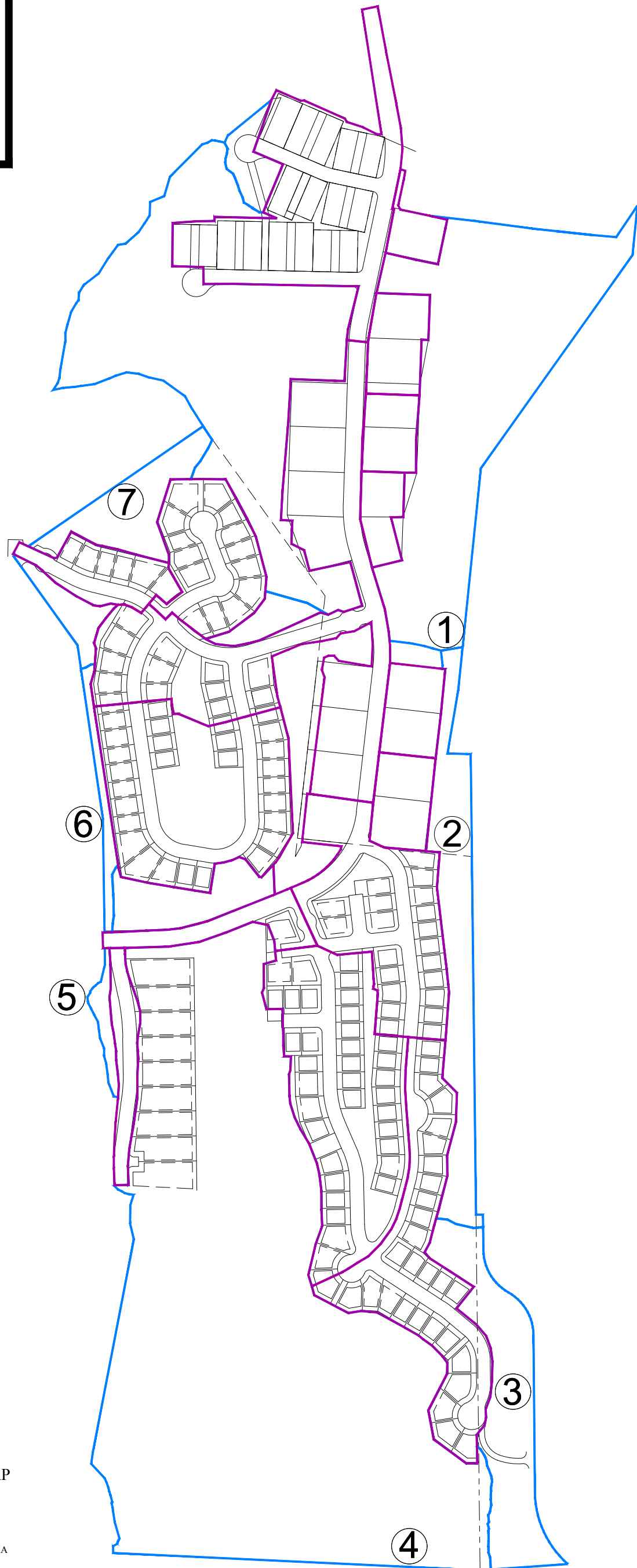
COMPLIANCE POINT



PROPOSED DEVELOPED  
SHED BOUNDARY



PROPOSED OPENSOURCE  
SHED BOUNDARY



## WATER QUALITY FEATURES MAP FOR DORADO OAKS

EL DORADO COUNTY STATE OF CALIFORNIA  
SEPTEMBER 28, 2018

# Appendix B



2) Lag Time : Existing

| SUB BASIN | Travel Time   |          |        |       |           |                      |          |        |       |          |      |              |          |        |        |      |      |                            | Lag time<br>(min) |
|-----------|---------------|----------|--------|-------|-----------|----------------------|----------|--------|-------|----------|------|--------------|----------|--------|--------|------|------|----------------------------|-------------------|
|           | Overland flow |          |        |       |           | Shallow Concentrated |          |        |       |          |      | Channel flow |          |        |        |      |      | total travel time<br>(min) |                   |
|           | Start Elev    | End Elev | Length | Slope | time(min) | Start Elev           | End Elev | Length | Slope | vel(fps) | time | Start Elev   | End Elev | Length | slope  | vel  | time |                            |                   |
| OS1       | 1830          | 1822     | 300    | 0.027 | 21        | 1822                 | 1814     | 265    | 0.030 | 2.80     | 1.6  | 1814.0       | 1768.0   | 2343   | 0.0196 | 2.5  | 15.5 | 37.77                      | <b>22.7</b>       |
| OS2       | 1875          | 1870     | 300    | 0.017 | 25        | 1870                 | 1860     | 265    | 0.038 | 3.13     | 1.4  | 1860.0       | 1800.0   | 1210   | 0.0496 | 4.0  | 5.0  | 31.43                      | <b>18.9</b>       |
| OS3       | 1813          | 1808     | 300    | 0.017 | 25        | 1808                 | 1800     | 265    | 0.030 | 2.80     | 1.6  | 1800.0       | 1748.0   | 2534   | 0.0205 | 2.6  | 16.4 | 42.95                      | <b>25.8</b>       |
| OS5       | 1784          | 1764     | 300    | 0.067 | 14        | 1764                 | 1748     | 539    | 0.030 | 2.78     | 3.2  | 1748.0       | 1747.0   | 1      | 1.0000 | 10.0 | 0.0  | 17.58                      | <b>10.6</b>       |
| OS6       | 1810          | 1800     | 300    | 0.033 | 13        | 1800                 | 1734     | 1210   | 0.055 | 3.77     | 5.4  | 1734.0       | 1698.0   | 1513   | 0.0238 | 2.8  | 9.1  | 27.44                      | <b>16.5</b>       |
| OS4       | 1769          | 1759     | 300    | 0.033 | 13        | 1759                 | 1744     | 838    | 0.018 | 2.16     | 6.5  | 1744.0       | 1743.0   | 1      | 1.0000 | 10.0 | 0.0  | 19.48                      | <b>11.7</b>       |
| OS7       | 1805          | 1784     | 100    | 0.210 | 3         | 1784                 | 1766     | 336    | 0.054 | 3.73     | 1.5  | 1766.0       | 1765.0   | 1      | 1.0000 | 10.0 | 0.0  | 4.09                       | <b>2.5</b>        |
| OS8       | 1774          | 1749     | 166    | 0.151 | 4         | 1749                 | 1746     | 273    | 0.011 | 1.69     | 2.7  | 1746.0       | 1738.0   | 723    | 0.0111 | 1.9  | 6.4  | 13.49                      | <b>8.1</b>        |
| OS9       | 1836          | 1809     | 232    | 0.116 | 6         | 1809                 | 1808     | 1      | 1.000 | 16.13    | 0.0  | 1808.0       | 1807.0   | 1      | 1.0000 | 10.0 | 0.0  | 6.42                       | <b>3.9</b>        |
| OS11      | 1754          | 1691     | 239    | 0.264 | 5         | 1691                 | 1690     | 1      | 1.000 | 16.13    | 0.0  | 1690.0       | 1689.0   | 1      | 1.0000 | 10.0 | 0.0  | 4.74                       | <b>2.8</b>        |
| OS12.1    | 1740          | 1720     | 279    | 0.072 | 9         | 1720                 | 1686     | 584    | 0.058 | 3.89     | 2.5  | 1686.0       | 1685.0   | 1      | 1.0000 | 10.0 | 0.0  | 11.54                      | <b>6.9</b>        |
| OS12.2    | 1740          | 1714     | 300    | 0.087 | 9         | 1714                 | 1676     | 389    | 0.098 | 5.04     | 1.3  | 1676.0       | 1675.0   | 1      | 1.0000 | 10.0 | 0.0  | 10.16                      | <b>6.1</b>        |
| OS10      | 1836          | 1791     | 300    | 0.150 | 7         | 1791                 | 1751     | 494    | 0.081 | 4.59     | 1.8  | 1751.0       | 1622.0   | 2881   | 0.0448 | 3.8  | 12.6 | 21.52                      | <b>12.9</b>       |

Overland time per equation 3-3 TR 55:  $n=0.24$  or  $0.15$ ,  $p=7.0$ ,  $Max L=300$ ,  $Tt=(.007(nL)^.8)/((P)^.5 (s)^.4)$

Shallow concentrated flow velocity based on Figure 3-1, TR-55:  $Length(ft) = 2000$  max

Channel flow based on Manning's equation

Lag time = total travel time x 0.6

3) Loss RatePer SCS Method (now NRCS)

SOIL TYPES C throughout the watershed

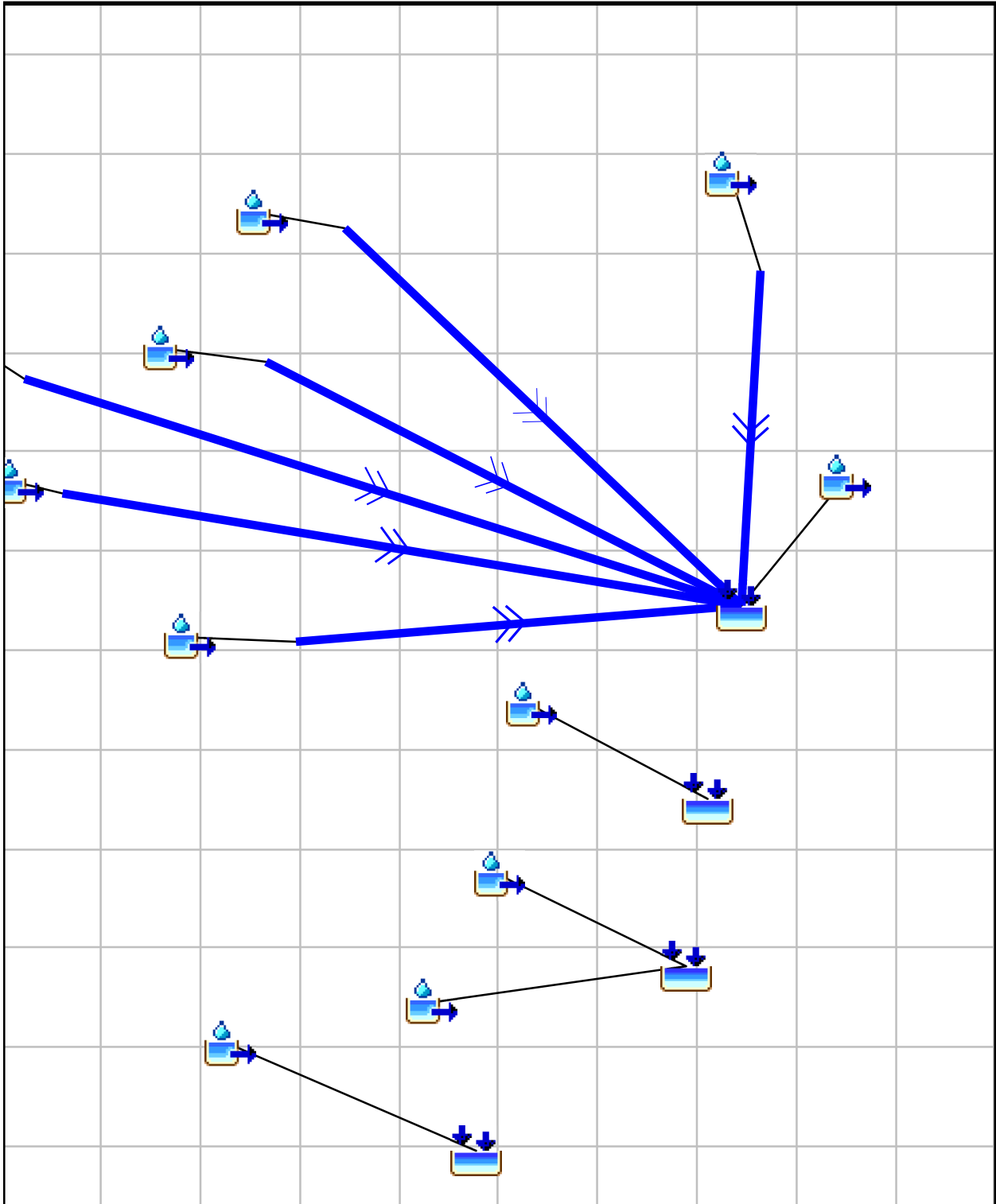
SCS CURVE NUMBER(average moisture C Soil)=81



HEC-HMS

# Project : Dorado Oaks

Basin Model : Dorado Oaks Ex  
Sep 28 13:13:54 PDT 2018





Project: Dorado Oaks Simulation Run: Dorado Oaks 10yr

Start of Run: 01Jan2007, 00:00 Basin Model: Dorado Oaks Ex  
 End of Run: 02Jan2007, 00:00 Meteorologic Model: 10 YR-24IN  
 Compute Time: 28Sep2018, 13:11:49 Control Specifications: 1 DAY

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (IN) |
|--------------------|----------------------------------|----------------------|------------------|-------------|
| OS3                | 0.2817                           | 155.6                | 01Jan2007, 12:28 | 3.05        |
| ROS3-1             | 0.2817                           | 155.3                | 01Jan2007, 12:36 | 3.03        |
| OS1                | 0.1690                           | 99.6                 | 01Jan2007, 12:24 | 3.06        |
| ROS1-1             | 0.1690                           | 99.2                 | 01Jan2007, 12:37 | 3.03        |
| OS2                | 0.0700                           | 45.1                 | 01Jan2007, 12:20 | 3.06        |
| ROS2-1             | 0.0700                           | 44.9                 | 01Jan2007, 12:39 | 3.02        |
| DOE03              | 0.0440                           | 35.5                 | 01Jan2007, 12:13 | 3.08        |
| RDOE3-1            | 0.0440                           | 35.1                 | 01Jan2007, 12:20 | 3.06        |
| DOE05              | 0.0275                           | 29.6                 | 01Jan2007, 12:09 | 3.51        |
| RDOE5-1            | 0.0275                           | 29.1                 | 01Jan2007, 12:17 | 3.49        |
| DOE02              | 0.0260                           | 18.3                 | 01Jan2007, 12:18 | 3.14        |
| DOE01              | 0.0130                           | 11.0                 | 01Jan2007, 12:12 | 3.08        |
| RDOE1-1            | 0.0130                           | 10.8                 | 01Jan2007, 12:28 | 3.05        |
| CP1                | 0.6312                           | 347.4                | 01Jan2007, 12:35 | 3.06        |
| DOE10              | 0.1123                           | 86.6                 | 01Jan2007, 12:14 | 3.08        |
| CP4                | 0.1123                           | 86.6                 | 01Jan2007, 12:14 | 3.08        |
| DOE09              | 0.0380                           | 40.7                 | 01Jan2007, 12:07 | 3.09        |
| DOE08              | 0.0075                           | 7.6                  | 01Jan2007, 12:08 | 3.09        |
| CP3                | 0.0455                           | 48.2                 | 01Jan2007, 12:07 | 3.09        |
| DOE07              | 0.0127                           | 17.2                 | 01Jan2007, 12:04 | 3.09        |
| CP2                | 0.0127                           | 17.2                 | 01Jan2007, 12:04 | 3.09        |
| DOE04              | 0.0121                           | 18.5                 | 01Jan2007, 12:04 | 3.45        |
| CP6                | 0.0121                           | 18.5                 | 01Jan2007, 12:04 | 3.45        |
| DOE06              | 0.0035                           | 4.4                  | 01Jan2007, 12:05 | 3.09        |
| CP5                | 0.0035                           | 4.4                  | 01Jan2007, 12:05 | 3.09        |



2) Lag Time : Developed

| SUB BASIN | Travel Time   |          |        |       |           |                      |          |        |       |          |      |              |          |        |        |     |      |                   | Lag time<br>(min) |
|-----------|---------------|----------|--------|-------|-----------|----------------------|----------|--------|-------|----------|------|--------------|----------|--------|--------|-----|------|-------------------|-------------------|
|           | Overland flow |          |        |       |           | Shallow Concentrated |          |        |       |          |      | Channel flow |          |        |        |     |      | total travel time |                   |
|           | Start Elev    | End Elev | Length | Slope | time(min) | Start Elev           | End Elev | Length | Slope | vel(fps) | time | Start Elev   | End Elev | Length | slope  | vel | time | (min)             |                   |
| OS1       | 1830          | 1822     | 300    | 0.027 | 21        | 1822                 | 1814     | 265    | 0.030 | 2.80     | 1.6  | 1814.0       | 1768.0   | 2343   | 0.0196 | 2.5 | 15.5 | 37.77             | 22.7              |
| OS2       | 1875          | 1870     | 300    | 0.017 | 25        | 1870                 | 1860     | 265    | 0.038 | 3.13     | 1.4  | 1860.0       | 1800.0   | 1210   | 0.0496 | 4.0 | 5.0  | 31.43             | 18.9              |
| OS3       | 1813          | 1808     | 300    | 0.017 | 25        | 1808                 | 1800     | 265    | 0.030 | 2.80     | 1.6  | 1800.0       | 1748.0   | 2534   | 0.0205 | 2.6 | 16.4 | 42.95             | 25.8              |
| OS4       | 1780          | 1768     | 100    | 0.120 | 5         | 1768                 | 1768     | 0      |       |          | 0.0  | 1768.0       | 1768.0   | 0      |        |     | -    | 4.71              | 2.8               |
| OS5       | 1822          | 1790     | 300    | 0.107 | 12        | 1790                 | 1770     | 500    | 0.040 | 3.23     | 2.6  | 1770.0       | 1754.0   | 510    | 0.0314 | 7.4 | 1.2  | 15.63             | 9.4               |
| OS6       | 1754          | 1720     | 300    | 0.113 | 12        | 1720                 | 1710     | 300    | 0.033 | 2.95     | 1.7  | 1710.0       | 1700.0   | 940    | 0.0106 | 4.3 | 3.7  | 16.96             | 10.2              |
| OS7       | 1785          | 1760     | 200    | 0.125 | 8         | 1760                 | 1740     | 87     | 0.230 | 7.74     | 0.2  | 1740.0       | 1740.0   | 0      | 0.0000 | 0.0 | -    | 8.26              | 5.0               |
| OS8       | 1810          | 1790     | 200    | 0.100 | 9         | 1790                 | 1790     | 0      | 0.000 | 0.00     | 0.0  | 1790.0       | 1790.0   | 0      | 0.0000 | 0.0 | -    | 8.82              | 5.3               |
| OS9       | 1800          | 1776     | 100    | 0.240 | 4         | 1776                 | 1760     | 270    | 0.059 | 3.93     | 1.1  | 1760.0       | 1760.0   | 0      | 0.0000 | 0.0 | -    | 4.72              | 2.8               |
| OS10      | 1750          | 1710     | 161    | 0.248 | 5         | 1710                 | 1710     | 0      | 0.000 | 0.00     | 0.0  | 1710.0       | 1710.0   | 0      | 0.0000 | 0.0 | -    | 5.16              | 3.1               |
| OS11      | 1815          | 1805     | 30     | 0.333 | 1         | 1805                 | 1800     | 0      | 0.000 | 0.00     | 0.0  | 1800.0       | 1800.0   | 0      | 0.0000 | 0.0 | -    | 1.20              | 0.7               |
| OS12      | 1761          | 1748     | 300    | 0.043 | 17        | 1748                 | 1738     | 152    | 0.066 | 4.14     | 0.6  | 1738.0       | 1738.0   | 0      | 0.0000 | 0.0 | -    | 17.67             | 10.6              |
| OS13      | 1790          | 1775     | 95     | 0.158 | 4         | 1775                 | 1775     | 0      | 0.000 | 0.00     | 0.0  | 1775.0       | 1775.0   | 0      | 0.0000 | 0.0 | -    | 4.05              | 2.4               |
| OS14      | 1734          | 1714     | 157    | 0.127 | 7         | 1714                 | 1714     | 0      | 0.000 | 0.00     | 0.0  | 1714.0       | 1714.0   | 0      | 0.0000 | 0.0 | -    | 6.60              | 4.0               |
| OS15      | 1760          | 1732     | 300    | 0.093 | 13        | 1732                 | 1732     | 0      | 0.000 | 0.00     | 0.0  | 1732.0       | 1624.0   | 2315   | 0.0467 | 9.0 | 4.3  | 16.85             | 10.1              |
| SW1       | 1768          | 1767     | 100    | 0.010 | 13        | 1767                 | 1754     | 950    | 0.014 | 1.89     | 8.4  | 1754.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 21.12             | 12.7              |
| SW2       | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1753     | 88     | 0.011 | 1.72     | 0.9  | 1753.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 13.58             | 8.2               |
| SW3       | 1754          | 1753     | 100    | 0.010 | 13        | 1753                 | 1752     | 88     | 0.011 | 1.72     | 0.9  | 1752.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 13.58             | 8.2               |
| SW4       | 1752          | 1751     | 100    | 0.010 | 13        | 1751                 | 1750     | 90     | 0.011 | 1.70     | 0.9  | 1750.0       | 1750.0   | 0      | 0.0000 | 0.0 | -    | 13.61             | 8.2               |
| SW5       | 1750          | 1749     | 100    | 0.010 | 13        | 1749                 | 1748     | 88     | 0.011 | 1.72     | 0.9  | 1748.0       | 1748.0   | 0      | 0.0000 | 0.0 | -    | 13.58             | 8.2               |
| SW6       | 1805          | 1804     | 87     | 0.011 | 11        | 1804                 | 1780     | 500    | 0.048 | 3.53     | 2.4  | 1780.0       | 1780.0   | 0      | 0.0000 | 0.0 | -    | 13.13             | 7.9               |
| SW7       | 1803          | 1802     | 100    | 0.010 | 13        | 1802                 | 1789     | 590    | 0.022 | 2.39     | 4.1  | 1789.0       | 1789.0   | 0      | 0.0000 | 0.0 | -    | 16.84             | 10.1              |
| SW8       | 1744          | 1743     | 100    | 0.010 | 13        | 1743                 | 1742     | 90     | 0.011 | 1.70     | 0.9  | 1742.0       | 1742.0   | 0      | 0.0000 | 0.0 | -    | 13.61             | 8.2               |
| SW9       | 1744          | 1743     | 100    | 0.010 | 13        | 1743                 | 1742     | 90     | 0.011 | 1.70     | 0.9  | 1742.0       | 1742.0   | 0      | 0.0000 | 0.0 | -    | 13.61             | 8.2               |
| SW10      | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1744     | 836    | 0.012 | 1.76     | 7.9  | 1744.0       | 1744.0   | 0      | 0.0000 | 0.0 | -    | 20.63             | 12.4              |
| SW11      | 1798          | 1797     | 24     | 0.042 | 2         | 1797                 | 1761     | 847    | 0.043 | 3.33     | 4.2  | 1761.0       | 1761.0   | 0      | 0.0000 | 0.0 | -    | 6.54              | 3.9               |
| SW12      | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1750     | 130    | 0.031 | 2.83     | 0.8  | 1750.0       | 1734.0   | 1000   | 0.0160 | 5.3 | 3.2  | 16.67             | 10.0              |
| SW13      | 1753          | 1752     | 100    | 0.010 | 13        | 1752                 | 1746     | 400    | 0.015 | 1.98     | 3.4  | 1746.0       | 1734.0   | 1200   | 0.0100 | 4.2 | 4.8  | 20.92             | 12.6              |
| BS1       | 1754          | 1753     | 100    | 0.010 | 13        | 1753                 | 1742     | 994    | 0.011 | 1.70     | 9.8  | 1742.0       | 1768.0   | 0      | 0.0000 | 0.0 | -    | 22.49             | 13.5              |
| BS2       | 1817          | 1816     | 100    | 0.010 | 13        | 1816                 | 1768     | 710    | 0.068 | 4.20     | 2.8  | 1768.0       | 1768.0   | 0      | 0.0000 | 0.0 | -    | 15.55             | 9.3               |
| BS3       | 1762          | 1761     | 10     | 0.100 | 1         | 1761                 | 1748     | 417    | 0.031 | 2.85     | 2.4  | 1748.0       | 1748.0   | 0      | 0.0000 | 0.0 | -    | 3.24              | 1.9               |
| SW14      | 1779          | 1757     | 100    | 0.220 | 4         | 1757                 | 1749     | 720    | 0.011 | 1.70     | 7.1  | 1749.0       | 1749.0   | 0      | 0.0000 | 0.0 | -    | 10.75             | 6.5               |

Overland time per equation 3-3 TR 55:  $n=0.24$  or  $0.15$ ,  $p=7.0$ ,  $Max L=300$ ,  $Tt=(.007(nL)^.8)/((P)^.5 (s)^.4)$

Shallow concentrated flow velocity based on Figure 3-1, TR-55:  $Length(ft) = 2000$  max

Channel flow based on Manning's equation

Lag time = total travel time x 0.6

3) Loss RatePer SCS Method (now NRCS)

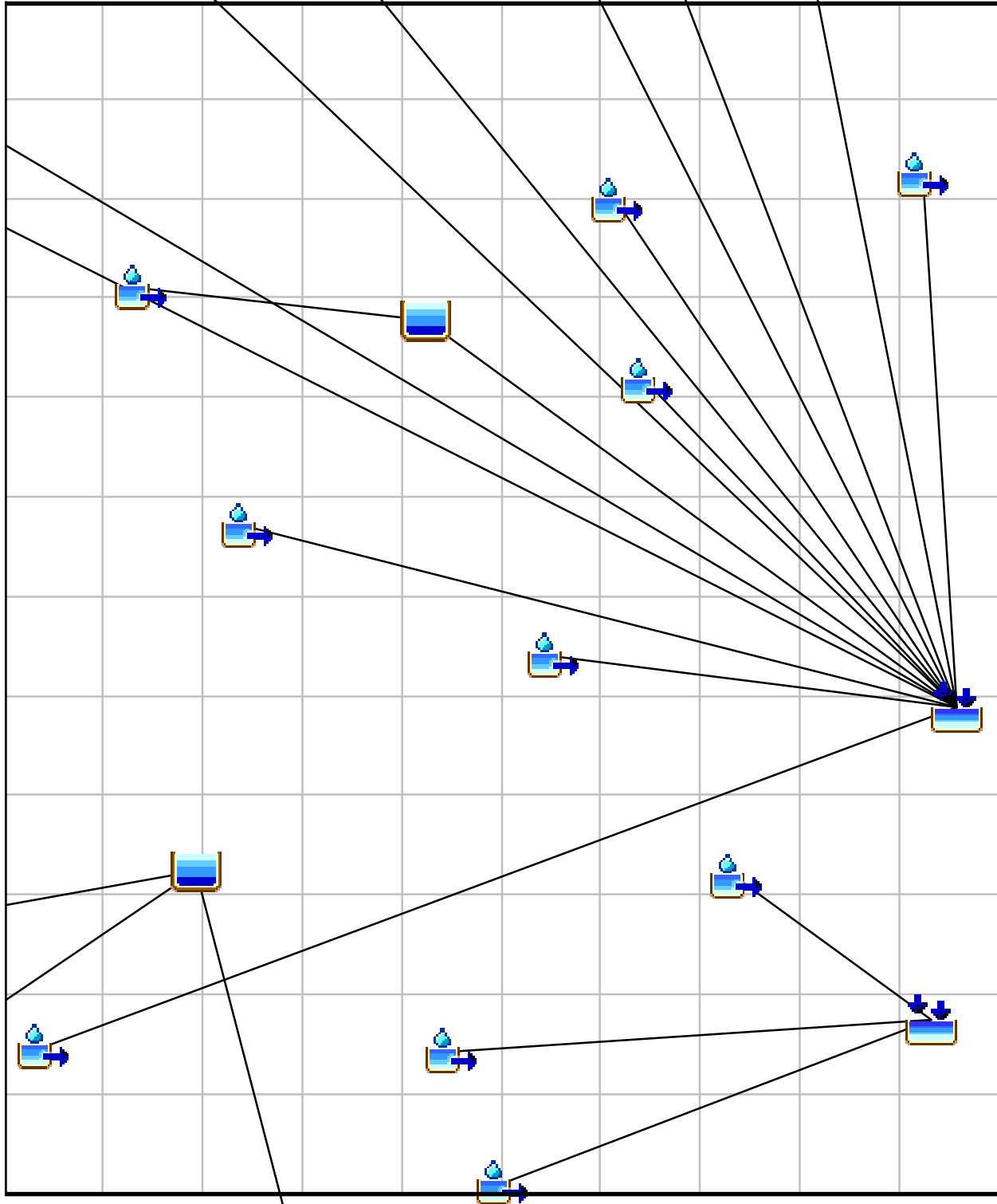
SOIL TYPES C throughout the watershed

SCS CURVE NUMBER(average moisture C Soil)= 81



HEC-HMS

**Project : Dorado Oaks**  
Basin Model : Dorado Oaks Dev  
Sep 28 13:20:09 PDT 2018



Project: Dorado Oaks Simulation Run: DO Dev 10yr

Start of Run: 01Jan2007, 00:00 Basin Model: Dorado Oaks Dev  
 End of Run: 02Jan2007, 00:00 Meteorologic Model: 10 YR-24IN  
 Compute Time: 28Sep2018, 13:24:10 Control Specifications:1 DAY

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (AC-FT) |
|--------------------|----------------------------------|----------------------|------------------|----------------|
| OS03               | 0.2817                           | 155.7                | 01Jan2007, 12:28 | 45.9           |
| OS01               | 0.169                            | 90.0                 | 01Jan2007, 12:30 | 27.5           |
| OS02               | 0.07                             | 41.4                 | 01Jan2007, 12:21 | 9.9            |
| OS04               | 0.0244                           | 33.9                 | 01Jan2007, 12:04 | 4.1            |
| OS05               | 0.0244                           | 21.7                 | 01Jan2007, 12:10 | 4.0            |
| OS06               | 0.023                            | 19.7                 | 01Jan2007, 12:11 | 3.8            |
| BS01               | 0.0199                           | 19.5                 | 01Jan2007, 12:14 | 4.6            |
| DB01               | 0.0199                           | 7.1                  | 01Jan2007, 12:40 | 4.5            |
| SW01               | 0.0142                           | 14.5                 | 01Jan2007, 12:14 | 3.4            |
| SW14               | 0.0044                           | 3.1                  | 01Jan2007, 12:15 | 0.6            |
| SW03               | 0.0026                           | 3.2                  | 01Jan2007, 12:09 | 0.6            |
| SW04               | 0.0019                           | 2.3                  | 01Jan2007, 12:09 | 0.4            |
| SW05               | 0.0016                           | 2.0                  | 01Jan2007, 12:09 | 0.4            |
| SW02               | 0.0012                           | 1.5                  | 01Jan2007, 12:09 | 0.3            |
| OS09               | 0.0012                           | 1.5                  | 01Jan2007, 12:04 | 0.2            |
| CP1                | 0.6395                           | 330.4                | 01Jan2007, 12:24 | 105.4          |
| OS15               | 0.0692                           | 54.8                 | 01Jan2007, 12:11 | 9.8            |
| BS02               | 0.0138                           | 14.9                 | 01Jan2007, 12:10 | 2.9            |
| BS03               | 0.0023                           | 2.9                  | 01Jan2007, 12:09 | 0.6            |
| DB02               | 0.0161                           | 3.8                  | 01Jan2007, 12:55 | 3.1            |
| SW12               | 0.0145                           | 15.1                 | 01Jan2007, 12:11 | 3.0            |
| SW10               | 0.0105                           | 9.9                  | 01Jan2007, 12:13 | 2.2            |
| OS12               | 0.0032                           | 2.5                  | 01Jan2007, 12:12 | 0.5            |
| SW11               | 0.0022                           | 3.7                  | 01Jan2007, 12:05 | 0.5            |
| CP4                | 0.1157                           | 86.8                 | 01Jan2007, 12:11 | 19.1           |
| SW13               | 0.0111                           | 10.4                 | 01Jan2007, 12:14 | 2.3            |
| OS14               | 0.0079                           | 9.0                  | 01Jan2007, 12:05 | 1.1            |

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (AC-FT) |
|--------------------|----------------------------------|----------------------|------------------|----------------|
| CP3                | 0.0190                           | 16.0                 | 01Jan2007, 12:06 | 3.4            |
| SW07               | 0.006                            | 6.3                  | 01Jan2007, 12:11 | 1.3            |
| OS07               | 0.0038                           | 4.4                  | 01Jan2007, 12:06 | 0.6            |
| SW06               | 0.0032                           | 3.8                  | 01Jan2007, 12:09 | 0.7            |
| CP6                | 0.0130                           | 13.6                 | 01Jan2007, 12:08 | 2.6            |
| OS10               | 0.0075                           | 9.1                  | 01Jan2007, 12:04 | 1.1            |
| SW09               | 0.0025                           | 3.1                  | 01Jan2007, 12:09 | 0.6            |
| SW08               | 0.0023                           | 2.8                  | 01Jan2007, 12:09 | 0.5            |
| CP2                | 0.0123                           | 13.7                 | 01Jan2007, 12:05 | 2.2            |
| OS13               | 0.008                            | 10.3                 | 01Jan2007, 12:04 | 1.1            |
| OS08               | 0.0014                           | 1.3                  | 01Jan2007, 12:10 | 0.2            |
| OS11               | 0.0011                           | 1.5                  | 01Jan2007, 12:03 | 0.2            |
| CP5                | 0.0105                           | 12.4                 | 01Jan2007, 12:03 | 1.5            |

# Appendix C





2) Lag Time : Existing

| SUB BASIN | Travel Time   |          |        |       |           |                      |          |        |       |          |      |              |          |        |        |      |      |                            |             | Lag time<br>(min) |
|-----------|---------------|----------|--------|-------|-----------|----------------------|----------|--------|-------|----------|------|--------------|----------|--------|--------|------|------|----------------------------|-------------|-------------------|
|           | Overland flow |          |        |       |           | Shallow Concentrated |          |        |       |          |      | Channel flow |          |        |        |      |      | total travel time<br>(min) |             |                   |
|           | Start Elev    | End Elev | Length | Slope | time(min) | Start Elev           | End Elev | Length | Slope | vel(fps) | time | Start Elev   | End Elev | Length | slope  | vel  | time |                            |             |                   |
| OS1       | 1830          | 1822     | 300    | 0.027 | 21        | 1822                 | 1814     | 265    | 0.030 | 2.80     | 1.6  | 1814.0       | 1768.0   | 2343   | 0.0196 | 2.5  | 15.5 | 37.77                      | <b>22.7</b> |                   |
| OS2       | 1875          | 1870     | 300    | 0.017 | 25        | 1870                 | 1860     | 265    | 0.038 | 3.13     | 1.4  | 1860.0       | 1800.0   | 1210   | 0.0496 | 4.0  | 5.0  | 31.43                      | <b>18.9</b> |                   |
| OS3       | 1813          | 1808     | 300    | 0.017 | 25        | 1808                 | 1800     | 265    | 0.030 | 2.80     | 1.6  | 1800.0       | 1748.0   | 2534   | 0.0205 | 2.6  | 16.4 | 42.95                      | <b>25.8</b> |                   |
| OS5       | 1784          | 1764     | 300    | 0.067 | 14        | 1764                 | 1748     | 539    | 0.030 | 2.78     | 3.2  | 1748.0       | 1747.0   | 1      | 1.0000 | 10.0 | 0.0  | 17.58                      | <b>10.6</b> |                   |
| OS6       | 1810          | 1800     | 300    | 0.033 | 13        | 1800                 | 1734     | 1210   | 0.055 | 3.77     | 5.4  | 1734.0       | 1698.0   | 1513   | 0.0238 | 2.8  | 9.1  | 27.44                      | <b>16.5</b> |                   |
| OS4       | 1769          | 1759     | 300    | 0.033 | 13        | 1759                 | 1744     | 838    | 0.018 | 2.16     | 6.5  | 1744.0       | 1743.0   | 1      | 1.0000 | 10.0 | 0.0  | 19.48                      | <b>11.7</b> |                   |
| OS7       | 1805          | 1784     | 100    | 0.210 | 3         | 1784                 | 1766     | 336    | 0.054 | 3.73     | 1.5  | 1766.0       | 1765.0   | 1      | 1.0000 | 10.0 | 0.0  | 4.09                       | <b>2.5</b>  |                   |
| OS8       | 1774          | 1749     | 166    | 0.151 | 4         | 1749                 | 1746     | 273    | 0.011 | 1.69     | 2.7  | 1746.0       | 1738.0   | 723    | 0.0111 | 1.9  | 6.4  | 13.49                      | <b>8.1</b>  |                   |
| OS9       | 1836          | 1809     | 232    | 0.116 | 6         | 1809                 | 1808     | 1      | 1.000 | 16.13    | 0.0  | 1808.0       | 1807.0   | 1      | 1.0000 | 10.0 | 0.0  | 6.42                       | <b>3.9</b>  |                   |
| OS11      | 1754          | 1691     | 239    | 0.264 | 5         | 1691                 | 1690     | 1      | 1.000 | 16.13    | 0.0  | 1690.0       | 1689.0   | 1      | 1.0000 | 10.0 | 0.0  | 4.74                       | <b>2.8</b>  |                   |
| OS12.1    | 1740          | 1720     | 279    | 0.072 | 9         | 1720                 | 1686     | 584    | 0.058 | 3.89     | 2.5  | 1686.0       | 1685.0   | 1      | 1.0000 | 10.0 | 0.0  | 11.54                      | <b>6.9</b>  |                   |
| OS12.2    | 1740          | 1714     | 300    | 0.087 | 9         | 1714                 | 1676     | 389    | 0.098 | 5.04     | 1.3  | 1676.0       | 1675.0   | 1      | 1.0000 | 10.0 | 0.0  | 10.16                      | <b>6.1</b>  |                   |
| OS10      | 1836          | 1791     | 300    | 0.150 | 7         | 1791                 | 1751     | 494    | 0.081 | 4.59     | 1.8  | 1751.0       | 1622.0   | 2881   | 0.0448 | 3.8  | 12.6 | 21.52                      | <b>12.9</b> |                   |

Overland time per equation 3-3 TR 55:  $n=0.24$  or  $0.15$ ,  $p=7.0$ ,  $Max L=300$ ,  $Tt=(.007(nL)^{.8})/((P)^{.5} (s)^{.4})$

Shallow concentrated flow velocity based on Figure 3-1, TR-55:  $Length(ft) = 2000$  max

Channel flow based on Manning's equation

Lag time = total travel time x 0.6

**3) Loss RatePer SCS Method (now NRCS)**

SOIL TYPES C throughout the watershed

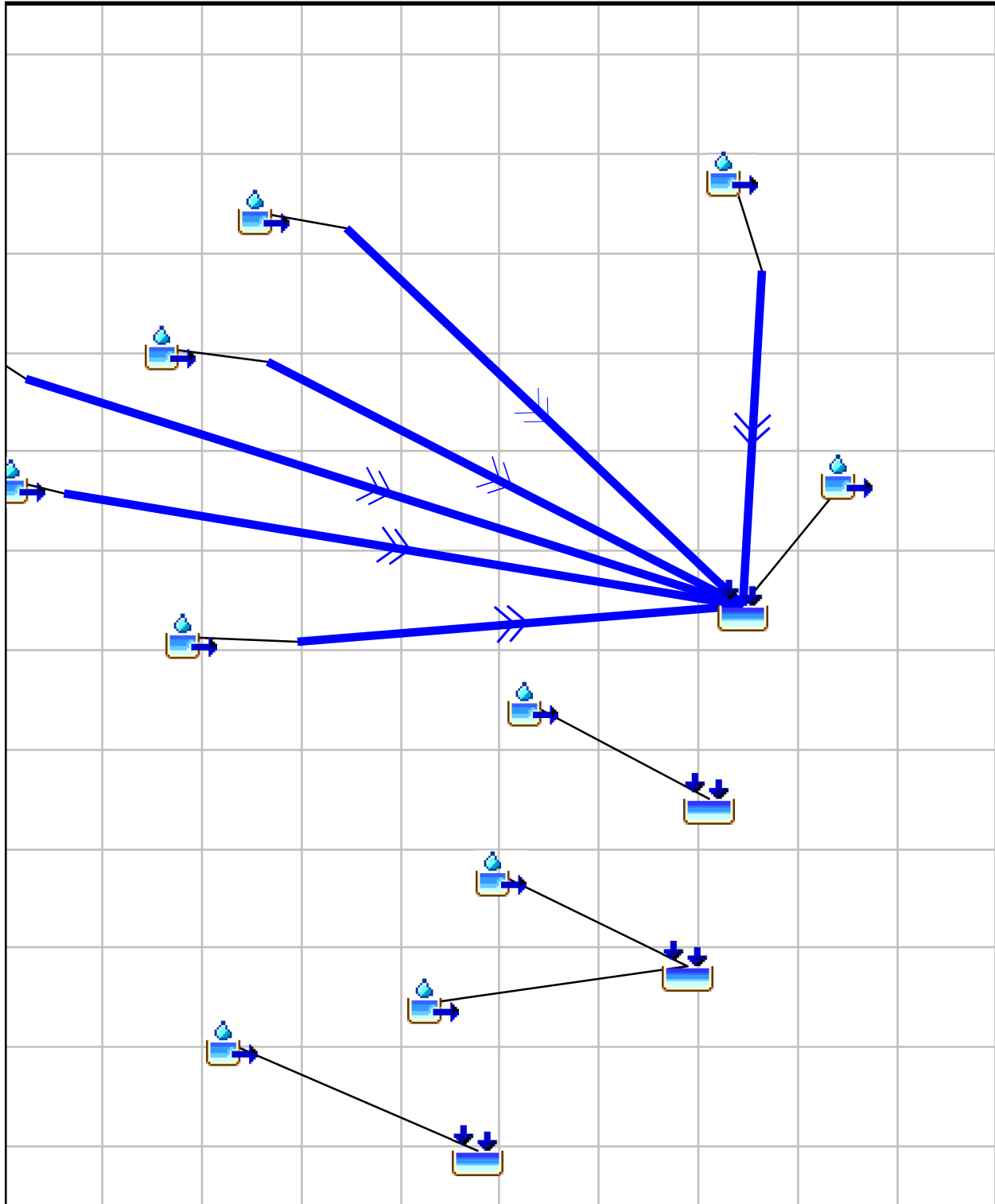
SCS CURVE NUMBER(average moisture C Soil)=81



HEC-HMS

# Project : Dorado Oaks

Basin Model : Dorado Oaks Ex  
Sep 28 13:13:54 PDT 2018



Project: Dorado Oaks Simulation Run: Dorado Oaks 100-yr

Start of Run: 01Jan2007, 00:00 Basin Model: Dorado Oaks Ex  
 End of Run: 02Jan2007, 00:00 Meteorologic Model: 100 YR-24IN  
 Compute Time: 28Sep2018, 13:11:26 Control Specifications: 1 DAY

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (AC-FT) |
|--------------------|----------------------------------|----------------------|------------------|----------------|
| OS3                | 0.2817                           | 256.6                | 01Jan2007, 12:28 | 77.0           |
| ROS3-1             | 0.2817                           | 256.2                | 01Jan2007, 12:35 | 76.6           |
| OS1                | 0.169                            | 163.7                | 01Jan2007, 12:24 | 46.3           |
| ROS1-1             | 0.169                            | 163.2                | 01Jan2007, 12:36 | 45.9           |
| OS2                | 0.070                            | 73.8                 | 01Jan2007, 12:20 | 19.2           |
| ROS2-1             | 0.070                            | 73.5                 | 01Jan2007, 12:37 | 19.0           |
| DOE03              | 0.044                            | 57.4                 | 01Jan2007, 12:13 | 12.1           |
| RDOE3-1            | 0.044                            | 57.0                 | 01Jan2007, 12:19 | 12.1           |
| DOE05              | 0.0275                           | 45.8                 | 01Jan2007, 12:09 | 8.4            |
| RDOE5-1            | 0.0275                           | 45.0                 | 01Jan2007, 12:16 | 8.3            |
| DOE02              | 0.026                            | 29.6                 | 01Jan2007, 12:18 | 7.3            |
| DOE01              | 0.013                            | 17.7                 | 01Jan2007, 12:12 | 3.6            |
| RDOE1-1            | 0.013                            | 17.6                 | 01Jan2007, 12:26 | 3.6            |
| CP1                | 0.6312                           | 574.9                | 01Jan2007, 12:33 | 172.6          |
| DOE10              | 0.1123                           | 140.5                | 01Jan2007, 12:14 | 30.9           |
| CP4                | 0.1123                           | 140.5                | 01Jan2007, 12:14 | 30.9           |
| DOE09              | 0.038                            | 65.4                 | 01Jan2007, 12:07 | 10.5           |
| DOE08              | 0.0075                           | 12.3                 | 01Jan2007, 12:08 | 2.1            |
| CP3                | 0.0455                           | 77.6                 | 01Jan2007, 12:07 | 12.6           |
| DOE07              | 0.0127                           | 27.6                 | 01Jan2007, 12:04 | 3.5            |
| CP2                | 0.0127                           | 27.6                 | 01Jan2007, 12:04 | 3.5            |
| DOE04              | 0.0121                           | 28.7                 | 01Jan2007, 12:04 | 3.6            |
| CP6                | 0.0121                           | 28.7                 | 01Jan2007, 12:04 | 3.6            |
| DOE06              | 0.0035                           | 7.0                  | 01Jan2007, 12:05 | 1.0            |
| CP5                | 0.0035                           | 7.0                  | 01Jan2007, 12:05 | 1.0            |



2) Lag Time : Developed

| SUB BASIN | Travel Time   |          |        |       |           |                      |          |        |       |          |      |              |          |        |        |     |      | Lag time<br>(min) |                            |
|-----------|---------------|----------|--------|-------|-----------|----------------------|----------|--------|-------|----------|------|--------------|----------|--------|--------|-----|------|-------------------|----------------------------|
|           | Overland flow |          |        |       |           | Shallow Concentrated |          |        |       |          |      | Channel flow |          |        |        |     |      |                   | total travel time<br>(min) |
|           | Start Elev    | End Elev | Length | Slope | time(min) | Start Elev           | End Elev | Length | Slope | vel(fps) | time | Start Elev   | End Elev | Length | slope  | vel | time |                   |                            |
| OS1       | 1830          | 1822     | 300    | 0.027 | 21        | 1822                 | 1814     | 265    | 0.030 | 2.80     | 1.6  | 1814.0       | 1768.0   | 2343   | 0.0196 | 2.5 | 15.5 | 37.77             | 22.7                       |
| OS2       | 1875          | 1870     | 300    | 0.017 | 25        | 1870                 | 1860     | 265    | 0.038 | 3.13     | 1.4  | 1860.0       | 1800.0   | 1210   | 0.0496 | 4.0 | 5.0  | 31.43             | 18.9                       |
| OS3       | 1813          | 1808     | 300    | 0.017 | 25        | 1808                 | 1800     | 265    | 0.030 | 2.80     | 1.6  | 1800.0       | 1748.0   | 2534   | 0.0205 | 2.6 | 16.4 | 42.95             | 25.8                       |
| OS4       | 1780          | 1768     | 100    | 0.120 | 5         | 1768                 | 1768     | 0      |       |          | 0.0  | 1768.0       | 1768.0   | 0      |        |     | -    | 4.71              | 2.8                        |
| OS5       | 1822          | 1790     | 300    | 0.107 | 12        | 1790                 | 1770     | 500    | 0.040 | 3.23     | 2.6  | 1770.0       | 1754.0   | 510    | 0.0314 | 7.4 | 1.2  | 15.63             | 9.4                        |
| OS6       | 1754          | 1720     | 300    | 0.113 | 12        | 1720                 | 1710     | 300    | 0.033 | 2.95     | 1.7  | 1710.0       | 1700.0   | 940    | 0.0106 | 4.3 | 3.7  | 16.96             | 10.2                       |
| OS7       | 1785          | 1760     | 200    | 0.125 | 8         | 1760                 | 1740     | 87     | 0.230 | 7.74     | 0.2  | 1740.0       | 1740.0   | 0      | 0.0000 | 0.0 | -    | 8.26              | 5.0                        |
| OS8       | 1810          | 1790     | 200    | 0.100 | 9         | 1790                 | 1790     | 0      | 0.000 | 0.00     | 0.0  | 1790.0       | 1790.0   | 0      | 0.0000 | 0.0 | -    | 8.82              | 5.3                        |
| OS9       | 1800          | 1776     | 100    | 0.240 | 4         | 1776                 | 1760     | 270    | 0.059 | 3.93     | 1.1  | 1760.0       | 1760.0   | 0      | 0.0000 | 0.0 | -    | 4.72              | 2.8                        |
| OS10      | 1750          | 1710     | 161    | 0.248 | 5         | 1710                 | 1710     | 0      | 0.000 | 0.00     | 0.0  | 1710.0       | 1710.0   | 0      | 0.0000 | 0.0 | -    | 5.16              | 3.1                        |
| OS11      | 1815          | 1805     | 30     | 0.333 | 1         | 1805                 | 1800     | 0      | 0.000 | 0.00     | 0.0  | 1800.0       | 1800.0   | 0      | 0.0000 | 0.0 | -    | 1.20              | 0.7                        |
| OS12      | 1761          | 1748     | 300    | 0.043 | 17        | 1748                 | 1738     | 152    | 0.066 | 4.14     | 0.6  | 1738.0       | 1738.0   | 0      | 0.0000 | 0.0 | -    | 17.67             | 10.6                       |
| OS13      | 1790          | 1775     | 95     | 0.158 | 4         | 1775                 | 1775     | 0      | 0.000 | 0.00     | 0.0  | 1775.0       | 1775.0   | 0      | 0.0000 | 0.0 | -    | 4.05              | 2.4                        |
| OS14      | 1734          | 1714     | 157    | 0.127 | 7         | 1714                 | 1714     | 0      | 0.000 | 0.00     | 0.0  | 1714.0       | 1714.0   | 0      | 0.0000 | 0.0 | -    | 6.60              | 4.0                        |
| OS15      | 1760          | 1732     | 300    | 0.093 | 13        | 1732                 | 1732     | 0      | 0.000 | 0.00     | 0.0  | 1732.0       | 1624.0   | 2315   | 0.0467 | 9.0 | 4.3  | 16.85             | 10.1                       |
| SW1       | 1768          | 1767     | 100    | 0.010 | 13        | 1767                 | 1754     | 950    | 0.014 | 1.89     | 8.4  | 1754.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 21.12             | 12.7                       |
| SW2       | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1753     | 88     | 0.011 | 1.72     | 0.9  | 1753.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 13.58             | 8.2                        |
| SW3       | 1754          | 1753     | 100    | 0.010 | 13        | 1753                 | 1752     | 88     | 0.011 | 1.72     | 0.9  | 1752.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 13.58             | 8.2                        |
| SW4       | 1752          | 1751     | 100    | 0.010 | 13        | 1751                 | 1750     | 90     | 0.011 | 1.70     | 0.9  | 1750.0       | 1750.0   | 0      | 0.0000 | 0.0 | -    | 13.61             | 8.2                        |
| SW5       | 1750          | 1749     | 100    | 0.010 | 13        | 1749                 | 1748     | 88     | 0.011 | 1.72     | 0.9  | 1748.0       | 1748.0   | 0      | 0.0000 | 0.0 | -    | 13.58             | 8.2                        |
| SW6       | 1805          | 1804     | 87     | 0.011 | 11        | 1804                 | 1780     | 500    | 0.048 | 3.53     | 2.4  | 1780.0       | 1780.0   | 0      | 0.0000 | 0.0 | -    | 13.13             | 7.9                        |
| SW7       | 1803          | 1802     | 100    | 0.010 | 13        | 1802                 | 1789     | 590    | 0.022 | 2.39     | 4.1  | 1789.0       | 1789.0   | 0      | 0.0000 | 0.0 | -    | 16.84             | 10.1                       |
| SW8       | 1744          | 1743     | 100    | 0.010 | 13        | 1743                 | 1742     | 90     | 0.011 | 1.70     | 0.9  | 1742.0       | 1742.0   | 0      | 0.0000 | 0.0 | -    | 13.61             | 8.2                        |
| SW9       | 1744          | 1743     | 100    | 0.010 | 13        | 1743                 | 1742     | 90     | 0.011 | 1.70     | 0.9  | 1742.0       | 1742.0   | 0      | 0.0000 | 0.0 | -    | 13.61             | 8.2                        |
| SW10      | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1744     | 836    | 0.012 | 1.76     | 7.9  | 1744.0       | 1744.0   | 0      | 0.0000 | 0.0 | -    | 20.63             | 12.4                       |
| SW11      | 1798          | 1797     | 24     | 0.042 | 2         | 1797                 | 1761     | 847    | 0.043 | 3.33     | 4.2  | 1761.0       | 1761.0   | 0      | 0.0000 | 0.0 | -    | 6.54              | 3.9                        |
| SW12      | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1750     | 130    | 0.031 | 2.83     | 0.8  | 1750.0       | 1734.0   | 1000   | 0.0160 | 5.3 | 3.2  | 16.67             | 10.0                       |
| SW13      | 1753          | 1752     | 100    | 0.010 | 13        | 1752                 | 1746     | 400    | 0.015 | 1.98     | 3.4  | 1746.0       | 1734.0   | 1200   | 0.0100 | 4.2 | 4.8  | 20.92             | 12.6                       |
| BS1       | 1754          | 1753     | 100    | 0.010 | 13        | 1753                 | 1742     | 994    | 0.011 | 1.70     | 9.8  | 1742.0       | 1768.0   | 0      | 0.0000 | 0.0 | -    | 22.49             | 13.5                       |
| BS2       | 1817          | 1816     | 100    | 0.010 | 13        | 1816                 | 1768     | 710    | 0.068 | 4.20     | 2.8  | 1768.0       | 1768.0   | 0      | 0.0000 | 0.0 | -    | 15.55             | 9.3                        |
| BS3       | 1762          | 1761     | 10     | 0.100 | 1         | 1761                 | 1748     | 417    | 0.031 | 2.85     | 2.4  | 1748.0       | 1748.0   | 0      | 0.0000 | 0.0 | -    | 3.24              | 1.9                        |
| SW14      | 1779          | 1757     | 100    | 0.220 | 4         | 1757                 | 1749     | 720    | 0.011 | 1.70     | 7.1  | 1749.0       | 1749.0   | 0      | 0.0000 | 0.0 | -    | 10.75             | 6.5                        |

Overland time per equation 3-3 TR 55:  $n=0.24$  or  $0.15$ ,  $p=7.0$ ,  $Max L=300$ ,  $Tt=(.007(nL)^.8)/((P)^.5 (s)^.4)$

Shallow concentrated flow velocity based on Figure 3-1, TR-55:  $Length(ft) = 2000$  max

Channel flow based on Manning's equation

Lag time = total travel time x 0.6

3) Loss RatePer SCS Method (now NRCS)

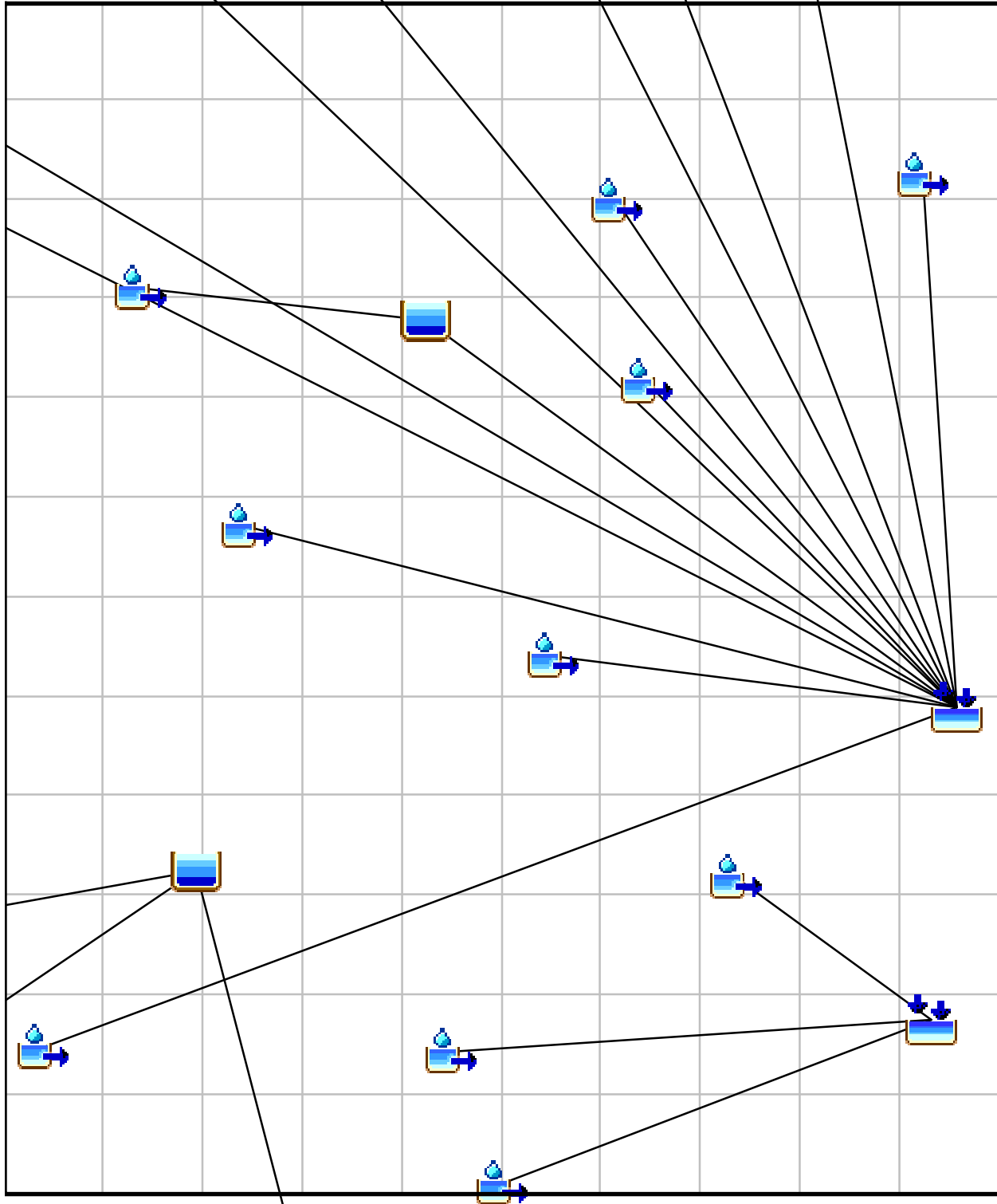
SOIL TYPES C throughout the watershed

SCS CURVE NUMBER(average moisture C Soil)= 81



HEC-HMS

**Project : Dorado Oaks**  
Basin Model : Dorado Oaks Dev  
Sep 28 13:20:09 PDT 2018



Project: Dorado Oaks Simulation Run: DO Dev 100yr

Start of Run: 01Jan2007, 00:00 Basin Model: Dorado Oaks Dev  
 End of Run: 02Jan2007, 00:00 Meteorologic Model: 100 YR-24IN  
 Compute Time: 28Sep2018, 13:24:12 Control Specifications: 1 DAY

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (AC-FT) |
|--------------------|----------------------------------|----------------------|------------------|----------------|
| OS03               | 0.2817                           | 256.7                | 01Jan2007, 12:28 | 77.0           |
| OS01               | 0.169                            | 148.7                | 01Jan2007, 12:30 | 46.1           |
| OS02               | 0.07                             | 71.1                 | 01Jan2007, 12:20 | 17.6           |
| OS04               | 0.0244                           | 54.2                 | 01Jan2007, 12:04 | 6.9            |
| OS05               | 0.0244                           | 35.1                 | 01Jan2007, 12:10 | 6.7            |
| OS06               | 0.023                            | 31.9                 | 01Jan2007, 12:11 | 6.3            |
| BS01               | 0.0199                           | 28.7                 | 01Jan2007, 12:14 | 7.0            |
| DB01               | 0.0199                           | 10.3                 | 01Jan2007, 12:43 | 6.8            |
| SW01               | 0.0142                           | 21.2                 | 01Jan2007, 12:14 | 5.1            |
| SW14               | 0.0044                           | 5.2                  | 01Jan2007, 12:15 | 1.1            |
| SW03               | 0.0026                           | 4.6                  | 01Jan2007, 12:09 | 0.9            |
| SW04               | 0.0019                           | 3.4                  | 01Jan2007, 12:09 | 0.7            |
| SW05               | 0.0016                           | 2.9                  | 01Jan2007, 12:09 | 0.6            |
| SW02               | 0.0012                           | 2.1                  | 01Jan2007, 12:09 | 0.4            |
| OS09               | 0.0012                           | 2.5                  | 01Jan2007, 12:04 | 0.3            |
| CP1                | 0.6395                           | 546.2                | 01Jan2007, 12:24 | 176.5          |
| OS15               | 0.0692                           | 92.9                 | 01Jan2007, 12:11 | 17.5           |
| BS02               | 0.0138                           | 22.4                 | 01Jan2007, 12:10 | 4.5            |
| BS03               | 0.0023                           | 4.2                  | 01Jan2007, 12:09 | 0.8            |
| DB02               | 0.0161                           | 6.0                  | 01Jan2007, 12:54 | 4.8            |
| SW12               | 0.0145                           | 22.8                 | 01Jan2007, 12:11 | 4.7            |
| SW10               | 0.0105                           | 15.1                 | 01Jan2007, 12:13 | 3.4            |
| OS12               | 0.0032                           | 4.2                  | 01Jan2007, 12:12 | 0.8            |
| SW11               | 0.0022                           | 5.3                  | 01Jan2007, 12:05 | 0.8            |
| CP4                | 0.1157                           | 141.9                | 01Jan2007, 12:11 | 32.1           |
| SW13               | 0.0111                           | 15.8                 | 01Jan2007, 12:14 | 3.6            |
| OS14               | 0.0079                           | 15.2                 | 01Jan2007, 12:05 | 2.0            |

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (AC-FT) |
|--------------------|----------------------------------|----------------------|------------------|----------------|
| CP3                | 0.0190                           | 26.0                 | 01Jan2007, 12:06 | 5.6            |
| SW07               | 0.006                            | 9.5                  | 01Jan2007, 12:11 | 2.0            |
| OS07               | 0.0038                           | 7.0                  | 01Jan2007, 12:06 | 1.1            |
| SW06               | 0.0032                           | 5.6                  | 01Jan2007, 12:09 | 1.1            |
| CP6                | 0.0130                           | 20.7                 | 01Jan2007, 12:08 | 4.1            |
| OS10               | 0.0075                           | 15.4                 | 01Jan2007, 12:04 | 1.9            |
| SW09               | 0.0025                           | 4.5                  | 01Jan2007, 12:09 | 0.9            |
| SW08               | 0.0023                           | 4.1                  | 01Jan2007, 12:09 | 0.8            |
| CP2                | 0.0123                           | 21.9                 | 01Jan2007, 12:05 | 3.6            |
| OS13               | 0.008                            | 17.2                 | 01Jan2007, 12:04 | 2.0            |
| OS08               | 0.0014                           | 2.1                  | 01Jan2007, 12:10 | 0.4            |
| OS11               | 0.0011                           | 2.6                  | 01Jan2007, 12:03 | 0.3            |
| CP5                | 0.0105                           | 20.9                 | 01Jan2007, 12:03 | 2.7            |



# Appendix D

Project # 27082.00

Dorado Oaks

Date: 09-25-2018

Storm Water Quality Calculations

| Swale # | Design    | Runoff      | Tributary | Design | Swale        | Side  |        |       |       | Depth of          | Design Slope | Design Flow | Contact Time | Design Length |
|---------|-----------|-------------|-----------|--------|--------------|-------|--------|-------|-------|-------------------|--------------|-------------|--------------|---------------|
|         | Intensity | Coefficient | Area      | Flow   | Bottom Width | Slope | A      | A/P   | Q     | flow <sup>1</sup> | (1%)         | Velocity    |              |               |
|         | in/hr     |             | ac.       | cfs    | ft           | ft/ft |        |       |       | in                | ft/ft        | ft/sec      | min          | ft            |
| SW1     | 0.20      | 0.60        | 9.1       | 1.089  | 5.0          | 3     | 3.2500 | 0.541 | 1.310 | 6.0               | 0.010        | 0.3         | 10.0         | 201           |
| SW2     | 0.20      | 0.60        | 0.8       | 0.095  | 2.0          | 3     | 0.5200 | 0.294 | 0.114 | 2.4               | 0.010        | 0.2         | 10.0         | 110           |
| SW3     | 0.20      | 0.60        | 1.6       | 0.197  | 2.0          | 3     | 0.8700 | 0.368 | 0.239 | 3.6               | 0.010        | 0.2         | 10.0         | 136           |
| SW4     | 0.20      | 0.60        | 1.2       | 0.149  | 2.0          | 3     | 0.7228 | 0.340 | 0.183 | 3.1               | 0.010        | 0.2         | 10.0         | 124           |
| SW5     | 0.20      | 0.60        | 1.0       | 0.122  | 2.0          | 3     | 0.6187 | 0.318 | 0.146 | 2.8               | 0.010        | 0.2         | 10.0         | 118           |
| SW6     | 0.20      | 0.60        | 2.0       | 0.243  | 2.0          | 3     | 1.0268 | 0.394 | 0.301 | 4.1               | 0.010        | 0.2         | 10.0         | 142           |
| SW7     | 0.20      | 0.60        | 3.8       | 0.460  | 2.0          | 3     | 1.6027 | 0.470 | 0.561 | 5.6               | 0.010        | 0.3         | 10.0         | 172           |
| SW8     | 0.20      | 0.60        | 1.5       | 0.180  | 2.0          | 3     | 0.8323 | 0.361 | 0.224 | 3.5               | 0.010        | 0.2         | 10.0         | 130           |
| SW9     | 0.20      | 0.60        | 1.6       | 0.190  | 2.0          | 3     | 0.8323 | 0.361 | 0.224 | 3.5               | 0.010        | 0.2         | 10.0         | 137           |
| SW10    | 0.20      | 0.60        | 6.7       | 0.806  | 5.0          | 3     | 2.7047 | 0.497 | 1.001 | 5.2               | 0.010        | 0.3         | 10.0         | 179           |
| SW11    | 0.20      | 0.60        | 1.4       | 0.167  | 2.0          | 3     | 0.7587 | 0.347 | 0.196 | 3.2               | 0.010        | 0.2         | 10.0         | 132           |
| SW12    | 0.20      | 0.60        | 9.3       | 1.110  | 5.0          | 3     | 3.3303 | 0.547 | 1.358 | 6.1               | 0.010        | 0.3         | 10.0         | 200           |
| SW13    | 0.20      | 0.60        | 7.1       | 0.852  | 5.0          | 3     | 2.7808 | 0.504 | 1.043 | 5.3               | 0.010        | 0.3         | 10.0         | 184           |

**DORADO OAKS TENTATIVE SUBDIVISION MAP  
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)  
(STATE CLEARINGHOUSE #2019071041)**

**APPENDIX F**

**HAZARDS AND HAZARDOUS MATERIALS**

# State Route 49/Pleasant Valley Road at Faith Lane Project



## Initial Site Assessment

State Route 49/Pleasant Valley Road  
at Faith Lane Project  
Diamond Springs, California

April 2019



This page intentionally left blank

# **Initial Site Assessment**

State Route 49/Pleasant Valley Road  
at Faith Lane Project  
Diamond Springs, California

**April 2019**

STATE OF CALIFORNIA  
Department of Transportation

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Andrew Garber  
Deputy Director Engineering  
County of El Dorado  
Department of Transportation



# TABLE OF CONTENTS

---

## State Route 49/Pleasant Valley Road at Faith Lane Project Draft - Initial Site Assessment

|  | <u>Page</u> |
|--|-------------|
| <b>1.0 Executive Summary</b>   | <b>1</b>    |
| <b>2.0 Introduction</b>  | <b>5</b>    |
| 2.1 Purpose, Standards, and Definitions  | 5           |
| 2.2 Scope of Services  | 6           |
| 2.3 Limitations and Exceptions   | 7           |
| <b>3.0 Site Description</b>  | <b>9</b>    |
| 3.1 General Setting and Location   | 9           |
| 3.2 Project Description  | 9           |
| 3.3 Project Need   | 10          |
| <b>4.0 Records Review</b>  | <b>11</b>   |
| 4.1 Results of Database Search   | 11          |
| 4.2 Other Records Reviewed   | 14          |
| 4.3 Physical Setting   | 16          |
| <b>5.0 Site Reconnaissance</b>   | <b>18</b>   |
| 5.1 Methodology and Limiting Conditions  | 18          |
| 5.2 Site Observations  | 18          |
| 5.3 Results of Site Reconnaissance   | 28          |
| <b>6.0 Findings and Opinions</b>   | <b>29</b>   |
| 6.1 Findings and Opinions  | 29          |
| 6.2 Data Gaps  | 30          |
| <b>7.0 Report Authors and Qualifications</b>   | <b>31</b>   |
| <b>8.0 References</b>  | <b>32</b>   |
| <b>APPENDIX A - Regulatory Records Radius Report</b>   |             |
| <b>APPENDIX B - Historical Aerial Photographs, Topographic Maps,<br/>Fire Insurance Map, City Directories, and FEMA Flood Maps</b> |             |
| <b>Figures</b>   |             |
| Figure 1: Location Map   | 3           |
| Figure 2: Project Map  | 4           |



This page intentionally left blank

# SECTION 1.0

---

## Executive Summary

This Initial Site Assessment (ISA) was conducted on behalf of Caltrans and Stonehenge Springs, LLC (Stonehenge) for the proposed State Route 49/Pleasant Valley Road at Faith Lane Project (SR-49 project) located at the intersection of State Route 49/Pleasant Valley Road and Faith Lane in Diamond Springs in El Dorado County, California (see **Figure 1**). This SR-49 project would be constructed in conjunction with a proposed Stonehenge residential development along Faith Lane to the south of SR-49.

This ISA identifies Recognized Environmental Conditions (RECs) for the project site that may adversely affect roadway construction or right-of-way acquisition. This ISA was conducted in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice E 1527-13, which describes the standard practice for conducting assessments. This ISA includes a summary of the site reconnaissance conducted on January 10, 2019, a review of environmental databases, and a review of historical data sources. A REC is defined by ASTM Practice E 1527-13 as: “The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

The SR-49 Project evaluates four potential realignments of the intersection of Faith Lane with State Route 49 to accommodate ingress/egress to/from the aforementioned proposed residential development and to improve traffic flow in Diamond Springs. The proposed work would result in less than 2 feet of excavation with the exception of some utility trenching that may be down to 4 feet below grade. The four options are collectively located within the red outlined area shown on **Figure 2** and listed below. The outlined area provides for a suitable buffer areas extending up to about 50 feet from either side of the likely edge-of-pavement of the various options.

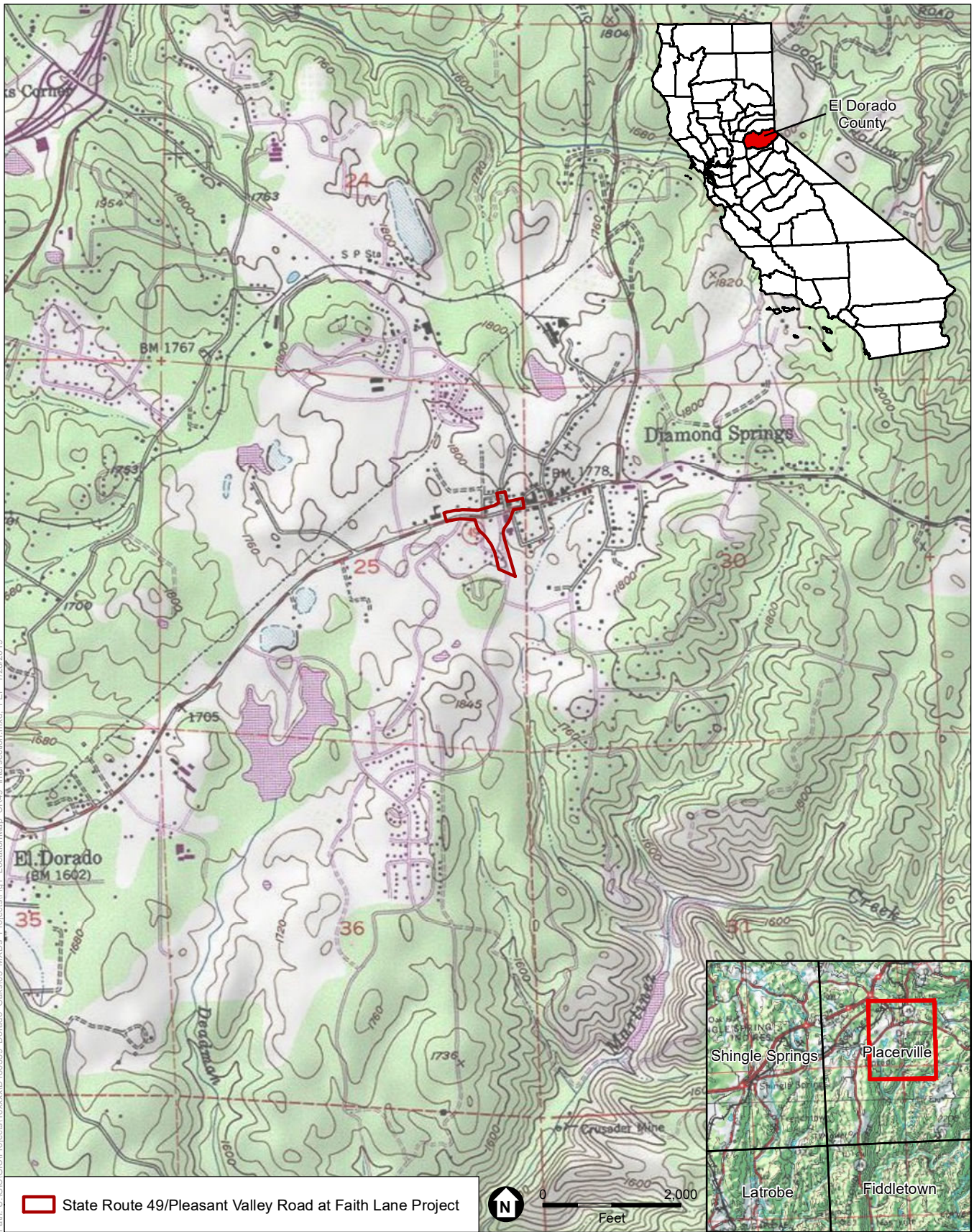
- Option A: a four-way roundabout at the intersection of China Garden Road and SR-49 to the east of Faith Lane.
- Option B: a three-way roundabout between Silver Drive and Faith Line at SR-49.
- Option C: a signalized T-shaped intersection at Faith Lane and SR-49.
- Option D: a signalized T-shaped intersection at Silver Drive and SR-49.

Depending on the selected option, the project would take place on some combination of parts of 13 parcels, one of which appears on the searched regulatory agency records as a former leaking underground storage tank (LUST) site. One former service station was previously located at 493 Main Street (now referred to as Pleasant Valley Road and/or State Route 49) on APN 054-490-04 on the northeast corner of State Route 49 and China Garden Road. Two 500-gallon gasoline underground storage tanks (USTs) were removed in 1992 and the Regional Water Quality Control Board (RWQCB) issued a No Further Action (NFA) letter in 1996. However, the NFA letter states that contaminated soil and groundwater are present along the south side of the former service station site extending to some unknown distance beneath State Route 49 and possibly under the footprint of the project site, depending on the selected option. No map of the site was provided. It is unknown whether the contamination extends to beneath the project site and there is no definitive visual indication of the former UST locations. **This is considered an REC because excavation for the project close to or under State Route 49 may encounter contaminated soil and groundwater.**

Various businesses and residences are located within the footprint of the four options, but none are listed on regulatory records as having violations or hazardous materials spoils, leaks, or releases. The various businesses are small commercial retail businesses that would use small quantities of cleaning solvents, and other small quantities of chemicals specific to the particular business. None of the businesses would be expected to use large quantities of hazardous materials and no USTs, above-ground storage tanks, hazardous materials containers, soil or pavement staining indicative of chemical spills, or stressed vegetation was observed.

The road sides do not have standard curbs and gutters. Most drainage is to dirt shoulders or unlined ditches. Some occasional trash was observed in the ditches and shoulder areas; however, no containers, staining indicative of chemical releases, or stressed vegetation was observed. The trash and debris are considered a *de minimus* condition because the materials can readily be recycled or disposed of at any municipal (Class III non-hazardous waste) landfill.

Although not an ASTM 1527 Phase I assessment consideration, it should be noted that if older structures that predate the 1970s US EPA ban on asbestos-containing materials (ACM) or lead-based paint (LBP) need to be removed (e.g., the 1877 Carpenter Building on the southwest corner of State Route 49 and Faith Lane), those older structures may contain ACM and/or LBP that would require surveying and removal by state-licensed professional as hazardous materials. In addition, various underground utilities were noted within and along the sides of most road segments. Construction activities would need to account for these utilities. Finally, soil along the sides of the roadways may have concentrations of aerially-deposited lead above action levels and would require investigation and if present above regulatory action levels, management as a hazardous material.

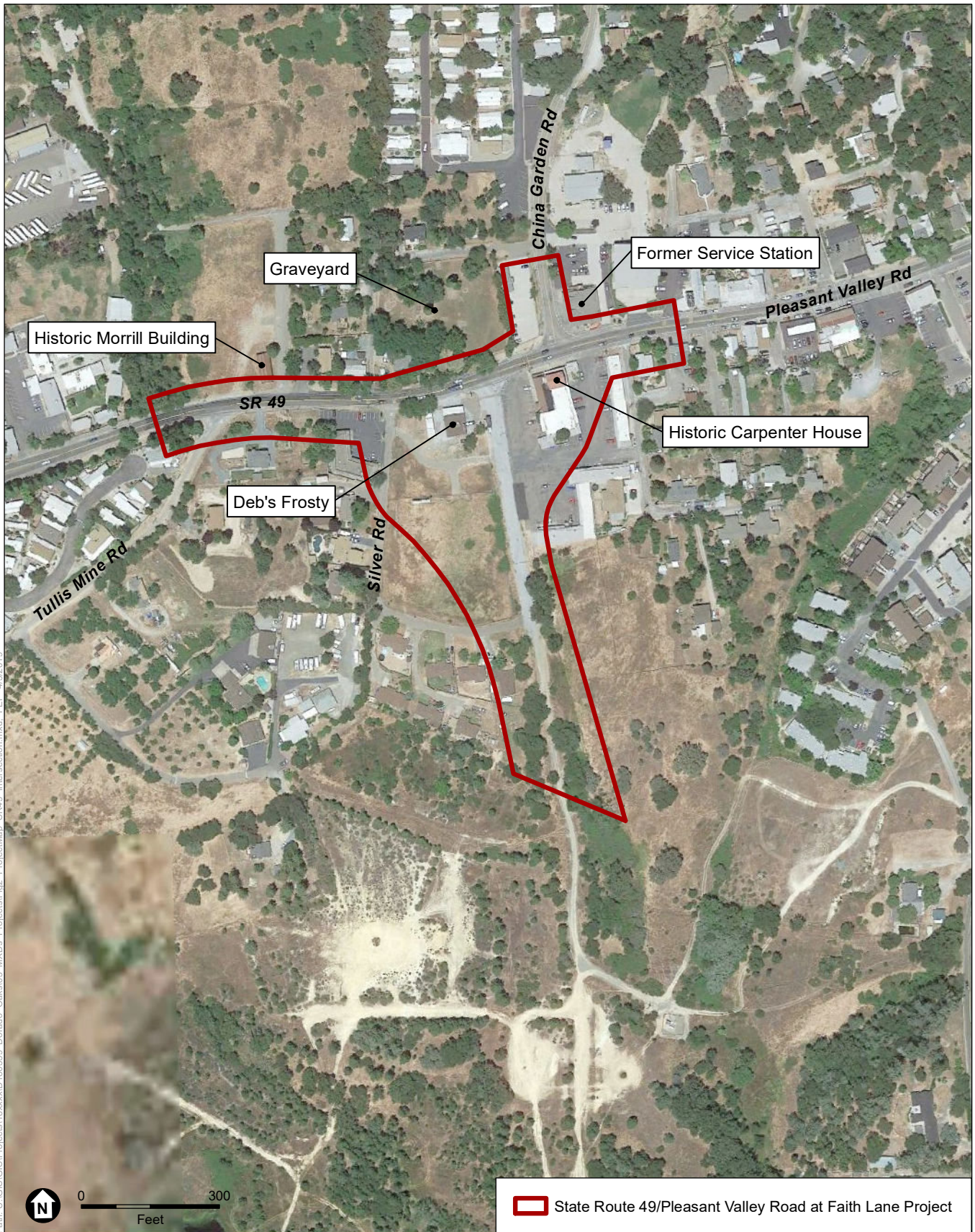


SOURCE: USGS 7.5' Topo Quad (Placerville, 1950); ESA, 2019

State Route 49/Pleasant Valley Road at Faith Lane Project

**Figure 1**  
Location Map





SOURCE: Google (Imagery date June 25, 2018); ESA, 2019

State Route 49/Pleasant Valley Road at Faith Lane Project

**Figure 2**  
Project Map



## SECTION 2.0

---

### Introduction

#### 2.1 Purpose, Standards, and Definitions

Environmental Science Associates (ESA) conducted this Initial Site Assessment (ISA) for the proposed SR-49 project located in Diamond Springs in El Dorado County, California. This ISA was conducted in accordance with ESA's scope of work with Stonehenge Springs, LLC dated November 11, 2018. In addition, this ISA uses relevant guidance from the Caltrans *Standard Environmental Reference, Volume 1 Guidance for Compliance, Section 3 Topics, Chapter 10 - Hazardous Materials, Hazardous Waste, and Contamination, Initial Site Assessment*, last updated June 21, 2016, and the American Society of Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-13). This ISA is focused on and limited to identifying potential contamination sources or issues at or within 1/8-mile of the project site because of the limited footprint of the proposed project activities.

Three types of Recognized Environmental Conditions (RECs) are defined by the ASTM E1527-13, as listed below. The term Recognized Environmental Conditions (REC) means:

- “The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

In addition, the updated ASTM E1527-13 defined the two additional categories cited below.

- The term Historical Recognized Environmental Conditions (HREC) means: “A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Initial Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past release to be a recognized environmental condition at the time the Initial Site Assessment

is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition.”

For a past REC to be considered an HREC it must:

- Have already been remediated (or meet current standards without remediation);
- Not require use restrictions or engineering controls (e.g., cap, subslab depressurization system); and
- Meet current standards.

If the REC has use restrictions or engineering controls (e.g., cap, subslab depressurization system), then the REC may be designated as a Controlled Recognized Environmental Condition (CREC), as defined below. Unlike HRECs, a CREC will be listed in the conclusions section of the Phase I assessment, along with other RECs. The purpose of this new category is to bring continuing obligations such as use restrictions, maintenance requirements, reporting requirements to the forefront. The term Controlled Recognized Environmental Conditions (CREC) means:

“A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Initial Site Assessment report, and as a recognized environmental condition in the conclusions section of the Initial Site Assessment report.”

RECs, HRECs, and CRECs are not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

## 2.2 Scope of Services

The following sections describe ESA’s work scope:

Section 2, *Introduction, Standards, and Definitions*, includes a discussion of the purpose for performing the ISA; the standards and definitions used for the ISA; and the significant assumptions and limitations.

Section 3, *Site Description*, compiles information concerning the location, current and proposed use, a description of any structures and improvements at the time of ESA’s assessment, and adjoining property uses.

Section 4, *Records Review and Site Reconnaissance*, includes ESA’s review of the Cortese List databases available from the federal, state, and local regulatory agencies regarding hazardous

materials use, storage, or disposal at or adjacent to the bridge. Applicable information is summarized and copies of relevant documents are included in the appendices of this report. Historical aerial photographs and topographic maps are reviewed for indications of historical environmental conditions. In addition, the Site Reconnaissance, describing ESA's observations during reconnaissance of the project area, was keyed to sites identified during the records review. The methodology used and limiting conditions are described herein.

Section 5, *Findings and Opinions*, presents ESA's findings and professional opinions regarding the information contained in this report. It provides ESA's conclusions regarding the presence of RECs, HRECs, and CRECs connected with the bridge and data gaps, if any, that could affect the recognition of RECs.

Section 6, *Report Authors and Signatures*, provides the signatures of the qualified personnel that conducted this assessment.

Section 7, *References*, is a summary of the resources used to compile this report that are not already included in the Appendices.

The appendices contain certain pertinent documentation regarding the parcels. Appendices A and B contain the regulatory agency database search results report, historical aerial photographs and topographic maps, fire insurance map and city directory search results, and the permit history. No interviews of site owners were conducted for this assessment because the project footprint is on public roads and does not have any operations that would use hazardous materials. Instead, this ISA relied on the project design documents prepared for this project (CTA, 2018), the site reconnaissance, and the regulatory records search (GeoSearch, 2018).

## 2.3 Limitations and Exceptions

No environmental site assessment can wholly eliminate uncertainty regarding the potential for RECs, HRECs, and CRECs in connection with a property. Conformance of this limited ISA with ASTM E1527-13 reduces, but does not eliminate, uncertainty regarding the potential for RECs, HRECs, and CRECs in connection with the subject property. While ESA has made every effort to discover and interpret available information regarding the bridge within the time available, some potential always remains for undiscovered contamination to be present. ESA's report is a best-efforts collection and interpretation of available information, and cannot be considered wholly conclusive. This report and the associated work were provided in accordance with the principles and practices generally employed by the local environmental consulting profession. This is in lieu of all warranties, expressed or implied. No other warranty is expressed or implied.

This limited ISA is based primarily on a database review and a site reconnaissance of accessible areas. This limited ISA does not include "non-scope issues" as specified by ASTM E1527-13, such as invasive<sup>1</sup> surveys for the presence of the following items on or in the vicinity of the subject property: asbestos-containing materials, poly-chlorinated biphenyls (PCBs), radon, indoor

---

<sup>1</sup> Invasive surveys include sampling of materials.



air quality, lead-based paint analysis, lead in drinking water, regulatory compliance, and high voltage lines.

The conclusions presented are professional opinions based solely upon indicated data described in this report, visual site and vicinity observations, and the interpretation of the available historical information and documents reviewed, as described in this report. Unless ESA has actual knowledge to the contrary, information obtained from interviews or provided to ESA is assumed to be correct and complete. ESA does not assume any liability for information that was misrepresented to ESA by others or for items not visible, accessible, or present on or at the bridge during the time of the site reconnaissance. The conclusions are intended exclusively for the purpose outlined herein and the site location and project indicated. Any use or reuse of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of the user.

Opinions and recommendations presented herein apply to the site conditions existing at the time of this limited ISA and cannot necessarily apply to site changes of which ESA is not aware and has not had the opportunity to evaluate. Changes in the conditions of the bridge may occur with time due to natural processes or the works of man on the property or adjacent properties. Changes in applicable standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond ESA's control. Opinions and judgments expressed herein are based on ESA's understanding and interpretation of current regulatory standards, and should not be construed as legal opinions.

## SECTION 3.0

---

### Site Description

#### 3.1 General Setting and Location

The SR-49 Project area consists SR-49/Pleasant Valley Road (also referred to a Main Street), the northern portion of Faith Lane, possibly the northern portion of Silver Drive, possibly the southern portion of China Garden Road, along with some portions of the areas adjacent to the roadways (**Figures 1 and 2**). Some of these adjacent areas are occupied by buildings. The local area is a mix of residential, rural, commercial/retail land uses, and one cemetery.

#### 3.2 Project Description

The SR-49 Project would construct one of four potential realignments of the intersection of Faith Lane with State Route 49 to improve traffic flow in Diamond Springs. The four options are within the red area shown on **Figure 2** and listed below. The outlined area provides for a suitable buffer areas extending up to about 50 feet from either side of the likely edge-of-pavement of the various options.

- Option A: a four-way roundabout at the intersection of China Garden Road/SR-49, to the east of Faith Lane.
- Option B: a three-way roundabout between Silver Drive and Faith Line at SR-49.
- Option C: a signalized T-shaped intersection at Faith Lane/SR-49.
- Option D: a signalized T-shaped intersection at Silver Drive/SR-49.

The proposed work would result in less than 2 feet of excavation with the exception of some utility trenching that may be to 4 feet below grade. Depending on the selected option, the project would take place on some combination of the parcels listed below in **Table 3-1**. The project would construct either a round-about or a typical signalized intersection; standard sidewalks, curbs, and gutters; and underground utility corridors. Depending on the selected option, some buildings may be removed.

**TABLE 3-1  
PARCELS AND CONDITIONS**

| APN        | Existing Use  |
|------------|---|
|            | North of SR 49  |
| 054-371-19 | Historic Morrill Building ; mostly undeveloped                                  |
| 054-371-20 | Residential   |
| 054-371-05 | Residential   |
| 054-372-03 | Cemetery  |
| 054-372-02 | Cemetery  |
| 054-372-04 | El Dorado County Ambulance JPA building,<br>parking lot covering most of parcel |
| 054-490-04 | Gust Bros. Building.; restaurant; dentist                                       |
|            | South of SR 49  |
| 054-402-37 | Residential   |
| 054-402-47 | Diamond Springs Plaza; various retail outlets                                   |
| 054-402-39 | Deb's Frosty Restaurant   |
| 054-402-40 | Diamond Village; various retail outlets;<br>historic Carpenter building         |
| 054-402-49 | One portable storage shed; mostly undeveloped                                   |
| 054-402-18 | Paved road  |

SOURCE: El Dorado County, 2018

### 3.3 Project Need

The existing intersection at Faith Lane to State Route 49 does not include stoplights or a stop sign on the highway. The addition of the residences south of the existing intersection would add to the level of traffic. In addition, none of this section of State Route 49 has standard sidewalks, curbs, or gutters. This combination of conditions would likely worsen the area's Level of Service (LOS) for traffic operations. Implementation of the project would improve the LOS, as well as improve the drainage.

## SECTION 4.0

---

# Records Review

The purpose of the records review is to obtain and examine records that could help to evaluate potential RECs, HRECs, and CRECs in connection with the proposed project. This section documents the database records search and evaluation of other records that were conducted, and describes the physical setting of the project area.

### 4.1 Results of Database Search

Federal, state, and local regulatory agencies publish databases of businesses and properties that handle hazardous materials or hazardous waste, including those properties with a known release of hazardous substances to soil and/or groundwater. These databases are available for review and/or purchase at the regulatory agencies, or the information may be obtained through a commercial database service. ESA contracted with a commercial database service to perform the regulatory agency database search for listings within the appropriate ASTM Standard minimum search distance (GeoSearch, 2018). A detailed description of the types of information contained in each of the databases reviewed and the agency responsible for compiling the data is included in the Radius Report provided as **Appendix A**, which includes a list of acronyms for the individual searched databases.

ESA evaluated the listings with regard to the nature of potential chemicals of concern, the extent of known releases, and the physical setting of the parcels (e.g., soil properties, geology, and seismicity). In general, reported or potential releases likely to affect a property would include those located on or within 1/8-mile radius of the parcels. Sites that are reported to use or have used hazardous materials but do not have any records of leaks, spills, or releases are not considered further since such sites would not have affected the project site. ESA also considered additional factors such as chemical properties, regional knowledge of the site vicinity, groundwater flow direction, and available past regulatory documentation as part of the REC evaluation.

All information on hazardous materials sites is from the regulatory database search (GeoSearch, 2018) unless otherwise indicated. Updates to the regulatory agency database records search were acquired by checking the State Water Resources Control Board (SWRCB) GeoTracker and the Department of Toxic Substances Control (DTSC) EnviroStor websites to search for other possible site listings and updated information to the database search, and to identify sites that have been recently cleanup and closed after the database search was conducted.

### **Subject Site Listings**

The following one listing is located within the project site as shown on Figure 2. The site numbers keyed to the listings and maps in the regulatory database report in Appendix A.

**8 – Former service station** – One former service station was previously located at 493 Main Street (now Pleasant Valley Road and State Route 49; see Figure 2), about 250 feet northeast of the northernmost part of the project site (GeoSearch, 2018; RWQCB, 1996). Two 500-gallon gasoline USTs were removed in 1992. The USTs had numerous holes and the surrounding soil was contaminated. Although the RWQCB issued a No Further Action (NFA) letter in 1996, the NFA letter states that contaminated soil and groundwater are present along the south side of the former service station site extending to beneath State Route 49 and toward the project site. Soil samples from the south wall of the UST excavation facing State Route 49 had 540 milligrams per kilograms (mg/kg) of total petroleum hydrocarbons (TPH) as gasoline, 1.4 mg/kg of toluene, 2.2 mg/kg of ethylbenzene, and 11 mg/kg of xylenes. Soil samples collected further south and closer to State Route 49 had 260 to 1,400 mg/kg of TPH as gasoline, 0.49 to 3.8 mg/kg of toluene, non-detect to 16 mg/kg of ethylbenzene, and 3.0 to 86 mg/kg of xylenes. In addition, groundwater collected from the excavation pit had 40 micrograms per liter (ug/L) of TPH as gasoline, 500 ug/L of benzene, 1,200 ug/L of toluene, 410 ug/L of ethylbenzene, and 3,000 ug/L of xylenes. The RWQCB concluded that contaminated soil and groundwater extends to an unknown distance beneath State Route 49. No maps of this site were provided. It is unknown whether the soil and groundwater contamination extends further to beneath the project site. Note that the available records did not include maps showing the location of the USTs or contamination. **This is considered an REC because excavation for the project within, adjacent, and possibly south of State Route 49 may encounter contaminated soil and groundwater.**

### **Offsite Listings**

Twenty-two offsite locations were listed for hazardous materials use within the ASTM search distances. However, most of the offsite listings are listings for routine hazardous materials use or disposal but with no records of spills, leaks, or releases. Sites with no records of leaks, spills, or releases are not considered further.

The following 12 sites are located upgradient of or near to the project site and have records of spills, leaks, or releases. The site numbers are keyed to the listings and maps in the regulatory database report in Appendix A.

**2 - Phillip N. Hufft mining claim** – A claim for placer gold mining is listed under the name of Phillip N. Hufft and the majority of the project site shows extensive evidence of reworking for placer mining operations. No mining equipment or associated contamination was observed during the site reconnaissance. An internet check of the mining name claim identified a Phillip Newton Hufft that died in Placerville on February 7, 1878, suggesting that this is a gold rush-era claim that is still listed but hasn't been active since then. The mining operations appear to have used placer mining techniques where gold was separated using water and gravity. This technique would not have used chemicals, such as mercury. Therefore, this placer mining operation is not anticipated to have resulted in residual environmental issues and is not considered a REC.

**4 – Potable water leak** – About 1,000 gallons of potable water was released from a pipe break in 2004. However, given that the released material was water treated to drinking water standards, this would not be a hazardous material and would not have adversely affected the project site.

**6 – Waste water spill** – About 300 gallons of waste water was spilled into a drainage ditch in 2008. No information was listed regarding the nature of the waste water, the extent of the spill, or the cleanup activities. Given the date of the spill, this spill is considered unlikely to be a continuing environmental concern. This site is considered to be an HREC but not a current REC.

**11 – El Dorado Union High School** – This school site has six active USTs: two 12,000-gallon diesel USTs, two 8,000-gallon gasoline USTs, and two 1,000-gallon gasoline USTs. This site has no records of violations, spills, leaks, or releases. Therefore, this site would not have affected the project site.

**12 – Waste connections** – This site is a waste recycling and disposal center located at 4100 Throwita Way that was constructed on a former lime processing facility. The environmental concern is that lime has an elevated pH that could threaten groundwater quality. However, the direction of groundwater flow is to the northwest away from the project site (Youngdahl, 2018). Therefore, any contamination issues with the former lime processing center would be unable to affect the project site.

**14 – Foothill Auto Repair** – The site is listed for poor housekeeping that allowed solvents, antifreeze, and waste oil to be spilled on the ground (GeoSearch, 2019). However, a nearby well was sampled and the testing results indicated that the spills had not migrated to groundwater. Therefore, any contamination issues with the auto repair facility were limited to the repair facility and would be unable to affect the project site.

**18 and 21 – Celebrity Plating** – This site is a plating shop cited for poor housekeeping with cyanide, chromium, nickel and other metals detected in soil from spills. However, this site is located about ½-mile north of the project site. Investigations at the nearby Site 12, discussed above, indicated that the direction of groundwater flow is to the northwest, away from the project site (Youngdahl, 2018). In addition, the DTSC determined that this site does not pose a threat to other properties. Therefore, any contamination issues with this site would be unable to affect the project site.

**20 – Teters Auto Wrecking** – This site, located about ½-mile north of the project site, is listed as a one-acre auto wrecking yard in 1987 based on the nature of the site activities. No further investigation is documented, no records of spills, leaks, or releases are recorded, and the site is listed as a low priority. Investigations at the nearby Site 12, discussed above, indicated that the direction of groundwater flow is to the northwest, away from the project site (Youngdahl, 2018). Therefore, any contamination issues with this site would be unable to affect the project site.

**22 – Oxygen Service and Supply Company** – This site, located about ½-mile north of the project site, is an oxygen service and supply facility listed due to the nature of the facility. No further investigation is documented, and no records of spills, leaks, or releases are recorded.

Investigations at the nearby Site 12, discussed above, indicated that the direction of groundwater flow is to the northwest, away from the project site (Youngdahl, 2018). Therefore, any contamination issues with this site would be unable to affect the project site.

**23 – Old Caldor Lumber Company** – This site, located about 3/4-mile north of the project site, is a former lumber yard, listed due to the nature of the previous activities. The DTSC completed a Preliminary Endangerment Assessment in 1989 and concluded that this site does not pose a threat to public health or the environment (GeoSearch, 2018).

### ***Sites with Poor or Inadequate Addresses***

Sites not plotted due to poor or inadequate address information are referred to as orphan sites. Three orphan sites were listed. The Union Mine address is about 1-1/2 mile to the southwest and cross- to downgradient of the project site. The two Bright Court addresses are located about one mile west of the project site and cross gradient of the project site. These three orphan site listings are not upgradient of the project site and would not be able to affect the project site.

## **4.2 Other Records Reviewed**

ESA accessed websites for the State Water Resources Control Board and Department of Toxic Substance Control that track hazardous materials sites. In addition, the regulatory agency records search provides historical aerial photographs, historical topographic maps, and a search of Sanborn insurance maps and city directories for review. The results of the review of these records are discussed below.

### **Hazardous Materials Websites**

ESA accessed the SWRCB and DTSC combined online GeoTracker database at <http://geotracker.waterboards.ca.gov/> and EnviroStor database at <http://www.envirostor.dtsc.ca.gov/public> for cleanup sites located on or near the subject property under SWRCB jurisdiction. The former service station previously located at 493 Main Street is discussed above as Site 2 was listed and the available information incorporated above. The Youngdahl, 2018, report was acquired from the GeoTracker website and used to augment the discussions above for Sites 12, 18, 20, 21, and 22. No other active sites were listed upslope (upgradient) of the proposed project.

### **Historical Aerial Photographs**

Historical aerial photographs are available for the years 1946, 1952, 1964, 1975, 1980, 1984, 1993, 2004, 2005, 2006, 2009, 2010, 2012, 2014, and 2016, included in **Appendix B** (GeoSearch, 2018). The 2018 aerial photograph is used as the base for Figure 2.

#### **1946**

The 1946 aerial photograph shows State Route 49 and China Garden Road in their current alignment. Faith Lane and Silver Drive are not yet present. Evidence of the placer mining activities south of State

Route 49 of the late 1800's has been muted by time, consisting of various unpaved roads, paths, and other ground surface works. No mining equipment is visible in the photograph, assuming any had been used for placer mining; placer mining generally uses only water and gravity to separate the gold from soil. The area next to and south of State Route 49 have what appears to be an orchard with two structures likely to be a residence and agricultural support structure. As discussed above in the regulatory records search, a service station with USTs removed in 1992 was reportedly present at the location in the blue oval. A building is present within the blue oval and does not appear to be different from the present building occupying this location. The site reconnaissance observed the building is identified as the Gust Brothers Building constructed in 1930. No obvious fuel islands are visible although the 1946 station configuration may have been different from modern fuel island configurations. Given the documentation of a fuel leak next to and underneath State Route 49, the USTs and fuel dispensers are assumed to have been located between the building and the highway or perhaps along the side of the building near the highway. The surrounding area is a mix of rural use with some development. The cemetery, Carpenter house, and Morrill building identified on Figure 2 are present.

## **1952**

In the 1952 aerial photograph, almost all of the orchard and building closest to State Route 49 are gone; the assumed agricultural structure set further back from the highway is still present.

## **1964**

The 1964 aerial photograph shows increased development in the area. Silver Road is present.

## **1975**

The 1975 aerial photograph shows Faith Lane in its current alignment. The Diamond Springs shopping center is also present at the southeast corner of State Route 49 and Faith Lane.

## **1980**

The 1980 aerial photograph is of poor quality and does not appear to show any changes.

## **1984**

The 1984 aerial photograph is of poor quality but shows extensive grading associated with a previous development south of State Route 49 that did not proceed beyond initial grading.

## **1993**

The 1993 aerial photograph is of good quality and shows increased development in the area.

## **2004 through 2016**

The 2004 through 2016 aerial photographs show no substantive changes.



## Historical Topographic Maps

Historical topographic maps are available for the years 1891, 1892, 1893, 1949, 1950, 1973, and 2012, and are included in **Appendix B** (GeoSearch, 2018).

The 1891, 1892, 1893 are all small scale topographic maps (1:125,000-scale) that provide limited detail, but each show the project site with no development and State Route 49 in its current alignment. One unimproved road is shown along the western side of the project site. The 1949 topographic map is a larger scale map (1:24,000-scale) and shows China Garden Road and other nearby roadways. Diamond Springs is shown largely as currently developed. The 1950, 1973, and 2012 topographic maps show no substantive changes, though Faith Lane and Silver Road appear on the 1975 and later maps.

## Fire Insurance Maps

Fire insurance maps did not cover the area of the project site, as documented in Appendix B (GeoSearch, 2018).

## City Directory

A city directory search was conducted for the project site and nearby parcels (GeoSearch, 2018). The listings for section of Pleasant Valley Road within the proposed project are for residential or commercial properties not anticipated to handle significant quantities of hazardous materials. The search report is in Appendix B.

## Permit History

Previous residential development efforts referred to as the Missouri Flat-Diamond Springs Redevelopment Project in the early 1980s proceeded as far as some limited initial grading visible beginning with the 1984 aerial photograph, discussed above (Snoke, 1984). The project did not proceed further. The Eldorado County online permit website was checked for violations; no violations were recorded (El Dorado County, 2019).

## County Assessor Records

The El Dorado County Recorders records were checked for environmental liens on APN 329-301-20-100, the parcel adjacent to State Route 49 (GeoSearch, 2018). No liens were recorded.

## 4.3 Physical Setting

The following sections provide information about the physical setting of the parcels obtained the regulatory agency records search in Appendix B. Although geotechnical information is not a required element of ASTM E1527-13 Phase I assessments, the regulatory records search includes some geotechnical information, as provided below.

## Topography

The U.S. Geological Survey (USGS), 7.5 minute Placerville, California, topographic quadrangle map, 1973, depicts the subject property at an elevation ranging from about 1,819 feet above sea level at the northern end of the project site on China Garden Road to about 1,794 feet above sea at the southern end of the project site on Faith Lane. Most of the project site is hilly and sloping to the west or south.

## Geology and Hydrology

Surface soil types consist of very fine sandy loam to very rocky sandy loam, with placer diggings throughout the area (GeoSearch, 2018). The entire project site is underlain Mesozoic granitic rocks with rock exposures in various locations. No wells are located on the project site. The flow direction of groundwater likely mimics the ground surface flowing to the northeast.

## Oil and Gas Fields

There are no recorded oil or natural gas wells located on or within ½ mile of the parcel (GeoSearch, 2018).

## Flood Zone Designation

The parcel is not located within the 100-year flood zone (GeoSearch, 2018).

## **SECTION 5.0**

### **Site Reconnaissance**

---

#### **5.1 Methodology and Limiting Conditions**

The purpose of the site reconnaissance was to identify visible hazardous materials on the project site. Michael Burns of ESA conducted the site reconnaissance on January 10, 2019, to assess present conditions. Weather at the time of the site visit was clear. The site conditions discussed below are limited to readily apparent environmental conditions observed. ESA archaeologists Heidi Koenig and Robin Hoffman accompanied Mr. Burns on the site reconnaissance. Local resident Mike Roberts and Native American representatives Ramona Tripp-Verbeck, Joseph Valdez, and John McGregor also accompanied the group for some of the reconnaissance.

#### **5.2 Site Observations**

The project site consists of State Route 49 and adjacent areas. Access is from State Route 49 (also referred to as Main Street or Pleasant Valley Road) and sections of Faith Lane, China Garden Road, and/or Silver Road, as needed. Drainage generally flows south. The project site consists paved roads, paved parking areas, and unimproved drainages and areas along the sides of the roads and parking areas. No standard sidewalks, curbs, and gutters are present anywhere in the project area; drainage flows to unlined ditches or across roadways. Several structures are present along the sides of the roads and within one or more of the potential road realignment option areas. Notable features and site conditions are identified on Figure 2 and discussed in the text below, along with photographs of features of interest. The reconnaissance is organized by subareas divided by the roads.

##### **North of State Route 49 and East of China Garden Road**

The Gust Brothers Building, located at 493 Main Street (State Route 49) and identified on Figure 2, was constructed in 1930. The building is currently occupied by a café, hair salon, and a dentist, as shown in the photographs below. A fire station is located next door. No USTs or above ground storage tanks (ASTs) are present. No hazardous materials, stained soil or pavement, or stressed vegetation were observed.

The photographs below show the existing Gust Brothers Building, which does not have the appearance of a former service station. As previously discussed above in the records review, this site was previously a service station with two 500-gallon gasoline USTs that were removed in 1992. The 1996 No Further Action letter issued by the RWQCB stated that contaminated soil and groundwater extended south to an unknown distance beneath State Route 49 and was left in place (RWQCB, 1996). Given the documentation that contamination extended to beneath the highway, it is assumed that the USTs must have been located in between the building and the highway or possibly to one side of the building but near the highway. Visual inspection did not indicate an obvious concrete or asphalt patch suggesting a filled-in excavation, as shown in the photographs

below. Therefore, it is uncertain where the documented contamination was located or how far it extended beneath the highway; this uncertain condition is considered a REC.



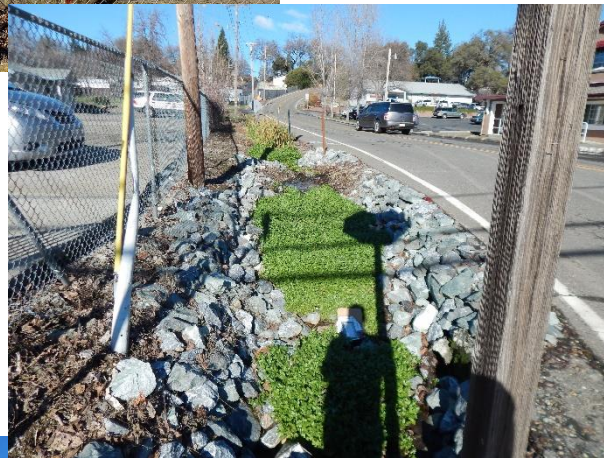
## North of State Route 49 and West of China Garden Road

The El Dorado County Ambulance JPA building and parking lot is at 480 Locust Road and the northwest corner of State Route 49 and China Garden Road, and covers most of parcel. No USTs, ASTs, hazardous materials, stained soil or pavement, or stressed vegetation were observed.



← Ambulance Building

Drainage ditch between ambulance building and China Garden Road →



Ambulance building parking lot  
↓



A cemetery that dates to the 1800s is adjacent and west of the ambulance building. Further west are several residences, undeveloped land, and the vacant, dilapidated, and historic stone Morrill Building built in 1857 at 425 Pleasant Valley Road. No USTs, ASTs, hazardous materials, stained soil or pavement, or stressed vegetation were observed. The photographs below show the cemetery and the Morrill Building, whose locations are identified on Figure 2.

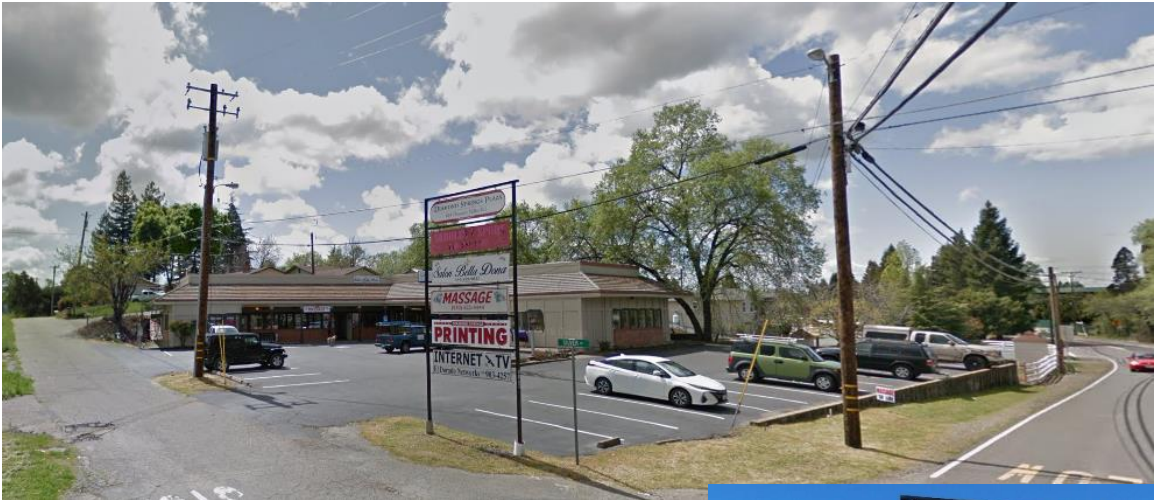


## South of State Route 49 and West of Faith Lane

Deb's Frosty is a restaurant located at 460 Pleasant Valley Road (State Route 49), the southwest corner of State Route 49 and Faith Lane, as identified on Figure 2. The area behind Deb's Frosty has one propane tank, two dumpsters, one refrigeration unit, and one 55-gallon drum that was empty, as shown in the bottom photograph below. No USTs, ASTs, hazardous materials, stained soil or pavement, or stressed vegetation were observed.



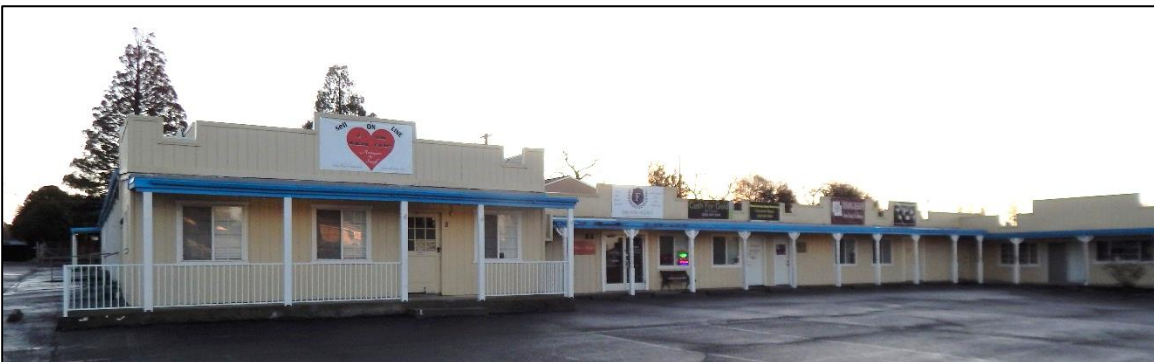
The Diamond Springs Plaza Shopping Center at 444 Pleasant Valley Road is located adjacent and west of Deb's Frosty. The center is occupied by a small strip mall occupied by small commercial retail outlets, including a hair salon, a massage parlor, a printer, and an internet carrier office. The retail outlets are anticipated to use small quantities of cleaning solutions, solvents, and other small quantities of chemicals specific to each business. No USTs, ASTs, hazardous materials, stained soil or pavement, or stressed vegetation were observed.





## South of State Route 49 and East of Faith Lane

The area south of State Route 49 and east of Faith Lane is occupied by the Diamond Village Shopping Center at 484 and 478 Pleasant Valley Road. The center consists of several strip mall buildings occupied by small commercial retail outlets, including a chiropractor, cash for gold service, a Humane Society office (no outdoor animals or animal pens were observed), a television and computer repair shop, a bakery/market, barber shop, an income tax preparer, a printer/embroiderer, a bicycle sales and repair shop, a gift shop, a medical equipment and supply outlet (e.g., wheelchairs and walkers), and several other spaces of uncertain use. The various outlets are anticipated to use small quantities of cleaning solutions, solvents, and other small quantities of chemicals specific to each business. No hazardous materials, ASTs, USTs, soil or pavement staining, or stressed vegetation were observed.



The historic brick Carpenter Building at 478 Pleasant Valley Road is also located in this shopping center at the location identified on Figure 2. This brick structure was constructed in 1877 by C. G. Carpenter, an early pioneer of Diamond Springs. The brick building and attached more recent structures are shown in the photographs below. No USTs, ASTs, hazardous materials, stained soil or pavement, or stressed vegetation were observed. Given the age of the structure, ACM and/or LBP may be present. These are common building materials with existing regulations for proper handling and disposal.



## Faith Lane

Faith Lane is a paved road section that extends south from State Route 49/Pleasant Valley Road. The road extends south to a locked gate and an unpaved road section further south, as shown in the photographs below. A buried sewer line is located under the length of Faith Lane. Drainage ditches are on both sides of the road and drain to the south. No USTs, ASTs, hazardous materials, stained soil or pavement, or stressed vegetation were observed.



The area west of Faith Lane is a fenced unpaved area with one closed storage trailer, whose contents are unknown. The rest of the area was empty. The area east of Faith Lane is empty and undeveloped but shows a hummocky topographic surface indicating historical placer mining activities. No USTs, ASTs, hazardous materials, stained soil or pavement, or stressed vegetation were observed.



## 5.3 Results of Site Reconnaissance

No evidence of discolored or stained pavement, soil, or water; stressed vegetation; ASTs; USTs; pits; or lagoons were observed at the project site. Trash and debris were observed in scattered locations, particularly inside the Morrill Building. However, the trash and debris are considered a *de minimus* condition because the materials can readily be recycled or disposed of at any municipal (Class III non-hazardous waste) landfill. The Carpenter Building may have ACM and/or LBP; these are common building materials with existing regulations for proper handling and disposal.

The release of gasoline to soil and groundwater from two USTs removed from the Gust Brothers Building site is considered a REC because the regulatory agency stated that contamination extended to some unknown distance beneath State Route 49. Depending on the extent of contamination and the footprint of the selected roadway and intersection alignment, the project may encounter soil and groundwater contaminated with fuel.

## SECTION 6.0

---

# Findings and Opinions

### 6.1 Findings and Opinions

Relevant federal, state, and local regulatory agency lists for sites at or near the project site were reviewed. A former service station at the corner of State Route 49 and China Garden Road was identified as the location of contaminated soil and groundwater that extend to an unknown distance beneath the highway. **This is considered a REC since excavation for the project may encounter contaminated soil and groundwater.** No other hazardous materials sites at or near the project were indicated in the database search results or by the regulatory agencies as being able to affect the project site. Various other sites have records of past minor releases that have been cleaned up and the cases closed by regulatory agencies. Various businesses that use small quantities of hazardous materials consisting of cleaning solutions and are located along the segments but none are listed on regulatory records as having violations or hazardous materials releases. In addition, all of the listed facilities are set back from the road segments. Given the setback distances, it is unlikely that any of the listed sites would be able to affect soil conditions in the road segments.

The site reconnaissance did not observe any RECs and verified that previous sites with cleanup actions are set back from the road. Some of the road segments have dirt shoulders or ditches without sidewalks or gutters. Some trash was observed in the ditches and shoulder areas; however, no containers, staining indicative of chemical releases, or stressed vegetation was observed. The trash and debris are considered a *de minimus* condition because the materials can be recycled or disposed of at any Class III (non-hazardous materials) landfill.

Although not an ASTM 1527 Phase I assessment consideration, it should be noted that structures that predate the 1970s USEPA ban on ACM and LBP may have these materials. Hazardous building materials would be required to be disposed of as licensed facilities permitted to accept the waste.

Various underground utilities were noted within and along the sides of most road segments. Construction activities would need to account for these utilities.

In addition, soil along the sides of the subject roadways may have concentrations of lead above action levels. Caltrans and the DTSC have developed guidance for evaluating and addressing aerially deposited lead at <http://www.dot.ca.gov/env/hazwaste/adl.html>. The investigation for aerially deposited lead would be included in the Preliminary Site Assessment (PSI) conducted for this project.

## 6.2 Data Gaps

ESA attempted to obtain reasonably ascertainable information regarding the bridge and the surrounding environs within the limited scope of work. There were no data gaps identified that could affect the identification of RECs, HRECs, or CRECs at the parcels.

## SECTION 7.0

# Report Authors and Qualifications

---

This section includes qualification statements of the environmental professionals responsible for conducting the Phase I assessment and preparing this report.

Mr. Michael Burns, PG, CEG, CHG, of ESA conducted the data review for the bridge, conducted the site reconnaissance, and prepared the Initial Site Assessment report. Mr. Burns has over 30 years of experience in environmental site investigations, characterizations, and assessments, including Initial Site Assessments.

The work conducted and the report written by Mr. Burns was reviewed by Mr. Luke Evans. Mr. Evans has 20 years of experience in environmental site investigations, characterizations, and assessments, including Initial Site Assessments.

Mr. Burns declares that, to the best of his professional knowledge and belief, he meets the definition of Environmental Professional as defined in 40 CFR §312.10. Mr. Evans declares that, to the best of his professional knowledge and belief, he meets the definition of Environmental Professional as defined in 40 CFR §312.10.

Mr. Burns has the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of this property. With the assistance of Mr. Evans, he has developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Principal Analyst/Reviewer:

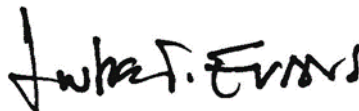


April 3, 2019

---

Michael G. Burns, PG #4532, CEG #1846, CHG #280

Senior Reviewer:



April 3, 2019

---

Luke Evans, Program Manager



## SECTION 8.0

---

### References

- ASTM, 2013, E1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Assessment Process*
- Caltrans, 2014, *Standard Environmental Reference, Volume 1 Guidance for Compliance, Section 3 Topics, Chapter 10 - Hazardous Materials, Hazardous Waste, and Contamination, Initial Site Assessment*, last updated August 27
- Caltrans, 2017, California Road System, Map 7J52, December 15
- CTA Engineering and Surveying, 2018, *Tentative Map, Dorado Oaks*, September
- El Dorado County Online Permits, 2019, website check for permits and permit violations, February 2
- GeoSearch, 2018, *Radius Report, Target Property: Stonehenge Springs, Faith Lane, Diamond Springs, El Dorado County, California*, December 7
- Snoke, 1984, *Archaeological Reconnaissance of the Missouri Flat-Diamond Springs Redevelopment Project*. NCIC Ref. # 4258. Confidential cultural resources report on file at the North Central Information Center, California State University, Sacramento.
- US EPA, 1985, *Lead Poisoning: A Historical Perspective*, May

# APPENDIX A

---

## Regulatory Records Radius Report



---

## **Radius Report**

---

[NEW: GeoLens by Geosearch](#)

*Target Property:*  
**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, El Dorado County, California 95619**

*Prepared For:*  
**Environmental Science Assoc-San Francisco**

**Order #: 118699**  
**Job #: 269577**  
**Project #: D180359**  
**PO #: D180359-99**  
**Date: 12/07/2018**

---

## Table of Contents

---

|  |                |
|--|----------------|
| <i>Target Property Summary</i> . . . . .           | 1              |
| <i>Database Summary</i> . . . . .                  | 2              |
| <i>Database Radius Summary</i> . . . . .           | 7              |
| <i>Radius Map</i> . . . . .                        | 12             |
| <i>Ortho Map</i> . . . . .                         | 14             |
| <i>Topographic Map</i> . . . . .                   | 15             |
| <i>Located Sites Summary</i> . . . . .             | 15             |
| <i>Elevation Summary</i> . . . . .                 | 20             |
| <i>Unlocated Sites Summary</i> . . . . .           | 81             |
| <i>Environmental Records Definitions</i> . . . . . | 83             |
| <i>Unlocatable Report</i> . . . . .                | See Attachment |
| <i>Zip Report</i> . . . . .                        | See Attachment |

---

## Disclaimer

---

*This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR § 312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal, state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR § 312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.*

*The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.*

## Target Property Summary

### **Target Property Information**

Stonehenge Springs

Faith Lane

Diamond Springs, California 95619

#### **Coordinates**

Area centroid (-120.81907, 38.6845057)

1,761 feet above sea level

#### **USGS Quadrangle**

Placerville, CA

### **Geographic Coverage Information**

**County/Parish:** El Dorado (CA)

#### **ZipCode(s):**

Diamond Springs CA: 95619

El Dorado CA: 95623

Placerville CA: 95667

## Database Summary

### **FEDERAL LISTING**

#### **Standard Environmental Records**

| <b>Database</b>  | <b>Acronym</b>            | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|--|---------------------------|------------------|--------------------|------------------------------|
| EMERGENCY RESPONSE NOTIFICATION SYSTEM   | <a href="#">ERNSCA</a>    | 0                | 0                  | TP/AP                        |
| FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES  | <a href="#">EC</a>        | 0                | 0                  | TP/AP                        |
| LAND USE CONTROL INFORMATION SYSTEM  | <a href="#">LUCIS</a>     | 0                | 0                  | TP/AP                        |
| RCRA SITES WITH CONTROLS   | <a href="#">RCRASC</a>    | 0                | 0                  | TP/AP                        |
| RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR   | <a href="#">RCRAGR09</a>  | 0                | 0                  | 0.1250                       |
| RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR   | <a href="#">RCRANGR09</a> | 0                | 0                  | 0.1250                       |
| FEMA OWNED STORAGE TANKS   | <a href="#">FEMAUST</a>   | 0                | 0                  | 0.2500                       |
| BROWNFIELDS MANAGEMENT SYSTEM  | <a href="#">BF</a>        | 0                | 0                  | 0.5000                       |
| DELISTED NATIONAL PRIORITIES LIST  | <a href="#">DNPL</a>      | 0                | 0                  | 0.5000                       |
| NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES   | <a href="#">NLRRCRAT</a>  | 0                | 0                  | 0.5000                       |
| RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES | <a href="#">RCRAT</a>     | 0                | 0                  | 0.5000                       |
| SUPERFUND ENTERPRISE MANAGEMENT SYSTEM   | <a href="#">SEMS</a>      | 0                | 0                  | 0.5000                       |
| SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY                               | <a href="#">SEMSARCH</a>  | 1                | 0                  | 0.5000                       |
| NATIONAL PRIORITIES LIST   | <a href="#">NPL</a>       | 0                | 0                  | 1.0000                       |
| NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES  | <a href="#">NLRRCRAC</a>  | 0                | 0                  | 1.0000                       |
| PROPOSED NATIONAL PRIORITIES LIST  | <a href="#">PNPL</a>      | 0                | 0                  | 1.0000                       |
| RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES                          | <a href="#">RCRAC</a>     | 0                | 0                  | 1.0000                       |
| RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES               | <a href="#">RCRASUBC</a>  | 0                | 0                  | 1.0000                       |
| <b>SUB-TOTAL</b>   |                           | <b>1</b>         | <b>0</b>           |                              |

#### **Additional Environmental Records**

| <b>Database</b>  | <b>Acronym</b>           | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|--|--------------------------|------------------|--------------------|------------------------------|
| AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM | <a href="#">AIRSAFS</a>  | 0                | 0                  | TP/AP                        |
| BIENNIAL REPORTING SYSTEM  | <a href="#">BRS</a>      | 0                | 0                  | TP/AP                        |
| CERCLIS LIENS  | <a href="#">SFLIENS</a>  | 0                | 0                  | TP/AP                        |
| CLANDESTINE DRUG LABORATORY LOCATIONS                            | <a href="#">CDL</a>      | 0                | 0                  | TP/AP                        |
| EPA DOCKET DATA  | <a href="#">DOCKETS</a>  | 0                | 0                  | TP/AP                        |
| ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION                   | <a href="#">ECHKOR09</a> | 0                | 0                  | TP/AP                        |



## Database Summary

| <b>Database</b>  | <b>Acronym</b>               | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|--|------------------------------|------------------|--------------------|------------------------------|
| FACILITY REGISTRY SYSTEM   | <a href="#">FRSCA</a>        | 3                | 0                  | TP/AP                        |
| HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM  | <a href="#">HMIRSR09</a>     | 0                | 0                  | TP/AP                        |
| INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)                              | <a href="#">ICIS</a>         | 0                | 0                  | TP/AP                        |
| INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM | <a href="#">ICISNPDES</a>    | 0                | 0                  | TP/AP                        |
| MATERIAL LICENSING TRACKING SYSTEM   | <a href="#">MLTS</a>         | 0                | 0                  | TP/AP                        |
| NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  | <a href="#">NPDESR09</a>     | 0                | 0                  | TP/AP                        |
| PCB ACTIVITY DATABASE SYSTEM   | <a href="#">PADS</a>         | 0                | 0                  | TP/AP                        |
| PERMIT COMPLIANCE SYSTEM   | <a href="#">PCSR09</a>       | 0                | 0                  | TP/AP                        |
| SEMS LIEN ON PROPERTY  | <a href="#">SEMCLIENS</a>    | 0                | 0                  | TP/AP                        |
| SECTION SEVEN TRACKING SYSTEM  | <a href="#">SSTS</a>         | 0                | 0                  | TP/AP                        |
| TOXIC SUBSTANCE CONTROL ACT INVENTORY  | <a href="#">TSCA</a>         | 0                | 0                  | TP/AP                        |
| TOXICS RELEASE INVENTORY   | <a href="#">TRI</a>          | 0                | 0                  | TP/AP                        |
| ALTERNATIVE FUELING STATIONS   | <a href="#">ALTFUELS</a>     | 0                | 0                  | 0.2500                       |
| HISTORICAL GAS STATIONS  | <a href="#">HISTPST</a>      | 0                | 0                  | 0.2500                       |
| INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS                                     | <a href="#">ICISCLEANERS</a> | 0                | 0                  | 0.2500                       |
| MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE                                  | <a href="#">MSHA</a>         | 0                | 0                  | 0.2500                       |
| MINERAL RESOURCE DATA SYSTEM   | <a href="#">MRDS</a>         | 3                | 0                  | 0.2500                       |
| OPEN DUMP INVENTORY  | <a href="#">ODI</a>          | 0                | 0                  | 0.5000                       |
| SURFACE MINING CONTROL AND RECLAMATION ACT SITES   | <a href="#">SMCRA</a>        | 0                | 0                  | 0.5000                       |
| URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES  | <a href="#">USUMTRCA</a>     | 0                | 0                  | 0.5000                       |
| DEPARTMENT OF DEFENSE SITES  | <a href="#">DOD</a>          | 0                | 0                  | 1.0000                       |
| FORMER MILITARY NIKE MISSILE SITES   | <a href="#">NMS</a>          | 0                | 0                  | 1.0000                       |
| FORMERLY USED DEFENSE SITES  | <a href="#">FUDS</a>         | 0                | 0                  | 1.0000                       |
| FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM  | <a href="#">FUSRAP</a>       | 0                | 0                  | 1.0000                       |
| RECORD OF DECISION SYSTEM  | <a href="#">RODS</a>         | 0                | 0                  | 1.0000                       |
| <b>SUB-TOTAL</b>   |                              | <b>6</b>         | <b>0</b>           |                              |

## Database Summary

### STATE (CA) LISTING

#### Standard Environmental Records

| Database   | Acronym                       | Locatable | Unlocatable | Search Radius (miles) |
|--|-------------------------------|-----------|-------------|-----------------------|
| DTSC DEED RESTRICTIONS                                 | <a href="#">DTSCDR</a>        | 0         | 0           | TP/AP                 |
| ABOVE GROUND STORAGE TANKS                             | <a href="#">ABST</a>          | 0         | 0           | 0.2500                |
| ABOVEGROUND STORAGE TANKS PRIOR TO JANUARY 2008        | <a href="#">AST2007</a>       | 0         | 0           | 0.2500                |
| HISTORICAL UNDERGROUND STORAGE TANKS                   | <a href="#">HISTUST</a>       | 1         | 1           | 0.2500                |
| STATEWIDE ENVIRONMENTAL EVALUATION AND PLANNING SYSTEM | <a href="#">SWEEPS</a>        | 1         | 1           | 0.2500                |
| UNDERGROUND STORAGE TANKS                              | <a href="#">USTCUPA</a>       | 1         | 0           | 0.2500                |
| BROWNFIELD SITES                                       | <a href="#">BF</a>            | 0         | 0           | 0.5000                |
| CALSITES DATABASE                                      | <a href="#">CALSITES</a>      | 2         | 0           | 0.5000                |
| GEOTRACKER CLEANUP SITES                               | <a href="#">CLEANUPSITES</a>  | 4         | 0           | 0.5000                |
| LEAKING UNDERGROUND STORAGE TANKS                      | <a href="#">LUST</a>          | 2         | 0           | 0.5000                |
| SOLID WASTE INFORMATION SYSTEM SITES                   | <a href="#">SWIS</a>          | 3         | 0           | 0.5000                |
| VOLUNTARY CLEANUP PROGRAM                              | <a href="#">VCP</a>           | 0         | 0           | 0.5000                |
| ENVIROSTOR CLEANUP SITES                               | <a href="#">ENVIROSTOR</a>    | 7         | 0           | 1.0000                |
| ENVIROSTOR PERMITTED AND CORRECTIVE ACTION SITES       | <a href="#">ENVIROSTORPCA</a> | 0         | 0           | 1.0000                |
| <b>SUB-TOTAL</b>                                       |                               | <b>21</b> | <b>2</b>    |                       |

#### Additional Environmental Records

| Database   | Acronym                 | Locatable | Unlocatable | Search Radius (miles) |
|--|-------------------------|-----------|-------------|-----------------------|
| CALIFORNIA HAZARDOUS MATERIAL INCIDENT REPORT SYSTEM       | <a href="#">CHMIRS</a>  | 3         | 0           | TP/AP                 |
| CLANDESTINE DRUG LABS                                      | <a href="#">CDL</a>     | 1         | 0           | TP/AP                 |
| EMISSIONS INVENTORY DATA                                   | <a href="#">EMI</a>     | 0         | 0           | TP/AP                 |
| HAZARDOUS WASTE TANNER SUMMARY                             | <a href="#">HWTS</a>    | 2         | 0           | TP/AP                 |
| LAND DISPOSAL SITES  | <a href="#">LDS</a>     | 0         | 0           | TP/AP                 |
| MILITARY CLEANUP SITES                                     | <a href="#">MCS</a>     | 0         | 0           | TP/AP                 |
| NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM FACILITIES | <a href="#">NPDES</a>   | 0         | 0           | TP/AP                 |
| RECORDED ENVIRONMENTAL CLEANUP LIENS                       | <a href="#">LIENS</a>   | 0         | 0           | TP/AP                 |
| CALIFORNIA MEDICAL WASTE MANAGEMENT PROGRAM FACILITY LIST  | <a href="#">MWMP</a>    | 0         | 0           | 0.2500                |
| DTSC REGISTERED HAZARDOUS WASTE TRANSPORTERS               | <a href="#">DTSCHWT</a> | 0         | 0           | 0.2500                |
| DRY CLEANER FACILITIES                                     | <a href="#">CLEANER</a> | 0         | 0           | 0.2500                |
| MINES LISTING  | <a href="#">MINES</a>   | 0         | 0           | 0.2500                |

## Database Summary

| <b>Database</b>  | <b>Acronym</b>              | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|--|-----------------------------|------------------|--------------------|------------------------------|
| SPILLS, LEAKS, INVESTIGATION & CLEANUP RECOVERY LISTING                  | <a href="#">SLIC</a>        | 0                | 0                  | 0.2500                       |
| CORTESE LIST   | <a href="#">CORTESE</a>     | 0                | 0                  | 0.5000                       |
| EXPEDITED REMOVAL ACTION PROGRAM SITES                                   | <a href="#">ERAP</a>        | 0                | 0                  | 0.5000                       |
| HISTORICAL CORTESE LIST  | <a href="#">HISTCORTESE</a> | 3                | 0                  | 0.5000                       |
| LISTING OF CERTIFIED DROPOFF, COLLECTION, AND COMMUNITY SERVICE PROGRAMS | <a href="#">DROP</a>        | 3                | 1                  | 0.5000                       |
| LISTING OF CERTIFIED PROCESSORS  | <a href="#">PROC</a>        | 1                | 0                  | 0.5000                       |
| NO FURTHER ACTION DETERMINATION  | <a href="#">NFA</a>         | 1                | 0                  | 0.5000                       |
| RECYCLING CENTERS  | <a href="#">SWRCY</a>       | 10               | 0                  | 0.5000                       |
| REFERRED TO ANOTHER LOCAL OR STATE AGENCY                                | <a href="#">REF</a>         | 1                | 0                  | 0.5000                       |
| SITES NEEDING FURTHER EVALUATION   | <a href="#">NFE</a>         | 0                | 0                  | 0.5000                       |
| WASTE MANAGEMENT UNIT DATABASE   | <a href="#">WMUDS</a>       | 0                | 0                  | 0.5000                       |
| TOXIC PITS CLEANUP ACT SITES   | <a href="#">TOXPITS</a>     | 0                | 0                  | 1.0000                       |
| <b>SUB-TOTAL</b>   |                             | <b>25</b>        | <b>1</b>           |                              |

## Database Summary

### **TRIBAL LISTING**

#### **Standard Environmental Records**

| <b>Database</b>                                       | <b>Acronym</b>                  | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|---|---------------------------------|------------------|--------------------|------------------------------|
| UNDERGROUND STORAGE TANKS ON TRIBAL LANDS             | <a href="#">LUSTR09</a>         | 0                | 0                  | 0.2500                       |
| ILLEGAL DUMP SITES ON THE TORRES MARTINEZ RESERVATION | <a href="#">TORRESDUMPSITES</a> | 0                | 0                  | 0.5000                       |
| LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS     | <a href="#">LUSTR09</a>         | 0                | 0                  | 0.5000                       |
| OPEN DUMP INVENTORY ON TRIBAL LANDS                   | <a href="#">ODINDIAN</a>        | 0                | 0                  | 0.5000                       |

|           |  |   |   |  |
|-----------|--|---|---|--|
| SUB-TOTAL |  | 0 | 0 |  |
|-----------|--|---|---|--|

#### **Additional Environmental Records**

| <b>Database</b>     | <b>Acronym</b>            | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|---------------------|---------------------------|------------------|--------------------|------------------------------|
| INDIAN RESERVATIONS | <a href="#">INDIANRES</a> | 0                | 0                  | 1.0000                       |

|           |  |   |   |  |
|-----------|--|---|---|--|
| SUB-TOTAL |  | 0 | 0 |  |
|-----------|--|---|---|--|

|       |  |    |   |  |
|-------|--|----|---|--|
| TOTAL |  | 53 | 3 |  |
|-------|--|----|---|--|

## Database Radius Summary

### **FEDERAL LISTING**

Standard environmental records are displayed in **bold**.

| Acronym          | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile  | Total    |
|------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|-----------|----------|
| AIRSAFS          | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| BRS              | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| CDL              | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| DOCKETS          | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>EC</b>        | <b>0.0200</b>         | <b>0</b>         | <b>NS</b>          | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| ECHOR09          | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>ERNSCA</b>    | <b>0.0200</b>         | <b>0</b>         | <b>NS</b>          | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| FRSCA            | 0.0200                | 3                | NS                 | NS               | NS               | NS             | NS        | 3        |
| HMIRSR09         | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| ICIS             | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| ICISNPDES        | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>LUCIS</b>     | <b>0.0200</b>         | <b>0</b>         | <b>NS</b>          | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| MLTS             | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| NPDESR09         | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| PADS             | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| PCSR09           | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>RCRASC</b>    | <b>0.0200</b>         | <b>0</b>         | <b>NS</b>          | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| SEMSLIENS        | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| SFLIENS          | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| SSTS             | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| TRI              | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| TSCA             | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>RCRAGR09</b>  | <b>0.1250</b>         | <b>0</b>         | <b>0</b>           | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>RCRANGR09</b> | <b>0.1250</b>         | <b>0</b>         | <b>0</b>           | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| ALTFUELS         | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| <b>FEMAUST</b>   | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| HISTPST          | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| ICISCLEANERS     | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| MRDS             | 0.2500                | 1                | 2                  | 0                | NS               | NS             | NS        | 3        |
| MSHA             | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| <b>BF</b>        | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>DNPL</b>      | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>NLRRCRAT</b>  | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| ODI              | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS        | 0        |
| <b>RCRAT</b>     | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |

## Database Radius Summary

| Acronym          | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile | Total |
|------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|----------|-------|
| <b>SEMS</b>      | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS       | 0     |
| <b>SEMSARCH</b>  | 0.5000                | 0                | 0                  | 1                | 0                | NS             | NS       | 1     |
| SMCRA            | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS       | 0     |
| USUMTRCA         | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS       | 0     |
| DOD              | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| FUDS             | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| FUSRAP           | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>NLRRCRAC</b>  | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| NMS              | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>NPL</b>       | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>PNPL</b>      | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>RCRAC</b>     | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>RCRASUBC</b>  | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| RODS             | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>SUB-TOTAL</b> |                       | 4                | 2                  | 1                | 0                | 0              | 0        | 7     |

## Database Radius Summary

### STATE (CA) LISTING

Standard environmental records are displayed in **bold**.

| Acronym             | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile  | Total    |
|---------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|-----------|----------|
| CDL                 | 0.0200                | 1                | NS                 | NS               | NS               | NS             | NS        | 1        |
| CHMIRS              | 0.0200                | 3                | NS                 | NS               | NS               | NS             | NS        | 3        |
| <b>DTSCDR</b>       | <b>0.0200</b>         | <b>0</b>         | <b>NS</b>          | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| EMI                 | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| HWTS                | 0.0200                | 2                | NS                 | NS               | NS               | NS             | NS        | 2        |
| LDS                 | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| LIENS               | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| MCS                 | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| NPDES               | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>ABST</b>         | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>AST2007</b>      | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| CLEANER             | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| DTSCHWT             | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| <b>HISTUST</b>      | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>1</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>1</b> |
| MINES               | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| MWMP                | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| SLIC                | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| <b>SWEEPS</b>       | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>1</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>1</b> |
| <b>USTCUPA</b>      | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>1</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>1</b> |
| <b>BF</b>           | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>CALSITES</b>     | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>2</b>         | <b>NS</b>      | <b>NS</b> | <b>2</b> |
| <b>CLEANUPSITES</b> | <b>0.5000</b>         | <b>0</b>         | <b>1</b>           | <b>0</b>         | <b>3</b>         | <b>NS</b>      | <b>NS</b> | <b>4</b> |
| CORTESE             | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS        | 0        |
| DROP                | 0.5000                | 0                | 0                  | 0                | 3                | NS             | NS        | 3        |
| ERAP                | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS        | 0        |
| HISTCORTESE         | 0.5000                | 0                | 1                  | 0                | 2                | NS             | NS        | 3        |
| <b>LUST</b>         | <b>0.5000</b>         | <b>0</b>         | <b>1</b>           | <b>0</b>         | <b>1</b>         | <b>NS</b>      | <b>NS</b> | <b>2</b> |
| NFA                 | 0.5000                | 0                | 0                  | 0                | 1                | NS             | NS        | 1        |
| NFE                 | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS        | 0        |
| PROC                | 0.5000                | 0                | 0                  | 0                | 1                | NS             | NS        | 1        |
| REF                 | 0.5000                | 0                | 0                  | 0                | 1                | NS             | NS        | 1        |
| <b>SWIS</b>         | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>3</b>         | <b>NS</b>      | <b>NS</b> | <b>3</b> |
| SWRCY               | 0.5000                | 0                | 0                  | 0                | 10               | NS             | NS        | 10       |
| <b>VGP</b>          | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| WMUDS               | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS        | 0        |

## Database Radius Summary

| Acronym          | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile | Total |
|------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|----------|-------|
| ENVIROSTOR       | 1.0000                | 0                | 0                  | 0                | 3                | 4              | NS       | 7     |
| ENVIROSTORPCA    | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| TOXPITS          | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>SUB-TOTAL</b> |                       | 6                | 3                  | 3                | 30               | 4              | 0        | 46    |



## Database Radius Summary

### **TRIBAL LISTING**

Standard environmental records are displayed in **bold**.

| Acronym                | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile  | Total    |
|------------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|-----------|----------|
| <b>USTR09</b>          | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>LUSTR09</b>         | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>ODINDIAN</b>        | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>TORRESDUMPSITES</b> | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>INDIANRES</b>       | <b>1.0000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>0</b>       | <b>NS</b> | <b>0</b> |
| <b>SUB-TOTAL</b>       |                       | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>0</b>       | <b>0</b>  | <b>0</b> |

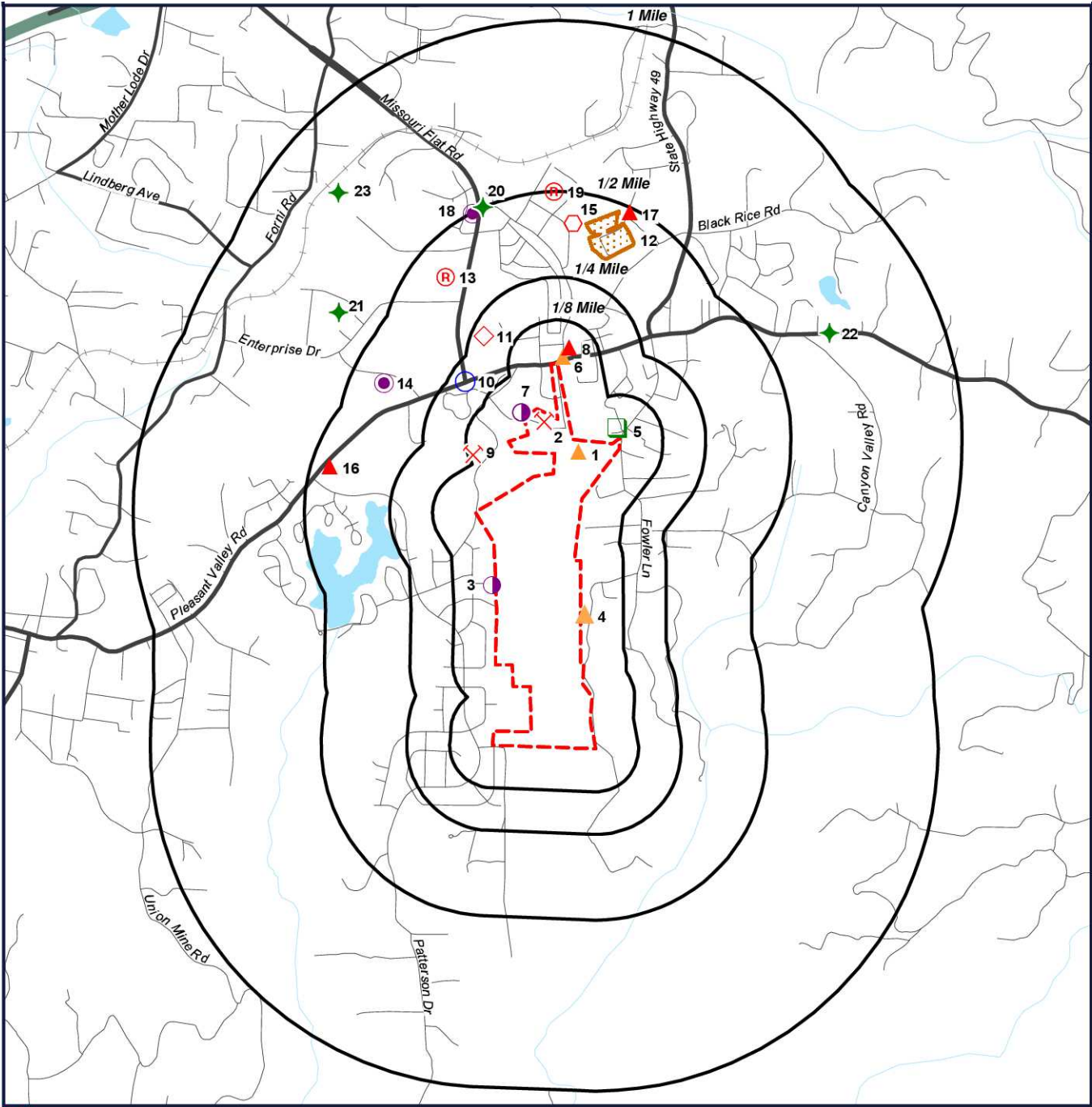
|              |  |           |          |          |           |          |          |           |
|--------------|--|-----------|----------|----------|-----------|----------|----------|-----------|
| <b>TOTAL</b> |  | <b>10</b> | <b>5</b> | <b>4</b> | <b>30</b> | <b>4</b> | <b>0</b> | <b>53</b> |
|--------------|--|-----------|----------|----------|-----------|----------|----------|-----------|

**NOTES:**

**NS = NOT SEARCHED**

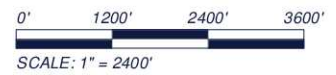
**TP/AP = TARGET PROPERTY/ADJACENT PROPERTY**

# Radius Map 1



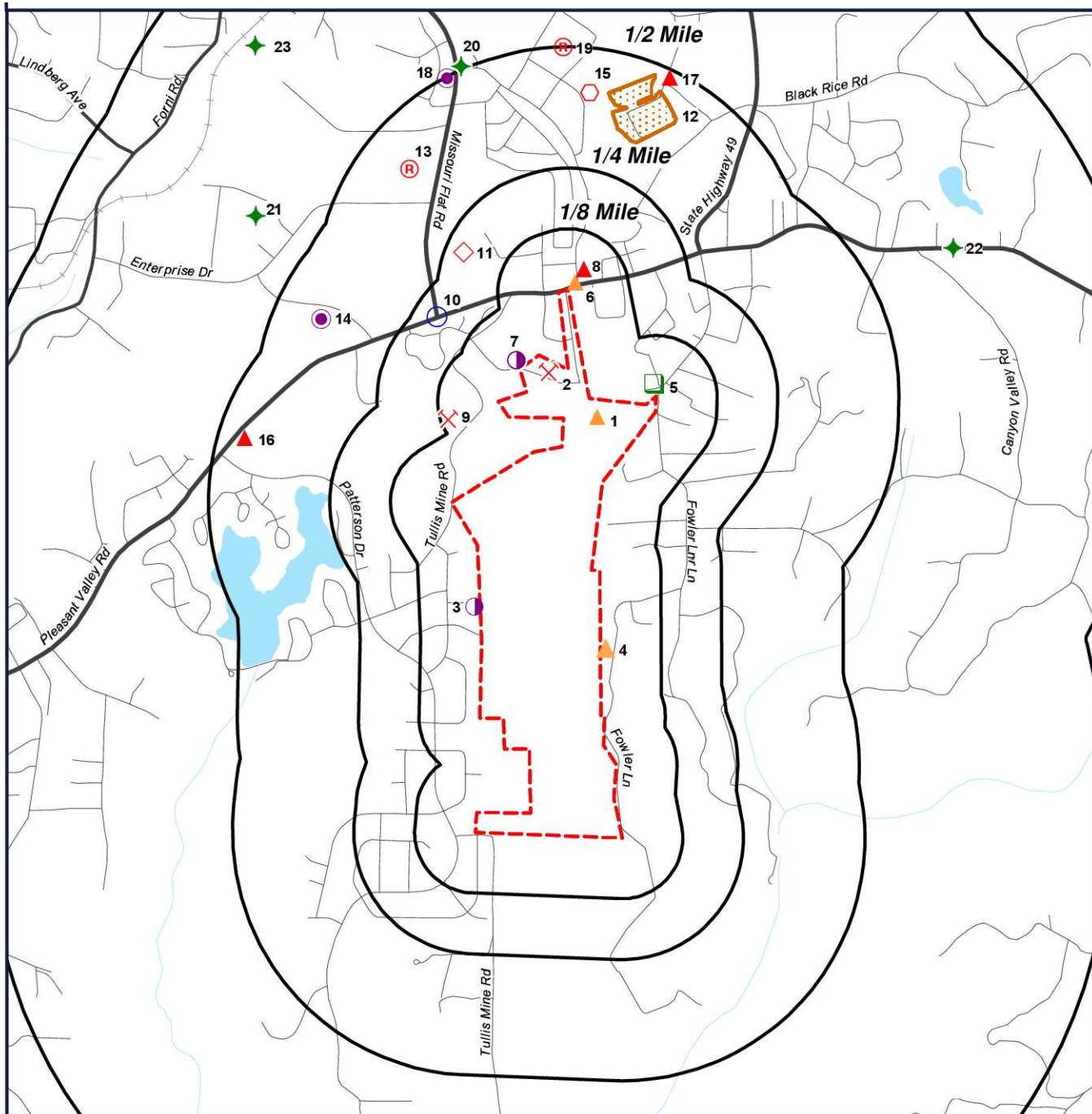
- |                      |              |
|----------------------|--------------|
| Target Property (TP) | SWRCY        |
| CHMIRS               | PROC         |
| MRDS                 | DROP         |
| HWTS                 | CLEANUPSITES |
| FRSCA                | SWRCY        |
| CLEANUPSITES         | CALSITES     |
| SEMSARCH             | HISTCORTESE  |
| USTCUPA              | ENVIROSTOR   |
| SWIS                 |              |

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



[Click here to access Satellite view](#)

# Radius Map 2



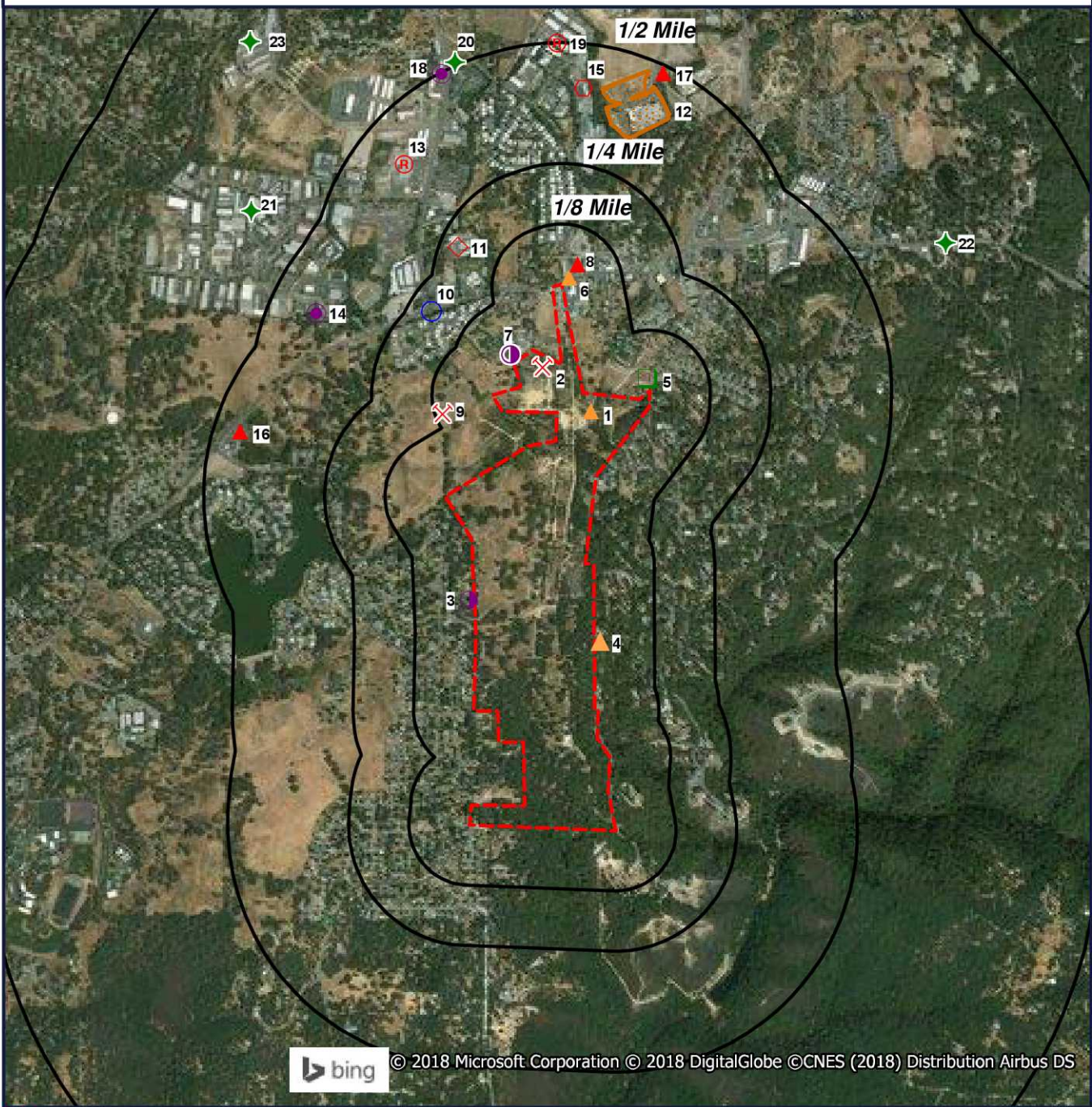
- |                      |            |              |
|----------------------|------------|--------------|
| Target Property (TP) | CHMIRS     | SWRCY        |
| MRDS                 | HWTS       | PROC         |
| FRSCA                | SEMSARCH   | DROP         |
| CLEANUPSITES         | USTCUPA    | CLEANUPSITES |
| SEMSARCH             | SWRCY      | SWRCY        |
| USTCUPA              | CALSITES   | HISTCORTESE  |
| SWIS                 | ENVIROSTOR | ENVIROSTOR   |

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



[Click here to access Satellite view](#)

# Ortho Map



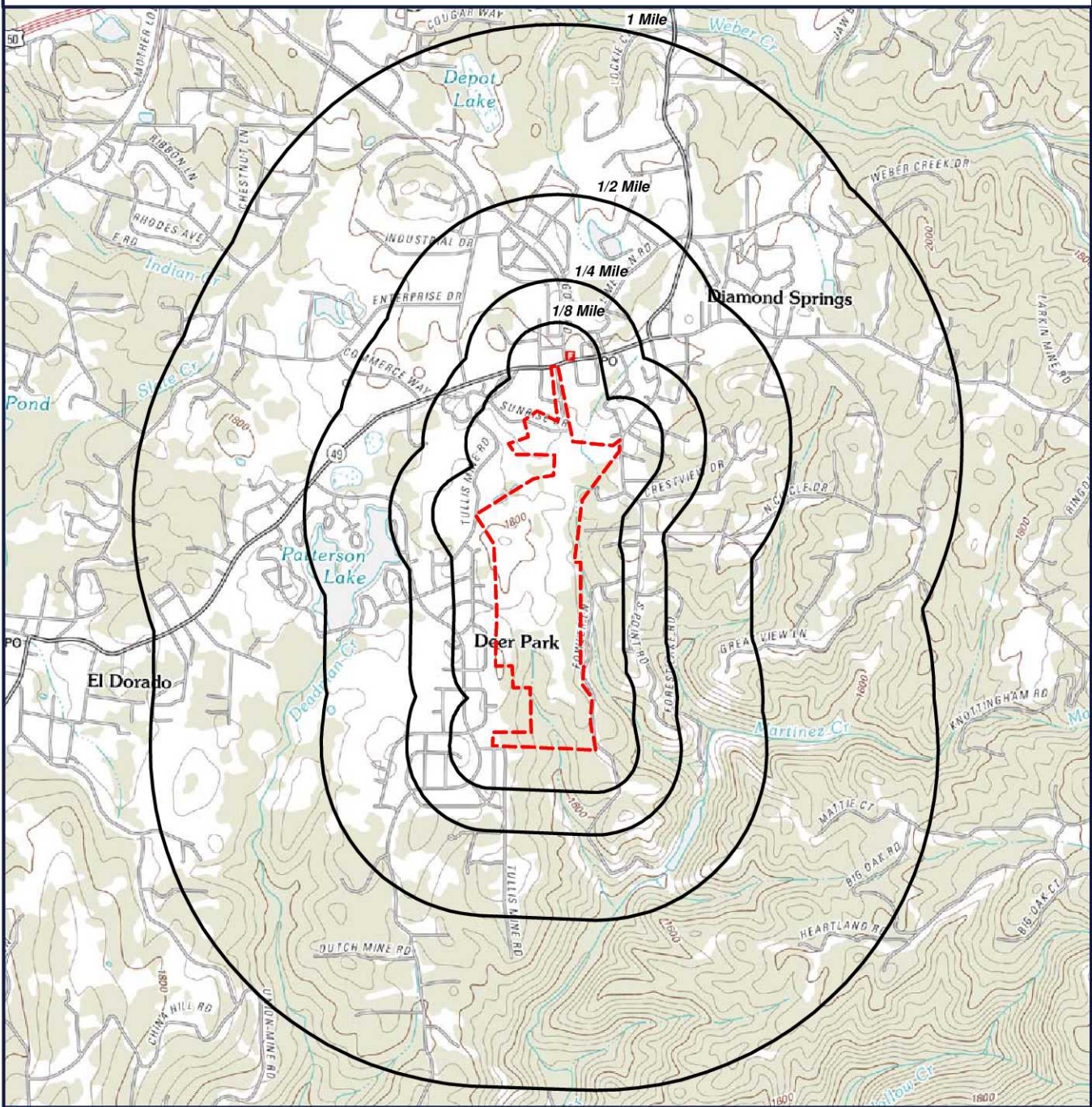
- Target Property (TP)
- CHMIRS
- MRDS
- HWTS
- FRSCA
- CLEANUPSITES
- SEMSARCH
- USTCUPA
- SWIS
- SWRCY
- PROC
- DROP
- CLEANUPSITES
- SWRCY
- CALSITES
- HISTCORTESE
- ENVIROSTOR

**Quadrangle(s): Placerville  
Stonehenge Springs  
Faith Lane  
Diamond Springs, California  
95619**



[Click here to access Satellite view](#)

# Topographic Map



 Target Property (TP)

**Quadrangle(s): Placerville**  
**Source: USGS, 03/06/2012**  
**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



0' 1200' 2400' 3600'  
SCALE: 1" = 2400'

[Click here to access Satellite view](#)

## Located Sites Summary

NOTE: Standard environmental records are displayed in **bold**.

| Map ID#            | Database Name       | Site ID#             | Relative Elevation            | Distance From Site                      | Site Name                                 | Address   | PAGE #             |
|--------------------|---------------------|----------------------|-------------------------------|---|---|---|--------------------|
| <a href="#">1</a>  | CHMIRS              | 005732               | Lower<br>(1,739 ft.)          | TP                                      |   | DEBS FROSTY LIFT STATION<br>END OF FAITH LANE, DIAMOND<br>SPRINGS, CA 95619 | <a href="#">22</a> |
| <a href="#">1</a>  | FRSCA               | 110065851242         | Lower<br>(1,739 ft.)          | TP                                      | DEB'S FROSTY LIFT<br>STATION              | FAITH LANE ESNA 0.25 MI. S/HWY<br>49, DIAMOND SPRINGS, CA 95619             | <a href="#">23</a> |
| <a href="#">2</a>  | MRDS                | 10139067             | Higher<br>(1,763 ft.)         | TP                                      | PHILLIP N. HUFFT<br>CLAIM                 | EL DORADO COUNTY, DIAMOND<br>SPRINGS, CA 95619                              | <a href="#">24</a> |
| <a href="#">3</a>  | HWTS                | CAC002801219         | Higher<br>(1,778 ft.)         | 0.012 mi. W<br>(63 ft.)                 | MARK MORGAN                               | 210 JUSTINE CT, DIAMOND<br>SPRINGS, CA 95619                                | <a href="#">25</a> |
| <a href="#">4</a>  | CDL                 | 200202096            | Lower<br>(1,690 ft.)          | 0.012 mi. E<br>(63 ft.)                 |   | 473 FOWLER LANE, DIAMOND<br>SPRINGS, CA 95619                               | <a href="#">26</a> |
| <a href="#">4</a>  | CHMIRS              | 04-1482              | Lower<br>(1,690 ft.)          | 0.012 mi. E<br>(63 ft.)                 |   | 473 FOWLER LANE, DIAMOND<br>SPRINGS, CA 95667                               | <a href="#">27</a> |
| <a href="#">5</a>  | FRSCA               | 110064896171         | Lower<br>(1,753 ft.)          | 0.018 mi. N<br>(95 ft.)                 | DIAMOND VILLAS<br>SENIOR HOUSING          | PANTHER LANE, DIAMOND<br>SPRINGS, CA 95619                                  | <a href="#">28</a> |
| <a href="#">6</a>  | CHMIRS              | 08-5950              | Higher<br>(1,786 ft.)         | 0.019 mi.<br>ENE<br>(100 ft.)           |   | CHINA GARDEN AT PLEASANT<br>VALLEY RD., DIAMOND SPRINGS,<br>CA              | <a href="#">29</a> |
| <a href="#">7</a>  | FRSCA               | 110066033820         | Higher<br>(1,767 ft.)         | 0.019 mi. NW<br>(100 ft.)               | WARD'S<br>AUTOMOTIVE                      | 2189 SUNRISE DR, DIAMOND<br>SPRINGS, CA 95619                               | <a href="#">30</a> |
| <a href="#">7</a>  | HWTS                | CAL000167531         | Higher<br>(1,767 ft.)         | 0.019 mi. NW<br>(100 ft.)               | WARDS<br>AUTOMOTIVE INC                   | 2189 SUNRISE DR, DIAMOND<br>SPRINGS, CA 95619                               | <a href="#">31</a> |
| <a href="#">8</a>  | <b>CLEANUPSITES</b> | <b>T0601700047</b>   | <b>Higher<br/>(1,786 ft.)</b> | <b>0.05 mi. NE<br/>(264 ft.)</b>        | <b>FORMER SS</b>                          | <b>493 MAIN ST, DIAMOND SPRINGS,<br/>CA 95619</b>                           | <a href="#">32</a> |
| <a href="#">8</a>  | HISTCORTESE         | 090065COR            | Higher<br>(1,786 ft.)         | 0.05 mi. NE<br>(264 ft.)                | FORMER SS                                 | 493 MAIN, DIAMOND SPRINGS, CA<br>95619                                      | <a href="#">33</a> |
| <a href="#">8</a>  | <b>LUST</b>         | <b>T0601700047</b>   | <b>Higher<br/>(1,786 ft.)</b> | <b>0.05 mi. NE<br/>(264 ft.)</b>        | <b>FORMER SS</b>                          | <b>493 MAIN ST, DIAMOND SPRINGS,<br/>CA 95619</b>                           | <a href="#">34</a> |
| <a href="#">9</a>  | MRDS                | 10029926             | Lower<br>(1,760 ft.)          | 0.107 mi.<br>WSW<br>(565 ft.)           | ROBERT NELSON<br>CLAIM                    | EL DORADO COUNTY, DIAMOND<br>SPRINGS, CA 95619                              | <a href="#">35</a> |
| <a href="#">9</a>  | MRDS                | 10029927             | Lower<br>(1,760 ft.)          | 0.107 mi.<br>WSW<br>(565 ft.)           | WHEELOCK                                  | EL DORADO COUNTY, DIAMOND<br>SPRINGS, CA 95619                              | <a href="#">36</a> |
| <a href="#">10</a> | <b>SEMSARCH</b>     | <b>CAD980637417</b>  | <b>Higher<br/>(1,762 ft.)</b> | <b>0.201 mi.<br/>WNW<br/>(1061 ft.)</b> | <b>OLD CALDOR<br/>LUMBER CO YD</b>        | <b>HWY 49 &amp; FLAT RD, DIAMOND<br/>SPRINGS, CA 95619</b>                  | <a href="#">37</a> |
| <a href="#">11</a> | <b>HISTUST</b>      | <b>0002344F</b>      | <b>Higher<br/>(1,799 ft.)</b> | <b>0.211 mi.<br/>WNW<br/>(1114 ft.)</b> | <b>EL DORADO UNION<br/>HIGH SCHOOL DI</b> | <b>4675 MISSOURI FLAT ROAD,<br/>DIAMOND SPRINGS, CA 95619</b>               | <a href="#">38</a> |
| <a href="#">11</a> | <b>SWEEPS</b>       | <b>A09-000-46253</b> | <b>Higher<br/>(1,799 ft.)</b> | <b>0.211 mi.<br/>WNW<br/>(1114 ft.)</b> | <b>EL DORADO UNION<br/>HIGH SCHOOL DI</b> | <b>4675 MISSOURI FLAT RD,<br/>DIAMOND SPRINGS, CA 95619</b>                 | <a href="#">42</a> |
| <a href="#">11</a> | <b>USTCUPA</b>      | <b>187573130</b>     | <b>Higher<br/>(1,799 ft.)</b> | <b>0.211 mi.<br/>WNW<br/>(1114 ft.)</b> | <b>EDUHSD<br/>TRANSPORTATION</b>          | <b>4675 MISSOURI FLAT RD,<br/>PLACERVILLE, CA 95667</b>                     | <a href="#">43</a> |
| <a href="#">12</a> | <b>CLEANUPSITES</b> | <b>T10000009244</b>  | <b>Higher<br/>(1,812 ft.)</b> | <b>0.333 mi.<br/>NNE<br/>(1758 ft.)</b> | <b>WASTE<br/>CONNECTIONS</b>              | <b>4100 THROWITA WAY,<br/>PLACERVILLE, CA 95667</b>                         | <a href="#">44</a> |
| <a href="#">12</a> | DROP                | CP0674               | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | MATERIAL<br>RECOVERY FACILITY             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667                                 | <a href="#">46</a> |

## Located Sites Summary

NOTE: Standard environmental records are displayed in **bold**.

| Map ID#            | Database Name     | Site ID#              | Relative Elevation            | Distance From Site                      | Site Name   | Address   | PAGE #             |
|--------------------|-------------------|-----------------------|-------------------------------|---|---|---|--------------------|
| <a href="#">12</a> | DROP              | CP0880                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | EL DORADO<br>DISPOSAL SERVICE<br>MRF                  | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">47</a> |
| <a href="#">12</a> | DROP              | CP0961                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | SEI SOLID WASTE                                       | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">48</a> |
| <a href="#">12</a> | PROC              | PR0439                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | EL DORADO<br>DISPOSAL SERVICE                         | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">49</a> |
| <a href="#">12</a> | <b>SWIS</b>       | <b>09-AA-0004SWIS</b> | <b>Higher<br/>(1,812 ft.)</b> | <b>0.333 mi.<br/>NNE<br/>(1758 ft.)</b> | <b>WESTERN EL<br/>DORADO RECOVERY<br/>SYSTEMS MRF</b> | <b>4100 THROWITA WAY,<br/>PLACERVILLE, CA 95667</b>       | <a href="#">50</a> |
| <a href="#">12</a> | <b>SWIS</b>       | <b>09-AA-0006SWIS</b> | <b>Higher<br/>(1,812 ft.)</b> | <b>0.333 mi.<br/>NNE<br/>(1758 ft.)</b> | <b>WEDRS-GREEN<br/>WASTE RECYCLING<br/>CENTER</b>     | <b>4100 THROWITA WAY,<br/>PLACERVILLE, CA 95667</b>       | <a href="#">51</a> |
| <a href="#">12</a> | <b>SWIS</b>       | <b>09-AA-0007SWIS</b> | <b>Higher<br/>(1,812 ft.)</b> | <b>0.333 mi.<br/>NNE<br/>(1758 ft.)</b> | <b>WEDRS- CDI<br/>RECOVETY<br/>OPERATION (MVCDI)</b>  | <b>4100 THROWITA WAY,<br/>PLACERVILLE, CA 95667</b>       | <a href="#">52</a> |
| <a href="#">12</a> | SWRCY             | CP0880                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | EL DORADO<br>DISPOSAL SERVICE<br>MRF                  | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">53</a> |
| <a href="#">12</a> | SWRCY             | CS1171                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WASTE<br>CONNECTIONS OF<br>CALIFORNIA INC             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">54</a> |
| <a href="#">12</a> | SWRCY             | CS1234                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WASTE<br>CONNECTIONS OF<br>CALIFORNIA INC             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">55</a> |
| <a href="#">12</a> | SWRCY             | CS1235                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WASTE<br>CONNECTIONS OF<br>CALIFORNIA INC             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">56</a> |
| <a href="#">12</a> | SWRCY             | CS1236                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WASTE<br>CONNECTIONS OF<br>CALIFORNIA INC             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">57</a> |
| <a href="#">12</a> | SWRCY             | CS19394.001           | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WASTE<br>CONNECTIONS OF<br>CALIFORNIA INC             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">58</a> |
| <a href="#">12</a> | SWRCY             | PR0439                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | EL DORADO<br>DISPOSAL SERVICE                         | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">59</a> |
| <a href="#">12</a> | SWRCY             | RC10531               | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WESTERN EL<br>DORADO RECOVERY<br>SYSTEMS              | 4100 THROWITA WY,<br>PLACERVILLE, CA 95667                | <a href="#">60</a> |
| <a href="#">13</a> | SWRCY             | RC10654               | Higher<br>(1,816 ft.)         | 0.396 mi.<br>WNW<br>(2091 ft.)          | MISSOURI FLAT<br>RECYCLE CENTER                       | 4600 MISSOURI FLAT RD,<br>PLACERVILLE, CA 95667           | <a href="#">61</a> |
| <a href="#">14</a> | <b>CALSITES</b>   | <b>09750002</b>       | <b>Higher<br/>(1,802 ft.)</b> | <b>0.401 mi.<br/>WNW<br/>(2117 ft.)</b> | <b>FOOTHILL AUTO<br/>REPAIR</b>                       | <b>6566-C COMMERCE WAY,<br/>DIAMOND SPRINGS, CA 95619</b> | <a href="#">62</a> |
| <a href="#">14</a> | <b>ENVIROSTOR</b> | <b>09750002</b>       | <b>Higher<br/>(1,802 ft.)</b> | <b>0.401 mi.<br/>WNW<br/>(2117 ft.)</b> | <b>FOOTHILL AUTO<br/>REPAIR</b>                       | <b>6566-C COMMERCE WAY,<br/>DIAMOND SPRINGS, CA 95619</b> | <a href="#">63</a> |
| <a href="#">14</a> | REF               | 9750002               | Higher<br>(1,802 ft.)         | 0.401 mi.<br>WNW<br>(2117 ft.)          | FOOTHILL AUTO<br>REPAIR                               | 6566-C COMMERCE WAY,<br>DIAMOND SPRINGS, CA 95619         | <a href="#">64</a> |

## Located Sites Summary

NOTE: Standard environmental records are displayed in **bold**.

| Map ID#            | Database Name        | Site ID#            | Relative Elevation            | Distance From Site                      | Site Name  | Address  | PAGE #             |
|--------------------|----------------------|---------------------|-------------------------------|---|--|--|--------------------|
| <a href="#">15</a> | HISTCORTESE          | 6A189101N25C OR     | Higher<br>(1,801 ft.)         | 0.403 mi.<br>(2128 ft.)                 | GUSTAFSON D M & PATRICI                          | 3655 CHUCKWAGON,<br>PLACERVILLE, CA 95667                    | <a href="#">65</a> |
| <a href="#">16</a> | <b>CLEANUPSITE S</b> | <b>T0601700077</b>  | <b>Lower<br/>(1,747 ft.)</b>  | <b>0.443 mi.<br/>WNW<br/>(2339 ft.)</b> | <b>STEVE'S CHEAPER</b>                           | <b>130 PLEASANT VALLEY RD,<br/>DIAMOND SPRINGS, CA 95619</b> | <a href="#">66</a> |
| <a href="#">16</a> | HISTCORTESE          | 090096COR           | Lower<br>(1,747 ft.)          | 0.443 mi.<br>WNW<br>(2339 ft.)          | STEVE'S CHEAPER                                  | 130 PLEASANT VALLEY,<br>DIAMOND SPRINGS, CA 95619            | <a href="#">69</a> |
| <a href="#">16</a> | <b>LUST</b>          | <b>T0601700077</b>  | <b>Lower<br/>(1,747 ft.)</b>  | <b>0.443 mi.<br/>WNW<br/>(2339 ft.)</b> | <b>STEVE'S CHEAPER</b>                           | <b>130 PLEASANT VALLEY RD,<br/>DIAMOND SPRINGS, CA 95619</b> | <a href="#">70</a> |
| <a href="#">17</a> | <b>CLEANUPSITE S</b> | <b>T10000010458</b> | <b>Higher<br/>(1,819 ft.)</b> | <b>0.481 mi.<br/>NNE<br/>(2540 ft.)</b> | <b>ABEL TRUST</b>                                | <b>4061 LIME PLANT ROAD,<br/>DIAMOND SPRINGS, CA 95667</b>   | <a href="#">71</a> |
| <a href="#">18</a> | <b>CALSITES</b>      | <b>09340001</b>     | <b>Higher<br/>(1,817 ft.)</b> | <b>0.497 mi.<br/>NNW<br/>(2624 ft.)</b> | <b>CELEBRITY PLATING</b>                         | <b>4502 MISSOURI FLAT ROAD,<br/>PLACERVILLE, CA 95667</b>    | <a href="#">73</a> |
| <a href="#">18</a> | <b>ENVIROSTOR</b>    | <b>09340001</b>     | <b>Higher<br/>(1,817 ft.)</b> | <b>0.497 mi.<br/>NNW<br/>(2624 ft.)</b> | <b>CELEBRITY PLATING</b>                         | <b>4502 MISSOURI FLAT ROAD,<br/>PLACERVILLE, CA 95667</b>    | <a href="#">74</a> |
| <a href="#">18</a> | <b>ENVIROSTOR</b>    | <b>71003046</b>     | <b>Higher<br/>(1,817 ft.)</b> | <b>0.497 mi.<br/>NNW<br/>(2624 ft.)</b> | <b>CELEBRITY, INC.</b>                           | <b>4502 MISSOURI FLAT ROAD,<br/>PLACERVILLE, CA 95667</b>    | <a href="#">75</a> |
| <a href="#">18</a> | NFA                  | 71003046            | Higher<br>(1,817 ft.)         | 0.497 mi.<br>NNW<br>(2624 ft.)          | CELEBRITY, INC.                                  | 4502 MISSOURI FLAT ROAD,<br>PLACERVILLE, CA 95667            | <a href="#">76</a> |
| <a href="#">19</a> | SWRCY                | RC4019              | Higher<br>(1,812 ft.)         | 0.498 mi. N<br>(2629 ft.)               | E M RECYCLING                                    | 4040 #A-2 STAGE CT,<br>PLACERVILLE, CA 95667                 | <a href="#">77</a> |
| <a href="#">20</a> | <b>ENVIROSTOR</b>    | <b>09500006</b>     | <b>Higher<br/>(1,817 ft.)</b> | <b>0.522 mi.<br/>NNW<br/>(2756 ft.)</b> | <b>TETERS AUTO<br/>WRECKERS</b>                  | <b>4487 MISSOURI FLAT ROAD,<br/>PLACERVILLE, CA 95667</b>    | <a href="#">78</a> |
| <a href="#">21</a> | <b>ENVIROSTOR</b>    | <b>71003697</b>     | <b>Lower<br/>(1,757 ft.)</b>  | <b>0.641 mi.<br/>WNW<br/>(3384 ft.)</b> | <b>CELEBRITY, INC.</b>                           | <b>6650 MERCHANDISE WAY,<br/>DIAMOND SPRINGS, CA 95619</b>   | <a href="#">79</a> |
| <a href="#">22</a> | <b>ENVIROSTOR</b>    | <b>09280001</b>     | <b>Higher<br/>(1,848 ft.)</b> | <b>0.683 mi.<br/>ENE<br/>(3606 ft.)</b> | <b>OXYGEN SERVICE<br/>AND SUPPLY<br/>COMPANY</b> | <b>13 CHINA GARDEN ROAD,<br/>DIAMOND SPRINGS, CA 95619</b>   | <a href="#">80</a> |
| <a href="#">23</a> | <b>ENVIROSTOR</b>    | <b>09730001</b>     | <b>Higher<br/>(1,794 ft.)</b> | <b>0.818 mi.<br/>WNW<br/>(4319 ft.)</b> | <b>OLD CALDOR<br/>LUMBER COMPANY<br/>YARD</b>    | <b>180 INDUSTRIAL DRIVE,<br/>DIAMOND SPRINGS, CA 95619</b>   | <a href="#">81</a> |



# Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

**Target Property Elevation: 1761 ft.**

NOTE: Standard environmental records are displayed in **bold**.

## **EQUAL/HIGHER ELEVATION**

| Map ID#            | Database Name       | Elevation        | Site Name                                     | Address   | Page #             |
|--------------------|---------------------|------------------|---|---|--------------------|
| <a href="#">2</a>  | MRDS                | 1,763 ft.        | PHILLIP N. HUFFT CLAIM                        | EL DORADO COUNTY, DIAMOND SPRINGS, CA 95619               | <a href="#">24</a> |
| <a href="#">3</a>  | HWTS                | 1,778 ft.        | MARK MORGAN                                   | 210 JUSTINE CT, DIAMOND SPRINGS, CA 95619                 | <a href="#">25</a> |
| <a href="#">6</a>  | CHMIRS              | 1,786 ft.        |   | CHINA GARDEN AT PLEASANT VALLEY RD., DIAMOND SPRINGS, CA  | <a href="#">29</a> |
| <a href="#">7</a>  | FRSCA               | 1,767 ft.        | WARD'S AUTOMOTIVE                             | 2189 SUNRISE DR, DIAMOND SPRINGS, CA 95619                | <a href="#">30</a> |
| <a href="#">7</a>  | HWTS                | 1,767 ft.        | WARDS AUTOMOTIVE INC                          | 2189 SUNRISE DR, DIAMOND SPRINGS, CA 95619                | <a href="#">31</a> |
| <a href="#">8</a>  | <b>CLEANUPSITES</b> | <b>1,786 ft.</b> | <b>FORMER SS</b>                              | <b>493 MAIN ST, DIAMOND SPRINGS, CA 95619</b>             | <a href="#">32</a> |
| <a href="#">8</a>  | HISTCORTESE         | 1,786 ft.        | FORMER SS                                     | 493 MAIN, DIAMOND SPRINGS, CA 95619                       | <a href="#">33</a> |
| <a href="#">8</a>  | <b>LUST</b>         | <b>1,786 ft.</b> | <b>FORMER SS</b>                              | <b>493 MAIN ST, DIAMOND SPRINGS, CA 95619</b>             | <a href="#">34</a> |
| <a href="#">10</a> | <b>SEMSARCH</b>     | <b>1,762 ft.</b> | <b>OLD CALDOR LUMBER CO YD</b>                | <b>HWY 49 &amp; FLAT RD, DIAMOND SPRINGS, CA 95619</b>    | <a href="#">37</a> |
| <a href="#">11</a> | <b>HISTUST</b>      | <b>1,799 ft.</b> | <b>EL DORADO UNION HIGH SCHOOL DI</b>         | <b>4675 MISSOURI FLAT ROAD, DIAMOND SPRINGS, CA 95619</b> | <a href="#">38</a> |
| <a href="#">11</a> | <b>SWEEPS</b>       | <b>1,799 ft.</b> | <b>EL DORADO UNION HIGH SCHOOL DI</b>         | <b>4675 MISSOURI FLAT RD, DIAMOND SPRINGS, CA 95619</b>   | <a href="#">42</a> |
| <a href="#">11</a> | <b>USTCUPA</b>      | <b>1,799 ft.</b> | <b>EDUHSD TRANSPORTATION</b>                  | <b>4675 MISSOURI FLAT RD, PLACERVILLE, CA 95667</b>       | <a href="#">43</a> |
| <a href="#">12</a> | <b>CLEANUPSITES</b> | <b>1,812 ft.</b> | <b>WASTE CONNECTIONS</b>                      | <b>4100 THROWITA WAY, PLACERVILLE, CA 95667</b>           | <a href="#">44</a> |
| <a href="#">12</a> | DROP                | 1,812 ft.        | MATERIAL RECOVERY FACILITY                    | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">46</a> |
| <a href="#">12</a> | DROP                | 1,812 ft.        | EL DORADO DISPOSAL SERVICE MRF                | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">47</a> |
| <a href="#">12</a> | DROP                | 1,812 ft.        | SEI SOLID WASTE                               | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">48</a> |
| <a href="#">12</a> | PROC                | 1,812 ft.        | EL DORADO DISPOSAL SERVICE                    | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">49</a> |
| <a href="#">12</a> | <b>SWIS</b>         | <b>1,812 ft.</b> | <b>WESTERN EL DORADO RECOVERY SYSTEMS MRF</b> | <b>4100 THROWITA WAY, PLACERVILLE, CA 95667</b>           | <a href="#">50</a> |
| <a href="#">12</a> | <b>SWIS</b>         | <b>1,812 ft.</b> | <b>WEDRS-GREEN WASTE RECYCLING CENTER</b>     | <b>4100 THROWITA WAY, PLACERVILLE, CA 95667</b>           | <a href="#">51</a> |
| <a href="#">12</a> | <b>SWIS</b>         | <b>1,812 ft.</b> | <b>WEDRS- CDI RECOVETY OPERATION (MVCDI)</b>  | <b>4100 THROWITA WAY, PLACERVILLE, CA 95667</b>           | <a href="#">52</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | EL DORADO DISPOSAL SERVICE MRF                | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">53</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WASTE CONNECTIONS OF CALIFORNIA INC           | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">54</a> |

## Elevation Summary

| Map ID#            | Database Name       | Elevation        | Site Name                                | Address  | Page #             |
|--------------------|---------------------|------------------|--|--|--------------------|
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WASTE CONNECTIONS OF CALIFORNIA INC      | 4100 THROWITA WAY, PLACERVILLE, CA 95667               | <a href="#">55</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WASTE CONNECTIONS OF CALIFORNIA INC      | 4100 THROWITA WAY, PLACERVILLE, CA 95667               | <a href="#">56</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WASTE CONNECTIONS OF CALIFORNIA INC      | 4100 THROWITA WAY, PLACERVILLE, CA 95667               | <a href="#">57</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WASTE CONNECTIONS OF CALIFORNIA INC      | 4100 THROWITA WAY, PLACERVILLE, CA 95667               | <a href="#">58</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | EL DORADO DISPOSAL SERVICE               | 4100 THROWITA WAY, PLACERVILLE, CA 95667               | <a href="#">59</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WESTERN EL DORADO RECOVERY SYSTEMS       | 4100 THROWITA WY, PLACERVILLE, CA 95667                | <a href="#">60</a> |
| <a href="#">13</a> | SWRCY               | 1,816 ft.        | MISSOURI FLAT RECYCLE CENTER             | 4600 MISSOURI FLAT RD, PLACERVILLE, CA 95667           | <a href="#">61</a> |
| <a href="#">14</a> | <b>CALSITES</b>     | <b>1,802 ft.</b> | <b>FOOTHILL AUTO REPAIR</b>              | <b>6566-C COMMERCE WAY, DIAMOND SPRINGS, CA 95619</b>  | <a href="#">62</a> |
| <a href="#">14</a> | <b>ENVIROSTOR</b>   | <b>1,802 ft.</b> | <b>FOOTHILL AUTO REPAIR</b>              | <b>6566-C COMMERCE WAY, DIAMOND SPRINGS, CA 95619</b>  | <a href="#">63</a> |
| <a href="#">14</a> | REF                 | 1,802 ft.        | FOOTHILL AUTO REPAIR                     | 6566-C COMMERCE WAY, DIAMOND SPRINGS, CA 95619         | <a href="#">64</a> |
| <a href="#">15</a> | HISTCORTESE         | 1,801 ft.        | GUSTAFSON D M & PATRICI                  | 3655 CHUCKWAGON, PLACERVILLE, CA 95667                 | <a href="#">65</a> |
| <a href="#">17</a> | <b>CLEANUPSITES</b> | <b>1,819 ft.</b> | <b>ABEL TRUST</b>                        | <b>4061 LIME PLANT ROAD, DIAMOND SPRINGS, CA 95667</b> | <a href="#">71</a> |
| <a href="#">18</a> | <b>CALSITES</b>     | <b>1,817 ft.</b> | <b>CELEBRITY PLATING</b>                 | <b>4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667</b>  | <a href="#">73</a> |
| <a href="#">18</a> | <b>ENVIROSTOR</b>   | <b>1,817 ft.</b> | <b>CELEBRITY PLATING</b>                 | <b>4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667</b>  | <a href="#">74</a> |
| <a href="#">18</a> | <b>ENVIROSTOR</b>   | <b>1,817 ft.</b> | <b>CELEBRITY, INC.</b>                   | <b>4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667</b>  | <a href="#">75</a> |
| <a href="#">18</a> | NFA                 | 1,817 ft.        | CELEBRITY, INC.                          | 4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667         | <a href="#">76</a> |
| <a href="#">19</a> | SWRCY               | 1,812 ft.        | E M RECYCLING                            | 4040 #A-2 STAGE CT, PLACERVILLE, CA 95667              | <a href="#">77</a> |
| <a href="#">20</a> | <b>ENVIROSTOR</b>   | <b>1,817 ft.</b> | <b>TETERS AUTO WRECKERS</b>              | <b>4487 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667</b>  | <a href="#">78</a> |
| <a href="#">22</a> | <b>ENVIROSTOR</b>   | <b>1,848 ft.</b> | <b>OXYGEN SERVICE AND SUPPLY COMPANY</b> | <b>13 CHINA GARDEN ROAD, DIAMOND SPRINGS, CA 95619</b> | <a href="#">80</a> |
| <a href="#">23</a> | <b>ENVIROSTOR</b>   | <b>1,794 ft.</b> | <b>OLD CALDOR LUMBER COMPANY YARD</b>    | <b>180 INDUSTRIAL DRIVE, DIAMOND SPRINGS, CA 95619</b> | <a href="#">81</a> |

### **LOWER ELEVATION**

| Map ID#           | Database Name | Elevation | Site Name                 | Address   | Page #             |
|-------------------|---------------|-----------|---------------------------|---|--------------------|
| <a href="#">1</a> | CHMIRS        | 1,739 ft. |                           | DEBS FROSTY LIFT STATION END OF FAITH LANE, DIAMOND SPRINGS, CA 95619 | <a href="#">22</a> |
| <a href="#">1</a> | FRSCA         | 1,739 ft. | DEB'S FROSTY LIFT STATION | FAITH LANE ESNA 0.25 MI. S/HWY 49, DIAMOND SPRINGS, CA 95619          | <a href="#">23</a> |
| <a href="#">4</a> | CDL           | 1,690 ft. |                           | 473 FOWLER LANE, DIAMOND SPRINGS, CA 95619                            | <a href="#">26</a> |

## Elevation Summary

| Map ID#            | Database Name       | Elevation        | Site Name                     | Address  | Page #             |
|--------------------|---------------------|------------------|-------------------------------|--|--------------------|
| <a href="#">4</a>  | CHMIRS              | 1,690 ft.        |                               | 473 FOWLER LANE, DIAMOND SPRINGS, CA 95667               | <a href="#">27</a> |
| <a href="#">5</a>  | FRSCA               | 1,753 ft.        | DIAMOND VILLAS SENIOR HOUSING | PANTHER LANE, DIAMOND SPRINGS, CA 95619                  | <a href="#">28</a> |
| <a href="#">9</a>  | MRDS                | 1,760 ft.        | ROBERT NELSON CLAIM           | EL DORADO COUNTY, DIAMOND SPRINGS, CA 95619              | <a href="#">35</a> |
| <a href="#">9</a>  | MRDS                | 1,760 ft.        | WHEELLOCK                     | EL DORADO COUNTY, DIAMOND SPRINGS, CA 95619              | <a href="#">36</a> |
| <a href="#">16</a> | <b>CLEANUPSITES</b> | <b>1,747 ft.</b> | <b>STEVE'S CHEAPER</b>        | <b>130 PLEASANT VALLEY RD, DIAMOND SPRINGS, CA 95619</b> | <a href="#">66</a> |
| <a href="#">16</a> | HISTCORTESE         | 1,747 ft.        | STEVE'S CHEAPER               | 130 PLEASANT VALLEY, DIAMOND SPRINGS, CA 95619           | <a href="#">69</a> |
| <a href="#">16</a> | <b>LUST</b>         | <b>1,747 ft.</b> | <b>STEVE'S CHEAPER</b>        | <b>130 PLEASANT VALLEY RD, DIAMOND SPRINGS, CA 95619</b> | <a href="#">70</a> |
| <a href="#">21</a> | <b>ENVIROSTOR</b>   | <b>1,757 ft.</b> | <b>CELEBRITY, INC.</b>        | <b>6650 MERCHANDISE WAY, DIAMOND SPRINGS, CA 95619</b>   | <a href="#">79</a> |

# California Hazardous Material Incident Report System (CHMIRS)

**MAP ID# 1**

Distance from Property: 0 mi. (0 ft.) X  
Elevation: 1,739 ft. (Lower than TP)

## **INCIDENT INFORMATION**

CONTROL #: 005732  
NOTIFIED: 12/16/94  
AGENCY: EL DORADO IRRIGATION DISTRICT  
ADMINISTRATION: NOT REPORTED  
INCIDENT LOCATION: DEBS FROSTY LIFT STATION END OF FAITH LANE  
DIAMOND SPRINGS, CA 95619  
INCIDENT COUNTY: EL DORADO

## **SUBSTANCE INFORMATION**

SUBSTANCE: RAW SEWAGE  
QUANTITY: NOT REPORTED  
TYPE: ONS

## **INCIDENT DESCRIPTION**

FAILURE AT LIFT STATION - UNKNOWN CAUSE UNDER INVESTIGATION WATER INVOLVEMENT UNKNOWN AT THIS TIME  
SPILL WENT TO CULVERT  
CONTAINED: NOT REPORTED  
WATER INVOLVED / WATERWAY: NO / NOT REPORTED  
DATE AND TIME: 1200/16DEC  
SITE: NOT REPORTED  
INJURIES: NO  
FATALITIES: NO  
EVACUATIONS: NO  
CLEANUP BY: EID

---

[Back to Report Summary](#)

## Facility Registry System (FRSCA)

[MAP ID# 1](#)

Distance from Property: 0 mi. (0 ft.) X  
Elevation: 1,739 ft. (Lower than TP)

### **FACILITY INFORMATION**

REGISTRY ID: 110065851242

NAME: **DEB'S FROSTY LIFT STATION**

LOCATION ADDRESS: **FAITH LANE ESNA 0.25 MI. S/HWY 49  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

**DEB'S FROSTY LIFT STATION**

PROGRAM/S LISTED FOR THIS FACILITY

**CA-ENVIROVIEW - CA-ENVIROVIEW**

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

**4952 - SEWERAGE SYSTEMS**

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

**NO NAICS DATA REPORTED**

---

[Back to Report Summary](#)

# Mineral Resource Data System (MRDS)

**MAP ID# 2**

Distance from Property: 0 mi. (0 ft.) X  
Elevation: 1,763 ft. (Higher than TP)

## **FACILITY INFORMATION**

GEOSEARCH ID: 10139067

DEP ID: 10139067

MINE NAME: PHILLIP N. HUFFT CLAIM

ADDRESS: EL DORADO COUNTY  
DIAMOND SPRINGS, CA 95619

DEVELOPMENT STATUS: UNKNOWN

## **COMMODITY DETAILS**

COMMODITY: GOLD

COMMODITY TYPE: METALLIC

COMMODITY GROUP: GOLD

IMPORTANCE: PRIMARY

**MATERIAL DETAILS** NO MATERIAL DETAILS REPORTED

## **NAME DETAILS**

SITE NAME: PHILLIP N. HUFFT CLAIM

STATUS: CURRENT

---

[Back to Report Summary](#)

## Hazardous Waste Tanner Summary (HWTS)

**MAP ID# 3**

Distance from Property: 0.012 mi. (63 ft.) W  
Elevation: 1,778 ft. (Higher than TP)

### SITE INFORMATION

EPA ID: **CAC002801219**  
NAME: **MARK MORGAN**  
COUNTY: **NOT REPORTED**  
ADDRESS: **210 JUSTINE CT**  
**DIAMOND SPRINGS, CA 95619-9318**

FACILITY LINK: [Department of Toxic Substances Control](#)

### MANIFEST SUMMARY INFORMATION

YEAR: **2015**  
TSD ID: **CAD982042475**  
GENERATOR COUNTY: **NOT REPORTED**  
DISPOSAL COUNTY: **SOLANO**  
WASTE CATEGORY: **ASBESTOS CONTAINING WASTE**  
AMOUNT DISPOSED(TONS): **0.23**  
DISPOSAL METHOD: **LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL( TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)**

### CONTACT INFORMATION

CONTACT: **MARK MORGAN**  
PHONE: **530-306-2485**  
ADDRESS: **3218 EASTVIEW DR**  
**SHINGLE SPRINGS CA 956827109**

---

[Back to Report Summary](#)

## Clandestine Drug Labs (CDL)

[MAP ID# 4](#)

Distance from Property: 0.012 mi. (63 ft.) E  
Elevation: 1,690 ft. (Lower than TP)

### **SITE INFORMATION**

GEOSEARCH ID: 200202096

ID#: 2002-02-096

ADDRESS: 473 FOWLER LANE

DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

LAB TYPE: ILLEGAL DRUG LAB - LOCATION WHERE AND ILLEGAL DRUG LAB WAS OPERATED OR DRUG LAB EQUIPMENT  
AND/OR MATERIALS WERE STORED

---

[Back to Report Summary](#)



# California Hazardous Material Incident Report System (CHMIRS)

**MAP ID# 4**

Distance from Property: 0.012 mi. (63 ft.) E  
Elevation: 1,690 ft. (Lower than TP)

## **INCIDENT INFORMATION**

CONTROL #: 04-1482

NOTIFIED: 03/17/04

AGENCY: EL DORADO IRRIGATION DISTRICT

ADMINISTRATION: EL DORADO COUNTY ENVIRONMENTAL MGMT.

INCIDENT LOCATION: 473 FOWLER LANE  
DIAMOND SPRINGS, CA 95667

INCIDENT COUNTY: EL DORADO

## **SUBSTANCE INFORMATION**

SUBSTANCE: POTABLE WATER

QUANTITY: 1000

TYPE: GALS

## **INCIDENT DESCRIPTION**

**TWO INCH LINE BREAK CAUSED THE SPILL. NOT USED FOR DRINKING OR RECREATION. THE WATER IS CHLORINATED.**

CONTAINED: YES

WATER INVOLVED / WATERWAY: NOT REPORTED / SEASONAL CREEK

DATE AND TIME: 3/17/2004

SITE: RESIDENCE

INJURIES: 0

FATALITIES: 0

EVACUATIONS: 0

CLEANUP BY: N/A

---

[Back to Report Summary](#)

## Facility Registry System (FRSCA)

**MAP ID# 5**

Distance from Property: 0.018 mi. (95 ft.) N  
Elevation: 1,753 ft. (Lower than TP)

### **FACILITY INFORMATION**

REGISTRY ID: 110064896171

NAME: **DIAMOND VILLAS SENIOR HOUSING**

LOCATION ADDRESS: **PANTHER LANE**  
**DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO COUNTY**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

**DIAMOND VILLAS SENIOR HOUSING**

PROGRAM/S LISTED FOR THIS FACILITY

**CA-ENVIROVIEW - CA-ENVIROVIEW**

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

**1522 - GENERAL CONTRACTORS-RESIDENTIAL BUILDINGS, OTHER THAN SINGLE-FAMILY**

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

**NO NAICS DATA REPORTED**

---

[Back to Report Summary](#)

# California Hazardous Material Incident Report System (CHMIRS)

**MAP ID# 6**

Distance from Property: 0.019 mi. (100 ft.) ENE  
Elevation: 1,786 ft. (Higher than TP)

## INCIDENT INFORMATION

CONTROL #: 08-5950

NOTIFIED: 08/15/08

AGENCY: EL DORADO IRRIGATION DIST.

ADMINISTRATION: EL DORADO COUNTY ENVIRONMENTAL MGMT.

INCIDENT LOCATION: CHINA GARDEN AT PLEASANT VALLEY RD.  
DIAMOND SPRINGS, CA

INCIDENT COUNTY: EL DORADO

## SUBSTANCE INFORMATION

SUBSTANCE: WASTE WATER

QUANTITY: 300

TYPE: GAL(S)

## INCIDENT DESCRIPTION

THE WASTE WATER SPILLED INTO A DRAINAGE DITCH.

CONTAINED: NO

WATER INVOLVED / WATERWAY: NO / NOT REPORTED

DATE AND TIME: 8/15/2008

SITE: OTHER

INJURIES: 0

FATALITIES: 0

EVACUATIONS: 0

CLEANUP BY: REPORTING PARTY

---

[Back to Report Summary](#)

## Facility Registry System (FRSCA)

**MAP ID# 7**

Distance from Property: 0.019 mi. (100 ft.) NW  
Elevation: 1,767 ft. (Higher than TP)

### **FACILITY INFORMATION**

REGISTRY ID: 110066033820

NAME: **WARD'S AUTOMOTIVE**

LOCATION ADDRESS: 2189 SUNRISE DR  
DIAMOND SPRINGS, CA 95619

COUNTY: **EL DORADO**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

**WARD'S AUTOMOTIVE**

PROGRAM/S LISTED FOR THIS FACILITY

**CA-ENVIROVIEW - CA-ENVIROVIEW**

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

**NO SIC DATA REPORTED**

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

**NO NAICS DATA REPORTED**

---

[Back to Report Summary](#)

## Hazardous Waste Tanner Summary (HWTS)

**MAP ID# 7**

Distance from Property: 0.019 mi. (100 ft.) NW  
Elevation: 1,767 ft. (Higher than TP)

### SITE INFORMATION

EPA ID: CAL000167531  
NAME: WARDS AUTOMOTIVE INC  
COUNTY: NOT REPORTED  
ADDRESS: 2189 SUNRISE DR  
DIAMOND SPRINGS, CA 95619

FACILITY LINK: [Department of Toxic Substances Control](#)

### MANIFEST SUMMARY INFORMATION

YEAR: 1998  
TSD ID: NVD982358483  
GENERATOR COUNTY: EL DORADO  
DISPOSAL COUNTY: UNKNOWN  
WASTE CATEGORY: UNSPECIFIED OIL-CONTAINING WASTE  
AMOUNT DISPOSED(TONS): 0.2418  
DISPOSAL METHOD: RECYCLER

YEAR: 1997  
TSD ID: NVD982358483  
GENERATOR COUNTY: EL DORADO  
DISPOSAL COUNTY: UNKNOWN  
WASTE CATEGORY: UNSPECIFIED OIL-CONTAINING WASTE  
AMOUNT DISPOSED(TONS): 0.3127  
DISPOSAL METHOD: RECYCLER

### CONTACT INFORMATION

CONTACT: WARDS AUTOMOTIVE INC  
PHONE: NOT REPORTED  
ADDRESS: NOT REPORTED  
NOT REPORTED NOT REPORTED

---

[Back to Report Summary](#)

# GeoTracker Cleanup Sites (CLEANUPSITES)

**MAP ID# 8**

Distance from Property: 0.05 mi. (264 ft.) NE  
Elevation: 1,786 ft. (Higher than TP)

## **FACILITY INFORMATION**

GLOBAL ID: T0601700047  
URL LINK: [CLICK HERE](#)  
BUSINESS NAME: FORMER SS  
ADDRESS: 493 MAIN ST  
DIAMOND SPRINGS, CA 95619  
COUNTY: EL DORADO

## **FACILITY DETAILS**

CASE TYPE: LUST CLEANUP SITE  
CASE NUMBER: 90065  
STATUS: COMPLETED - CASE CLOSED 06/22/1992  
POTENTIAL CONTAMINATION:

### **GASOLINE**

POTENTIAL MEDIA AFFECTED:

### **SOIL**

SITE HISTORY:

**NOT REPORTED**

## **REGULATORY ACTIVITIES**

| TYPE OF ACTION: | DATE:      | ACTION:                          |
|-----------------|------------|----------------------------------|
| OTHER           | 01/01/50   | LEAK DISCOVERY                   |
| OTHER           | 01/01/50   | LEAK REPORTED                    |
| ENFORCEMENT     | 11/13/1996 | CLOSURE/NO FURTHER ACTION LETTER |
| OTHER           | 04/01/1992 | LEAK REPORTED                    |
| OTHER           | 02/28/1992 | LEAK DISCOVERY                   |

## **STATUS HISTORY**

| STATUS:                 | DATE:      |
|-------------------------|------------|
| COMPLETED - CASE CLOSED | 06/22/1992 |
| OPEN - SITE ASSESSMENT  | 04/01/1992 |
| OPEN - CASE BEGIN DATE  | 02/28/1992 |

## **CONTACT DETAILS**

ORGANIZATION: CENTRAL VALLEY RWQCB (REGION 5S)  
ADDRESS: 11020 SUN CENTER DRIVE #200  
CITY: RANCHO CORDOVA  
CONTACT NAME: PETER MINKEL  
CONTACT TYPE: REGIONAL BOARD CASEWORKER  
CONTACT PHONE: NOT REPORTED  
EMAIL: PMINKEL@WATERBOARDS.CA.GOV

[Back to Report Summary](#)

## Historical Cortese List (HISTCORTESE)

[MAP ID# 8](#)

Distance from Property: 0.05 mi. (264 ft.) NE

Elevation: 1,786 ft. (Higher than TP)

### FACILITY INFORMATION

GEOSEARCH ID: 090065COR

ID#: 090065

NAME: FORMER SS

ADDRESS: 493 MAIN

DIAMOND SPRINGS, CA 95619

---

[Back to Report Summary](#)

## Leaking Underground Storage Tanks (LUST)

**MAP ID# 8**

Distance from Property: 0.05 mi. (264 ft.) NE  
Elevation: 1,786 ft. (Higher than TP)

### **FACILITY INFORMATION**

GLOBAL ID: T0601700047

URL LINK: [CLICK HERE](#)

BUSINESS NAME: FORMER SS

ADDRESS: 493 MAIN ST  
DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

### **FACILITY DETAILS**

CASE TYPE: LUST CLEANUP SITE

CASE NUMBER: 090065

STATUS: 06/22/1992

POTENTIAL CONTAMINATION:

**GASOLINE**

POTENTIAL MEDIA AFFECTED:

**SOIL**

SITE HISTORY:

**NOT REPORTED**

### **HISTORICAL FACILITY DETAILS**

**NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY**

---

[Back to Report Summary](#)



# Mineral Resource Data System (MRDS)

**MAP ID# 9**

Distance from Property: 0.107 mi. (565 ft.) WSW  
Elevation: 1,760 ft. (Lower than TP)

## **FACILITY INFORMATION**

GEOSEARCH ID: 10029926

DEP ID: 10029926

MINE NAME: ROBERT NELSON CLAIM

ADDRESS: EL DORADO COUNTY  
DIAMOND SPRINGS, CA 95619

DEVELOPMENT STATUS: OCCURRENCE

## **COMMODITY DETAILS**

COMMODITY: GOLD

COMMODITY TYPE: METALLIC

COMMODITY GROUP: GOLD

IMPORTANCE: PRIMARY

**MATERIAL DETAILS** NO MATERIAL DETAILS REPORTED

## **NAME DETAILS**

SITE NAME: ROBERT NELSON CLAIM

STATUS: CURRENT

---

[Back to Report Summary](#)

# Mineral Resource Data System (MRDS)

**MAP ID# 9**

Distance from Property: 0.107 mi. (565 ft.) WSW  
Elevation: 1,760 ft. (Lower than TP)

## **FACILITY INFORMATION**

GEOSEARCH ID: 10029927

DEP ID: 10029927

MINE NAME: WHEELOCK

ADDRESS: EL DORADO COUNTY  
DIAMOND SPRINGS, CA 95619

DEVELOPMENT STATUS: OCCURRENCE

## **COMMODITY DETAILS**

COMMODITY: GOLD

COMMODITY TYPE: METALLIC

COMMODITY GROUP: GOLD

IMPORTANCE: PRIMARY

**MATERIAL DETAILS** NO MATERIAL DETAILS REPORTED

## **NAME DETAILS**

SITE NAME: WHEELOCK

STATUS: CURRENT

---

[Back to Report Summary](#)

# Superfund Enterprise Management System Archived Site Inventory (SEMSARCH)

**MAP ID# 10**

Distance from Property: 0.201 mi. (1,061 ft.) WNW  
Elevation: 1,762 ft. (Higher than TP)

## FACILITY INFORMATION

EPA ID#: CAD980637417

SITE ID#: 0901900

NAME: OLD CALDOR LUMBER CO YD

ADDRESS: HWY 49 & FLAT RD

DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

FEDERAL FACILITY: NOT A FEDERAL FACILITY

NPL: NOT ON THE NPL

NON NPL STATUS: NFRAP-SITE DOES NOT QUALIFY FOR THE NPL BASED ON EXISTING INFORMATION

SEMS SEARCH: [CLICK HERE](#)

Below information was gathered from the prior NFRAP update completed in 10/2013 update:

| <u>ACTION</u>               | <u>START DATE</u> | <u>COMPLETION DATE</u> | <u>RESPONSIBILITY</u> |
|-----------------------------|-------------------|------------------------|-----------------------|
| PA - PRELIMINARY ASSESSMENT | 2/1/1985          | 5/1/1985               | STATE (FUND)          |
| DS - DISCOVERY              | NOT REPORTED      | 6/1/1981               | EPA FUND              |
| PA - PRELIMINARY ASSESSMENT | NOT REPORTED      | 7/1/1988               | EPA FUND              |
| VS - ARCHIVE SITE           | NOT REPORTED      | 7/1/1988               | EPA IN-HOUSE          |

## ACTION DESCRIPTIONS

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

DS - (DISCOVERY) - THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

VS - (ARCHIVE SITE) - THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

---

[Back to Report Summary](#)

# Historical Underground Storage Tanks (HISTUST)

**MAP ID# 11**

Distance from Property: 0.211 mi. (1,114 ft.) WNW  
Elevation: 1,799 ft. (Higher than TP)

EL DORADO UNION HIGH SCHOOL DI, 4675 MISSOURI FLAT ROAD, DIAMOND SPRINGS, CA 95619  
UNIQUE ID: 0002344F

Page 1 out of 4



# HISTUST (HISTUST)

EL DORADO UNION HIGH SCHOOL DI, 4675 MISSOURI FLAT ROAD, DIAMOND SPRINGS, CA 95619  
UNIQUE ID: 0002344F

Page 2 out of 4



**HISTUST (HISTUST)**

EL DORADO UNION HIGH SCHOOL DI, 4675 MISSOURI FLAT ROAD, DIAMOND SPRINGS, CA 95619  
UNIQUE ID: 0002344F

Page 3 out of 4



# HISTUST (HISTUST)

EL DORADO UNION HIGH SCHOOL DI, 4675 MISSOURI FLAT ROAD, DIAMOND SPRINGS, CA 95619  
UNIQUE ID: 0002344F

Page 4 out of 4

---

[Back to Report Summary](#)

# Statewide Environmental Evaluation and Planning System (SWEEPS)

**MAP ID# 11**

Distance from Property: 0.211 mi. (1,114 ft.) WNW  
Elevation: 1,799 ft. (Higher than TP)

## **FACILITY INFORMATION**

FACILITY #: 46253 STATUS: ACTIVE  
BOE: 44-003046 JURISDICTION: EL DORADO COUNTY  
NAME: EL DORADO UNION HIGH SCHOOL AGENCY: ENVIRONMENTAL HEALTH - U.S.T.  
DI  
ADDRESS: 4675 MISSOURI FLAT RD  
DIAMOND SPRINGS, CA 95619

## **TANK INFORMATION**

TANK #: 000001 CAPACITY: 12000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: DIESEL CONTAINMENT: NOT REPORTED

TANK #: 000002 CAPACITY: 8000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: REG UNLEADED CONTAINMENT: NOT REPORTED

TANK #: 000003 CAPACITY: 1000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: LEADED CONTAINMENT: NOT REPORTED

TANK #: 000004 CAPACITY: 12000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: DIESEL CONTAINMENT: NOT REPORTED

TANK #: 000005 CAPACITY: 8000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: REG UNLEADED CONTAINMENT: NOT REPORTED

TANK #: 000006 CAPACITY: 1000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: LEADED CONTAINMENT: NOT REPORTED

[Back to Report Summary](#)



## Underground Storage Tanks (USTCUPA)

[MAP ID# 11](#)

Distance from Property: 0.211 mi. (1,114 ft.) WNW  
Elevation: 1,799 ft. (Higher than TP)

### FACILITY INFORMATION

GEOSEARCH ID: 187573130                      FACILITY ID: FA0000680  
NAME: EDUHSD TRANSPORTATION  
ADDRESS: 4675 MISSOURI FLAT RD  
                    PLACERVILLE, CA 95667  
COUNTY: EL DORADO

### FACILITY DETAILS

OTHER FACILITY NAME(S) LISTED FOR THIS SITE: EDUHSD TRANSPORTATION  
PERMIT AGENCY: EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT  
FACILITY DETAILS LINK: [Click Here](#)

---

[Back to Report Summary](#)

# GeoTracker Cleanup Sites (CLEANUPSITES)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

## **FACILITY INFORMATION**

GLOBAL ID: T10000009244

URL LINK: [CLICK HERE](#)

BUSINESS NAME: WASTE CONNECTIONS

ADDRESS: 4100 THROWITA WAY  
PLACERVILLE, CA 95667

COUNTY: EL DORADO

## **FACILITY DETAILS**

CASE TYPE: CLEANUP PROGRAM SITE

CASE NUMBER: NOT REPORTED

STATUS: OPEN - SITE ASSESSMENT 08/12/2016

POTENTIAL CONTAMINATION:

**OTHER ACID OR CORROSIVE**

POTENTIAL MEDIA AFFECTED:

**NOT REPORTED**

SITE HISTORY:

**SITE WAS CONSTRUCTED ON A FORMER LIME PROCESSING FACILITY. LIME WASTE BENEATH SITE HAS ELEVATED PH AND THREATENS GROUNDWATER.**

## **REGULATORY ACTIVITIES**

| TYPE OF ACTION: | DATE:      | ACTION:                                      |
|-----------------|------------|--|
| ENFORCEMENT     | 06/18/2018 | STAFF LETTER                                 |
| RESPONSE        | 04/24/2018 | MONITORING REPORT - QUARTERLY                |
| RESPONSE        | 01/31/2018 | MONITORING REPORT - QUARTERLY                |
| ENFORCEMENT     | 01/31/2018 | NOTIFICATION - PUBLIC PARTICIPATION DOCUMENT |
| ENFORCEMENT     | 12/11/2017 | STAFF LETTER                                 |
| RESPONSE        | 11/15/2017 | EMAIL CORRESPONDENCE                         |
| RESPONSE        | 11/14/2017 | CORRESPONDENCE                               |
| ENFORCEMENT     | 11/08/2017 | STAFF LETTER                                 |
| ENFORCEMENT     | 10/24/2017 | LETTER - NOTICE                              |
| RESPONSE        | 10/24/2017 | MONITORING REPORT - QUARTERLY                |
| RESPONSE        | 10/15/2017 | EMAIL CORRESPONDENCE                         |
| RESPONSE        | 10/03/2017 | FEASIBILITY STUDY REPORT                     |
| RESPONSE        | 07/31/2017 | MONITORING REPORT - QUARTERLY                |
| ENFORCEMENT     | 06/09/2017 | STAFF LETTER                                 |
| RESPONSE        | 05/25/2017 | SITE INVESTIGATION                           |
| ENFORCEMENT     | 02/10/2017 | EMAIL CORRESPONDENCE                         |
| RESPONSE        | 02/10/2017 | CORRESPONDENCE                               |
| ENFORCEMENT     | 02/08/2017 | EMAIL CORRESPONDENCE                         |
| RESPONSE        | 02/08/2017 | SOIL AND WATER INVESTIGATION WORKPLAN        |
| ENFORCEMENT     | 02/07/2017 | STAFF LETTER                                 |
| ENFORCEMENT     | 02/06/2017 | STAFF LETTER                                 |
| RESPONSE        | 01/30/2017 | SITE INVESTIGATION WORKPLAN                  |
| RESPONSE        | 01/24/2017 | SOIL AND WATER INVESTIGATION REPORT          |

## GeoTracker Cleanup Sites (CLEANUPSITES)

| TYPE OF ACTION: | DATE:      | ACTION:                     |
|-----------------|------------|-----------------------------|
| ENFORCEMENT     | 11/04/2016 | EMAIL CORRESPONDENCE        |
| RESPONSE        | 10/17/2016 | SITE INVESTIGATION WORKPLAN |
| ENFORCEMENT     | 09/08/2016 | EMAIL CORRESPONDENCE        |
| ENFORCEMENT     | 08/15/2016 | STAFF LETTER                |
| RESPONSE        | 07/22/2016 | SITE INVESTIGATION          |

### STATUS HISTORY

| STATUS:                | DATE:      |
|------------------------|------------|
| OPEN - SITE ASSESSMENT | 08/12/2016 |
| OPEN - CASE BEGIN DATE | 07/22/2016 |

### CONTACT DETAILS

ORGANIZATION: CENTRAL VALLEY RWQCB (REGION 5S)  
ADDRESS: 11020 SUN CENTER DRIVE, SUITE 200  
CITY: RANCHO CORDOVA  
CONTACT NAME: WALTER FLOYD  
CONTACT TYPE: REGIONAL BOARD CASEWORKER  
CONTACT PHONE: 9164644651  
EMAIL: WALTER.FLOYD@WATERBOARDS.CA.GOV

[Back to Report Summary](#)

## ***Listing of Certified Dropoff, Collection, and Community Service Programs (DROP)***

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CP0674**  
NAME: **MATERIAL RECOVERY FACILITY**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **12/23/96**  
OPERATION END DATE: **07/19/00**  
PROGRAM PHONE: **(530) 642-0731**  
ORGANIZATION NAME: **NOT REPORTED**  
ADDRESS: **STREET NOT REPORTED**  
**CITY NOT REPORTED**  
GLASS: **ACCEPTED**  
ALUMINIUM: **ACCEPTED**  
PLASTIC: **ACCEPTED**  
BIMETAL: **NOT ACCEPTED**

---

[Back to Report Summary](#)

## ***Listing of Certified Dropoff, Collection, and Community Service Programs (DROP)***

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CP0880**  
NAME: **EL DORADO DISPOSAL SERVICE MRF**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **9/22/2006**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **ACCEPTED**  
ALUMINIUM: **ACCEPTED**  
PLASTIC: **ACCEPTED**  
BIMETAL: **ACCEPTED**

---

[Back to Report Summary](#)

## ***Listing of Certified Dropoff, Collection, and Community Service Programs (DROP)***

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CP0961**  
NAME: **SEI SOLID WASTE**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **3/9/2009**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **ACCEPTED**  
ALUMINIUM: **ACCEPTED**  
PLASTIC: **ACCEPTED**  
BIMETAL: **ACCEPTED**

---

[Back to Report Summary](#)

## Listing of Certified Processors (PROC)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: PR0439  
NAME: EL DORADO DISPOSAL SERVICE  
ADDRESS: 4100 THROWITA WAY  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### **SITE DETAILS**

OPERATION BEGIN DATE: 10/12/2006  
OPERATION END DATE: NOT REPORTED  
PROGRAM PHONE: (530) 626-4141  
ORGANIZATION NAME: WASTE CONNECTIONS OF CALIFORNIA INC  
ADDRESS: 4100 THROWITA WAY  
PLACERVILLE CA 95667  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## Solid Waste Information System Sites (SWIS)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **FACILITY INFORMATION**

GEOSEARCH ID: 09-AA-0004SWIS  
ID NUMBER: 09-AA-0004  
NAME: WESTERN EL DORADO RECOVERY SYSTEMS MRF  
LOCATION: 4100 THROWITA WAY  
PLACERVILLE, CA 95667  
COUNTY: EL DORADO  
LATITUDE: 38.698960000  
LONGITUDE: -120.815620000

### **OWNER INFORMATION**

NAME: WASTE CONNECTIONS OF CALIFORNIA, INC.  
ADDRESS: 10001 WOODLOCH FOREST DRIVE, SUITE 400  
THE WOODLANDS, TX 77380

### **OPERATOR INFORMATION**

NAME: WESTERN EL DORADO REG SYSTEM  
ADDRESS: 4100 THROWITA WAY  
PLACERVILLE CA 95667

### **FACILITY DETAILS**

SITE ID: 384  
LAND USE: NOT REPORTED  
PERMIT DATE: 2/23/2005  
PERMIT STATUS: PERMITTED  
ENFORCEMENT AGENCY: COUNTY OF PLACER

### **UNIT**

CATEGORY: TRANSFER/PROCESSING  
UNIT #: 01  
REGULATORY STATUS: PERMITTED  
OPERATIONAL STATUS: ACTIVE  
ACTIVITY: LARGE VOLUME TRANSFER/PROC FACILITY  
INSPECTION: MONTHLY  
ACCEPTED WASTE: MIXED MUNICIPAL  
CAPACITY: 400  
REMAINING CAPACITY: NOT REPORTED  
THROUGHPUT: 400  
DISPOSAL ACREAGE: NOT REPORTED  
CLOSURE DATE: NOT REPORTED

[Back to Report Summary](#)



## Solid Waste Information System Sites (SWIS)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **FACILITY INFORMATION**

GEOSEARCH ID: 09-AA-0006SWIS  
ID NUMBER: 09-AA-0006  
NAME: WEDRS-GREEN WASTE RECYCLING CENTER  
LOCATION: 4100 THROWITA WAY  
PLACERVILLE, CA 95667  
COUNTY: EL DORADO  
LATITUDE: 38.699250000  
LONGITUDE: -120.815810000

### **OWNER INFORMATION**

NAME: WASTE CONNECTIONS, INC.  
ADDRESS: 3 WATERWAY SQUARE PLACE, SUITE 110  
THE WOODLANDS, TX 77380

### **OPERATOR INFORMATION**

NAME: WESTERN EL DORADO SERVICES, INC.  
ADDRESS: 4100 THROWITA WAY  
PLACERVILLE CA 95667

### **FACILITY DETAILS**

SITE ID: 10521  
LAND USE: COMMERCIAL  
PERMIT DATE: 8/5/2014  
PERMIT STATUS: NOTIFICATION  
ENFORCEMENT AGENCY: COUNTY OF PLACER

### **UNIT**

CATEGORY: COMPOSTING  
UNIT #: 01  
REGULATORY STATUS: NOTIFICATION  
OPERATIONAL STATUS: ACTIVE  
ACTIVITY: CHIPPING AND GRINDING ACTIVITY FAC./ OP.  
INSPECTION: QUARTERLY  
ACCEPTED WASTE: GREEN MATERIALS  
CAPACITY: 72600  
REMAINING CAPACITY: NOT REPORTED  
THROUGHPUT: 200  
DISPOSAL ACREAGE: NOT REPORTED  
CLOSURE DATE: NOT REPORTED

[Back to Report Summary](#)

## Solid Waste Information System Sites (SWIS)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **FACILITY INFORMATION**

GEOSEARCH ID: 09-AA-0007SWIS  
ID NUMBER: 09-AA-0007  
NAME: WEDRS- CDI RECOVETY OPERATION (MVCDI)  
LOCATION: 4100 THROWITA WAY  
PLACERVILLE, CA 95667  
COUNTY: EL DORADO  
LATITUDE: 38.699250000  
LONGITUDE: -120.815810000

### **OWNER INFORMATION**

NAME: WASTE CONNECTIONS, INC.  
ADDRESS: 3 WATERWAY SQUARE PLACE, SUITE 110  
THE WOODLANDS, TX 77380

### **OPERATOR INFORMATION**

NAME: WESTERN EL DORADO SERVICES, INC.  
ADDRESS: 4100 THROWITA WAY  
PLACERVILLE CA 95667

### **FACILITY DETAILS**

SITE ID: 10522  
LAND USE: NOT REPORTED  
PERMIT DATE: 6/10/2009  
PERMIT STATUS: PERMITTED  
ENFORCEMENT AGENCY: COUNTY OF PLACER

### **UNIT**

CATEGORY: TRANSFER/PROCESSING  
UNIT #: 01  
REGULATORY STATUS: PERMITTED  
OPERATIONAL STATUS: ACTIVE  
ACTIVITY: MEDIUM VOL CD WOOD DEBRIS CHIPGRIND FAC.  
INSPECTION: MONTHLY  
ACCEPTED WASTE: CONSTRUCTION/DEMOLITION,INERT,METALS,WOOD WASTE  
CAPACITY: 63525  
REMAINING CAPACITY: NOT REPORTED  
THROUGHPUT: 175  
DISPOSAL ACREAGE: NOT REPORTED  
CLOSURE DATE: NOT REPORTED

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CP0880**  
NAME: **EL DORADO DISPOSAL SERVICE MRF**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **09/22/06**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **ACCEPTED**  
ALUMINIUM: **ACCEPTED**  
PLASTIC: **ACCEPTED**  
BIMETAL: **ACCEPTED**

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

[MAP ID# 12](#)

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: CS1171  
NAME: WASTE CONNECTIONS OF CALIFORNIA INC  
ADDRESS: 4100 THROWITA WAY  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### **SITE DETAILS**

OPERATION BEGIN DATE: 05/19/05  
OPERATION END DATE: NOT REPORTED  
PROGRAM PHONE: (530) 626-4141  
ORGANIZATION NAME: WASTE CONNECTIONS OF CALIFORNIA INC  
ADDRESS: PO BOX 1270  
DIAMOND SPRINGS CA 95619  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CS1234**  
NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **08/24/06**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **NOT ACCEPTED**  
ALUMINIUM: **NOT ACCEPTED**  
PLASTIC: **NOT ACCEPTED**  
BIMETAL: **NOT ACCEPTED**

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CS1235**  
NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **08/24/06**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **NOT ACCEPTED**  
ALUMINIUM: **NOT ACCEPTED**  
PLASTIC: **NOT ACCEPTED**  
BIMETAL: **NOT ACCEPTED**

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CS1236**  
NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **08/24/06**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **NOT ACCEPTED**  
ALUMINIUM: **NOT ACCEPTED**  
PLASTIC: **NOT ACCEPTED**  
BIMETAL: **NOT ACCEPTED**

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CS19394.001**  
NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **08/15/16**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **NOT ACCEPTED**  
ALUMINIUM: **NOT ACCEPTED**  
PLASTIC: **NOT ACCEPTED**  
BIMETAL: **NOT ACCEPTED**

---

[Back to Report Summary](#)



## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: PR0439  
NAME: EL DORADO DISPOSAL SERVICE  
ADDRESS: 4100 THROWITA WAY  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### **SITE DETAILS**

OPERATION BEGIN DATE: 10/12/06  
OPERATION END DATE: NOT REPORTED  
PROGRAM PHONE: (530) 626-4141  
ORGANIZATION NAME: WASTE CONNECTIONS OF CALIFORNIA INC  
ADDRESS: 4100 THROWITA WAY  
PLACERVILLE CA 95667  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

[MAP ID# 12](#)

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### SITE INFORMATION

ID #: RC10531  
NAME: WESTERN EL DORADO RECOVERY SYSTEMS  
ADDRESS: 4100 THROWITA WY  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### SITE DETAILS

OPERATION BEGIN DATE: 08/30/00  
OPERATION END DATE: 11/09/06  
PROGRAM PHONE: (530) 626-4141  
ORGANIZATION NAME: NOT REPORTED  
ADDRESS: STREET NOT REPORTED  
CITY NOT REPORTED  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 13**

Distance from Property: 0.396 mi. (2,091 ft.) WNW  
Elevation: 1,816 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: RC10654  
NAME: MISSOURI FLAT RECYCLE CENTER  
ADDRESS: 4600 MISSOURI FLAT RD  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### **SITE DETAILS**

OPERATION BEGIN DATE: 02/06/01  
OPERATION END DATE: NOT REPORTED  
PROGRAM PHONE: (530) 626-4141  
ORGANIZATION NAME: NOT REPORTED  
ADDRESS: STREET NOT REPORTED  
CITY NOT REPORTED  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## CALSITES Database (CALSITES)

**MAP ID# 14**

Distance from Property: 0.401 mi. (2,117 ft.) WNW  
Elevation: 1,802 ft. (Higher than TP)

### **FACILITY INFORMATION**

ID #: 09750002

NAME: FOOTHILL AUTO REPAIR

ADDRESS: 6566-C COMMERCE WAY  
DIAMOND SPRINGS, CA

STATUS (DATE): PROPERTY/SITE REFERRED TO RWQCB (07/15/1987)

STANDARD INDUSTRIAL CLASSIFICATION BELIEVED TO BE CAUSE OF (POTENTIAL) CONTAMINATION:

**AUTO REPAIR, SERVICES & PARKING**

ACCESS TO SITE: CONTROLLED

GROUNDWATER CONTAMINATION: NOT REPORTED

### **COMMENTS**

FACILITY IDENTIFIED EL DORADO CO HEALTH RECEIVED A COMPLAINT OF POSSIBLE WELL WATER CONTAMINATION. INSPECTION(LOCAL) EL DORADO CO HLTH/CENTRAL VALLEY RWQCB OPERATOR ALLOWED SOLVENTS, ANTIFREEZE, AND WASTE OIL TO FLOW TO GROUND FACILITY DRIVE-BY DHS (SSP); STAINED SOIL, POOR HOUSEKEEP DHS RECORDS SEARCH-NO FILE FOUND STATE LANDS COMMISSION DEPT. OF WATER RESOURCES PRELIM ASSESS DONE PENDING PER CVRWQCB WELL WATER SAMPLES SAMPLE RESULTS NFA BASED ON CVRWQCB SAMPLES; NO DETECTABLE LIMITS (<.5) OF MISC. PETROLEUM PRODUCTS (GASOLINE & SOLVENTS)

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 14**

Distance from Property: 0.401 mi. (2,117 ft.) WNW  
Elevation: 1,802 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **09750002** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **FOOTHILL AUTO REPAIR**

ADDRESS: **6566-C COMMERCE WAY  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **1**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **EVALUATION**

### SITE TYPE DESCRIPTION

**EVALUATION: IDENTIFIES SUSPECTED, BUT UNCONFIRMED, CONTAMINATED SITES THAT NEED OR HAVE GONE THROUGH AN INVESTIGATION AND ASSESSMENT PROCESS. IF A SITE IS FOUND TO HAVE CONFIRMED CONTAMINATION, IT WILL CHANGE FROM EVALUATION TO EITHER A STATE RESPONSE OR VOLUNTARY CLEANUP SITE TYPE. SITES FOUND TO HAVE NO CONTAMINATION AT THE COMPLETION OF THE INVESTIGATION AND ASSESSMENT PROCESS RESULT IN A NO ACTION REQUIRED (FOR PHASE 1 ASSESSMENTS) OR NO FURTHER ACTION (FOR PHASE 2 ASSESSMENTS) DETERMINATION.**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 07/15/1987)

**REFER: RWQCB -**

PAST USE/S THAT CAUSED THE CONTAMINATION

**NONE SPECIFIED**

CONFIRMED CONTAMINANTS OF CONCERN

**NONESPECIFIED - NONE SPECIFIED**

---

[Back to Report Summary](#)

## Referred to Another Local or State Agency (REF)

**MAP ID# 14**

Distance from Property: 0.401 mi. (2,117 ft.) WNW  
Elevation: 1,802 ft. (Higher than TP)

### **FACILITY INFORMATION**

GEOSEARCH ID: 9750002

ENVIROSTOR ID: 9750002

FACILITY NAME: **FOOTHILL AUTO REPAIR**

ADDRESS: **6566-C COMMERCE WAY  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO**

### **FACILITY DETAILS**

PROGRAM TYPE: **EVALUATION**

STATUS: **REFER: RWQCB**

STATUS DATE: **7/15/1987**

CALENVIROSCREEN SCORE: **36-40%**

SITE CODE: **NOT REPORTED**

---

[Back to Report Summary](#)

## Historical Cortese List (HISTCORTESE)

**MAP ID# 15**

Distance from Property: 0.403 mi. (2,128 ft.) N

Elevation: 1,801 ft. (Higher than TP)

### FACILITY INFORMATION

GEOSEARCH ID: 6A189101N25COR

ID#: 6A189101N25

NAME: GUSTAFSON D M & PATRICI

ADDRESS: 3655 CHUCKWAGON  
PLACERVILLE, CA 95667

---

[Back to Report Summary](#)

## GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 16

Distance from Property: 0.443 mi. (2,339 ft.) WNW  
Elevation: 1,747 ft. (Lower than TP)

### FACILITY INFORMATION

GLOBAL ID: T0601700077

URL LINK: [CLICK HERE](#)

BUSINESS NAME: STEVE'S CHEAPER

ADDRESS: 130 PLEASANT VALLEY RD  
DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

### FACILITY DETAILS

CASE TYPE: LUST CLEANUP SITE

CASE NUMBER: 90096

STATUS: COMPLETED - CASE CLOSED 01/02/2013

POTENTIAL CONTAMINATION:

#### GASOLINE

POTENTIAL MEDIA AFFECTED:

AQUIFER USED FOR DRINKING WATER SUPPLY

SITE HISTORY:

THE FIRST THREE MONITORING WELLS WERE INSTALLED ON SITE IN NOVEMBER 1999. BY THE TIME OF THE INITIATION OF THE OFF SITE INVESTIGATION IN THE FALL OF 2001, THE AVERAGE REPORTED MTBE CONCENTRATIONS IN THESE THREE WELLS WAS 50,083 µG/L. THE AVERAGE CONCENTRATION IN THESE THREE WELLS FOR THE LAST FOUR SEMI-ANNUAL MONITORING EVENTS IS 566 µG/L. THIS REPRESENTS A 98.9 PERCENT REDUCTION SINCE ONSITE REMEDIATION BEGAN IN EARLY 2002. OFF SITE INVESTIGATION CONTINUED THROUGH TO THE SUMMER OF 2004 WITH CONCURRENT REMEDIAL ACTIVITIES. BY AUGUST 2004 THERE WERE 29 MONITORING WELLS AND TWO EXTRACTION WELLS IN USE. ELEVEN OF THE MONITORING WELLS DEFINE THE OUTWARD EXTENT OR EDGES OF THE MTBE PLUME, COMPRISING THE WELLS THAT HAVE CONSISTENTLY BEEN REPORTED WITH MTBE BELOW THE DRINKING WATER STANDARD. A SENSITIVE RECEPTOR SURVEY WAS COMPLETED IN LATE 2000. THERE WERE NO WATER SUPPLY WELLS LOCATED WITHIN THE EXTENT OF THE PLUME, LATER DEFINED, AND ONLY FIVE WELLS WERE FOUND IN THE 2000 FOOT SEARCH RADIUS. THE CLOSEST WAS OVER 500 FEET CROSS GRADIENT OF THE PLUME AND HAS SUBSEQUENTLY BEEN REMOVED. GROUNDWATER AS A POTENTIAL SOURCE VAPOR EMANATIONS WAS ADDRESSED IN WORKPLAN DATED JANUARY 26, 2007 INDICATING THAT THERE WERE NO AREAS THAT COULD POTENTIALLY BE IMPACTED TO INVESTIGATE. THIS WAS AFFIRMED IN THE WORKPLAN APPROVAL LETTER FROM THE REGIONAL BOARD DATED 6 FEBRUARY 2007. PATTERSON LAKE IS SITUATED DOWNGRADIENT OF THE SOUTHWESTERLY DIRECTED PLUME THAT ORIGINATED AT THE PROPERTY NOW OWNED BY TOWER ENERGY GROUP. THE LAKE HAS FUNCTIONED AS A HYDRAULIC BARRIER, LOWERING THE GROUNDWATER GRADIENT IN ITS AREA AND SLOWING THE PREREMEDIAL ADVANCEMENT OF THE PLUME. THREE 10,000 GALLON UST'S AND ASSOCIATED PIPING WERE REMOVED FROM THE SITE IN THE SUMMER OF 2010 STATION UPGRADES ACTIVITIES.

### REGULATORY ACTIVITIES

| TYPE OF ACTION: | DATE:      | ACTION:  |
|-----------------|------------|--|
| OTHER           | 01/01/50   | LEAK BEGAN   |
| OTHER           | 01/01/50   | LEAK DISCOVERY                                       |
| OTHER           | 01/01/50   | LEAK REPORTED  |
| OTHER           | 01/01/50   | LEAK STOPPED   |
| REMEDIATION     | 01/01/50   | IN SITU PHYSICAL/CHEMICAL TREATMENT (OTHER THAN SVE) |
| REMEDIATION     | 01/01/50   | OTHER (USE DESCRIPTION FIELD)                        |
| REMEDIATION     | 01/01/50   | PUMP & TREAT (P&T) GROUNDWATER                       |
| ENFORCEMENT     | 01/02/2013 | CLOSURE/NO FURTHER ACTION LETTER                     |



## GeoTracker Cleanup Sites (CLEANUPSITES)

| TYPE OF ACTION: | DATE:      | ACTION:  |
|-----------------|------------|--|
| ENFORCEMENT     | 10/30/2012 | LOP CASE CLOSURE SUMMARY TO RB                       |
| ENFORCEMENT     | 09/30/2012 | LETTER - NOTICE                                      |
| ENFORCEMENT     | 08/24/2012 | STAFF LETTER   |
| ENFORCEMENT     | 06/08/2012 | STAFF LETTER   |
| ENFORCEMENT     | 02/16/2012 | STAFF LETTER   |
| ENFORCEMENT     | 08/25/2010 | STAFF LETTER   |
| ENFORCEMENT     | 08/12/2010 | STAFF LETTER   |
| ENFORCEMENT     | 08/12/2010 | STAFF LETTER   |
| ENFORCEMENT     | 04/11/2010 | STAFF LETTER   |
| ENFORCEMENT     | 02/27/2009 | STAFF LETTER   |
| ENFORCEMENT     | 10/01/2008 | LETTER - NOTICE                                      |
| RESPONSE        | 04/30/2008 | REMEDIAL PROGRESS REPORT                             |
| RESPONSE        | 04/30/2008 | OTHER REPORT / DOCUMENT                              |
| RESPONSE        | 01/31/2008 | REMEDIAL PROGRESS REPORT                             |
| RESPONSE        | 10/30/2007 | OTHER REPORT / DOCUMENT                              |
| RESPONSE        | 07/30/2007 | REMEDIAL PROGRESS REPORT                             |
| RESPONSE        | 04/30/2007 | INTERIM REMEDIAL ACTION REPORT                       |
| RESPONSE        | 04/30/2007 | MONITORING REPORT - QUARTERLY                        |
| ENFORCEMENT     | 04/10/2007 | MEETING  |
| ENFORCEMENT     | 02/06/2007 | STAFF LETTER   |
| ENFORCEMENT     | 02/01/2007 | SITE VISIT / INSPECTION / SAMPLING                   |
| RESPONSE        | 01/31/2007 | OTHER WORKPLAN                                       |
| RESPONSE        | 01/31/2007 | OTHER REPORT / DOCUMENT                              |
| RESPONSE        | 01/31/2007 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 12/29/2006 | OTHER REPORT / DOCUMENT                              |
| ENFORCEMENT     | 12/19/2006 | STAFF LETTER   |
| RESPONSE        | 10/31/2006 | MONITORING REPORT - QUARTERLY                        |
| ENFORCEMENT     | 10/24/2006 | VERBAL COMMUNICATION                                 |
| RESPONSE        | 07/30/2006 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 04/30/2006 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 01/31/2006 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 10/31/2005 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 07/15/2005 | MONITORING REPORT - QUARTERLY                        |
| REMEDIATION     | 07/11/2005 | IN SITU PHYSICAL/CHEMICAL TREATMENT (OTHER THAN SVE) |
| RESPONSE        | 04/30/2005 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 01/31/2005 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 10/15/2004 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 07/15/2004 | MONITORING REPORT - QUARTERLY                        |
| ENFORCEMENT     | 04/15/2004 | STAFF LETTER   |
| RESPONSE        | 04/15/2004 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 04/09/2004 | OTHER WORKPLAN                                       |
| REMEDIATION     | 03/05/2004 | PUMP & TREAT (P&T) GROUNDWATER                       |
| ENFORCEMENT     | 02/27/2004 | STAFF LETTER   |
| RESPONSE        | 01/15/2004 | MONITORING REPORT - QUARTERLY                        |

## GeoTracker Cleanup Sites (CLEANUPSITES)

| TYPE OF ACTION: | DATE:      | ACTION:                       |
|-----------------|------------|-------------------------------|
| RESPONSE        | 10/15/2003 | MONITORING REPORT - QUARTERLY |
| RESPONSE        | 07/15/2003 | MONITORING REPORT - QUARTERLY |
| RESPONSE        | 04/15/2003 | MONITORING REPORT - QUARTERLY |
| RESPONSE        | 01/15/2003 | MONITORING REPORT - QUARTERLY |
| ENFORCEMENT     | 07/26/2002 | FILE REVIEW                   |
| ENFORCEMENT     | 07/25/2002 | FILE REVIEW                   |
| ENFORCEMENT     | 02/25/2002 | FILE REVIEW                   |
| ENFORCEMENT     | 10/17/2001 | STAFF LETTER                  |
| REMEDIATION     | 08/03/2001 | OTHER (USE DESCRIPTION FIELD) |
| ENFORCEMENT     | 07/11/2001 | STAFF LETTER                  |
| ENFORCEMENT     | 04/20/2001 | STAFF LETTER                  |
| ENFORCEMENT     | 10/24/2000 | STAFF LETTER                  |
| ENFORCEMENT     | 05/26/2000 | STAFF LETTER                  |
| ENFORCEMENT     | 07/23/1997 | REFERRAL TO REGIONAL BOARD    |
| OTHER           | 07/23/1997 | LEAK BEGAN                    |
| OTHER           | 07/23/1997 | LEAK STOPPED                  |
| OTHER           | 07/23/1997 | LEAK REPORTED                 |
| OTHER           | 06/22/1997 | LEAK DISCOVERY                |
| RESPONSE        | 04/15/0204 | MONITORING REPORT - QUARTERLY |

### STATUS HISTORY

| STATUS:                        | DATE:      |
|--------------------------------|------------|
| COMPLETED - CASE CLOSED        | 01/02/2013 |
| OPEN - ELIGIBLE FOR CLOSURE    | 10/10/2012 |
| OPEN - VERIFICATION MONITORING | 11/06/2009 |
| OPEN - REMEDIATION             | 03/08/2008 |
| OPEN - REMEDIATION             | 03/06/2008 |
| OPEN - REMEDIATION             | 07/30/2007 |
| OPEN - REMEDIATION             | 07/11/2005 |
| OPEN - REMEDIATION             | 04/08/2004 |
| OPEN - SITE ASSESSMENT         | 04/18/2001 |
| OPEN - SITE ASSESSMENT         | 12/01/2000 |
| OPEN - CASE BEGIN DATE         | 06/22/1997 |
| OPEN - SITE ASSESSMENT         | 06/22/1997 |

### CONTACT DETAILS

ORGANIZATION: EL DORADO COUNTY  
ADDRESS: 2850 FAIRLANE CT., BUILDING C  
CITY: PLACERVILLE  
CONTACT NAME: ROBERT LAURITZEN  
CONTACT TYPE: LOCAL AGENCY CASEWORKER  
CONTACT PHONE: NOT REPORTED  
EMAIL: ROBERT.LAURITZEN@EDCGOV.US

[Back to Report Summary](#)

## Historical Cortese List (HISTCORTESE)

[MAP ID# 16](#)

Distance from Property: 0.443 mi. (2,339 ft.) WNW  
Elevation: 1,747 ft. (Lower than TP)

### FACILITY INFORMATION

GEOSEARCH ID: 090096COR

ID#: 090096

NAME: STEVE'S CHEAPER

ADDRESS: 130 PLEASANT VALLEY  
DIAMOND SPRINGS, CA 95619

---

[Back to Report Summary](#)

# Leaking Underground Storage Tanks (LUST)

**MAP ID# 16**

Distance from Property: 0.443 mi. (2,339 ft.) WNW  
Elevation: 1,747 ft. (Lower than TP)

## **FACILITY INFORMATION**

GLOBAL ID: T0601700077

URL LINK: [CLICK HERE](#)

BUSINESS NAME: STEVE'S CHEAPER

ADDRESS: 130 PLEASANT VALLEY RD  
DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

## **FACILITY DETAILS**

CASE TYPE: LUST CLEANUP SITE

CASE NUMBER: 090096

STATUS: 01/02/2013

POTENTIAL CONTAMINATION:

**GASOLINE**

POTENTIAL MEDIA AFFECTED:

**AQUIFER USED FOR DRINKING WATER SUPPLY**

SITE HISTORY:

THE FIRST THREE MONITORING WELLS WERE INSTALLED ON SITE IN NOVEMBER 1999. BY THE TIME OF THE INITIATION OF THE OFF SITE INVESTIGATION IN THE FALL OF 2001, THE AVERAGE REPORTED MTBE CONCENTRATIONS IN THESE THREE WELLS WAS 50,083 ìG/L. THE AVERAGE CONCENTRATION IN THESE THREE WELLS FOR THE LAST FOUR SEMI-ANNUAL MONITORING EVENTS IS 566 ìG/L. THIS REPRESENTS A 98.9 PERCENT REDUCTION SINCE ONSITE REMEDIATION BEGAN IN EARLY 2002. OFF SITE INVESTIGATION CONTINUED THROUGH TO THE SUMMER OF 2004 WITH CONCURRENT REMEDIAL ACTIVITIES. BY AUGUST 2004 THERE WERE 29 MONITORING WELLS AND TWO EXTRACTION WELLS IN USE. ELEVEN OF THE MONITORING WELLS DEFINE THE OUTWARD EXTENT OR EDGES OF THE MTBE PLUME, COMPRISING THE WELLS THAT HAVE CONSISTENTLY BEEN REPORTED WITH MTBE BELOW THE DRINKING WATER STANDARD. A SENSITIVE RECEPTOR SURVEY WAS COMPLETED IN LATE 2000. THERE WERE NO WATER SUPPLY WELLS LOCATED WITHIN THE EXTENT OF THE PLUME, LATER DEFINED, AND ONLY FIVE WELLS WERE FOUND IN THE 2000 FOOT SEARCH RADIUS. THE CLOSEST WAS OVER 500 FEET CROSS GRADIENT OF THE PLUME AND HAS SUBSEQUENTLY BEEN REMOVED. GROUNDWATER AS A POTENTIAL SOURCE VAPOR EMANATIONS WAS ADDRESSED IN WORKPLAN DATED JANUARY 26, 2007 INDICATING THAT THERE WERE NO AREAS THAT COULD POTENTIALLY BE IMPACTED TO INVESTIGATE. THIS WAS AFFIRMED IN THE WORKPLAN APPROVAL LETTER FROM THE REGIONAL BOARD DATED 6 FEBRUARY 2007. PATTERSON LAKE IS SITUATED DOWNGRADIENT OF THE SOUTHWESTERLY DIRECTED PLUME THAT ORIGINATED AT THE PROPERTY NOW OWNED BY TOWER ENERGY GROUP. THE LAKE HAS FUNCTIONED AS A HYDRAULIC BARRIER, LOWERING THE GROUNDWATER GRADIENT IN ITS AREA AND SLOWING THE PREREMEDIAL ADVANCEMENT OF THE PLUME. THREE 10,000 GALLON UST'S AND ASSOCIATED PIPING WERE REMOVED FROM THE SITE IN THE SUMMER OF 2010 STATION UPGRADES ACTIVITIES.

## **HISTORICAL FACILITY DETAILS**

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

---

[Back to Report Summary](#)

# GeoTracker Cleanup Sites (CLEANUPSITES)

**MAP ID# 17**

Distance from Property: 0.481 mi. (2,540 ft.) NNE  
Elevation: 1,819 ft. (Higher than TP)

## **FACILITY INFORMATION**

GLOBAL ID: T10000010458

URL LINK: [CLICK HERE](#)

BUSINESS NAME: ABEL TRUST

ADDRESS: 4061 LIME PLANT ROAD  
DIAMOND SPRINGS, CA 95667

COUNTY: EL DORADO

## **FACILITY DETAILS**

CASE TYPE: CLEANUP PROGRAM SITE

CASE NUMBER: NOT REPORTED

STATUS: OPEN - ACTIVE 06/09/2017

POTENTIAL CONTAMINATION:

**OTHER ACID OR CORROSIVE**

POTENTIAL MEDIA AFFECTED:

**NOT REPORTED**

SITE HISTORY:

**NOT REPORTED**

## **REGULATORY ACTIVITIES**

| TYPE OF ACTION: | DATE:      | ACTION:                              |
|-----------------|------------|--------------------------------------|
| ENFORCEMENT     | 04/09/2018 | STAFF LETTER                         |
| RESPONSE        | 03/16/2018 | REMOVAL ACTION WORK PLAN             |
| ENFORCEMENT     | 02/06/2018 | STAFF LETTER                         |
| RESPONSE        | 02/01/2018 | CORRESPONDENCE                       |
| ENFORCEMENT     | 01/22/2018 | STAFF LETTER                         |
| RESPONSE        | 01/12/2018 | SITE INVESTIGATION                   |
| ENFORCEMENT     | 11/15/2017 | LETTER - NOTICE                      |
| RESPONSE        | 11/06/2017 | PRELIMINARY SITE ASSESSMENT WORKPLAN |
| ENFORCEMENT     | 10/26/2017 | EMAIL CORRESPONDENCE                 |
| ENFORCEMENT     | 05/16/2017 | EMAIL CORRESPONDENCE                 |
| ENFORCEMENT     | 04/17/2017 | 13267 REQUIREMENT                    |
| ENFORCEMENT     | 11/15/2016 | LETTER - NOTICE                      |

## **STATUS HISTORY**

| STATUS:                | DATE:      |
|------------------------|------------|
| OPEN - ACTIVE          | 06/09/2017 |
| OPEN - CASE BEGIN DATE | 11/15/2016 |

## **CONTACT DETAILS**

ORGANIZATION: CENTRAL VALLEY RWQCB (REGION 5S)

ADDRESS: 11020 SUN CENTER DRIVE, SUITE 200

CITY: RANCHO CORDOVA

CONTACT NAME: WALTER FLOYD

CONTACT TYPE: REGIONAL BOARD CASEWORKER

CONTACT PHONE: 9164644651

EMAIL: WALTER.FLOYD@WATERBOARDS.CA.GOV

## GeoTracker Cleanup Sites (CLEANUPSITES)

[Back to Report Summary](#)

## CALSITES Database (CALSITES)

**MAP ID# 18**

Distance from Property: 0.497 mi. (2,624 ft.) NNW  
Elevation: 1,817 ft. (Higher than TP)

### **FACILITY INFORMATION**

ID #: 09340001

NAME: CELEBRITY PLATING

ADDRESS: 4502 MISSOURI FLAT ROAD  
PLACERVILLE, CA

STATUS (DATE): PRELIMINARY ENDANGERMENT ASSESSMENT REQUIRED (04/14/1997)

STANDARD INDUSTRIAL CLASSIFICATION BELIEVED TO BE CAUSE OF (POTENTIAL) CONTAMINATION:

**MANU - FABRICATED METAL PRODUCTS**

ACCESS TO SITE: NOT REPORTED

GROUNDWATER CONTAMINATION: NOT REPORTED

### **COMMENTS**

SITE SCREENING COMPLETED. EL DORADO COUNTY HEALTH DEPARTMENT SUBMITTED AN INVESTIGATION REPORT TO DTSC FOR REVIEW AND COMMENT. DTSC STAFF PERFORMED A CURSORY REVIEW OF THE REPORT AND CONDUCTED A SITE VISIT. THE HOUSEKEEPING PRACTICES IN THE PLATING AREA WERE POOR. MOST OF THE FLOOR AND WALLS SHOWED SIGNS OF SPILLS AND LEAKS. SOIL SAMPLES FROM BENEATH THE FLOOR WERE CONTAMINATED WITH 42 PPM CYANIDE, 159 PPM CHROMIUM, 123 PPM COPPER, 1010 PPM NICKEL AND OTHER METALS. A PRELIMINARY ENDANGERMENT ASSESSMENT IS REQUIRED TO DETER- THE POTENTIAL THREAT POSED BY ONSITE CONTAMINATION.

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 18**

Distance from Property: 0.497 mi. (2,624 ft.) NNW  
Elevation: 1,817 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **09340001** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **CELEBRITY PLATING**

ADDRESS: **4502 MISSOURI FLAT ROAD  
PLACERVILLE, CA 95667**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **10**

LEAD AGENCY: **HWMP**

DTSC PROJECT MANAGER: **LANCE MCMAHAN**

DTSC SUPERVISOR: **NOEL SHRUM**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **CORRECTIVE ACTION**

### **SITE TYPE DESCRIPTION**

**INVESTIGATION AND CLEANUP ACTIVITIES AT HAZARDOUS WASTE FACILITIES (EITHER RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OR STATE-ONLY) THAT EITHER WERE ELIGIBLE FOR A PERMIT OR RECEIVED A PERMIT, ARE CALLED CORRECTIVE ACTION.**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 04/05/2010)

**NO FURTHER ACTION - IDENTIFIES COMPLETED SITES WHERE DTSC DETERMINED AFTER INVESTIGATION, GENERALLY A PEA (AN INITIAL ASSESSMENT), THAT THE PROPERTY DOES NOT POSE A PROBLEM TO PUBLIC HEALTH OR THE ENVIRONMENT**

PAST USE/S THAT CAUSED THE CONTAMINATION

**HAZARDOUS WASTE TREATMENT, METAL PLATING - CHROME**

CONFIRMED CONTAMINANTS OF CONCERN

**30152 - CHROMIUM III**

**30153 - CHROMIUM VI**

**30160 - CYANIDE (FREE)**

**30406 - NICKEL (SOLUBLE SALTS)**

---

[Back to Report Summary](#)



## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 18**

Distance from Property: 0.497 mi. (2,624 ft.) NNW  
Elevation: 1,817 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **71003046** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **CELEBRITY, INC.**

ADDRESS: **4502 MISSOURI FLAT ROAD  
PLACERVILLE, CA 95667**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **NOT REPORTED**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **NOT REPORTED**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **TIERED PERMIT**

SITE TYPE DESCRIPTION

**NOT REPORTED**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 07/07/2003)

**NO ACTION REQUIRED - IDENTIFIES SITES WHERE A PHASE I ENVIRONMENTAL ASSESSMENT  
WAS COMPLETED AND RESULTED IN A NO ACTION REQUIRED DETERMINATION**

PAST USE/S THAT CAUSED THE CONTAMINATION

**NONE SPECIFIED**

CONFIRMED CONTAMINANTS OF CONCERN

**NONESPECIFIED - NONE SPECIFIED**

---

[Back to Report Summary](#)

## No Further Action Determination (NFA)

**MAP ID# 18**

Distance from Property: 0.497 mi. (2,624 ft.) NNW  
Elevation: 1,817 ft. (Higher than TP)

### **FACILITY INFORMATION**

GEOSEARCH ID: 71003046

ENVIROSTOR ID: 71003046

FACILITY NAME: CELEBRITY, INC.

ADDRESS: 4502 MISSOURI FLAT ROAD  
PLACERVILLE, CA 95667

COUNTY: EL DORADO

### **FACILITY DETAILS**

PROGRAM TYPE: TIERED PERMIT

STATUS: NO ACTION REQUIRED

STATUS DATE: 7/7/2003

CALENVIROSCREEN SCORE: 36-40%

SITE CODE: 101525

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 19**

Distance from Property: 0.498 mi. (2,629 ft.) N  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: RC4019  
NAME: E M RECYCLING  
ADDRESS: 4040 #A-2 STAGE CT  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### **SITE DETAILS**

OPERATION BEGIN DATE: 01/09/91  
OPERATION END DATE: 01/07/93  
PROGRAM PHONE: (916) 621-2027  
ORGANIZATION NAME: NOT REPORTED  
ADDRESS: STREET NOT REPORTED  
CITY NOT REPORTED  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 20**

Distance from Property: 0.522 mi. (2,756 ft.) NNW  
Elevation: 1,817 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **09500006** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **TETERS AUTO WRECKERS**

ADDRESS: **4487 MISSOURI FLAT ROAD  
PLACERVILLE, CA 95667**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **1**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **EVALUATION**

### SITE TYPE DESCRIPTION

**EVALUATION: IDENTIFIES SUSPECTED, BUT UNCONFIRMED, CONTAMINATED SITES THAT NEED OR HAVE GONE THROUGH AN INVESTIGATION AND ASSESSMENT PROCESS. IF A SITE IS FOUND TO HAVE CONFIRMED CONTAMINATION, IT WILL CHANGE FROM EVALUATION TO EITHER A STATE RESPONSE OR VOLUNTARY CLEANUP SITE TYPE. SITES FOUND TO HAVE NO CONTAMINATION AT THE COMPLETION OF THE INVESTIGATION AND ASSESSMENT PROCESS RESULT IN A NO ACTION REQUIRED (FOR PHASE 1 ASSESSMENTS) OR NO FURTHER ACTION (FOR PHASE 2 ASSESSMENTS) DETERMINATION.**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 09/12/1995)

**REFER: OTHER AGENCY -**

PAST USE/S THAT CAUSED THE CONTAMINATION

**NONE SPECIFIED**

CONFIRMED CONTAMINANTS OF CONCERN

**NONESPECIFIED - NONE SPECIFIED**

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 21**

Distance from Property: 0.641 mi. (3,384 ft.) WNW  
Elevation: 1,757 ft. (Lower than TP)

### **SITE INFORMATION**

ID #: **71003697** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **CELEBRITY, INC.**

ADDRESS: **6650 MERCHANDISE WAY  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **NOT REPORTED**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **NOT REPORTED**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **TIERED PERMIT**

SITE TYPE DESCRIPTION

**NOT REPORTED**

DTSC's CURRENT INVOLVEMENT AT SITE (as of )

**NO ACTION REQUIRED - IDENTIFIES SITES WHERE A PHASE I ENVIRONMENTAL ASSESSMENT  
WAS COMPLETED AND RESULTED IN A NO ACTION REQUIRED DETERMINATION**

PAST USE/S THAT CAUSED THE CONTAMINATION

**NONE SPECIFIED**

CONFIRMED CONTAMINANTS OF CONCERN

**NONESPECIFIED - NONE SPECIFIED**

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 22**

Distance from Property: 0.683 mi. (3,606 ft.) ENE  
Elevation: 1,848 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **09280001** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **OXYGEN SERVICE AND SUPPLY COMPANY**

ADDRESS: **13 CHINA GARDEN ROAD  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **1**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **EVALUATION**

### SITE TYPE DESCRIPTION

**EVALUATION: IDENTIFIES SUSPECTED, BUT UNCONFIRMED, CONTAMINATED SITES THAT NEED OR HAVE GONE THROUGH AN INVESTIGATION AND ASSESSMENT PROCESS. IF A SITE IS FOUND TO HAVE CONFIRMED CONTAMINATION, IT WILL CHANGE FROM EVALUATION TO EITHER A STATE RESPONSE OR VOLUNTARY CLEANUP SITE TYPE. SITES FOUND TO HAVE NO CONTAMINATION AT THE COMPLETION OF THE INVESTIGATION AND ASSESSMENT PROCESS RESULT IN A NO ACTION REQUIRED (FOR PHASE 1 ASSESSMENTS) OR NO FURTHER ACTION (FOR PHASE 2 ASSESSMENTS) DETERMINATION.**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 05/31/1988)

**REFER: OTHER AGENCY -**

PAST USE/S THAT CAUSED THE CONTAMINATION

**NONE SPECIFIED**

CONFIRMED CONTAMINANTS OF CONCERN

**NONESPECIFIED - NONE SPECIFIED**

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

MAP ID# 23

Distance from Property: 0.818 mi. (4,319 ft.) WNW  
Elevation: 1,794 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: 09730001 ASSESSOR'S PARCEL #: 32924051

URL LINK: [CLICK HERE](#)

NAME: OLD CALDOR LUMBER COMPANY YARD

ADDRESS: 180 INDUSTRIAL DRIVE  
DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

SITE SIZE (ACRES): 1

LEAD AGENCY: NONE SPECIFIED

DTSC PROJECT MANAGER: NOT REPORTED

DTSC SUPERVISOR: STEVEN BECKER

DTSC DIVISION BRANCH: CLEANUP SACRAMENTO

NPL LISTED: NO RESTRICTED LAND USE: NO

SITE TYPE: HISTORICAL

### SITE TYPE DESCRIPTION

**HISTORICAL: IDENTIFIES SITES FROM AN OLDER DATABASE WHERE NO SITE TYPE WAS IDENTIFIED. MOST OF THESE SITES HAVE A STATUS OF REFERRED OR NO FURTHER ACTION. DTSC IS WORKING TO CLEAN UP THIS DATA BY IDENTIFYING AN APPROPRIATE SITE TYPE FOR EACH "HISTORIC" SITE.**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 02/27/1989)

**NO FURTHER ACTION - IDENTIFIES COMPLETED SITES WHERE DTSC DETERMINED AFTER INVESTIGATION, GENERALLY A PEA (AN INITIAL ASSESSMENT), THAT THE PROPERTY DOES NOT POSE A PROBLEM TO PUBLIC HEALTH OR THE ENVIRONMENT**

PAST USE/S THAT CAUSED THE CONTAMINATION

**MANUFACTURING - LUMBER/WOOD PRODUCTS**

**CONFIRMED CONTAMINANTS OF CONCERN**

**NONE SPECIFIED**

---

[Back to Report Summary](#)

## Unlocated Sites Summary

*This list contains sites that could not be mapped due to limited or incomplete address information.*

| <b>Database Name</b> | <b>Site ID#</b> | <b>Site Name</b>        | <b>Address</b>     | <b>City/State/Zip/County</b>           |
|----------------------|-----------------|-------------------------|--------------------|--|
| DROP                 | CP0005          | BOB'S SALVAGE           | 4000 UNION MINE RD | DIAMOND SPRINGS, CA<br>95619 EL DORADO |
| HISTUST              | 00023440        | DIAMOND INDUSTRIAL PARK | NONE BRIGHT COURT  | DIAMOND SPRINGS, CA<br>95619 El Dorado |
| SWEEPS               | A09-000-34834   | DIAMOND INDUSTRIAL PARK | BRIGHT CT          | DIAMOND SPRINGS, CA<br>95619           |



## ***Environmental Records Definitions - FEDERAL***

**AIRSAFS** Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance.

**BRS** Biennial Reporting System

VERSION DATE: 12/31/15

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

**CDL** Clandestine Drug Laboratory Locations

VERSION DATE: 10/05/17

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

**DOCKETS** EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

**EC** Federal Engineering Institutional Control Sites

VERSION DATE: 08/03/15

This database includes site locations where Engineering and/or Institutional Controls have been identified as part

## ***Environmental Records Definitions - FEDERAL***

of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

**ECHOR09** Enforcement and Compliance History Information

VERSION DATE: 09/01/18

The EPA's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

**ERNSCA** Emergency Response Notification System

VERSION DATE: 10/28/18

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

**FRSCA** Facility Registry System

VERSION DATE: 10/09/18

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

**HMIRSR09** Hazardous Materials Incident Reporting System

VERSION DATE: 09/30/18

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

**ICIS** Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 09/01/18

## ***Environmental Records Definitions - FEDERAL***

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

**ICISNPDES** Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 07/09/17

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

**LUCIS** Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

**MLTS** Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

**NPDES09** National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from December 2002 until April 2007. Refer to the PCS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

**PADS** PCB Activity Database System

VERSION DATE: 09/14/18

## ***Environmental Records Definitions - FEDERAL***

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

**PCSR09** Permit Compliance System

VERSION DATE: 08/01/12

The Permit Compliance System is used in tracking enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act and is maintained by the United States Environmental Protection Agency's Office of Compliance. PCS is designed to support the NPDES program at the state, regional, and national levels. This database includes permitted facilities located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa. PCS has been modernized, and no longer exists. National Pollutant Discharge Elimination System (ICIS-NPDES) data can now be found in Integrated Compliance Information System (ICIS).

**RCRASC** RCRA Sites with Controls

VERSION DATE: 09/26/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

**SEMSLIENS** SEMS Lien on Property

VERSION DATE: 08/13/18

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

**SFLIENS** CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of

## ***Environmental Records Definitions - FEDERAL***

these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete.

**SSTS** Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

**TRI** Toxics Release Inventory

VERSION DATE: 12/31/16

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

**TSCA** Toxic Substance Control Act Inventory

VERSION DATE: 12/31/12

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site.

**RCRAGR09** Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 9 includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

## ***Environmental Records Definitions - FEDERAL***

### **RCRANGR09**

Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA Region 9 includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

### **ALTFUELS**

Alternative Fueling Stations

VERSION DATE: 09/01/18

Nationwide list of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

### **FEMAUST**

FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

### **HISTPST**

Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

### **ICISCLEANERS**

Integrated Compliance Information System Drycleaners

VERSION DATE: 09/01/18

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

### **MRDS**

Mineral Resource Data System

VERSION DATE: 03/15/16

## ***Environmental Records Definitions - FEDERAL***

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

**MSHA** Mine Safety and Health Administration Master Index File

VERSION DATE: 08/31/18

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

**BF** Brownfields Management System

VERSION DATE: 10/01/18

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

**DNPL** Delisted National Priorities List

VERSION DATE: 11/14/18

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

**NLRRCRAT** No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/01/18

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

**ODI** Open Dump Inventory

VERSION DATE: 06/01/85

## **Environmental Records Definitions - FEDERAL**

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

**RCRAT** Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

**SEMS** Superfund Enterprise Management System

VERSION DATE: 08/13/18

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

**SEMSARCH** Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 08/13/18

The Superfund Enterprise Management System Archive listing (SEMS-ARCHIVE) has replaced the CERCLIS NFRAP reporting system in 2015. This listing reflect sites that have been assessed and no further remediation is planned and is of no further interest under the Superfund program.

**SMCRA** Surface Mining Control and Reclamation Act Sites

VERSION DATE: 09/14/18

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.



## ***Environmental Records Definitions - FEDERAL***

**USUMTRCA** Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

**DOD** Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

**FUDS** Formerly Used Defense Sites

VERSION DATE: 06/01/15

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. **DISCLAIMER:** This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

**FUSRAP** Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

**NLRRCRAC** No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/01/18

## ***Environmental Records Definitions - FEDERAL***

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

**NMS** Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites.

During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

**NPL** National Priorities List

VERSION DATE: 11/14/18

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

**PNPL** Proposed National Priorities List

VERSION DATE: 11/14/18

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

**RCRAC** Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

## ***Environmental Records Definitions - FEDERAL***

**RCRASUBC**

Resource Conservation &amp; Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

**RODS**

Record of Decision System

VERSION DATE: 08/13/18

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

## **Environmental Records Definitions - STATE (CA)**

**CDL** Clandestine Drug Labs

VERSION DATE: 12/31/17

The California Department of Toxic Substance Control (DTSC) provides this listing of illegal drug laboratories. Pursuant to Section 25354.5 of the California Health and Safety Code, DTSC conducts emergency removal actions at clandestine drug labs at the request of State and local law enforcement agencies. DTSC's contractors typically remove hazardous substances that may pose an immediate threat to public health and the environment while the enforcement officials are on scene. During the emergency removal actions, contractors remove and properly dispose of contaminated lab equipment, chemicals used to make the illegal drugs (usually methamphetamine), lab chemical wastes, and other grossly contaminated materials. DTSC does not perform additional assessment work beyond standard emergency removal actions and makes no further determination regarding the need for future cleanup work at the emergency removal location. The reported location information may or may not include the actual location of the illegal drug lab. The DTSC does not guarantee the accuracy of the address or location information or the condition of the location listed.

**CHMIRS** California Hazardous Material Incident Report System

VERSION DATE: 10/24/18

The California Hazardous Material Incident Report System database is provided by the California Emergency Management Agency. This database contains accidental or spill release information from reported hazardous material incidents since 1993.

**DTSCDR** DTSC Deed Restrictions

VERSION DATE: 10/07/18

The California Department of Toxic Substances Control (DTSC) maintains this listing of sites with deed restrictions. According to the DTSC, restricted land use indicates whether the site or area within the site has an environmental restriction recorded and/or other institutional control preventing certain types of land use or activities. The land use restrictions listed under the site management requirements are only an abbreviated summary of the land use restrictions, and may not encompass all restrictions and notification requirements placed on a property. For complete land use restriction information please contact the DTSC to review associated Land Use Restriction documents.

**EMI** Emissions Inventory Data

VERSION DATE: 12/31/16

The Air Resources Board's Emissions Inventory Database contains criteria pollutant data and toxic data on facilities throughout the state of California for the 2012-2000 inventory years.

**HWTS** Hazardous Waste Tanner Summary

VERSION DATE: 12/31/17

## **Environmental Records Definitions - STATE (CA)**

This data is prepared from information extracted from copies of hazardous waste manifests received each year by the Department of Toxic Substances Control. The Hazardous Waste Summary Report (Tanner Report) currently includes manifest data from the 1993 through the 2016 reporting years.

**LDS** Land Disposal Sites

VERSION DATE: 10/09/18

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

**LIENS** Recorded Environmental Cleanup Liens

VERSION DATE: 05/17/18

The California Department of Toxic Substance Control (DTSC) maintains this listing of liens placed upon real properties. A lien is utilized by the DTSC to obtain reimbursement from responsible parties for costs associated with the remediation of contaminated properties.

**MCS** Military Cleanup Sites

VERSION DATE: 07/09/18

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater

**NPDES** National Pollutant Discharge Elimination System Facilities

VERSION DATE: 09/04/18

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

**ABST** Above Ground Storage Tanks

VERSION DATE: 09/13/18

This database, provided by the California Environmental Protection Agency's (CalEPA) Regulated Site Portal, contains aboveground petroleum storage tank facilities originating from the California Environmental Reporting System (CERS). These facilities store petroleum in aboveground storage tanks with oversight by local agencies. As of January 1, 2008, Assembly Bill No. 1130 of the Aboveground Petroleum Storage Act (APSA) authorized the Certified Unified Program Agencies to implement and administer the requirements of the APSA. CalEPA Data Disclaimer: Information displayed in the portal is collected from separate agency databases and displayed unaltered. Information that is considered confidential, trade secret, or is otherwise protected by the agency that

## **Environmental Records Definitions - STATE (CA)**

manages the database is not loaded into the portal. For more detail about information displayed in the portal, please visit the data source sites. Please refer to AST2007 database for aboveground storage tank information obtained from the California State Water Resources Control Board prior to 2008 APSA requirements.

**AST2007** Aboveground Storage Tanks Prior to January 2008

VERSION DATE: 12/01/07

This database contains aboveground storage tank facilities registered with the California State Water Resources Control Board (SWRCB) between 2007 and 2003. Since 2006, tanks were required to contain a minimum (even as cumulative) of 1320 gallons to be in the program. As of January 1, 2008, the SWRCB no longer maintains a list of registered aboveground storage tanks, due to effective Assembly Bill No. 1130 (Laird) of the Aboveground Petroleum Storage Act (APSA). This Bill authorized the Certified Unified Program Agencies to implement and administer the requirements of the APSA. Please refer to ABST database as a current source for aboveground petroleum storage tank data.

**CLEANER** Dry Cleaner Facilities

VERSION DATE: 06/20/18

This database, created by accessing the California Department of Toxic Substances Control's (DTSC) Hazardous Waste Tracking System, includes dry cleaner facilities that have registered EPA identification numbers. These facilities are categorized with one of the following NAICS Codes: 81231 or 81232. This database may also include facilities other than dry cleaners who also register with these same NAICS Codes. Not all companies report their NAICS/SIC Codes to the DTSC and therefore this database may exclude registered dry cleaner facilities with incomplete classification information.

**DTSCHWT** DTSC Registered Hazardous Waste Transporters

VERSION DATE: 10/14/18

The Department of Toxic Substances Control provides this list of Registered Hazardous Waste Transporters.

**HISTUST** Historical Underground Storage Tanks

VERSION DATE: 12/31/87

The Hazardous Substance Storage Container Database is a historical list of Underground Storage Tank sites, compiled from tank survey and registration information collected at one time between 1984 and 1987 by the State Water Resources Control Board. The hazardous substances stored within these tanks includes, but not restricted to, petroleum products, industrial solvents, and other materials.

**MINES** Mines Listing

VERSION DATE: 07/31/18

This database includes mine site locations from the California Office of Mine Reclamation.

## **Environmental Records Definitions - STATE (CA)**

**MWMP** California Medical Waste Management Program Facility List

VERSION DATE: 06/29/18

To protect the public and the environment from potential infectious exposure to disease causing agents, the Medical Waste Management Program (MWMP), in the Environmental Management Branch of the California Department of Public Health, regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities, medical waste transporters, and medical waste transfer stations.

**SLIC** Spills, Leaks, Investigation & Cleanup Recovery Listing

VERSION DATE: 06/16/08

These records are maintained by the California Regional Water Quality Control Board (RWQCB). This list includes contaminated sites that impact groundwater or have the potential to impact ground water. Please refer to CLEANUPSITES database as source of current data.

**SWEEPS** Statewide Environmental Evaluation and Planning System

VERSION DATE: 10/01/94

The Statewide Environmental Evaluation and Planning System (SWEEPS) contains a historical listing of active and inactive underground storage tank locations from the State Water Resources Control Board. The hazardous substances stored within these tanks includes, but not restricted to, petroleum products, industrial solvents, and other materials. Refer to CUPA listing for source of current data.

**USTCUPA** Underground Storage Tanks

VERSION DATE: 10/18/18

An underground storage tank is an individual tank or group of tanks that store hazardous substances. Underground storage tanks are completely or considerably below the ground surface. This database contains UST permit data submitted from the Certified Unified Program Agencies (CUPA) directly to the State Water Resources Control Board. CUPA's are local agencies that have been certified by the California EPA to implement state environmental programs within the local agency's jurisdiction.

**BF** Brownfield Sites

VERSION DATE: 09/03/18

This database includes Brownfield sites from the State Water Resources Control Board. These are sites that have gone through the Moratorium of Agreement (MOA) process.

## **Environmental Records Definitions - STATE (CA)**

**CALSITES**                      CALSITES Database

VERSION DATE: 05/01/04

This historical database was maintained by the Department of Toxic Substance Control for more than a decade. CALSITES contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.

**CLEANUPSITES**                      GeoTracker Cleanup Sites

VERSION DATE: 10/09/18

This GeoTracker Cleanup Sites database is maintained by the State Water Resources Control Board. The database contains contaminated sites that impact groundwater or have the potential to impact ground water, including sites that require cleanup, such as Leaking Underground Storage Tank Sites, Department of Defense Sites, and Cleanup Program Sites. GeoTracker also contains records for various unregulated projects as well as permitted facilities including: Irrigated Lands, Oil and Gas production, operating Permitted USTs, and Land Disposal Sites. GeoTracker portals retrieve records and view integrated data sets from multiple State Water Board programs and other agencies.

**CORTESE**                      Cortese List

VERSION DATE: 10/18/18

This active listing includes hazardous waste and substances sites designated by the State Water Resources Control Board, the Integrated Waste Board, and the Department of Toxic Substance Control. The Cortese List is utilized by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites.

**DROP**                      Listing of Certified Dropoff, Collection, and Community Service Programs

VERSION DATE: 10/14/18

Listing of Certified Dropoff, Collection, and Community Service Programs (non-buyback) operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

**ERAP**                      Expedited Removal Action Program Sites

VERSION DATE: 10/14/18

The Expedited Remedial Action Program is a pilot project administered by the Department of Toxic Substances Control's Site Mitigation and Brownfields Reuse Program to promote the cleanup of up to 30 hazardous substance release sites. ERAP provides significant incentives for redevelopment of contaminated properties by promoting cleanups based on the planned land use, by providing a covenant not to sue, and by outlining a fair and equitable liability scheme.



## **Environmental Records Definitions - STATE (CA)**

**HISTCORTESE** Historical Cortese List

VERSION DATE: 11/02/02

This historical listing includes hazardous waste and substances sites designated by the State Water Resources Control Board, the Integrated Waste Board, and the Department of Toxic Substance Control. The Cortese List was utilized by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. See CACORTESE for an updated version of this database.

**LUST** Leaking Underground Storage Tanks

VERSION DATE: 10/09/18

This database is maintained by the State Water Resources Control Board. LUST records contain an inventory of reported leaking underground storage tank incidents. Please refer to the CLEANUPSITES database as source of current data.

**NFA** No Further Action Determination

VERSION DATE: 09/16/18

The NFA listing contains properties at which the Department of Toxic Substance Control has made a clear determination that the property does not pose a problem to the environment or to public health.

**NFE** Sites Needing Further Evaluation

VERSION DATE: 06/20/18

The NFE listing contains properties that the Department of Toxic Substance Control suspects with possible contamination. These are unconfirmed contaminated properties that need further assessment.

**PROC** Listing of Certified Processors

VERSION DATE: 08/12/18

Listing of Certified Processors that are operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

**REF** Referred to Another Local or State Agency

VERSION DATE: 06/21/18

The REF listing contains properties where contamination has not been confirmed and which were determined as not requiring direct Department of Toxic Substance Control Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency.

## **Environmental Records Definitions - STATE (CA)**

**SWIS** Solid Waste Information System Sites

VERSION DATE: 10/08/18

The Solid Waste Information System (SWIS) database includes information on solid waste facilities, operations, and disposal sites located in California. This database is maintained by the California Department of Resources Recycling and Recovery.

**SWRCY** Recycling Centers

VERSION DATE: 08/13/18

Listing of Certified Recycling Centers that are operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

**VCP** Voluntary Cleanup Program

VERSION DATE: 10/14/18

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

**WMUDS** Waste Management Unit Database

VERSION DATE: 01/01/00

The Waste Management Unit Database System tracks and inventories waste management units. CCR Title 27 contains criteria stating that Waste Management Units are classified according to their ability to contain wastes. Containment shall be determined by geology, hydrology, topography, climatology, and other factors relating to the ability of the Unit to protect water quality. Water Code Section 13273.1 requires that operators submit a water quality solid waste assessment test (SWAT) report to address leak status. The WMUDS was last updated by the State Water Resources control board in 2000.

**ENVIROSTOR** EnviroStor Cleanup Sites

VERSION DATE: 10/14/18

The Department of Toxic Substances Control (DTSC) has developed the EnviroStor database system to evaluate and track sites with confirmed or potential contamination and sites where further investigation may be necessary. This EnviroStor database of cleanup sites contains the following: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. Sites where DTSC has made a "No Action Required" determination are not included in this database, as these sites had assessments that revealed no evidence of recognized environmental conditions in connection with the property.

## ***Environmental Records Definitions - STATE (CA)***

### **ENVIROSTORPCA**

EnviroStor Permitted and Corrective Action Sites

VERSION DATE: 10/18/18

The Department of Toxic Substances Control (DTSC) has developed the EnviroStor database system to evaluate and track sites with confirmed or potential contamination and sites where further investigation may be necessary. This EnviroStor database contains detailed information on hazardous waste permitted and corrective action facilities. Investigation and cleanup activities at hazardous waste facilities (either Resource Conservation and Recovery Act (RCRA) or State-only) that either were eligible for a permit or received a permit are called "corrective action." These facilities treated stored, disposed and/or transferred hazardous waste.

### **TOXPITS**

Toxic Pits Cleanup Act Sites

VERSION DATE: 07/01/95

Toxic Pits are sites with possible contamination of hazardous substances where cleanup is necessary. This listing is no longer updated by the State Water Resources Control Board.

## ***Environmental Records Definitions - TRIBAL***

**USTR09**                      Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/10/18

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

**LUSTR09**                      Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/10/18

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

**ODINDIAN**                      Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

**TORRESDUMPSITES**                      Illegal Dump Sites on the Torres Martinez Reservation

VERSION DATE: 10/29/07

This listing of illegal dump site locations on the Torres Martinez Reservation is maintained by the United States Environmental Protection Agency, Region IX. These dump sites contain unlawfully discarded household waste such as landscaping and wood wastes with no known soil or groundwater contamination. A majority of the sites have already been cleaned up through the collaborative efforts of the EPA, The California Integrated Waste Management Board and the Torres Martinez Tribe.

**INDIANRES**                      Indian Reservations

VERSION DATE: 01/01/00

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

## **APPENDIX B**

---

Historical Aerial Photographs, Topographic Maps, Fire Insurance Map, City Directories, and FEMA Flood Maps

---

## ***Historical Aerial Photographs***

---

[NEW: GeoLens by Geosearch](#)

*Target Property:*  
**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, El Dorado, California 95619**

*Prepared For:*  
**Environmental Science Assoc-San Francisco**

**Order #: 118699**  
**Job #: 269581**  
**Project #: D180359**  
**Date: 12/7/2018**

## Target Property Summary

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado, California 95619**

USGS Quadrangle: **Placerville**

Target Property Geometry: **Area**

Target Property Longitude(s)/Latitude(s):

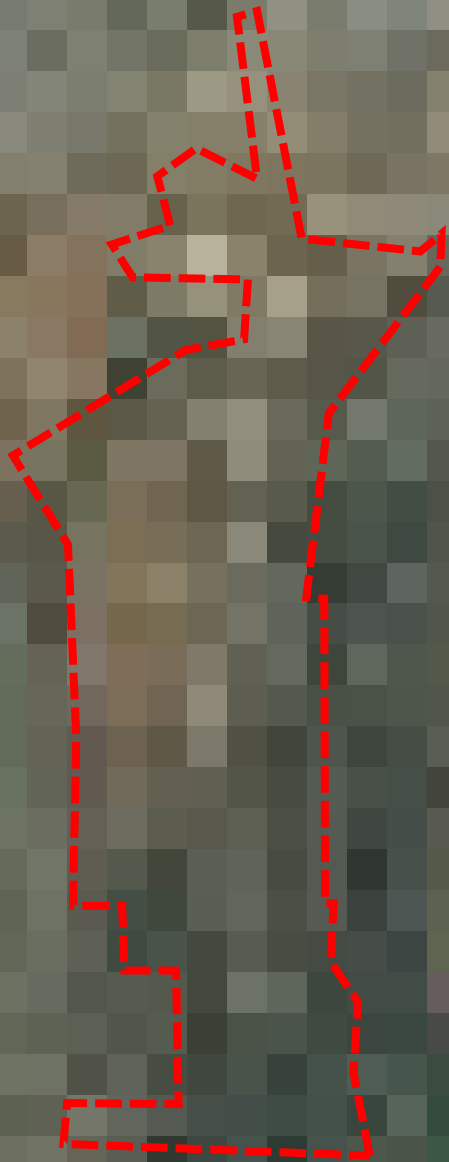
(-120.816350834, 38.677359136), (-120.821951287, 38.677526651), (-120.821886914, 38.678112951),  
(-120.819848435, 38.678096199), (-120.819891350, 38.680005827), (-120.820835488, 38.680005827),  
(-120.820878403, 38.680927121), (-120.821779625, 38.680927121), (-120.821715252, 38.683322429),  
(-120.821865456, 38.686086146), (-120.822873967, 38.687359095), (-120.819719689, 38.688866505),  
(-120.818646805, 38.689017244), (-120.818582432, 38.689871428), (-120.820685284, 38.689904925),  
(-120.821071522, 38.690373884), (-120.819998639, 38.690641859), (-120.820234673, 38.691345288),  
(-120.819526570, 38.691747245), (-120.818410771, 38.691311792), (-120.818775551, 38.693623014),  
(-120.818410771, 38.693706752), (-120.817595379, 38.690457626), (-120.815428154, 38.690273393),  
(-120.815041916, 38.690524620), (-120.815063374, 38.690055662), (-120.817101853, 38.687962063),  
(-120.817509549, 38.685332415), (-120.817187684, 38.685315666), (-120.817166226, 38.680960622),  
(-120.817016022, 38.680960622), (-120.817058938, 38.680123084), (-120.816565411, 38.679553552),  
(-120.816651242, 38.678548484)

## Aerial Research Summary

| <u>Date</u> | <u>Source</u> | <u>Scale</u> | <u>Frame</u> |
|-------------|---------------|--------------|--------------|
| 2016        | USDA          | 1" = 1000'   | N/A          |
| 2014        | USDA          | 1" = 1000'   | N/A          |
| 2012        | USDA          | 1" = 1000'   | N/A          |
| 2010        | USDA          | 1" = 1000'   | N/A          |
| 2009        | USDA          | 1" = 1000'   | N/A          |
| 2006        | USDA          | 1" = 1000'   | N/A          |
| 2005        | USDA          | 1" = 1000'   | N/A          |
| 2004        | USDA          | 1" = 1000'   | N/A          |
| 05/09/1993  | USGS          | 1" = 1000'   | N/A          |
| 09/07/1984  | NASA          | 1" = 1000'   | 3405-9638    |
| 06/26/1980  | USGS          | 1" = 1000'   | 1-30         |
| 08/29/1975  | USGS          | 1" = 1000'   | 1-150        |
| 07/31/1964  | CAS           | 1" = 1000'   | 2-44         |
| 09/02/1952  | ASCS          | 1" = 1000'   | 1-130        |
| 11/03/1946  | USGS          | 1" = 1000'   | 3-34         |

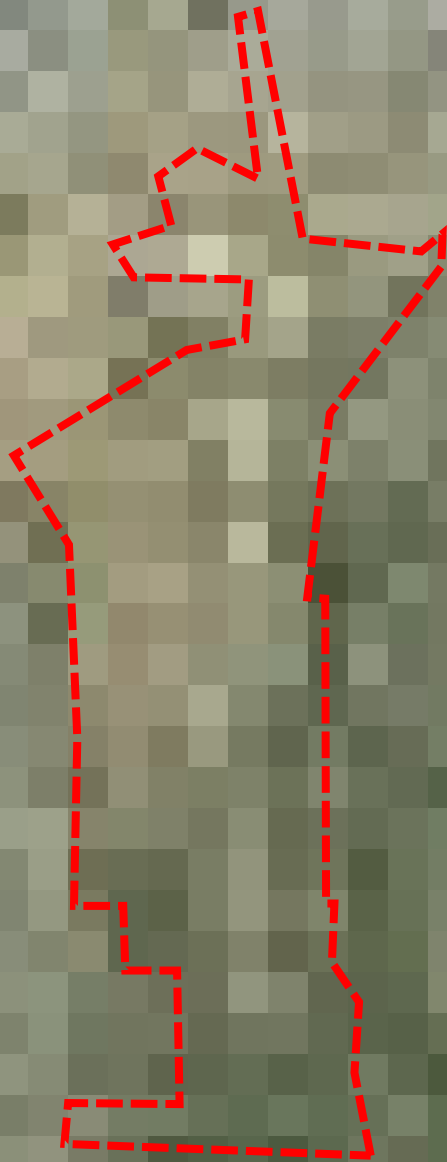
Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.





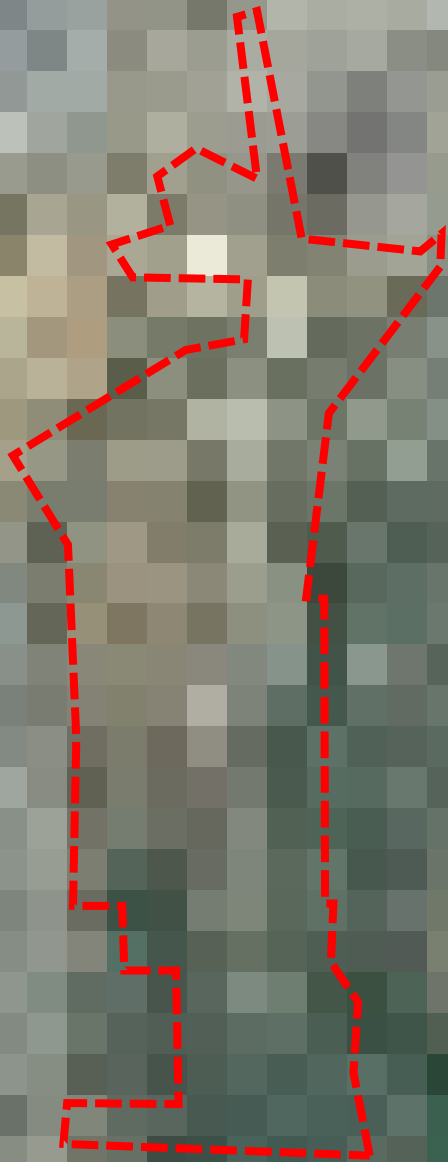
Stonehenge Springs  
USDA  
2016





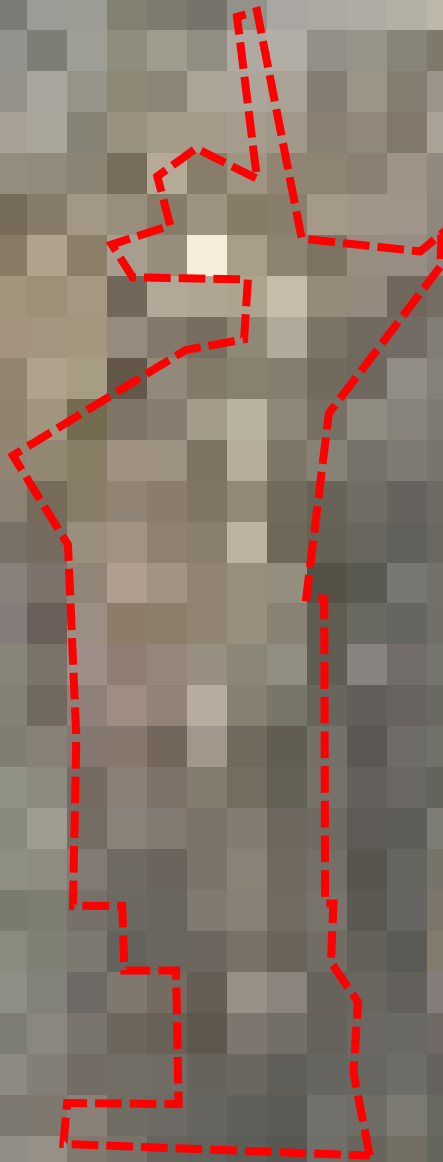
Stonehenge Springs  
USDA  
2014





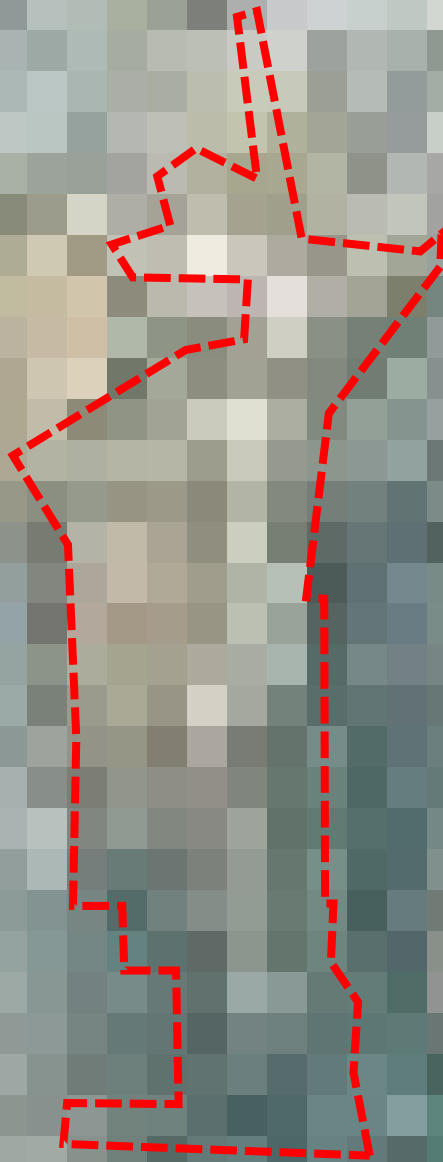
Stonehenge Springs  
USDA  
2012

**GeoSearch**



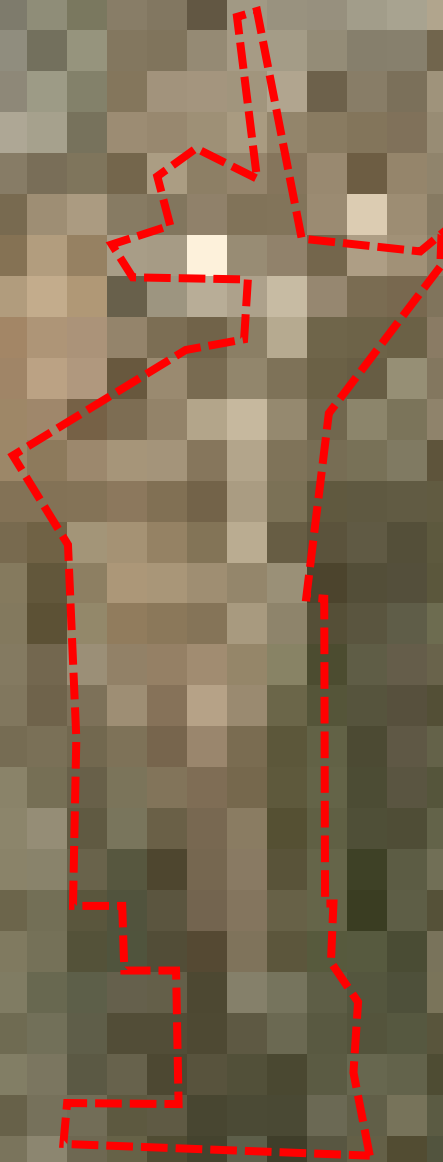
Stonehenge Springs  
USDA  
2010





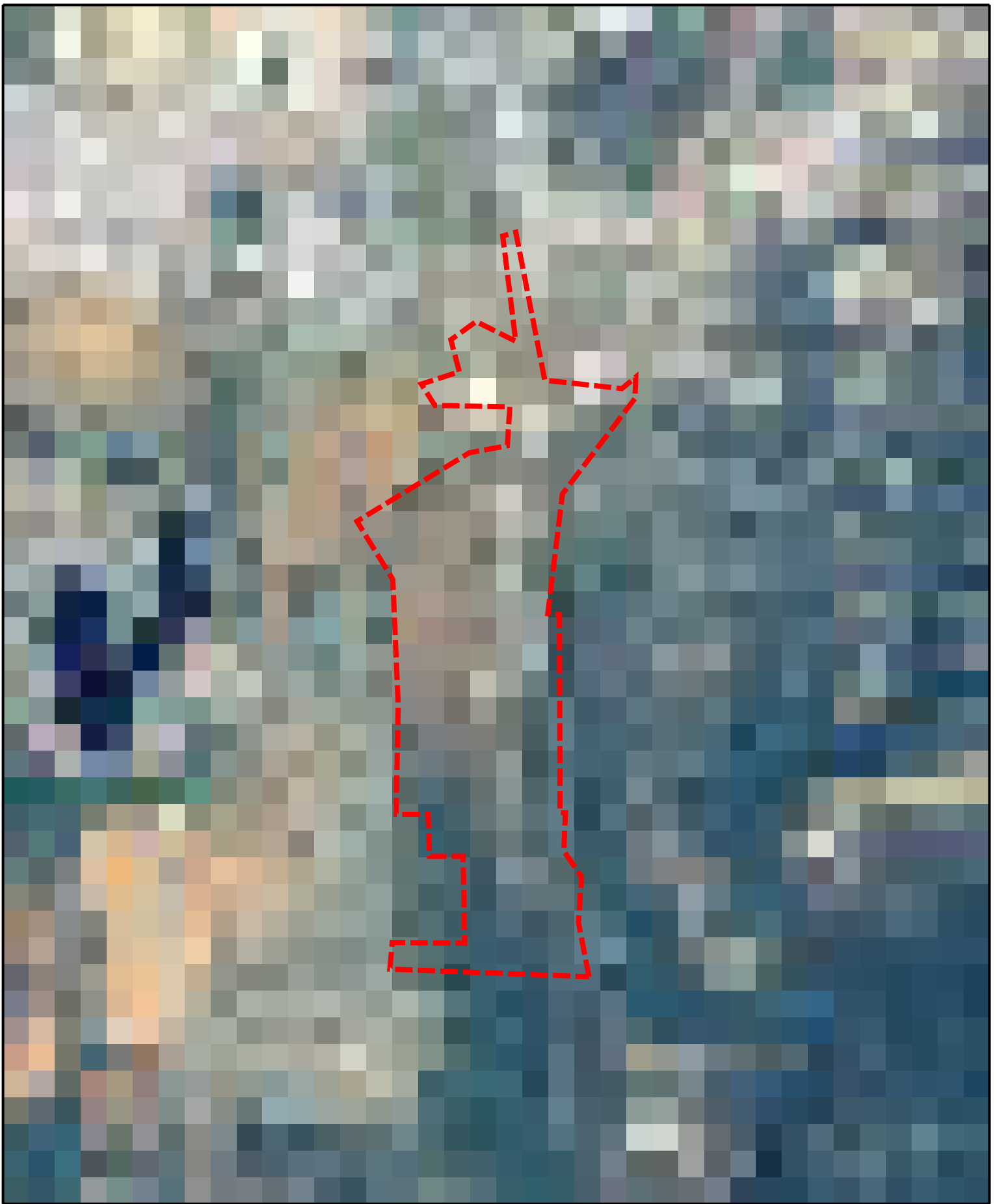
Stonehenge Springs  
USDA  
2009

GeoSearch



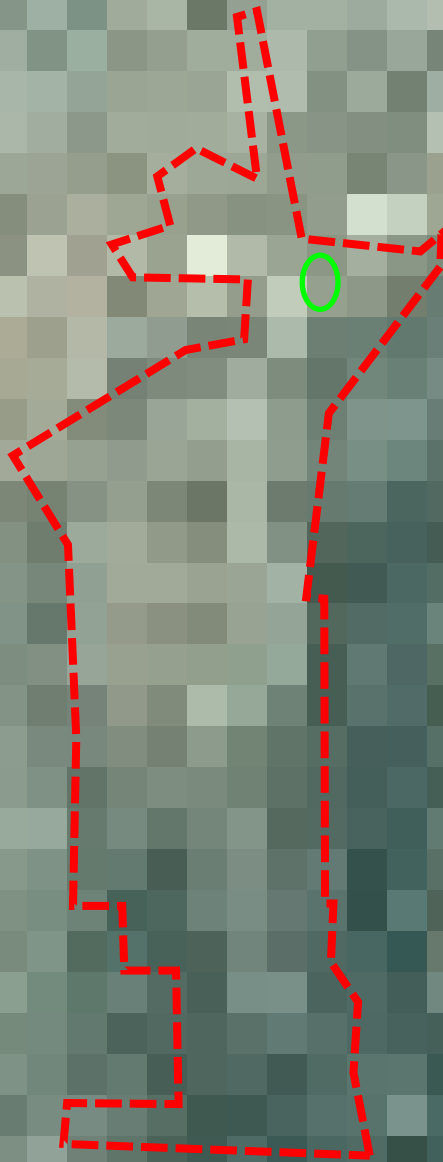
Stonehenge Springs  
USDA  
2006





Stonehenge Springs  
USDA  
2005

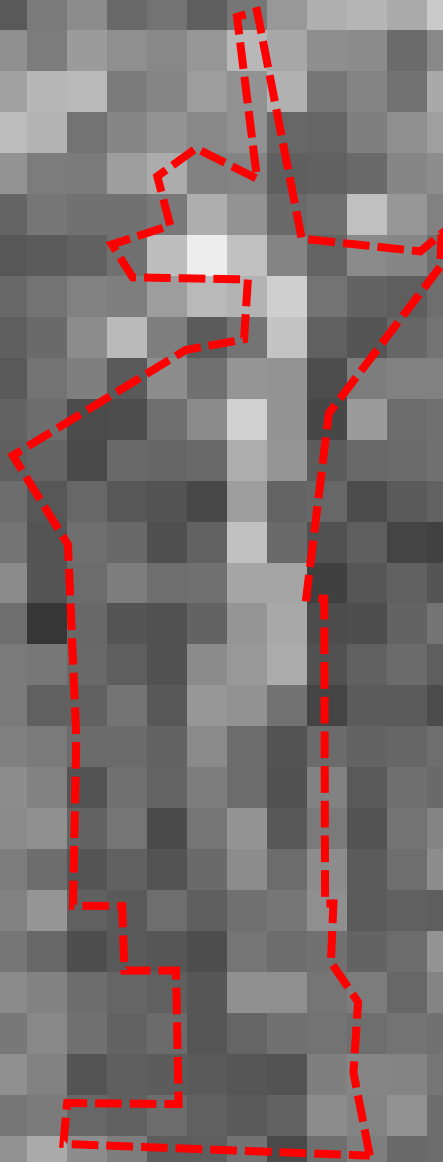
GeoSearch



Stonehenge Springs  
USDA  
2004

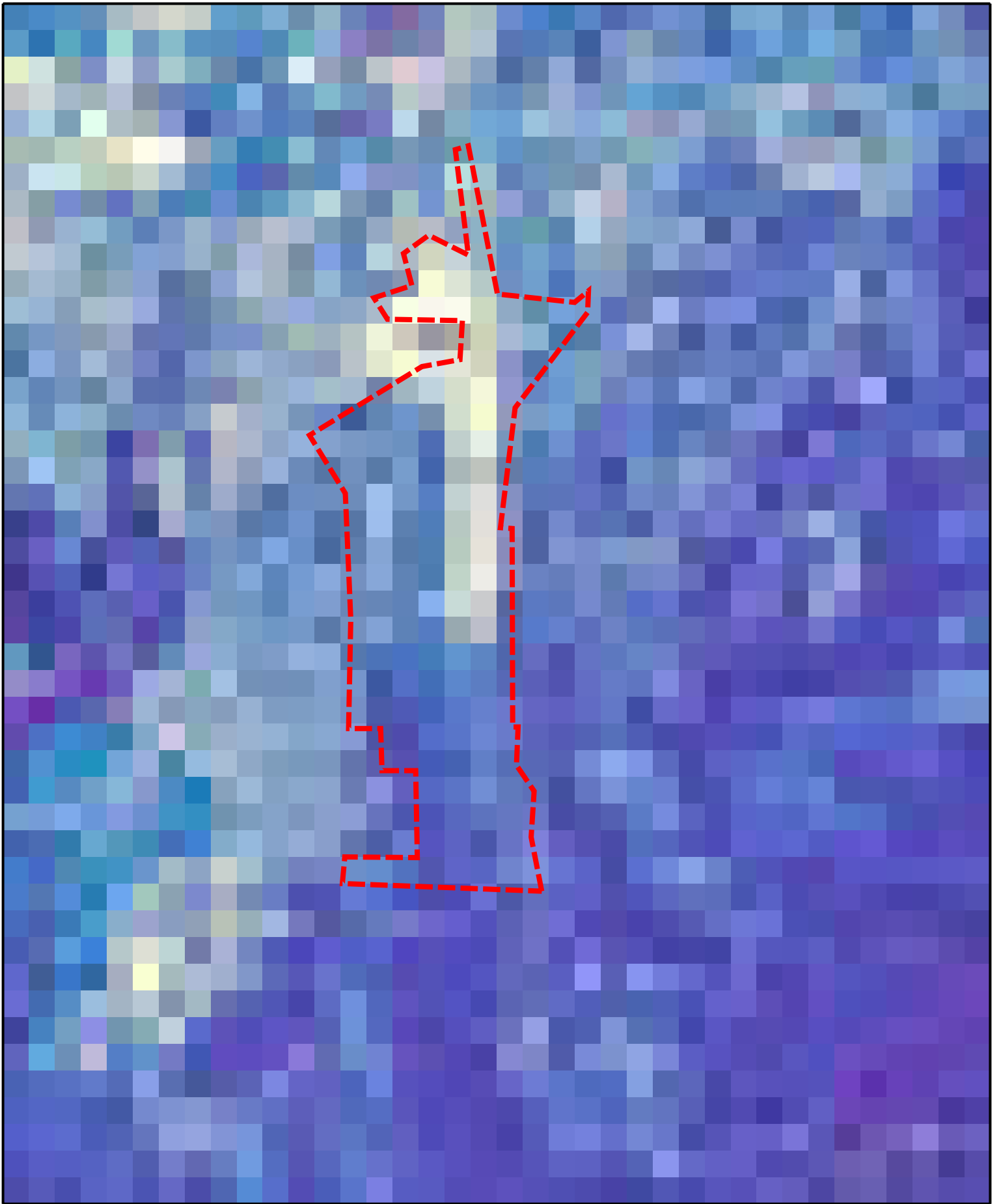
GeoSearch





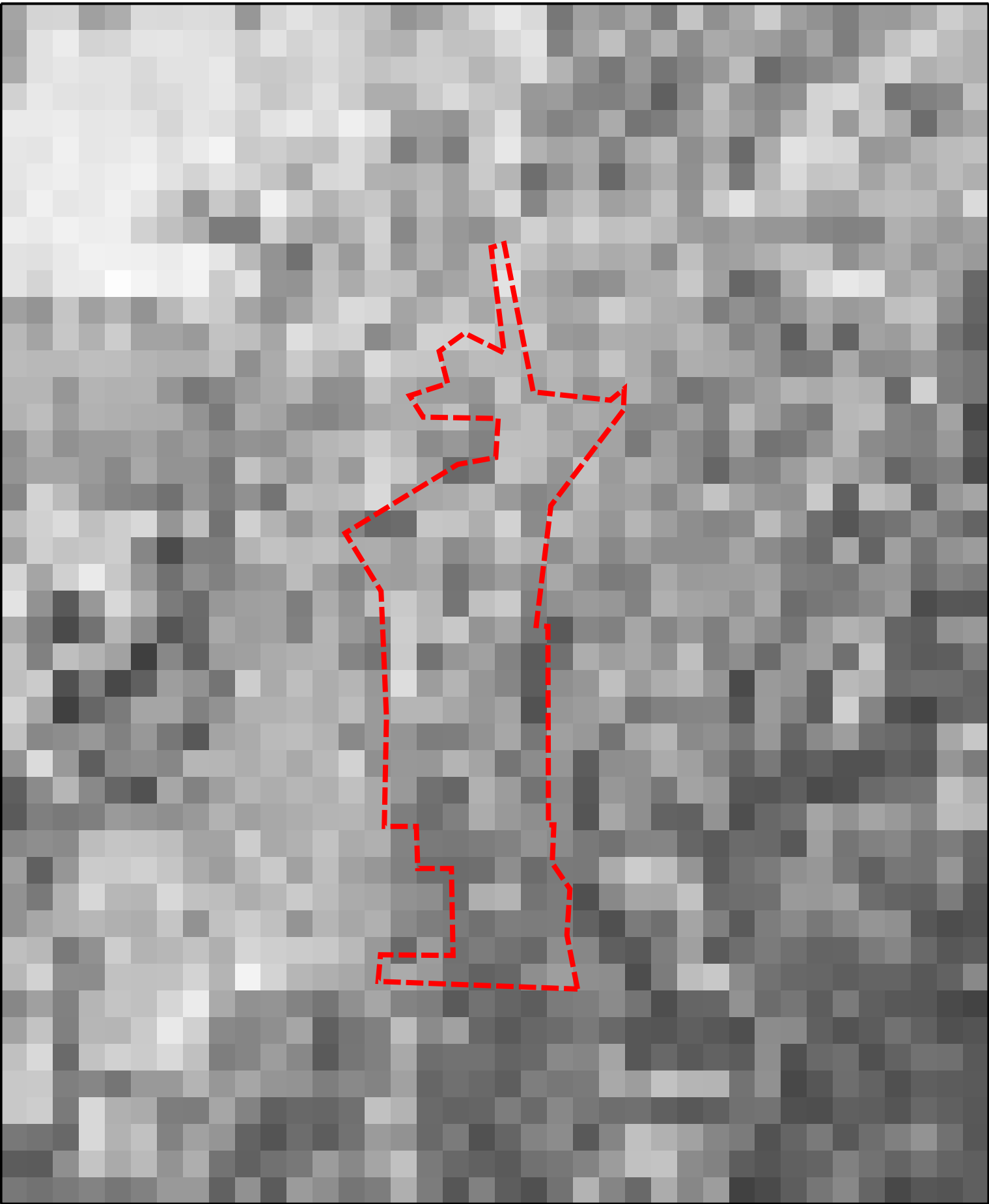
Stonehenge Springs  
USGS  
05/09/1993

GeoSearch



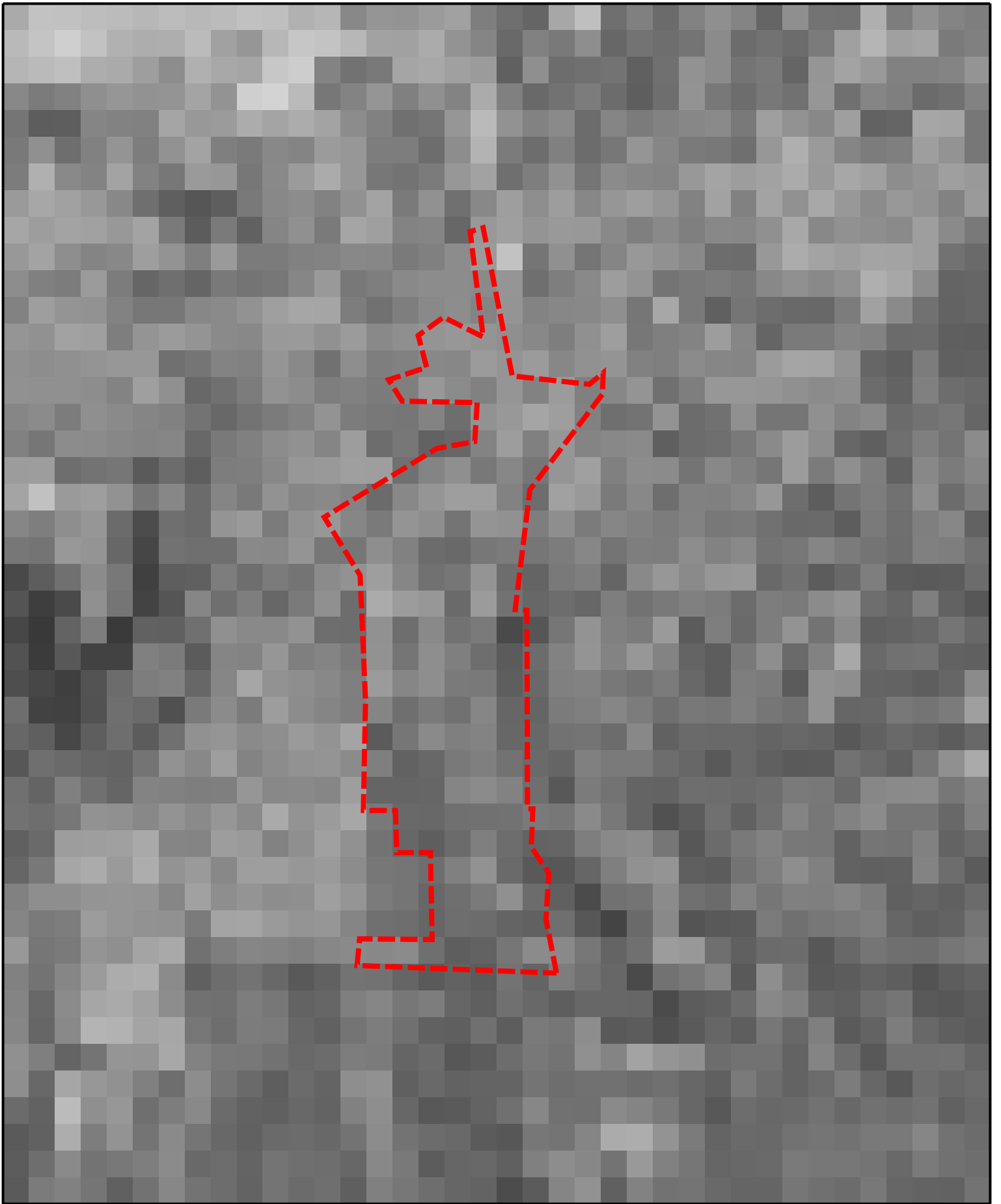
Stonehenge Springs  
NASA  
09/07/1984

GeoSearch



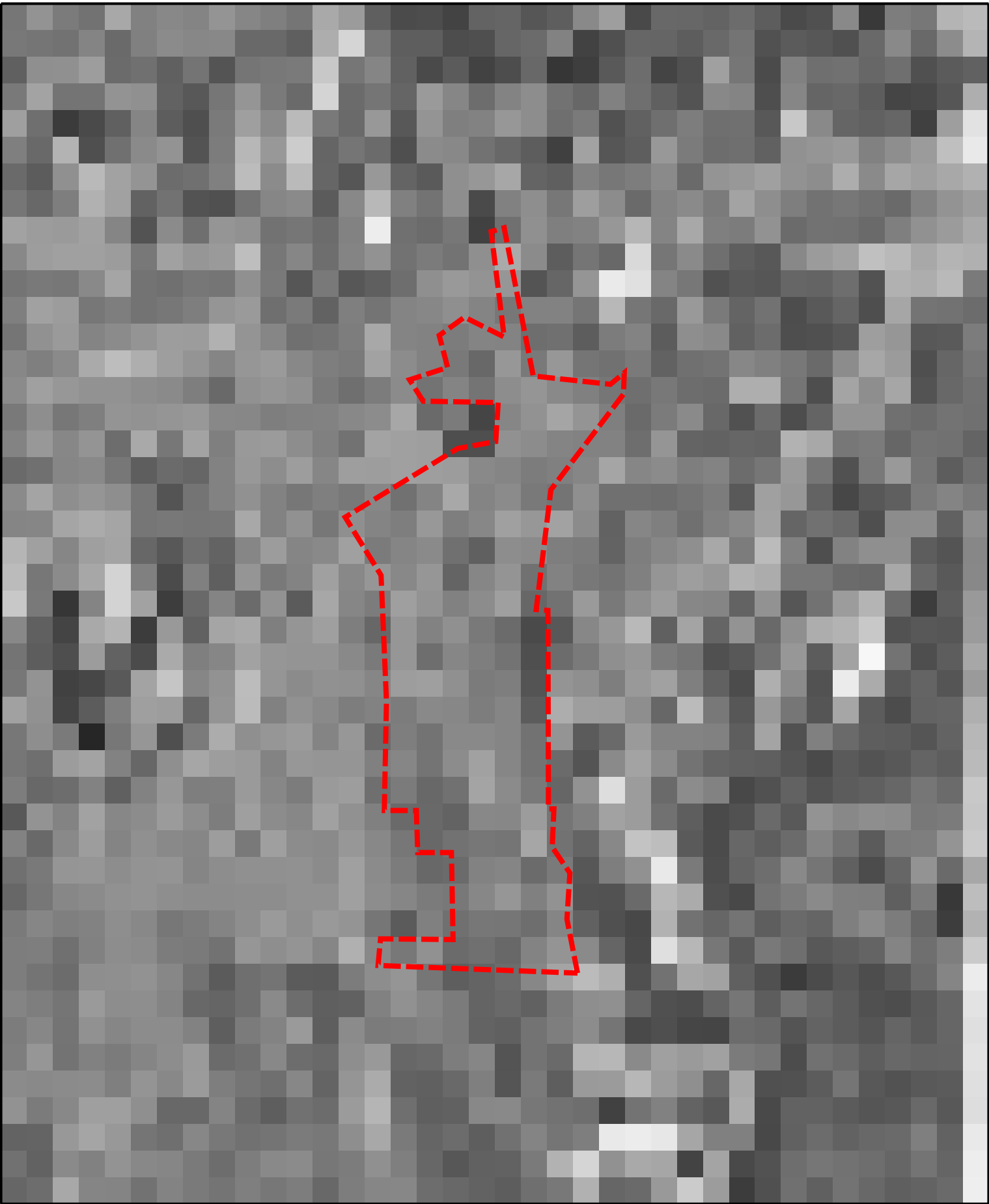
Stonehenge Springs  
USGS  
06/26/1980





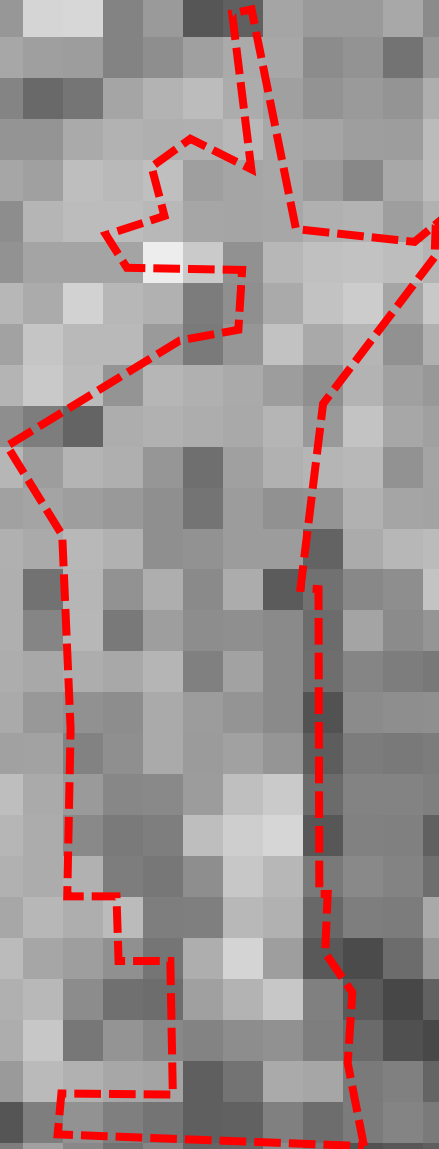
Stonehenge Springs  
USGS  
08/29/1975

GeoSearch



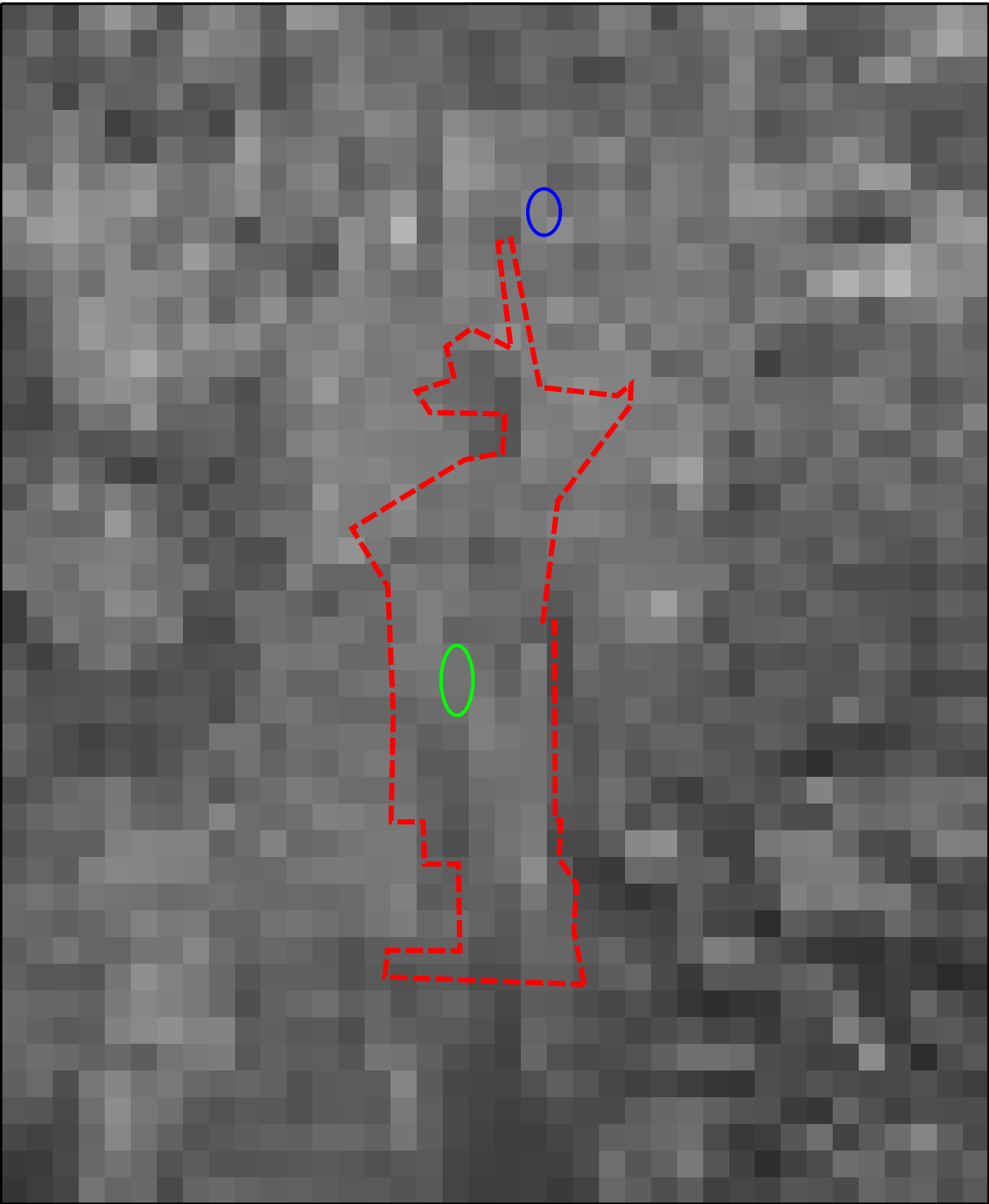
Stonehenge Springs  
CAS  
07/31/1964





Stonehenge Springs  
ASCS  
09/02/1952





Stonehenge Springs  
USGS  
11/03/1946

GeoSearch

---

## ***Historical Topographic Maps***

---

[NEW: GeoLens by Geosearch](#)

*Target Property:*

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado, California 95619**

*Prepared For:*

**Environmental Science Assoc-San Francisco**

**Order #: 118699**

**Job #: 269580**

**Project #: D180359**

**Date: 12/7/2018**



## Target Property Summary

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado, California 95619**

USGS Quadrangle: **Placerville**

Target Property Geometry: **Area**

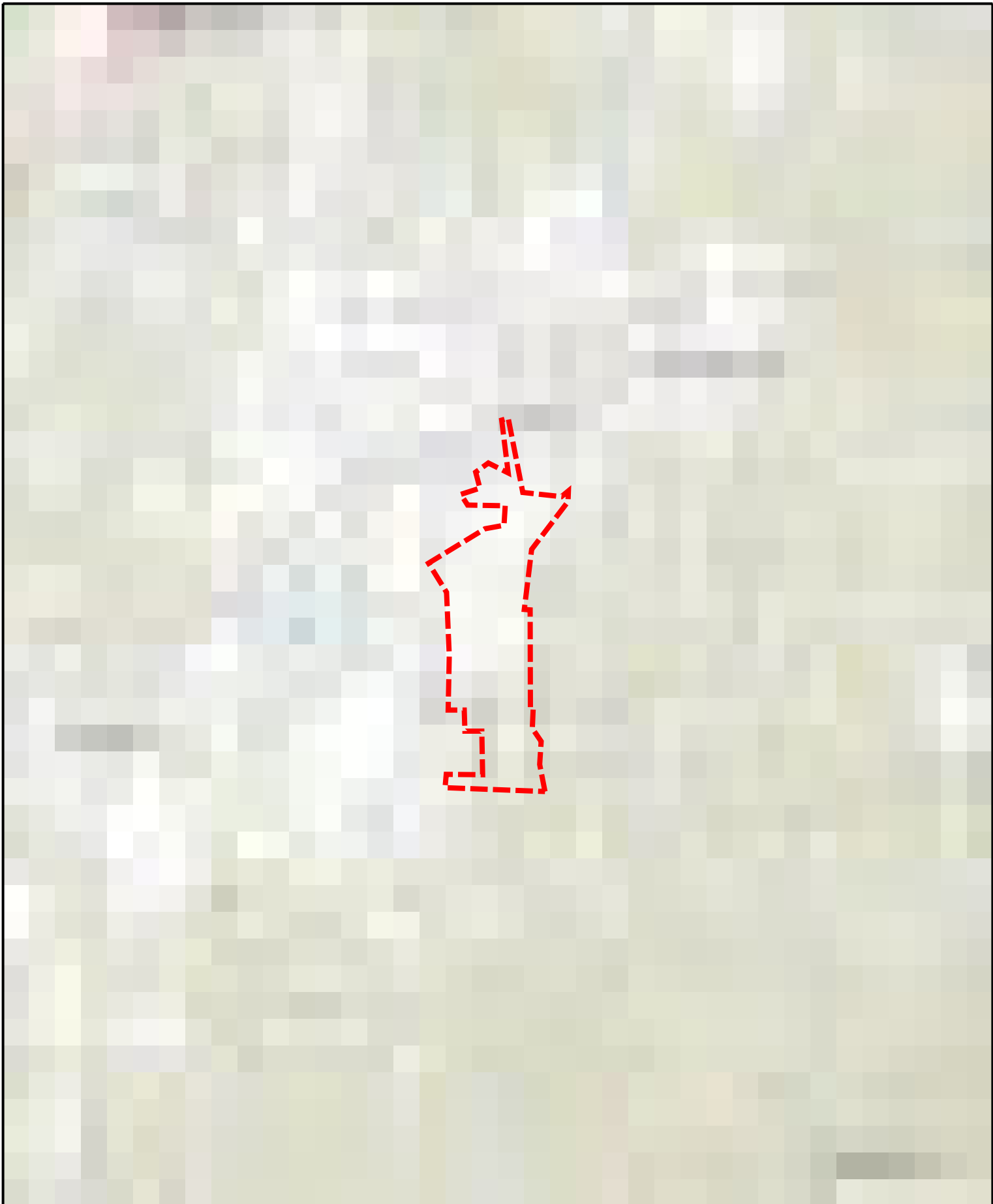
Target Property Longitude(s)/Latitude(s):

(-120.816350834, 38.677359136), (-120.821951287, 38.677526651), (-120.821886914, 38.678112951),  
(-120.819848435, 38.678096199), (-120.819891350, 38.680005827), (-120.820835488, 38.680005827),  
(-120.820878403, 38.680927121), (-120.821779625, 38.680927121), (-120.821715252, 38.683322429),  
(-120.821865456, 38.686086146), (-120.822873967, 38.687359095), (-120.819719689, 38.688866505),  
(-120.818646805, 38.689017244), (-120.818582432, 38.689871428), (-120.820685284, 38.689904925),  
(-120.821071522, 38.690373884), (-120.819998639, 38.690641859), (-120.820234673, 38.691345288),  
(-120.819526570, 38.691747245), (-120.818410771, 38.691311792), (-120.818775551, 38.693623014),  
(-120.818410771, 38.693706752), (-120.817595379, 38.690457626), (-120.815428154, 38.690273393),  
(-120.815041916, 38.690524620), (-120.815063374, 38.690055662), (-120.817101853, 38.687962063),  
(-120.817509549, 38.685332415), (-120.817187684, 38.685315666), (-120.817166226, 38.680960622),  
(-120.817016022, 38.680960622), (-120.817058938, 38.680123084), (-120.816565411, 38.679553552),  
(-120.816651242, 38.678548484)

## Topographic Map Summary

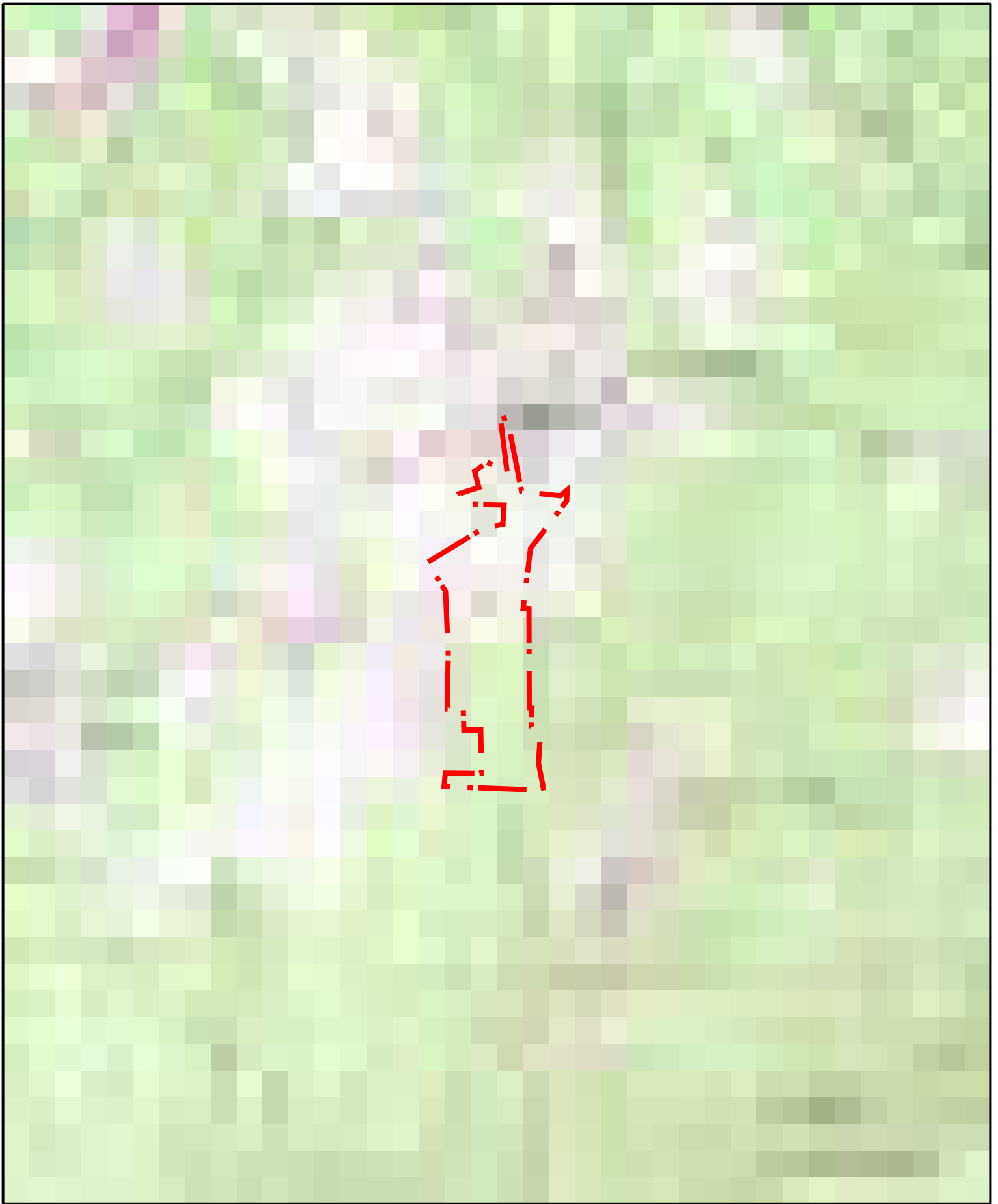
| <u>Date</u>            | <u>Quadrangle</u> | <u>Scale</u> |
|------------------------|-------------------|--------------|
| 2012                   | Placerville, CA   | 1" = 2000'   |
| 1949 PHOTOREVISED 1973 | Placerville, CA   | 1" = 2000'   |
| 1950                   | Placerville, CA   | 1" = 2000'   |
| 1949                   | Placerville, CA   | 1" = 2000'   |
| 1893                   | Placerville, CA   | 1" = 10420'  |
| 1892                   | Placerville, CA   | 1" = 10420'  |
| 1891                   | Placerville, CA   | 1" = 10420'  |

Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.



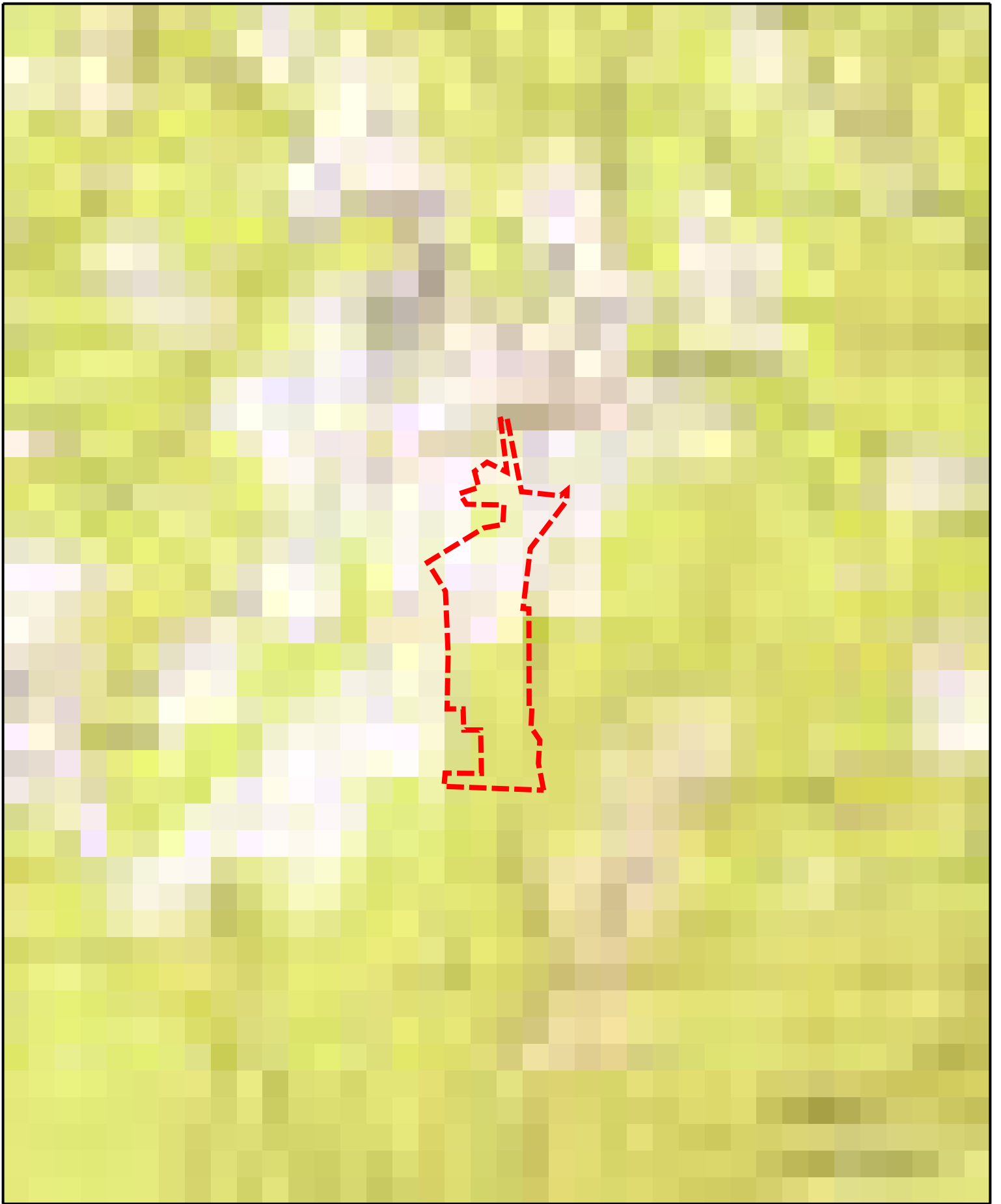
*Stonehenge Springs  
Placerville, CA (2012)*

**GeoSearch**



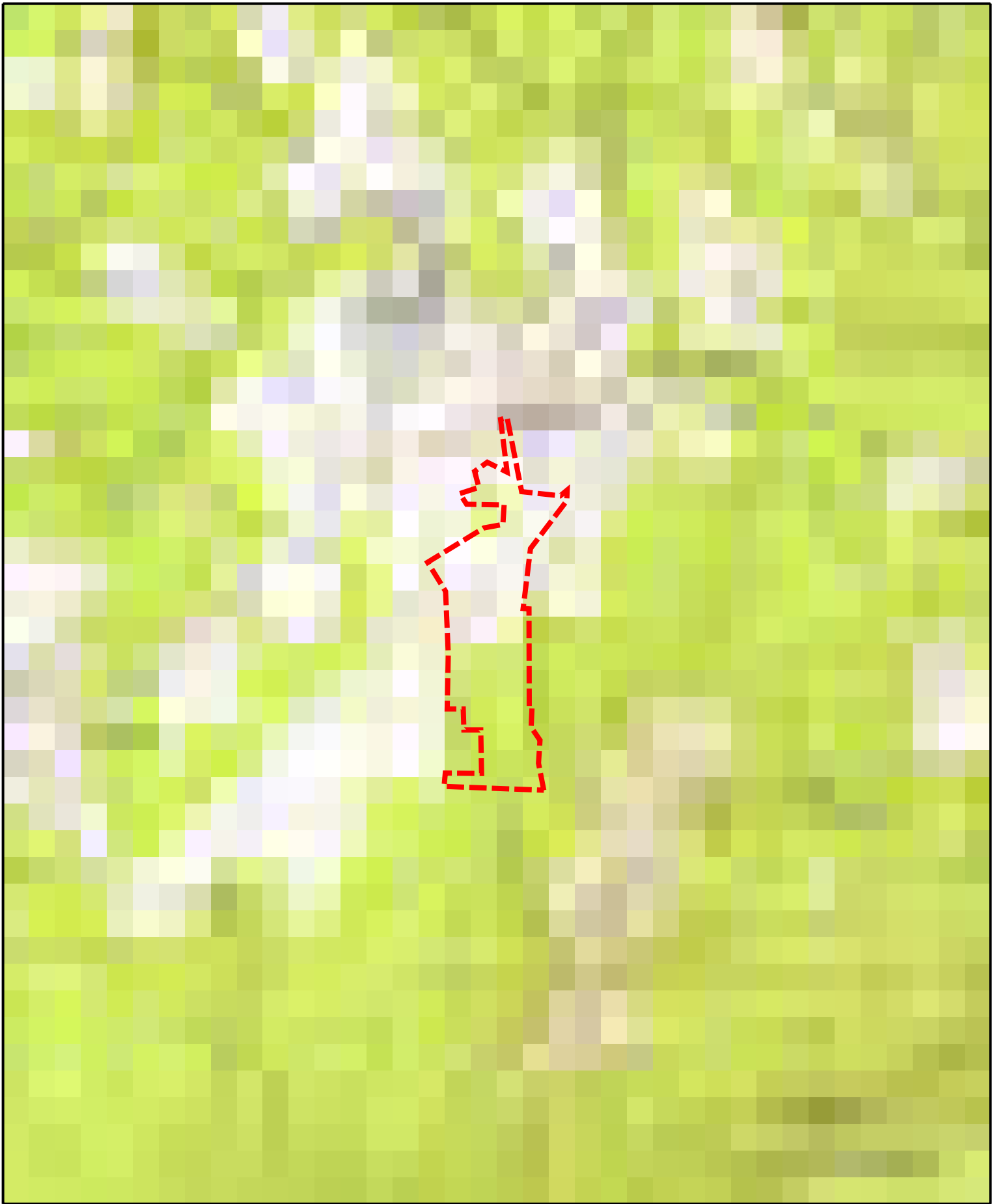
*Stonehenge Springs*  
*Placerville, CA (1973)*

**GeoSearch**



*Stonehenge Springs  
Placerville, CA (1950)*

**GeoSearch**



*Stonehenge Springs*  
*Placerville, CA (1949)*

**GeoSearch**



*Stonehenge Springs  
Placerville, CA (1893)*

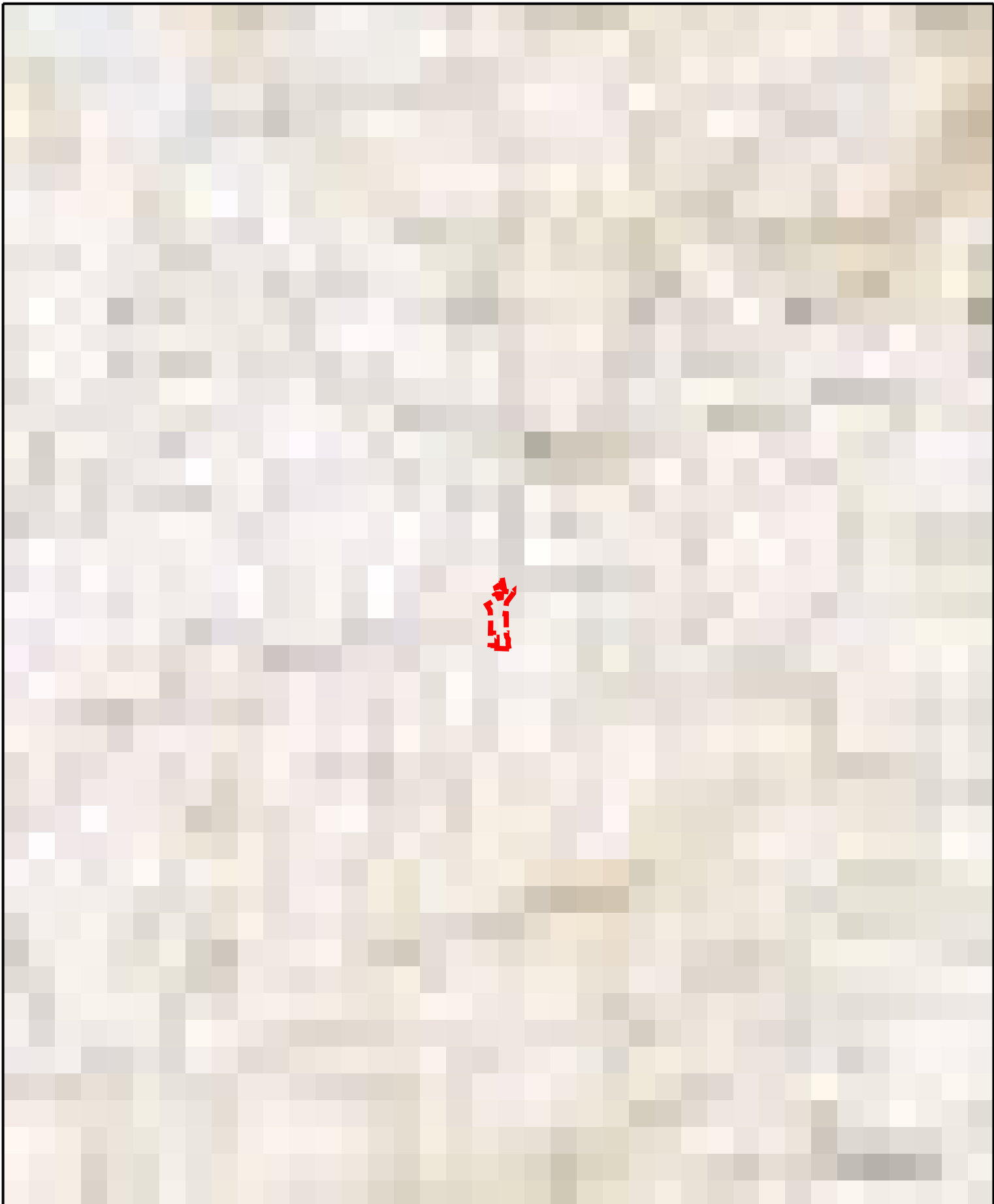
**GeoSearch**



*Stonehenge Springs*  
*Placerville, CA (1892)*

**GeoSearch**





*Stonehenge Springs*  
*Placerville, CA (1891)*

**GeoSearch**



*Target Property:*  
**Stonehenge Springs**  
**Faith Lane,**  
**Diamond Springs, CA 95619**

*Prepared For:*  
**Environmental Science Assoc-San Francisco**

**Order #: 118699**  
**Job #: 269584**  
**Project #: D180359**  
**Date #: 12/07/18**



**Date:** 12/07/18  
**GS Job Number:** 118699  
**Company Name:** Environmental Science Assoc-San Francisco  
**Project Number:** D180359  
**Site Information:** Stonehenge Springs  
Faith Lane,  
Diamond Springs, CA 95619

The collections of fire insurance maps listed below were reviewed according to the site information supplied by client. Based on the information provided, no coverage is available.

Library of Congress  
University Publications of America  
Other Libraries (universities, state, local, etc.).

Disclaimer – The information in this report was obtained from a variety of public sources. GeoSearch cannot insure or makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customers interpretation of this report. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

---

## ***City Directory Target Property Address***

---

***Target Property:***

*Faith Ln,  
Diamond Springs, CA 95619*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***

**City Directory Target Property Address**

*Faith Ln, Diamond Springs, CA 95619*

1 FAITH LN

|         |                   |                     |                                      |
|---------|-------------------|---------------------|--------------------------------------|
| 2016    | STREET NOT LISTED | INFOUSA             | SOUTH WEST                           |
| 2011    | STREET NOT LISTED | INFOUSA             | PACIFIC                              |
| 2006    | STREET NOT LISTED | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | STREET NOT LISTED | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |

**Comment:**

---

## ***Historical By Street Number***

---

***Target Property:***

*Faith Ln,  
Diamond Springs, CA 95619*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***

## City Directory Historical by Street Number

|            |                           |
|------------|---------------------------|
| 1 Faith Ln | No Listing (2002/03-2016) |
|------------|---------------------------|

Comments:

---

## ***City Directory Standard Report***

---

***Target Property:***

*Faith Ln,  
Diamond Springs, CA 95619*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***



**City Directory Standard Report**

*Faith Ln, Diamond Springs, CA 95619*

INFOUSA

|            |      |                 |                   |
|------------|------|-----------------|-------------------|
| SOUTH WEST | 2016 | <b>FAITH LN</b> |                   |
|            |      | 1               | STREET NOT LISTED |

INFOUSA

|         |      |                 |                   |
|---------|------|-----------------|-------------------|
| PACIFIC | 2011 | <b>FAITH LN</b> |                   |
|         |      | 1               | STREET NOT LISTED |

HAINES DIRECTORY

|                                      |      |                 |                   |
|--------------------------------------|------|-----------------|-------------------|
| SACRAMENTO<br>EAST(CITY &<br>SUBURB) | 2006 | <b>FAITH LN</b> |                   |
|                                      |      | 1               | STREET NOT LISTED |

HAINES DIRECTORY

|                                      |         |                 |                   |
|--------------------------------------|---------|-----------------|-------------------|
| SACRAMENTO<br>EAST(CITY &<br>SUBURB) | 2002-03 | <b>FAITH LN</b> |                   |
|                                      |         | 1               | STREET NOT LISTED |

**Comment:**

---

## ***City Directory Target Property Address***

---

***Target Property:***

*Pleasant Valley Rd,  
Diamond Springs, CA 95828*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

### 1 PLEASANT VALLEY RD

|         |                   |                     |                                      |
|---------|-------------------|---------------------|--------------------------------------|
| 2016    | STREET BEGINS     | INFOUSA             | SOUTH WEST                           |
| 2011    | STREET BEGINS     | INFOUSA             | PACIFIC                              |
| 2002-03 | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96 | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1990    | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1985    | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1980    | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1977    | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1970    | STREET NOT LISTED | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |

### 98 PLEASANT VALLEY RD

|      |                     |                     |                                    |
|------|---------------------|---------------------|------------------------------------|
| 1985 | HARSHFIELD COLLIN F | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN) |
|------|---------------------|---------------------|------------------------------------|

### 118 PLEASANT VALLEY RD

|      |             |                     |                                    |
|------|-------------|---------------------|------------------------------------|
| 1985 | HEDGECOCK C | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN) |
|------|-------------|---------------------|------------------------------------|

### 130 PLEASANT VALLEY RD

|         |              |                     |                                      |
|---------|--------------|---------------------|--------------------------------------|
| 2016    | TOWER MART   | INFOUSA             | SOUTH WEST                           |
| 2011    | CAB SERVICES | INFOUSA             | PACIFIC                              |
| 2011    | TOWER MART   | INFOUSA             | PACIFIC                              |
| 2002-03 | TOWER MART   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | TOWER MART   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                       |                     |                                      |
|-------------------------------|-----------------------|---------------------|--------------------------------------|
| 1995-96                       | NO CURRENT LISTING    | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1990                          | FOOD&LIQUOR           | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>202 PLEASANT VALLEY RD</u> |                       |                     |                                      |
| 2011                          | ASCHE BONNIE          | INFOUSA             | PACIFIC                              |
| 1990                          | CARSTEN D             | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>273 PLEASANT VALLEY RD</u> |                       |                     |                                      |
| 2016                          | CREATIVE PHOTO FRAMES | INFOUSA             | SOUTH WEST                           |
| 2011                          | CREATIVE PHOTO FRAMES | INFOUSA             | PACIFIC                              |
| 2006                          | CREATIVE PHOTO FRAMES | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | HARRINGTON PATRICIA   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | CRAETIVE PHOTO FRAMES | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | HARRINGTON P          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96                       | CREATIVE PHOTO FRME   | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>300 PLEASANT VALLEY RD</u> |                       |                     |                                      |
| 1990                          | NO CURRENT LISTING    | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1985                          | NO CURRENT LISTING    | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>320 PLEASANT VALLEY RD</u> |                       |                     |                                      |
| 2002-03                       | PARISEK JOHN          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>321 PLEASANT VALLEY RD</u> |                       |                     |                                      |
| 2016                          | DAWSON OIL CO         | INFOUSA             | SOUTH WEST                           |
| 2011                          | DAWSON OIL CO         | INFOUSA             | PACIFIC                              |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                                |                     |                                      |
|-------------------------------|--------------------------------|---------------------|--------------------------------------|
| 2006                          | DAWSON OIL CO                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | DAWSON OIL CO                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | WESTWOOD MBL HMS               | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | APARTMENTS                     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | X [COMMERCE WAY INTS]          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>350 PLEASANT VALLEY RD</u> |                                |                     |                                      |
| 2016                          | WESTWOOD MOBILE HOME COMMUNITY | INFOUSA             | SOUTH WEST                           |
| 2011                          | WESTWOOD MOBILE HOME COMMUNITY | INFOUSA             | PACIFIC                              |
| 2006                          | MULTI TENANT RESIDENTIAL       | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | WESTWOOD MBL HMS               | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | WESTWOOD MOBILE HOME COMMUNITY | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | X [WRANGLER RD INTS]           | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | Y [COMMERCE WAY INTS]          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96                       | WESTWOOD MBL HMS               | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1990                          | WESTWOOD MBL HMS               | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1985                          | WESTWOOD MBL HMS               | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1980                          | WERSTWOOD MBL HMS              | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                              |                     |                                      |
|-------------------------------|------------------------------|---------------------|--------------------------------------|
| 1977                          | MULTI TENANT RESIDENTIAL     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1977                          | WERSTWOOD MBL HMS            | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1977                          | WESTWD MBL HM CMNTY          | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>373 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2016                          | D & D SUPPLY                 | INFOUSA             | SOUTH WEST                           |
| 2011                          | D & D SUPPLY                 | INFOUSA             | PACIFIC                              |
| 2006                          | D & D PLUMBNG                | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | D&B PLUMBING SUPPLY          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | D & D SUPPLY                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | X [MISSOURI FLAT RD INTS]    | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1990                          | NO CURRENT LISTING           | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>385 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2016                          | INDEPENDENCE HIGH SCHOOL     | INFOUSA             | SOUTH WEST                           |
| 2016                          | INDEPENDENCE LEARNING CTR    | INFOUSA             | SOUTH WEST                           |
| 2011                          | INDEPENDENCE HIGH SCHOOL     | INFOUSA             | PACIFIC                              |
| 2011                          | INDEPENDENCE LEARNING CENTER | INFOUSA             | PACIFIC                              |
| 2006                          | ELDRDO ADULT SCHOOL          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | X [MIISOURI FLAT RD INTS]    | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>424 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2011                          | TIRAPELLE L                  | INFOUSA             | PACIFIC                              |
| 2006                          | TIRAPELLI L                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                               |                     |                                      |
|-------------------------------|-------------------------------|---------------------|--------------------------------------|
| 2002-03                       | TIRAPELLE L                   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96                       | TIRAPELLI L                   | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1990                          | TIRAPELLE L                   | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>435 PLEASANT VALLEY RD</u> |                               |                     |                                      |
| 2016                          | MOUER LABS                    | INFOUSA             | SOUTH WEST                           |
| 2011                          | SUNRISE FAMILY MEDICINE       | INFOUSA             | PACIFIC                              |
| 2006                          | BACK ON TRACK COUNSELING SERV | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | MCCUNE CAROLE                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | MCCUNE CAROLE                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | YUBACOIN INC                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>443 PLEASANT VALLEY RD</u> |                               |                     |                                      |
| 2002-03                       | LASHER WM                     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96                       | LASHER WM                     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>444 PLEASANT VALLEY RD</u> |                               |                     |                                      |
| 2002-03                       | PARKER JOHN                   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>460 PLEASANT VALLEY RD</u> |                               |                     |                                      |
| 2016                          | DEB'S FROSTY                  | INFOUSA             | SOUTH WEST                           |
| 2006                          | DEB'S FROSTY                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | X [CHINA GARDEN INTS]         | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                              |                     |                                      |
|-------------------------------|------------------------------|---------------------|--------------------------------------|
| 2002-03                       | DEB'S FROSTY                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | SMITH ELAIDA                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>461 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2006                          | TAYLOR THOMAS                | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | TAYLOR THOMAS                | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>466 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 1980                          | NO CURRENT LISTING           | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1977                          | WEINAND KENT MRS             | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>470 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2002-03                       | BONANZA CARPET CLEANING      | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>478 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2002-03                       | DIAMOND TV&SATELLITE         | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>484 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2016                          | GREEN SPERO                  | INFOUSA             | SOUTH WEST                           |
| 2011                          | TAYLOR CLIFF A DC            | INFOUSA             | PACIFIC                              |
| 2011                          | TAYLOR JOHN F                | INFOUSA             | PACIFIC                              |
| 2006                          | BUILDING                     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | ALTERBATIVE HEALING ALLIANCE | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | AZTECA BAKERY & MARKET       | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |



## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|      |                               |                     |                                      |
|------|-------------------------------|---------------------|--------------------------------------|
| 2006 | BAHAI CENTER                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | CARLA'S LIKE YOUR STYLE       | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | DIAMOND SPRINGS MOBILITY      | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | DIAMOND TV & SATELLITE        | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | DIAMOND VILLAGE CHIROPRACTIC  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | DUIVAS FITNESS FOR WOMEN      | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | ELDRO HUMANE SOCIETY          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | FACTORY TEAM 2 RCNG MTR SPRTS | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | FINE LINE TATOOING            | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | INALLIANCE                    | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | MAIN STREET MAIL              | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | MCCULLCH MIKIO A DC           | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | TAYLOR CLIFF A DC             | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | TAYLOR CLIFF A DC             | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | TAYLOR JOHN DR DIAMOND V C    | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | TAYLOR JOHN F                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|         |                               |                     |                                      |
|---------|-------------------------------|---------------------|--------------------------------------|
| 2006    | X [HOWARD CIR INTS]           | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | ALMOST ANTIQUES               | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | BARGAIN BARIN                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | CARLENE'S                     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | DOWNTOWN DOLLS                | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | ELDRO HUMANE SOCIETY          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | HAIR BY KIMBERLY              | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | HIGH MOUNTAIN BLUE WATER TCKL | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | IRON MOUNTAIN MOTORCYCLES     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | KNIGHT VIRGIL                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | KNIGHT'S MUSIC                | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | MOUNATIN MAIL 2               | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | MULLEN MIKE                   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | TAYLOR JOHN                   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96 | IMAGES LIFE PHOTO             | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1995-96 | JACKS CABINETS                | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                           |                     |                                      |
|-------------------------------|---------------------------|---------------------|--------------------------------------|
| 1990                          | JACKS CABINETS            | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1985                          | LARSEN H CABINET          | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>493 PLEASANT VALLEY RD</u> |                           |                     |                                      |
| 2016                          | HAIR AFFAIR               | INFOUSA             | SOUTH WEST                           |
| 2016                          | J & J JAVA                | INFOUSA             | SOUTH WEST                           |
| 2016                          | LANDIS TOBY Y PHD         | INFOUSA             | SOUTH WEST                           |
| 2011                          | CHARLOTTE'S BAKERY & CAFE | INFOUSA             | PACIFIC                              |
| 2011                          | HAIR AFFAIR               | INFOUSA             | PACIFIC                              |
| 2011                          | LANDIS TOBY Y PHD         | INFOUSA             | PACIFIC                              |
| 2002-03                       | DIAMOND ESORESSO&MORE     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>500 PLEASANT VALLEY RD</u> |                           |                     |                                      |
| 2016                          | FIRE HOUSE CAFE           | INFOUSA             | SOUTH WEST                           |
| 2011                          | FIREHOUSE CAFE            | INFOUSA             | PACIFIC                              |
| <u>501 PLEASANT VALLEY RD</u> |                           |                     |                                      |
| 2002-03                       | NO CURRENT LISTING        | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>504 PLEASANT VALLEY RD</u> |                           |                     |                                      |
| 2006                          | HANSEN DENISE D LCSW      | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | VENDERKAR PEF MA MPA MFT  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>515 PLEASANT VALLEY RD</u> |                           |                     |                                      |
| 1995-96                       | ROHLFING FRANK            | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1990                          | ROHLFING FRANK            | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |

**City Directory Target Property Address**

*Pleasant Valley Rd, Diamond Springs, CA 95828*

517 PLEASANT VALLEY RD

1985 NO CURRENT LISTING

HAINES  
DIRECTORY

SACRAMENTO  
(CITY &  
SUBURBAN)

538 PLEASANT VALLEY RD

1980 NO CURRENT LISTING

HAINES  
DIRECTORY

SACRAMENTO  
(CITY &  
SUBURBAN)

1977 NO CURRENT LISTING

HAINES  
DIRECTORY

SACRAMENTO  
(CITY &  
SUBURBAN)

**Comment:** No coverage for Diamond Springs prior to 1970.

---

## ***Historical By Street Number***

---

***Target Property:***

*Pleasant Valley Rd,  
Diamond Springs, CA 95828*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***

## City Directory Historical by Street Number

|                               |  |
|-------------------------------|--|
| <b>1 Pleasant Valley Rd</b>   | No Listing (1970); Street Begins (1977-2002/03); No Listing (2006); Street Begins (2011-2016)  |
| <b>118 Pleasant Valley Rd</b> | No Listing (1970-1980); Hedgecock C (1985); No Listing (1990-2016)   |
| <b>130 Pleasant Valley Rd</b> | No Listing (1970-1985); Food&Liquor (1990); No Current Listing (1995/96); Tower Mart (2002/03); No Listing (2006); Cab Services (2011); Tower Mart (2011-2016)   |
| <b>202 Pleasant Valley Rd</b> | No Listing (1970-1985); Carsten D (1990); No Listing (1995/96-2006); Asche Bonnie (2011); No Listing (2016)  |
| <b>273 Pleasant Valley Rd</b> | No Listing (1970-1990); Creative Photo Frme (1995/96-2016); Harrington P (2002/03-2006)  |
| <b>300 Pleasant Valley Rd</b> | No Listing (1970-1980); No Current Listing (1985-1990); No Listing (1995/96-2016)  |
| <b>320 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Parisek John (2002/03); No Listing (2006-2016)  |
| <b>321 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Dawson Oil Co (2002/03-2016); Westwood Mbl Hms (2002/03); Apartments (2002/03)  |
| <b>350 Pleasant Valley Rd</b> | No Listing (1970); Multi Tenant Residential (1977); Werstwood Mbl Hms (1977-1995/96); Westwd Mbl Hm Cmnty (1977); No Listing (2002/03); Multi Tenant Residential (2006); Westwood Mbl Hms (2006); Westwood Mobile Home Community (2006-2016) |
| <b>373 Pleasant Valley Rd</b> | No Listing (1970-1985); No Current Listing (1990); No Listing (1995/96); D&B Plumbing Supply (2002/03-2016)  |
| <b>385 Pleasant Valley Rd</b> | No Listing (1970-2002/03); Eldrdo Adult School (2006); Independence High School (2011-2016)  |
| <b>424 Pleasant Valley Rd</b> | No Listing (1970-1985); Tirapelle L (1990-2011); No Listing (2016)   |
| <b>435 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Mccune Carole (2002/03-2006); Yubacoin Inc (2002/03); Back On Track Counseling Serv (2006); Sunrise Family Medicine (2011); Mouer Labs (2016)   |
| <b>443 Pleasant Valley Rd</b> | No Listing (1970-1990); Lasher Wm (1995/96-2002/03); No Listing (2006-2016)  |
| <b>444 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Parker John (2002/03); No Listing (2006-2016)   |
| <b>460 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Deb's Frosty (2002/03-2006); Smith Elaida (2002/03); No Listing (2011); Deb's Frosty (2016)   |
| <b>461 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Taylor Thomas (2002/03-2006); No Listing (2011-2016)  |
| <b>466 Pleasant Valley Rd</b> | No Listing (1970); Weinand Kent Mrs (1977); No Current Listing (1980); No Listing (1985-2016)  |
| <b>470 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Bonanza Carpet Cleaning (2002/03); No Listing (2006-2016)   |
| <b>478 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Diamond Tv&Satellite (2002/03); No Listing (2006-2016)  |

|                               |  |
|-------------------------------|--|
| <b>484 Pleasant Valley Rd</b> | No Listing (1970-1980); Larsen H Cabinet (1985); Jacks Cabinets (1990-1995/96); Images Life Photo (1995/96); Almost Antiques (2002/03); Bargain Barin (2002/03); Carlene's (2002/03); Downtown Dolls (2002/03); Eldro Humane Society (2002/03-2006); Hair By Kimberly (2002/03); High Mountain Blue Water Tckl (2002/03); Iron Mountain Motorcycles (2002/03); Knight Virgil (2002/03); Knight's Music (2002/03); Mounatin Mail 2 (2002/03); Mullen Mike (2002/03); Taylor John (2002/03); Building (2006); Alterbative Healing Alliance (2006); Azteca Bakery & Market (2006); Bahai Center (2006); Carla's Like Your Style (2006); Diamond Springs Mobility (2006); Diamond Village Chiropractic (2006); Duivas Fitness For Women (2006); Factory Team 2 Rcnng Mtr Sprts (2006); Fine Line Tatooning (2006); Inalliance (2006); Main Street Mail (2006); Mccullch Mikio A Dc (2006-2011); Taylor John Dr Diamond V C (2006-2011); Green Spero (2016) |
| <b>493 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Diamond Esoresso&More (2002/03); No Listing (2006); Charlotte's Bakery & Cafe (2011); Hair Affair (2011-2016); Landis Toby Y Phd (2011-2016); J & J Java (2016)   |
| <b>500 Pleasant Valley Rd</b> | No Listing (1970-2006); Firehouse Cafe (2011-2016)   |
| <b>501 Pleasant Valley Rd</b> | No Listing (1970-1995/96); No Current Listing (2002/03); No Listing (2006-2016)  |
| <b>504 Pleasant Valley Rd</b> | No Listing (1970-2002/03); Hansen Denise D Lcsw (2006); Venderkar Pef Ma Mpa Mft (2006); No Listing (2011-2016)  |
| <b>515 Pleasant Valley Rd</b> | No Listing (1970-1985); Rohlfing Frank (1990-1995/96); No Listing (2002/03-2016)   |
| <b>517 Pleasant Valley Rd</b> | No Listing (1970-1980); No Current Listing (1985); No Listing (1990-2016)  |
| <b>538 Pleasant Valley Rd</b> | No Listing (1970); No Current Listing (1977-1980); No Listing (1985-2016)  |
| <b>98 Pleasant Valley Rd</b>  | No Listing (1970-1980); Harshfield Collin F (1985); No Listing (1990-2016)   |

**Comments:** No coverage for Diamond Springs prior to 1970.

---

## ***City Directory Standard Report***

---

***Target Property:***

*Pleasant Valley Rd,  
Diamond Springs, CA 95828*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***



**City Directory Standard Report**  
**Pleasant Valley Rd, Diamond Springs, CA 95828**

INFOUSA

SOUTH WEST

2016

**PLEASANT VALLEY RD**

|     |                                   |
|-----|-----------------------------------|
| 1   | STREET BEGINS                     |
| 130 | TOWER MART                        |
| 273 | CREATIVE PHOTO FRAMES             |
| 321 | DAWSON OIL CO                     |
| 350 | WESTWOOD MOBILE HOME<br>COMMUNITY |
| 373 | D & D SUPPLY                      |
| 385 | INDEPENDENCE HIGH SCHOOL          |
| 385 | INDEPENDENCE LEARNING CTR         |
| 435 | MOUER LABS                        |
| 460 | DEB'S FROSTY                      |
| 484 | GREEN SPERO                       |
| 493 | HAIR AFFAIR                       |
| 493 | J & J JAVA                        |
| 493 | LANDIS TOBY Y PHD                 |
| 500 | FIRE HOUSE CAFE                   |

INFOUSA

PACIFIC

2011

**PLEASANT VALLEY RD**

|     |                                   |
|-----|-----------------------------------|
| 1   | STREET BEGINS                     |
| 130 | CAB SERVICES                      |
| 130 | TOWER MART                        |
| 202 | ASCHE BONNIE                      |
| 273 | CREATIVE PHOTO FRAMES             |
| 321 | DAWSON OIL CO                     |
| 350 | WESTWOOD MOBILE HOME<br>COMMUNITY |
| 373 | D & D SUPPLY                      |
| 385 | INDEPENDENCE HIGH SCHOOL          |
| 385 | INDEPENDENCE LEARNING CENTER      |
| 424 | TIRAPELLE L                       |
| 435 | SUNRISE FAMILY MEDICINE           |
| 484 | TAYLOR CLIFF A DC                 |

## City Directory Standard Report

Pleasant Valley Rd, Diamond Springs, CA 95828

|     |                           |
|-----|---------------------------|
| 484 | TAYLOR JOHN F             |
| 493 | CHARLOTTE'S BAKERY & CAFE |
| 493 | HAIR AFFAIR               |
| 493 | LANDIS TOBY Y PHD         |
| 500 | FIREHOUSE CAFE            |

### HAINES DIRECTORY

SACRAMENTO 2006  
EAST(CITY &  
SUBURB)

### PLEASANT VALLEY RD

|     |                                   |
|-----|-----------------------------------|
| 273 | CREATIVE PHOTO FRAMES             |
| 273 | HARRINGTON PATRICIA               |
| 321 | DAWSON OIL CO                     |
| 350 | MULTI TENANT RESIDENTIAL          |
| 350 | WESTWOOD MBL HMS                  |
| 350 | WESTWOOD MOBILE HOME<br>COMMUNITY |
| 350 | X [WRANGLER RD INTS]              |
| 350 | Y [COMMERCE WAY INTS]             |
| 373 | D & D PLUMBNG                     |
| 385 | ELDRDO ADULT SCHOOL               |
| 385 | X [MIISOURI FLAT RD INTS]         |
| 424 | TIRAPELLI L                       |
| 435 | BACK ON TRACK COUNSELING<br>SERV  |
| 435 | MCCUNE CAROLE                     |
| 460 | DEB'S FROSTY                      |
| 460 | X [CHINA GARDEN INTS]             |
| 461 | TAYLOR THOMAS                     |
| 484 | ALTERBATIVE HEALING ALLIANCE      |
| 484 | AZTECA BAKERY & MARKET            |
| 484 | BAHAI CENTER                      |
| 484 | BUILDING                          |
| 484 | CARLA'S LIKE YOUR STYLE           |
| 484 | DIAMOND SPRINGS MOBILITY          |
| 484 | DIAMOND TV & SATELLITE            |

## City Directory Standard Report

Pleasant Valley Rd, Diamond Springs, CA 95828

|     |                               |
|-----|-------------------------------|
| 484 | DIAMOND VILLAGE CHIROPRACTIC  |
| 484 | DUIVAS FITNESS FOR WOMEN      |
| 484 | ELDRO HUMANE SOCIETY          |
| 484 | FACTORY TEAM 2 RCNG MTR SPRTS |
| 484 | FINE LINE TATOOING            |
| 484 | INALLIANCE                    |
| 484 | MAIN STREET MAIL              |
| 484 | MCCULLCH MIKIO A DC           |
| 484 | TAYLOR CLIFF A DC             |
| 484 | TAYLOR CLIFF A DC             |
| 484 | TAYLOR JOHN DR DIAMOND V C    |
| 484 | TAYLOR JOHN F                 |
| 484 | X [HOWARD CIR INTS]           |
| 504 | HANSEN DENISE D LCSW          |
| 504 | VENDERKAR PEF MA MPA MFT      |

### HAINES DIRECTORY

SACRAMENTO 2002-03  
EAST(CITY &  
SUBURB)

### PLEASANT VALLEY RD

|     |                           |
|-----|---------------------------|
| 1   | STREET BEGINS             |
| 130 | TOWER MART                |
| 130 | TOWER MART                |
| 273 | CRAETIVE PHOTO FRAMES     |
| 273 | HARRINGTON P              |
| 320 | PARISEK JOHN              |
| 321 | APARTMENTS                |
| 321 | DAWSON OIL CO             |
| 321 | WESTWOOD MBL HMS          |
| 321 | X [COMMERCE WAY INTS]     |
| 373 | D & D SUPPLY              |
| 373 | D&B PLUMBING SUPPLY       |
| 373 | X [MISSOURI FLAT RD INTS] |
| 424 | TIRAPELLE L               |
| 435 | MCCUNE CAROLE             |

## City Directory Standard Report

Pleasant Valley Rd, Diamond Springs, CA 95828

|     |                               |
|-----|-------------------------------|
| 435 | YUBACOID INC                  |
| 443 | LASHER WM                     |
| 444 | PARKER JOHN                   |
| 460 | DEB'S FROSTY                  |
| 460 | SMITH ELAIDA                  |
| 461 | TAYLOR THOMAS                 |
| 470 | BONANZA CARPET CLEANING       |
| 478 | DIAMOND TV&SATELLITE          |
| 484 | ALMOST ANTIQUES               |
| 484 | BARGAIN BARIN                 |
| 484 | CARLENE'S                     |
| 484 | DOWNTOWN DOLLS                |
| 484 | ELDRO HUMANE SOCIETY          |
| 484 | HAIR BY KIMBERLY              |
| 484 | HIGH MOUNTAIN BLUE WATER TCKL |
| 484 | IRON MOUNTAIN MOTORCYCLES     |
| 484 | KNIGHT VIRGIL                 |
| 484 | KNIGHT'S MUSIC                |
| 484 | MOUNATIN MAIL 2               |
| 484 | MULLEN MIKE                   |
| 484 | TAYLOR JOHN                   |
| 493 | DIAMOND ESORESSO&MORE         |
| 501 | NO CURRENT LISTING            |

### HAINES DIRECTORY

SACRAMENTO 1995-96  
(CITY &  
SUBURBAN)

### PLEASANT VALLEY RD

|     |                     |
|-----|---------------------|
| 1   | STREET BEGINS       |
| 130 | NO CURRENT LISTING  |
| 273 | CREATIVE PHOTO FRME |
| 350 | WESTWOOD MBL HMS    |
| 424 | TIRAPELLI L         |
| 443 | LASHER WM           |
| 484 | IMAGES LIFE PHOTO   |

**City Directory Standard Report**

**Pleasant Valley Rd, Diamond Springs, CA 95828**

484 JACKS CABINETS  
515 ROHLFING FRANK

HAINES DIRECTORY

SACRAMENTO 1990  
(CITY &  
SUBURBAN)

**PLEASANT VALLEY RD**

1 STREET BEGINS  
130 FOOD&LIQUOR  
202 CARSTEN D  
300 NO CURRENT LISTING  
350 WESTWOOD MBL HMS  
373 NO CURRENT LISTING  
424 TIRAPELLE L  
484 JACKS CABINETS  
515 ROHLFING FRANK

HAINES DIRECTORY

SACRAMENTO 1985  
(CITY &  
SUBURBAN)

**PLEASANT VALLEY RD**

1 STREET BEGINS  
98 HARSHFIELD COLLIN F  
118 HEDGECOCK C  
300 NO CURRENT LISTING  
350 WESTWOOD MBL HMS  
484 LARSEN H CABINET  
517 NO CURRENT LISTING

HAINES DIRECTORY

SACRAMENTO 1980  
(CITY &  
SUBURBAN)

**PLEASANT VALLEY RD**

1 STREET BEGINS  
350 WERSTWOOD MBL HMS  
466 NO CURRENT LISTING  
538 NO CURRENT LISTING

HAINES DIRECTORY

**City Directory Standard Report**

**Pleasant Valley Rd, Diamond Springs, CA 95828**

SACRAMENTO 1977  
(CITY &  
SUBURBAN)

**PLEASANT VALLEY RD**

|     |                          |
|-----|--------------------------|
| 1   | STREET BEGINS            |
| 350 | MULTI TENANT RESIDENTIAL |
| 350 | WERSTWOOD MBL HMS        |
| 350 | WESTWD MBL HM CMNTY      |
| 466 | WEINAND KENT MRS         |
| 538 | NO CURRENT LISTING       |

HAINES DIRECTORY

SACRAMENTO 1970  
(CITY &  
SUBURBAN)

**PLEASANT VALLEY RD**

|   |                   |
|---|-------------------|
| 1 | STREET NOT LISTED |
|---|-------------------|

**Comment:** No coverage for Diamond Springs prior to 1970.



---

## ***Environmental Lien***

---

*Target Property:*  
**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, El Dorado County, California**  
**95619**

*Prepared For:*  
**Environmental Science Assoc-San Francisco**

**Order #: 118699**  
**Job #: 269579**  
**Project #: D180359**  
**PO #: D180359-99**  
**Date: 12/10/2018**

## TARGET PROPERTY SUMMARY

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado County, California 95619**

USGS Quadrangle: **Placerville, CA**

Target Property Geometry: **Area**

Target Property Longitude(s)/Latitude(s):

(-120.816351, 38.677359), (-120.821951, 38.677527), (-120.821887, 38.678113), (-120.819848, 38.678096),  
(-120.819891, 38.680006), (-120.820835, 38.680006), (-120.820878, 38.680927), (-120.821780, 38.680927),  
(-120.821715, 38.683322), (-120.821865, 38.686086), (-120.822874, 38.687359), (-120.819720, 38.688867),  
(-120.818647, 38.689017), (-120.818582, 38.689871), (-120.820685, 38.689905), (-120.821072, 38.690374),  
(-120.819999, 38.690642), (-120.820235, 38.691345), (-120.819527, 38.691747), (-120.818411, 38.691312),  
(-120.818776, 38.693623), (-120.818411, 38.693707), (-120.817595, 38.690458), (-120.815428, 38.690273),  
(-120.815042, 38.690525), (-120.815063, 38.690056), (-120.817102, 38.687962), (-120.817510, 38.685332),  
(-120.817188, 38.685316), (-120.817166, 38.680961), (-120.817016, 38.680961), (-120.817059, 38.680123),  
(-120.816565, 38.679554), (-120.816651, 38.678548), (-120.816351, 38.677359)

County/Parish Covered:

**El Dorado (CA)**

Zipcode(s) Covered:

**Diamond Springs CA: 95619**

**El Dorado CA: 95623**

**Placerville CA: 95667**

State(s) Covered:

**CA**

Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.





## ENVIRONMENTAL LIEN/AUL SEARCH

We have done a search of El Dorado County Recorders Records for “Environmental Liens” only on the subject property as identified as APN: 329-301-20-100, Diamond Springs, CA. and find the following:

**None found**

We have done a search of El Dorado County Recorders Records for “Activity and Use Limitations” (AUL’s) only on the subject property as identified as APN: 329-301-20-100, Diamond Springs, CA. and find the following:

**None found**

---

## **GeoPlus Oil & Gas Report**

---

[NEW: GeoLens by Geosearch](#)

*Target Property:*

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado County, California 95619**

*Prepared For:*

**Environmental Science Assoc-San Francisco**

**Order #: 118699**

**Job #: 269583**

**Project #: D180359**

**PO #: D180359-99**

**Date: 12/07/2018**

---

## Table of Contents

---

|  |   |
|--|---|
| <i>Target Property Summary</i> . . . . .           | 1 |
| <i>Database Radius Summary</i> . . . . .           | 2 |
| <i>Oil &amp; Gas Map</i> . . . . .                 | 3 |
| <i>Environmental Records Definitions</i> . . . . . | 5 |

---

## Disclaimer

---

*The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.*

## Target Property Summary

### **Target Property Information**

Stonehenge Springs

Faith Lane

Diamond Springs, California 95619

#### **Coordinates**

Area centroid (-120.81907, 38.6845057)

#### **USGS Quadrangle**

Placerville, CA

### **Geographic Coverage Information**

**County/Parish:** El Dorado (CA)

#### **ZipCode(s):**

Diamond Springs CA: 95619

El Dorado CA: 95623

Placerville CA: 95667

## Database Radius Summary

### STATE (CA) LISTING

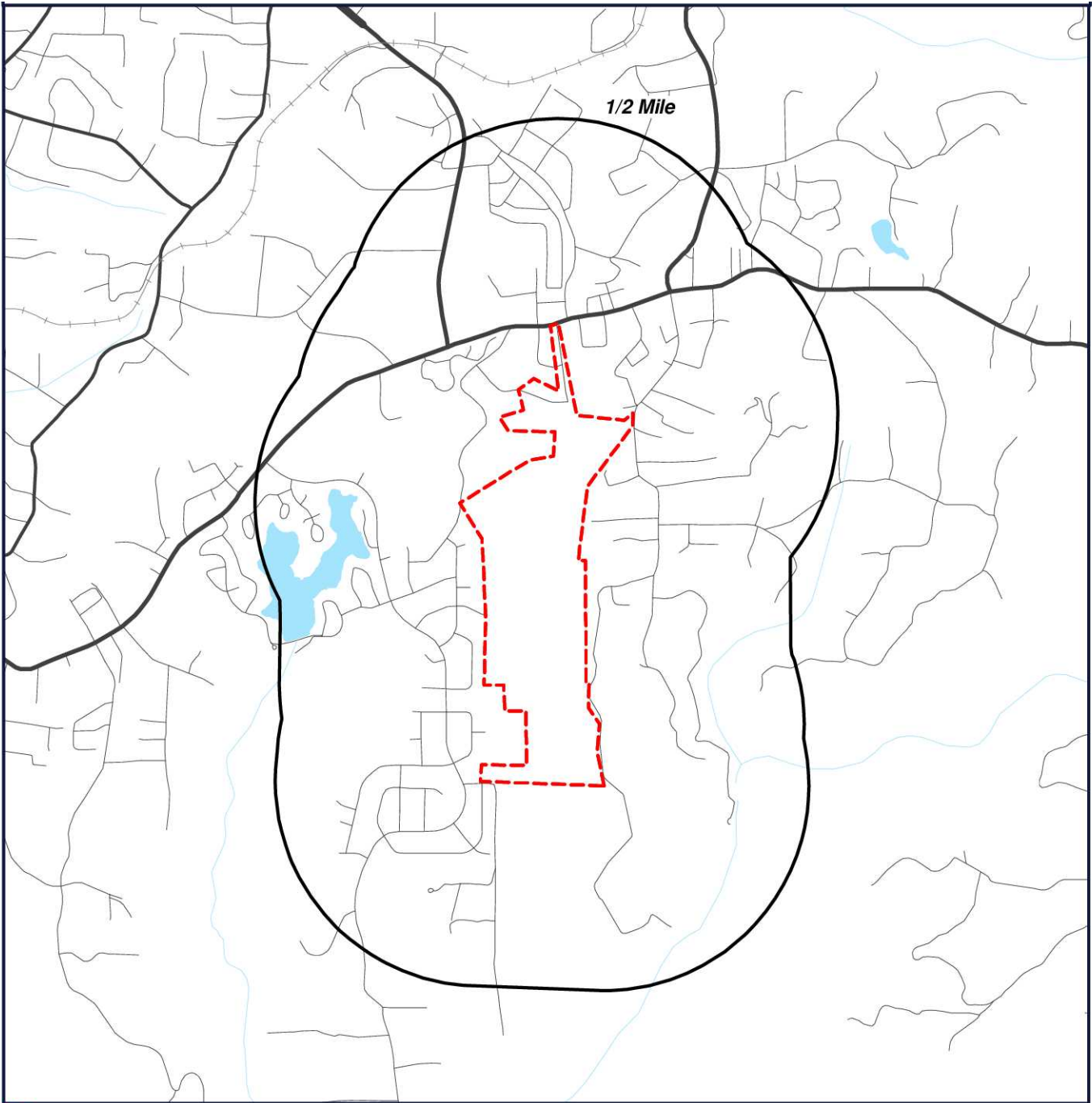
| Acronym          | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile | Total |
|------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|----------|-------|
| OG               | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS       | 0     |
| <b>SUB-TOTAL</b> |                       | 0                | 0                  | 0                | 0                | 0              | 0        | 0     |
| <b>TOTAL</b>     |                       | 0                | 0                  | 0                | 0                | 0              | 0        | 0     |

**NOTES:**

**NS = NOT SEARCHED**

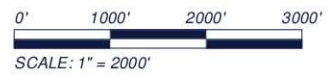
**TP/AP = TARGET PROPERTY/ADJACENT PROPERTY**

# OIL & GAS WELL MAP



-  Target Property (TP)
-  Well Location

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



[Click here to access Satellite view](#)

## Located Sites Summary

No Records Found.



## ***Environmental Records Definitions - STATE (CA)***

**OG** Oil and Gas

VERSION DATE: 04/16/18

This oil, gas, and geothermal well information database is maintained by the California Department of Conservation's Division of Oil, Gas, and Geothermal Resources. The database information may change without notice. The Department of Conservation makes no warranties, whether expressed or implied, as to the suitability of the product for any particular purpose. Any use of this information is at the user's own risk.

---

## **GeoPlus Physical Setting Maps**

---

[Satellite view](#)

*Target Property:*

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado County, California 95619**

*Prepared For:*

**Environmental Science Assoc-San Francisco**

**Order #: 118699**

**Job #: 269585**

**Project #: D180359**

**PO #: D180359-99**

**Date: 12/07/2018**

---

## Table of Contents

---

|  |    |
|--|----|
| <i>Target Property Summary</i> . . . . . | 1  |
| <i>FEMA Map</i> . . . . .                | 2  |
| <i>FEMA Report</i> . . . . .             | 3  |
| <i>NWI Map</i> . . . . .                 | 4  |
| <i>NWI Report</i> . . . . .              | 5  |
| <i>SOIL Map</i> . . . . .                | 7  |
| <i>SOIL Report</i> . . . . .             | 8  |
| <i>GEOLOGY Map</i> . . . . .             | 9  |
| <i>GEOLOGY Report</i> . . . . .          | 10 |

---

## Disclaimer

---

*The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.*

## Target Property Summary

### **Target Property Information**

Stonehenge Springs

Faith Lane

Diamond Springs, California 95619

#### **Coordinates**

Area centroid (-120.81907, 38.6845057)

#### **USGS Quadrangle**

Placerville, CA

### **Geographic Coverage Information**

**County/Parish:** El Dorado (CA)

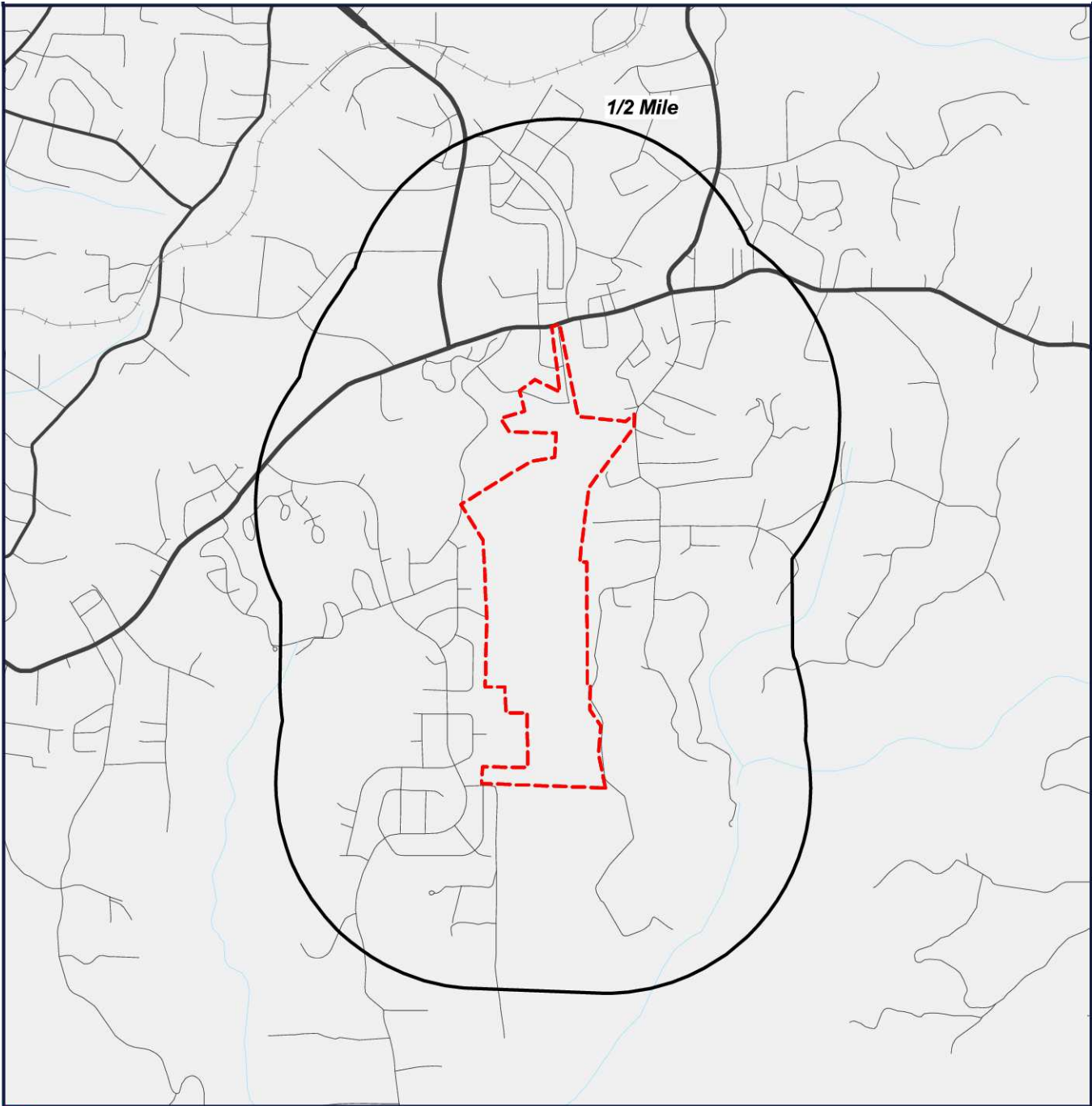
#### **ZipCode(s):**

Diamond Springs CA: 95619

El Dorado CA: 95623

Placerville CA: 95667

# FEMA Map



 Target Property (TP)

- |   |  |
|---|--|
|  ZONE A  |  ZONE D                           |
|  ZONE AE |  ZONE X                           |
|  ZONE AH |  AREA NOT INCLUDED                |
|  ZONE A0 |  OPEN WATER                       |
|  ZONE AR |  NDA - DIGITAL DATA NOT AVAILABLE |
|  ZONE V  |  |
|  ZONE VE |  |

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



Letter of map revision date: 05/18/2018  
Latest study effective date: 04/04/2018  
Panel #: 06005C0075F

0' 1000' 2000' 3000'  
SCALE: 1" = 2000'

[Click here to access Satellite view](#)

# FEMA Report

## FEMA - Federal Emergency Management Agency

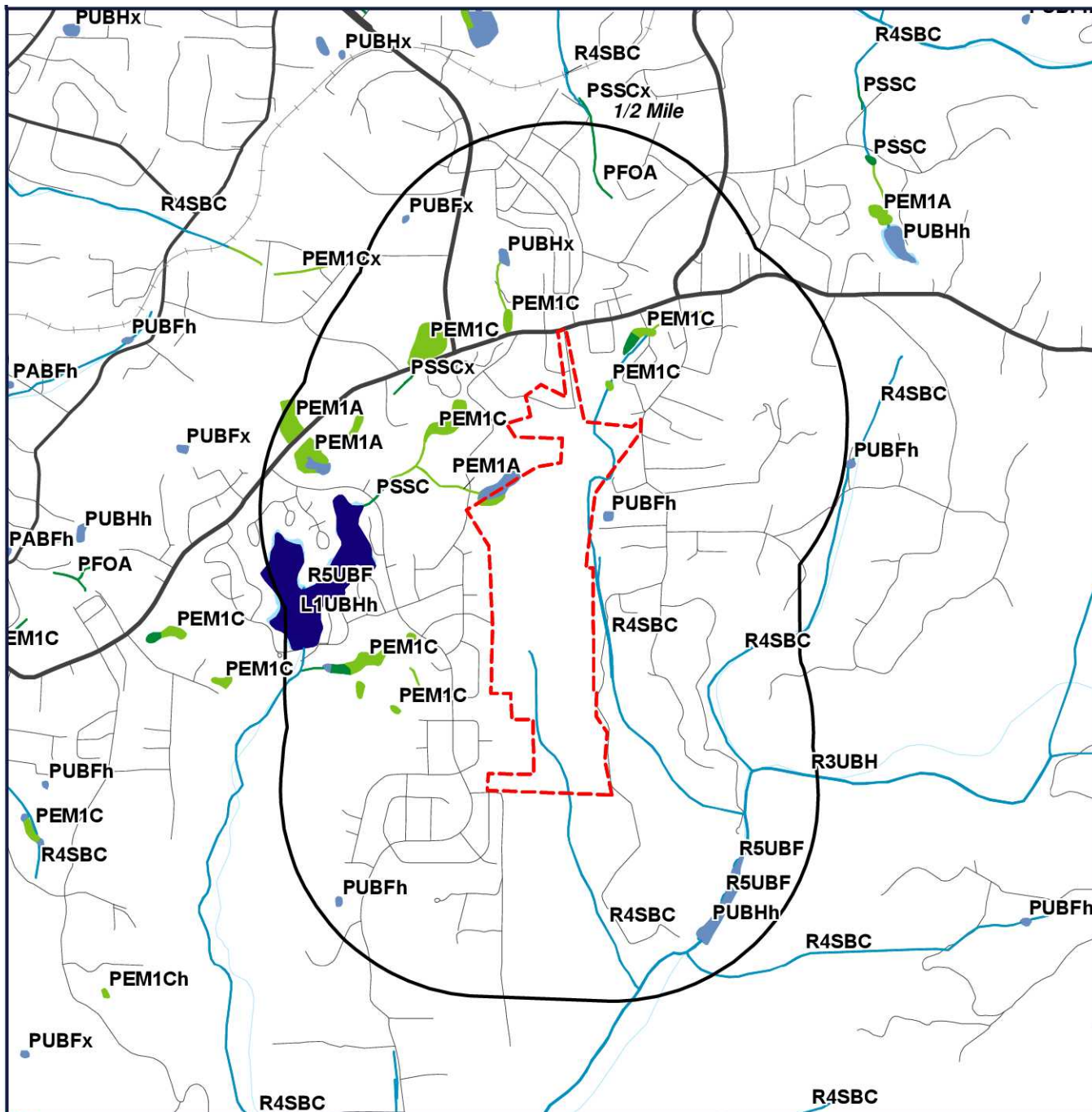
The National Flood Hazard Layer (NFHL) data used in this report is derived from the Federal Emergency Management Agency. The NFHL dataset is a compilation of effective Flood Insurance Rate Map (FIRM) databases (a collection of the digital data that are used in GIS systems for creating new Flood Insurance Rate Maps) and Letters of Map Change (Letters of Map Amendment and Letters of Map Revision only) that create a seamless GIS data layer for United States and its territories. The NFHL is updated as new study or LOMC data becomes effective. Note: Currently, not all areas have modernized FIRM database data available. As a result, users may need to refer to the effective Flood Insurance Rate Map for effective flood hazard information. This data was provided by the Federal Emergency Management Agency's Map Service Center in November of 2013.

## FEMA Flood Zone Definitions within Search Radius

|   |        |
|---|--------|
| X | Zone X |
|---|--------|

An area that is determined to be outside the 100 and 500 year floodplains.

# NWI Map



Target Property (TP)

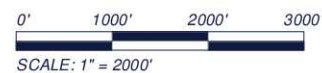
- ESTUARINE AND MARINE DEEPWATER
- ESTUARINE AND MARINE WETLAND
- FRESHWATER EMERGENT WETLAND
- FRESHWATER FORESTED/SHRUB WETLAND

- LAKE
- OTHER
- RIVERINE

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**

- FRESHWATER POND
- NDA - DIGITAL DATA NOT AVAILABLE

Map Date: 05/01/2018



[Click here to access Satellite view](#)



# NWI Report

## NWI - National Wetlands Inventory

The US NWI digital data bundle is a set of records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. Currently, this data is only available in select counties throughout the United States.

## NWI Definitions within Search Radius

### L1UBHh

SYSTEM: **LACUSTRINE**  
SUBSYSTEM: **LIMNETIC**  
CLASS: **UNCONSOLIDATED BOTTOM**  
WATER REGIME: **PERMANENTLY FLOODED**  
SPECIAL MODIFIER: **DIKED/IMPOUNDED**

### PEM1A

SYSTEM: **PALUSTRINE**  
CLASS: **EMERGENT**  
SUBCLASS: **BROAD-LEAVED DECIDUOUS**  
WATER REGIME: **TEMPORARILY FLOODED**

### PEM1C

SYSTEM: **PALUSTRINE**  
CLASS: **EMERGENT**  
SUBCLASS: **BROAD-LEAVED DECIDUOUS**  
WATER REGIME: **SEASONALLY FLOODED**

### PFOA

SYSTEM: **PALUSTRINE**  
CLASS: **FORESTED**

### PSSC

SYSTEM: **PALUSTRINE**  
CLASS: **SCRUB-SHRUB**

### PSSCx

SYSTEM: **PALUSTRINE**  
CLASS: **SCRUB-SHRUB**  
SPECIAL MODIFIER: **EXCAVATED**

### PUBFh

SYSTEM: **PALUSTRINE**  
CLASS: **UNCONSOLIDATED BOTTOM**  
SPECIAL MODIFIER: **DIKED/IMPOUNDED**

# NWI Report

## PUBFx

SYSTEM: PALUSTRINE  
CLASS: UNCONSOLIDATED BOTTOM  
SPECIAL MODIFIER: EXCAVATED

## PUBHh

SYSTEM: PALUSTRINE  
CLASS: UNCONSOLIDATED BOTTOM  
SPECIAL MODIFIER: DIKED/IMPOUNDED

## PUBHx

SYSTEM: PALUSTRINE  
CLASS: UNCONSOLIDATED BOTTOM  
SPECIAL MODIFIER: EXCAVATED

## R3UBH

SYSTEM: RIVERINE  
SUBSYSTEM: UPPER PERENNIAL  
CLASS: UNCONSOLIDATED BOTTOM  
WATER REGIME: PERMANENTLY FLOODED

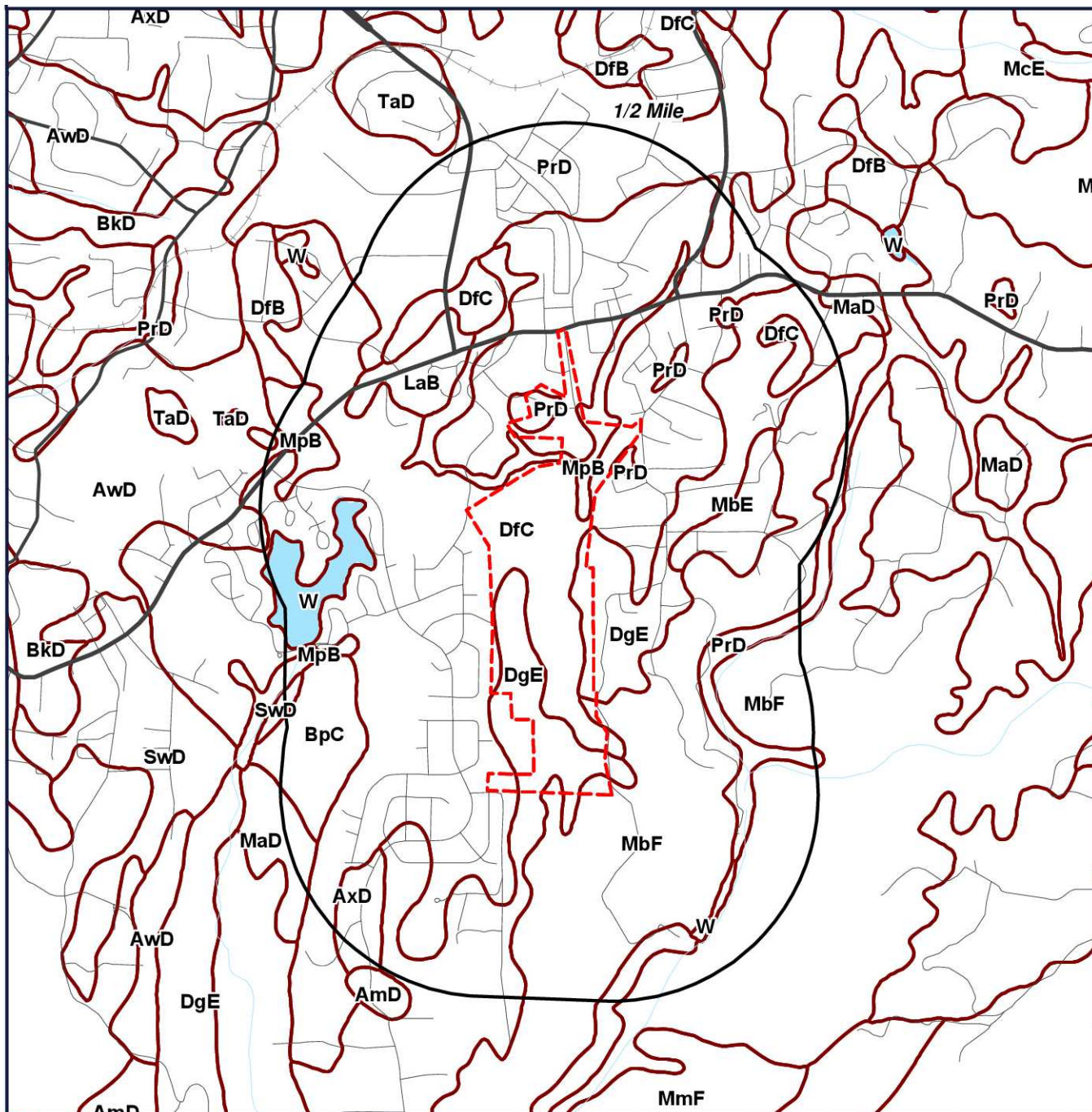
## R4SBC

SYSTEM: RIVERINE  
SUBSYSTEM: INTERMITTENT  
CLASS: STREAMBED  
WATER REGIME: SEASONALLY FLOODED

## R5UBF

SYSTEM: RIVERINE  
SUBSYSTEM: UNKNOWN PERENNIAL  
CLASS: UNCONSOLIDATED BOTTOM  
WATER REGIME: SEMIPERMANENTLY FLOODED

# Soil Map



 Target Property (TP)

 SOIL BOUNDARY

 NOTCOM - DIGITAL DATA NOT AVAILABLE/NOT COMPLETE

Stonehenge Springs  
Faith Lane  
Diamond Springs, California  
95619



0' 1000' 2000' 3000'  
SCALE: 1" = 2000'

[Click here to access Satellite view](#)

# SOIL Report

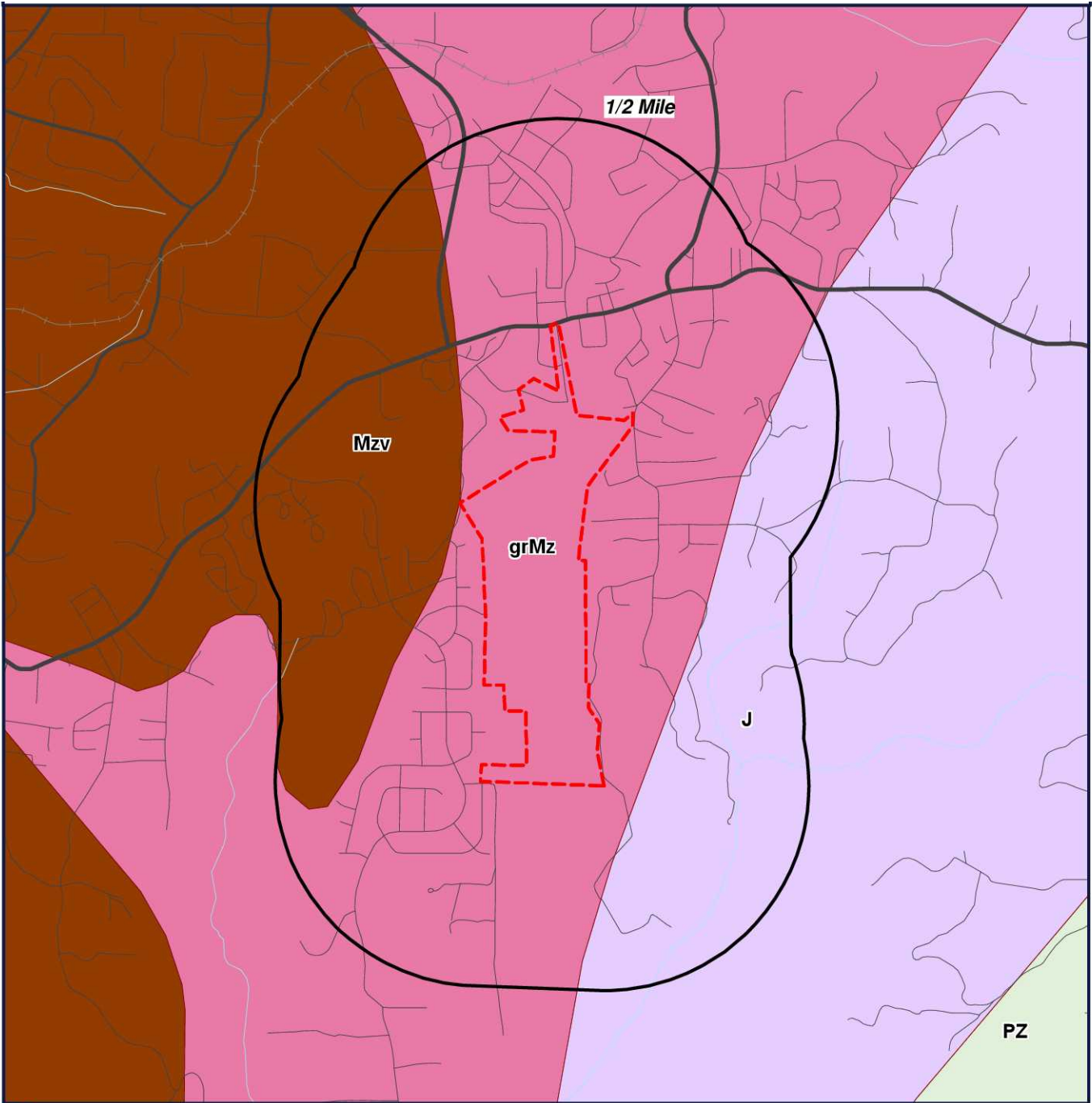
## Soil Surveys

The soil data used in this report is obtained from the Natural Resources Conservation Service (NRCS). The NRCS is the primary federal agency that works with private landowners to help them conserve, maintain and improve their natural resources. The soil survey contains information that can be applied in managing farms and ranches; in selecting sites for roads, ponds, buildings and other structures; and in determining the suitability of tracts of land for farming, industry and recreation. This data is available in select counties throughout the United States.

## SOIL Code Definitions within Search Radius

|            |   |
|------------|---|
| <b>AwD</b> | AUBURN SILT LOAM, 2 TO 30 PERCENT SLOPES                                |
| <b>AxD</b> | AUBURN VERY ROCKY SILT LOAM, 2 TO 30 PERCENT SLOPES                     |
| <b>BpC</b> | BOOMER-SITES LOAMS, 9 TO 15 PERCENT SLOPES                              |
| <b>DfB</b> | DIAMOND SPRINGS VERY FINE SANDY LOAM, 3 TO 9 PERCENT SLOPES             |
| <b>DfC</b> | DIAMOND SPRINGS VERY FINE SANDY LOAM, 9 TO 15 PERCENT SLOPES            |
| <b>DgE</b> | DIAMOND SPRINGS VERY ROCKY VERY FINE SANDY LOAM, 3 TO 50 PERCENT SLOPES |
| <b>LaB</b> | LOAMY ALLUVIAL LAND   |
| <b>MaD</b> | MARIPOSA GRAVELLY SILT LOAM, 3 TO 30 PERCENT SLOPES                     |
| <b>MbE</b> | MARIPOSA VERY ROCKY SILT LOAM, 3 TO 50 PERCENT SLOPES                   |
| <b>MbF</b> | MARIPOSA VERY ROCKY SILT LOAM, 50 TO 70 PERCENT SLOPES                  |
| <b>MpB</b> | MIXED ALLUVIAL LAND   |
| <b>PrD</b> | PLACER DIGGINGS   |
| <b>SwD</b> | SOBRANTE VERY ROCKY SILT LOAM, 3 TO 30 PERCENT SLOPES                   |
| <b>TaD</b> | TAILINGS  |
| <b>W</b>   | WATER   |

# Geology Map



 Target Property (TP)

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



0' 1000' 2000' 3000'  
SCALE: 1" = 2000'

[Click here to access Satellite view](#)

# GEOLOGY Report

## US GEOLOGY

THE GEOLOGY DATA USED IN THIS REPORT ORIGINATES FROM THE USGS. THE FIRST STAGE IN DEVELOPING STATE DATABASES FOR THE CONTERMINOUS UNITED STATES WAS TO ACQUIRE DIGITAL VERSIONS OF ALL EXISTING STATE GEOLOGIC MAPS. ALTHOUGH A SIGNIFICANT NUMBER OF DIGITAL STATE MAPS ALREADY EXISTED, A NUMBER OF STATES LACKED THEM. FOR THESE STATES NEW DIGITAL COMPILATIONS WERE PREPARED IN COOPERATION WITH STATE GEOLOGIC SURVEYS OR BY THE NSA (NATIONAL SURVEYS AND ANALYSIS) PROJECT. THESE NEW DIGITAL STATE GEOLOGIC MAPS AND DATABASES WERE CREATED BY DIGITIZING ALREADY EXISTING PRINTED MAPS, OR, IN A FEW CASES, BY MERGING EXISTING LARGER SCALE DIGITAL MAPS.

### GEOLOGY Definitions within Search Radius

GEOLOGY SYMBOL: **grMz**

UNIT NAME: **Mesozoic granitic rocks, unit 3 (Sierra Nevada, Death Valley area, Northern Mojave Desert and Transverse Ranges)**

UNIT AGE: **Permian to Tertiary; most Mesozoic**

UNIT DESCRIPTION:

**Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite**

ADDITIONAL UNIT INFORMATION:

**Sierra Nevada, Death Valley area, Transverse Ranges and Mojave Desert. Primarily granodiorite, tonalite, quartz monzonite, and granite ranging in age from Late Triassic to Late Cretaceous. Includes some rocks as old as Permian and possibly a few as young as Tertiary. Three main periods of emplacement (Triassic, Jurassic, and Cretaceous); wide variety of rock types**

ROCKTYPE/S: **granodiorite; quartz monzonite; tonalite; quartz diorite; diorite; granite; monzodiorite; quartz syenite; quartz monzodiorite; gabbro; trondhjemite; alkali-granite (alaskite); pegmatite; monzonite; aplite**

GEOLOGY SYMBOL: **J**

UNIT NAME: **Jurassic marine rocks, unit 1 (Western Sierra Nevada and Western Klamath Mountains)**

UNIT AGE: **Triassic to Late Jurassic**

UNIT DESCRIPTION:

**Shale, sandstone, minor conglomerate, chert, slate, limestone; minor pyroclastic rocks**

ADDITIONAL UNIT INFORMATION:

**Western Klamath Mountains, western Sierra Nevada. Primarily slate and metamorphosed graywacke; minor siltstone, conglomerate, chert, and volcanic rocks. Mainly Late Jurassic in age, but also includes some Early Jurassic or older rocks**

ROCKTYPE/S: **slate; graywacke; siltstone; pyroclastic; conglomerate; chert; basalt**

GEOLOGY SYMBOL: **Mzv**

UNIT NAME: **Mesozoic volcanic rocks, unit 2 (Western Sierra Foothills and Western Klamath Mountains)**

UNIT AGE: **Jurassic**

UNIT DESCRIPTION:

**Undivided Mesozoic volcanic and metavolcanic rocks. Andesite and rhyolite flow rocks, greenstone, volcanic breccia and other pyroclastic rocks; in part strongly metamorphosed. Includes volcanic rocks of Franciscan Complex: basaltic pillow lava, diabase, greenstone, and minor pyroclastic rocks**

ADDITIONAL UNIT INFORMATION:

**Western Sierra Nevada and western Klamath Mountains. Mostly basaltic to andesitic breccias, flows, and tuffs, metamorphosed but with primary volcanic features generally recognizable. Minor associated sandstone and conglomerate. Largely or entirely of marine origin. Includes some rocks interpreted as ophiolites (Smartville complex)**

ROCKTYPE/S: **mafic volcanic rock; intermediate volcanic rock; felsic volcanic rock; chert; sandstone; conglomerate**

---

## **GeoPlus Water Well Report**

---

[NEW: GeoLens by Geosearch](#)

*Target Property:*  
**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, El Dorado County, California 95619**

*Prepared For:*  
**Environmental Science Assoc-San Francisco**

**Order #: 118699**  
**Job #: 269582**  
**Project #: D180359**  
**PO #: D180359-99**  
**Date: 12/07/2018**

---

## Table of Contents

---

|  |   |
|--|---|
| <i>Target Property Summary</i> . . . . .           | 1 |
| <i>Database Radius Summary</i> . . . . .           | 2 |
| <i>Water Well Map</i> . . . . .                    | 4 |
| <i>Environmental Records Definitions</i> . . . . . | 6 |



---

## Disclaimer

---

*The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.*

## Target Property Summary

### **Target Property Information**

Stonehenge Springs

Faith Lane

Diamond Springs, California 95619

#### **Coordinates**

Area centroid (-120.81907, 38.6845057)

#### **USGS Quadrangle**

Placerville, CA

### **Geographic Coverage Information**

**County/Parish:** El Dorado (CA)

#### **ZipCode(s):**

Diamond Springs CA: 95619

El Dorado CA: 95623

Placerville CA: 95667

## Database Radius Summary

### **FEDERAL LISTING**

| <b>Acronym</b>   | <b>Search Radius (miles)</b> | <b>TP/AP (0 - 0.02)</b> | <b>1/8 Mile (&gt; TP/AP)</b> | <b>1/4 Mile (&gt; 1/8)</b> | <b>1/2 Mile (&gt; 1/4)</b> | <b>1 Mile (&gt; 1/2)</b> | <b>&gt; 1 Mile</b> | <b>Total</b> |
|------------------|------------------------------|-------------------------|------------------------------|----------------------------|----------------------------|--------------------------|--------------------|--------------|
| NWIS             | 0.5000                       | 0                       | 0                            | 0                          | 0                          | NS                       | NS                 | 0            |
| <b>SUB-TOTAL</b> |                              | 0                       | 0                            | 0                          | 0                          | 0                        | 0                  | 0            |

## Database Radius Summary

### STATE (CA) LISTING

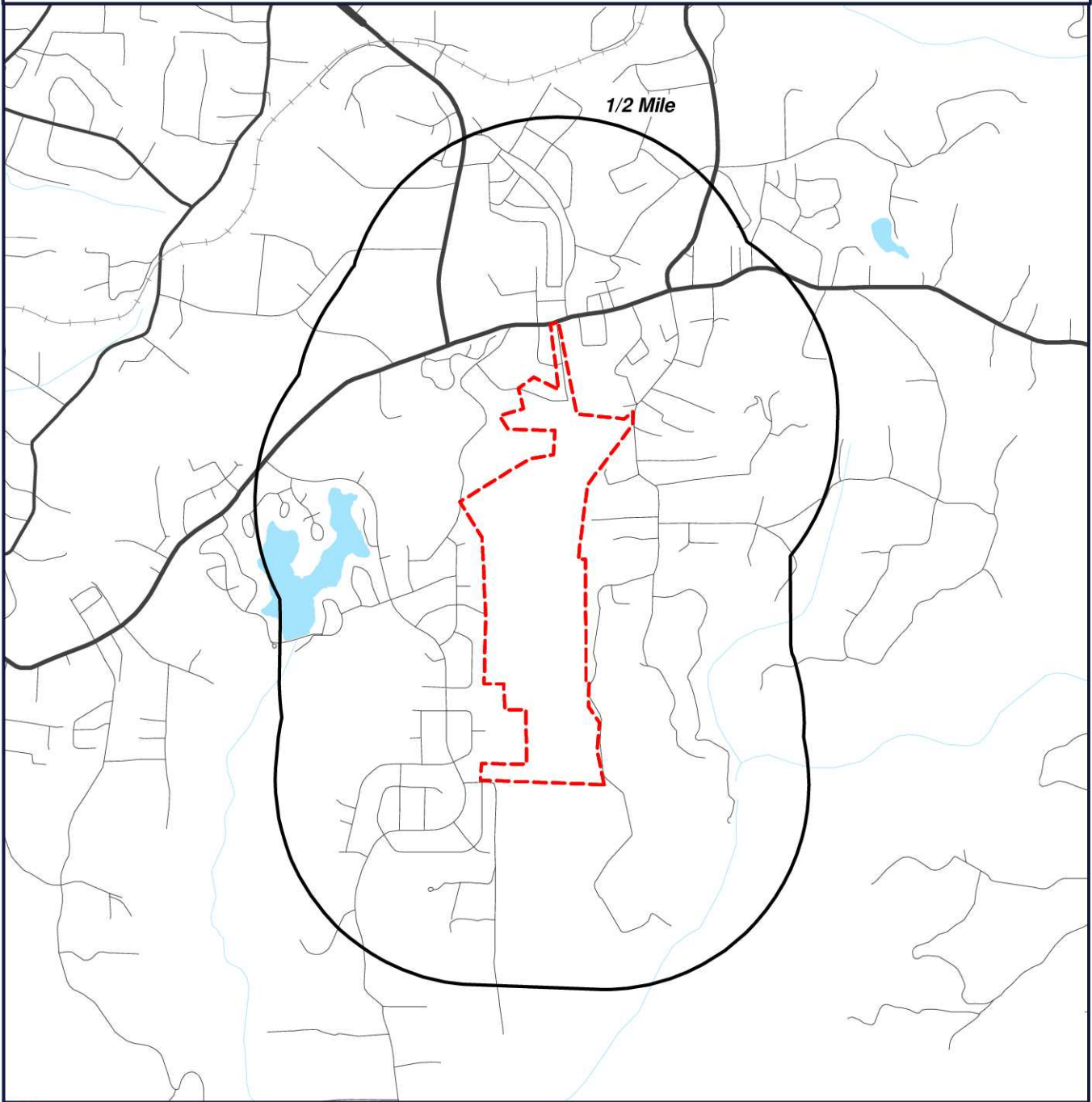
| Acronym   | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile | Total |
|-----------|-----------------------|------------------|--------------------|------------------|------------------|----------------|----------|-------|
| DWRWELLS  | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS       | 0     |
| SUB-TOTAL |                       | 0                | 0                  | 0                | 0                | 0              | 0        | 0     |
| TOTAL     |                       | 0                | 0                  | 0                | 0                | 0              | 0        | 0     |

**NOTES:**

NS = NOT SEARCHED

TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

# Waterwell Map



 Target Property (TP)

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**

CONTOUR LINES REPRESENTED IN FEET



[Click here to access Satellite view](#)

## Located Sites Summary

No Records Found.

## ***Environmental Records Definitions - FEDERAL***

**NWIS**

United States Geological Survey National Water Information System

VERSION DATE: 12/14/16

This USGS National Water Information System database only includes groundwater wells. The USGS defines this well type as: A hole or shaft constructed in the earth intended to be used to locate, sample, or develop groundwater, oil, gas, or some other subsurface material. The diameter of a well is typically much smaller than the depth. Wells are also used to artificially recharge groundwater or to pressurize oil and gas production zones. Additional information about specific kinds of wells should be recorded under the secondary site types or the Use of Site field. Underground waste-disposal wells should be classified as waste-injection wells.

## ***Environmental Records Definitions - STATE (CA)***

**DWRWELLS**

California Department of Water Resources Water Wells

VERSION DATE: 05/09/18

The California Department of Water Resources (DWR) maintains this database of water wells, including California Statewide Groundwater Elevation Monitoring (CASGEM) program wells and Voluntary wells. In Late 2009 the State Legislature amended the Water Code with SBx7-6, which mandates a statewide groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevations in California's groundwater basins. To achieve that goal, the amendment requires collaboration between local monitoring entities and DWR to collect groundwater elevation data. In accordance with this amendment to the Water Code, DWR developed the CASGEM program.



DORADO OAKS TENTATIVE TRACT MAP PROJECT  
FAITH LANE  
DIAMOND SPRINGS, CALIFORNIA  
Phase I Environmental Site Assessment

Prepared for  
Stonehenge Springs, LLC

April 2019





# DORADO OAKS TENTATIVE TRACT MAP PROJECT FAITH LANE DIAMOND SPRINGS, CALIFORNIA

Phase I Environmental Site Assessment

Prepared for  
Stonehenge Springs, LLC

April 2019

1425 N. McDowell Boulevard  
Suite 200  
Petaluma, CA 94954  
707.795.0900  
[www.esassoc.com](http://www.esassoc.com)



|              |            |               |
|--------------|------------|---------------|
| Bend         | Oakland    | San Francisco |
| Camarillo    | Orlando    | Santa Monica  |
| Delray Beach | Pasadena   | Sarasota      |
| Destin       | Petaluma   | Seattle       |
| Irvine       | Portland   | Sunrise       |
| Los Angeles  | Sacramento | Tampa         |
| Miami        | San Diego  |               |

**OUR COMMITMENT TO SUSTAINABILITY** | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

# TABLE OF CONTENTS

---

## Phase I Environmental Site Assessment Dorado Oaks Tentative Tract Map Project Faith Lane Diamond Springs, California

|   |           |
|---|-----------|
| <b>1.0 Executive Summary</b>                        | <b>1</b>  |
| <b>2.0 Introduction</b>                             | <b>7</b>  |
| 2.1 Purpose, Standards, and Definitions             | 7         |
| 2.2 Scope of Services                               | 9         |
| 2.3 Limitations and Exceptions                      | 9         |
| <b>3.0 Site Description</b>                         | <b>11</b> |
| 3.1 General Setting and Location                    | 11        |
| 3.2 Current and Proposed Land Uses                  | 11        |
| <b>4.0 Records Review</b>                           | <b>12</b> |
| 4.1 Standard Environmental Record Sources           | 12        |
| 4.2 Results of Database Search                      | 12        |
| 4.3 Other Records Reviewed                          | 15        |
| 4.4 Physical Setting                                | 18        |
| <b>5.0 Site Reconnaissance</b>                      | <b>19</b> |
| 5.1 Methodology and Limiting Conditions             | 19        |
| 5.2 General Site Setting                            | 19        |
| 5.3 Site Observations                               | 19        |
| 5.4 Results of Site Reconnaissance                  | 27        |
| <b>6.0 Interviews and User Provided Information</b> | <b>28</b> |
| <b>7.0 Findings and Opinions</b>                    | <b>29</b> |
| 7.1 Findings and Opinions                           | 29        |
| 7.2 Data Gaps                                       | 30        |
| <b>8.0 Report Authors and Qualifications</b>        | <b>31</b> |
| <b>9.0 References</b>                               | <b>32</b> |

|  | <u>Page</u> |
|--|-------------|
| <b>Appendices</b>  |             |
| A. Regulatory Records Database Report  | A-1         |
| B. Historical Aerial Photographs, Topographic Maps, Fire Insurance Map, City Directory, and Permit History | B-1         |
| C. Interview Questionnaire   | C-1         |
| <br>   |             |
| <b>List of Tables</b>  |             |
| 3-1 Location and Zoning  | 11          |
| <br>   |             |
| <b>List of Figures</b>   |             |
| 1 Location Map   | 3           |
| 2. Project Map   | 5           |

# SECTION 1.0

---

## Executive Summary

*ESA compiled this Executive Summary using excerpts from the Phase I Environmental Site Assessment report that follows. This Executive Summary may not provide all the information necessary to fully characterize the site and gain an understanding of the issues nor does it detail the Phase I assessment and its findings. ESA does not recommend sole reliance on this Executive Summary.*

This Phase I Environmental Site Assessment was conducted on behalf of Stonehenge Springs, LLC (Stonehenge) for six parcels located along Faith Lane in Diamond Springs in El Dorado County, California (project site) (see **Figures 1 and 2**). This report was prepared in general accordance with guidance from the American Society of Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-13). Any exceptions to, or deletions from, this practice are described in the Scope of Services and Limitations and Exceptions sections of this report.

Stonehenge is considering developing six combined parcels of approximately 144 acres for residential housing. The parcels are mostly undeveloped oak and pine forest, brush, and grassy areas. The mostly unpaved Faith Lane bisects the parcels north to south, and other unpaved roads and graded areas are present. One sewage lift station is the only development on the project site.

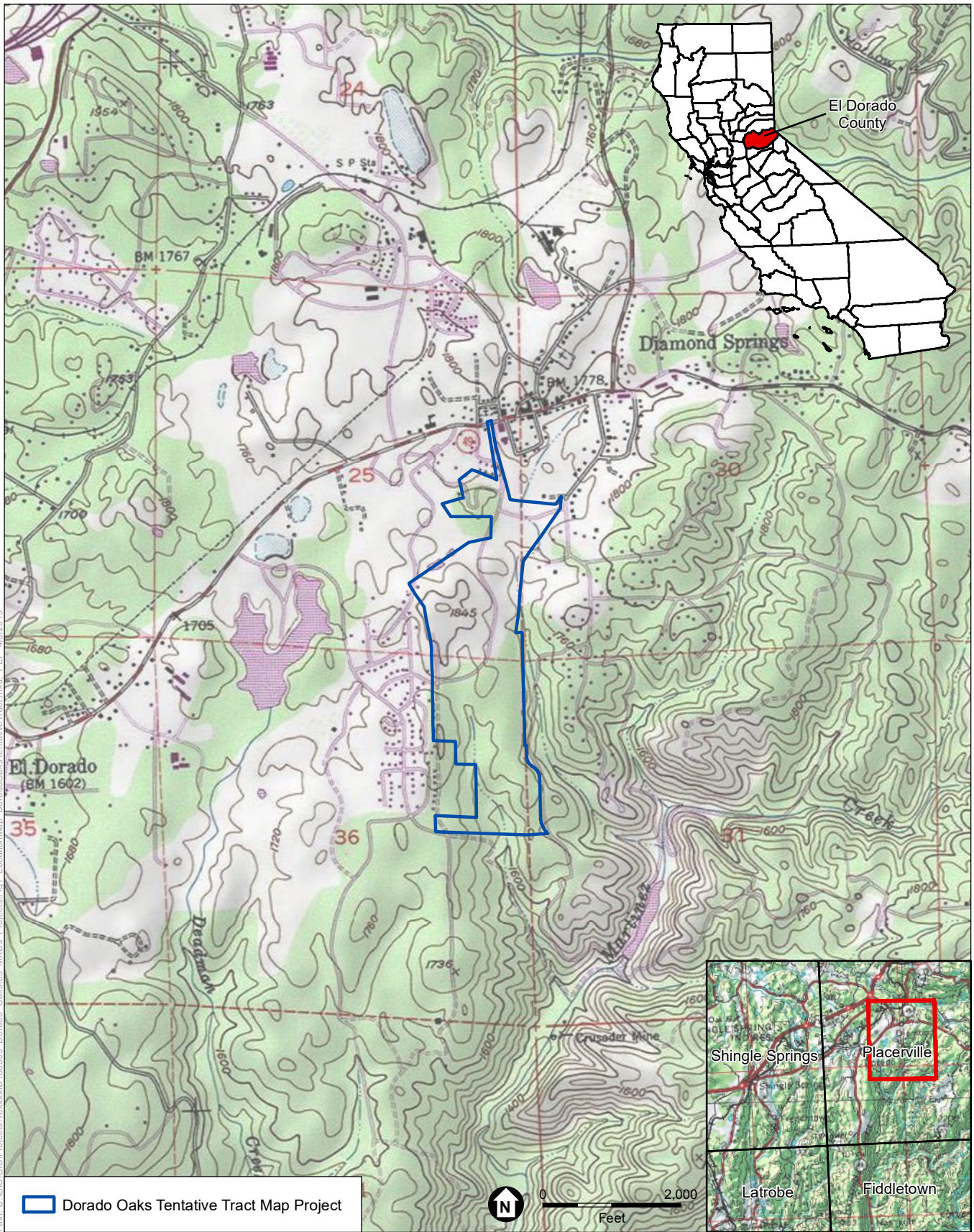
Based on the information reviewed and described in this report, a site reconnaissance of the subject property, and interviews with persons knowledgeable about the subject property, this assessment has noted the following in connection with the subject property:

- The reworking of the surface topography indicates that mining activities conducted in the late 1800s used placer mining techniques where the gold was separated using water and gravity. No mining equipment or associated contamination was observed during the site reconnaissance. The mining activities are not considered a Recognized Environmental Conditions (REC). Note: These terms are defined in Section 2.1.
- A raw sewage spill occurred in 1994 at the lift station on APN 329-310-10. No visual evidence of sewage or discolored soil at or around the lift station was observed during the January 2019 site reconnaissance. This is considered a Historical Recognized Environmental Condition (HREC) and not a current Recognized Environmental Condition (REC).

- With the exception of the lift station noted above, the project site is not identified as a location of soil or groundwater contamination on any of the regulatory databases that were searched.
- One former service station was previously located at 493 Main Street (now Pleasant Valley Road/State Route 49), about 250 feet northeast of the northernmost part of the project site. Two gasoline underground storage tanks (USTs) were removed in 1992 and the Regional Water Quality Control Board (RWQCB) issued a No Further Action (NFA) letter in 1996. However, the NFA letter states that contaminated soil and groundwater are present along the south side of the former service station site extending south to some unknown distance beneath State Route 49 and toward the project site. It is unknown whether the contamination extends to beneath the project site and there is no definitive visual indication of the former UST locations. **This is considered an REC because excavation for the project close to or under State Route 49 may encounter contaminated soil and groundwater.**
- The site reconnaissance observed occasional trash and debris piles in scattered locations throughout the southern portion of the project site. However, the discarded trash and debris is considered a *de minimus* condition because the materials can readily be recycled or disposed of at any municipal (Class III non-hazardous waste) landfill.

This Phase I Environmental Site Assessment did not identify any other RECs, HRECs, Controlled Recognized Environmental Conditions, or business environmental risks. This report should be read in its entirety for a comprehensive understanding of the proposed project conditions described.





SOURCE: USGS 7.5' Topo Quad (Placerville, 1950); ESA, 2019

Dorado Oaks Tentative Tract Map Project

**Figure 1**  
Location Map



*This page intentionally left blank*



Path: U:\GIS\Projects\18\000\180339\_Dorado\_Oaks\03\_MXD\Projects\Fig2\_ProjectMap\_DoradoOaksTentativeTract.mxd, FEP\_4/3/2019

SOURCE: Google (Imagery date June 25, 2018); ESA, 2019

Dorado Oaks Tentative Tract Map Project



**Figure 2**  
Project Map

*This 11 x 17 page intentionally left blank*

# SECTION 2.0

---

## Introduction

### 2.1 Purpose, Standards, and Definitions

Stonehenge Springs, LLC, retained Environmental Science Associates (ESA) to conduct a Phase I Environmental Site Assessment for the Dorado Oaks Tentative Tract Map Project located in Diamond Springs in Sonoma County, California (see **Figures 1 and 2**). This Phase I assessment was conducted in accordance with ESA's scope of work with Stonehenge dated November 11, 2018 and in general accordance with the American Society of Testing Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-13) and the U.S. Environmental Protection Agency (US EPA) Final Rule regarding Standards and Practices for All Appropriate Inquiries as published in the Federal Register on November 1, 2005 (70 FR 66070) and codified at 40 CFR Part 312 (AAI Rule). The US EPA has stated that the newly revised ASTM E1527-13 is consistent with the AAI rule (78 FR 79319, December 30, 2013). Specifically, this final rule amends the AAI Rule at 40 CFR Part 312 to reference ASTM E1527-13 and make clear that persons conducting all appropriate inquiries may use the procedures included in this standard to comply with the AAI Rule.

The purpose of this Phase I assessment is to enable the parties relying on it to satisfy one or more of the requirements for the innocent landholder defense to liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and to evaluate the potential for Recognized Environmental Conditions (RECs) at the Project site in advance of Project development. Three types of RECs are defined by the ASTM E1527-13, as listed below. The term Recognized Environmental Conditions (REC) means:

“The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

The term Historical Recognized Environmental Conditions (HREC) means:

“A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Phase I Environmental Site Assessment is

conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past release to be a recognized environmental condition at the time the Phase I Environmental Site Assessment is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition.”

For a past REC to be considered an HREC it must:

- Have already been remediated (or meet current standards without remediation);
- Not require use restrictions or engineering controls (e.g., cap, subslab depressurization system, etc.); and
- Meet current standards.

If the REC has use restrictions or engineering controls (e.g., caps, control and treatment systems), then the REC may be designated as a Controlled Recognized Environmental Condition (CREC), as defined below. Unlike HRECs, a CREC will be listed in the conclusions section of the Phase I assessment, along with other RECs. The purpose of this category is to bring continuing obligations such as use restrictions, maintenance requirements, reporting requirements to the forefront. The term Controlled Recognized Environmental Conditions (CREC) means:

“A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report.”

RECs, HRECs, and CRECs are not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

An additional category is termed business environmental risk, defined as

“A risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations.”

## 2.2 Scope of Services

The following sections describe ESA's work scope:

Section 2, *Introduction*, includes a discussion of the purpose for performing the Phase I assessment; the standards and definitions used for the Phase I assessment; and the significant assumptions and limitations.

Section 3, *Site Description*, compiles information concerning the location, legal description, current and proposed use, a description of any structures and improvements at the time of ESA's assessment, and adjoining property use for the parcels.

Section 4, *Records Review*, includes ESA's review of various databases available from the federal, state, and local regulatory agencies regarding hazardous materials use, storage, or disposal at the parcels. Client-provided information is summarized and copies of relevant documents are included in the appendices of this report. Physical setting information such as topography, soil, and groundwater conditions are described.

Section 5, *Site Reconnaissance*, describes ESA's observations during reconnaissance of the parcels. The methodology used and limiting conditions are described.

Section 6, *Interviews and User Provided Information*, summarizes telephone and personal interviews conducted with Key Site Managers and persons knowledgeable about site conditions and history.

Section 7, *Findings and Opinions*, presents ESA's findings and professional opinions regarding the information contained in this report. It provides ESA's conclusions regarding the presence of RECs connected with the ten parcels and data gaps, if any, that could affect the recognition of RECs.

Section 8, *Report Authors and Qualifications*, provides the signatures and qualifications of the report authors.

Section 9, *References*, is a summary of the resources used to compile this report that are in addition to the information provided in the appendices.

The appendices contain certain pertinent documentation regarding the parcels. Appendices A and B contain the regulatory agency database search results report, historical aerial photographs and topographic maps, fire insurance map and city directory search results, and the permit history. Appendix C provides the results of the interview questionnaire.

## 2.3 Limitations and Exceptions

No environmental site assessment can wholly eliminate uncertainty regarding the potential for RECs, HRECs, and CRECs in connection with a property. Conformance of this Phase I

assessment with ASTM E1527-13 reduces, but does not eliminate, uncertainty regarding the potential for RECs, HRECs, and CRECs in connection with the subject property. While ESA has made every effort to discover and interpret available historical and current information on the properties within the time available, some potential always remains for undiscovered contamination to be present. ESA's report is a best-efforts collection and interpretation of available information, and cannot be considered wholly conclusive. This report and the associated work were provided in accordance with the principles and practices generally employed by the local environmental consulting profession. This is in lieu of all warranties, expressed or implied. No other warranty is expressed or implied. ASTM E1527-13 is included in this report by reference.

This Phase I assessment is based primarily on historical research, a database review, and a site reconnaissance of accessible areas. This Phase I assessment does not include "non-scope issues" as specified by ASTM E1527-13, such as surveys for the presence of the following items on or in the vicinity of the subject property: asbestos-containing materials (ACMs), polychlorinated biphenyls (PCBs), radon, indoor air quality, lead-based paint (LBP) analysis, lead in drinking water, industrial hygiene, health and safety, regulatory compliance, and high voltage lines.

The conclusions presented are professional opinions based solely upon indicated data described in this report, visual site and vicinity observations, and the interpretation of the available historical information and documents reviewed, as described in this report. Unless ESA has actual knowledge to the contrary, information obtained from interviews or provided to ESA is assumed to be correct and complete. ESA does not assume any liability for information that was misrepresented to ESA by others or for items not visible, accessible, or present on the parcels during the time of the site reconnaissance. The conclusions are intended exclusively for the purpose outlined herein and the site location and project indicated. Any use or reuse of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of the user.

Opinions and recommendations presented herein apply to the site conditions existing at the time of this Phase I assessment and cannot necessarily apply to site changes of which ESA is not aware and has not had the opportunity to evaluate. Changes in the conditions of the parcels may occur with time due to natural processes or the works of man on the property or adjacent properties. Changes in applicable standards may also occur as a result of legislation, regulation, or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond ESA's control. Opinions and judgments expressed herein are based on ESA's understanding and interpretation of current regulatory standards, and should not be construed as legal opinions.



# SECTION 3.0

---

## Site Description

### 3.1 General Setting and Location

The project site is located in Diamond Springs on the western slopes of the Sierra Nevada and consists of six undeveloped parcels with one paved access road, several sections of unpaved roads, and one sewer lift station. The parcels are mostly hilly and slope to the south with some flat areas. The majority of the project suite shows the residual surface reworking of late 1800s placer mining activities. The project site consists of six parcels with the Assessor Parcel Number (APN), acreage, land use, zoning, and development information tabulated below in **Table 3-1**. The regional location and project site are shown on **Figures 1 and 2**.

**TABLE 3-1  
LOCATION AND ZONING**

| APN        | Acres   | Development        | Land Use | Zoning |
|------------|---------|--------------------|----------|--------|
| 054-402-18 | 1.549   | Paved road         | MFR      | RM     |
| 329-301-15 | 4.08    | None               | MFR      | RM     |
| 329-301-20 | 4.86    | None               | MFR      | RM     |
| 329-310-10 | 69.47   | Sewer lift station | HDR      | R1     |
| 329-310-11 | 6.38    | None               | HDR      | R1     |
| 329-310-12 | 57.39   | None               | HDR      | R1     |
| Total      | 143.729 |                    |          |        |

NOTES:

RM = Multi-Unit Residential  
R1 = Single Unit Residential District  
HDR = High Density Residential  
MFR = Multi-Family Residential  
SOURCE: El Dorado County, 2018

### 3.2 Current and Proposed Land Uses

The project site currently has no developed use, other than the sewer lift station. Stonehenge is considering developing the parcels with residential units.

# SECTION 4.0

---

## Records Review

The purpose of the records review is to obtain and examine records that could help to evaluate potential RECs, HRECs, and CRECs in connection with the parcels. This section documents the database records search, the evaluation of other records, summarizes information provided by the property owners, and describes the physical setting of the parcels.

### 4.1 Standard Environmental Record Sources

Federal, state, and local regulatory agencies publish databases of businesses and properties that handle hazardous materials or hazardous waste, including those properties with a known release of hazardous substances to soil and/or groundwater. These databases are available for review and/or purchase at the regulatory agencies, or the information may be obtained through a commercial database service. ESA contracted with a commercial database service to perform the regulatory agency database search for listings within the appropriate ASTM Standard minimum search distance (GeoSearch, 2018). A detailed description of the types of information contained in each of the databases reviewed and the agency responsible for compiling the data is included in the Radius Report provided as **Appendix A**, which includes a list of acronyms for the individual searched databases.

ESA evaluated the listings with regard to the nature of potential chemicals of concern, the extent of known releases, and the physical setting of the parcels (e.g., soil properties, geology, and seismicity). In general, reported or potential releases likely to affect a property would include those located on or within 1/8-mile radius of the parcels. Sites that are reported to use or have used hazardous materials but do not have any records of leaks, spills, or releases are not considered further since such sites would not have affected the project site. ESA also considered additional factors such as chemical properties, regional knowledge of the site vicinity, groundwater flow direction, and available past regulatory documentation as part of the REC evaluation.

### 4.2 Results of Database Search

All information on hazardous materials sites is from the regulatory database search (GeoSearch, 2018) unless otherwise indicated. Updates to the regulatory agency database records search were acquired by checking the State Water Resources Control Board (SWRCB) GeoTracker and the Department of Toxic Substances Control (DTSC) EnviroStor websites to search for other possible site listings and updated information to the database search, and to identify sites that have been recently cleanup and closed after the database search was conducted.

## ***Subject Parcel Listings***

The following two listings are located within the project site with locations shown on Figure 1. The site numbers are keyed to the listings and maps in the regulatory database report in Appendix A.

**1 – Deb’s Frosty Lift Station** – A raw sewage leak was reported on December 16, 1994, at the sewer lift station located on APN 329-310-10. The spill reportedly went to a nearby culvert. Cleanup was conducted by the El Dorado Irrigation District. As discussed below in Section 5.3, Site Observations, no visual evidence of sewage or discolored soil or concrete was observed at or around the lift station during the January 2019 site reconnaissance. Therefore, this is considered a HREC and not a current REC.

**2 - Phillip N. Hufft mining claim** – A claim for placer gold mining is listed under the name of Phillip N. Hufft and the majority of the project site shows extensive evidence of reworking for placer mining operations. No mining equipment or associated contamination was observed during the site reconnaissance. An internet check of the mining name claim identified a Phillip Newton Hufft that died in Placerville on February 7, 1878, suggesting that this is a gold rush-era claim that is still listed but hasn’t been active since the late 1800’s. The mining operations appear to have used placer mining techniques where gold was separated using water and gravity. This technique would not have used chemicals, such as mercury. Therefore, this placer mining operation is not anticipated to have resulted in residual environmental issues and is not considered a REC.

## ***Offsite Listings***

Twenty-one offsite locations were listed for hazardous materials use within the ASTM search distances. However, most of the offsite listings are listings for routine hazardous materials use or disposal but with no records of spills, leaks, or releases. Sites with no records of leaks, spills, or releases are not considered further.

The following 12 sites are located upgradient of or near to the project site and have records of spills, leaks, or releases. The site numbers are keyed to the listings and maps in the regulatory database report in Appendix A. As discussed below, only the former service station identified as Site #8 is considered a REC.

**4 – Illegal drug lab** – This site was located adjacent to the eastern border of APN 329-310-10 and reported in 2002. No additional information was available. The site was not listed on the DTSC EnviroStor website, which tracks active cleanup sites under their jurisdiction. Given the date of the lab discovery and the lack of an active listing, this site is considered to be an HREC but not a current REC.

**4 – Potable water leak** – About 1,000 gallons of potable water was released from a pipe break in 2004. However, given that the released material was water treated to drinking water standards, this would not be a hazardous material and would not have adversely affected the project site.

**6 – Waste water spill** – About 300 gallons of waste water was spilled into a drainage ditch in 2008. No information was listed regarding the nature of the waste water, the extent of the spill, or the cleanup activities. Given the date of the spill, this spill is considered unlikely to be a continuing environmental concern. This site is considered to be an HREC but not a current REC.

**8 – Former service station** – One former service station was previously located at 493 Main Street (now Pleasant Valley Road/State Route 49), about 250 feet northeast of the northernmost part of the project site (GeoSearch, 2018; RWQCB, 1996). Two 500-gallon gasoline USTs were removed in 1992. The USTs had numerous holes and the surrounding soil was contaminated. Although the RWQCB issued a No Further Action (NFA) letter in 1996, the NFA letter states that contaminated soil and groundwater are present along the south side of the former service station site extending south to beneath State Route 49 and toward the project site. Soil samples from the south wall of the UST excavation facing State Route 49 had 540 milligrams per kilograms (mg/kg) of total petroleum hydrocarbons (TPH) as gasoline, 1.4 mg/kg of toluene, 2.2 mg/kg of ethylbenzene, and 11 mg/kg of xylenes. Soil samples collected further south and closer to State Route 49 had 260 to 1,400 mg/kg of TPH as gasoline, 0.49 to 3.8 mg/kg of toluene, non-detect to 16 mg/kg of ethylbenzene, and 3.0 to 86 mg/kg of xylenes. In addition, groundwater collected from the excavation pit had 40 micrograms per liter (ug/L) of TPH as gasoline, 500 ug/L of benzene, 1,200 ug/L of toluene, 410 ug/L of ethylbenzene, and 3,000 ug/L of xylenes. The RWQCB concluded that contaminated soil and groundwater extends to an unknown distance beneath State Route 49. It is unknown whether the soil and groundwater contamination extends further to beneath the project site. Note that the available records did not include maps showing the location of the USTs or contamination. **This is considered an REC because excavation for the project close to and possibly south of State Route 49 may encounter contaminated soil and groundwater.**

**12 – Waste connections** – This site is a waste recycling and disposal center located at 4100 Throwita Way that was constructed on a former lime processing facility. The environmental concern is that lime has an elevated pH that could threaten groundwater quality. However, the direction of groundwater flow is to the northwest away from the project site (Youngdahl, 2018). Therefore, any contamination issues with the former lime processing center would be unable to affect the project site.

**14 – Foothill Auto Repair** – The site is listed for poor housekeeping that allowed solvents, antifreeze, and waste oil to be spilled on the ground (GeoSearch, 2019). However, a nearby well was sampled and the testing results indicated that the spills had not migrated to groundwater. Therefore, any contamination issues with the auto repair facility were limited to the repair facility and would be unable to affect the project site.

**16 – Steve’s Cheaper** – This service station, now a Tower Chevron station, located at 130 Pleasant Valley Road had leaking gasoline USTs that contaminated groundwater in 1997. Remediation was complete by 2012 and the RWQCB issued a no further action letter by 2013. In addition, the site is located about 3/4-mile southwest and downgradient of the project site. Therefore, any contamination issues with this service station would be unable to affect the project site.

**18 and 21 – Celebrity Plating** – This site is a plating shop cited for poor housekeeping with cyanide, chromium, nickel, and other metals detected in soil from spills. However, this site is located about ½-mile north of the project site. Investigations at the nearby Site 12, discussed above, indicated that the direction of groundwater flow is to the northwest, away from the project site (Youngdahl, 2018). In addition, the DTSC determined that this site does not pose a threat to other properties. Therefore, any contamination issues with this site would be unable to affect the project site.

**20 – Teters Auto Wrecking** – This site, located about ½-mile north of the project site, is listed as a one-acre auto wrecking yard in 1987 based on the nature of the site activities. No further investigation is documented, no records of spills, leaks, or releases are recorded, and the site is listed as a low priority. Investigations at the nearby Site 12, discussed above, indicated that the direction of groundwater flow is to the northwest, away from the project site (Youngdahl, 2018). Therefore, any contamination issues with this site would be unable to affect the project site.

**22 – Oxygen Service and Supply Company** – This site, located about ½-mile north of the project site, is an oxygen service and supply facility listed due to the nature of the facility. No further investigation is documented, and no records of spills, leaks, or releases are recorded. Investigations at the nearby Site 12, discussed above, indicated that the direction of groundwater flow is to the northwest, away from the project site (Youngdahl, 2018). Therefore, any contamination issues with this site would be unable to affect the project site.

**23 – Old Caldor Lumber Company** – This site, located about ¾-mile north of the project site, is a former lumber yard, listed due to the nature of the previous activities. The DTSC completed a Preliminary Endangerment Assessment in 1989 and concluded that this site does not pose a threat to public health or the environment (GeoSearch, 2018). Therefore, any contamination issues with the former lumber yard would be unable to affect the project site.

### ***Sites with Poor or Inadequate Addresses***

Sites not plotted due to poor or inadequate address information are referred to as orphan sites. Three orphan sites were listed. The Union Mine address is about 1-½ mile to the southwest and cross- to downgradient of the project site. The two Bright Court addresses are located about one mile west of the project site and cross gradient of the project site. These three orphan site listings are not upgradient of the project site and would not be able to affect the project site.

## **4.3 Other Records Reviewed**

ESA accessed websites for the State Water Resources Control Board (SWRCB) and Department of Toxic Substance Control (DTSC) that track hazardous materials sites. In addition, the regulatory agency records search provides historical aerial photographs, historical topographic maps, and a search of Sanborn insurance maps and city directories for review. The results of the review of these records are discussed below.

## Hazardous Materials Websites

ESA accessed the SWRCB and DTSC combined online GeoTracker database at <http://geotracker.waterboards.ca.gov/> and EnviroStor database at <http://www.envirostor.dtsc.ca.gov/public> for cleanup sites located on or near the subject property under SWRCB jurisdiction. The six parcels are not listed on the website. The former service station previously located at 493 Main Street is discussed above as Site 2 was listed and the available information incorporated above. The Youngdahl, 2018, report was acquired from the GeoTracker website and used to augment the discussions above for Sites 12, 18, 20, 21, and 22. No other active sites were listed upslope (upgradient) of the subject parcel.

## Historical Aerial Photographs

Historical aerial photographs are available for the years 1946, 1952, 1964, 1975, 1980, 1984, 1993, 2004, 2005, 2006, 2009, 2010, 2012, 2014, and 2016, included in **Appendix B** (GeoSearch, 2018). The 2018 aerial photograph is used as the base for Figure 2.

### 1946

The 1946 aerial photograph shows the project site largely in the current undeveloped condition with State Route 49 in its current alignment. Faith Lane and Silver Drive are not yet present. Evidence of the placer mining activities conducted south of State Route 49 in the late 1800's has been muted by time, consisting of various unpaved roads, paths, and other ground surface works. No mining equipment is visible in the photograph, assuming any had been used for placer mining. Two rectangular structures of unknown use are visible inside the green oval in the middle of the project site. The northernmost portion of the project site next to State Route 49 has what appears to be an orchard with two structures likely to be a residence and agricultural support structure. As discussed above in the regulatory records search, a service station with USTs removed in 1992 was reportedly present at the location in the blue oval. A building is present within the blue oval and does not appear to be different from the present building occupying this location. The site reconnaissance observed the building is identified as the Gust Brothers Building constructed in 1930. No obvious fuel islands are visible, although the 1946 station configuration may have been different from modern fuel island configurations. Given the documentation of a fuel leak next to and underneath State Route 49, the USTs and fuel dispensers are assumed to have been located between the building and the highway or perhaps along the side of the building near the highway. The surrounding area is a mix of rural use with some development. The graveyard, Carpenter house, and Morrill building identified on Figure 2 are present.

### 1952

In the 1952 aerial photograph, the two structures that were in the green oval are gone. Almost all of the orchard and building closest to State Route 49 are also gone; the assumed agricultural structure set further back from the highway is still present.

## **1964**

The 1964 aerial photograph shows one unpaved road entering the northwestern area but no other apparent changes on the project site.

## **1975**

The 1975 aerial photograph shows Faith Lane in its current alignment. The Diamond Springs shopping center is also present just east of the northernmost portion of the project site.

## **1980**

The 1980 aerial photograph is of poor quality and does not appear to show any changes.

## **1984**

The 1984 aerial photograph is of poor quality but shows some grading associated with previous development efforts that did not proceed beyond some initial grading.

## **1993**

The 1993 aerial photograph is of good quality and shows the grading of roads and other areas.

## **2004**

The 2004 aerial photograph shows the existing sewer lift station structure in the green oval.

## **2005 through 2016**

The 2005 through 2016 aerial photographs show no substantive changes.

## **Historical Topographic Maps**

Historical topographic maps are available for the years 1891, 1892, 1893, 1949, 1950, 1973, and 2012, and are included in **Appendix B** (GeoSearch, 2018).

The 1891, 1892, 1893 are all small scale topographic maps (1:125,000-scale) that provide limited detail, but each show the project site with no development and State Route 49 in its current alignment. One unimproved road is shown along the western side of the project site. The 1949 topographic map is a larger scale map (1:24,000-scale) and shows China Garden Road and other nearby roadways. Diamond Springs is shown largely as currently developed. The 1950, 1973, and 2012 topographic maps show no substantive changes, though Faith Lane and Silver Road appear on the 1975 and later maps.

## **Fire Insurance Maps**

Fire insurance maps did not cover the area of the project site, as documented in Appendix B (GeoSearch, 2018).

## City Directory

A city directory search was conducted for the project site and nearby parcels (GeoSearch, 2018). No listings were available for Faith Lane properties. The search report is in Appendix B.

## Permit History

Previous residential development efforts referred to as the Missouri Flat-Diamond Springs Redevelopment Project in the early 1980s proceeded as far as some limited initial grading visible beginning with the 1984 aerial photograph, discussed above (Snoke, 1984). The project did not proceed further. The Eldorado County online permit website was checked for violations; no violations were recorded (El Dorado County, 2019).

## County Assessor Records

The El Dorado County Recorders records were checked for environmental liens on APN 329-301-20-100, the parcel adjacent to State Route 49 (GeoSearch, 2018). No liens were recorded.

## 4.4 Physical Setting

The following sections provide information about the physical setting of the parcels obtained the regulatory agency records search in Appendix B. Although geotechnical information is not a required element of ASTM E1527-13 Phase I assessments, the regulatory records search includes some geotechnical information, as provided below.

### Topography

The U.S. Geological Survey (USGS), 7.5 minute Placerville, California, topographic quadrangle map, 1973, depicts the subject property at an elevation ranging from about 1,610 feet above sea level at the southernmost end of the project site to about 1,845 feet above sea level at a hilltop near the center of the project site. Most of the project site is hilly and sloping to the south.

### Geology and Hydrology

Surface soil types consist of very fine sandy loam to very rocky sandy loam, with placer diggings throughout the area (GeoSearch, 2018). The entire project site is underlain Mesozoic granitic rocks with rock exposures in various locations. No wells are located on the project site. The flow direction of groundwater likely mimics the ground surface flowing to the south.

### Oil and Gas Fields

There are no recorded oil or natural gas wells located on or within ½ mile of the parcel (GeoSearch, 2018).



## Flood Zone Designation

The parcel is not located within the 100-year flood zone (GeoSearch, 2018).

*This page intentionally left blank*

## **SECTION 5.0**

---

### **Site Reconnaissance**

#### **5.1 Methodology and Limiting Conditions**

The purpose of the site reconnaissance was to identify visible hazardous materials on the subject property. Mr. Michael Burns of ESA conducted the site reconnaissance on January 10, 2019, to assess present conditions. Weather at the time of the site visit was clear. The site conditions discussed below are limited to readily apparent environmental conditions observed. ESA archaeologists Heidi Koenig and Robin Hoffman accompanied Mr. Burns on the site reconnaissance. Local resident Mike Roberts and Native American representatives Ramona Tripp-Verbeck, Joseph Valdez, and John McGregor also accompanied the group for some of the reconnaissance. Notable features and site conditions are identified on Figure 2 and discussed below. Photographs of features of interest are included in the text below.

#### **5.2 General Site Setting**

The project site consists of six parcels totaling about 144 acres. Access is from State Route 49 (also referred to as Main Street or Pleasant Valley Road) and a paved section of Faith Lane that extends south to unpaved roads and footpaths further south into and throughout the project site. A stream drainage flows south along the eastern side of the project site and various drainages are present throughout the site, all flowing generally south.

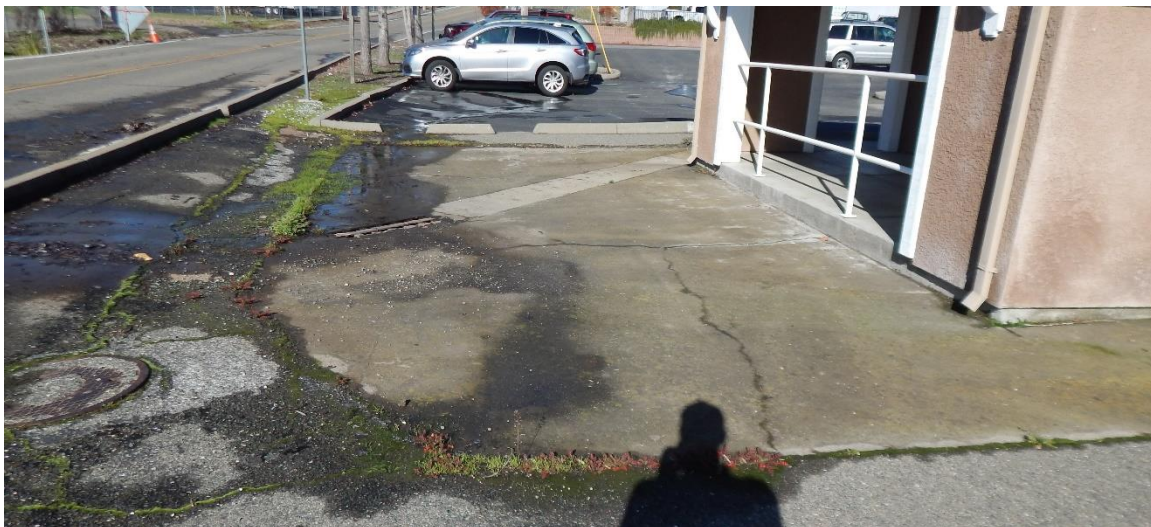
#### **5.3 Site Observations**

The project site consists mostly of conifer, oak, and brush forest, and some open grassy areas. The majority of the project site has a highly disturbed topography from placer mining activities in the late 1800s and defunct development efforts during the 1980s. The site reconnaissance observations discussed below are from the north to the south, with items of interest noted on Figure 2.

The northernmost portion of the project site consists of the paved portion of Faith Lane (APN 054-402-18) that extends from State Route 49 south into the project site. The road extends south to a locked gate and an unpaved road section further south, as shown in the photographs below. The Diamond Village shopping center is along the east side of the paved road section. This shopping center consists of various commercial retail outlets; no industrial or manufacturing facilities were observed. Deb's Frosty, a fast food outlet, is located along the west side of Faith Lane. Hazardous materials use for these commercial facilities would be limited to small household quantities of cleaning solutions. A buried sewer line is located under Faith Lane. No RECs were observed.



As discussed above in the regulatory records search, a former service station was located at 493 Main Street (State Route 49), north and across the highway from the project site (see Figure 2). The photographs below show the existing building, built in 1930 but since modified, which does not have the appearance of a former service station. The USTs were likely near the street. The bottom photograph below shows a concrete area along the west side of the building that may have possibly been the location of the former USTs, but this is speculation. Otherwise, there were no distinct indications of the UST locations.



The El Dorado Irrigation District sewer lift station is shown in the photographs below. No staining was observed on the concrete pads or the surrounding soil.



The photographs below show a former mine adit, now filled in with soil (see Figure 2). One small section of railroad track rail was observed, likely used to stabilize the opening. No mining equipment or materials were observed.



The body of a flipped over 1968 Chevrolet Camaro was observed at the location shown on Figure 2. The engine and transmission had been removed, along with the fuel, oil, and lubricants within those parts. The fuel tank was still present. However, the fueling port was open, indicating that any gasoline left in the tank would have evaporated away long ago. No stressed vegetation was observed.





The northern portion of the project site is free of trash and discarded debris. As the site reconnaissance proceeded further south of the mine adit into the more heavily forested portions southern portion of the project site, the observations of trash increased. The photographs below show trash at the green oval location shown on Figure 2. The trash at this and other locations consisted of household trash, furniture and bedding, tires, a water heater, and other debris. Various discarded small containers of household-size cleaning solutions, motor oil, and pesticides were observed; all were examined and found to be empty. Therefore, the presence of the trash and debris is considered a *de minimus* condition because the materials could be disposed of at any municipal (Class III non-hazardous waste) landfill.



Miscellaneous individual items are scattered throughout the southern portion of the project site, including pieces of furniture, bedding, a refrigerator, containers, and other items, as shown in the photographs below. As previously noted, these are considered *de minimus* conditions since the materials could be recycled or disposed at any municipal landfill.



## 5.4 Results of Site Reconnaissance

No evidence of discolored or stained pavement, soil, or water; stressed vegetation; above ground or underground storage tanks; pits; or lagoons were observed at the project site. Trash and debris were observed in scattered locations throughout the southern portion of the project site. However, the trash and debris are considered a *de minimus* condition because the materials can readily be recycled or disposed of at any municipal landfill. No RECs were observed.

## **SECTION 6.0**

---

# **Interviews and User Provided Information**

The following sections highlight information provided during interviews conducted for the project. Interviews included contacting individuals familiar with the subject property and knowledgeable of the subject parcel's historic and existing conditions relative to hazardous materials. The objective of the interview process is to obtain additional information regarding the history and current uses of the subject parcel. Much of the information acquired has been incorporated into various sections of this report.

### **6.1 Interview with Current Property Owner**

Mr. Kevin Sweeney, the developer/owner was contacted and interviewed using the form provided in Appendix C. Mr. Sweeney has been associated with the property for about 20 years. He stated there are no known hazardous materials or environmental issues known to him. He is aware that one or more development projects prior to his time were considered but none of those project advanced beyond initial grading stages.

### **6.2 Interview with Local Resident**

Mr. Mike Robert, a long-time local resident and amateur historian, provided information during the site reconnaissance. He could not recall a service station being located at 493 Main Street (now Pleasant Valley Road and State Route 49), north and across the highway from the project site.

## SECTION 7.0

---

# Findings and Opinions

## 7.1 Findings and Opinions

ESA has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Standard Practice E1527-13. Any exceptions to, or deletions from, this practice are described in the Scope of Services and Limitations and Exceptions sections of this report. Based only on the information reviewed and described in this report, a site reconnaissance of the parcel, and interviews, this assessment has noted the following in connection with the project site:

- With the exception of the sewer lift station, the project site was not identified as a location of soil or groundwater contamination on any of the databases that were searched.
- There is one sewer lift station operating on the project site that appears to be good working order with no visible environmental issues.
- There is no indication that previous use as a placer mining operation resulted in contamination to the parcel. No mining equipment was observed. The reworking of the surface topography suggests all mining was conducted using placer mining techniques where the gold was separated using water and gravity.
- The site reconnaissance observed trash and debris scattered throughout the southern portion of the project site. However, the discarded trash and debris is considered a *de minimus* condition because the materials can readily be recycled or disposed of at any municipal (Class III non-hazardous waste) landfill.

This assessment has identified one REC adjacent to the project site:

- One former service station was previously located at 493 Main Street (now Pleasant Valley Road and State Route 49), about 250 feet northeast of the northernmost part of the project site. Two gasoline USTs were removed in 1992 and the Regional Water Quality Control Board (RWQCB) issued a No Further Action (NFA) letter in 1996. However, the NFA letter states that contaminated soil and groundwater are present along the south side of the former service station site extending to beneath State Route 49 and toward the project site. It is unknown whether the contamination extends to beneath the project site. **This is considered an REC because excavation for the project close to State Route 49 may encounter contaminated soil and groundwater.**

## 7.2 Data Gaps

ESA attempted to obtain reasonably ascertainable information regarding the subject property and their surrounding environs. There were no data gaps identified that could affect the identification of RECs, HRECs, or CRECs.

## SECTION 8.0

# Report Authors and Qualifications

---

### 8.1 Report Authors and Signatures

This section includes qualification statements of the environmental professionals responsible for conducting the Phase I assessment and preparing this report.

Mr. Michael Burns, PG, CEG, CHG, of ESA conducted the data review for the campground, conducted the site reconnaissance, and prepared the Phase I Environmental Site Assessment report. Mr. Burns has over 30 years of experience in environmental site investigations, characterizations, and assessments, including Phase I Environmental Site Assessments.

The work conducted and the report written by Mr. Burns was reviewed by Mr. Luke Evans. Mr. Evans has 20 years of experience in environmental site investigations, characterizations, and assessments, including Phase I Environmental Site Assessments.

Mr. Burns declares that, to the best of his professional knowledge and belief, he meets the definition of Environmental Professional as defined in 40 CFR §312.10. Mr. Evans declares that, to the best of his professional knowledge and belief, he meets the definition of Environmental Professional as defined in 40 CFR §312.10.

Mr. Burns has the specific qualifications based on education, training, and experience to assess a parcel of the nature, history, and setting of this parcel. With the assistance of Mr. Evans, he has developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Principal Analyst/Reviewer:

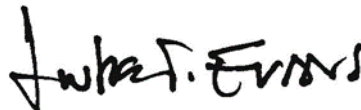


April 3, 2019

---

Michael G. Burns, PG #4532, CEG #1846, CHG #280

Senior Reviewer:



April 3, 2019

---

Luke Evans, Program Manager

## SECTION 9.0

---

### References

- ASTM, 2013, E1527-13 *Standard Practice for Environmental Site Assessments: Phase 1 Environmental Assessment Process*
- El Dorado County Online Permits, 2019, website check for permits and permit violations, February 2
- GeoSearch, 2018, *Radius Report, Target Property: Stonehenge Springs, Faith Lane, Diamond Springs, El Dorado County, California*, December 7
- Snoke, 1984, *Archaeological Reconnaissance of the Missouri Flat-Diamond Springs Redevelopment Project*. NCIC Ref. # 4258. Confidential cultural resources report on file at the North Central Information Center, California State University, Sacramento.
- Youngdahl Consulting Group, 2018, *Western El Dorado Recovery Material Facility, 4100 Throwita Way, Diamond Springs, El Dorado County, California, Third Quarter 2018 Groundwater Sampling Report*, September 28



This page intentionally left blank



# **APPENDIX A**

---

## **Regulatory Records Database Report**



---

## **Radius Report**

---

[NEW: GeoLens by Geosearch](#)

*Target Property:*  
**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, El Dorado County, California 95619**

*Prepared For:*  
**Environmental Science Assoc-San Francisco**

**Order #: 118699**  
**Job #: 269577**  
**Project #: D180359**  
**PO #: D180359-99**  
**Date: 12/07/2018**

---

## Table of Contents

---

|  |                |
|--|----------------|
| <i>Target Property Summary</i> . . . . .           | 1              |
| <i>Database Summary</i> . . . . .                  | 2              |
| <i>Database Radius Summary</i> . . . . .           | 7              |
| <i>Radius Map</i> . . . . .                        | 12             |
| <i>Ortho Map</i> . . . . .                         | 14             |
| <i>Topographic Map</i> . . . . .                   | 15             |
| <i>Located Sites Summary</i> . . . . .             | 15             |
| <i>Elevation Summary</i> . . . . .                 | 20             |
| <i>Unlocated Sites Summary</i> . . . . .           | 81             |
| <i>Environmental Records Definitions</i> . . . . . | 83             |
| <i>Unlocatable Report</i> . . . . .                | See Attachment |
| <i>Zip Report</i> . . . . .                        | See Attachment |

---

## Disclaimer

---

*This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR § 312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal, state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR § 312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.*

*The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.*

## Target Property Summary

### **Target Property Information**

Stonehenge Springs

Faith Lane

Diamond Springs, California 95619

#### **Coordinates**

Area centroid (-120.81907, 38.6845057)

1,761 feet above sea level

#### **USGS Quadrangle**

Placerville, CA

### **Geographic Coverage Information**

**County/Parish:** El Dorado (CA)

#### **ZipCode(s):**

Diamond Springs CA: 95619

El Dorado CA: 95623

Placerville CA: 95667



## Database Summary

### **FEDERAL LISTING**

#### **Standard Environmental Records**

| <b>Database</b>  | <b>Acronym</b>            | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|--|---------------------------|------------------|--------------------|------------------------------|
| EMERGENCY RESPONSE NOTIFICATION SYSTEM   | <a href="#">ERNSCA</a>    | 0                | 0                  | TP/AP                        |
| FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES  | <a href="#">EC</a>        | 0                | 0                  | TP/AP                        |
| LAND USE CONTROL INFORMATION SYSTEM  | <a href="#">LUCIS</a>     | 0                | 0                  | TP/AP                        |
| RCRA SITES WITH CONTROLS   | <a href="#">RCRASC</a>    | 0                | 0                  | TP/AP                        |
| RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR   | <a href="#">RCRAGR09</a>  | 0                | 0                  | 0.1250                       |
| RESOURCE CONSERVATION & RECOVERY ACT - NON-GENERATOR   | <a href="#">RCRANGR09</a> | 0                | 0                  | 0.1250                       |
| FEMA OWNED STORAGE TANKS   | <a href="#">FEMAUST</a>   | 0                | 0                  | 0.2500                       |
| BROWNFIELDS MANAGEMENT SYSTEM  | <a href="#">BF</a>        | 0                | 0                  | 0.5000                       |
| DELISTED NATIONAL PRIORITIES LIST  | <a href="#">DNPL</a>      | 0                | 0                  | 0.5000                       |
| NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES   | <a href="#">NLRRCRAT</a>  | 0                | 0                  | 0.5000                       |
| RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES | <a href="#">RCRAT</a>     | 0                | 0                  | 0.5000                       |
| SUPERFUND ENTERPRISE MANAGEMENT SYSTEM   | <a href="#">SEMS</a>      | 0                | 0                  | 0.5000                       |
| SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY                               | <a href="#">SEMSARCH</a>  | 1                | 0                  | 0.5000                       |
| NATIONAL PRIORITIES LIST   | <a href="#">NPL</a>       | 0                | 0                  | 1.0000                       |
| NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES  | <a href="#">NLRRCRAC</a>  | 0                | 0                  | 1.0000                       |
| PROPOSED NATIONAL PRIORITIES LIST  | <a href="#">PNPL</a>      | 0                | 0                  | 1.0000                       |
| RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES                          | <a href="#">RCRAC</a>     | 0                | 0                  | 1.0000                       |
| RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES               | <a href="#">RCRASUBC</a>  | 0                | 0                  | 1.0000                       |
| <b>SUB-TOTAL</b>   |                           | <b>1</b>         | <b>0</b>           |                              |

#### **Additional Environmental Records**

| <b>Database</b>  | <b>Acronym</b>           | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|--|--------------------------|------------------|--------------------|------------------------------|
| AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM | <a href="#">AIRSAFS</a>  | 0                | 0                  | TP/AP                        |
| BIENNIAL REPORTING SYSTEM  | <a href="#">BRS</a>      | 0                | 0                  | TP/AP                        |
| CERCLIS LIENS  | <a href="#">SFLIENS</a>  | 0                | 0                  | TP/AP                        |
| CLANDESTINE DRUG LABORATORY LOCATIONS                            | <a href="#">CDL</a>      | 0                | 0                  | TP/AP                        |
| EPA DOCKET DATA  | <a href="#">DOCKETS</a>  | 0                | 0                  | TP/AP                        |
| ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION                   | <a href="#">ECHKOR09</a> | 0                | 0                  | TP/AP                        |

## Database Summary

| <b>Database</b>  | <b>Acronym</b>               | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|--|------------------------------|------------------|--------------------|------------------------------|
| FACILITY REGISTRY SYSTEM   | <a href="#">FRSCA</a>        | 3                | 0                  | TP/AP                        |
| HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM  | <a href="#">HMIRSR09</a>     | 0                | 0                  | TP/AP                        |
| INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)                              | <a href="#">ICIS</a>         | 0                | 0                  | TP/AP                        |
| INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM | <a href="#">ICISNPDES</a>    | 0                | 0                  | TP/AP                        |
| MATERIAL LICENSING TRACKING SYSTEM   | <a href="#">MLTS</a>         | 0                | 0                  | TP/AP                        |
| NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  | <a href="#">NPDESR09</a>     | 0                | 0                  | TP/AP                        |
| PCB ACTIVITY DATABASE SYSTEM   | <a href="#">PADS</a>         | 0                | 0                  | TP/AP                        |
| PERMIT COMPLIANCE SYSTEM   | <a href="#">PCSR09</a>       | 0                | 0                  | TP/AP                        |
| SEMS LIEN ON PROPERTY  | <a href="#">SEMCLIENS</a>    | 0                | 0                  | TP/AP                        |
| SECTION SEVEN TRACKING SYSTEM  | <a href="#">SSTS</a>         | 0                | 0                  | TP/AP                        |
| TOXIC SUBSTANCE CONTROL ACT INVENTORY  | <a href="#">TSCA</a>         | 0                | 0                  | TP/AP                        |
| TOXICS RELEASE INVENTORY   | <a href="#">TRI</a>          | 0                | 0                  | TP/AP                        |
| ALTERNATIVE FUELING STATIONS   | <a href="#">ALTFUELS</a>     | 0                | 0                  | 0.2500                       |
| HISTORICAL GAS STATIONS  | <a href="#">HISTPST</a>      | 0                | 0                  | 0.2500                       |
| INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS                                     | <a href="#">ICISCLEANERS</a> | 0                | 0                  | 0.2500                       |
| MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE                                  | <a href="#">MSHA</a>         | 0                | 0                  | 0.2500                       |
| MINERAL RESOURCE DATA SYSTEM   | <a href="#">MRDS</a>         | 3                | 0                  | 0.2500                       |
| OPEN DUMP INVENTORY  | <a href="#">ODI</a>          | 0                | 0                  | 0.5000                       |
| SURFACE MINING CONTROL AND RECLAMATION ACT SITES   | <a href="#">SMCRA</a>        | 0                | 0                  | 0.5000                       |
| URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES  | <a href="#">USUMTRCA</a>     | 0                | 0                  | 0.5000                       |
| DEPARTMENT OF DEFENSE SITES  | <a href="#">DOD</a>          | 0                | 0                  | 1.0000                       |
| FORMER MILITARY NIKE MISSILE SITES   | <a href="#">NMS</a>          | 0                | 0                  | 1.0000                       |
| FORMERLY USED DEFENSE SITES  | <a href="#">FUDS</a>         | 0                | 0                  | 1.0000                       |
| FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM  | <a href="#">FUSRAP</a>       | 0                | 0                  | 1.0000                       |
| RECORD OF DECISION SYSTEM  | <a href="#">RODS</a>         | 0                | 0                  | 1.0000                       |
| <b>SUB-TOTAL</b>   |                              | <b>6</b>         | <b>0</b>           |                              |

# Database Summary

## STATE (CA) LISTING

### Standard Environmental Records

| Database   | Acronym                       | Locatable | Unlocatable | Search Radius (miles) |
|--|-------------------------------|-----------|-------------|-----------------------|
| DTSC DEED RESTRICTIONS                                 | <a href="#">DTSCDR</a>        | 0         | 0           | TP/AP                 |
| ABOVE GROUND STORAGE TANKS                             | <a href="#">ABST</a>          | 0         | 0           | 0.2500                |
| ABOVEGROUND STORAGE TANKS PRIOR TO JANUARY 2008        | <a href="#">AST2007</a>       | 0         | 0           | 0.2500                |
| HISTORICAL UNDERGROUND STORAGE TANKS                   | <a href="#">HISTUST</a>       | 1         | 1           | 0.2500                |
| STATEWIDE ENVIRONMENTAL EVALUATION AND PLANNING SYSTEM | <a href="#">SWEEPS</a>        | 1         | 1           | 0.2500                |
| UNDERGROUND STORAGE TANKS                              | <a href="#">USTCUPA</a>       | 1         | 0           | 0.2500                |
| BROWNFIELD SITES                                       | <a href="#">BF</a>            | 0         | 0           | 0.5000                |
| CALSITES DATABASE                                      | <a href="#">CALSITES</a>      | 2         | 0           | 0.5000                |
| GEOTRACKER CLEANUP SITES                               | <a href="#">CLEANUPSITES</a>  | 4         | 0           | 0.5000                |
| LEAKING UNDERGROUND STORAGE TANKS                      | <a href="#">LUST</a>          | 2         | 0           | 0.5000                |
| SOLID WASTE INFORMATION SYSTEM SITES                   | <a href="#">SWIS</a>          | 3         | 0           | 0.5000                |
| VOLUNTARY CLEANUP PROGRAM                              | <a href="#">VCP</a>           | 0         | 0           | 0.5000                |
| ENVIROSTOR CLEANUP SITES                               | <a href="#">ENVIROSTOR</a>    | 7         | 0           | 1.0000                |
| ENVIROSTOR PERMITTED AND CORRECTIVE ACTION SITES       | <a href="#">ENVIROSTORPCA</a> | 0         | 0           | 1.0000                |
| <b>SUB-TOTAL</b>                                       |                               | <b>21</b> | <b>2</b>    |                       |

### Additional Environmental Records

| Database   | Acronym                 | Locatable | Unlocatable | Search Radius (miles) |
|--|-------------------------|-----------|-------------|-----------------------|
| CALIFORNIA HAZARDOUS MATERIAL INCIDENT REPORT SYSTEM       | <a href="#">CHMIRS</a>  | 3         | 0           | TP/AP                 |
| CLANDESTINE DRUG LABS                                      | <a href="#">CDL</a>     | 1         | 0           | TP/AP                 |
| EMISSIONS INVENTORY DATA                                   | <a href="#">EMI</a>     | 0         | 0           | TP/AP                 |
| HAZARDOUS WASTE TANNER SUMMARY                             | <a href="#">HWTS</a>    | 2         | 0           | TP/AP                 |
| LAND DISPOSAL SITES  | <a href="#">LDS</a>     | 0         | 0           | TP/AP                 |
| MILITARY CLEANUP SITES                                     | <a href="#">MCS</a>     | 0         | 0           | TP/AP                 |
| NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM FACILITIES | <a href="#">NPDES</a>   | 0         | 0           | TP/AP                 |
| RECORDED ENVIRONMENTAL CLEANUP LIENS                       | <a href="#">LIENS</a>   | 0         | 0           | TP/AP                 |
| CALIFORNIA MEDICAL WASTE MANAGEMENT PROGRAM FACILITY LIST  | <a href="#">MWMP</a>    | 0         | 0           | 0.2500                |
| DTSC REGISTERED HAZARDOUS WASTE TRANSPORTERS               | <a href="#">DTSCHWT</a> | 0         | 0           | 0.2500                |
| DRY CLEANER FACILITIES                                     | <a href="#">CLEANER</a> | 0         | 0           | 0.2500                |
| MINES LISTING  | <a href="#">MINES</a>   | 0         | 0           | 0.2500                |

## Database Summary

| <b>Database</b>  | <b>Acronym</b>              | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|--|-----------------------------|------------------|--------------------|------------------------------|
| SPILLS, LEAKS, INVESTIGATION & CLEANUP RECOVERY LISTING                  | <a href="#">SLIC</a>        | 0                | 0                  | 0.2500                       |
| CORTESE LIST   | <a href="#">CORTESE</a>     | 0                | 0                  | 0.5000                       |
| EXPEDITED REMOVAL ACTION PROGRAM SITES                                   | <a href="#">ERAP</a>        | 0                | 0                  | 0.5000                       |
| HISTORICAL CORTESE LIST  | <a href="#">HISTCORTESE</a> | 3                | 0                  | 0.5000                       |
| LISTING OF CERTIFIED DROPOFF, COLLECTION, AND COMMUNITY SERVICE PROGRAMS | <a href="#">DROP</a>        | 3                | 1                  | 0.5000                       |
| LISTING OF CERTIFIED PROCESSORS  | <a href="#">PROC</a>        | 1                | 0                  | 0.5000                       |
| NO FURTHER ACTION DETERMINATION  | <a href="#">NFA</a>         | 1                | 0                  | 0.5000                       |
| RECYCLING CENTERS  | <a href="#">SWRCY</a>       | 10               | 0                  | 0.5000                       |
| REFERRED TO ANOTHER LOCAL OR STATE AGENCY                                | <a href="#">REF</a>         | 1                | 0                  | 0.5000                       |
| SITES NEEDING FURTHER EVALUATION   | <a href="#">NFE</a>         | 0                | 0                  | 0.5000                       |
| WASTE MANAGEMENT UNIT DATABASE   | <a href="#">WMUDS</a>       | 0                | 0                  | 0.5000                       |
| TOXIC PITS CLEANUP ACT SITES   | <a href="#">TOXPITS</a>     | 0                | 0                  | 1.0000                       |
| <b>SUB-TOTAL</b>   |                             | <b>25</b>        | <b>1</b>           |                              |

## Database Summary

### **TRIBAL LISTING**

#### **Standard Environmental Records**

| <b>Database</b>                                       | <b>Acronym</b>                  | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|---|---------------------------------|------------------|--------------------|------------------------------|
| UNDERGROUND STORAGE TANKS ON TRIBAL LANDS             | <a href="#">LUSTR09</a>         | 0                | 0                  | 0.2500                       |
| ILLEGAL DUMP SITES ON THE TORRES MARTINEZ RESERVATION | <a href="#">TORRESDUMPSITES</a> | 0                | 0                  | 0.5000                       |
| LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS     | <a href="#">LUSTR09</a>         | 0                | 0                  | 0.5000                       |
| OPEN DUMP INVENTORY ON TRIBAL LANDS                   | <a href="#">ODINDIAN</a>        | 0                | 0                  | 0.5000                       |

|           |  |   |   |  |
|-----------|--|---|---|--|
| SUB-TOTAL |  | 0 | 0 |  |
|-----------|--|---|---|--|

#### **Additional Environmental Records**

| <b>Database</b>     | <b>Acronym</b>            | <b>Locatable</b> | <b>Unlocatable</b> | <b>Search Radius (miles)</b> |
|---------------------|---------------------------|------------------|--------------------|------------------------------|
| INDIAN RESERVATIONS | <a href="#">INDIANRES</a> | 0                | 0                  | 1.0000                       |

|           |  |   |   |  |
|-----------|--|---|---|--|
| SUB-TOTAL |  | 0 | 0 |  |
|-----------|--|---|---|--|

|       |  |    |   |  |
|-------|--|----|---|--|
| TOTAL |  | 53 | 3 |  |
|-------|--|----|---|--|

## Database Radius Summary

### **FEDERAL LISTING**

Standard environmental records are displayed in **bold**.

| Acronym          | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile  | Total    |
|------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|-----------|----------|
| AIRSAFS          | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| BRS              | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| CDL              | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| DOCKETS          | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>EC</b>        | <b>0.0200</b>         | <b>0</b>         | <b>NS</b>          | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| ECHOR09          | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>ERNSCA</b>    | <b>0.0200</b>         | <b>0</b>         | <b>NS</b>          | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| FRSCA            | 0.0200                | 3                | NS                 | NS               | NS               | NS             | NS        | 3        |
| HMIRSR09         | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| ICIS             | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| ICISNPDES        | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>LUCIS</b>     | <b>0.0200</b>         | <b>0</b>         | <b>NS</b>          | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| MLTS             | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| NPDESR09         | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| PADS             | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| PCSR09           | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>RCRASC</b>    | <b>0.0200</b>         | <b>0</b>         | <b>NS</b>          | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| SEMSLIENS        | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| SFLIENS          | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| SSTS             | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| TRI              | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| TSCA             | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>RCRAGR09</b>  | <b>0.1250</b>         | <b>0</b>         | <b>0</b>           | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>RCRANGR09</b> | <b>0.1250</b>         | <b>0</b>         | <b>0</b>           | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| ALTFUELS         | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| <b>FEMAUST</b>   | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| HISTPST          | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| ICISCLEANERS     | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| MRDS             | 0.2500                | 1                | 2                  | 0                | NS               | NS             | NS        | 3        |
| MSHA             | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| <b>BF</b>        | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>DNPL</b>      | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>NLRRCRAT</b>  | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| ODI              | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS        | 0        |
| <b>RCRAT</b>     | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |

## Database Radius Summary

| Acronym          | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile | Total |
|------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|----------|-------|
| <b>SEMS</b>      | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS       | 0     |
| <b>SEMSARCH</b>  | 0.5000                | 0                | 0                  | 1                | 0                | NS             | NS       | 1     |
| SMCRA            | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS       | 0     |
| USUMTRCA         | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS       | 0     |
| DOD              | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| FUDS             | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| FUSRAP           | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>NLRRCRAC</b>  | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| NMS              | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>NPL</b>       | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>PNPL</b>      | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>RCRAC</b>     | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>RCRASUBC</b>  | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| RODS             | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>SUB-TOTAL</b> |                       | 4                | 2                  | 1                | 0                | 0              | 0        | 7     |

## Database Radius Summary

### STATE (CA) LISTING

Standard environmental records are displayed in **bold**.

| Acronym             | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile  | Total    |
|---------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|-----------|----------|
| CDL                 | 0.0200                | 1                | NS                 | NS               | NS               | NS             | NS        | 1        |
| CHMIRS              | 0.0200                | 3                | NS                 | NS               | NS               | NS             | NS        | 3        |
| <b>DTSCDR</b>       | <b>0.0200</b>         | <b>0</b>         | <b>NS</b>          | <b>NS</b>        | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| EMI                 | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| HWTS                | 0.0200                | 2                | NS                 | NS               | NS               | NS             | NS        | 2        |
| LDS                 | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| LIENS               | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| MCS                 | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| NPDES               | 0.0200                | 0                | NS                 | NS               | NS               | NS             | NS        | 0        |
| <b>ABST</b>         | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>AST2007</b>      | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| CLEANER             | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| DTSCHWT             | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| <b>HISTUST</b>      | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>1</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>1</b> |
| MINES               | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| MWMP                | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| SLIC                | 0.2500                | 0                | 0                  | 0                | NS               | NS             | NS        | 0        |
| <b>SWEEPS</b>       | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>1</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>1</b> |
| <b>USTCUPA</b>      | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>1</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>1</b> |
| <b>BF</b>           | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>CALSITES</b>     | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>2</b>         | <b>NS</b>      | <b>NS</b> | <b>2</b> |
| <b>CLEANUPSITES</b> | <b>0.5000</b>         | <b>0</b>         | <b>1</b>           | <b>0</b>         | <b>3</b>         | <b>NS</b>      | <b>NS</b> | <b>4</b> |
| CORTESE             | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS        | 0        |
| DROP                | 0.5000                | 0                | 0                  | 0                | 3                | NS             | NS        | 3        |
| ERAP                | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS        | 0        |
| HISTCORTESE         | 0.5000                | 0                | 1                  | 0                | 2                | NS             | NS        | 3        |
| <b>LUST</b>         | <b>0.5000</b>         | <b>0</b>         | <b>1</b>           | <b>0</b>         | <b>1</b>         | <b>NS</b>      | <b>NS</b> | <b>2</b> |
| NFA                 | 0.5000                | 0                | 0                  | 0                | 1                | NS             | NS        | 1        |
| NFE                 | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS        | 0        |
| PROC                | 0.5000                | 0                | 0                  | 0                | 1                | NS             | NS        | 1        |
| REF                 | 0.5000                | 0                | 0                  | 0                | 1                | NS             | NS        | 1        |
| <b>SWIS</b>         | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>3</b>         | <b>NS</b>      | <b>NS</b> | <b>3</b> |
| SWRCY               | 0.5000                | 0                | 0                  | 0                | 10               | NS             | NS        | 10       |
| <b>VCP</b>          | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| WMUDS               | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS        | 0        |



## Database Radius Summary

| Acronym          | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile | Total |
|------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|----------|-------|
| ENVIROSTOR       | 1.0000                | 0                | 0                  | 0                | 3                | 4              | NS       | 7     |
| ENVIROSTORPCA    | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| TOXPITS          | 1.0000                | 0                | 0                  | 0                | 0                | 0              | NS       | 0     |
| <b>SUB-TOTAL</b> |                       | 6                | 3                  | 3                | 30               | 4              | 0        | 46    |

## Database Radius Summary

### **TRIBAL LISTING**

Standard environmental records are displayed in **bold**.

| Acronym                | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile  | Total    |
|------------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|-----------|----------|
| <b>USTR09</b>          | <b>0.2500</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>NS</b>        | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>LUSTR09</b>         | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>ODINDIAN</b>        | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>TORRESDUMPSITES</b> | <b>0.5000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>NS</b>      | <b>NS</b> | <b>0</b> |
| <b>INDIANRES</b>       | <b>1.0000</b>         | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>0</b>       | <b>NS</b> | <b>0</b> |
| <b>SUB-TOTAL</b>       |                       | <b>0</b>         | <b>0</b>           | <b>0</b>         | <b>0</b>         | <b>0</b>       | <b>0</b>  | <b>0</b> |

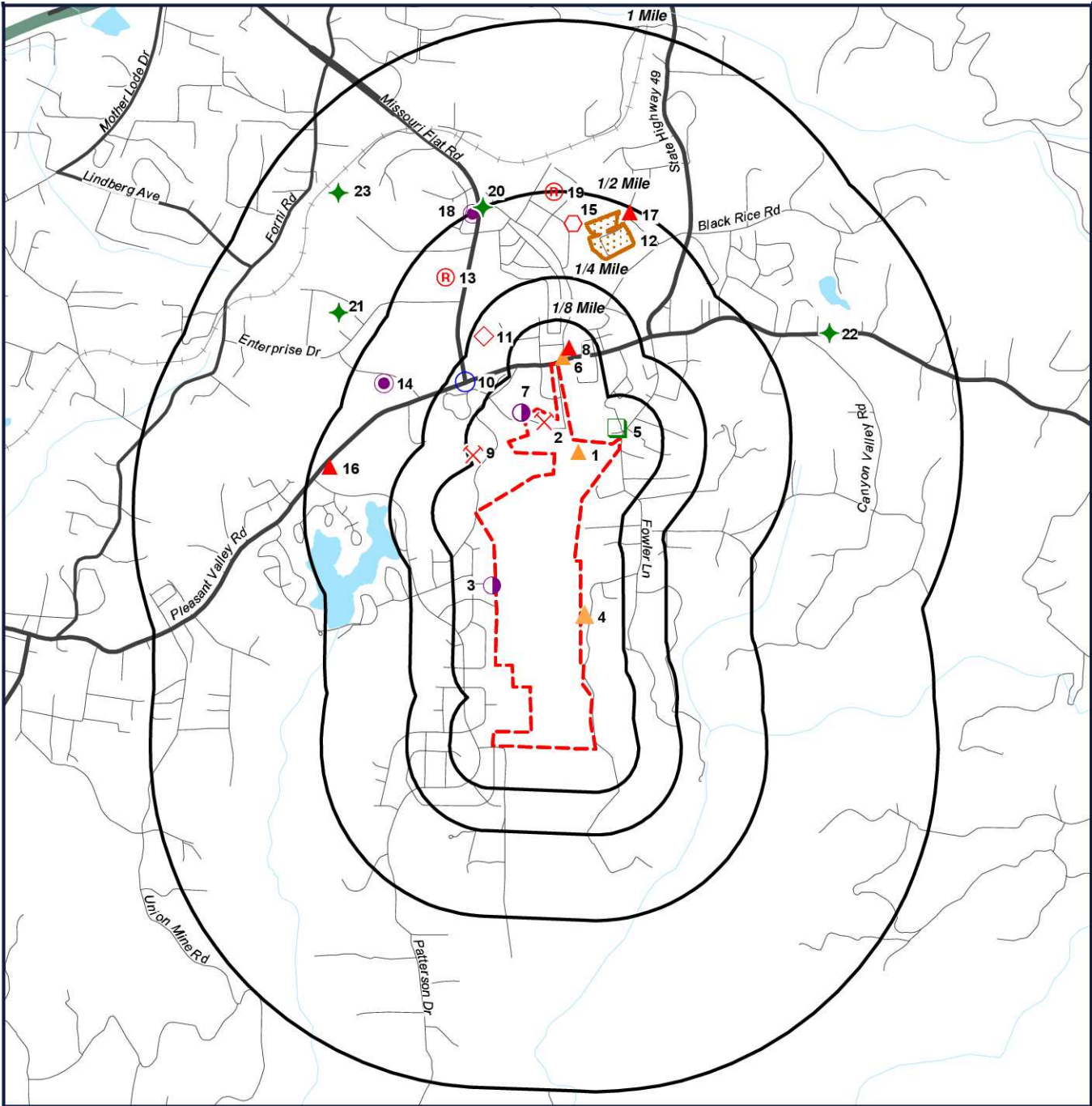
|              |  |           |          |          |           |          |          |           |
|--------------|--|-----------|----------|----------|-----------|----------|----------|-----------|
| <b>TOTAL</b> |  | <b>10</b> | <b>5</b> | <b>4</b> | <b>30</b> | <b>4</b> | <b>0</b> | <b>53</b> |
|--------------|--|-----------|----------|----------|-----------|----------|----------|-----------|

**NOTES:**

**NS = NOT SEARCHED**

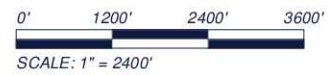
**TP/AP = TARGET PROPERTY/ADJACENT PROPERTY**

# Radius Map 1



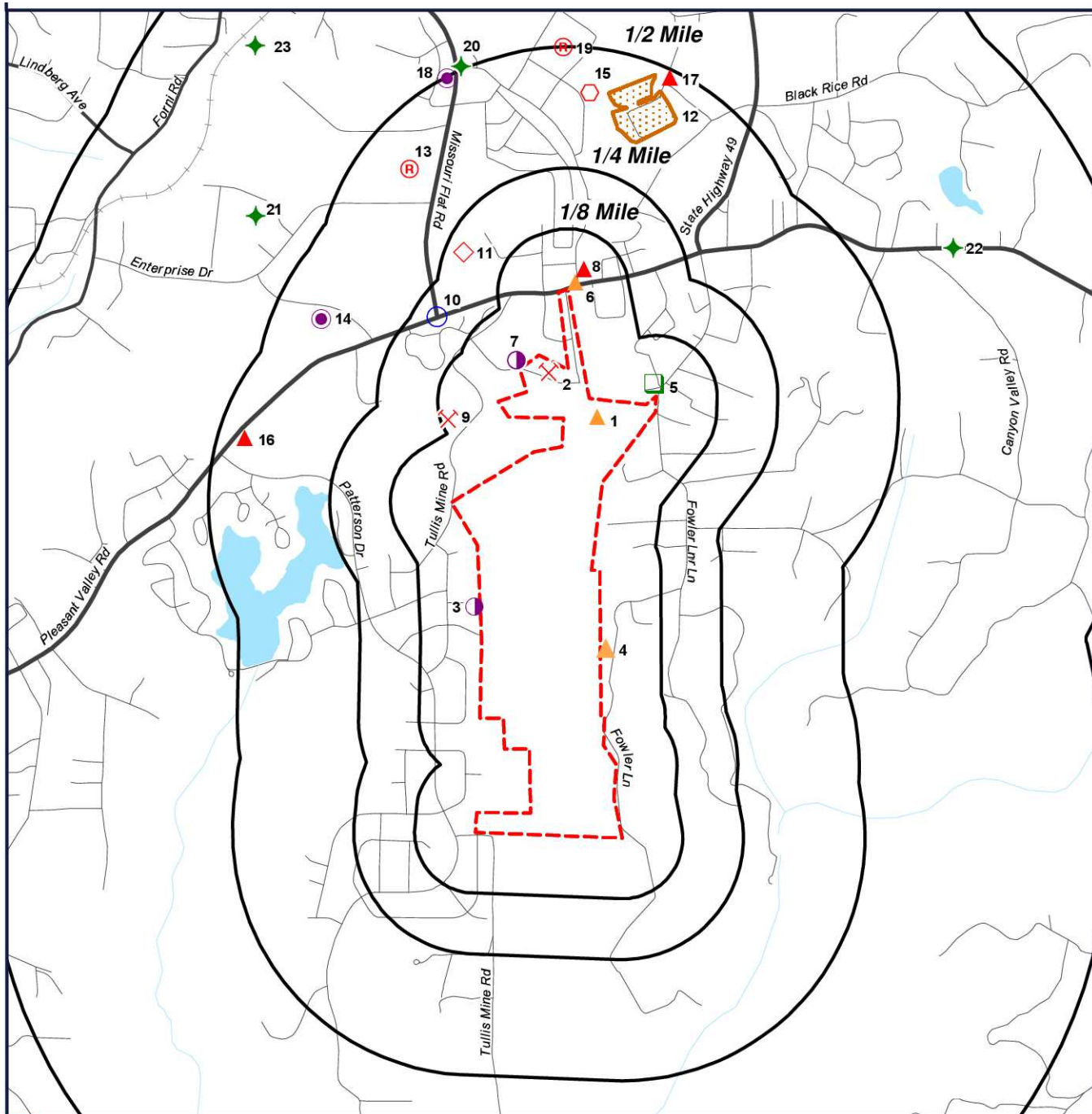
- |                      |              |
|----------------------|--------------|
| Target Property (TP) | SWRCY        |
| CHMIRS               | PROC         |
| MRDS                 | DROP         |
| HWTS                 | CLEANUPSITES |
| FRSCA                | SWRCY        |
| CLEANUPSITES         | CALSITES     |
| SEMSARCH             | HISTCORTESE  |
| USTCUPA              | ENVIROSTOR   |
| SWIS                 |              |

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



[Click here to access Satellite view](#)

# Radius Map 2



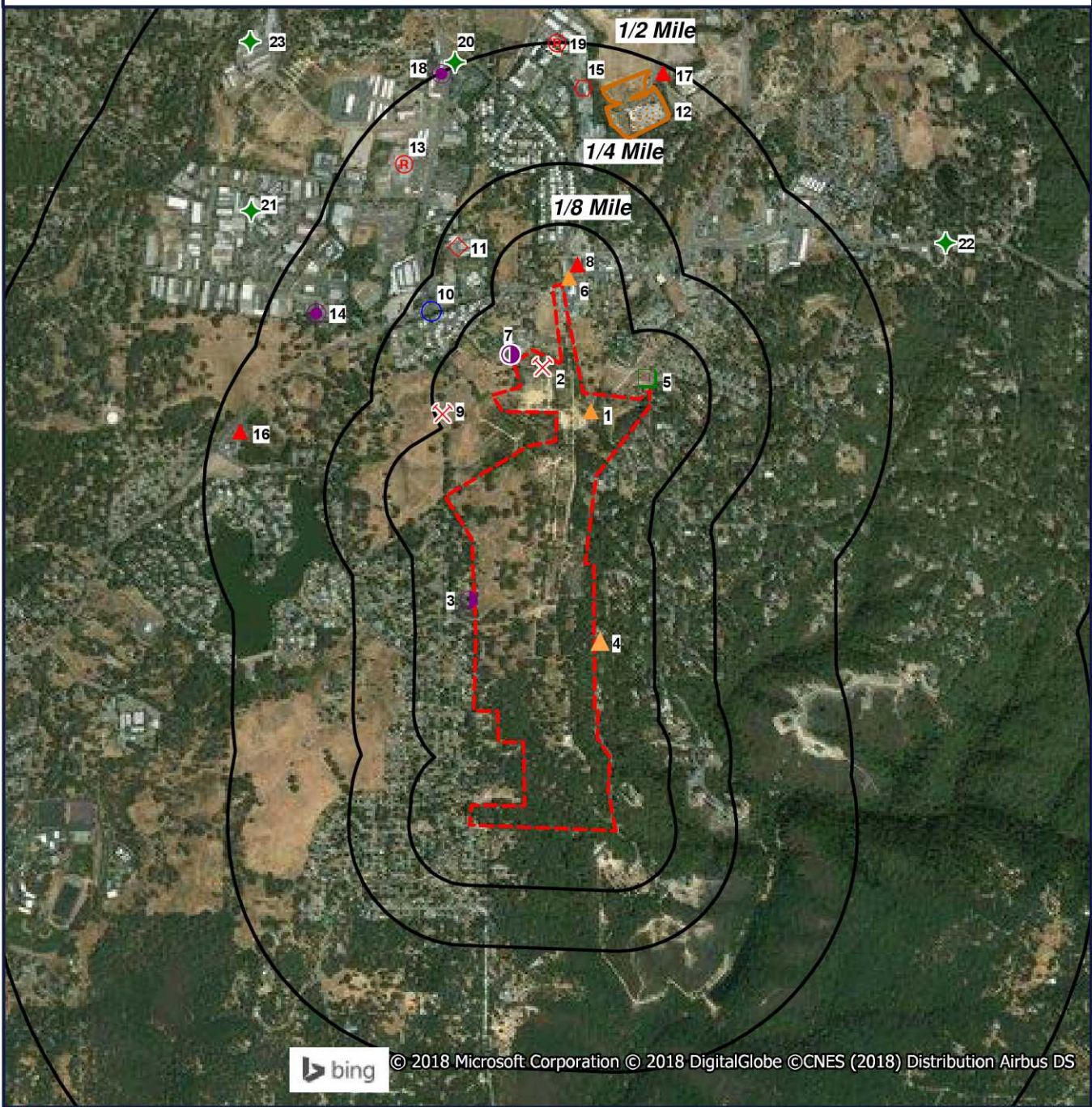
- Target Property (TP)
- CHMIRS
- MRDS
- HWTS
- FRSCA
- CLEANUPSITES
- SEMSARCH
- USTCUPA
- SWIS
- SWRCY
- PROC
- DROP
- CLEANUPSITES
- SWRCY
- CALSITES
- HISTCORTESE
- ENVIROSTOR

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



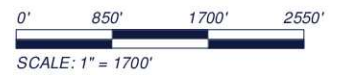
[Click here to access Satellite view](#)

# Ortho Map



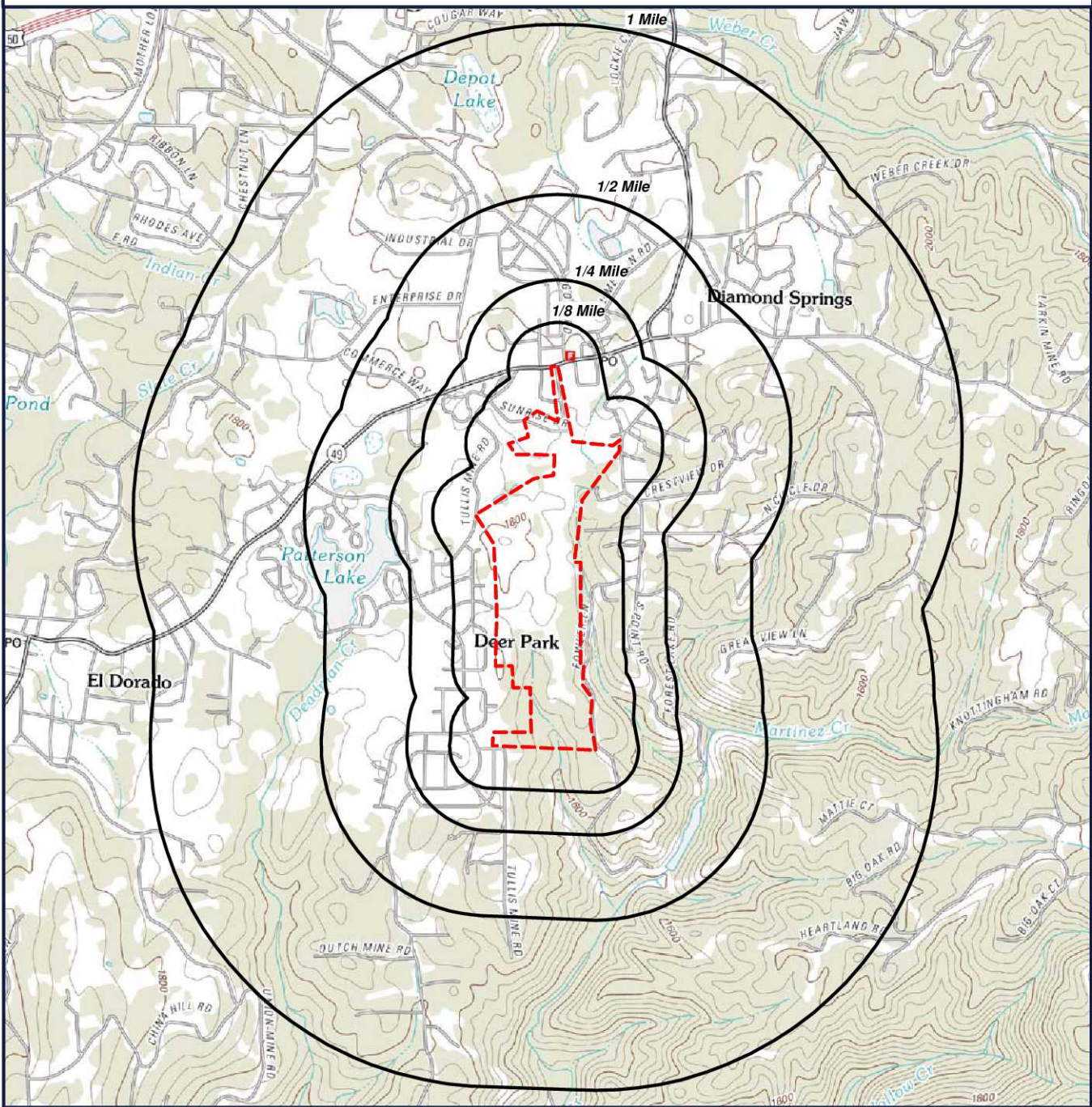
- Target Property (TP)
- CHMIRS
- MRDS
- HWTS
- FRSCA
- CLEANUPSITES
- SEMSARCH
- USTCUPA
- SWIS
- SWRCY
- PROC
- DROP
- CLEANUPSITES
- SWRCY
- CALSITES
- HISTCORTESE
- ENVIROSTOR

**Quadrangle(s): Placerville  
Stonehenge Springs  
Faith Lane  
Diamond Springs, California  
95619**



[Click here to access Satellite view](#)

# Topographic Map



 Target Property (TP)

**Quadrangle(s): Placerville**  
**Source: USGS, 03/06/2012**  
**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



0' 1200' 2400' 3600'  
SCALE: 1" = 2400'

[Click here to access Satellite view](#)

## Located Sites Summary

NOTE: Standard environmental records are displayed in **bold**.

| Map ID#            | Database Name            | Site ID#             | Relative Elevation            | Distance From Site                      | Site Name                                 | Address   | PAGE #             |
|--------------------|--------------------------|----------------------|-------------------------------|---|---|---|--------------------|
| <a href="#">1</a>  | CHMIRS                   | 005732               | Lower<br>(1,739 ft.)          | TP                                      |   | DEBS FROSTY LIFT STATION<br>END OF FAITH LANE, DIAMOND<br>SPRINGS, CA 95619 | <a href="#">22</a> |
| <a href="#">1</a>  | FRSCA                    | 110065851242         | Lower<br>(1,739 ft.)          | TP                                      | DEB'S FROSTY LIFT<br>STATION              | FAITH LANE ESNA 0.25 MI. S/HWY<br>49, DIAMOND SPRINGS, CA 95619             | <a href="#">23</a> |
| <a href="#">2</a>  | MRDS                     | 10139067             | Higher<br>(1,763 ft.)         | TP                                      | PHILLIP N. HUFFT<br>CLAIM                 | EL DORADO COUNTY, DIAMOND<br>SPRINGS, CA 95619                              | <a href="#">24</a> |
| <a href="#">3</a>  | HWTS                     | CAC002801219         | Higher<br>(1,778 ft.)         | 0.012 mi. W<br>(63 ft.)                 | MARK MORGAN                               | 210 JUSTINE CT, DIAMOND<br>SPRINGS, CA 95619                                | <a href="#">25</a> |
| <a href="#">4</a>  | CDL                      | 200202096            | Lower<br>(1,690 ft.)          | 0.012 mi. E<br>(63 ft.)                 |   | 473 FOWLER LANE, DIAMOND<br>SPRINGS, CA 95619                               | <a href="#">26</a> |
| <a href="#">4</a>  | CHMIRS                   | 04-1482              | Lower<br>(1,690 ft.)          | 0.012 mi. E<br>(63 ft.)                 |   | 473 FOWLER LANE, DIAMOND<br>SPRINGS, CA 95667                               | <a href="#">27</a> |
| <a href="#">5</a>  | FRSCA                    | 110064896171         | Lower<br>(1,753 ft.)          | 0.018 mi. N<br>(95 ft.)                 | DIAMOND VILLAS<br>SENIOR HOUSING          | PANTHER LANE, DIAMOND<br>SPRINGS, CA 95619                                  | <a href="#">28</a> |
| <a href="#">6</a>  | CHMIRS                   | 08-5950              | Higher<br>(1,786 ft.)         | 0.019 mi.<br>ENE<br>(100 ft.)           |   | CHINA GARDEN AT PLEASANT<br>VALLEY RD., DIAMOND SPRINGS,<br>CA              | <a href="#">29</a> |
| <a href="#">7</a>  | FRSCA                    | 110066033820         | Higher<br>(1,767 ft.)         | 0.019 mi. NW<br>(100 ft.)               | WARD'S<br>AUTOMOTIVE                      | 2189 SUNRISE DR, DIAMOND<br>SPRINGS, CA 95619                               | <a href="#">30</a> |
| <a href="#">7</a>  | HWTS                     | CAL000167531         | Higher<br>(1,767 ft.)         | 0.019 mi. NW<br>(100 ft.)               | WARDS<br>AUTOMOTIVE INC                   | 2189 SUNRISE DR, DIAMOND<br>SPRINGS, CA 95619                               | <a href="#">31</a> |
| <a href="#">8</a>  | <b>CLEANUPSITE<br/>S</b> | <b>T0601700047</b>   | <b>Higher<br/>(1,786 ft.)</b> | <b>0.05 mi. NE<br/>(264 ft.)</b>        | <b>FORMER SS</b>                          | <b>493 MAIN ST, DIAMOND SPRINGS,<br/>CA 95619</b>                           | <a href="#">32</a> |
| <a href="#">8</a>  | HISTCORTESE              | 090065COR            | Higher<br>(1,786 ft.)         | 0.05 mi. NE<br>(264 ft.)                | FORMER SS                                 | 493 MAIN, DIAMOND SPRINGS, CA<br>95619                                      | <a href="#">33</a> |
| <a href="#">8</a>  | <b>LUST</b>              | <b>T0601700047</b>   | <b>Higher<br/>(1,786 ft.)</b> | <b>0.05 mi. NE<br/>(264 ft.)</b>        | <b>FORMER SS</b>                          | <b>493 MAIN ST, DIAMOND SPRINGS,<br/>CA 95619</b>                           | <a href="#">34</a> |
| <a href="#">9</a>  | MRDS                     | 10029926             | Lower<br>(1,760 ft.)          | 0.107 mi.<br>WSW<br>(565 ft.)           | ROBERT NELSON<br>CLAIM                    | EL DORADO COUNTY, DIAMOND<br>SPRINGS, CA 95619                              | <a href="#">35</a> |
| <a href="#">9</a>  | MRDS                     | 10029927             | Lower<br>(1,760 ft.)          | 0.107 mi.<br>WSW<br>(565 ft.)           | WHEELOCK                                  | EL DORADO COUNTY, DIAMOND<br>SPRINGS, CA 95619                              | <a href="#">36</a> |
| <a href="#">10</a> | <b>SEMSARCH</b>          | <b>CAD980637417</b>  | <b>Higher<br/>(1,762 ft.)</b> | <b>0.201 mi.<br/>WNW<br/>(1061 ft.)</b> | <b>OLD CALDOR<br/>LUMBER CO YD</b>        | <b>HWY 49 &amp; FLAT RD, DIAMOND<br/>SPRINGS, CA 95619</b>                  | <a href="#">37</a> |
| <a href="#">11</a> | <b>HISTUST</b>           | <b>0002344F</b>      | <b>Higher<br/>(1,799 ft.)</b> | <b>0.211 mi.<br/>WNW<br/>(1114 ft.)</b> | <b>EL DORADO UNION<br/>HIGH SCHOOL DI</b> | <b>4675 MISSOURI FLAT ROAD,<br/>DIAMOND SPRINGS, CA 95619</b>               | <a href="#">38</a> |
| <a href="#">11</a> | <b>SWEEPS</b>            | <b>A09-000-46253</b> | <b>Higher<br/>(1,799 ft.)</b> | <b>0.211 mi.<br/>WNW<br/>(1114 ft.)</b> | <b>EL DORADO UNION<br/>HIGH SCHOOL DI</b> | <b>4675 MISSOURI FLAT RD,<br/>DIAMOND SPRINGS, CA 95619</b>                 | <a href="#">42</a> |
| <a href="#">11</a> | <b>USTCUPA</b>           | <b>187573130</b>     | <b>Higher<br/>(1,799 ft.)</b> | <b>0.211 mi.<br/>WNW<br/>(1114 ft.)</b> | <b>EDUHSD<br/>TRANSPORTATION</b>          | <b>4675 MISSOURI FLAT RD,<br/>PLACERVILLE, CA 95667</b>                     | <a href="#">43</a> |
| <a href="#">12</a> | <b>CLEANUPSITE<br/>S</b> | <b>T10000009244</b>  | <b>Higher<br/>(1,812 ft.)</b> | <b>0.333 mi.<br/>NNE<br/>(1758 ft.)</b> | <b>WASTE<br/>CONNECTIONS</b>              | <b>4100 THROWITA WAY,<br/>PLACERVILLE, CA 95667</b>                         | <a href="#">44</a> |
| <a href="#">12</a> | DROP                     | CP0674               | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | MATERIAL<br>RECOVERY FACILITY             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667                                 | <a href="#">46</a> |

## Located Sites Summary

NOTE: Standard environmental records are displayed in **bold**.

| Map ID#            | Database Name     | Site ID#              | Relative Elevation            | Distance From Site                      | Site Name   | Address   | PAGE #             |
|--------------------|-------------------|-----------------------|-------------------------------|---|---|---|--------------------|
| <a href="#">12</a> | DROP              | CP0880                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | EL DORADO<br>DISPOSAL SERVICE<br>MRF                  | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">47</a> |
| <a href="#">12</a> | DROP              | CP0961                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | SEI SOLID WASTE                                       | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">48</a> |
| <a href="#">12</a> | PROC              | PR0439                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | EL DORADO<br>DISPOSAL SERVICE                         | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">49</a> |
| <a href="#">12</a> | <b>SWIS</b>       | <b>09-AA-0004SWIS</b> | <b>Higher<br/>(1,812 ft.)</b> | <b>0.333 mi.<br/>NNE<br/>(1758 ft.)</b> | <b>WESTERN EL<br/>DORADO RECOVERY<br/>SYSTEMS MRF</b> | <b>4100 THROWITA WAY,<br/>PLACERVILLE, CA 95667</b>       | <a href="#">50</a> |
| <a href="#">12</a> | <b>SWIS</b>       | <b>09-AA-0006SWIS</b> | <b>Higher<br/>(1,812 ft.)</b> | <b>0.333 mi.<br/>NNE<br/>(1758 ft.)</b> | <b>WEDRS-GREEN<br/>WASTE RECYCLING<br/>CENTER</b>     | <b>4100 THROWITA WAY,<br/>PLACERVILLE, CA 95667</b>       | <a href="#">51</a> |
| <a href="#">12</a> | <b>SWIS</b>       | <b>09-AA-0007SWIS</b> | <b>Higher<br/>(1,812 ft.)</b> | <b>0.333 mi.<br/>NNE<br/>(1758 ft.)</b> | <b>WEDRS- CDI<br/>RECOVETY<br/>OPERATION (MVCDI)</b>  | <b>4100 THROWITA WAY,<br/>PLACERVILLE, CA 95667</b>       | <a href="#">52</a> |
| <a href="#">12</a> | SWRCY             | CP0880                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | EL DORADO<br>DISPOSAL SERVICE<br>MRF                  | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">53</a> |
| <a href="#">12</a> | SWRCY             | CS1171                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WASTE<br>CONNECTIONS OF<br>CALIFORNIA INC             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">54</a> |
| <a href="#">12</a> | SWRCY             | CS1234                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WASTE<br>CONNECTIONS OF<br>CALIFORNIA INC             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">55</a> |
| <a href="#">12</a> | SWRCY             | CS1235                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WASTE<br>CONNECTIONS OF<br>CALIFORNIA INC             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">56</a> |
| <a href="#">12</a> | SWRCY             | CS1236                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WASTE<br>CONNECTIONS OF<br>CALIFORNIA INC             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">57</a> |
| <a href="#">12</a> | SWRCY             | CS19394.001           | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WASTE<br>CONNECTIONS OF<br>CALIFORNIA INC             | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">58</a> |
| <a href="#">12</a> | SWRCY             | PR0439                | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | EL DORADO<br>DISPOSAL SERVICE                         | 4100 THROWITA WAY,<br>PLACERVILLE, CA 95667               | <a href="#">59</a> |
| <a href="#">12</a> | SWRCY             | RC10531               | Higher<br>(1,812 ft.)         | 0.333 mi.<br>NNE<br>(1758 ft.)          | WESTERN EL<br>DORADO RECOVERY<br>SYSTEMS              | 4100 THROWITA WY,<br>PLACERVILLE, CA 95667                | <a href="#">60</a> |
| <a href="#">13</a> | SWRCY             | RC10654               | Higher<br>(1,816 ft.)         | 0.396 mi.<br>WNW<br>(2091 ft.)          | MISSOURI FLAT<br>RECYCLE CENTER                       | 4600 MISSOURI FLAT RD,<br>PLACERVILLE, CA 95667           | <a href="#">61</a> |
| <a href="#">14</a> | <b>CALSITES</b>   | <b>09750002</b>       | <b>Higher<br/>(1,802 ft.)</b> | <b>0.401 mi.<br/>WNW<br/>(2117 ft.)</b> | <b>FOOTHILL AUTO<br/>REPAIR</b>                       | <b>6566-C COMMERCE WAY,<br/>DIAMOND SPRINGS, CA 95619</b> | <a href="#">62</a> |
| <a href="#">14</a> | <b>ENVIROSTOR</b> | <b>09750002</b>       | <b>Higher<br/>(1,802 ft.)</b> | <b>0.401 mi.<br/>WNW<br/>(2117 ft.)</b> | <b>FOOTHILL AUTO<br/>REPAIR</b>                       | <b>6566-C COMMERCE WAY,<br/>DIAMOND SPRINGS, CA 95619</b> | <a href="#">63</a> |
| <a href="#">14</a> | REF               | 9750002               | Higher<br>(1,802 ft.)         | 0.401 mi.<br>WNW<br>(2117 ft.)          | FOOTHILL AUTO<br>REPAIR                               | 6566-C COMMERCE WAY,<br>DIAMOND SPRINGS, CA 95619         | <a href="#">64</a> |



## Located Sites Summary

NOTE: Standard environmental records are displayed in **bold**.

| Map ID#            | Database Name        | Site ID#            | Relative Elevation            | Distance From Site                      | Site Name  | Address  | PAGE #             |
|--------------------|----------------------|---------------------|-------------------------------|---|--|--|--------------------|
| <a href="#">15</a> | HISTCORTESE          | 6A189101N25C OR     | Higher<br>(1,801 ft.)         | 0.403 mi.<br>(2128 ft.)                 | GUSTAFSON D M & PATRICI                          | 3655 CHUCKWAGON,<br>PLACERVILLE, CA 95667                    | <a href="#">65</a> |
| <a href="#">16</a> | <b>CLEANUPSITE S</b> | <b>T0601700077</b>  | <b>Lower<br/>(1,747 ft.)</b>  | <b>0.443 mi.<br/>WNW<br/>(2339 ft.)</b> | <b>STEVE'S CHEAPER</b>                           | <b>130 PLEASANT VALLEY RD,<br/>DIAMOND SPRINGS, CA 95619</b> | <a href="#">66</a> |
| <a href="#">16</a> | HISTCORTESE          | 090096COR           | Lower<br>(1,747 ft.)          | 0.443 mi.<br>WNW<br>(2339 ft.)          | STEVE'S CHEAPER                                  | 130 PLEASANT VALLEY,<br>DIAMOND SPRINGS, CA 95619            | <a href="#">69</a> |
| <a href="#">16</a> | <b>LUST</b>          | <b>T0601700077</b>  | <b>Lower<br/>(1,747 ft.)</b>  | <b>0.443 mi.<br/>WNW<br/>(2339 ft.)</b> | <b>STEVE'S CHEAPER</b>                           | <b>130 PLEASANT VALLEY RD,<br/>DIAMOND SPRINGS, CA 95619</b> | <a href="#">70</a> |
| <a href="#">17</a> | <b>CLEANUPSITE S</b> | <b>T10000010458</b> | <b>Higher<br/>(1,819 ft.)</b> | <b>0.481 mi.<br/>NNE<br/>(2540 ft.)</b> | <b>ABEL TRUST</b>                                | <b>4061 LIME PLANT ROAD,<br/>DIAMOND SPRINGS, CA 95667</b>   | <a href="#">71</a> |
| <a href="#">18</a> | <b>CALSITES</b>      | <b>09340001</b>     | <b>Higher<br/>(1,817 ft.)</b> | <b>0.497 mi.<br/>NNW<br/>(2624 ft.)</b> | <b>CELEBRITY PLATING</b>                         | <b>4502 MISSOURI FLAT ROAD,<br/>PLACERVILLE, CA 95667</b>    | <a href="#">73</a> |
| <a href="#">18</a> | <b>ENVIROSTOR</b>    | <b>09340001</b>     | <b>Higher<br/>(1,817 ft.)</b> | <b>0.497 mi.<br/>NNW<br/>(2624 ft.)</b> | <b>CELEBRITY PLATING</b>                         | <b>4502 MISSOURI FLAT ROAD,<br/>PLACERVILLE, CA 95667</b>    | <a href="#">74</a> |
| <a href="#">18</a> | <b>ENVIROSTOR</b>    | <b>71003046</b>     | <b>Higher<br/>(1,817 ft.)</b> | <b>0.497 mi.<br/>NNW<br/>(2624 ft.)</b> | <b>CELEBRITY, INC.</b>                           | <b>4502 MISSOURI FLAT ROAD,<br/>PLACERVILLE, CA 95667</b>    | <a href="#">75</a> |
| <a href="#">18</a> | NFA                  | 71003046            | Higher<br>(1,817 ft.)         | 0.497 mi.<br>NNW<br>(2624 ft.)          | CELEBRITY, INC.                                  | 4502 MISSOURI FLAT ROAD,<br>PLACERVILLE, CA 95667            | <a href="#">76</a> |
| <a href="#">19</a> | SWRCY                | RC4019              | Higher<br>(1,812 ft.)         | 0.498 mi. N<br>(2629 ft.)               | E M RECYCLING                                    | 4040 #A-2 STAGE CT,<br>PLACERVILLE, CA 95667                 | <a href="#">77</a> |
| <a href="#">20</a> | <b>ENVIROSTOR</b>    | <b>09500006</b>     | <b>Higher<br/>(1,817 ft.)</b> | <b>0.522 mi.<br/>NNW<br/>(2756 ft.)</b> | <b>TETERS AUTO<br/>WRECKERS</b>                  | <b>4487 MISSOURI FLAT ROAD,<br/>PLACERVILLE, CA 95667</b>    | <a href="#">78</a> |
| <a href="#">21</a> | <b>ENVIROSTOR</b>    | <b>71003697</b>     | <b>Lower<br/>(1,757 ft.)</b>  | <b>0.641 mi.<br/>WNW<br/>(3384 ft.)</b> | <b>CELEBRITY, INC.</b>                           | <b>6650 MERCHANDISE WAY,<br/>DIAMOND SPRINGS, CA 95619</b>   | <a href="#">79</a> |
| <a href="#">22</a> | <b>ENVIROSTOR</b>    | <b>09280001</b>     | <b>Higher<br/>(1,848 ft.)</b> | <b>0.683 mi.<br/>ENE<br/>(3606 ft.)</b> | <b>OXYGEN SERVICE<br/>AND SUPPLY<br/>COMPANY</b> | <b>13 CHINA GARDEN ROAD,<br/>DIAMOND SPRINGS, CA 95619</b>   | <a href="#">80</a> |
| <a href="#">23</a> | <b>ENVIROSTOR</b>    | <b>09730001</b>     | <b>Higher<br/>(1,794 ft.)</b> | <b>0.818 mi.<br/>WNW<br/>(4319 ft.)</b> | <b>OLD CALDOR<br/>LUMBER COMPANY<br/>YARD</b>    | <b>180 INDUSTRIAL DRIVE,<br/>DIAMOND SPRINGS, CA 95619</b>   | <a href="#">81</a> |

# Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

**Target Property Elevation: 1761 ft.**

NOTE: Standard environmental records are displayed in **bold**.

## **EQUAL/HIGHER ELEVATION**

| Map ID#            | Database Name       | Elevation        | Site Name                                     | Address   | Page #             |
|--------------------|---------------------|------------------|---|---|--------------------|
| <a href="#">2</a>  | MRDS                | 1,763 ft.        | PHILLIP N. HUFFT CLAIM                        | EL DORADO COUNTY, DIAMOND SPRINGS, CA 95619               | <a href="#">24</a> |
| <a href="#">3</a>  | HWTS                | 1,778 ft.        | MARK MORGAN                                   | 210 JUSTINE CT, DIAMOND SPRINGS, CA 95619                 | <a href="#">25</a> |
| <a href="#">6</a>  | CHMIRS              | 1,786 ft.        |   | CHINA GARDEN AT PLEASANT VALLEY RD., DIAMOND SPRINGS, CA  | <a href="#">29</a> |
| <a href="#">7</a>  | FRSCA               | 1,767 ft.        | WARD'S AUTOMOTIVE                             | 2189 SUNRISE DR, DIAMOND SPRINGS, CA 95619                | <a href="#">30</a> |
| <a href="#">7</a>  | HWTS                | 1,767 ft.        | WARDS AUTOMOTIVE INC                          | 2189 SUNRISE DR, DIAMOND SPRINGS, CA 95619                | <a href="#">31</a> |
| <a href="#">8</a>  | <b>CLEANUPSITES</b> | <b>1,786 ft.</b> | <b>FORMER SS</b>                              | <b>493 MAIN ST, DIAMOND SPRINGS, CA 95619</b>             | <a href="#">32</a> |
| <a href="#">8</a>  | HISTCORTESE         | 1,786 ft.        | FORMER SS                                     | 493 MAIN, DIAMOND SPRINGS, CA 95619                       | <a href="#">33</a> |
| <a href="#">8</a>  | <b>LUST</b>         | <b>1,786 ft.</b> | <b>FORMER SS</b>                              | <b>493 MAIN ST, DIAMOND SPRINGS, CA 95619</b>             | <a href="#">34</a> |
| <a href="#">10</a> | <b>SEMSARCH</b>     | <b>1,762 ft.</b> | <b>OLD CALDOR LUMBER CO YD</b>                | <b>HWY 49 &amp; FLAT RD, DIAMOND SPRINGS, CA 95619</b>    | <a href="#">37</a> |
| <a href="#">11</a> | <b>HISTUST</b>      | <b>1,799 ft.</b> | <b>EL DORADO UNION HIGH SCHOOL DI</b>         | <b>4675 MISSOURI FLAT ROAD, DIAMOND SPRINGS, CA 95619</b> | <a href="#">38</a> |
| <a href="#">11</a> | <b>SWEEPS</b>       | <b>1,799 ft.</b> | <b>EL DORADO UNION HIGH SCHOOL DI</b>         | <b>4675 MISSOURI FLAT RD, DIAMOND SPRINGS, CA 95619</b>   | <a href="#">42</a> |
| <a href="#">11</a> | <b>USTCUPA</b>      | <b>1,799 ft.</b> | <b>EDUHSD TRANSPORTATION</b>                  | <b>4675 MISSOURI FLAT RD, PLACERVILLE, CA 95667</b>       | <a href="#">43</a> |
| <a href="#">12</a> | <b>CLEANUPSITES</b> | <b>1,812 ft.</b> | <b>WASTE CONNECTIONS</b>                      | <b>4100 THROWITA WAY, PLACERVILLE, CA 95667</b>           | <a href="#">44</a> |
| <a href="#">12</a> | DROP                | 1,812 ft.        | MATERIAL RECOVERY FACILITY                    | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">46</a> |
| <a href="#">12</a> | DROP                | 1,812 ft.        | EL DORADO DISPOSAL SERVICE MRF                | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">47</a> |
| <a href="#">12</a> | DROP                | 1,812 ft.        | SEI SOLID WASTE                               | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">48</a> |
| <a href="#">12</a> | PROC                | 1,812 ft.        | EL DORADO DISPOSAL SERVICE                    | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">49</a> |
| <a href="#">12</a> | <b>SWIS</b>         | <b>1,812 ft.</b> | <b>WESTERN EL DORADO RECOVERY SYSTEMS MRF</b> | <b>4100 THROWITA WAY, PLACERVILLE, CA 95667</b>           | <a href="#">50</a> |
| <a href="#">12</a> | <b>SWIS</b>         | <b>1,812 ft.</b> | <b>WEDRS-GREEN WASTE RECYCLING CENTER</b>     | <b>4100 THROWITA WAY, PLACERVILLE, CA 95667</b>           | <a href="#">51</a> |
| <a href="#">12</a> | <b>SWIS</b>         | <b>1,812 ft.</b> | <b>WEDRS- CDI RECOVETY OPERATION (MVCDI)</b>  | <b>4100 THROWITA WAY, PLACERVILLE, CA 95667</b>           | <a href="#">52</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | EL DORADO DISPOSAL SERVICE MRF                | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">53</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WASTE CONNECTIONS OF CALIFORNIA INC           | 4100 THROWITA WAY, PLACERVILLE, CA 95667                  | <a href="#">54</a> |

## Elevation Summary

| Map ID#            | Database Name       | Elevation        | Site Name                                | Address  | Page #             |
|--------------------|---------------------|------------------|--|--|--------------------|
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WASTE CONNECTIONS OF CALIFORNIA INC      | 4100 THROWITA WAY, PLACERVILLE, CA 95667               | <a href="#">55</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WASTE CONNECTIONS OF CALIFORNIA INC      | 4100 THROWITA WAY, PLACERVILLE, CA 95667               | <a href="#">56</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WASTE CONNECTIONS OF CALIFORNIA INC      | 4100 THROWITA WAY, PLACERVILLE, CA 95667               | <a href="#">57</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WASTE CONNECTIONS OF CALIFORNIA INC      | 4100 THROWITA WAY, PLACERVILLE, CA 95667               | <a href="#">58</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | EL DORADO DISPOSAL SERVICE               | 4100 THROWITA WAY, PLACERVILLE, CA 95667               | <a href="#">59</a> |
| <a href="#">12</a> | SWRCY               | 1,812 ft.        | WESTERN EL DORADO RECOVERY SYSTEMS       | 4100 THROWITA WY, PLACERVILLE, CA 95667                | <a href="#">60</a> |
| <a href="#">13</a> | SWRCY               | 1,816 ft.        | MISSOURI FLAT RECYCLE CENTER             | 4600 MISSOURI FLAT RD, PLACERVILLE, CA 95667           | <a href="#">61</a> |
| <a href="#">14</a> | <b>CALSITES</b>     | <b>1,802 ft.</b> | <b>FOOTHILL AUTO REPAIR</b>              | <b>6566-C COMMERCE WAY, DIAMOND SPRINGS, CA 95619</b>  | <a href="#">62</a> |
| <a href="#">14</a> | <b>ENVIROSTOR</b>   | <b>1,802 ft.</b> | <b>FOOTHILL AUTO REPAIR</b>              | <b>6566-C COMMERCE WAY, DIAMOND SPRINGS, CA 95619</b>  | <a href="#">63</a> |
| <a href="#">14</a> | REF                 | 1,802 ft.        | FOOTHILL AUTO REPAIR                     | 6566-C COMMERCE WAY, DIAMOND SPRINGS, CA 95619         | <a href="#">64</a> |
| <a href="#">15</a> | HISTCORTESE         | 1,801 ft.        | GUSTAFSON D M & PATRICI                  | 3655 CHUCKWAGON, PLACERVILLE, CA 95667                 | <a href="#">65</a> |
| <a href="#">17</a> | <b>CLEANUPSITES</b> | <b>1,819 ft.</b> | <b>ABEL TRUST</b>                        | <b>4061 LIME PLANT ROAD, DIAMOND SPRINGS, CA 95667</b> | <a href="#">71</a> |
| <a href="#">18</a> | <b>CALSITES</b>     | <b>1,817 ft.</b> | <b>CELEBRITY PLATING</b>                 | <b>4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667</b>  | <a href="#">73</a> |
| <a href="#">18</a> | <b>ENVIROSTOR</b>   | <b>1,817 ft.</b> | <b>CELEBRITY PLATING</b>                 | <b>4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667</b>  | <a href="#">74</a> |
| <a href="#">18</a> | <b>ENVIROSTOR</b>   | <b>1,817 ft.</b> | <b>CELEBRITY, INC.</b>                   | <b>4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667</b>  | <a href="#">75</a> |
| <a href="#">18</a> | NFA                 | 1,817 ft.        | CELEBRITY, INC.                          | 4502 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667         | <a href="#">76</a> |
| <a href="#">19</a> | SWRCY               | 1,812 ft.        | E M RECYCLING                            | 4040 #A-2 STAGE CT, PLACERVILLE, CA 95667              | <a href="#">77</a> |
| <a href="#">20</a> | <b>ENVIROSTOR</b>   | <b>1,817 ft.</b> | <b>TETERS AUTO WRECKERS</b>              | <b>4487 MISSOURI FLAT ROAD, PLACERVILLE, CA 95667</b>  | <a href="#">78</a> |
| <a href="#">22</a> | <b>ENVIROSTOR</b>   | <b>1,848 ft.</b> | <b>OXYGEN SERVICE AND SUPPLY COMPANY</b> | <b>13 CHINA GARDEN ROAD, DIAMOND SPRINGS, CA 95619</b> | <a href="#">80</a> |
| <a href="#">23</a> | <b>ENVIROSTOR</b>   | <b>1,794 ft.</b> | <b>OLD CALDOR LUMBER COMPANY YARD</b>    | <b>180 INDUSTRIAL DRIVE, DIAMOND SPRINGS, CA 95619</b> | <a href="#">81</a> |

### **LOWER ELEVATION**

| Map ID#           | Database Name | Elevation | Site Name                 | Address   | Page #             |
|-------------------|---------------|-----------|---------------------------|---|--------------------|
| <a href="#">1</a> | CHMIRS        | 1,739 ft. |                           | DEBS FROSTY LIFT STATION END OF FAITH LANE, DIAMOND SPRINGS, CA 95619 | <a href="#">22</a> |
| <a href="#">1</a> | FRSCA         | 1,739 ft. | DEB'S FROSTY LIFT STATION | FAITH LANE ESNA 0.25 MI. S/HWY 49, DIAMOND SPRINGS, CA 95619          | <a href="#">23</a> |
| <a href="#">4</a> | CDL           | 1,690 ft. |                           | 473 FOWLER LANE, DIAMOND SPRINGS, CA 95619                            | <a href="#">26</a> |

## Elevation Summary

| Map ID#            | Database Name       | Elevation        | Site Name                     | Address  | Page #             |
|--------------------|---------------------|------------------|-------------------------------|--|--------------------|
| <a href="#">4</a>  | CHMIRS              | 1,690 ft.        |                               | 473 FOWLER LANE, DIAMOND SPRINGS, CA 95667               | <a href="#">27</a> |
| <a href="#">5</a>  | FRSCA               | 1,753 ft.        | DIAMOND VILLAS SENIOR HOUSING | PANTHER LANE, DIAMOND SPRINGS, CA 95619                  | <a href="#">28</a> |
| <a href="#">9</a>  | MRDS                | 1,760 ft.        | ROBERT NELSON CLAIM           | EL DORADO COUNTY, DIAMOND SPRINGS, CA 95619              | <a href="#">35</a> |
| <a href="#">9</a>  | MRDS                | 1,760 ft.        | WHEELLOCK                     | EL DORADO COUNTY, DIAMOND SPRINGS, CA 95619              | <a href="#">36</a> |
| <a href="#">16</a> | <b>CLEANUPSITES</b> | <b>1,747 ft.</b> | <b>STEVE'S CHEAPER</b>        | <b>130 PLEASANT VALLEY RD, DIAMOND SPRINGS, CA 95619</b> | <a href="#">66</a> |
| <a href="#">16</a> | HISTCORTESE         | 1,747 ft.        | STEVE'S CHEAPER               | 130 PLEASANT VALLEY, DIAMOND SPRINGS, CA 95619           | <a href="#">69</a> |
| <a href="#">16</a> | <b>LUST</b>         | <b>1,747 ft.</b> | <b>STEVE'S CHEAPER</b>        | <b>130 PLEASANT VALLEY RD, DIAMOND SPRINGS, CA 95619</b> | <a href="#">70</a> |
| <a href="#">21</a> | <b>ENVIROSTOR</b>   | <b>1,757 ft.</b> | <b>CELEBRITY, INC.</b>        | <b>6650 MERCHANDISE WAY, DIAMOND SPRINGS, CA 95619</b>   | <a href="#">79</a> |

# California Hazardous Material Incident Report System (CHMIRS)

**MAP ID# 1**

Distance from Property: 0 mi. (0 ft.) X  
Elevation: 1,739 ft. (Lower than TP)

## **INCIDENT INFORMATION**

CONTROL #: 005732  
NOTIFIED: 12/16/94  
AGENCY: EL DORADO IRRIGATION DISTRICT  
ADMINISTRATION: NOT REPORTED  
INCIDENT LOCATION: DEBS FROSTY LIFT STATION END OF FAITH LANE  
DIAMOND SPRINGS, CA 95619  
INCIDENT COUNTY: EL DORADO

## **SUBSTANCE INFORMATION**

SUBSTANCE: RAW SEWAGE  
QUANTITY: NOT REPORTED  
TYPE: ONS

## **INCIDENT DESCRIPTION**

FAILURE AT LIFT STATION - UNKNOWN CAUSE UNDER INVESTIGATION WATER INVOLVEMENT UNKNOWN AT THIS TIME  
SPILL WENT TO CULVERT  
CONTAINED: NOT REPORTED  
WATER INVOLVED / WATERWAY: NO / NOT REPORTED  
DATE AND TIME: 1200/16DEC  
SITE: NOT REPORTED  
INJURIES: NO  
FATALITIES: NO  
EVACUATIONS: NO  
CLEANUP BY: EID

---

[Back to Report Summary](#)

## Facility Registry System (FRSCA)

[MAP ID# 1](#)

Distance from Property: 0 mi. (0 ft.) X  
Elevation: 1,739 ft. (Lower than TP)

### **FACILITY INFORMATION**

REGISTRY ID: 110065851242

NAME: **DEB'S FROSTY LIFT STATION**

LOCATION ADDRESS: **FAITH LANE ESNA 0.25 MI. S/HWY 49  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

**DEB'S FROSTY LIFT STATION**

PROGRAM/S LISTED FOR THIS FACILITY

**CA-ENVIROVIEW - CA-ENVIROVIEW**

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

**4952 - SEWERAGE SYSTEMS**

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

**NO NAICS DATA REPORTED**

---

[Back to Report Summary](#)

# Mineral Resource Data System (MRDS)

**MAP ID# 2**

Distance from Property: 0 mi. (0 ft.) X  
Elevation: 1,763 ft. (Higher than TP)

## **FACILITY INFORMATION**

GEOSEARCH ID: 10139067

DEP ID: 10139067

MINE NAME: PHILLIP N. HUFFT CLAIM

ADDRESS: EL DORADO COUNTY  
DIAMOND SPRINGS, CA 95619

DEVELOPMENT STATUS: UNKNOWN

## **COMMODITY DETAILS**

COMMODITY: GOLD

COMMODITY TYPE: METALLIC

COMMODITY GROUP: GOLD

IMPORTANCE: PRIMARY

**MATERIAL DETAILS** NO MATERIAL DETAILS REPORTED

## **NAME DETAILS**

SITE NAME: PHILLIP N. HUFFT CLAIM

STATUS: CURRENT

---

[Back to Report Summary](#)

## Hazardous Waste Tanner Summary (HWTS)

**MAP ID# 3**

Distance from Property: 0.012 mi. (63 ft.) W  
Elevation: 1,778 ft. (Higher than TP)

### SITE INFORMATION

EPA ID: **CAC002801219**  
NAME: **MARK MORGAN**  
COUNTY: **NOT REPORTED**  
ADDRESS: **210 JUSTINE CT**  
**DIAMOND SPRINGS, CA 95619-9318**

FACILITY LINK: [Department of Toxic Substances Control](#)

### MANIFEST SUMMARY INFORMATION

YEAR: **2015**  
TSD ID: **CAD982042475**  
GENERATOR COUNTY: **NOT REPORTED**  
DISPOSAL COUNTY: **SOLANO**  
WASTE CATEGORY: **ASBESTOS CONTAINING WASTE**  
AMOUNT DISPOSED(TONS): **0.23**  
DISPOSAL METHOD: **LANDFILL OR SURFACE IMPOUNDMENT THAT WILL BE CLOSED AS LANDFILL( TO INCLUDE ON-SITE TREATMENT AND/OR STABILIZATION)**

### CONTACT INFORMATION

CONTACT: **MARK MORGAN**  
PHONE: **530-306-2485**  
ADDRESS: **3218 EASTVIEW DR**  
**SHINGLE SPRINGS CA 956827109**

---

[Back to Report Summary](#)



## Clandestine Drug Labs (CDL)

[MAP ID# 4](#)

Distance from Property: 0.012 mi. (63 ft.) E  
Elevation: 1,690 ft. (Lower than TP)

### **SITE INFORMATION**

GEOSEARCH ID: 200202096

ID#: 2002-02-096

ADDRESS: 473 FOWLER LANE

DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

LAB TYPE: ILLEGAL DRUG LAB - LOCATION WHERE AND ILLEGAL DRUG LAB WAS OPERATED OR DRUG LAB EQUIPMENT  
AND/OR MATERIALS WERE STORED

---

[Back to Report Summary](#)

# California Hazardous Material Incident Report System (CHMIRS)

**MAP ID# 4**

Distance from Property: 0.012 mi. (63 ft.) E  
Elevation: 1,690 ft. (Lower than TP)

## **INCIDENT INFORMATION**

CONTROL #: 04-1482

NOTIFIED: 03/17/04

AGENCY: EL DORADO IRRIGATION DISTRICT

ADMINISTRATION: EL DORADO COUNTY ENVIRONMENTAL MGMT.

INCIDENT LOCATION: 473 FOWLER LANE

DIAMOND SPRINGS, CA 95667

INCIDENT COUNTY: EL DORADO

## **SUBSTANCE INFORMATION**

SUBSTANCE: POTABLE WATER

QUANTITY: 1000

TYPE: GALS

## **INCIDENT DESCRIPTION**

**TWO INCH LINE BREAK CAUSED THE SPILL. NOT USED FOR DRINKING OR RECREATION. THE WATER IS CHLORINATED.**

CONTAINED: YES

WATER INVOLVED / WATERWAY: NOT REPORTED / SEASONAL CREEK

DATE AND TIME: 3/17/2004

SITE: RESIDENCE

INJURIES: 0

FATALITIES: 0

EVACUATIONS: 0

CLEANUP BY: N/A

---

[Back to Report Summary](#)

## Facility Registry System (FRSCA)

**MAP ID# 5**

Distance from Property: 0.018 mi. (95 ft.) N  
Elevation: 1,753 ft. (Lower than TP)

### **FACILITY INFORMATION**

REGISTRY ID: 110064896171

NAME: **DIAMOND VILLAS SENIOR HOUSING**

LOCATION ADDRESS: **PANTHER LANE  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO COUNTY**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

**DIAMOND VILLAS SENIOR HOUSING**

PROGRAM/S LISTED FOR THIS FACILITY

**CA-ENVIROVIEW - CA-ENVIROVIEW**

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

**1522 - GENERAL CONTRACTORS-RESIDENTIAL BUILDINGS, OTHER THAN SINGLE-FAMILY**

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

**NO NAICS DATA REPORTED**

---

[Back to Report Summary](#)

# California Hazardous Material Incident Report System (CHMIRS)

**MAP ID# 6**

Distance from Property: 0.019 mi. (100 ft.) ENE  
Elevation: 1,786 ft. (Higher than TP)

## INCIDENT INFORMATION

CONTROL #: 08-5950

NOTIFIED: 08/15/08

AGENCY: EL DORADO IRRIGATION DIST.

ADMINISTRATION: EL DORADO COUNTY ENVIRONMENTAL MGMT.

INCIDENT LOCATION: CHINA GARDEN AT PLEASANT VALLEY RD.  
DIAMOND SPRINGS, CA

INCIDENT COUNTY: EL DORADO

## SUBSTANCE INFORMATION

SUBSTANCE: WASTE WATER

QUANTITY: 300

TYPE: GAL(S)

## INCIDENT DESCRIPTION

THE WASTE WATER SPILLED INTO A DRAINAGE DITCH.

CONTAINED: NO

WATER INVOLVED / WATERWAY: NO / NOT REPORTED

DATE AND TIME: 8/15/2008

SITE: OTHER

INJURIES: 0

FATALITIES: 0

EVACUATIONS: 0

CLEANUP BY: REPORTING PARTY

---

[Back to Report Summary](#)

## Facility Registry System (FRSCA)

**MAP ID# 7**

Distance from Property: 0.019 mi. (100 ft.) NW  
Elevation: 1,767 ft. (Higher than TP)

### **FACILITY INFORMATION**

REGISTRY ID: 110066033820

NAME: **WARD'S AUTOMOTIVE**

LOCATION ADDRESS: 2189 SUNRISE DR  
DIAMOND SPRINGS, CA 95619

COUNTY: **EL DORADO**

EPA REGION: **09**

FEDERAL FACILITY: **NOT REPORTED**

TRIBAL LAND: **NOT REPORTED**

ALTERNATIVE NAME/S:

**WARD'S AUTOMOTIVE**

PROGRAM/S LISTED FOR THIS FACILITY

**CA-ENVIROVIEW - CA-ENVIROVIEW**

STANDARD INDUSTRIAL CLASSIFICATION/S (SIC)

**NO SIC DATA REPORTED**

NORTH AMERICAN INDUSTRY CLASSIFICATION/S (NAICS)

**NO NAICS DATA REPORTED**

---

[Back to Report Summary](#)

## Hazardous Waste Tanner Summary (HWTS)

**MAP ID# 7**

Distance from Property: 0.019 mi. (100 ft.) NW  
Elevation: 1,767 ft. (Higher than TP)

### SITE INFORMATION

EPA ID: CAL000167531  
NAME: WARDS AUTOMOTIVE INC  
COUNTY: NOT REPORTED  
ADDRESS: 2189 SUNRISE DR  
DIAMOND SPRINGS, CA 95619

FACILITY LINK: [Department of Toxic Substances Control](#)

### MANIFEST SUMMARY INFORMATION

YEAR: 1998  
TSD ID: NVD982358483  
GENERATOR COUNTY: EL DORADO  
DISPOSAL COUNTY: UNKNOWN  
WASTE CATEGORY: UNSPECIFIED OIL-CONTAINING WASTE  
AMOUNT DISPOSED(TONS): 0.2418  
DISPOSAL METHOD: RECYCLER

YEAR: 1997  
TSD ID: NVD982358483  
GENERATOR COUNTY: EL DORADO  
DISPOSAL COUNTY: UNKNOWN  
WASTE CATEGORY: UNSPECIFIED OIL-CONTAINING WASTE  
AMOUNT DISPOSED(TONS): 0.3127  
DISPOSAL METHOD: RECYCLER

### CONTACT INFORMATION

CONTACT: WARDS AUTOMOTIVE INC  
PHONE: NOT REPORTED  
ADDRESS: NOT REPORTED  
NOT REPORTED NOT REPORTED

---

[Back to Report Summary](#)

# GeoTracker Cleanup Sites (CLEANUPSITES)

**MAP ID# 8**

Distance from Property: 0.05 mi. (264 ft.) NE  
Elevation: 1,786 ft. (Higher than TP)

## **FACILITY INFORMATION**

GLOBAL ID: T0601700047  
URL LINK: [CLICK HERE](#)  
BUSINESS NAME: FORMER SS  
ADDRESS: 493 MAIN ST  
DIAMOND SPRINGS, CA 95619  
COUNTY: EL DORADO

## **FACILITY DETAILS**

CASE TYPE: LUST CLEANUP SITE  
CASE NUMBER: 90065  
STATUS: COMPLETED - CASE CLOSED 06/22/1992  
POTENTIAL CONTAMINATION:

### **GASOLINE**

POTENTIAL MEDIA AFFECTED:

### **SOIL**

SITE HISTORY:

**NOT REPORTED**

## **REGULATORY ACTIVITIES**

| TYPE OF ACTION: | DATE:      | ACTION:                          |
|-----------------|------------|----------------------------------|
| OTHER           | 01/01/50   | LEAK DISCOVERY                   |
| OTHER           | 01/01/50   | LEAK REPORTED                    |
| ENFORCEMENT     | 11/13/1996 | CLOSURE/NO FURTHER ACTION LETTER |
| OTHER           | 04/01/1992 | LEAK REPORTED                    |
| OTHER           | 02/28/1992 | LEAK DISCOVERY                   |

## **STATUS HISTORY**

| STATUS:                 | DATE:      |
|-------------------------|------------|
| COMPLETED - CASE CLOSED | 06/22/1992 |
| OPEN - SITE ASSESSMENT  | 04/01/1992 |
| OPEN - CASE BEGIN DATE  | 02/28/1992 |

## **CONTACT DETAILS**

ORGANIZATION: CENTRAL VALLEY RWQCB (REGION 5S)  
ADDRESS: 11020 SUN CENTER DRIVE #200  
CITY: RANCHO CORDOVA  
CONTACT NAME: PETER MINKEL  
CONTACT TYPE: REGIONAL BOARD CASEWORKER  
CONTACT PHONE: NOT REPORTED  
EMAIL: PMINKEL@WATERBOARDS.CA.GOV

[Back to Report Summary](#)

## Historical Cortese List (HISTCORTESE)

[MAP ID# 8](#)

Distance from Property: 0.05 mi. (264 ft.) NE

Elevation: 1,786 ft. (Higher than TP)

### FACILITY INFORMATION

GEOSEARCH ID: 090065COR

ID#: 090065

NAME: FORMER SS

ADDRESS: 493 MAIN

DIAMOND SPRINGS, CA 95619

---

[Back to Report Summary](#)



## Leaking Underground Storage Tanks (LUST)

**MAP ID# 8**

Distance from Property: 0.05 mi. (264 ft.) NE  
Elevation: 1,786 ft. (Higher than TP)

### **FACILITY INFORMATION**

GLOBAL ID: T0601700047

URL LINK: [CLICK HERE](#)

BUSINESS NAME: FORMER SS

ADDRESS: 493 MAIN ST  
DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

### **FACILITY DETAILS**

CASE TYPE: LUST CLEANUP SITE

CASE NUMBER: 090065

STATUS: 06/22/1992

POTENTIAL CONTAMINATION:

**GASOLINE**

POTENTIAL MEDIA AFFECTED:

**SOIL**

SITE HISTORY:

**NOT REPORTED**

### **HISTORICAL FACILITY DETAILS**

**NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY**

---

[Back to Report Summary](#)

# Mineral Resource Data System (MRDS)

**MAP ID# 9**

Distance from Property: 0.107 mi. (565 ft.) WSW  
Elevation: 1,760 ft. (Lower than TP)

## **FACILITY INFORMATION**

GEOSEARCH ID: 10029926

DEP ID: 10029926

MINE NAME: ROBERT NELSON CLAIM

ADDRESS: EL DORADO COUNTY  
DIAMOND SPRINGS, CA 95619

DEVELOPMENT STATUS: OCCURRENCE

## **COMMODITY DETAILS**

COMMODITY: GOLD

COMMODITY TYPE: METALLIC

COMMODITY GROUP: GOLD

IMPORTANCE: PRIMARY

**MATERIAL DETAILS** NO MATERIAL DETAILS REPORTED

## **NAME DETAILS**

SITE NAME: ROBERT NELSON CLAIM

STATUS: CURRENT

---

[Back to Report Summary](#)

# Mineral Resource Data System (MRDS)

**MAP ID# 9**

Distance from Property: 0.107 mi. (565 ft.) WSW  
Elevation: 1,760 ft. (Lower than TP)

## **FACILITY INFORMATION**

GEOSEARCH ID: 10029927

DEP ID: 10029927

MINE NAME: WHEELOCK

ADDRESS: EL DORADO COUNTY  
DIAMOND SPRINGS, CA 95619

DEVELOPMENT STATUS: OCCURRENCE

## **COMMODITY DETAILS**

COMMODITY: GOLD

COMMODITY TYPE: METALLIC

COMMODITY GROUP: GOLD

IMPORTANCE: PRIMARY

**MATERIAL DETAILS** NO MATERIAL DETAILS REPORTED

## **NAME DETAILS**

SITE NAME: WHEELOCK

STATUS: CURRENT

---

[Back to Report Summary](#)

# Superfund Enterprise Management System Archived Site Inventory (SEMSARCH)

**MAP ID# 10**

Distance from Property: 0.201 mi. (1,061 ft.) WNW  
Elevation: 1,762 ft. (Higher than TP)

## FACILITY INFORMATION

EPA ID#: CAD980637417

SITE ID#: 0901900

NAME: OLD CALDOR LUMBER CO YD

ADDRESS: HWY 49 & FLAT RD

DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

FEDERAL FACILITY: NOT A FEDERAL FACILITY

NPL: NOT ON THE NPL

NON NPL STATUS: NFRAP-SITE DOES NOT QUALIFY FOR THE NPL BASED ON EXISTING INFORMATION

SEMS SEARCH: [CLICK HERE](#)

Below information was gathered from the prior NFRAP update completed in 10/2013 update:

| <u>ACTION</u>               | <u>START DATE</u> | <u>COMPLETION DATE</u> | <u>RESPONSIBILITY</u> |
|-----------------------------|-------------------|------------------------|-----------------------|
| PA - PRELIMINARY ASSESSMENT | 2/1/1985          | 5/1/1985               | STATE (FUND)          |
| DS - DISCOVERY              | NOT REPORTED      | 6/1/1981               | EPA FUND              |
| PA - PRELIMINARY ASSESSMENT | NOT REPORTED      | 7/1/1988               | EPA FUND              |
| VS - ARCHIVE SITE           | NOT REPORTED      | 7/1/1988               | EPA IN-HOUSE          |

## ACTION DESCRIPTIONS

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

DS - (DISCOVERY) - THE PROCESS BY WHICH A POTENTIAL HAZARDOUS WASTE SITE IS BROUGHT TO THE ATTENTION OF THE EPA. THE PROCESS CAN OCCUR THROUGH THE USE OF SEVERAL MECHANISMS SUCH AS A PHONE CALL OR REFERRAL BY ANOTHER GOVERNMENT AGENCY.

PA - (PRELIMINARY ASSESSMENT) - COLLECTION OF DIVERSE EXISTING INFORMATION ABOUT THE SOURCE AND NATURE OF THE SITE HAZARD. IT IS EPA POLICY TO COMPLETE THE PRELIMINARY ASSESSMENT WITHIN ONE YEAR OF SITE DISCOVERY.

VS - (ARCHIVE SITE) - THE DECISION IS MADE THAT NO FURTHER ACTIVITY IS PLANNED AT THE SITE.

---

[Back to Report Summary](#)

# Historical Underground Storage Tanks (HISTUST)

**MAP ID# 11**

Distance from Property: 0.211 mi. (1,114 ft.) WNW  
Elevation: 1,799 ft. (Higher than TP)

EL DORADO UNION HIGH SCHOOL DI, 4675 MISSOURI FLAT ROAD, DIAMOND SPRINGS, CA 95619  
UNIQUE ID: 0002344F

Page 1 out of 4



**HISTUST (HISTUST)**

EL DORADO UNION HIGH SCHOOL DI, 4675 MISSOURI FLAT ROAD, DIAMOND SPRINGS, CA 95619  
UNIQUE ID: 0002344F



# HISTUST (HISTUST)

EL DORADO UNION HIGH SCHOOL DI, 4675 MISSOURI FLAT ROAD, DIAMOND SPRINGS, CA 95619  
UNIQUE ID: 0002344F

Page 3 out of 4



# HISTUST (HISTUST)

EL DORADO UNION HIGH SCHOOL DI, 4675 MISSOURI FLAT ROAD, DIAMOND SPRINGS, CA 95619  
UNIQUE ID: 0002344F

Page 4 out of 4

---

[Back to Report Summary](#)



# Statewide Environmental Evaluation and Planning System (SWEEPS)

**MAP ID# 11**

Distance from Property: 0.211 mi. (1,114 ft.) WNW  
Elevation: 1,799 ft. (Higher than TP)

## **FACILITY INFORMATION**

FACILITY #: 46253 STATUS: ACTIVE  
BOE: 44-003046 JURISDICTION: EL DORADO COUNTY  
NAME: EL DORADO UNION HIGH SCHOOL AGENCY: ENVIRONMENTAL HEALTH - U.S.T.  
DI  
ADDRESS: 4675 MISSOURI FLAT RD  
DIAMOND SPRINGS, CA 95619

## **TANK INFORMATION**

TANK #: 000001 CAPACITY: 12000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: DIESEL CONTAINMENT: NOT REPORTED

TANK #: 000002 CAPACITY: 8000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: REG UNLEADED CONTAINMENT: NOT REPORTED

TANK #: 000003 CAPACITY: 1000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: LEADED CONTAINMENT: NOT REPORTED

TANK #: 000004 CAPACITY: 12000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: DIESEL CONTAINMENT: NOT REPORTED

TANK #: 000005 CAPACITY: 8000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: REG UNLEADED CONTAINMENT: NOT REPORTED

TANK #: 000006 CAPACITY: 1000  
INSTALLED: NOT REPORTED REMOVED: NOT REPORTED  
TANK USE: M.V. FUEL STORAGE TYPE: PRODUCT  
CONTENT: LEADED CONTAINMENT: NOT REPORTED

[Back to Report Summary](#)

## Underground Storage Tanks (USTCUPA)

[MAP ID# 11](#)

Distance from Property: 0.211 mi. (1,114 ft.) WNW  
Elevation: 1,799 ft. (Higher than TP)

### FACILITY INFORMATION

GEOSEARCH ID: 187573130                      FACILITY ID: FA0000680  
NAME: EDUHSD TRANSPORTATION  
ADDRESS: 4675 MISSOURI FLAT RD  
                    PLACERVILLE, CA 95667  
COUNTY: EL DORADO

### FACILITY DETAILS

OTHER FACILITY NAME(S) LISTED FOR THIS SITE: EDUHSD TRANSPORTATION  
PERMIT AGENCY: EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT  
FACILITY DETAILS LINK: [Click Here](#)

---

[Back to Report Summary](#)

# GeoTracker Cleanup Sites (CLEANUPSITES)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

## **FACILITY INFORMATION**

GLOBAL ID: T10000009244

URL LINK: [CLICK HERE](#)

BUSINESS NAME: WASTE CONNECTIONS

ADDRESS: 4100 THROWITA WAY  
PLACERVILLE, CA 95667

COUNTY: EL DORADO

## **FACILITY DETAILS**

CASE TYPE: CLEANUP PROGRAM SITE

CASE NUMBER: NOT REPORTED

STATUS: OPEN - SITE ASSESSMENT 08/12/2016

POTENTIAL CONTAMINATION:

**OTHER ACID OR CORROSIVE**

POTENTIAL MEDIA AFFECTED:

**NOT REPORTED**

SITE HISTORY:

**SITE WAS CONSTRUCTED ON A FORMER LIME PROCESSING FACILITY. LIME WASTE BENEATH SITE HAS ELEVATED PH AND THREATENS GROUNDWATER.**

## **REGULATORY ACTIVITIES**

| TYPE OF ACTION: | DATE:      | ACTION:                                      |
|-----------------|------------|--|
| ENFORCEMENT     | 06/18/2018 | STAFF LETTER                                 |
| RESPONSE        | 04/24/2018 | MONITORING REPORT - QUARTERLY                |
| RESPONSE        | 01/31/2018 | MONITORING REPORT - QUARTERLY                |
| ENFORCEMENT     | 01/31/2018 | NOTIFICATION - PUBLIC PARTICIPATION DOCUMENT |
| ENFORCEMENT     | 12/11/2017 | STAFF LETTER                                 |
| RESPONSE        | 11/15/2017 | EMAIL CORRESPONDENCE                         |
| RESPONSE        | 11/14/2017 | CORRESPONDENCE                               |
| ENFORCEMENT     | 11/08/2017 | STAFF LETTER                                 |
| ENFORCEMENT     | 10/24/2017 | LETTER - NOTICE                              |
| RESPONSE        | 10/24/2017 | MONITORING REPORT - QUARTERLY                |
| RESPONSE        | 10/15/2017 | EMAIL CORRESPONDENCE                         |
| RESPONSE        | 10/03/2017 | FEASIBILITY STUDY REPORT                     |
| RESPONSE        | 07/31/2017 | MONITORING REPORT - QUARTERLY                |
| ENFORCEMENT     | 06/09/2017 | STAFF LETTER                                 |
| RESPONSE        | 05/25/2017 | SITE INVESTIGATION                           |
| ENFORCEMENT     | 02/10/2017 | EMAIL CORRESPONDENCE                         |
| RESPONSE        | 02/10/2017 | CORRESPONDENCE                               |
| ENFORCEMENT     | 02/08/2017 | EMAIL CORRESPONDENCE                         |
| RESPONSE        | 02/08/2017 | SOIL AND WATER INVESTIGATION WORKPLAN        |
| ENFORCEMENT     | 02/07/2017 | STAFF LETTER                                 |
| ENFORCEMENT     | 02/06/2017 | STAFF LETTER                                 |
| RESPONSE        | 01/30/2017 | SITE INVESTIGATION WORKPLAN                  |
| RESPONSE        | 01/24/2017 | SOIL AND WATER INVESTIGATION REPORT          |

## GeoTracker Cleanup Sites (CLEANUPSITES)

| TYPE OF ACTION: | DATE:      | ACTION:                     |
|-----------------|------------|-----------------------------|
| ENFORCEMENT     | 11/04/2016 | EMAIL CORRESPONDENCE        |
| RESPONSE        | 10/17/2016 | SITE INVESTIGATION WORKPLAN |
| ENFORCEMENT     | 09/08/2016 | EMAIL CORRESPONDENCE        |
| ENFORCEMENT     | 08/15/2016 | STAFF LETTER                |
| RESPONSE        | 07/22/2016 | SITE INVESTIGATION          |

### STATUS HISTORY

| STATUS:                | DATE:      |
|------------------------|------------|
| OPEN - SITE ASSESSMENT | 08/12/2016 |
| OPEN - CASE BEGIN DATE | 07/22/2016 |

### CONTACT DETAILS

ORGANIZATION: CENTRAL VALLEY RWQCB (REGION 5S)  
ADDRESS: 11020 SUN CENTER DRIVE, SUITE 200  
CITY: RANCHO CORDOVA  
CONTACT NAME: WALTER FLOYD  
CONTACT TYPE: REGIONAL BOARD CASEWORKER  
CONTACT PHONE: 9164644651  
EMAIL: WALTER.FLOYD@WATERBOARDS.CA.GOV

---

[Back to Report Summary](#)

## ***Listing of Certified Dropoff, Collection, and Community Service Programs (DROP)***

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CP0674**  
NAME: **MATERIAL RECOVERY FACILITY**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **12/23/96**  
OPERATION END DATE: **07/19/00**  
PROGRAM PHONE: **(530) 642-0731**  
ORGANIZATION NAME: **NOT REPORTED**  
ADDRESS: **STREET NOT REPORTED**  
**CITY NOT REPORTED**  
GLASS: **ACCEPTED**  
ALUMINIUM: **ACCEPTED**  
PLASTIC: **ACCEPTED**  
BIMETAL: **NOT ACCEPTED**

---

[Back to Report Summary](#)

## ***Listing of Certified Dropoff, Collection, and Community Service Programs (DROP)***

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CP0880**  
NAME: **EL DORADO DISPOSAL SERVICE MRF**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **9/22/2006**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **ACCEPTED**  
ALUMINIUM: **ACCEPTED**  
PLASTIC: **ACCEPTED**  
BIMETAL: **ACCEPTED**

---

[Back to Report Summary](#)

## ***Listing of Certified Dropoff, Collection, and Community Service Programs (DROP)***

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CP0961**  
NAME: **SEI SOLID WASTE**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **3/9/2009**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **ACCEPTED**  
ALUMINIUM: **ACCEPTED**  
PLASTIC: **ACCEPTED**  
BIMETAL: **ACCEPTED**

---

[Back to Report Summary](#)

## Listing of Certified Processors (PROC)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: PR0439  
NAME: EL DORADO DISPOSAL SERVICE  
ADDRESS: 4100 THROWITA WAY  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### **SITE DETAILS**

OPERATION BEGIN DATE: 10/12/2006  
OPERATION END DATE: NOT REPORTED  
PROGRAM PHONE: (530) 626-4141  
ORGANIZATION NAME: WASTE CONNECTIONS OF CALIFORNIA INC  
ADDRESS: 4100 THROWITA WAY  
PLACERVILLE CA 95667  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)



## Solid Waste Information System Sites (SWIS)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **FACILITY INFORMATION**

GEOSEARCH ID: 09-AA-0004SWIS  
ID NUMBER: 09-AA-0004  
NAME: WESTERN EL DORADO RECOVERY SYSTEMS MRF  
LOCATION: 4100 THROWITA WAY  
PLACERVILLE, CA 95667  
COUNTY: EL DORADO  
LATITUDE: 38.698960000  
LONGITUDE: -120.815620000

### **OWNER INFORMATION**

NAME: WASTE CONNECTIONS OF CALIFORNIA, INC.  
ADDRESS: 10001 WOODLOCH FOREST DRIVE, SUITE 400  
THE WOODLANDS, TX 77380

### **OPERATOR INFORMATION**

NAME: WESTERN EL DORADO REG SYSTEM  
ADDRESS: 4100 THROWITA WAY  
PLACERVILLE CA 95667

### **FACILITY DETAILS**

SITE ID: 384  
LAND USE: NOT REPORTED  
PERMIT DATE: 2/23/2005  
PERMIT STATUS: PERMITTED  
ENFORCEMENT AGENCY: COUNTY OF PLACER

### **UNIT**

CATEGORY: TRANSFER/PROCESSING  
UNIT #: 01  
REGULATORY STATUS: PERMITTED  
OPERATIONAL STATUS: ACTIVE  
ACTIVITY: LARGE VOLUME TRANSFER/PROC FACILITY  
INSPECTION: MONTHLY  
ACCEPTED WASTE: MIXED MUNICIPAL  
CAPACITY: 400  
REMAINING CAPACITY: NOT REPORTED  
THROUGHPUT: 400  
DISPOSAL ACREAGE: NOT REPORTED  
CLOSURE DATE: NOT REPORTED

[Back to Report Summary](#)

## Solid Waste Information System Sites (SWIS)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE

Elevation: 1,812 ft. (Higher than TP)

### **FACILITY INFORMATION**

GEOSEARCH ID: 09-AA-0006SWIS

ID NUMBER: 09-AA-0006

NAME: WEDRS-GREEN WASTE RECYCLING CENTER

LOCATION: 4100 THROWITA WAY  
PLACERVILLE, CA 95667

COUNTY: EL DORADO

LATITUDE: 38.699250000

LONGITUDE: -120.815810000

### **OWNER INFORMATION**

NAME: WASTE CONNECTIONS, INC.

ADDRESS: 3 WATERWAY SQUARE PLACE, SUITE 110  
THE WOODLANDS, TX 77380

### **OPERATOR INFORMATION**

NAME: WESTERN EL DORADO SERVICES, INC.

ADDRESS: 4100 THROWITA WAY  
PLACERVILLE CA 95667

### **FACILITY DETAILS**

SITE ID: 10521

LAND USE: COMMERCIAL

PERMIT DATE: 8/5/2014

PERMIT STATUS: NOTIFICATION

ENFORCEMENT AGENCY: COUNTY OF PLACER

### **UNIT**

CATEGORY: COMPOSTING

UNIT #: 01

REGULATORY STATUS: NOTIFICATION

OPERATIONAL STATUS: ACTIVE

ACTIVITY: CHIPPING AND GRINDING ACTIVITY FAC./ OP.

INSPECTION: QUARTERLY

ACCEPTED WASTE: GREEN MATERIALS

CAPACITY: 72600

REMAINING CAPACITY: NOT REPORTED

THROUGHPUT: 200

DISPOSAL ACREAGE: NOT REPORTED

CLOSURE DATE: NOT REPORTED

---

[Back to Report Summary](#)

## Solid Waste Information System Sites (SWIS)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **FACILITY INFORMATION**

GEOSEARCH ID: 09-AA-0007SWIS  
ID NUMBER: 09-AA-0007  
NAME: WEDRS- CDI RECOVETY OPERATION (MVCDI)  
LOCATION: 4100 THROWITA WAY  
PLACERVILLE, CA 95667  
COUNTY: EL DORADO  
LATITUDE: 38.699250000  
LONGITUDE: -120.815810000

### **OWNER INFORMATION**

NAME: WASTE CONNECTIONS, INC.  
ADDRESS: 3 WATERWAY SQUARE PLACE, SUITE 110  
THE WOODLANDS, TX 77380

### **OPERATOR INFORMATION**

NAME: WESTERN EL DORADO SERVICES, INC.  
ADDRESS: 4100 THROWITA WAY  
PLACERVILLE CA 95667

### **FACILITY DETAILS**

SITE ID: 10522  
LAND USE: NOT REPORTED  
PERMIT DATE: 6/10/2009  
PERMIT STATUS: PERMITTED  
ENFORCEMENT AGENCY: COUNTY OF PLACER

### **UNIT**

CATEGORY: TRANSFER/PROCESSING  
UNIT #: 01  
REGULATORY STATUS: PERMITTED  
OPERATIONAL STATUS: ACTIVE  
ACTIVITY: MEDIUM VOL CD WOOD DEBRIS CHIPGRIND FAC.  
INSPECTION: MONTHLY  
ACCEPTED WASTE: CONSTRUCTION/DEMOLITION,INERT,METALS,WOOD WASTE  
CAPACITY: 63525  
REMAINING CAPACITY: NOT REPORTED  
THROUGHPUT: 175  
DISPOSAL ACREAGE: NOT REPORTED  
CLOSURE DATE: NOT REPORTED

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CP0880**  
NAME: **EL DORADO DISPOSAL SERVICE MRF**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **09/22/06**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **ACCEPTED**  
ALUMINIUM: **ACCEPTED**  
PLASTIC: **ACCEPTED**  
BIMETAL: **ACCEPTED**

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

[MAP ID# 12](#)

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: CS1171  
NAME: WASTE CONNECTIONS OF CALIFORNIA INC  
ADDRESS: 4100 THROWITA WAY  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### **SITE DETAILS**

OPERATION BEGIN DATE: 05/19/05  
OPERATION END DATE: NOT REPORTED  
PROGRAM PHONE: (530) 626-4141  
ORGANIZATION NAME: WASTE CONNECTIONS OF CALIFORNIA INC  
ADDRESS: PO BOX 1270  
DIAMOND SPRINGS CA 95619  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CS1234**  
NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **08/24/06**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **NOT ACCEPTED**  
ALUMINIUM: **NOT ACCEPTED**  
PLASTIC: **NOT ACCEPTED**  
BIMETAL: **NOT ACCEPTED**

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CS1235**  
NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **08/24/06**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **NOT ACCEPTED**  
ALUMINIUM: **NOT ACCEPTED**  
PLASTIC: **NOT ACCEPTED**  
BIMETAL: **NOT ACCEPTED**

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CS1236**  
NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **08/24/06**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **NOT ACCEPTED**  
ALUMINIUM: **NOT ACCEPTED**  
PLASTIC: **NOT ACCEPTED**  
BIMETAL: **NOT ACCEPTED**

---

[Back to Report Summary](#)



## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **CS19394.001**  
NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
CITY: **PLACERVILLE**  
STATE: **CA**  
ZIP: **95667**  
COUNTY: **EL DORADO**

### **SITE DETAILS**

OPERATION BEGIN DATE: **08/15/16**  
OPERATION END DATE: **NOT REPORTED**  
PROGRAM PHONE: **(530) 626-4141**  
ORGANIZATION NAME: **WASTE CONNECTIONS OF CALIFORNIA INC**  
ADDRESS: **4100 THROWITA WAY**  
**PLACERVILLE CA 95667**  
GLASS: **NOT ACCEPTED**  
ALUMINIUM: **NOT ACCEPTED**  
PLASTIC: **NOT ACCEPTED**  
BIMETAL: **NOT ACCEPTED**

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 12**

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: PR0439  
NAME: EL DORADO DISPOSAL SERVICE  
ADDRESS: 4100 THROWITA WAY  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### **SITE DETAILS**

OPERATION BEGIN DATE: 10/12/06  
OPERATION END DATE: NOT REPORTED  
PROGRAM PHONE: (530) 626-4141  
ORGANIZATION NAME: WASTE CONNECTIONS OF CALIFORNIA INC  
ADDRESS: 4100 THROWITA WAY  
PLACERVILLE CA 95667  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

[MAP ID# 12](#)

Distance from Property: 0.333 mi. (1,758 ft.) NNE  
Elevation: 1,812 ft. (Higher than TP)

### SITE INFORMATION

ID #: RC10531  
NAME: WESTERN EL DORADO RECOVERY SYSTEMS  
ADDRESS: 4100 THROWITA WY  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### SITE DETAILS

OPERATION BEGIN DATE: 08/30/00  
OPERATION END DATE: 11/09/06  
PROGRAM PHONE: (530) 626-4141  
ORGANIZATION NAME: NOT REPORTED  
ADDRESS: STREET NOT REPORTED  
CITY NOT REPORTED  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 13**

Distance from Property: 0.396 mi. (2,091 ft.) WNW  
Elevation: 1,816 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: RC10654  
NAME: MISSOURI FLAT RECYCLE CENTER  
ADDRESS: 4600 MISSOURI FLAT RD  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### **SITE DETAILS**

OPERATION BEGIN DATE: 02/06/01  
OPERATION END DATE: NOT REPORTED  
PROGRAM PHONE: (530) 626-4141  
ORGANIZATION NAME: NOT REPORTED  
ADDRESS: STREET NOT REPORTED  
CITY NOT REPORTED  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## CALSITES Database (CALSITES)

**MAP ID# 14**

Distance from Property: 0.401 mi. (2,117 ft.) WNW  
Elevation: 1,802 ft. (Higher than TP)

### **FACILITY INFORMATION**

ID #: 09750002

NAME: FOOTHILL AUTO REPAIR

ADDRESS: 6566-C COMMERCE WAY  
DIAMOND SPRINGS, CA

STATUS (DATE): PROPERTY/SITE REFERRED TO RWQCB (07/15/1987)

STANDARD INDUSTRIAL CLASSIFICATION BELIEVED TO BE CAUSE OF (POTENTIAL) CONTAMINATION:

**AUTO REPAIR, SERVICES & PARKING**

ACCESS TO SITE: CONTROLLED

GROUNDWATER CONTAMINATION: NOT REPORTED

### **COMMENTS**

FACILITY IDENTIFIED EL DORADO CO HEALTH RECEIVED A COMPLAINT OF POSSIBLE WELL WATER CONTAMINATION. INSPECTION(LOCAL) EL DORADO CO HLTH/CENTRAL VALLEY RWQCB OPERATOR ALLOWED SOLVENTS, ANTIFREEZE, AND WASTE OIL TO FLOW TO GROUND FACILITY DRIVE-BY DHS (SSP); STAINED SOIL, POOR HOUSEKEEP DHS RECORDS SEARCH-NO FILE FOUND STATE LANDS COMMISSION DEPT. OF WATER RESOURCES PRELIM ASSESS DONE PENDING PER CVRWQCB WELL WATER SAMPLES SAMPLE RESULTS NFA BASED ON CVRWQCB SAMPLES; NO DETECTABLE LIMITS (<.5) OF MISC. PETROLEUM PRODUCTS (GASOLINE & SOLVENTS)

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 14**

Distance from Property: 0.401 mi. (2,117 ft.) WNW  
Elevation: 1,802 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **09750002** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **FOOTHILL AUTO REPAIR**

ADDRESS: **6566-C COMMERCE WAY  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **1**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **EVALUATION**

### SITE TYPE DESCRIPTION

**EVALUATION: IDENTIFIES SUSPECTED, BUT UNCONFIRMED, CONTAMINATED SITES THAT NEED OR HAVE GONE THROUGH AN INVESTIGATION AND ASSESSMENT PROCESS. IF A SITE IS FOUND TO HAVE CONFIRMED CONTAMINATION, IT WILL CHANGE FROM EVALUATION TO EITHER A STATE RESPONSE OR VOLUNTARY CLEANUP SITE TYPE. SITES FOUND TO HAVE NO CONTAMINATION AT THE COMPLETION OF THE INVESTIGATION AND ASSESSMENT PROCESS RESULT IN A NO ACTION REQUIRED (FOR PHASE 1 ASSESSMENTS) OR NO FURTHER ACTION (FOR PHASE 2 ASSESSMENTS) DETERMINATION.**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 07/15/1987)

**REFER: RWQCB -**

PAST USE/S THAT CAUSED THE CONTAMINATION

**NONE SPECIFIED**

CONFIRMED CONTAMINANTS OF CONCERN

**NONESPECIFIED - NONE SPECIFIED**

---

[Back to Report Summary](#)

## Referred to Another Local or State Agency (REF)

**MAP ID# 14**

Distance from Property: 0.401 mi. (2,117 ft.) WNW  
Elevation: 1,802 ft. (Higher than TP)

### **FACILITY INFORMATION**

GEOSEARCH ID: 9750002

ENVIROSTOR ID: 9750002

FACILITY NAME: Foothill Auto Repair

ADDRESS: 6566-C Commerce Way  
Diamond Springs, CA 95619

COUNTY: EL DORADO

### **FACILITY DETAILS**

PROGRAM TYPE: EVALUATION

STATUS: REFER: RWQCB

STATUS DATE: 7/15/1987

CALENVIROSCREEN SCORE: 36-40%

SITE CODE: NOT REPORTED

---

[Back to Report Summary](#)

## Historical Cortese List (HISTCORTESE)

**MAP ID# 15**

Distance from Property: 0.403 mi. (2,128 ft.) N  
Elevation: 1,801 ft. (Higher than TP)

### FACILITY INFORMATION

GEOSEARCH ID: 6A189101N25COR

ID#: 6A189101N25

NAME: GUSTAFSON D M & PATRICI

ADDRESS: 3655 CHUCKWAGON  
PLACERVILLE, CA 95667

---

[Back to Report Summary](#)



## GeoTracker Cleanup Sites (CLEANUPSITES)

MAP ID# 16

Distance from Property: 0.443 mi. (2,339 ft.) WNW  
Elevation: 1,747 ft. (Lower than TP)

### FACILITY INFORMATION

GLOBAL ID: T0601700077

URL LINK: [CLICK HERE](#)

BUSINESS NAME: STEVE'S CHEAPER

ADDRESS: 130 PLEASANT VALLEY RD  
DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

### FACILITY DETAILS

CASE TYPE: LUST CLEANUP SITE

CASE NUMBER: 90096

STATUS: COMPLETED - CASE CLOSED 01/02/2013

POTENTIAL CONTAMINATION:

#### GASOLINE

POTENTIAL MEDIA AFFECTED:

AQUIFER USED FOR DRINKING WATER SUPPLY

SITE HISTORY:

THE FIRST THREE MONITORING WELLS WERE INSTALLED ON SITE IN NOVEMBER 1999. BY THE TIME OF THE INITIATION OF THE OFF SITE INVESTIGATION IN THE FALL OF 2001, THE AVERAGE REPORTED MTBE CONCENTRATIONS IN THESE THREE WELLS WAS 50,083 µG/L. THE AVERAGE CONCENTRATION IN THESE THREE WELLS FOR THE LAST FOUR SEMI-ANNUAL MONITORING EVENTS IS 566 µG/L. THIS REPRESENTS A 98.9 PERCENT REDUCTION SINCE ONSITE REMEDIATION BEGAN IN EARLY 2002. OFF SITE INVESTIGATION CONTINUED THROUGH TO THE SUMMER OF 2004 WITH CONCURRENT REMEDIAL ACTIVITIES. BY AUGUST 2004 THERE WERE 29 MONITORING WELLS AND TWO EXTRACTION WELLS IN USE. ELEVEN OF THE MONITORING WELLS DEFINE THE OUTWARD EXTENT OR EDGES OF THE MTBE PLUME, COMPRISING THE WELLS THAT HAVE CONSISTENTLY BEEN REPORTED WITH MTBE BELOW THE DRINKING WATER STANDARD. A SENSITIVE RECEPTOR SURVEY WAS COMPLETED IN LATE 2000. THERE WERE NO WATER SUPPLY WELLS LOCATED WITHIN THE EXTENT OF THE PLUME, LATER DEFINED, AND ONLY FIVE WELLS WERE FOUND IN THE 2000 FOOT SEARCH RADIUS. THE CLOSEST WAS OVER 500 FEET CROSS GRADIENT OF THE PLUME AND HAS SUBSEQUENTLY BEEN REMOVED. GROUNDWATER AS A POTENTIAL SOURCE VAPOR EMANATIONS WAS ADDRESSED IN WORKPLAN DATED JANUARY 26, 2007 INDICATING THAT THERE WERE NO AREAS THAT COULD POTENTIALLY BE IMPACTED TO INVESTIGATE. THIS WAS AFFIRMED IN THE WORKPLAN APPROVAL LETTER FROM THE REGIONAL BOARD DATED 6 FEBRUARY 2007. PATTERSON LAKE IS SITUATED DOWNGRADIENT OF THE SOUTHWESTERLY DIRECTED PLUME THAT ORIGINATED AT THE PROPERTY NOW OWNED BY TOWER ENERGY GROUP. THE LAKE HAS FUNCTIONED AS A HYDRAULIC BARRIER, LOWERING THE GROUNDWATER GRADIENT IN ITS AREA AND SLOWING THE PREREMEDIAL ADVANCEMENT OF THE PLUME. THREE 10,000 GALLON UST'S AND ASSOCIATED PIPING WERE REMOVED FROM THE SITE IN THE SUMMER OF 2010 STATION UPGRADES ACTIVITIES.

### REGULATORY ACTIVITIES

| TYPE OF ACTION: | DATE:      | ACTION:  |
|-----------------|------------|--|
| OTHER           | 01/01/50   | LEAK BEGAN   |
| OTHER           | 01/01/50   | LEAK DISCOVERY                                       |
| OTHER           | 01/01/50   | LEAK REPORTED  |
| OTHER           | 01/01/50   | LEAK STOPPED   |
| REMEDIATION     | 01/01/50   | IN SITU PHYSICAL/CHEMICAL TREATMENT (OTHER THAN SVE) |
| REMEDIATION     | 01/01/50   | OTHER (USE DESCRIPTION FIELD)                        |
| REMEDIATION     | 01/01/50   | PUMP & TREAT (P&T) GROUNDWATER                       |
| ENFORCEMENT     | 01/02/2013 | CLOSURE/NO FURTHER ACTION LETTER                     |

## GeoTracker Cleanup Sites (CLEANUPSITES)

| TYPE OF ACTION: | DATE:      | ACTION:  |
|-----------------|------------|--|
| ENFORCEMENT     | 10/30/2012 | LOP CASE CLOSURE SUMMARY TO RB                       |
| ENFORCEMENT     | 09/30/2012 | LETTER - NOTICE                                      |
| ENFORCEMENT     | 08/24/2012 | STAFF LETTER   |
| ENFORCEMENT     | 06/08/2012 | STAFF LETTER   |
| ENFORCEMENT     | 02/16/2012 | STAFF LETTER   |
| ENFORCEMENT     | 08/25/2010 | STAFF LETTER   |
| ENFORCEMENT     | 08/12/2010 | STAFF LETTER   |
| ENFORCEMENT     | 08/12/2010 | STAFF LETTER   |
| ENFORCEMENT     | 04/11/2010 | STAFF LETTER   |
| ENFORCEMENT     | 02/27/2009 | STAFF LETTER   |
| ENFORCEMENT     | 10/01/2008 | LETTER - NOTICE                                      |
| RESPONSE        | 04/30/2008 | REMEDIAL PROGRESS REPORT                             |
| RESPONSE        | 04/30/2008 | OTHER REPORT / DOCUMENT                              |
| RESPONSE        | 01/31/2008 | REMEDIAL PROGRESS REPORT                             |
| RESPONSE        | 10/30/2007 | OTHER REPORT / DOCUMENT                              |
| RESPONSE        | 07/30/2007 | REMEDIAL PROGRESS REPORT                             |
| RESPONSE        | 04/30/2007 | INTERIM REMEDIAL ACTION REPORT                       |
| RESPONSE        | 04/30/2007 | MONITORING REPORT - QUARTERLY                        |
| ENFORCEMENT     | 04/10/2007 | MEETING  |
| ENFORCEMENT     | 02/06/2007 | STAFF LETTER   |
| ENFORCEMENT     | 02/01/2007 | SITE VISIT / INSPECTION / SAMPLING                   |
| RESPONSE        | 01/31/2007 | OTHER WORKPLAN                                       |
| RESPONSE        | 01/31/2007 | OTHER REPORT / DOCUMENT                              |
| RESPONSE        | 01/31/2007 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 12/29/2006 | OTHER REPORT / DOCUMENT                              |
| ENFORCEMENT     | 12/19/2006 | STAFF LETTER   |
| RESPONSE        | 10/31/2006 | MONITORING REPORT - QUARTERLY                        |
| ENFORCEMENT     | 10/24/2006 | VERBAL COMMUNICATION                                 |
| RESPONSE        | 07/30/2006 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 04/30/2006 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 01/31/2006 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 10/31/2005 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 07/15/2005 | MONITORING REPORT - QUARTERLY                        |
| REMEDIATION     | 07/11/2005 | IN SITU PHYSICAL/CHEMICAL TREATMENT (OTHER THAN SVE) |
| RESPONSE        | 04/30/2005 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 01/31/2005 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 10/15/2004 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 07/15/2004 | MONITORING REPORT - QUARTERLY                        |
| ENFORCEMENT     | 04/15/2004 | STAFF LETTER   |
| RESPONSE        | 04/15/2004 | MONITORING REPORT - QUARTERLY                        |
| RESPONSE        | 04/09/2004 | OTHER WORKPLAN                                       |
| REMEDIATION     | 03/05/2004 | PUMP & TREAT (P&T) GROUNDWATER                       |
| ENFORCEMENT     | 02/27/2004 | STAFF LETTER   |
| RESPONSE        | 01/15/2004 | MONITORING REPORT - QUARTERLY                        |

## GeoTracker Cleanup Sites (CLEANUPSITES)

| TYPE OF ACTION: | DATE:      | ACTION:                       |
|-----------------|------------|-------------------------------|
| RESPONSE        | 10/15/2003 | MONITORING REPORT - QUARTERLY |
| RESPONSE        | 07/15/2003 | MONITORING REPORT - QUARTERLY |
| RESPONSE        | 04/15/2003 | MONITORING REPORT - QUARTERLY |
| RESPONSE        | 01/15/2003 | MONITORING REPORT - QUARTERLY |
| ENFORCEMENT     | 07/26/2002 | FILE REVIEW                   |
| ENFORCEMENT     | 07/25/2002 | FILE REVIEW                   |
| ENFORCEMENT     | 02/25/2002 | FILE REVIEW                   |
| ENFORCEMENT     | 10/17/2001 | STAFF LETTER                  |
| REMEDATION      | 08/03/2001 | OTHER (USE DESCRIPTION FIELD) |
| ENFORCEMENT     | 07/11/2001 | STAFF LETTER                  |
| ENFORCEMENT     | 04/20/2001 | STAFF LETTER                  |
| ENFORCEMENT     | 10/24/2000 | STAFF LETTER                  |
| ENFORCEMENT     | 05/26/2000 | STAFF LETTER                  |
| ENFORCEMENT     | 07/23/1997 | REFERRAL TO REGIONAL BOARD    |
| OTHER           | 07/23/1997 | LEAK BEGAN                    |
| OTHER           | 07/23/1997 | LEAK STOPPED                  |
| OTHER           | 07/23/1997 | LEAK REPORTED                 |
| OTHER           | 06/22/1997 | LEAK DISCOVERY                |
| RESPONSE        | 04/15/0204 | MONITORING REPORT - QUARTERLY |

### STATUS HISTORY

| STATUS:                        | DATE:      |
|--------------------------------|------------|
| COMPLETED - CASE CLOSED        | 01/02/2013 |
| OPEN - ELIGIBLE FOR CLOSURE    | 10/10/2012 |
| OPEN - VERIFICATION MONITORING | 11/06/2009 |
| OPEN - REMEDIATION             | 03/08/2008 |
| OPEN - REMEDIATION             | 03/06/2008 |
| OPEN - REMEDIATION             | 07/30/2007 |
| OPEN - REMEDIATION             | 07/11/2005 |
| OPEN - REMEDIATION             | 04/08/2004 |
| OPEN - SITE ASSESSMENT         | 04/18/2001 |
| OPEN - SITE ASSESSMENT         | 12/01/2000 |
| OPEN - CASE BEGIN DATE         | 06/22/1997 |
| OPEN - SITE ASSESSMENT         | 06/22/1997 |

### CONTACT DETAILS

ORGANIZATION: EL DORADO COUNTY  
ADDRESS: 2850 FAIRLANE CT., BUILDING C  
CITY: PLACERVILLE  
CONTACT NAME: ROBERT LAURITZEN  
CONTACT TYPE: LOCAL AGENCY CASEWORKER  
CONTACT PHONE: NOT REPORTED  
EMAIL: ROBERT.LAURITZEN@EDCGOV.US

[Back to Report Summary](#)

## Historical Cortese List (HISTCORTESE)

**MAP ID# 16**

Distance from Property: 0.443 mi. (2,339 ft.) WNW  
Elevation: 1,747 ft. (Lower than TP)

### FACILITY INFORMATION

GEOSEARCH ID: 090096COR

ID#: 090096

NAME: STEVE'S CHEAPER

ADDRESS: 130 PLEASANT VALLEY  
DIAMOND SPRINGS, CA 95619

---

[Back to Report Summary](#)

# Leaking Underground Storage Tanks (LUST)

**MAP ID# 16**

Distance from Property: 0.443 mi. (2,339 ft.) WNW  
Elevation: 1,747 ft. (Lower than TP)

## **FACILITY INFORMATION**

GLOBAL ID: T0601700077

URL LINK: [CLICK HERE](#)

BUSINESS NAME: STEVE'S CHEAPER

ADDRESS: 130 PLEASANT VALLEY RD  
DIAMOND SPRINGS, CA 95619

COUNTY: EL DORADO

## **FACILITY DETAILS**

CASE TYPE: LUST CLEANUP SITE

CASE NUMBER: 090096

STATUS: 01/02/2013

POTENTIAL CONTAMINATION:

**GASOLINE**

POTENTIAL MEDIA AFFECTED:

**AQUIFER USED FOR DRINKING WATER SUPPLY**

SITE HISTORY:

THE FIRST THREE MONITORING WELLS WERE INSTALLED ON SITE IN NOVEMBER 1999. BY THE TIME OF THE INITIATION OF THE OFF SITE INVESTIGATION IN THE FALL OF 2001, THE AVERAGE REPORTED MTBE CONCENTRATIONS IN THESE THREE WELLS WAS 50,083 ìG/L. THE AVERAGE CONCENTRATION IN THESE THREE WELLS FOR THE LAST FOUR SEMI-ANNUAL MONITORING EVENTS IS 566 ìG/L. THIS REPRESENTS A 98.9 PERCENT REDUCTION SINCE ONSITE REMEDIATION BEGAN IN EARLY 2002. OFF SITE INVESTIGATION CONTINUED THROUGH TO THE SUMMER OF 2004 WITH CONCURRENT REMEDIAL ACTIVITIES. BY AUGUST 2004 THERE WERE 29 MONITORING WELLS AND TWO EXTRACTION WELLS IN USE. ELEVEN OF THE MONITORING WELLS DEFINE THE OUTWARD EXTENT OR EDGES OF THE MTBE PLUME, COMPRISING THE WELLS THAT HAVE CONSISTENTLY BEEN REPORTED WITH MTBE BELOW THE DRINKING WATER STANDARD. A SENSITIVE RECEPTOR SURVEY WAS COMPLETED IN LATE 2000. THERE WERE NO WATER SUPPLY WELLS LOCATED WITHIN THE EXTENT OF THE PLUME, LATER DEFINED, AND ONLY FIVE WELLS WERE FOUND IN THE 2000 FOOT SEARCH RADIUS. THE CLOSEST WAS OVER 500 FEET CROSS GRADIENT OF THE PLUME AND HAS SUBSEQUENTLY BEEN REMOVED. GROUNDWATER AS A POTENTIAL SOURCE VAPOR EMANATIONS WAS ADDRESSED IN WORKPLAN DATED JANUARY 26, 2007 INDICATING THAT THERE WERE NO AREAS THAT COULD POTENTIALLY BE IMPACTED TO INVESTIGATE. THIS WAS AFFIRMED IN THE WORKPLAN APPROVAL LETTER FROM THE REGIONAL BOARD DATED 6 FEBRUARY 2007. PATTERSON LAKE IS SITUATED DOWNGRADIENT OF THE SOUTHWESTERLY DIRECTED PLUME THAT ORIGINATED AT THE PROPERTY NOW OWNED BY TOWER ENERGY GROUP. THE LAKE HAS FUNCTIONED AS A HYDRAULIC BARRIER, LOWERING THE GROUNDWATER GRADIENT IN ITS AREA AND SLOWING THE PREREMEDIAL ADVANCEMENT OF THE PLUME. THREE 10,000 GALLON UST'S AND ASSOCIATED PIPING WERE REMOVED FROM THE SITE IN THE SUMMER OF 2010 STATION UPGRADES ACTIVITIES.

## **HISTORICAL FACILITY DETAILS**

NO HISTORICAL DETAIL(S) INFORMATION REPORTED FOR THIS FACILITY

---

[Back to Report Summary](#)

# GeoTracker Cleanup Sites (CLEANUPSITES)

**MAP ID# 17**

Distance from Property: 0.481 mi. (2,540 ft.) NNE  
Elevation: 1,819 ft. (Higher than TP)

## **FACILITY INFORMATION**

GLOBAL ID: T10000010458

URL LINK: [CLICK HERE](#)

BUSINESS NAME: ABEL TRUST

ADDRESS: 4061 LIME PLANT ROAD  
DIAMOND SPRINGS, CA 95667

COUNTY: EL DORADO

## **FACILITY DETAILS**

CASE TYPE: CLEANUP PROGRAM SITE

CASE NUMBER: NOT REPORTED

STATUS: OPEN - ACTIVE 06/09/2017

POTENTIAL CONTAMINATION:

**OTHER ACID OR CORROSIVE**

POTENTIAL MEDIA AFFECTED:

**NOT REPORTED**

SITE HISTORY:

**NOT REPORTED**

## **REGULATORY ACTIVITIES**

| TYPE OF ACTION: | DATE:      | ACTION:                              |
|-----------------|------------|--------------------------------------|
| ENFORCEMENT     | 04/09/2018 | STAFF LETTER                         |
| RESPONSE        | 03/16/2018 | REMOVAL ACTION WORK PLAN             |
| ENFORCEMENT     | 02/06/2018 | STAFF LETTER                         |
| RESPONSE        | 02/01/2018 | CORRESPONDENCE                       |
| ENFORCEMENT     | 01/22/2018 | STAFF LETTER                         |
| RESPONSE        | 01/12/2018 | SITE INVESTIGATION                   |
| ENFORCEMENT     | 11/15/2017 | LETTER - NOTICE                      |
| RESPONSE        | 11/06/2017 | PRELIMINARY SITE ASSESSMENT WORKPLAN |
| ENFORCEMENT     | 10/26/2017 | EMAIL CORRESPONDENCE                 |
| ENFORCEMENT     | 05/16/2017 | EMAIL CORRESPONDENCE                 |
| ENFORCEMENT     | 04/17/2017 | 13267 REQUIREMENT                    |
| ENFORCEMENT     | 11/15/2016 | LETTER - NOTICE                      |

## **STATUS HISTORY**

| STATUS:                | DATE:      |
|------------------------|------------|
| OPEN - ACTIVE          | 06/09/2017 |
| OPEN - CASE BEGIN DATE | 11/15/2016 |

## **CONTACT DETAILS**

ORGANIZATION: CENTRAL VALLEY RWQCB (REGION 5S)

ADDRESS: 11020 SUN CENTER DRIVE, SUITE 200

CITY: RANCHO CORDOVA

CONTACT NAME: WALTER FLOYD

CONTACT TYPE: REGIONAL BOARD CASEWORKER

CONTACT PHONE: 9164644651

EMAIL: WALTER.FLOYD@WATERBOARDS.CA.GOV

## GeoTracker Cleanup Sites (CLEANUPSITES)

[Back to Report Summary](#)

## CALSITES Database (CALSITES)

**MAP ID# 18**

Distance from Property: 0.497 mi. (2,624 ft.) NNW  
Elevation: 1,817 ft. (Higher than TP)

### **FACILITY INFORMATION**

ID #: 09340001

NAME: CELEBRITY PLATING

ADDRESS: 4502 MISSOURI FLAT ROAD  
PLACERVILLE, CA

STATUS (DATE): **PRELIMINARY ENDANGERMENT ASSESSMENT REQUIRED (04/14/1997)**

STANDARD INDUSTRIAL CLASSIFICATION BELIEVED TO BE CAUSE OF (POTENTIAL) CONTAMINATION:

**MANU - FABRICATED METAL PRODUCTS**

ACCESS TO SITE: **NOT REPORTED**

GROUNDWATER CONTAMINATION: **NOT REPORTED**

### **COMMENTS**

SITE SCREENING COMPLETED. EL DORADO COUNTY HEALTH DEPARTMENT SUBMITTED AN INVESTIGATION REPORT TO DTSC FOR REVIEW AND COMMENT. DTSC STAFF PERFORMED A CURSORY REVIEW OF THE REPORT AND CONDUCTED A SITE VISIT. THE HOUSEKEEPING PRACTICES IN THE PLATING AREA WERE POOR. MOST OF THE FLOOR AND WALLS SHOWED SIGNS OF SPILLS AND LEAKS. SOIL SAMPLES FROM BENEATH THE FLOOR WERE CONTAMINATED WITH 42 PPM CYANIDE, 159 PPM CHROMIUM, 123 PPM COPPER, 1010 PPM NICKEL AND OTHER METALS. A PRELIMINARY ENDANGERMENT ASSESSMENT IS REQUIRED TO DETER- THE POTENTIAL THREAT POSED BY ONSITE CONTAMINATION.

---

[Back to Report Summary](#)



## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 18**

Distance from Property: 0.497 mi. (2,624 ft.) NNW  
Elevation: 1,817 ft. (Higher than TP)

### SITE INFORMATION

ID #: **09340001** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **CELEBRITY PLATING**

ADDRESS: **4502 MISSOURI FLAT ROAD  
PLACERVILLE, CA 95667**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **10**

LEAD AGENCY: **HWMP**

DTSC PROJECT MANAGER: **LANCE MCMAHAN**

DTSC SUPERVISOR: **NOEL SHRUM**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **CORRECTIVE ACTION**

### SITE TYPE DESCRIPTION

**INVESTIGATION AND CLEANUP ACTIVITIES AT HAZARDOUS WASTE FACILITIES (EITHER RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OR STATE-ONLY) THAT EITHER WERE ELIGIBLE FOR A PERMIT OR RECEIVED A PERMIT, ARE CALLED CORRECTIVE ACTION.**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 04/05/2010)

**NO FURTHER ACTION - IDENTIFIES COMPLETED SITES WHERE DTSC DETERMINED AFTER INVESTIGATION, GENERALLY A PEA (AN INITIAL ASSESSMENT), THAT THE PROPERTY DOES NOT POSE A PROBLEM TO PUBLIC HEALTH OR THE ENVIRONMENT**

PAST USE/S THAT CAUSED THE CONTAMINATION

**HAZARDOUS WASTE TREATMENT, METAL PLATING - CHROME**

CONFIRMED CONTAMINANTS OF CONCERN

**30152 - CHROMIUM III**

**30153 - CHROMIUM VI**

**30160 - CYANIDE (FREE)**

**30406 - NICKEL (SOLUBLE SALTS)**

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 18**

Distance from Property: 0.497 mi. (2,624 ft.) NNW  
Elevation: 1,817 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **71003046** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **CELEBRITY, INC.**

ADDRESS: **4502 MISSOURI FLAT ROAD  
PLACERVILLE, CA 95667**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **NOT REPORTED**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **NOT REPORTED**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **TIERED PERMIT**

SITE TYPE DESCRIPTION

**NOT REPORTED**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 07/07/2003)

**NO ACTION REQUIRED - IDENTIFIES SITES WHERE A PHASE I ENVIRONMENTAL ASSESSMENT  
WAS COMPLETED AND RESULTED IN A NO ACTION REQUIRED DETERMINATION**

PAST USE/S THAT CAUSED THE CONTAMINATION

**NONE SPECIFIED**

CONFIRMED CONTAMINANTS OF CONCERN

**NONESPECIFIED - NONE SPECIFIED**

---

[Back to Report Summary](#)

## No Further Action Determination (NFA)

**MAP ID# 18**

Distance from Property: 0.497 mi. (2,624 ft.) NNW  
Elevation: 1,817 ft. (Higher than TP)

### **FACILITY INFORMATION**

GEOSEARCH ID: 71003046

ENVIROSTOR ID: 71003046

FACILITY NAME: CELEBRITY, INC.

ADDRESS: 4502 MISSOURI FLAT ROAD  
PLACERVILLE, CA 95667

COUNTY: EL DORADO

### **FACILITY DETAILS**

PROGRAM TYPE: TIERED PERMIT

STATUS: NO ACTION REQUIRED

STATUS DATE: 7/7/2003

CALENVIROSCREEN SCORE: 36-40%

SITE CODE: 101525

---

[Back to Report Summary](#)

## Recycling Centers (SWRCY)

**MAP ID# 19**

Distance from Property: 0.498 mi. (2,629 ft.) N  
Elevation: 1,812 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: RC4019  
NAME: E M RECYCLING  
ADDRESS: 4040 #A-2 STAGE CT  
CITY: PLACERVILLE  
STATE: CA  
ZIP: 95667  
COUNTY: EL DORADO

### **SITE DETAILS**

OPERATION BEGIN DATE: 01/09/91  
OPERATION END DATE: 01/07/93  
PROGRAM PHONE: (916) 621-2027  
ORGANIZATION NAME: NOT REPORTED  
ADDRESS: STREET NOT REPORTED  
CITY NOT REPORTED  
GLASS: NOT ACCEPTED  
ALUMINIUM: NOT ACCEPTED  
PLASTIC: NOT ACCEPTED  
BIMETAL: NOT ACCEPTED

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 20**

Distance from Property: 0.522 mi. (2,756 ft.) NNW  
Elevation: 1,817 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **09500006** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **TETERS AUTO WRECKERS**

ADDRESS: **4487 MISSOURI FLAT ROAD  
PLACERVILLE, CA 95667**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **1**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **EVALUATION**

### SITE TYPE DESCRIPTION

**EVALUATION: IDENTIFIES SUSPECTED, BUT UNCONFIRMED, CONTAMINATED SITES THAT NEED OR HAVE GONE THROUGH AN INVESTIGATION AND ASSESSMENT PROCESS. IF A SITE IS FOUND TO HAVE CONFIRMED CONTAMINATION, IT WILL CHANGE FROM EVALUATION TO EITHER A STATE RESPONSE OR VOLUNTARY CLEANUP SITE TYPE. SITES FOUND TO HAVE NO CONTAMINATION AT THE COMPLETION OF THE INVESTIGATION AND ASSESSMENT PROCESS RESULT IN A NO ACTION REQUIRED (FOR PHASE 1 ASSESSMENTS) OR NO FURTHER ACTION (FOR PHASE 2 ASSESSMENTS) DETERMINATION.**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 09/12/1995)

**REFER: OTHER AGENCY -**

PAST USE/S THAT CAUSED THE CONTAMINATION

**NONE SPECIFIED**

CONFIRMED CONTAMINANTS OF CONCERN

**NONESPECIFIED - NONE SPECIFIED**

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 21**

Distance from Property: 0.641 mi. (3,384 ft.) WNW  
Elevation: 1,757 ft. (Lower than TP)

### **SITE INFORMATION**

ID #: **71003697** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **CELEBRITY, INC.**

ADDRESS: **6650 MERCHANDISE WAY  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **NOT REPORTED**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **NOT REPORTED**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **TIERED PERMIT**

SITE TYPE DESCRIPTION

**NOT REPORTED**

DTSC's CURRENT INVOLVEMENT AT SITE (as of )

**NO ACTION REQUIRED - IDENTIFIES SITES WHERE A PHASE I ENVIRONMENTAL ASSESSMENT  
WAS COMPLETED AND RESULTED IN A NO ACTION REQUIRED DETERMINATION**

PAST USE/S THAT CAUSED THE CONTAMINATION

**NONE SPECIFIED**

CONFIRMED CONTAMINANTS OF CONCERN

**NONESPECIFIED - NONE SPECIFIED**

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 22**

Distance from Property: 0.683 mi. (3,606 ft.) ENE  
Elevation: 1,848 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **09280001** ASSESSOR'S PARCEL #: **NONE SPECIFIED**

URL LINK: [CLICK HERE](#)

NAME: **OXYGEN SERVICE AND SUPPLY COMPANY**

ADDRESS: **13 CHINA GARDEN ROAD  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **1**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **REFERRED - NOT ASSIGNED**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **EVALUATION**

### SITE TYPE DESCRIPTION

**EVALUATION: IDENTIFIES SUSPECTED, BUT UNCONFIRMED, CONTAMINATED SITES THAT NEED OR HAVE GONE THROUGH AN INVESTIGATION AND ASSESSMENT PROCESS. IF A SITE IS FOUND TO HAVE CONFIRMED CONTAMINATION, IT WILL CHANGE FROM EVALUATION TO EITHER A STATE RESPONSE OR VOLUNTARY CLEANUP SITE TYPE. SITES FOUND TO HAVE NO CONTAMINATION AT THE COMPLETION OF THE INVESTIGATION AND ASSESSMENT PROCESS RESULT IN A NO ACTION REQUIRED (FOR PHASE 1 ASSESSMENTS) OR NO FURTHER ACTION (FOR PHASE 2 ASSESSMENTS) DETERMINATION.**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 05/31/1988)

**REFER: OTHER AGENCY -**

PAST USE/S THAT CAUSED THE CONTAMINATION

**NONE SPECIFIED**

CONFIRMED CONTAMINANTS OF CONCERN

**NONESPECIFIED - NONE SPECIFIED**

---

[Back to Report Summary](#)

## EnviroStor Cleanup Sites (ENVIROSTOR)

**MAP ID# 23**

Distance from Property: 0.818 mi. (4,319 ft.) WNW  
Elevation: 1,794 ft. (Higher than TP)

### **SITE INFORMATION**

ID #: **09730001** ASSESSOR'S PARCEL #: **32924051**

URL LINK: [CLICK HERE](#)

NAME: **OLD CALDOR LUMBER COMPANY YARD**

ADDRESS: **180 INDUSTRIAL DRIVE  
DIAMOND SPRINGS, CA 95619**

COUNTY: **EL DORADO**

SITE SIZE (ACRES): **1**

LEAD AGENCY: **NONE SPECIFIED**

DTSC PROJECT MANAGER: **NOT REPORTED**

DTSC SUPERVISOR: **STEVEN BECKER**

DTSC DIVISION BRANCH: **CLEANUP SACRAMENTO**

NPL LISTED: **NO** RESTRICTED LAND USE: **NO**

SITE TYPE: **HISTORICAL**

### **SITE TYPE DESCRIPTION**

**HISTORICAL: IDENTIFIES SITES FROM AN OLDER DATABASE WHERE NO SITE TYPE WAS IDENTIFIED. MOST OF THESE SITES HAVE A STATUS OF REFERRED OR NO FURTHER ACTION. DTSC IS WORKING TO CLEAN UP THIS DATA BY IDENTIFYING AN APPROPRIATE SITE TYPE FOR EACH "HISTORIC" SITE.**

DTSC's CURRENT INVOLVEMENT AT SITE (as of 02/27/1989)

**NO FURTHER ACTION - IDENTIFIES COMPLETED SITES WHERE DTSC DETERMINED AFTER INVESTIGATION, GENERALLY A PEA (AN INITIAL ASSESSMENT), THAT THE PROPERTY DOES NOT POSE A PROBLEM TO PUBLIC HEALTH OR THE ENVIRONMENT**

PAST USE/S THAT CAUSED THE CONTAMINATION

**MANUFACTURING - LUMBER/WOOD PRODUCTS**

**CONFIRMED CONTAMINANTS OF CONCERN**

**NONE SPECIFIED**

---

[Back to Report Summary](#)



## Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

| <b>Database Name</b> | <b>Site ID#</b> | <b>Site Name</b>        | <b>Address</b>     | <b>City/State/Zip/County</b>           |
|----------------------|-----------------|-------------------------|--------------------|--|
| DROP                 | CP0005          | BOB'S SALVAGE           | 4000 UNION MINE RD | DIAMOND SPRINGS, CA<br>95619 EL DORADO |
| HISTUST              | 00023440        | DIAMOND INDUSTRIAL PARK | NONE BRIGHT COURT  | DIAMOND SPRINGS, CA<br>95619 El Dorado |
| SWEEPS               | A09-000-34834   | DIAMOND INDUSTRIAL PARK | BRIGHT CT          | DIAMOND SPRINGS, CA<br>95619           |

## ***Environmental Records Definitions - FEDERAL***

**AIRSAFS** Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance.

**BRS** Biennial Reporting System

VERSION DATE: 12/31/15

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

**CDL** Clandestine Drug Laboratory Locations

VERSION DATE: 10/05/17

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

**DOCKETS** EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

**EC** Federal Engineering Institutional Control Sites

VERSION DATE: 08/03/15

This database includes site locations where Engineering and/or Institutional Controls have been identified as part

## ***Environmental Records Definitions - FEDERAL***

of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

**ECHOR09** Enforcement and Compliance History Information

VERSION DATE: 09/01/18

The EPA's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

**ERNSCA** Emergency Response Notification System

VERSION DATE: 10/28/18

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

**FRSCA** Facility Registry System

VERSION DATE: 10/09/18

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

**HMIRSR09** Hazardous Materials Incident Reporting System

VERSION DATE: 09/30/18

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

**ICIS** Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 09/01/18

## ***Environmental Records Definitions - FEDERAL***

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

**ICISNPDES** Integrated Compliance Information System National Pollutant Discharge Elimination System

VERSION DATE: 07/09/17

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

**LUCIS** Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

**MLTS** Material Licensing Tracking System

VERSION DATE: 06/29/17

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements. Disclaimer: Due to agency regulations and policies, this database contains applicant/licensee location information which may or may not be related to the physical location per MLTS site.

**NPDES09** National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from December 2002 until April 2007. Refer to the PCS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

**PADS** PCB Activity Database System

VERSION DATE: 09/14/18

## ***Environmental Records Definitions - FEDERAL***

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

**PCSR09** Permit Compliance System

VERSION DATE: 08/01/12

The Permit Compliance System is used in tracking enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act and is maintained by the United States Environmental Protection Agency's Office of Compliance. PCS is designed to support the NPDES program at the state, regional, and national levels. This database includes permitted facilities located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa. PCS has been modernized, and no longer exists. National Pollutant Discharge Elimination System (ICIS-NPDES) data can now be found in Integrated Compliance Information System (ICIS).

**RCRASC** RCRA Sites with Controls

VERSION DATE: 09/26/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

**SEMSLIENS** SEMS Lien on Property

VERSION DATE: 08/13/18

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

**SFLIENS** CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of

## ***Environmental Records Definitions - FEDERAL***

these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete.

**SSTS** Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

**TRI** Toxics Release Inventory

VERSION DATE: 12/31/16

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

**TSCA** Toxic Substance Control Act Inventory

VERSION DATE: 12/31/12

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site.

**RCRAGR09** Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 9 includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

## ***Environmental Records Definitions - FEDERAL***

### **RCRANGR09**

Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA Region 9 includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

### **ALTFUELS**

Alternative Fueling Stations

VERSION DATE: 09/01/18

Nationwide list of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

### **FEMAUST**

FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

### **HISTPST**

Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

### **ICISCLEANERS**

Integrated Compliance Information System Drycleaners

VERSION DATE: 09/01/18

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

### **MRDS**

Mineral Resource Data System

VERSION DATE: 03/15/16

## ***Environmental Records Definitions - FEDERAL***

MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

**MSHA** Mine Safety and Health Administration Master Index File

VERSION DATE: 08/31/18

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

**BF** Brownfields Management System

VERSION DATE: 10/01/18

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

**DNPL** Delisted National Priorities List

VERSION DATE: 11/14/18

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

**NLRRCRAT** No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/01/18

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

**ODI** Open Dump Inventory

VERSION DATE: 06/01/85



## **Environmental Records Definitions - FEDERAL**

The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

**RCRAT** Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

**SEMS** Superfund Enterprise Management System

VERSION DATE: 08/13/18

The U.S. Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

**SEMSARCH** Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 08/13/18

The Superfund Enterprise Management System Archive listing (SEMS-ARCHIVE) has replaced the CERCLIS NFRAP reporting system in 2015. This listing reflect sites that have been assessed and no further remediation is planned and is of no further interest under the Superfund program.

**SMCRA** Surface Mining Control and Reclamation Act Sites

VERSION DATE: 09/14/18

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

## ***Environmental Records Definitions - FEDERAL***

**USUMTRCA** Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

**DOD** Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

**FUDS** Formerly Used Defense Sites

VERSION DATE: 06/01/15

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. **DISCLAIMER:** This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

**FUSRAP** Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

**NLRRCRAC** No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/01/18

## ***Environmental Records Definitions - FEDERAL***

This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

**NMS** Former Military Nike Missile Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites.

During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

**NPL** National Priorities List

VERSION DATE: 11/14/18

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

**PNPL** Proposed National Priorities List

VERSION DATE: 11/14/18

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

**RCRAC** Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.

## ***Environmental Records Definitions - FEDERAL***

**RCRASUBC**

Resource Conservation &amp; Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

**RODS**

Record of Decision System

VERSION DATE: 08/13/18

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

## **Environmental Records Definitions - STATE (CA)**

**CDL** Clandestine Drug Labs

VERSION DATE: 12/31/17

The California Department of Toxic Substance Control (DTSC) provides this listing of illegal drug laboratories. Pursuant to Section 25354.5 of the California Health and Safety Code, DTSC conducts emergency removal actions at clandestine drug labs at the request of State and local law enforcement agencies. DTSC's contractors typically remove hazardous substances that may pose an immediate threat to public health and the environment while the enforcement officials are on scene. During the emergency removal actions, contractors remove and properly dispose of contaminated lab equipment, chemicals used to make the illegal drugs (usually methamphetamine), lab chemical wastes, and other grossly contaminated materials. DTSC does not perform additional assessment work beyond standard emergency removal actions and makes no further determination regarding the need for future cleanup work at the emergency removal location. The reported location information may or may not include the actual location of the illegal drug lab. The DTSC does not guarantee the accuracy of the address or location information or the condition of the location listed.

**CHMIRS** California Hazardous Material Incident Report System

VERSION DATE: 10/24/18

The California Hazardous Material Incident Report System database is provided by the California Emergency Management Agency. This database contains accidental or spill release information from reported hazardous material incidents since 1993.

**DTSCDR** DTSC Deed Restrictions

VERSION DATE: 10/07/18

The California Department of Toxic Substances Control (DTSC) maintains this listing of sites with deed restrictions. According to the DTSC, restricted land use indicates whether the site or area within the site has an environmental restriction recorded and/or other institutional control preventing certain types of land use or activities. The land use restrictions listed under the site management requirements are only an abbreviated summary of the land use restrictions, and may not encompass all restrictions and notification requirements placed on a property. For complete land use restriction information please contact the DTSC to review associated Land Use Restriction documents.

**EMI** Emissions Inventory Data

VERSION DATE: 12/31/16

The Air Resources Board's Emissions Inventory Database contains criteria pollutant data and toxic data on facilities throughout the state of California for the 2012-2000 inventory years.

**HWTS** Hazardous Waste Tanner Summary

VERSION DATE: 12/31/17

## **Environmental Records Definitions - STATE (CA)**

This data is prepared from information extracted from copies of hazardous waste manifests received each year by the Department of Toxic Substances Control. The Hazardous Waste Summary Report (Tanner Report) currently includes manifest data from the 1993 through the 2016 reporting years.

**LDS** Land Disposal Sites

VERSION DATE: 10/09/18

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

**LIENS** Recorded Environmental Cleanup Liens

VERSION DATE: 05/17/18

The California Department of Toxic Substance Control (DTSC) maintains this listing of liens placed upon real properties. A lien is utilized by the DTSC to obtain reimbursement from responsible parties for costs associated with the remediation of contaminated properties.

**MCS** Military Cleanup Sites

VERSION DATE: 07/09/18

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater

**NPDES** National Pollutant Discharge Elimination System Facilities

VERSION DATE: 09/04/18

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

**ABST** Above Ground Storage Tanks

VERSION DATE: 09/13/18

This database, provided by the California Environmental Protection Agency's (CalEPA) Regulated Site Portal, contains aboveground petroleum storage tank facilities originating from the California Environmental Reporting System (CERS). These facilities store petroleum in aboveground storage tanks with oversight by local agencies. As of January 1, 2008, Assembly Bill No. 1130 of the Aboveground Petroleum Storage Act (APSA) authorized the Certified Unified Program Agencies to implement and administer the requirements of the APSA. CalEPA Data Disclaimer: Information displayed in the portal is collected from separate agency databases and displayed unaltered. Information that is considered confidential, trade secret, or is otherwise protected by the agency that

## **Environmental Records Definitions - STATE (CA)**

manages the database is not loaded into the portal. For more detail about information displayed in the portal, please visit the data source sites. Please refer to AST2007 database for aboveground storage tank information obtained from the California State Water Resources Control Board prior to 2008 APSA requirements.

**AST2007** Aboveground Storage Tanks Prior to January 2008

VERSION DATE: 12/01/07

This database contains aboveground storage tank facilities registered with the California State Water Resources Control Board (SWRCB) between 2007 and 2003. Since 2006, tanks were required to contain a minimum (even as cumulative) of 1320 gallons to be in the program. As of January 1, 2008, the SWRCB no longer maintains a list of registered aboveground storage tanks, due to effective Assembly Bill No. 1130 (Laird) of the Aboveground Petroleum Storage Act (APSA). This Bill authorized the Certified Unified Program Agencies to implement and administer the requirements of the APSA. Please refer to ABST database as a current source for aboveground petroleum storage tank data.

**CLEANER** Dry Cleaner Facilities

VERSION DATE: 06/20/18

This database, created by accessing the California Department of Toxic Substances Control's (DTSC) Hazardous Waste Tracking System, includes dry cleaner facilities that have registered EPA identification numbers. These facilities are categorized with one of the following NAICS Codes: 81231 or 81232. This database may also include facilities other than dry cleaners who also register with these same NAICS Codes. Not all companies report their NAICS/SIC Codes to the DTSC and therefore this database may exclude registered dry cleaner facilities with incomplete classification information.

**DTSCHWT** DTSC Registered Hazardous Waste Transporters

VERSION DATE: 10/14/18

The Department of Toxic Substances Control provides this list of Registered Hazardous Waste Transporters.

**HISTUST** Historical Underground Storage Tanks

VERSION DATE: 12/31/87

The Hazardous Substance Storage Container Database is a historical list of Underground Storage Tank sites, compiled from tank survey and registration information collected at one time between 1984 and 1987 by the State Water Resources Control Board. The hazardous substances stored within these tanks includes, but not restricted to, petroleum products, industrial solvents, and other materials.

**MINES** Mines Listing

VERSION DATE: 07/31/18

This database includes mine site locations from the California Office of Mine Reclamation.

## **Environmental Records Definitions - STATE (CA)**

**MWMP** California Medical Waste Management Program Facility List

VERSION DATE: 06/29/18

To protect the public and the environment from potential infectious exposure to disease causing agents, the Medical Waste Management Program (MWMP), in the Environmental Management Branch of the California Department of Public Health, regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities, medical waste transporters, and medical waste transfer stations.

**SLIC** Spills, Leaks, Investigation & Cleanup Recovery Listing

VERSION DATE: 06/16/08

These records are maintained by the California Regional Water Quality Control Board (RWQCB). This list includes contaminated sites that impact groundwater or have the potential to impact ground water. Please refer to CLEANUPSITES database as source of current data.

**SWEEPS** Statewide Environmental Evaluation and Planning System

VERSION DATE: 10/01/94

The Statewide Environmental Evaluation and Planning System (SWEEPS) contains a historical listing of active and inactive underground storage tank locations from the State Water Resources Control Board. The hazardous substances stored within these tanks includes, but not restricted to, petroleum products, industrial solvents, and other materials. Refer to CUPA listing for source of current data.

**USTCUPA** Underground Storage Tanks

VERSION DATE: 10/18/18

An underground storage tank is an individual tank or group of tanks that store hazardous substances. Underground storage tanks are completely or considerably below the ground surface. This database contains UST permit data submitted from the Certified Unified Program Agencies (CUPA) directly to the State Water Resources Control Board. CUPA's are local agencies that have been certified by the California EPA to implement state environmental programs within the local agency's jurisdiction.

**BF** Brownfield Sites

VERSION DATE: 09/03/18

This database includes Brownfield sites from the State Water Resources Control Board. These are sites that have gone through the Moratorium of Agreement (MOA) process.



## **Environmental Records Definitions - STATE (CA)**

**CALSITES**                      CALSITES Database

VERSION DATE: 05/01/04

This historical database was maintained by the Department of Toxic Substance Control for more than a decade. CALSITES contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.

**CLEANUPSITES**                      GeoTracker Cleanup Sites

VERSION DATE: 10/09/18

This GeoTracker Cleanup Sites database is maintained by the State Water Resources Control Board. The database contains contaminated sites that impact groundwater or have the potential to impact ground water, including sites that require cleanup, such as Leaking Underground Storage Tank Sites, Department of Defense Sites, and Cleanup Program Sites. GeoTracker also contains records for various unregulated projects as well as permitted facilities including: Irrigated Lands, Oil and Gas production, operating Permitted USTs, and Land Disposal Sites. GeoTracker portals retrieve records and view integrated data sets from multiple State Water Board programs and other agencies.

**CORTESE**                              Cortese List

VERSION DATE: 10/18/18

This active listing includes hazardous waste and substances sites designated by the State Water Resources Control Board, the Integrated Waste Board, and the Department of Toxic Substance Control. The Cortese List is utilized by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites.

**DROP**                                      Listing of Certified Dropoff, Collection, and Community Service Programs

VERSION DATE: 10/14/18

Listing of Certified Dropoff, Collection, and Community Service Programs (non-buyback) operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

**ERAP**                                      Expedited Removal Action Program Sites

VERSION DATE: 10/14/18

The Expedited Remedial Action Program is a pilot project administered by the Department of Toxic Substances Control's Site Mitigation and Brownfields Reuse Program to promote the cleanup of up to 30 hazardous substance release sites. ERAP provides significant incentives for redevelopment of contaminated properties by promoting cleanups based on the planned land use, by providing a covenant not to sue, and by outlining a fair and equitable liability scheme.

## **Environmental Records Definitions - STATE (CA)**

**HISTCORTESE** Historical Cortese List

VERSION DATE: 11/02/02

This historical listing includes hazardous waste and substances sites designated by the State Water Resources Control Board, the Integrated Waste Board, and the Department of Toxic Substance Control. The Cortese List was utilized by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. See CACORTESE for an updated version of this database.

**LUST** Leaking Underground Storage Tanks

VERSION DATE: 10/09/18

This database is maintained by the State Water Resources Control Board. LUST records contain an inventory of reported leaking underground storage tank incidents. Please refer to the CLEANUPSITES database as source of current data.

**NFA** No Further Action Determination

VERSION DATE: 09/16/18

The NFA listing contains properties at which the Department of Toxic Substance Control has made a clear determination that the property does not pose a problem to the environment or to public health.

**NFE** Sites Needing Further Evaluation

VERSION DATE: 06/20/18

The NFE listing contains properties that the Department of Toxic Substance Control suspects with possible contamination. These are unconfirmed contaminated properties that need further assessment.

**PROC** Listing of Certified Processors

VERSION DATE: 08/12/18

Listing of Certified Processors that are operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

**REF** Referred to Another Local or State Agency

VERSION DATE: 06/21/18

The REF listing contains properties where contamination has not been confirmed and which were determined as not requiring direct Department of Toxic Substance Control Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency.

## **Environmental Records Definitions - STATE (CA)**

**SWIS** Solid Waste Information System Sites

VERSION DATE: 10/08/18

The Solid Waste Information System (SWIS) database includes information on solid waste facilities, operations, and disposal sites located in California. This database is maintained by the California Department of Resources Recycling and Recovery.

**SWRCY** Recycling Centers

VERSION DATE: 08/13/18

Listing of Certified Recycling Centers that are operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

**VCP** Voluntary Cleanup Program

VERSION DATE: 10/14/18

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

**WMUDS** Waste Management Unit Database

VERSION DATE: 01/01/00

The Waste Management Unit Database System tracks and inventories waste management units. CCR Title 27 contains criteria stating that Waste Management Units are classified according to their ability to contain wastes. Containment shall be determined by geology, hydrology, topography, climatology, and other factors relating to the ability of the Unit to protect water quality. Water Code Section 13273.1 requires that operators submit a water quality solid waste assessment test (SWAT) report to address leak status. The WMUDS was last updated by the State Water Resources control board in 2000.

**ENVIROSTOR** EnviroStor Cleanup Sites

VERSION DATE: 10/14/18

The Department of Toxic Substances Control (DTSC) has developed the EnviroStor database system to evaluate and track sites with confirmed or potential contamination and sites where further investigation may be necessary. This EnviroStor database of cleanup sites contains the following: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. Sites where DTSC has made a "No Action Required" determination are not included in this database, as these sites had assessments that revealed no evidence of recognized environmental conditions in connection with the property.

## ***Environmental Records Definitions - STATE (CA)***

### **ENVIORSTORPCA**

EnviroStor Permitted and Corrective Action Sites

VERSION DATE: 10/18/18

The Department of Toxic Substances Control (DTSC) has developed the EnviroStor database system to evaluate and track sites with confirmed or potential contamination and sites where further investigation may be necessary. This EnviroStor database contains detailed information on hazardous waste permitted and corrective action facilities. Investigation and cleanup activities at hazardous waste facilities (either Resource Conservation and Recovery Act (RCRA) or State-only) that either were eligible for a permit or received a permit are called "corrective action." These facilities treated stored, disposed and/or transferred hazardous waste.

### **TOXPITS**

Toxic Pits Cleanup Act Sites

VERSION DATE: 07/01/95

Toxic Pits are sites with possible contamination of hazardous substances where cleanup is necessary. This listing is no longer updated by the State Water Resources Control Board.

## ***Environmental Records Definitions - TRIBAL***

**USTR09**                      Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/10/18

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

**LUSTR09**                      Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 04/10/18

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

**ODINDIAN**                      Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

**TORRESDUMPSITES**                      Illegal Dump Sites on the Torres Martinez Reservation

VERSION DATE: 10/29/07

This listing of illegal dump site locations on the Torres Martinez Reservation is maintained by the United States Environmental Protection Agency, Region IX. These dump sites contain unlawfully discarded household waste such as landscaping and wood wastes with no known soil or groundwater contamination. A majority of the sites have already been cleaned up through the collaborative efforts of the EPA, The California Integrated Waste Management Board and the Torres Martinez Tribe.

**INDIANRES**                      Indian Reservations

VERSION DATE: 01/01/00

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

## **APPENDIX B**

---

Historical Aerial Photographs, Topographic Maps, Fire Insurance Map, City Directory, Physical Setting Report, Water Well Report, and Oil and Gas Well Report



---

## ***Historical Aerial Photographs***

---

[NEW: GeoLens by Geosearch](#)

*Target Property:*  
**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, El Dorado, California 95619**

*Prepared For:*  
**Environmental Science Assoc-San Francisco**

**Order #: 118699**  
**Job #: 269581**  
**Project #: D180359**  
**Date: 12/7/2018**



## Target Property Summary

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado, California 95619**

USGS Quadrangle: **Placerville**

Target Property Geometry: **Area**

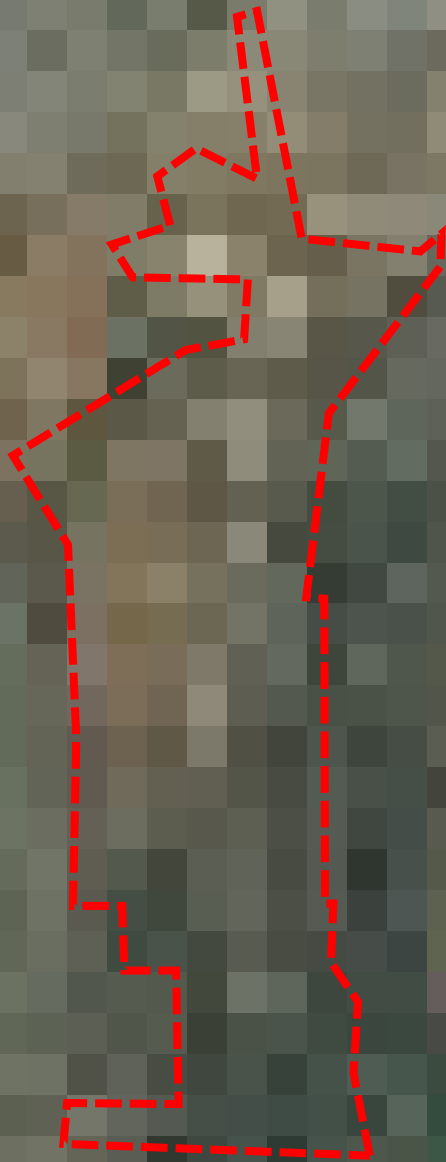
Target Property Longitude(s)/Latitude(s):

(-120.816350834, 38.677359136), (-120.821951287, 38.677526651), (-120.821886914, 38.678112951),  
(-120.819848435, 38.678096199), (-120.819891350, 38.680005827), (-120.820835488, 38.680005827),  
(-120.820878403, 38.680927121), (-120.821779625, 38.680927121), (-120.821715252, 38.683322429),  
(-120.821865456, 38.686086146), (-120.822873967, 38.687359095), (-120.819719689, 38.688866505),  
(-120.818646805, 38.689017244), (-120.818582432, 38.689871428), (-120.820685284, 38.689904925),  
(-120.821071522, 38.690373884), (-120.819998639, 38.690641859), (-120.820234673, 38.691345288),  
(-120.819526570, 38.691747245), (-120.818410771, 38.691311792), (-120.818775551, 38.693623014),  
(-120.818410771, 38.693706752), (-120.817595379, 38.690457626), (-120.815428154, 38.690273393),  
(-120.815041916, 38.690524620), (-120.815063374, 38.690055662), (-120.817101853, 38.687962063),  
(-120.817509549, 38.685332415), (-120.817187684, 38.685315666), (-120.817166226, 38.680960622),  
(-120.817016022, 38.680960622), (-120.817058938, 38.680123084), (-120.816565411, 38.679553552),  
(-120.816651242, 38.678548484)

## Aerial Research Summary

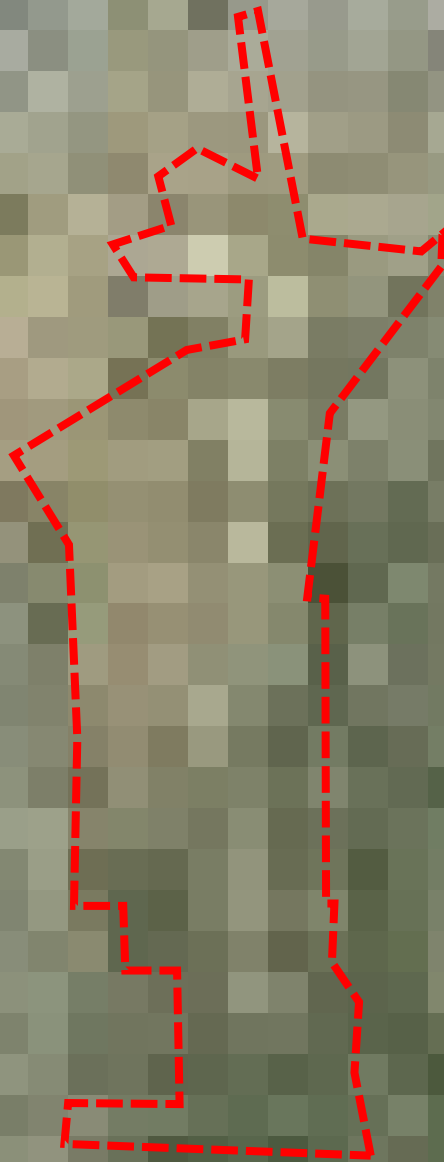
| <u>Date</u> | <u>Source</u> | <u>Scale</u> | <u>Frame</u> |
|-------------|---------------|--------------|--------------|
| 2016        | USDA          | 1" = 1000'   | N/A          |
| 2014        | USDA          | 1" = 1000'   | N/A          |
| 2012        | USDA          | 1" = 1000'   | N/A          |
| 2010        | USDA          | 1" = 1000'   | N/A          |
| 2009        | USDA          | 1" = 1000'   | N/A          |
| 2006        | USDA          | 1" = 1000'   | N/A          |
| 2005        | USDA          | 1" = 1000'   | N/A          |
| 2004        | USDA          | 1" = 1000'   | N/A          |
| 05/09/1993  | USGS          | 1" = 1000'   | N/A          |
| 09/07/1984  | NASA          | 1" = 1000'   | 3405-9638    |
| 06/26/1980  | USGS          | 1" = 1000'   | 1-30         |
| 08/29/1975  | USGS          | 1" = 1000'   | 1-150        |
| 07/31/1964  | CAS           | 1" = 1000'   | 2-44         |
| 09/02/1952  | ASCS          | 1" = 1000'   | 1-130        |
| 11/03/1946  | USGS          | 1" = 1000'   | 3-34         |

Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.



Stonehenge Springs  
USDA  
2016

GeoSearch



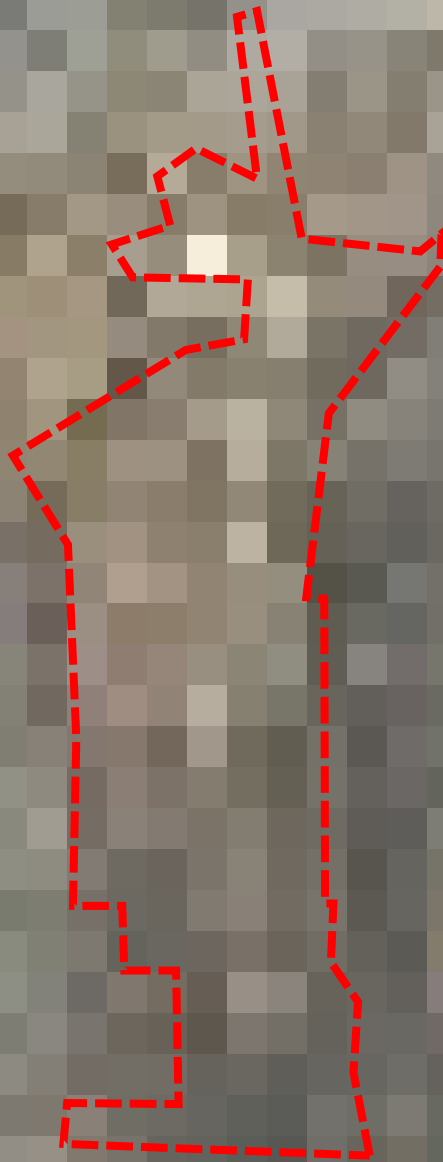
Stonehenge Springs  
USDA  
2014





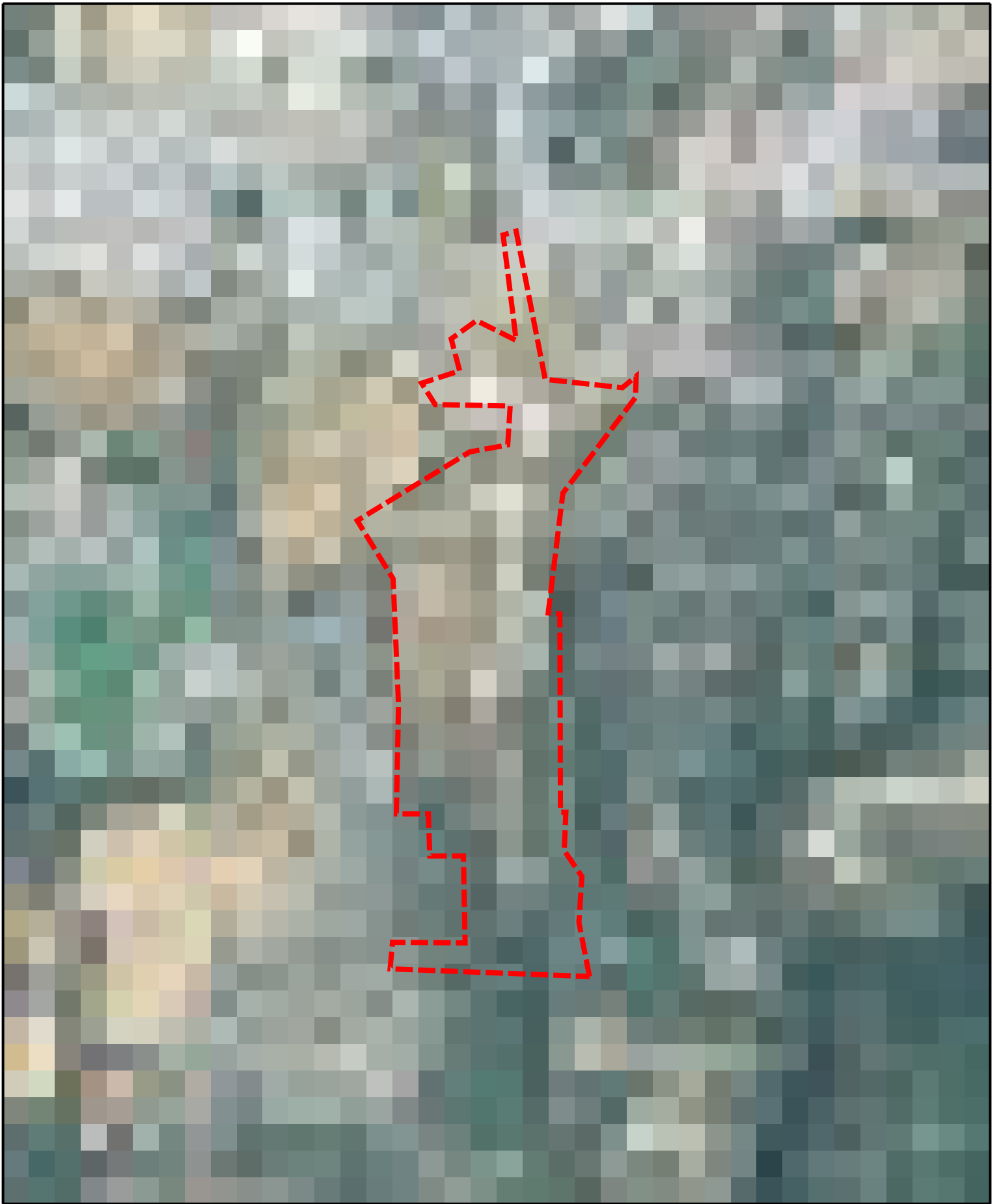
Stonehenge Springs  
USDA  
2012





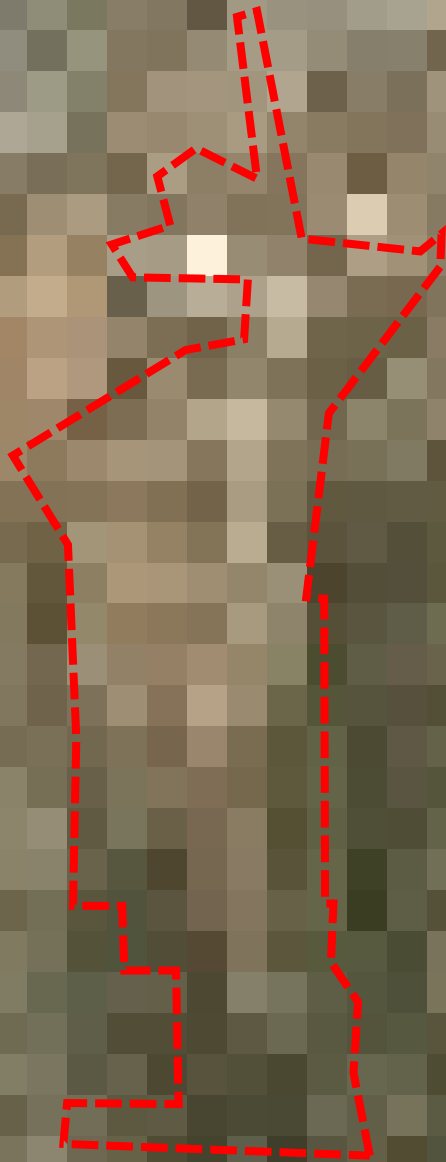
Stonehenge Springs  
USDA  
2010





Stonehenge Springs  
USDA  
2009

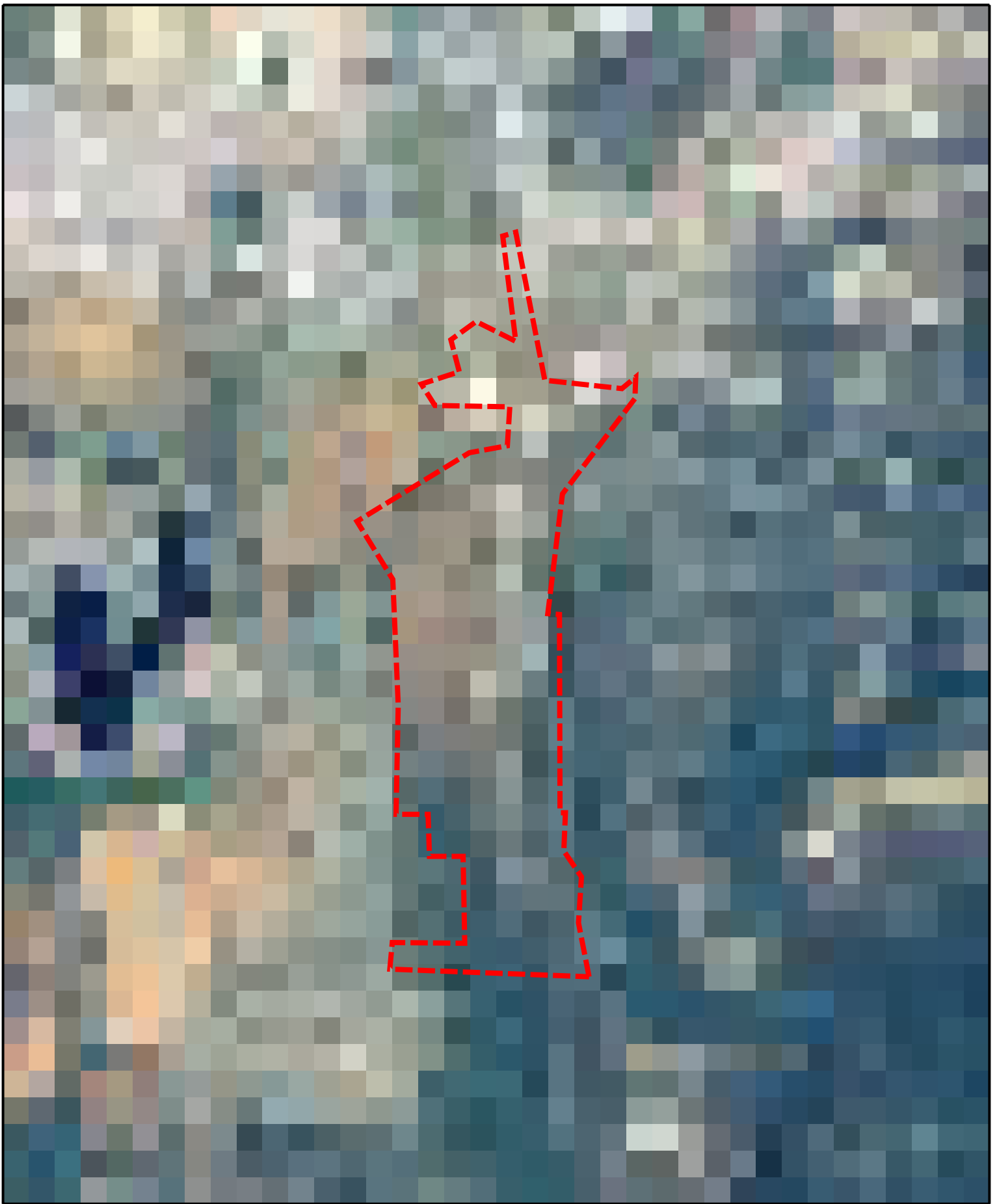
GeoSearch



Stonehenge Springs  
USDA  
2006

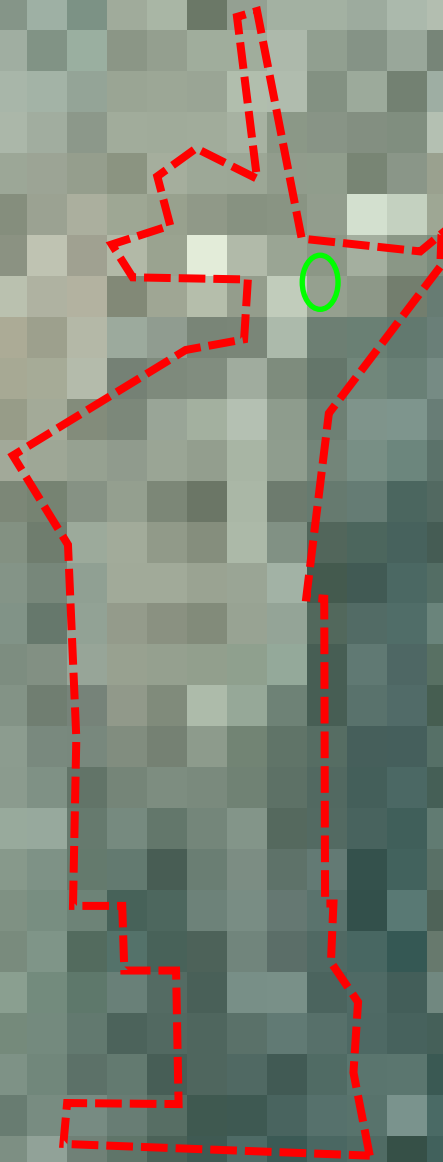
**GeoSearch**





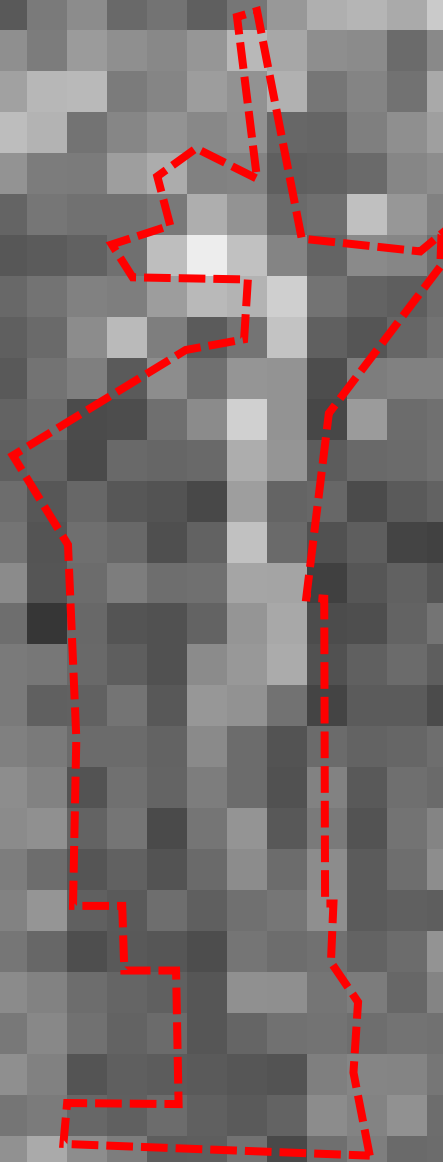
Stonehenge Springs  
USDA  
2005

GeoSearch



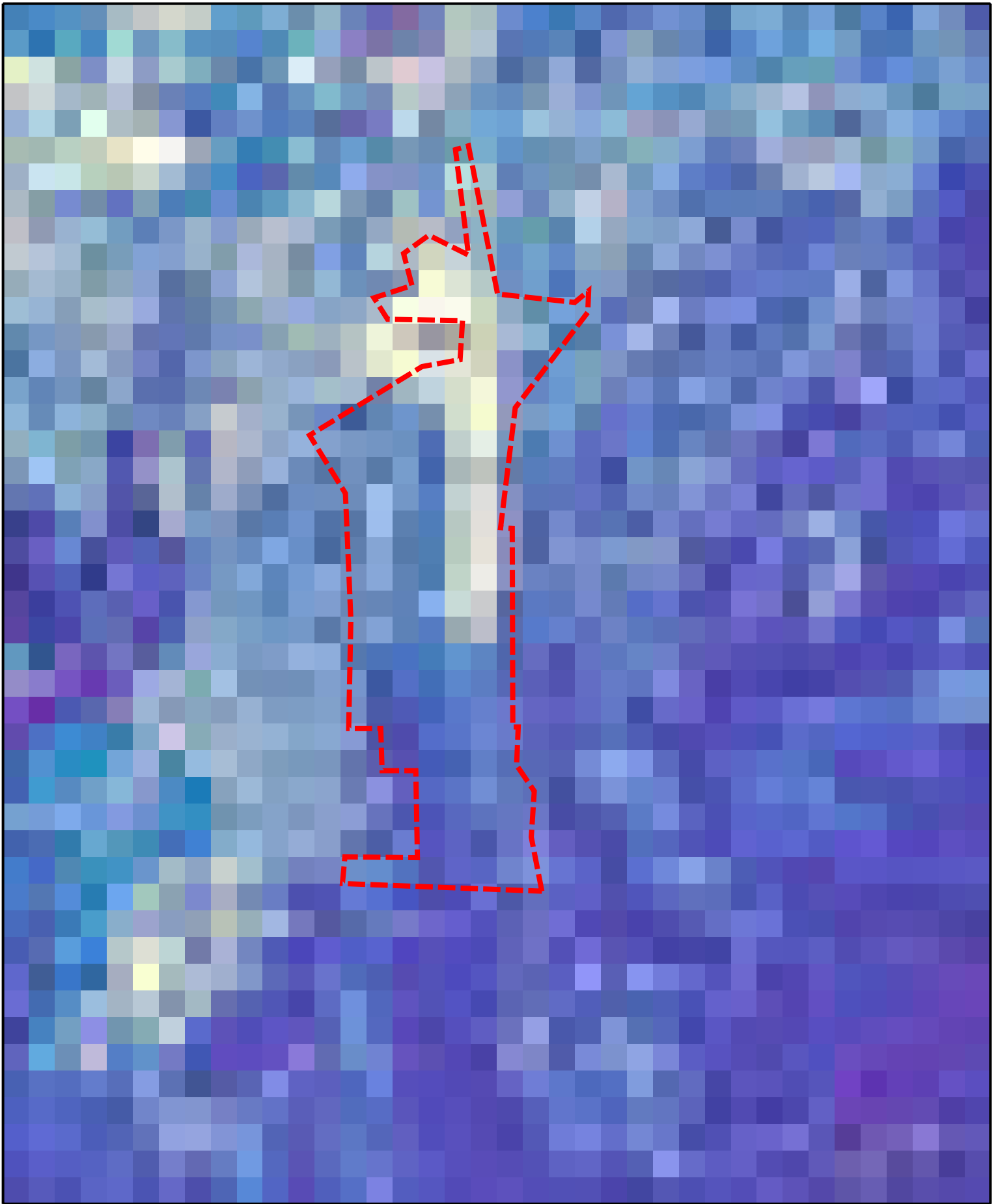
Stonehenge Springs  
USDA  
2004





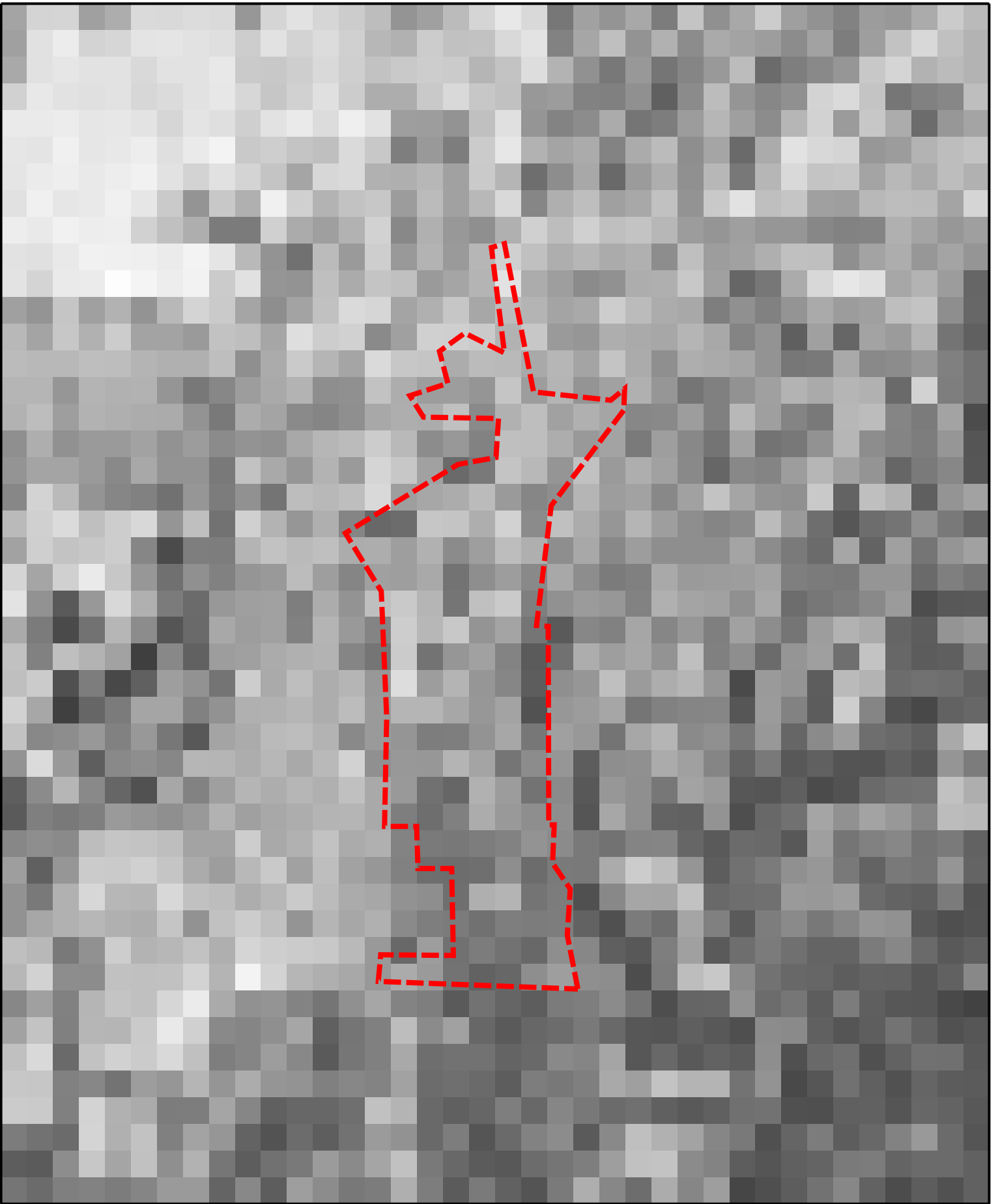
Stonehenge Springs  
USGS  
05/09/1993

GeoSearch



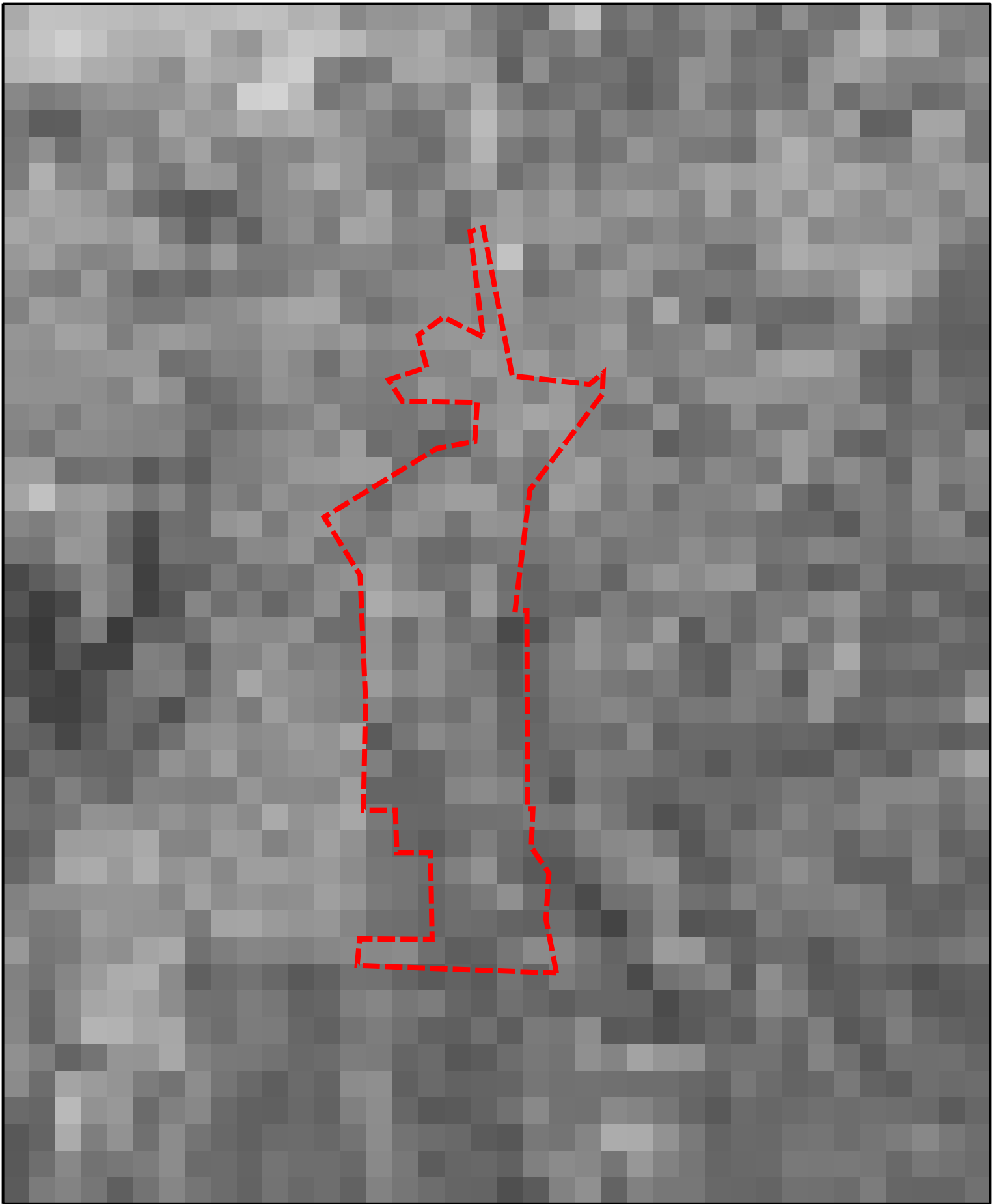
**Stonehenge Springs**  
NASA  
09/07/1984

**GeoSearch**



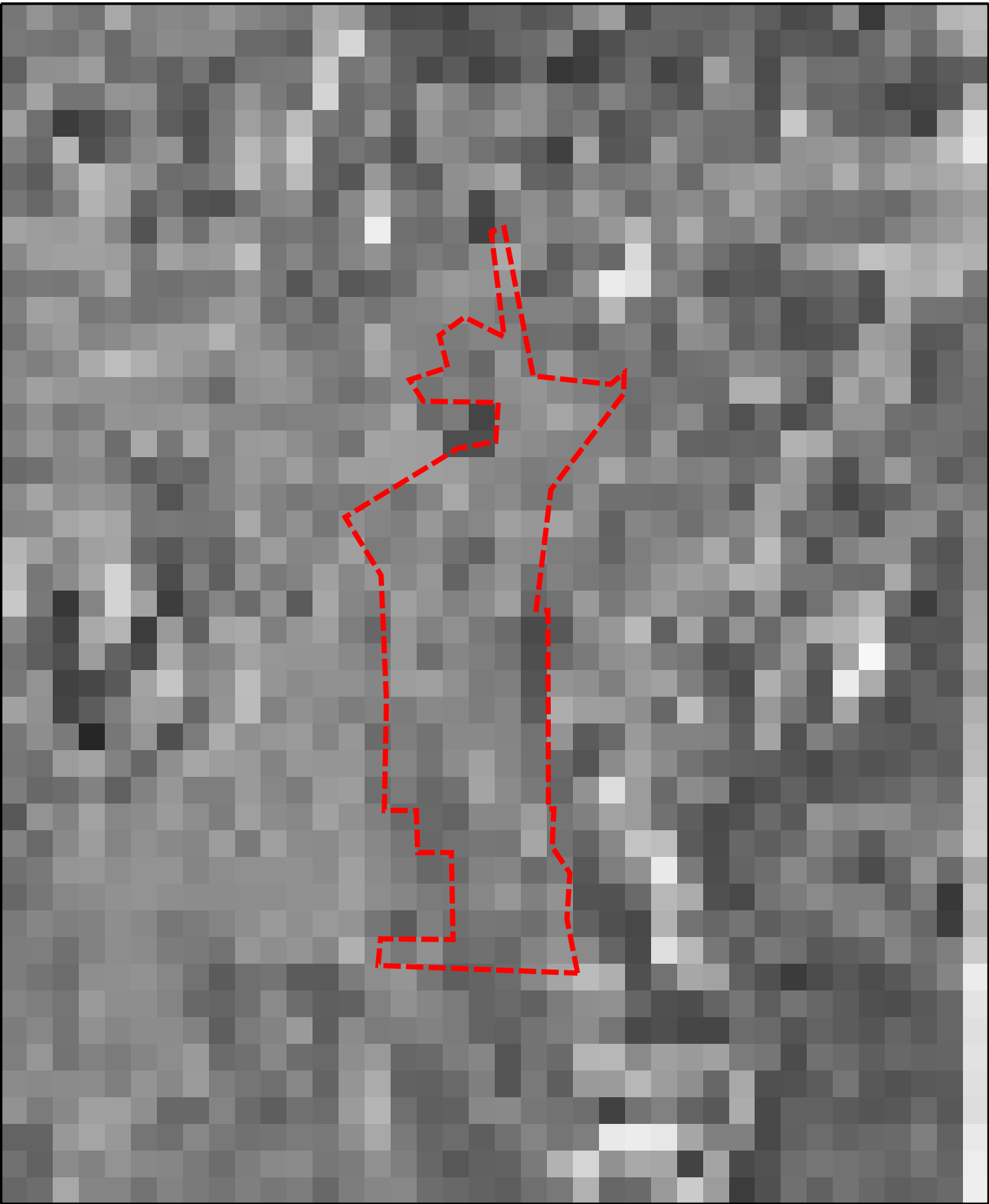
Stonehenge Springs  
USGS  
06/26/1980





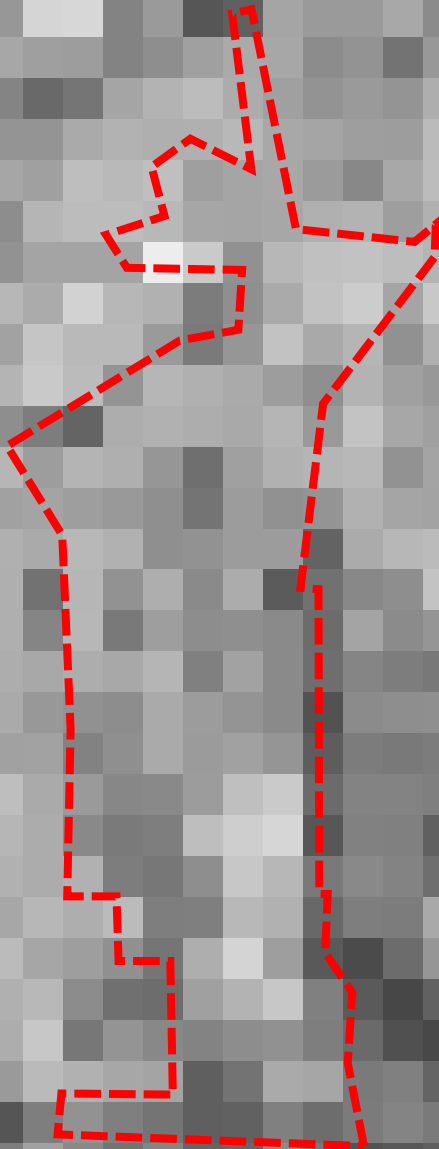
Stonehenge Springs  
USGS  
08/29/1975





Stonehenge Springs  
CAS  
07/31/1964





Stonehenge Springs  
ASCS  
09/02/1952







Stonehenge Springs  
USGS  
11/03/1946

GeoSearch

---

## ***Historical Topographic Maps***

---

[NEW: GeoLens by Geosearch](#)

*Target Property:*

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado, California 95619**

*Prepared For:*

**Environmental Science Assoc-San Francisco**

**Order #: 118699**

**Job #: 269580**

**Project #: D180359**

**Date: 12/7/2018**

## Target Property Summary

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado, California 95619**

USGS Quadrangle: **Placerville**

Target Property Geometry: **Area**

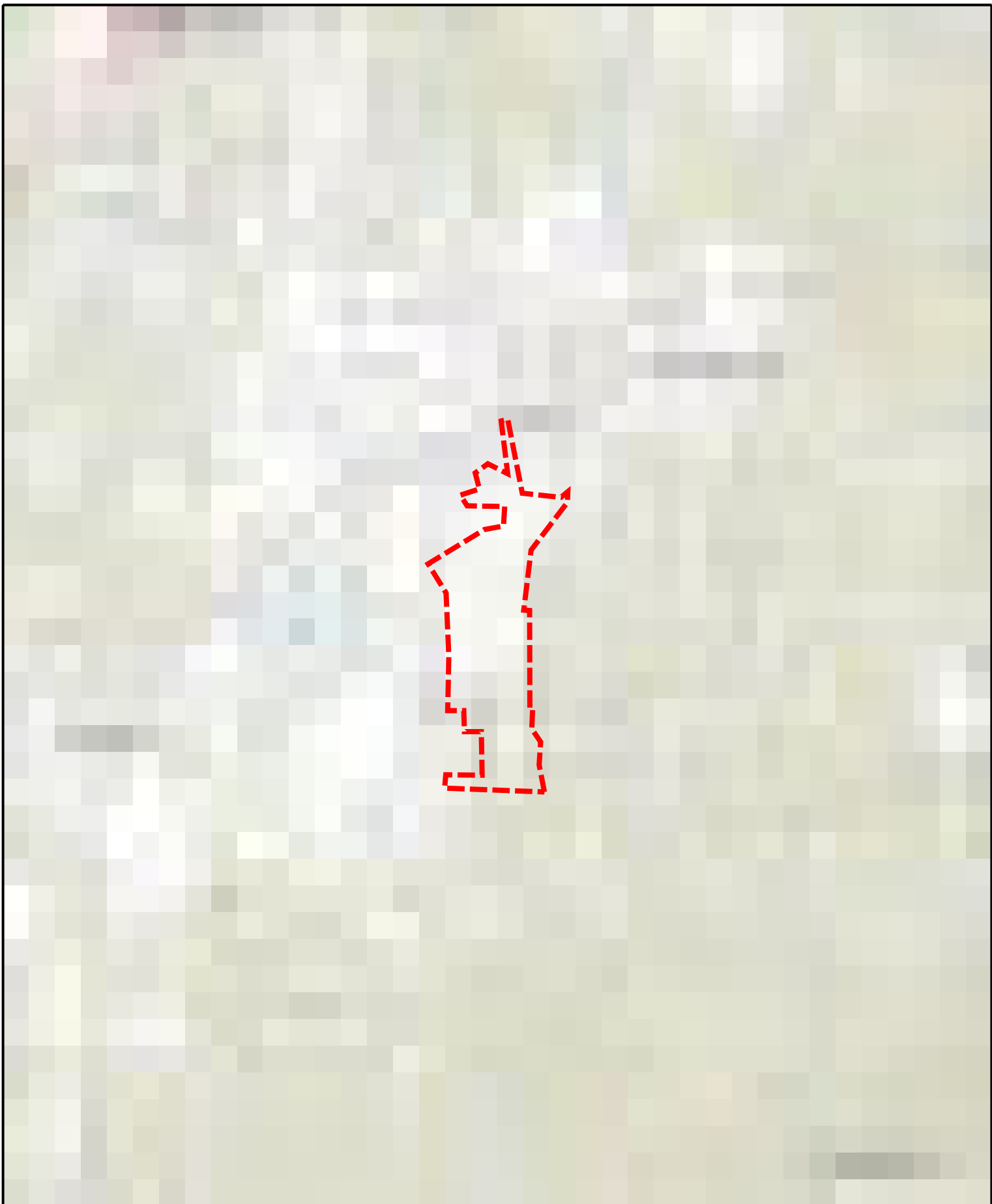
Target Property Longitude(s)/Latitude(s):

(-120.816350834, 38.677359136), (-120.821951287, 38.677526651), (-120.821886914, 38.678112951),  
(-120.819848435, 38.678096199), (-120.819891350, 38.680005827), (-120.820835488, 38.680005827),  
(-120.820878403, 38.680927121), (-120.821779625, 38.680927121), (-120.821715252, 38.683322429),  
(-120.821865456, 38.686086146), (-120.822873967, 38.687359095), (-120.819719689, 38.688866505),  
(-120.818646805, 38.689017244), (-120.818582432, 38.689871428), (-120.820685284, 38.689904925),  
(-120.821071522, 38.690373884), (-120.819998639, 38.690641859), (-120.820234673, 38.691345288),  
(-120.819526570, 38.691747245), (-120.818410771, 38.691311792), (-120.818775551, 38.693623014),  
(-120.818410771, 38.693706752), (-120.817595379, 38.690457626), (-120.815428154, 38.690273393),  
(-120.815041916, 38.690524620), (-120.815063374, 38.690055662), (-120.817101853, 38.687962063),  
(-120.817509549, 38.685332415), (-120.817187684, 38.685315666), (-120.817166226, 38.680960622),  
(-120.817016022, 38.680960622), (-120.817058938, 38.680123084), (-120.816565411, 38.679553552),  
(-120.816651242, 38.678548484)

## Topographic Map Summary

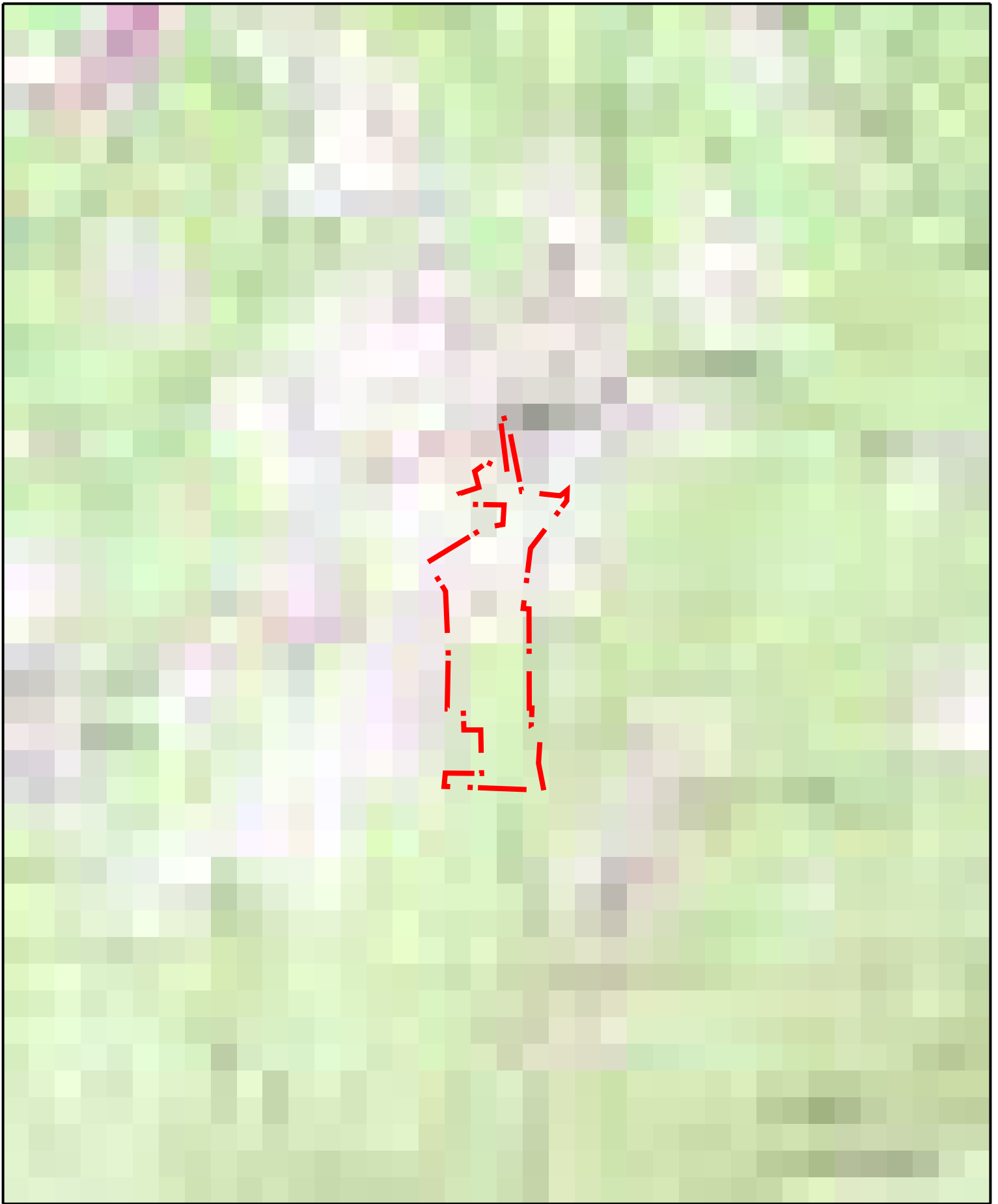
| <u>Date</u>            | <u>Quadrangle</u> | <u>Scale</u> |
|------------------------|-------------------|--------------|
| 2012                   | Placerville, CA   | 1" = 2000'   |
| 1949 PHOTOREVISED 1973 | Placerville, CA   | 1" = 2000'   |
| 1950                   | Placerville, CA   | 1" = 2000'   |
| 1949                   | Placerville, CA   | 1" = 2000'   |
| 1893                   | Placerville, CA   | 1" = 10420'  |
| 1892                   | Placerville, CA   | 1" = 10420'  |
| 1891                   | Placerville, CA   | 1" = 10420'  |

Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.



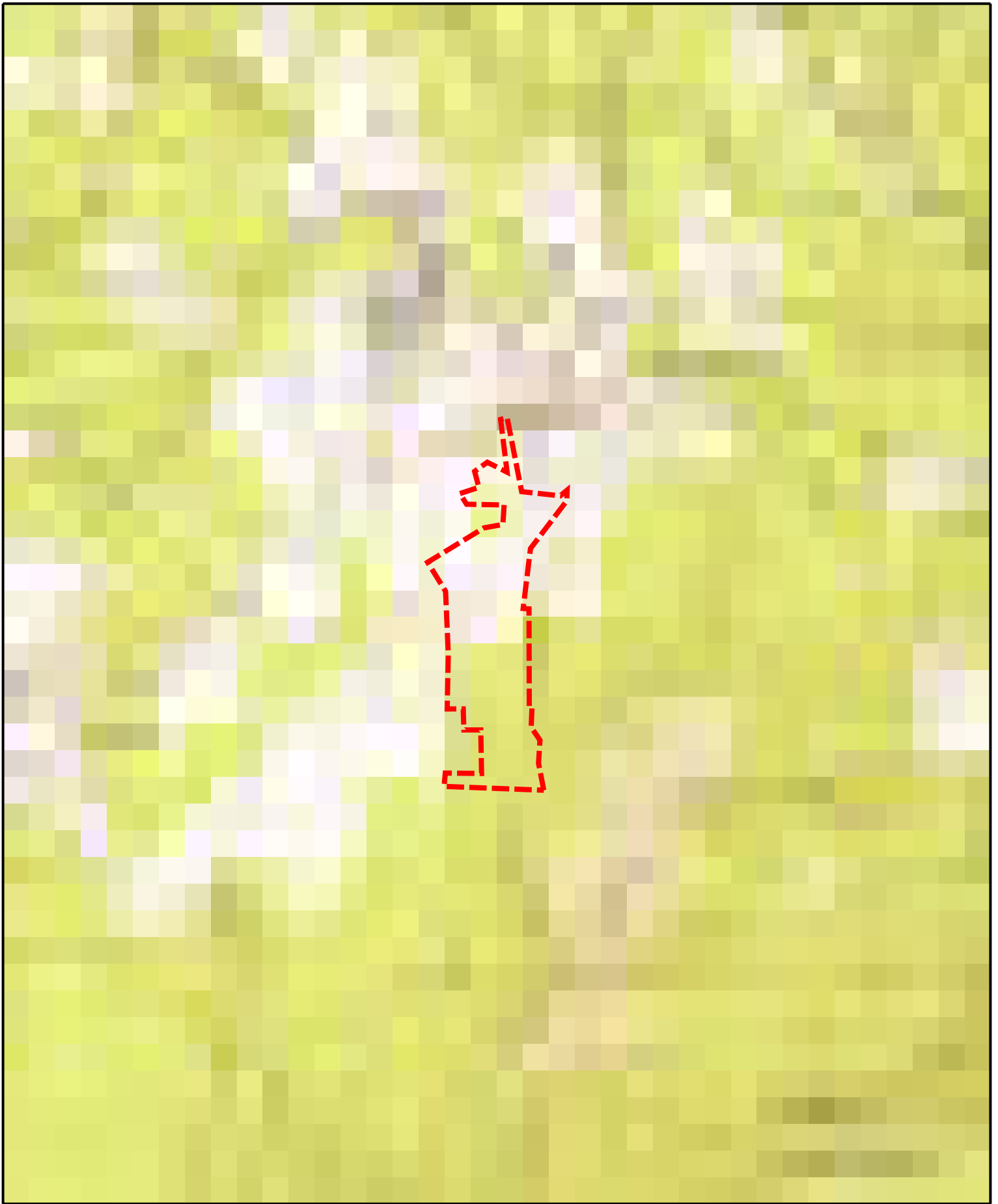
*Stonehenge Springs  
Placerville, CA (2012)*

**GeoSearch**



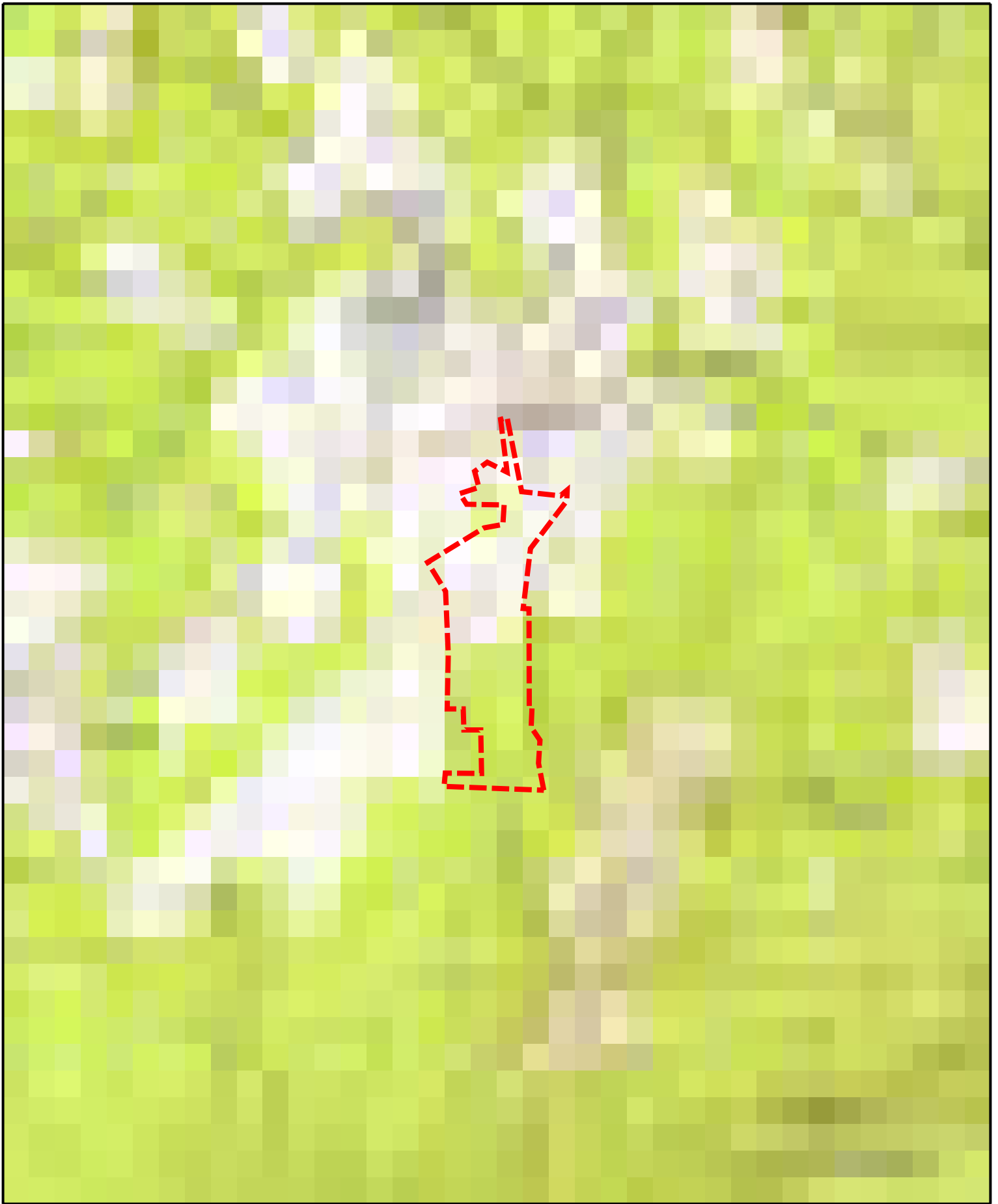
*Stonehenge Springs*  
*Placerville, CA (1973)*

**GeoSearch**



*Stonehenge Springs  
Placerville, CA (1950)*

**GeoSearch**



*Stonehenge Springs  
Placerville, CA (1949)*

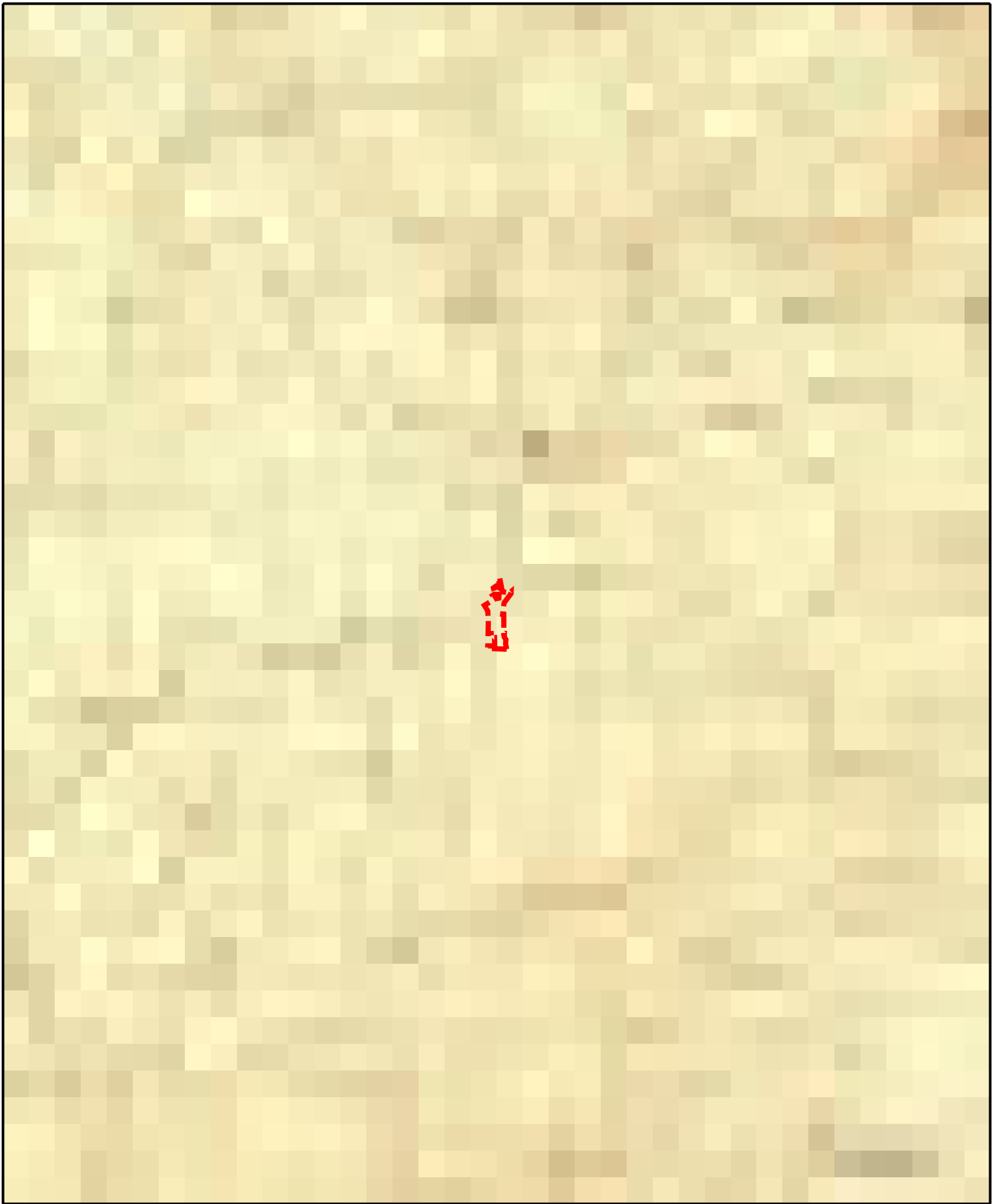
**GeoSearch**





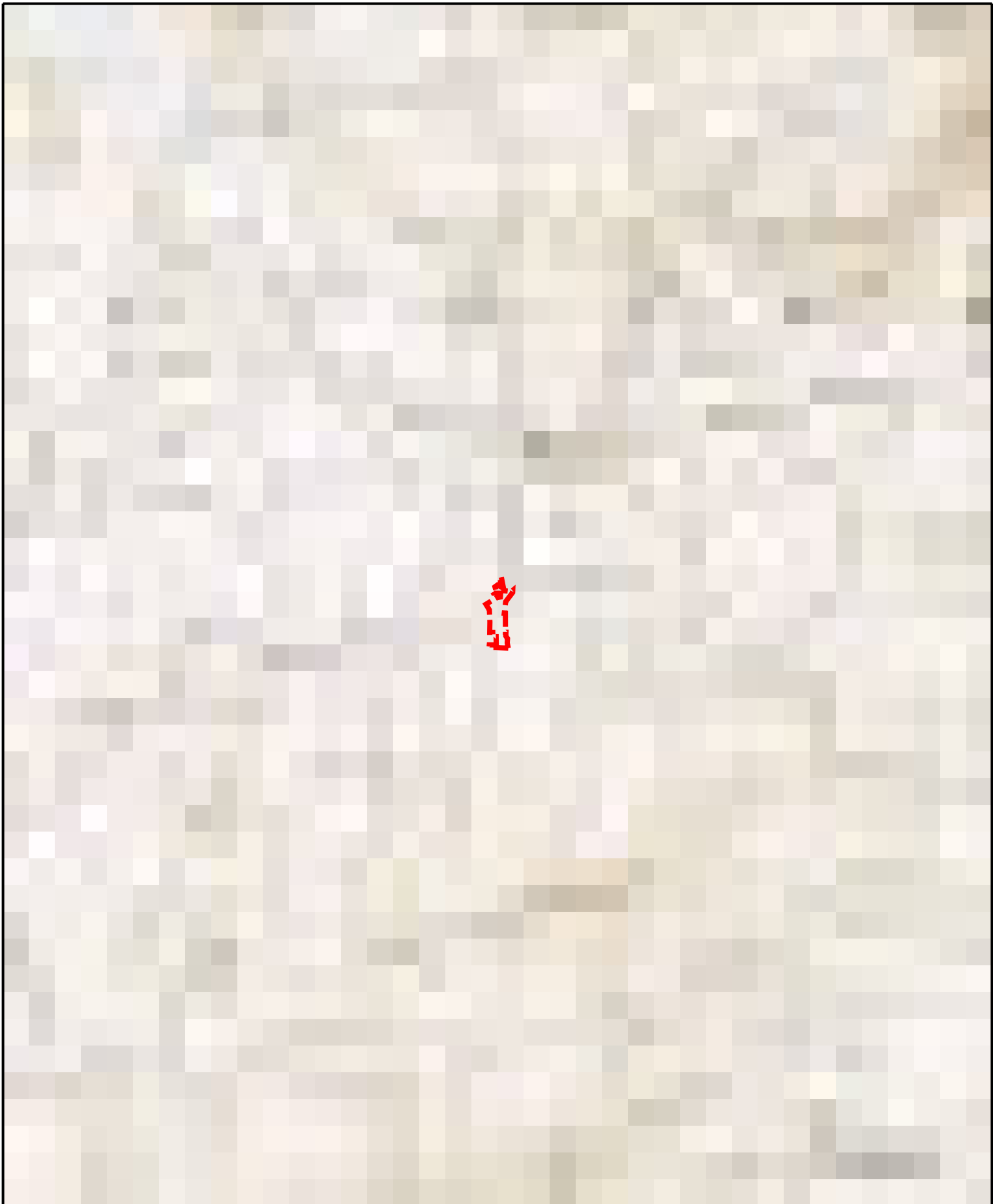
*Stonehenge Springs*  
*Placerville, CA (1893)*

**GeoSearch**



*Stonehenge Springs*  
*Placerville, CA (1892)*

**GeoSearch**



*Stonehenge Springs*  
*Placerville, CA (1891)*

**GeoSearch**



*Target Property:*  
**Stonehenge Springs**  
**Faith Lane,**  
**Diamond Springs, CA 95619**

*Prepared For:*  
**Environmental Science Assoc-San Francisco**

**Order #: 118699**  
**Job #: 269584**  
**Project #: D180359**  
**Date #: 12/07/18**



**Date:** 12/07/18  
**GS Job Number:** 118699  
**Company Name:** Environmental Science Assoc-San Francisco  
**Project Number:** D180359  
**Site Information:** Stonehenge Springs  
Faith Lane,  
Diamond Springs, CA 95619

The collections of fire insurance maps listed below were reviewed according to the site information supplied by client. Based on the information provided, no coverage is available.

Library of Congress  
University Publications of America  
Other Libraries (universities, state, local, etc.).

Disclaimer – The information in this report was obtained from a variety of public sources. GeoSearch cannot insure or makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customers interpretation of this report. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

---

## ***City Directory Target Property Address***

---

***Target Property:***

*Faith Ln,  
Diamond Springs, CA 95619*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***

**City Directory Target Property Address**

*Faith Ln, Diamond Springs, CA 95619*

1 FAITH LN

|         |                   |                     |                                      |
|---------|-------------------|---------------------|--------------------------------------|
| 2016    | STREET NOT LISTED | INFOUSA             | SOUTH WEST                           |
| 2011    | STREET NOT LISTED | INFOUSA             | PACIFIC                              |
| 2006    | STREET NOT LISTED | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | STREET NOT LISTED | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |

**Comment:**

---

## ***Historical By Street Number***

---

***Target Property:***

*Faith Ln,  
Diamond Springs, CA 95619*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***



## City Directory Historical by Street Number

|            |                           |
|------------|---------------------------|
| 1 Faith Ln | No Listing (2002/03-2016) |
|------------|---------------------------|

Comments:

---

## ***City Directory Standard Report***

---

***Target Property:***

*Faith Ln,  
Diamond Springs, CA 95619*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***

**City Directory Standard Report**

*Faith Ln, Diamond Springs, CA 95619*

INFOUSA

|            |      |                 |                   |
|------------|------|-----------------|-------------------|
| SOUTH WEST | 2016 | <b>FAITH LN</b> |                   |
|            |      | 1               | STREET NOT LISTED |

INFOUSA

|         |      |                 |                   |
|---------|------|-----------------|-------------------|
| PACIFIC | 2011 | <b>FAITH LN</b> |                   |
|         |      | 1               | STREET NOT LISTED |

HAINES DIRECTORY

|                                      |      |                 |                   |
|--------------------------------------|------|-----------------|-------------------|
| SACRAMENTO<br>EAST(CITY &<br>SUBURB) | 2006 | <b>FAITH LN</b> |                   |
|                                      |      | 1               | STREET NOT LISTED |

HAINES DIRECTORY

|                                      |         |                 |                   |
|--------------------------------------|---------|-----------------|-------------------|
| SACRAMENTO<br>EAST(CITY &<br>SUBURB) | 2002-03 | <b>FAITH LN</b> |                   |
|                                      |         | 1               | STREET NOT LISTED |

**Comment:**

---

## ***City Directory Target Property Address***

---

***Target Property:***

*Pleasant Valley Rd,  
Diamond Springs, CA 95828*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

### 1 PLEASANT VALLEY RD

|         |                   |                     |                                      |
|---------|-------------------|---------------------|--------------------------------------|
| 2016    | STREET BEGINS     | INFOUSA             | SOUTH WEST                           |
| 2011    | STREET BEGINS     | INFOUSA             | PACIFIC                              |
| 2002-03 | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96 | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1990    | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1985    | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1980    | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1977    | STREET BEGINS     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1970    | STREET NOT LISTED | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |

### 98 PLEASANT VALLEY RD

|      |                     |                     |                                    |
|------|---------------------|---------------------|------------------------------------|
| 1985 | HARSHFIELD COLLIN F | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN) |
|------|---------------------|---------------------|------------------------------------|

### 118 PLEASANT VALLEY RD

|      |             |                     |                                    |
|------|-------------|---------------------|------------------------------------|
| 1985 | HEDGECOCK C | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN) |
|------|-------------|---------------------|------------------------------------|

### 130 PLEASANT VALLEY RD

|         |              |                     |                                      |
|---------|--------------|---------------------|--------------------------------------|
| 2016    | TOWER MART   | INFOUSA             | SOUTH WEST                           |
| 2011    | CAB SERVICES | INFOUSA             | PACIFIC                              |
| 2011    | TOWER MART   | INFOUSA             | PACIFIC                              |
| 2002-03 | TOWER MART   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | TOWER MART   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                       |                     |                                      |
|-------------------------------|-----------------------|---------------------|--------------------------------------|
| 1995-96                       | NO CURRENT LISTING    | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1990                          | FOOD&LIQUOR           | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>202 PLEASANT VALLEY RD</u> |                       |                     |                                      |
| 2011                          | ASCHE BONNIE          | INFOUSA             | PACIFIC                              |
| 1990                          | CARSTEN D             | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>273 PLEASANT VALLEY RD</u> |                       |                     |                                      |
| 2016                          | CREATIVE PHOTO FRAMES | INFOUSA             | SOUTH WEST                           |
| 2011                          | CREATIVE PHOTO FRAMES | INFOUSA             | PACIFIC                              |
| 2006                          | CREATIVE PHOTO FRAMES | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | HARRINGTON PATRICIA   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | CRAETIVE PHOTO FRAMES | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | HARRINGTON P          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96                       | CREATIVE PHOTO FRME   | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>300 PLEASANT VALLEY RD</u> |                       |                     |                                      |
| 1990                          | NO CURRENT LISTING    | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1985                          | NO CURRENT LISTING    | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>320 PLEASANT VALLEY RD</u> |                       |                     |                                      |
| 2002-03                       | PARISEK JOHN          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>321 PLEASANT VALLEY RD</u> |                       |                     |                                      |
| 2016                          | DAWSON OIL CO         | INFOUSA             | SOUTH WEST                           |
| 2011                          | DAWSON OIL CO         | INFOUSA             | PACIFIC                              |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                                |                     |                                      |
|-------------------------------|--------------------------------|---------------------|--------------------------------------|
| 2006                          | DAWSON OIL CO                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | DAWSON OIL CO                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | WESTWOOD MBL HMS               | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | APARTMENTS                     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | X [COMMERCE WAY INTS]          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>350 PLEASANT VALLEY RD</u> |                                |                     |                                      |
| 2016                          | WESTWOOD MOBILE HOME COMMUNITY | INFOUSA             | SOUTH WEST                           |
| 2011                          | WESTWOOD MOBILE HOME COMMUNITY | INFOUSA             | PACIFIC                              |
| 2006                          | MULTI TENANT RESIDENTIAL       | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | WESTWOOD MBL HMS               | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | WESTWOOD MOBILE HOME COMMUNITY | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | X [WRANGLER RD INTS]           | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | Y [COMMERCE WAY INTS]          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96                       | WESTWOOD MBL HMS               | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1990                          | WESTWOOD MBL HMS               | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1985                          | WESTWOOD MBL HMS               | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1980                          | WERSTWOOD MBL HMS              | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                              |                     |                                      |
|-------------------------------|------------------------------|---------------------|--------------------------------------|
| 1977                          | MULTI TENANT RESIDENTIAL     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1977                          | WERSTWOOD MBL HMS            | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1977                          | WESTWD MBL HM CMNTY          | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>373 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2016                          | D & D SUPPLY                 | INFOUSA             | SOUTH WEST                           |
| 2011                          | D & D SUPPLY                 | INFOUSA             | PACIFIC                              |
| 2006                          | D & D PLUMBNG                | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | D&B PLUMBING SUPPLY          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | D & D SUPPLY                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | X [MISSOURI FLAT RD INTS]    | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1990                          | NO CURRENT LISTING           | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>385 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2016                          | INDEPENDENCE HIGH SCHOOL     | INFOUSA             | SOUTH WEST                           |
| 2016                          | INDEPENDENCE LEARNING CTR    | INFOUSA             | SOUTH WEST                           |
| 2011                          | INDEPENDENCE HIGH SCHOOL     | INFOUSA             | PACIFIC                              |
| 2011                          | INDEPENDENCE LEARNING CENTER | INFOUSA             | PACIFIC                              |
| 2006                          | ELDRDO ADULT SCHOOL          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | X [MIISOURI FLAT RD INTS]    | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>424 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2011                          | TIRAPELLE L                  | INFOUSA             | PACIFIC                              |
| 2006                          | TIRAPELLI L                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |



## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                               |                     |                                      |
|-------------------------------|-------------------------------|---------------------|--------------------------------------|
| 2002-03                       | TIRAPELLE L                   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96                       | TIRAPELLI L                   | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1990                          | TIRAPELLE L                   | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>435 PLEASANT VALLEY RD</u> |                               |                     |                                      |
| 2016                          | MOUER LABS                    | INFOUSA             | SOUTH WEST                           |
| 2011                          | SUNRISE FAMILY MEDICINE       | INFOUSA             | PACIFIC                              |
| 2006                          | BACK ON TRACK COUNSELING SERV | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | MCCUNE CAROLE                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | MCCUNE CAROLE                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | YUBACOIN INC                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>443 PLEASANT VALLEY RD</u> |                               |                     |                                      |
| 2002-03                       | LASHER WM                     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96                       | LASHER WM                     | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>444 PLEASANT VALLEY RD</u> |                               |                     |                                      |
| 2002-03                       | PARKER JOHN                   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>460 PLEASANT VALLEY RD</u> |                               |                     |                                      |
| 2016                          | DEB'S FROSTY                  | INFOUSA             | SOUTH WEST                           |
| 2006                          | DEB'S FROSTY                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | X [CHINA GARDEN INTS]         | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                              |                     |                                      |
|-------------------------------|------------------------------|---------------------|--------------------------------------|
| 2002-03                       | DEB'S FROSTY                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | SMITH ELAIDA                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>461 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2006                          | TAYLOR THOMAS                | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03                       | TAYLOR THOMAS                | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>466 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 1980                          | NO CURRENT LISTING           | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1977                          | WEINAND KENT MRS             | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>470 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2002-03                       | BONANZA CARPET CLEANING      | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>478 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2002-03                       | DIAMOND TV&SATELLITE         | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>484 PLEASANT VALLEY RD</u> |                              |                     |                                      |
| 2016                          | GREEN SPERO                  | INFOUSA             | SOUTH WEST                           |
| 2011                          | TAYLOR CLIFF A DC            | INFOUSA             | PACIFIC                              |
| 2011                          | TAYLOR JOHN F                | INFOUSA             | PACIFIC                              |
| 2006                          | BUILDING                     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | ALTERBATIVE HEALING ALLIANCE | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | AZTECA BAKERY & MARKET       | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|      |                               |                     |                                      |
|------|-------------------------------|---------------------|--------------------------------------|
| 2006 | BAHAI CENTER                  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | CARLA'S LIKE YOUR STYLE       | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | DIAMOND SPRINGS MOBILITY      | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | DIAMOND TV & SATELLITE        | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | DIAMOND VILLAGE CHIROPRACTIC  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | DUIVAS FITNESS FOR WOMEN      | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | ELDRO HUMANE SOCIETY          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | FACTORY TEAM 2 RCNG MTR SPRTS | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | FINE LINE TATOOING            | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | INALLIANCE                    | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | MAIN STREET MAIL              | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | MCCULLCH MIKIO A DC           | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | TAYLOR CLIFF A DC             | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | TAYLOR CLIFF A DC             | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | TAYLOR JOHN DR DIAMOND V C    | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006 | TAYLOR JOHN F                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|         |                               |                     |                                      |
|---------|-------------------------------|---------------------|--------------------------------------|
| 2006    | X [HOWARD CIR INTS]           | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | ALMOST ANTIQUES               | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | BARGAIN BARIN                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | CARLENE'S                     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | DOWNTOWN DOLLS                | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | ELDRO HUMANE SOCIETY          | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | HAIR BY KIMBERLY              | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | HIGH MOUNTAIN BLUE WATER TCKL | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | IRON MOUNTAIN MOTORCYCLES     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | KNIGHT VIRGIL                 | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | KNIGHT'S MUSIC                | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | MOUNATIN MAIL 2               | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | MULLEN MIKE                   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2002-03 | TAYLOR JOHN                   | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 1995-96 | IMAGES LIFE PHOTO             | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1995-96 | JACKS CABINETS                | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |

## City Directory Target Property Address

Pleasant Valley Rd, Diamond Springs, CA 95828

|                               |                           |                     |                                      |
|-------------------------------|---------------------------|---------------------|--------------------------------------|
| 1990                          | JACKS CABINETS            | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1985                          | LARSEN H CABINET          | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| <u>493 PLEASANT VALLEY RD</u> |                           |                     |                                      |
| 2016                          | HAIR AFFAIR               | INFOUSA             | SOUTH WEST                           |
| 2016                          | J & J JAVA                | INFOUSA             | SOUTH WEST                           |
| 2016                          | LANDIS TOBY Y PHD         | INFOUSA             | SOUTH WEST                           |
| 2011                          | CHARLOTTE'S BAKERY & CAFE | INFOUSA             | PACIFIC                              |
| 2011                          | HAIR AFFAIR               | INFOUSA             | PACIFIC                              |
| 2011                          | LANDIS TOBY Y PHD         | INFOUSA             | PACIFIC                              |
| 2002-03                       | DIAMOND ESORESSO&MORE     | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>500 PLEASANT VALLEY RD</u> |                           |                     |                                      |
| 2016                          | FIRE HOUSE CAFE           | INFOUSA             | SOUTH WEST                           |
| 2011                          | FIREHOUSE CAFE            | INFOUSA             | PACIFIC                              |
| <u>501 PLEASANT VALLEY RD</u> |                           |                     |                                      |
| 2002-03                       | NO CURRENT LISTING        | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>504 PLEASANT VALLEY RD</u> |                           |                     |                                      |
| 2006                          | HANSEN DENISE D LCSW      | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| 2006                          | VENDERKAR PEF MA MPA MFT  | HAINES<br>DIRECTORY | SACRAMENTO<br>EAST(CITY &<br>SUBURB) |
| <u>515 PLEASANT VALLEY RD</u> |                           |                     |                                      |
| 1995-96                       | ROHLFING FRANK            | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |
| 1990                          | ROHLFING FRANK            | HAINES<br>DIRECTORY | SACRAMENTO<br>(CITY &<br>SUBURBAN)   |

**City Directory Target Property Address**

*Pleasant Valley Rd, Diamond Springs, CA 95828*

517 PLEASANT VALLEY RD

1985 NO CURRENT LISTING

HAINES  
DIRECTORY

SACRAMENTO  
(CITY &  
SUBURBAN)

538 PLEASANT VALLEY RD

1980 NO CURRENT LISTING

HAINES  
DIRECTORY

SACRAMENTO  
(CITY &  
SUBURBAN)

1977 NO CURRENT LISTING

HAINES  
DIRECTORY

SACRAMENTO  
(CITY &  
SUBURBAN)

**Comment:** No coverage for Diamond Springs prior to 1970.

---

## ***Historical By Street Number***

---

***Target Property:***

*Pleasant Valley Rd,  
Diamond Springs, CA 95828*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***

## City Directory Historical by Street Number

|                               |  |
|-------------------------------|--|
| <b>1 Pleasant Valley Rd</b>   | No Listing (1970); Street Begins (1977-2002/03); No Listing (2006); Street Begins (2011-2016)  |
| <b>118 Pleasant Valley Rd</b> | No Listing (1970-1980); Hedgecock C (1985); No Listing (1990-2016)   |
| <b>130 Pleasant Valley Rd</b> | No Listing (1970-1985); Food&Liquor (1990); No Current Listing (1995/96); Tower Mart (2002/03); No Listing (2006); Cab Services (2011); Tower Mart (2011-2016)   |
| <b>202 Pleasant Valley Rd</b> | No Listing (1970-1985); Carsten D (1990); No Listing (1995/96-2006); Asche Bonnie (2011); No Listing (2016)  |
| <b>273 Pleasant Valley Rd</b> | No Listing (1970-1990); Creative Photo Frme (1995/96-2016); Harrington P (2002/03-2006)  |
| <b>300 Pleasant Valley Rd</b> | No Listing (1970-1980); No Current Listing (1985-1990); No Listing (1995/96-2016)  |
| <b>320 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Parisek John (2002/03); No Listing (2006-2016)  |
| <b>321 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Dawson Oil Co (2002/03-2016); Westwood Mbl Hms (2002/03); Apartments (2002/03)  |
| <b>350 Pleasant Valley Rd</b> | No Listing (1970); Multi Tenant Residential (1977); Werstwood Mbl Hms (1977-1995/96); Westwd Mbl Hm Cmnty (1977); No Listing (2002/03); Multi Tenant Residential (2006); Westwood Mbl Hms (2006); Westwood Mobile Home Community (2006-2016) |
| <b>373 Pleasant Valley Rd</b> | No Listing (1970-1985); No Current Listing (1990); No Listing (1995/96); D&B Plumbing Supply (2002/03-2016)  |
| <b>385 Pleasant Valley Rd</b> | No Listing (1970-2002/03); Eldrdo Adult School (2006); Independence High School (2011-2016)  |
| <b>424 Pleasant Valley Rd</b> | No Listing (1970-1985); Tirapelle L (1990-2011); No Listing (2016)   |
| <b>435 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Mccune Carole (2002/03-2006); Yubacoin Inc (2002/03); Back On Track Counseling Serv (2006); Sunrise Family Medicine (2011); Mouer Labs (2016)   |
| <b>443 Pleasant Valley Rd</b> | No Listing (1970-1990); Lasher Wm (1995/96-2002/03); No Listing (2006-2016)  |
| <b>444 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Parker John (2002/03); No Listing (2006-2016)   |
| <b>460 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Deb's Frosty (2002/03-2006); Smith Elaida (2002/03); No Listing (2011); Deb's Frosty (2016)   |
| <b>461 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Taylor Thomas (2002/03-2006); No Listing (2011-2016)  |
| <b>466 Pleasant Valley Rd</b> | No Listing (1970); Weinand Kent Mrs (1977); No Current Listing (1980); No Listing (1985-2016)  |
| <b>470 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Bonanza Carpet Cleaning (2002/03); No Listing (2006-2016)   |
| <b>478 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Diamond Tv&Satellite (2002/03); No Listing (2006-2016)  |



|                               |  |
|-------------------------------|--|
| <b>484 Pleasant Valley Rd</b> | No Listing (1970-1980); Larsen H Cabinet (1985); Jacks Cabinets (1990-1995/96); Images Life Photo (1995/96); Almost Antiques (2002/03); Bargain Barin (2002/03); Carlene's (2002/03); Downtown Dolls (2002/03); Eldro Humane Society (2002/03-2006); Hair By Kimberly (2002/03); High Mountain Blue Water Tckl (2002/03); Iron Mountain Motorcycles (2002/03); Knight Virgil (2002/03); Knight's Music (2002/03); Mounatin Mail 2 (2002/03); Mullen Mike (2002/03); Taylor John (2002/03); Building (2006); Alterbative Healing Alliance (2006); Azteca Bakery & Market (2006); Bahai Center (2006); Carla's Like Your Style (2006); Diamond Springs Mobility (2006); Diamond Village Chiropractic (2006); Duivas Fitness For Women (2006); Factory Team 2 Rcnng Mtr Sprts (2006); Fine Line Tatooning (2006); Inalliance (2006); Main Street Mail (2006); Mccullch Mikio A Dc (2006-2011); Taylor John Dr Diamond V C (2006-2011); Green Spero (2016) |
| <b>493 Pleasant Valley Rd</b> | No Listing (1970-1995/96); Diamond Esoresso&More (2002/03); No Listing (2006); Charlotte's Bakery & Cafe (2011); Hair Affair (2011-2016); Landis Toby Y Phd (2011-2016); J & J Java (2016)   |
| <b>500 Pleasant Valley Rd</b> | No Listing (1970-2006); Firehouse Cafe (2011-2016)   |
| <b>501 Pleasant Valley Rd</b> | No Listing (1970-1995/96); No Current Listing (2002/03); No Listing (2006-2016)  |
| <b>504 Pleasant Valley Rd</b> | No Listing (1970-2002/03); Hansen Denise D Lcsw (2006); Venderkar Pef Ma Mpa Mft (2006); No Listing (2011-2016)  |
| <b>515 Pleasant Valley Rd</b> | No Listing (1970-1985); Rohlfing Frank (1990-1995/96); No Listing (2002/03-2016)   |
| <b>517 Pleasant Valley Rd</b> | No Listing (1970-1980); No Current Listing (1985); No Listing (1990-2016)  |
| <b>538 Pleasant Valley Rd</b> | No Listing (1970); No Current Listing (1977-1980); No Listing (1985-2016)  |
| <b>98 Pleasant Valley Rd</b>  | No Listing (1970-1980); Harshfield Collin F (1985); No Listing (1990-2016)   |

**Comments:** No coverage for Diamond Springs prior to 1970.

---

## ***City Directory Standard Report***

---

***Target Property:***

*Pleasant Valley Rd,  
Diamond Springs, CA 95828*

***Prepared For:***

*Environmental Science Assoc-San Francisco*

Order #: 118699

Project #: D180359

***Date: 12/11/2018***

**City Directory Standard Report**  
**Pleasant Valley Rd, Diamond Springs, CA 95828**

INFOUSA

SOUTH WEST      2016

**PLEASANT VALLEY RD**

|     |                                   |
|-----|-----------------------------------|
| 1   | STREET BEGINS                     |
| 130 | TOWER MART                        |
| 273 | CREATIVE PHOTO FRAMES             |
| 321 | DAWSON OIL CO                     |
| 350 | WESTWOOD MOBILE HOME<br>COMMUNITY |
| 373 | D & D SUPPLY                      |
| 385 | INDEPENDENCE HIGH SCHOOL          |
| 385 | INDEPENDENCE LEARNING CTR         |
| 435 | MOUER LABS                        |
| 460 | DEB'S FROSTY                      |
| 484 | GREEN SPERO                       |
| 493 | HAIR AFFAIR                       |
| 493 | J & J JAVA                        |
| 493 | LANDIS TOBY Y PHD                 |
| 500 | FIRE HOUSE CAFE                   |

INFOUSA

PACIFIC      2011

**PLEASANT VALLEY RD**

|     |                                   |
|-----|-----------------------------------|
| 1   | STREET BEGINS                     |
| 130 | CAB SERVICES                      |
| 130 | TOWER MART                        |
| 202 | ASCHE BONNIE                      |
| 273 | CREATIVE PHOTO FRAMES             |
| 321 | DAWSON OIL CO                     |
| 350 | WESTWOOD MOBILE HOME<br>COMMUNITY |
| 373 | D & D SUPPLY                      |
| 385 | INDEPENDENCE HIGH SCHOOL          |
| 385 | INDEPENDENCE LEARNING CENTER      |
| 424 | TIRAPELLE L                       |
| 435 | SUNRISE FAMILY MEDICINE           |
| 484 | TAYLOR CLIFF A DC                 |

## City Directory Standard Report

Pleasant Valley Rd, Diamond Springs, CA 95828

|     |                           |
|-----|---------------------------|
| 484 | TAYLOR JOHN F             |
| 493 | CHARLOTTE'S BAKERY & CAFE |
| 493 | HAIR AFFAIR               |
| 493 | LANDIS TOBY Y PHD         |
| 500 | FIREHOUSE CAFE            |

### HAINES DIRECTORY

SACRAMENTO 2006  
EAST(CITY &  
SUBURB)

### PLEASANT VALLEY RD

|     |                                   |
|-----|-----------------------------------|
| 273 | CREATIVE PHOTO FRAMES             |
| 273 | HARRINGTON PATRICIA               |
| 321 | DAWSON OIL CO                     |
| 350 | MULTI TENANT RESIDENTIAL          |
| 350 | WESTWOOD MBL HMS                  |
| 350 | WESTWOOD MOBILE HOME<br>COMMUNITY |
| 350 | X [WRANGLER RD INTS]              |
| 350 | Y [COMMERCE WAY INTS]             |
| 373 | D & D PLUMBNG                     |
| 385 | ELDRDO ADULT SCHOOL               |
| 385 | X [MIISOURI FLAT RD INTS]         |
| 424 | TIRAPELLI L                       |
| 435 | BACK ON TRACK COUNSELING<br>SERV  |
| 435 | MCCUNE CAROLE                     |
| 460 | DEB'S FROSTY                      |
| 460 | X [CHINA GARDEN INTS]             |
| 461 | TAYLOR THOMAS                     |
| 484 | ALTERBATIVE HEALING ALLIANCE      |
| 484 | AZTECA BAKERY & MARKET            |
| 484 | BAHAI CENTER                      |
| 484 | BUILDING                          |
| 484 | CARLA'S LIKE YOUR STYLE           |
| 484 | DIAMOND SPRINGS MOBILITY          |
| 484 | DIAMOND TV & SATELLITE            |

## City Directory Standard Report

Pleasant Valley Rd, Diamond Springs, CA 95828

|     |                               |
|-----|-------------------------------|
| 484 | DIAMOND VILLAGE CHIROPRACTIC  |
| 484 | DUIVAS FITNESS FOR WOMEN      |
| 484 | ELDRO HUMANE SOCIETY          |
| 484 | FACTORY TEAM 2 RCNG MTR SPRTS |
| 484 | FINE LINE TATOOING            |
| 484 | INALLIANCE                    |
| 484 | MAIN STREET MAIL              |
| 484 | MCCULLCH MIKIO A DC           |
| 484 | TAYLOR CLIFF A DC             |
| 484 | TAYLOR CLIFF A DC             |
| 484 | TAYLOR JOHN DR DIAMOND V C    |
| 484 | TAYLOR JOHN F                 |
| 484 | X [HOWARD CIR INTS]           |
| 504 | HANSEN DENISE D LCSW          |
| 504 | VENDERKAR PEF MA MPA MFT      |

### HAINES DIRECTORY

SACRAMENTO 2002-03  
EAST(CITY &  
SUBURB)

### PLEASANT VALLEY RD

|     |                           |
|-----|---------------------------|
| 1   | STREET BEGINS             |
| 130 | TOWER MART                |
| 130 | TOWER MART                |
| 273 | CRAETIVE PHOTO FRAMES     |
| 273 | HARRINGTON P              |
| 320 | PARISEK JOHN              |
| 321 | APARTMENTS                |
| 321 | DAWSON OIL CO             |
| 321 | WESTWOOD MBL HMS          |
| 321 | X [COMMERCE WAY INTS]     |
| 373 | D & D SUPPLY              |
| 373 | D&B PLUMBING SUPPLY       |
| 373 | X [MISSOURI FLAT RD INTS] |
| 424 | TIRAPELLE L               |
| 435 | MCCUNE CAROLE             |

## City Directory Standard Report

Pleasant Valley Rd, Diamond Springs, CA 95828

|     |                               |
|-----|-------------------------------|
| 435 | YUBACoin INC                  |
| 443 | LASHER WM                     |
| 444 | PARKER JOHN                   |
| 460 | DEB'S FROSTY                  |
| 460 | SMITH ELAIDA                  |
| 461 | TAYLOR THOMAS                 |
| 470 | BONANZA CARPET CLEANING       |
| 478 | DIAMOND TV&SATELLITE          |
| 484 | ALMOST ANTIQUES               |
| 484 | BARGAIN BARIN                 |
| 484 | CARLENE'S                     |
| 484 | DOWNTOWN DOLLS                |
| 484 | ELDRO HUMANE SOCIETY          |
| 484 | HAIR BY KIMBERLY              |
| 484 | HIGH MOUNTAIN BLUE WATER TCKL |
| 484 | IRON MOUNTAIN MOTORCYCLES     |
| 484 | KNIGHT VIRGIL                 |
| 484 | KNIGHT'S MUSIC                |
| 484 | MOUNATIN MAIL 2               |
| 484 | MULLEN MIKE                   |
| 484 | TAYLOR JOHN                   |
| 493 | DIAMOND ESORESSO&MORE         |
| 501 | NO CURRENT LISTING            |

### HAINES DIRECTORY

SACRAMENTO 1995-96  
(CITY &  
SUBURBAN)

### PLEASANT VALLEY RD

|     |                     |
|-----|---------------------|
| 1   | STREET BEGINS       |
| 130 | NO CURRENT LISTING  |
| 273 | CREATIVE PHOTO FRME |
| 350 | WESTWOOD MBL HMS    |
| 424 | TIRAPELLI L         |
| 443 | LASHER WM           |
| 484 | IMAGES LIFE PHOTO   |

**City Directory Standard Report**

**Pleasant Valley Rd, Diamond Springs, CA 95828**

484 JACKS CABINETS  
515 ROHLFING FRANK

HAINES DIRECTORY

SACRAMENTO 1990  
(CITY &  
SUBURBAN)

**PLEASANT VALLEY RD**

1 STREET BEGINS  
130 FOOD&LIQUOR  
202 CARSTEN D  
300 NO CURRENT LISTING  
350 WESTWOOD MBL HMS  
373 NO CURRENT LISTING  
424 TIRAPELLE L  
484 JACKS CABINETS  
515 ROHLFING FRANK

HAINES DIRECTORY

SACRAMENTO 1985  
(CITY &  
SUBURBAN)

**PLEASANT VALLEY RD**

1 STREET BEGINS  
98 HARSHFIELD COLLIN F  
118 HEDGECOCK C  
300 NO CURRENT LISTING  
350 WESTWOOD MBL HMS  
484 LARSEN H CABINET  
517 NO CURRENT LISTING

HAINES DIRECTORY

SACRAMENTO 1980  
(CITY &  
SUBURBAN)

**PLEASANT VALLEY RD**

1 STREET BEGINS  
350 WERSTWOOD MBL HMS  
466 NO CURRENT LISTING  
538 NO CURRENT LISTING

HAINES DIRECTORY

**City Directory Standard Report**

**Pleasant Valley Rd, Diamond Springs, CA 95828**

SACRAMENTO 1977  
(CITY &  
SUBURBAN)

**PLEASANT VALLEY RD**

|     |                          |
|-----|--------------------------|
| 1   | STREET BEGINS            |
| 350 | MULTI TENANT RESIDENTIAL |
| 350 | WERSTWOOD MBL HMS        |
| 350 | WESTWD MBL HM CMNTY      |
| 466 | WEINAND KENT MRS         |
| 538 | NO CURRENT LISTING       |

HAINES DIRECTORY

SACRAMENTO 1970  
(CITY &  
SUBURBAN)

**PLEASANT VALLEY RD**

|   |                   |
|---|-------------------|
| 1 | STREET NOT LISTED |
|---|-------------------|

**Comment:** No coverage for Diamond Springs prior to 1970.





---

## ***Environmental Lien***

---

*Target Property:*  
**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, El Dorado County, California**  
**95619**

*Prepared For:*  
**Environmental Science Assoc-San Francisco**

**Order #: 118699**  
**Job #: 269579**  
**Project #: D180359**  
**PO #: D180359-99**  
**Date: 12/10/2018**

## TARGET PROPERTY SUMMARY

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado County, California 95619**

USGS Quadrangle: **Placerville, CA**

Target Property Geometry: **Area**

Target Property Longitude(s)/Latitude(s):

(-120.816351, 38.677359), (-120.821951, 38.677527), (-120.821887, 38.678113), (-120.819848, 38.678096),  
(-120.819891, 38.680006), (-120.820835, 38.680006), (-120.820878, 38.680927), (-120.821780, 38.680927),  
(-120.821715, 38.683322), (-120.821865, 38.686086), (-120.822874, 38.687359), (-120.819720, 38.688867),  
(-120.818647, 38.689017), (-120.818582, 38.689871), (-120.820685, 38.689905), (-120.821072, 38.690374),  
(-120.819999, 38.690642), (-120.820235, 38.691345), (-120.819527, 38.691747), (-120.818411, 38.691312),  
(-120.818776, 38.693623), (-120.818411, 38.693707), (-120.817595, 38.690458), (-120.815428, 38.690273),  
(-120.815042, 38.690525), (-120.815063, 38.690056), (-120.817102, 38.687962), (-120.817510, 38.685332),  
(-120.817188, 38.685316), (-120.817166, 38.680961), (-120.817016, 38.680961), (-120.817059, 38.680123),  
(-120.816565, 38.679554), (-120.816651, 38.678548), (-120.816351, 38.677359)

County/Parish Covered:

**El Dorado (CA)**

Zipcode(s) Covered:

**Diamond Springs CA: 95619**

**El Dorado CA: 95623**

**Placerville CA: 95667**

State(s) Covered:

**CA**

Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.



## ENVIRONMENTAL LIEN/AUL SEARCH

We have done a search of El Dorado County Recorders Records for “Environmental Liens” only on the subject property as identified as APN: 329-301-20-100, Diamond Springs, CA. and find the following:

**None found**

We have done a search of El Dorado County Recorders Records for “Activity and Use Limitations” (AUL’s) only on the subject property as identified as APN: 329-301-20-100, Diamond Springs, CA. and find the following:

**None found**

---

## **GeoPlus Oil & Gas Report**

---

[NEW: GeoLens by Geosearch](#)

*Target Property:*

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado County, California 95619**

*Prepared For:*

**Environmental Science Assoc-San Francisco**

**Order #: 118699**

**Job #: 269583**

**Project #: D180359**

**PO #: D180359-99**

**Date: 12/07/2018**

---

## Table of Contents

---

|  |   |
|--|---|
| <i>Target Property Summary</i> . . . . .           | 1 |
| <i>Database Radius Summary</i> . . . . .           | 2 |
| <i>Oil &amp; Gas Map</i> . . . . .                 | 3 |
| <i>Environmental Records Definitions</i> . . . . . | 5 |

---

## Disclaimer

---

*The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.*

## Target Property Summary

### **Target Property Information**

Stonehenge Springs

Faith Lane

Diamond Springs, California 95619

#### **Coordinates**

Area centroid (-120.81907, 38.6845057)

#### **USGS Quadrangle**

Placerville, CA

### **Geographic Coverage Information**

**County/Parish:** El Dorado (CA)

#### **ZipCode(s):**

Diamond Springs CA: 95619

El Dorado CA: 95623

Placerville CA: 95667

## Database Radius Summary

### STATE (CA) LISTING

| Acronym          | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile | Total |
|------------------|-----------------------|------------------|--------------------|------------------|------------------|----------------|----------|-------|
| OG               | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS       | 0     |
| <b>SUB-TOTAL</b> |                       | 0                | 0                  | 0                | 0                | 0              | 0        | 0     |
| <b>TOTAL</b>     |                       | 0                | 0                  | 0                | 0                | 0              | 0        | 0     |

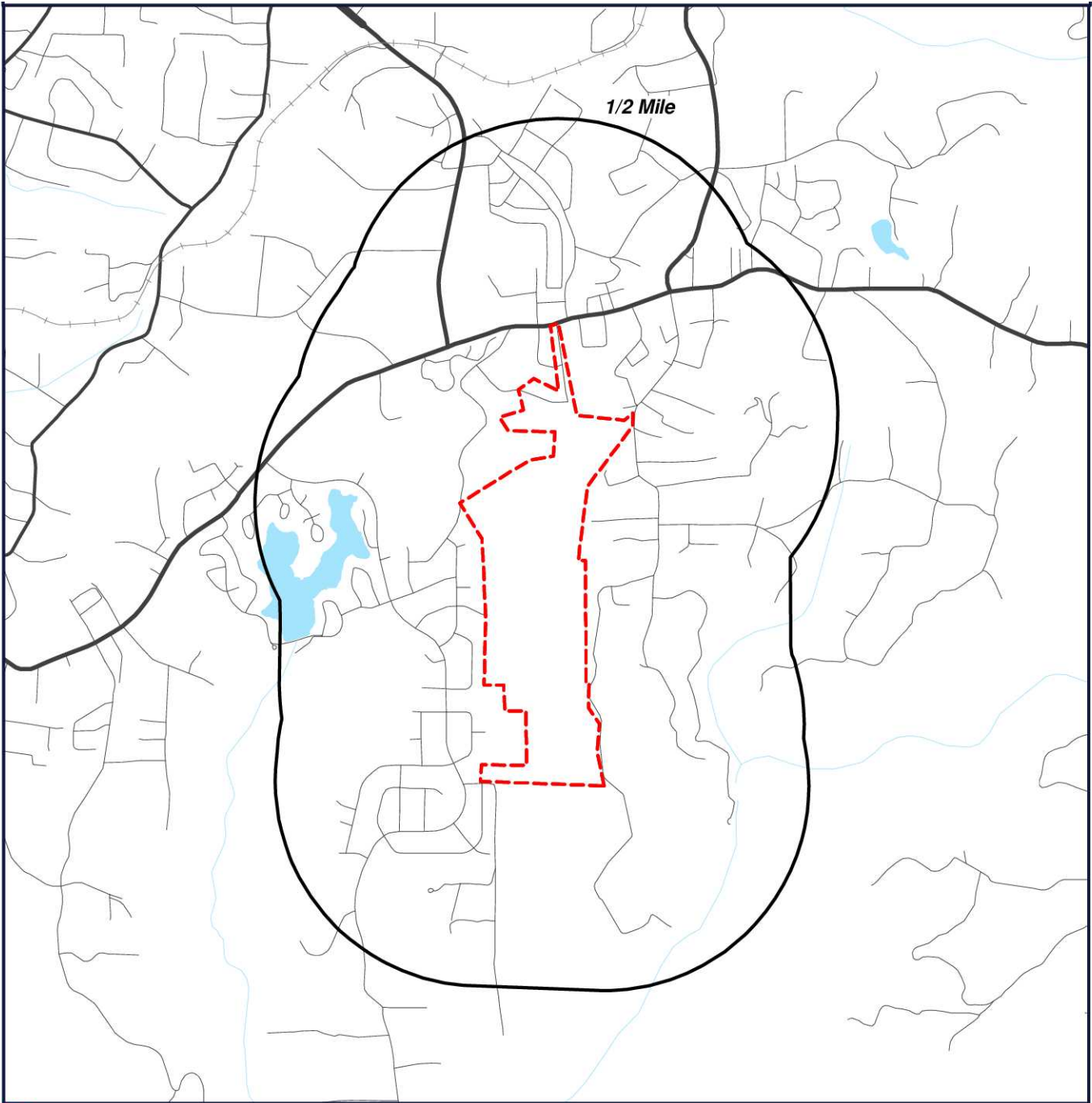
**NOTES:**

**NS = NOT SEARCHED**

**TP/AP = TARGET PROPERTY/ADJACENT PROPERTY**

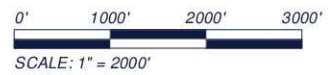


# OIL & GAS WELL MAP



-  Target Property (TP)
-  Well Location

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



[Click here to access Satellite view](#)

## Located Sites Summary

No Records Found.

## ***Environmental Records Definitions - STATE (CA)***

**OG** Oil and Gas

VERSION DATE: 04/16/18

This oil, gas, and geothermal well information database is maintained by the California Department of Conservation's Division of Oil, Gas, and Geothermal Resources. The database information may change without notice. The Department of Conservation makes no warranties, whether expressed or implied, as to the suitability of the product for any particular purpose. Any use of this information is at the user's own risk.

---

## **GeoPlus Physical Setting Maps**

---

[Satellite view](#)

*Target Property:*

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado County, California 95619**

*Prepared For:*

**Environmental Science Assoc-San Francisco**

**Order #: 118699**

**Job #: 269585**

**Project #: D180359**

**PO #: D180359-99**

**Date: 12/07/2018**

---

## Table of Contents

---

|  |    |
|--|----|
| <i>Target Property Summary</i> . . . . . | 1  |
| <i>FEMA Map</i> . . . . .                | 2  |
| <i>FEMA Report</i> . . . . .             | 3  |
| <i>NWI Map</i> . . . . .                 | 4  |
| <i>NWI Report</i> . . . . .              | 5  |
| <i>SOIL Map</i> . . . . .                | 7  |
| <i>SOIL Report</i> . . . . .             | 8  |
| <i>GEOLOGY Map</i> . . . . .             | 9  |
| <i>GEOLOGY Report</i> . . . . .          | 10 |

---

## Disclaimer

---

*The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.*

## Target Property Summary

### **Target Property Information**

Stonehenge Springs

Faith Lane

Diamond Springs, California 95619

#### **Coordinates**

Area centroid (-120.81907, 38.6845057)

#### **USGS Quadrangle**

Placerville, CA

### **Geographic Coverage Information**

**County/Parish:** El Dorado (CA)

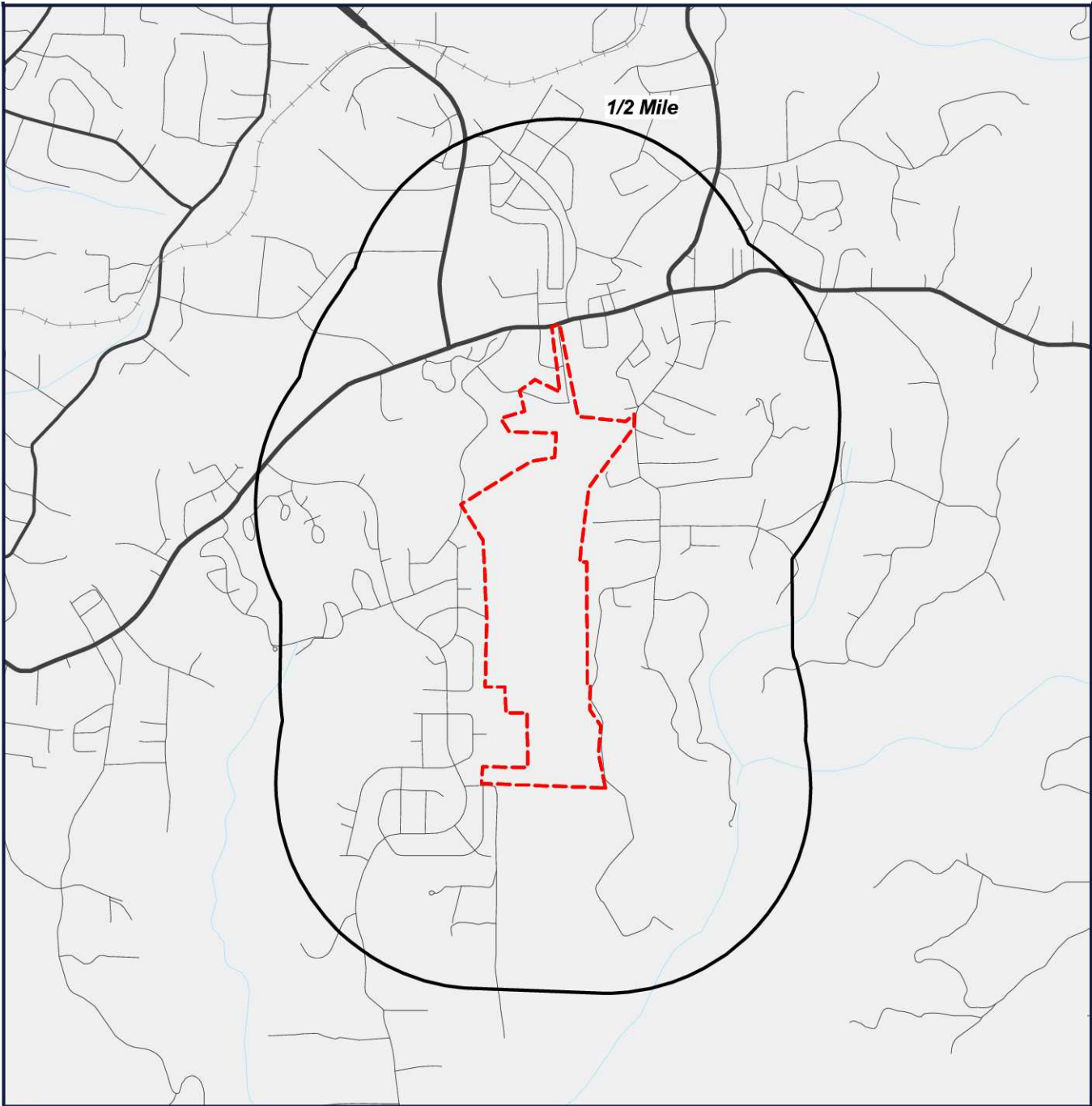
#### **ZipCode(s):**

Diamond Springs CA: 95619

El Dorado CA: 95623

Placerville CA: 95667

# FEMA Map



 Target Property (TP)

- |   |  |
|---|--|
|  ZONE A  |  ZONE D                           |
|  ZONE AE |  ZONE X                           |
|  ZONE AH |  AREA NOT INCLUDED                |
|  ZONE A0 |  OPEN WATER                       |
|  ZONE AR |  NDA - DIGITAL DATA NOT AVAILABLE |
|  ZONE V  |  |
|  ZONE VE |  |

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



Letter of map revision date: 05/18/2018  
Latest study effective date: 04/04/2018  
Panel #: 06005C0075F

0' 1000' 2000' 3000'  
SCALE: 1" = 2000'

[Click here to access Satellite view](#)



# FEMA Report

## FEMA - Federal Emergency Management Agency

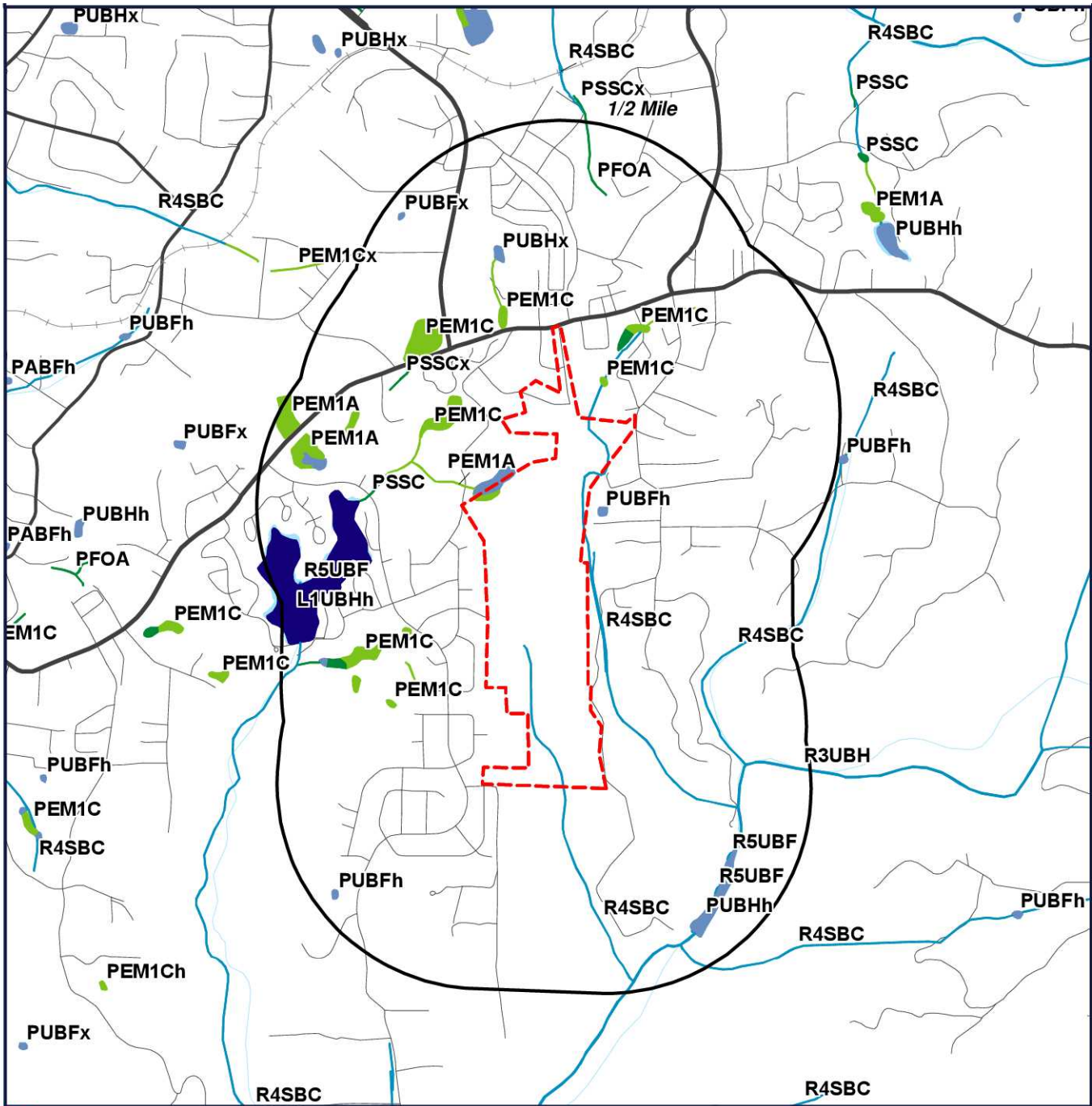
The National Flood Hazard Layer (NFHL) data used in this report is derived from the Federal Emergency Management Agency. The NFHL dataset is a compilation of effective Flood Insurance Rate Map (FIRM) databases (a collection of the digital data that are used in GIS systems for creating new Flood Insurance Rate Maps) and Letters of Map Change (Letters of Map Amendment and Letters of Map Revision only) that create a seamless GIS data layer for United States and its territories. The NFHL is updated as new study or LOMC data becomes effective. Note: Currently, not all areas have modernized FIRM database data available. As a result, users may need to refer to the effective Flood Insurance Rate Map for effective flood hazard information. This data was provided by the Federal Emergency Management Agency's Map Service Center in November of 2013.

## FEMA Flood Zone Definitions within Search Radius

|   |        |
|---|--------|
| X | Zone X |
|---|--------|

An area that is determined to be outside the 100 and 500 year floodplains.

# NWI Map



Target Property (TP)

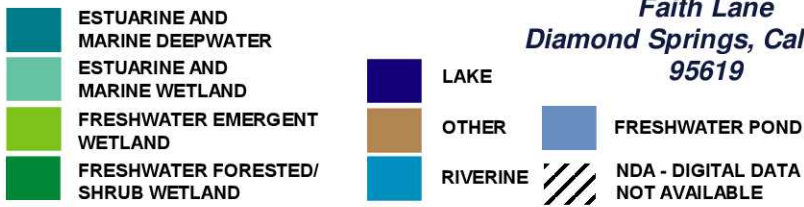
## Stonehenge Springs

Faith Lane

Diamond Springs, California

95619

Map Date: 05/01/2018



[Click here to access Satellite view](#)

# NWI Report

## NWI - National Wetlands Inventory

The US NWI digital data bundle is a set of records of wetlands location and classification as defined by the U.S. Fish & Wildlife Service. This dataset is one of a series available in 7.5 minute by 7.5 minute blocks containing ground planimetric coordinates of wetlands point, line, and area features and wetlands attributes. When completed, the series will provide coverage for all of the contiguous United States, Hawaii, Alaska, and U.S. protectorates in the Pacific and Caribbean. The digital data as well as the hardcopy maps that were used as the source for the digital data are produced and distributed by the U.S. Fish & Wildlife Service's National Wetlands Inventory project. Currently, this data is only available in select counties throughout the United States.

## NWI Definitions within Search Radius

### L1UBHh

SYSTEM: **LACUSTRINE**  
SUBSYSTEM: **LIMNETIC**  
CLASS: **UNCONSOLIDATED BOTTOM**  
WATER REGIME: **PERMANENTLY FLOODED**  
SPECIAL MODIFIER: **DIKED/IMPOUNDED**

### PEM1A

SYSTEM: **PALUSTRINE**  
CLASS: **EMERGENT**  
SUBCLASS: **BROAD-LEAVED DECIDUOUS**  
WATER REGIME: **TEMPORARILY FLOODED**

### PEM1C

SYSTEM: **PALUSTRINE**  
CLASS: **EMERGENT**  
SUBCLASS: **BROAD-LEAVED DECIDUOUS**  
WATER REGIME: **SEASONALLY FLOODED**

### PFOA

SYSTEM: **PALUSTRINE**  
CLASS: **FORESTED**

### PSSC

SYSTEM: **PALUSTRINE**  
CLASS: **SCRUB-SHRUB**

### PSSCx

SYSTEM: **PALUSTRINE**  
CLASS: **SCRUB-SHRUB**  
SPECIAL MODIFIER: **EXCAVATED**

### PUBFh

SYSTEM: **PALUSTRINE**  
CLASS: **UNCONSOLIDATED BOTTOM**  
SPECIAL MODIFIER: **DIKED/IMPOUNDED**

# NWI Report

## PUBFx

SYSTEM: PALUSTRINE  
CLASS: UNCONSOLIDATED BOTTOM  
SPECIAL MODIFIER: EXCAVATED

## PUBHh

SYSTEM: PALUSTRINE  
CLASS: UNCONSOLIDATED BOTTOM  
SPECIAL MODIFIER: DIKED/IMPOUNDED

## PUBHx

SYSTEM: PALUSTRINE  
CLASS: UNCONSOLIDATED BOTTOM  
SPECIAL MODIFIER: EXCAVATED

## R3UBH

SYSTEM: RIVERINE  
SUBSYSTEM: UPPER PERENNIAL  
CLASS: UNCONSOLIDATED BOTTOM  
WATER REGIME: PERMANENTLY FLOODED

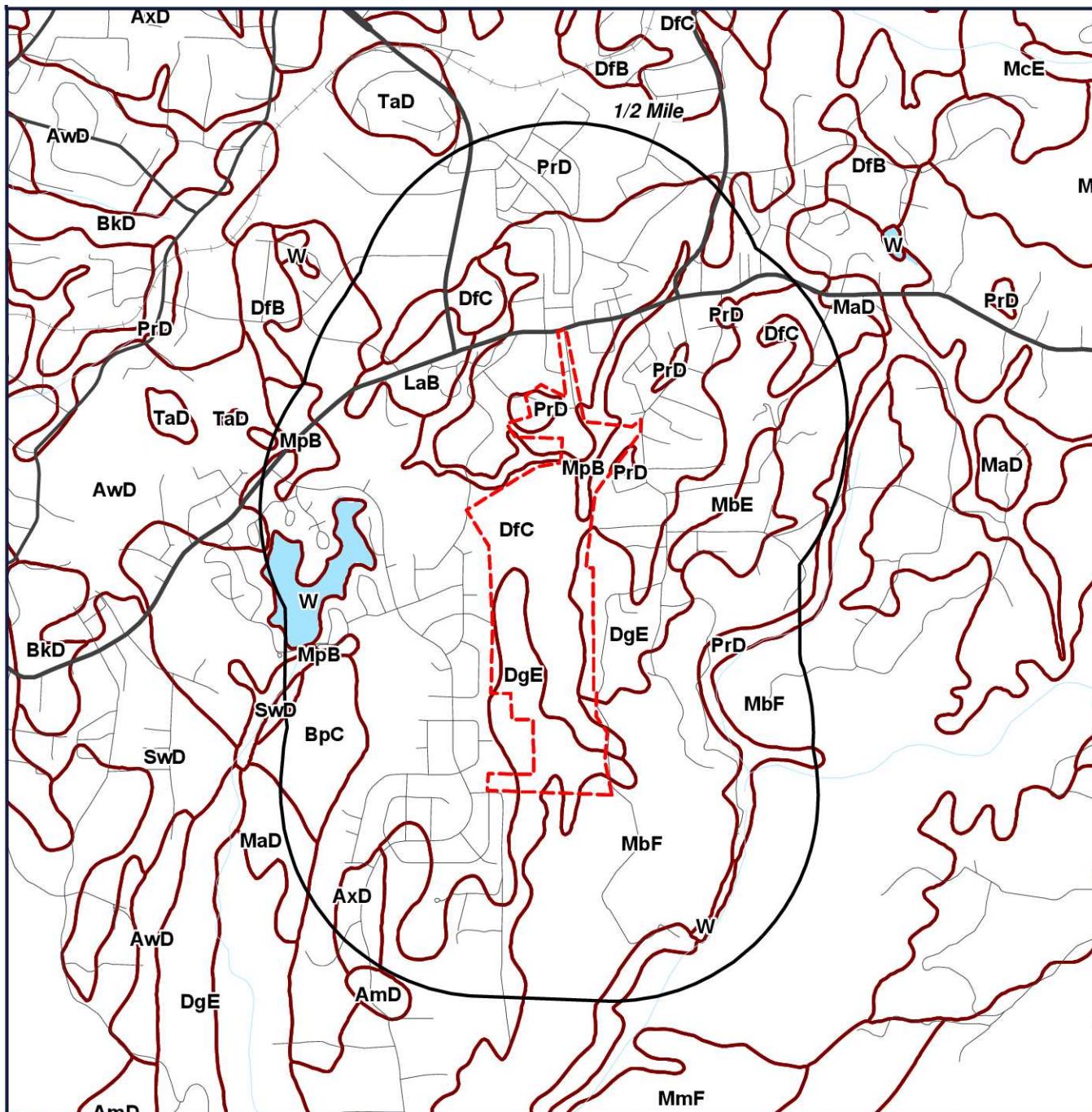
## R4SBC

SYSTEM: RIVERINE  
SUBSYSTEM: INTERMITTENT  
CLASS: STREAMBED  
WATER REGIME: SEASONALLY FLOODED

## R5UBF

SYSTEM: RIVERINE  
SUBSYSTEM: UNKNOWN PERENNIAL  
CLASS: UNCONSOLIDATED BOTTOM  
WATER REGIME: SEMIPERMANENTLY FLOODED

# Soil Map



Target Property (TP)

SOIL BOUNDARY

NOTCOM - DIGITAL DATA NOT AVAILABLE/NOT COMPLETE

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



0' 1000' 2000' 3000'  
 SCALE: 1" = 2000'

[Click here to access Satellite view](#)

# SOIL Report

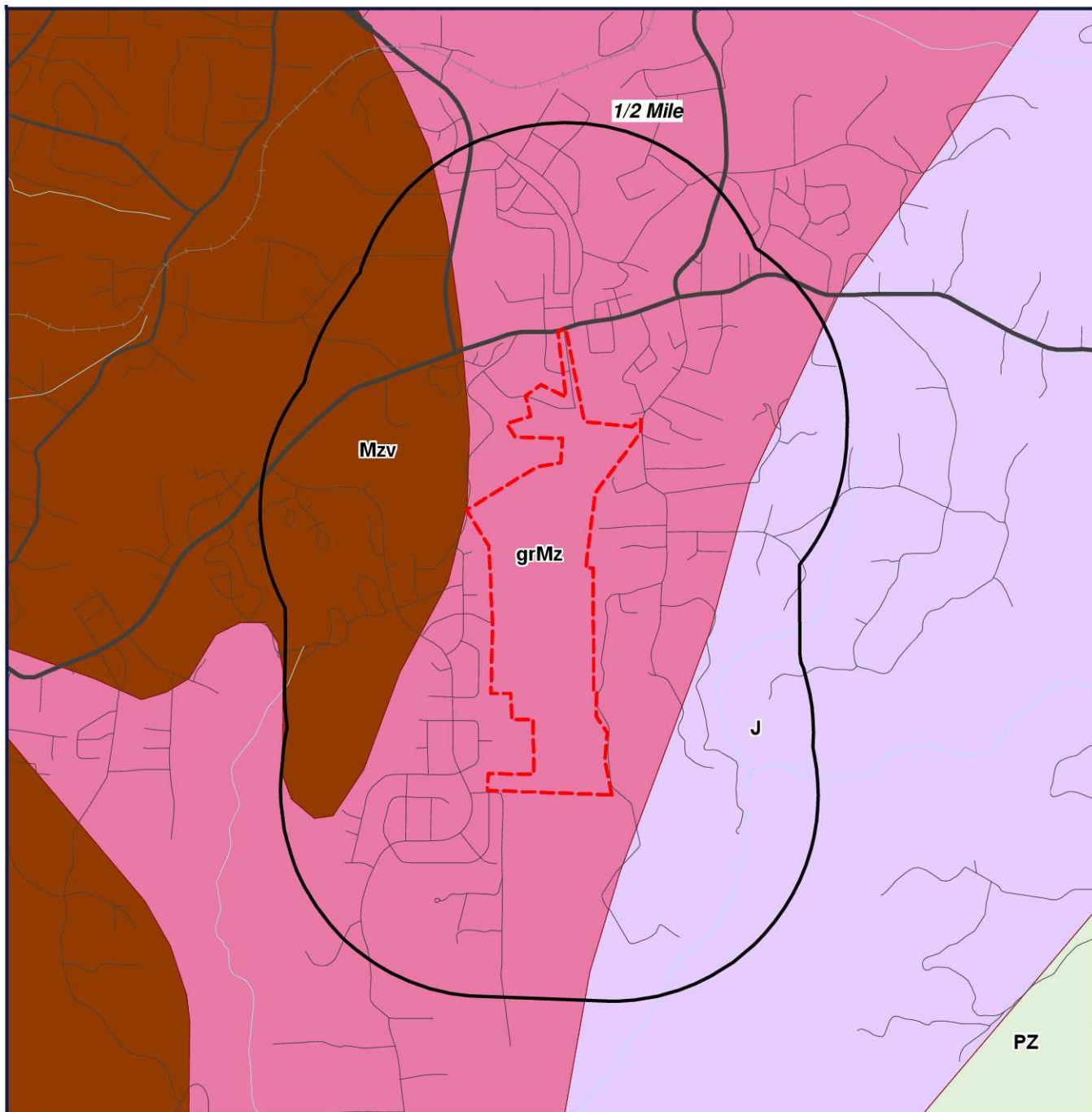
## Soil Surveys

The soil data used in this report is obtained from the Natural Resources Conservation Service (NRCS). The NRCS is the primary federal agency that works with private landowners to help them conserve, maintain and improve their natural resources. The soil survey contains information that can be applied in managing farms and ranches; in selecting sites for roads, ponds, buildings and other structures; and in determining the suitability of tracts of land for farming, industry and recreation. This data is available in select counties throughout the United States.

## SOIL Code Definitions within Search Radius

|            |   |
|------------|---|
| <b>AwD</b> | AUBURN SILT LOAM, 2 TO 30 PERCENT SLOPES                                |
| <b>AxD</b> | AUBURN VERY ROCKY SILT LOAM, 2 TO 30 PERCENT SLOPES                     |
| <b>BpC</b> | BOOMER-SITES LOAMS, 9 TO 15 PERCENT SLOPES                              |
| <b>DfB</b> | DIAMOND SPRINGS VERY FINE SANDY LOAM, 3 TO 9 PERCENT SLOPES             |
| <b>DfC</b> | DIAMOND SPRINGS VERY FINE SANDY LOAM, 9 TO 15 PERCENT SLOPES            |
| <b>DgE</b> | DIAMOND SPRINGS VERY ROCKY VERY FINE SANDY LOAM, 3 TO 50 PERCENT SLOPES |
| <b>LaB</b> | LOAMY ALLUVIAL LAND   |
| <b>MaD</b> | MARIPOSA GRAVELLY SILT LOAM, 3 TO 30 PERCENT SLOPES                     |
| <b>MbE</b> | MARIPOSA VERY ROCKY SILT LOAM, 3 TO 50 PERCENT SLOPES                   |
| <b>MbF</b> | MARIPOSA VERY ROCKY SILT LOAM, 50 TO 70 PERCENT SLOPES                  |
| <b>MpB</b> | MIXED ALLUVIAL LAND   |
| <b>PrD</b> | PLACER DIGGINGS   |
| <b>SwD</b> | SOBRANTE VERY ROCKY SILT LOAM, 3 TO 30 PERCENT SLOPES                   |
| <b>TaD</b> | TAILINGS  |
| <b>W</b>   | WATER   |

# Geology Map



 Target Property (TP)

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**



0' 1000' 2000' 3000'  
SCALE: 1" = 2000'

[Click here to access Satellite view](#)

# GEOLOGY Report

## US GEOLOGY

THE GEOLOGY DATA USED IN THIS REPORT ORIGINATES FROM THE USGS. THE FIRST STAGE IN DEVELOPING STATE DATABASES FOR THE CONTERMINOUS UNITED STATES WAS TO ACQUIRE DIGITAL VERSIONS OF ALL EXISTING STATE GEOLOGIC MAPS. ALTHOUGH A SIGNIFICANT NUMBER OF DIGITAL STATE MAPS ALREADY EXISTED, A NUMBER OF STATES LACKED THEM. FOR THESE STATES NEW DIGITAL COMPILATIONS WERE PREPARED IN COOPERATION WITH STATE GEOLOGIC SURVEYS OR BY THE NSA (NATIONAL SURVEYS AND ANALYSIS) PROJECT. THESE NEW DIGITAL STATE GEOLOGIC MAPS AND DATABASES WERE CREATED BY DIGITIZING ALREADY EXISTING PRINTED MAPS, OR, IN A FEW CASES, BY MERGING EXISTING LARGER SCALE DIGITAL MAPS.

### GEOLOGY Definitions within Search Radius

GEOLOGY SYMBOL: **grMz**

UNIT NAME: **Mesozoic granitic rocks, unit 3 (Sierra Nevada, Death Valley area, Northern Mojave Desert and Transverse Ranges)**

UNIT AGE: **Permian to Tertiary; most Mesozoic**

UNIT DESCRIPTION:

**Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite**

ADDITIONAL UNIT INFORMATION:

**Sierra Nevada, Death Valley area, Transverse Ranges and Mojave Desert. Primarily granodiorite, tonalite, quartz monzonite, and granite ranging in age from Late Triassic to Late Cretaceous. Includes some rocks as old as Permian and possibly a few as young as Tertiary. Three main periods of emplacement (Triassic, Jurassic, and Cretaceous); wide variety of rock types**

ROCKTYPE/S: **granodiorite; quartz monzonite; tonalite; quartz diorite; diorite; granite; monzodiorite; quartz syenite; quartz monzodiorite; gabbro; trondhjemite; alkali-granite (alaskite); pegmatite; monzonite; aplite**

GEOLOGY SYMBOL: **J**

UNIT NAME: **Jurassic marine rocks, unit 1 (Western Sierra Nevada and Western Klamath Mountains)**

UNIT AGE: **Triassic to Late Jurassic**

UNIT DESCRIPTION:

**Shale, sandstone, minor conglomerate, chert, slate, limestone; minor pyroclastic rocks**

ADDITIONAL UNIT INFORMATION:

**Western Klamath Mountains, western Sierra Nevada. Primarily slate and metamorphosed graywacke; minor siltstone, conglomerate, chert, and volcanic rocks. Mainly Late Jurassic in age, but also includes some Early Jurassic or older rocks**

ROCKTYPE/S: **slate; graywacke; siltstone; pyroclastic; conglomerate; chert; basalt**

GEOLOGY SYMBOL: **Mzv**

UNIT NAME: **Mesozoic volcanic rocks, unit 2 (Western Sierra Foothills and Western Klamath Mountains)**

UNIT AGE: **Jurassic**

UNIT DESCRIPTION:

**Undivided Mesozoic volcanic and metavolcanic rocks. Andesite and rhyolite flow rocks, greenstone, volcanic breccia and other pyroclastic rocks; in part strongly metamorphosed. Includes volcanic rocks of Franciscan Complex: basaltic pillow lava, diabase, greenstone, and minor pyroclastic rocks**

ADDITIONAL UNIT INFORMATION:

**Western Sierra Nevada and western Klamath Mountains. Mostly basaltic to andesitic breccias, flows, and tuffs, metamorphosed but with primary volcanic features generally recognizable. Minor associated sandstone and conglomerate. Largely or entirely of marine origin. Includes some rocks interpreted as ophiolites (Smartville complex)**

ROCKTYPE/S: **mafic volcanic rock; intermediate volcanic rock; felsic volcanic rock; chert; sandstone; conglomerate**



---

## **GeoPlus Water Well Report**

---

[NEW: GeoLens by Geosearch](#)

*Target Property:*

**Stonehenge Springs**

**Faith Lane**

**Diamond Springs, El Dorado County, California 95619**

*Prepared For:*

**Environmental Science Assoc-San Francisco**

**Order #: 118699**

**Job #: 269582**

**Project #: D180359**

**PO #: D180359-99**

**Date: 12/07/2018**

---

## Table of Contents

---

|  |   |
|--|---|
| <i>Target Property Summary</i> . . . . .           | 1 |
| <i>Database Radius Summary</i> . . . . .           | 2 |
| <i>Water Well Map</i> . . . . .                    | 4 |
| <i>Environmental Records Definitions</i> . . . . . | 6 |

---

## Disclaimer

---

*The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.*

## **Target Property Summary**

### **Target Property Information**

*Stonehenge Springs*

*Faith Lane*

*Diamond Springs, California 95619*

#### **Coordinates**

*Area centroid (-120.81907, 38.6845057)*

#### **USGS Quadrangle**

*Placerville, CA*

### **Geographic Coverage Information**

**County/Parish:** El Dorado (CA)

#### **ZipCode(s):**

Diamond Springs CA: 95619

El Dorado CA: 95623

Placerville CA: 95667

## Database Radius Summary

### **FEDERAL LISTING**

| <b>Acronym</b>   | <b>Search Radius (miles)</b> | <b>TP/AP (0 - 0.02)</b> | <b>1/8 Mile (&gt; TP/AP)</b> | <b>1/4 Mile (&gt; 1/8)</b> | <b>1/2 Mile (&gt; 1/4)</b> | <b>1 Mile (&gt; 1/2)</b> | <b>&gt; 1 Mile</b> | <b>Total</b> |
|------------------|------------------------------|-------------------------|------------------------------|----------------------------|----------------------------|--------------------------|--------------------|--------------|
| NWIS             | 0.5000                       | 0                       | 0                            | 0                          | 0                          | NS                       | NS                 | 0            |
| <b>SUB-TOTAL</b> |                              | 0                       | 0                            | 0                          | 0                          | 0                        | 0                  | 0            |

## Database Radius Summary

### STATE (CA) LISTING

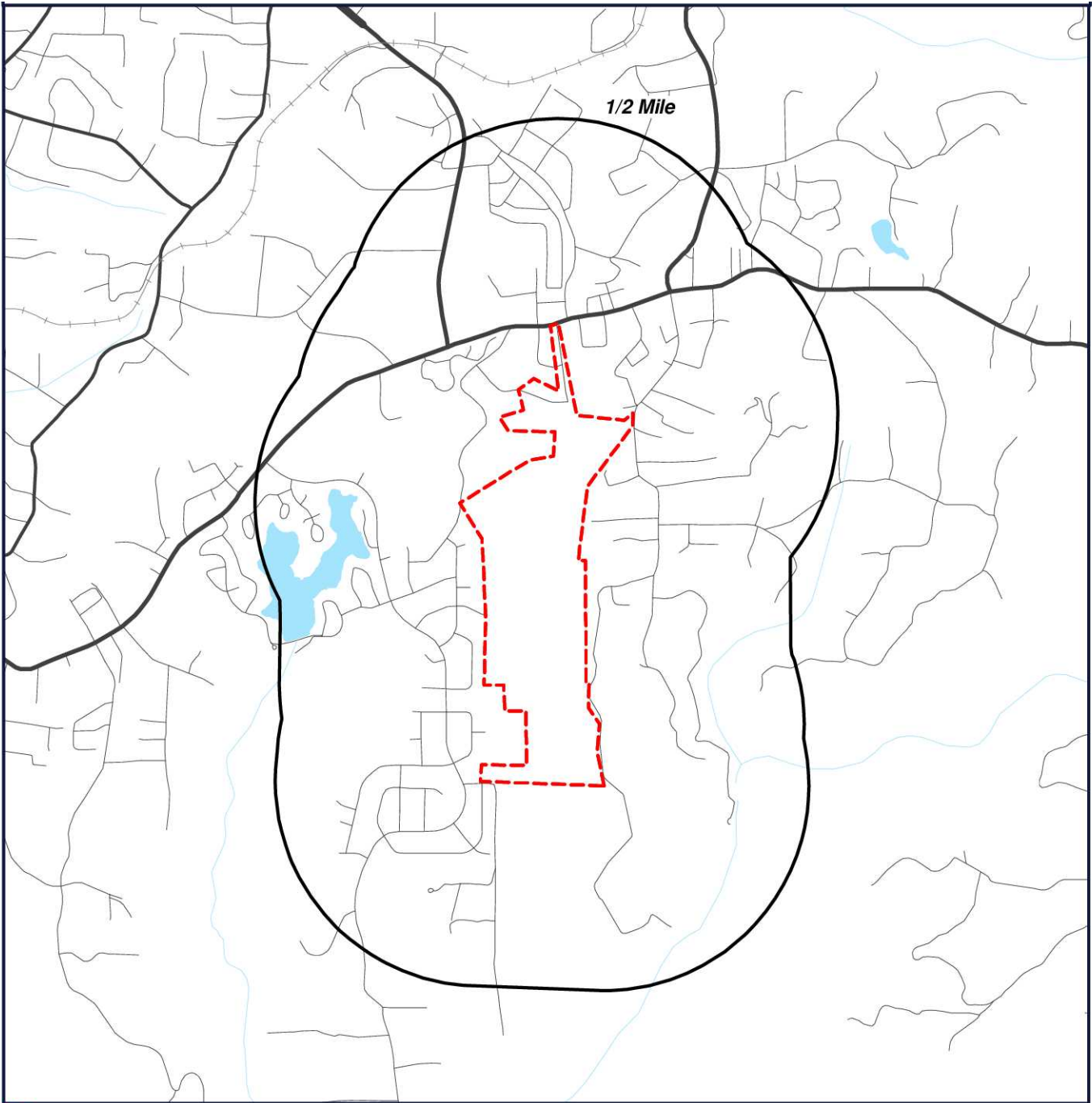
| Acronym   | Search Radius (miles) | TP/AP (0 - 0.02) | 1/8 Mile (> TP/AP) | 1/4 Mile (> 1/8) | 1/2 Mile (> 1/4) | 1 Mile (> 1/2) | > 1 Mile | Total |
|-----------|-----------------------|------------------|--------------------|------------------|------------------|----------------|----------|-------|
| DWRWELLS  | 0.5000                | 0                | 0                  | 0                | 0                | NS             | NS       | 0     |
| SUB-TOTAL |                       | 0                | 0                  | 0                | 0                | 0              | 0        | 0     |
| TOTAL     |                       | 0                | 0                  | 0                | 0                | 0              | 0        | 0     |


**NOTES:**

NS = NOT SEARCHED

TP/AP = TARGET PROPERTY/ADJACENT PROPERTY

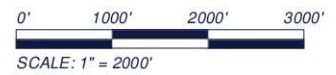
# Waterwell Map



 Target Property (TP)

**Stonehenge Springs**  
**Faith Lane**  
**Diamond Springs, California**  
**95619**

CONTOUR LINES REPRESENTED IN FEET



[Click here to access Satellite view](#)

## Located Sites Summary

No Records Found.



## ***Environmental Records Definitions - FEDERAL***

**NWIS**

United States Geological Survey National Water Information System

VERSION DATE: 12/14/16

This USGS National Water Information System database only includes groundwater wells. The USGS defines this well type as: A hole or shaft constructed in the earth intended to be used to locate, sample, or develop groundwater, oil, gas, or some other subsurface material. The diameter of a well is typically much smaller than the depth. Wells are also used to artificially recharge groundwater or to pressurize oil and gas production zones. Additional information about specific kinds of wells should be recorded under the secondary site types or the Use of Site field. Underground waste-disposal wells should be classified as waste-injection wells.

## ***Environmental Records Definitions - STATE (CA)***

**DWRWELLS**

California Department of Water Resources Water Wells

VERSION DATE: 05/09/18

The California Department of Water Resources (DWR) maintains this database of water wells, including California Statewide Groundwater Elevation Monitoring (CASGEM) program wells and Voluntary wells. In Late 2009 the State Legislature amended the Water Code with SBx7-6, which mandates a statewide groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevations in California's groundwater basins. To achieve that goal, the amendment requires collaboration between local monitoring entities and DWR to collect groundwater elevation data. In accordance with this amendment to the Water Code, DWR developed the CASGEM program.

# **APPENDIX C**

---

## **Interview Questionnaire**

**INTERVIEW QUESTIONNAIRE**  
**PHASE I ENVIRONMENTAL SITE ASSESSMENT**  
Compatible with ASTM Standard E 1527

Site Name: Dorado Oaks \_\_\_\_\_  
Site Address: Faith Lane \_\_\_\_\_  
Date: February 26, 2019 \_\_\_\_\_  
Interviewer: Michael Burns \_\_\_\_\_  
Interviewee: Kevin Sweeney \_\_\_\_\_  
Site Association: Owner & developer \_\_\_\_\_  
Years Associated: 20 years \_\_\_\_\_

---

Please answer the following questions to the best of your knowledge.

1. Was the property or adjoining property ever used for industrial purposes (e.g. manufacturing) or as a gas station, dry cleaners, waste treatment, processing facility, motor repair facility, photo lab, commercial printing facility, junkyard/disposal/recycling/ landfill? If yes, please list the activity, hazardous substances used, and approximate dates when the activity occurred.

Prior land use, hazardous substances used, and dates:

**Some previous development efforts but none that proceeded to completion** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Prior owners, key site managers/operators, occupants and dates:

**Pre-dates Mr. Sweeney** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Existing or prior structures used for what purposes and duration:

**None known** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Do any of the following documents exist for the site or any portion of the site? If so, can you provide a copy? Leins? **No leins are known. The geotech report was provided.**

- Environmental site assessment reports
- Environmental compliance audit reports
- Environmental permits
- Underground Storage Tank registration
- Underground Injection System registration
- Material Safety Data Sheets
- Community Right-To-Know Plan
- Safety plans: preparedness and prevention plans; spill prevention; countermeasure; and control plans, etc.
- Reports regarding hydrogeologic conditions on the property or surrounding area;
- Correspondence from any government agency relating to past or current violations of environmental laws with regard to the property or relating to environmental liens encumbering the property
- Hazardous waste generator notices or reports
- X Geotechnical studies
- Risk assessments
- Recorded Activity and Use Limitations (AULs)

3. Have you ever observed evidence of or do you have prior knowledge of any of the following items being used, stored, discarded, dumped above grade, buried, or burned onsite? Circle all that apply and indicate amount and approximate dates.  
**NONE**

| MATERIAL   | QUANTITY | DATE(S) OBSERVED | COMMENTS                         |
|--|----------|------------------|----------------------------------|
| Above ground storage tank (AST)*                   |          |                  | Size:<br>Contents:<br>Condition: |
| Automotive batteries                               |          |                  |                                  |
| Industrial batteries                               |          |                  |                                  |
| Pesticides (>5 gallon)                             |          |                  |                                  |
| Paints (> 5 gallon)                                |          |                  |                                  |
| Chemicals/Hazardous Substances (> 5 gallon liquid) |          |                  |                                  |

| MATERIAL   | QUANTITY | DATE(S) OBSERVED | COMMENTS                         |
|--|----------|------------------|----------------------------------|
| Chemicals/Hazardous Substances (dry sacks, containers, etc.)                     |          |                  |                                  |
| Industrial drums (typically 55 gallons)  |          |                  | Contents:<br>Condition:          |
| Transformer or other equipment that may contain PCBs (e.g. hydraulic equipment)* |          |                  | Installation date:               |
| Underground storage tank*  |          |                  | Size:<br>Contents:<br>Condition: |
| Unknown materials you suspect may be hazardous substances                        |          |                  | Describe:                        |

\*Please provide records if available.

4. What method(s) is used to contain spills of hazardous waste?

**N/A** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

5. What method(s) is used to dispose of hazardous waste?

**N/A** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

6. Are there any permits for handling, use, storage, or disposal of hazardous waste?

**None** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

7. Have you observed evidence of or have prior knowledge of the following onsite?

| MATERIAL   | QUANTITY | DATE(S) OBSERVED | COMMENTS |
|--|----------|------------------|----------|
| Equipment Maintenance Areas                                      | None     |                  |          |
| Accidental spills or releases of chemicals or petroleum products | None     |                  |          |

| MATERIAL   | QUANTITY | DATE(S) OBSERVED | COMMENTS                            |
|--|----------|------------------|-------------------------------------|
| Possible asbestos containing materials (e.g. pipe, building, etc.)   | None     |                  | Describe material:                  |
| Fill dirt originating from an unknown or contaminated site?  | None     |                  | Source:                             |
| Pits, ponds, or lagoons associated with waste treatment or waste disposal?                                       | None     |                  | Location:                           |
| Stained soil or odiferous soil? (e.g. oily black)  | None     |                  | Location:                           |
| Sumps or dry wells*  | None     |                  | Size :<br>Contents :<br>Condition : |
| Vent pipes, fill pipes, access ways to a fill pipe protruding from the ground or adjacent to a structure onsite? | None     |                  | Location:                           |
| Heating and cooling systems (include fuel source)  | None     |                  | Source:                             |
| Flooring, drains, walls that are stained or emitting a foul odor (do NOT include water damage)?                  | None     |                  | Location:                           |

\*Please provide records if available.

8. Is the property served by a private well or non-public water system? If so, please answer the following: **No**

a. Was the well used for domestic (D), agricultural irrigation (I), or monitoring (M) purposes? Are the wells currently operational and if not, when were they last used? When was the well drilled? How deep is the well? What is the approximate discharge rate?

| Well No. | Type | Operating? | Last Used | Date Drilled | Depth | Discharge Rate | Location |
|----------|------|------------|-----------|--------------|-------|----------------|----------|
| 1-       |      |            |           |              |       |                |          |
| 2-       |      |            |           |              |       |                |          |

- b. Have the wells been sampled for contaminants that exceed applicable requirements for the designated use (e.g. Drinking Water Standards)? If so, please provide the dates and copies of well records. **No**
- c. Has the well or water system been designated by any governmental environmental/health agency as contaminated? **None known**

9. Is there an oil/gas well or oil/gas vent located onsite? If so, please indicate the location. Please supply any documents available.

**No** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

10. Is the property or has the property to your knowledge been previously served by a septic system? If so, please indicate the location of the tank and leach lines (if applicable) and list any hazardous materials disposed.

**Unknown** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

11. Does the property discharge waste water into a storm water sewer system or a sanitary sewer system onto or adjacent to the property? If so, please describe location, piping flow, quantity discharged, and water quality.

**No** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

12. Do you have knowledge of the following with respect to the property? Circle and explain all that apply.

- a. Environmental clean-up, ongoing or pending. **None**
- b. Environmental liens **None**
- c. Governmental notifications regarding any possible past or present violations of environmental laws. **None**
- d. Past, threatened, pending lawsuits or administrative proceedings relevant to a release of a hazardous substance or petroleum product, in, on, or from the property. **None**



- e. Prior environmental assessment that indicated the presence of hazardous substances, petroleum hydrocarbons, contaminants, or recommended further assessment. **None**
- f. Deed Restrictions - **None**
- g. Citizen complaints regarding activities onsite **None**

**AGRICULTURAL SITES: No**

13. What crops have been grown onsite, currently and in the past?

| CROP        | DATE | LOCATION |
|-------------|------|----------|
| <b>None</b> |      |          |
|             |      |          |
|             |      |          |
|             |      |          |
|             |      |          |
|             |      |          |

**If crops are present or have been grown, please answer questions 14 through 16 below:**

14. Have pesticides been applied to fields or other portions of the site? If so, please answer the following questions:

- a. List the names of pesticides (includes herbicides, fungicides, insecticides, rodenticide) used and dates applied.

| PESTICIDE AND BRAND NAME | DATE | CROP OR ANIMAL USE |
|--------------------------|------|--------------------|
|                          |      |                    |
|                          |      |                    |
|                          |      |                    |
|                          |      |                    |
|                          |      |                    |
|                          |      |                    |

b. Have you been notified of any violation of environmental law with respect to application or storage of pesticides?

---

---

---

c. Location of pesticide mixing areas, if any (past or present)?

---

---

---

d. Method of pesticide application?

---

---

---

15. Have fertilizers been applied to the site? What type and method of application?

---

---

---

16. Are there any buried pipelines for irrigation or other purposes onsite? If so, what materials is the piping constructed of? Asbestos containing material, PVC, other? Describe the location of buried piping.

---

---

---

## User Questionnaire

**Only the client (“user”) needs to respond to the following questions:**

17. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law?
18. Are you aware of any Activity and Use Limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?
19. As the user of this Phase 1 ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
20. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?
21. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,
  - a) Do you know the past uses of the property?
  - b) Do you know of specific chemicals that are present or once were present at the property?
  - c) Do you know of spills or other chemical releases that have taken place at the property?
  - d) Do you know of any environmental cleanups that have taken place at the property?
22. As the user of this Phase 1 ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

**DORADO OAKS TENTATIVE SUBDIVISION MAP  
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)  
(STATE CLEARINGHOUSE #2019071041)**

**APPENDIX G**

**HYDROLOGY AND WATER QUALITY**



## TECHNICAL MEMORANDUM

**Date:** September 27, 2018  
**To:** El Dorado County  
**From:** Brian Hammer  
**CC:** Greg Stedfield  
**Subject:** Dorado Oaks Drainage and Storm Water Quality Technical Memo for Tentative Map

---

### Introduction

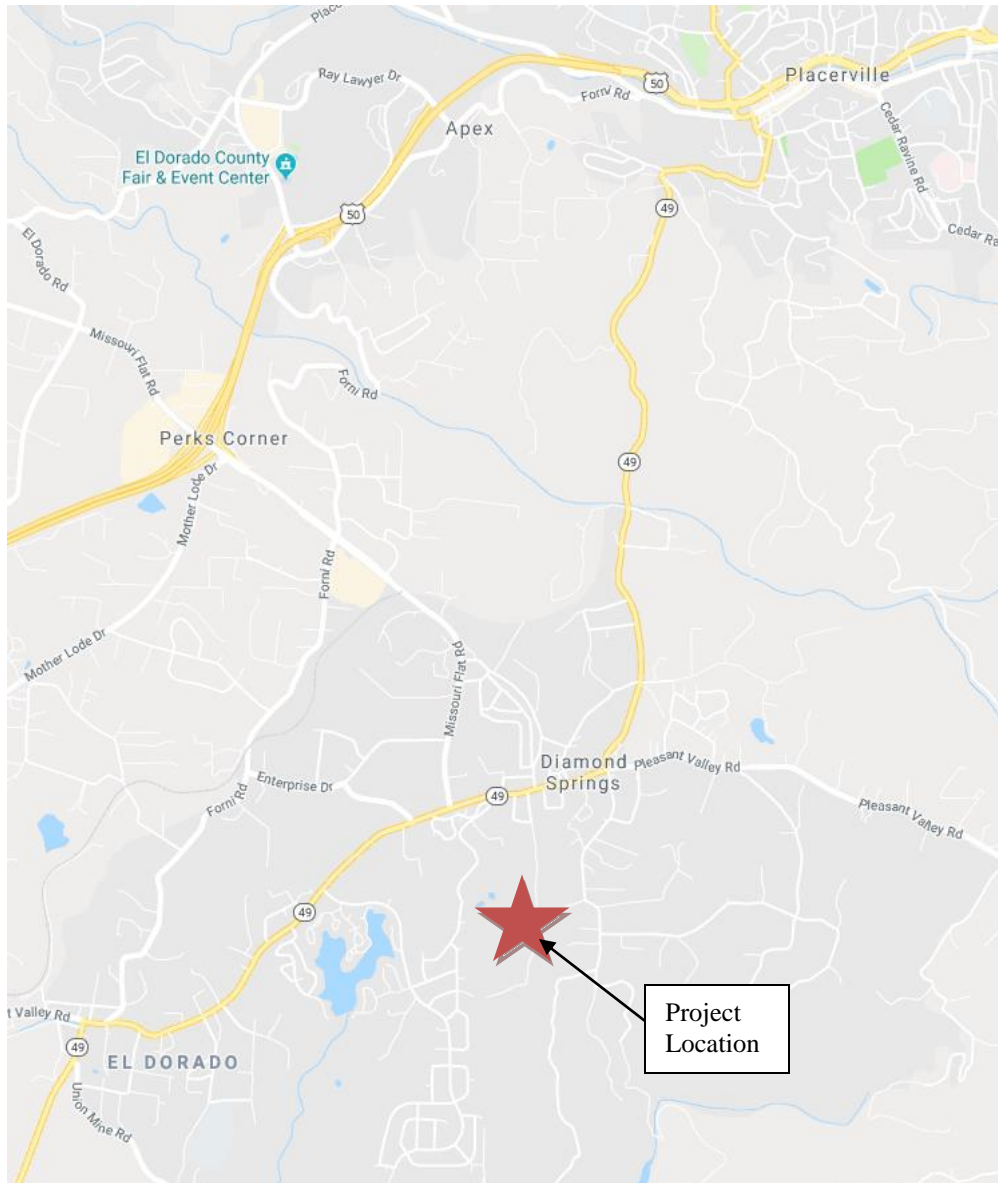
This Technical Memorandum (TM) is a technical drainage assessment for the Dorado Oaks proposed development and provides a tentative map level of analysis for the proposed storm drainage infrastructure and storm water quality facilities.

The contributory area analyzed herein is comprised of approximately 501 acres of which approximately 70 acres are developed with the remainder consisting of off-site and on-site contributory areas not developed for this project. See Appendix A for existing and developed watershed Maps.

The purpose of this technical memo is to:

- Present technical storm drainage and stormwater quality calculations for the proposed project development.
- Conclude that the proposed infrastructure is sufficient to serve the planned development.

The data, modeling, and exhibits herein are based upon the NGVD 29 datum. No previous studies were utilized in the preparation of this report.



**Figure 1. Project Location**

### Model Assumptions and Design Criteria

HEC-HMS was used to calculate runoff and to perform hydraulic calculations. The site discharges primarily to the south and east of the project with two small watersheds discharging to the West. There are two ridgelines in the project which results in a drainage path to the center of the project which continues south and a drainage path to the west of the project. There are five points of compliance for the project which can be seen on Figure 2. The path to the center and south is considered a single location in which the developed flow will be compared to the existing flows. The west slope of the project drains to compliance point 1 and 2. Compliance point 2 does not collect to a single point at the property line and therefore the flows leaving the site will be summed up and compared against the developed flows leaving the site to the west.

Due to the slope of the watershed it is assumed there will be no backwater condition placed on the swale outfalls.



**Figure 2. Compliance Point Locations**

The hydrologic input and criteria used for the development of this study are summarized below:

- The site consists of USGS Soil Type C Soils (See Figure 3 Below).
- The percent impervious rates used are as follows:
  - Roadway: 95%
  - Single Family Lots:
  - T-Court Lots:
  - Apartments or Condominiums:
  - Open Space or Existing: 2%

The hydraulic input and criteria used for the development of this study are summarized below:

- The following Manning's 'n' values were used:

- Pipes 0.015
- Gutters 0.015
- Asphalt Street Section 0.019
- Minimum pipe velocity of 2.0fps
- Minimum pipe diameter of 12"
- Data was input with information matching the tentative map grading plans.
- The 10-year hydraulic grade line shall stay at a minimum 1-foot below all manhole rims and inlet grates.
- The 100-year event shall be greater than 1 foot below adjacent finished pad elevations.
- 10-year and 100-year mitigation will be achieved for the development.
- Water Quality Swales and Basins will mitigate for the development impacts. No LID is assumed in the sizing of these facilities. If LID is proposed in the improvement plans these water quality features can be reduced in size.

Exhibit 1 displays the sheds, proposed pipe system, and pertinent results. The hydrologic data and parameters that were used to develop the runoff are included in Appendix A.

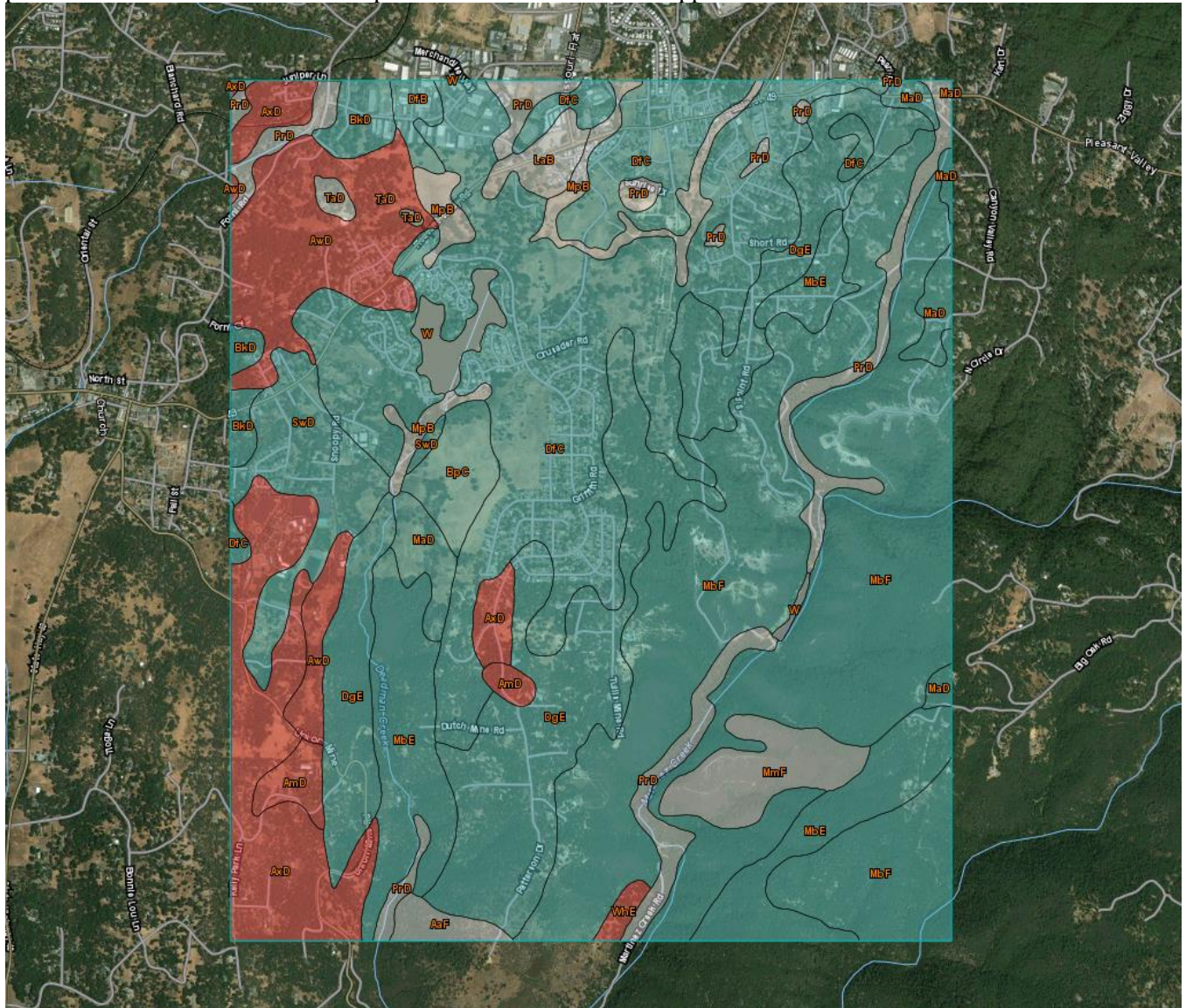


Figure 3. USGS Soil Map (Type C Soils)



### 10-Year Analysis and Results

The 10-year event for existing and proposed conditions was analyzed in HEC-HMS. Table 1 shows the resultant peak flows at each compliance point and the difference in flow leaving the site. The complete data and results are attached as Appendix B.

**Table 1. 10-Year Peak Flows**

| Point of Compliance | Existing (cfs) | Proposed (cfs) | Difference (cfs) |
|---------------------|----------------|----------------|------------------|
| 1                   | 347            | 330            | -17              |
| 2                   | 17             | 13.7           | -3.3             |
| 3                   | 48             | 16             | -32              |
| 4                   | 87             | 87             | 0                |
| 5                   | 4.4            | 12.4           | 8                |
| 6                   | 19             | 13.6           | -5.4             |
| Total               | 522.4          | 472.7          | -49.7            |

### 100-Year Analysis and Results

The 100-year event for existing and proposed conditions was analyzed in HEC-HMS. Table 2 shows the resultant peak flows at each compliance point and the difference in flow leaving the site. The complete data and results are attached as Appendix C.

**Table 2. 100-Year Peak Flows**

| Point of Compliance | Existing (cfs) | Proposed (cfs) | Difference (cfs) |
|---------------------|----------------|----------------|------------------|
| 1                   | 575            | 546            | -29              |
| 2                   | 28             | 21.9           | -6.1             |
| 3                   | 77.6           | 26             | -51.6            |
| 4                   | 141            | 142            | 1                |
| 5                   | 7              | 20.9           | 13.9             |
| 6                   | 19             | 20.7           | 1.7              |
| Total               | 847.6          | 777.5          | -70.1            |

### Storm Water Quality and Hydromodification

The Dorado Oaks proposed development projects create more than one acre of impervious surface. Due to this, it is required to provide storm water treatment for the 85th percentile event.

The first line of defense in maintaining storm water quality is to keep polluted water from commingling with clean water through the use of Source Controls. This can be done using structural and operational measures at the pollutant source. At this time in the development process source control measures are not yet implemented. It is anticipated that source control measures will be proposed for the apartment and T-lot development products. For the tentative map design, it is assumed no source control is proposed to show the largest size of water quality features.

Additionally, several Low Impact Development strategies are anticipated to reduce the post-development flows. These strategies remove pollutants from runoff, attenuate peak flows, and reduce runoff volume. The proposed LID measures include tree planting, disconnected impervious areas, bioretention facilities, and a vegetated swale. Similar to source controls, the LID features anticipated to be installed were not assumed to provide water quality or hydromodification reductions. This results in the greatest sized

facilities for purposes of land allocation. These facilities can be reduced at the improvement plan level analysis when LID feature locations and quantities are finalized.

No LID measures are proposed for off-site areas that contribute to the project's outfall nor for the interim graded pervious areas (future roadway).

The swale was sized to treat the entire stormwater quality flow without accounting for the tree planting, disconnected impervious areas, and bioretention facilities. Appendix D contains the calculations for sizing of the water quality swales which will adequately treat the development.

### Conclusion

The results of the analysis performed for this Technical Memorandum demonstrate that the proposed improvements can be satisfactorily treated and conveyed within the proposed drainage facilities without damage to structures or downstream receiving waters. Further detail on the storm drain system, swale grading, final basin grading, and culverts will be provided with the improvement plan submittal.

# Appendix A

# EXISTING SHED MAP

## LEGEND

EXISTING SHED BOUNDARY 



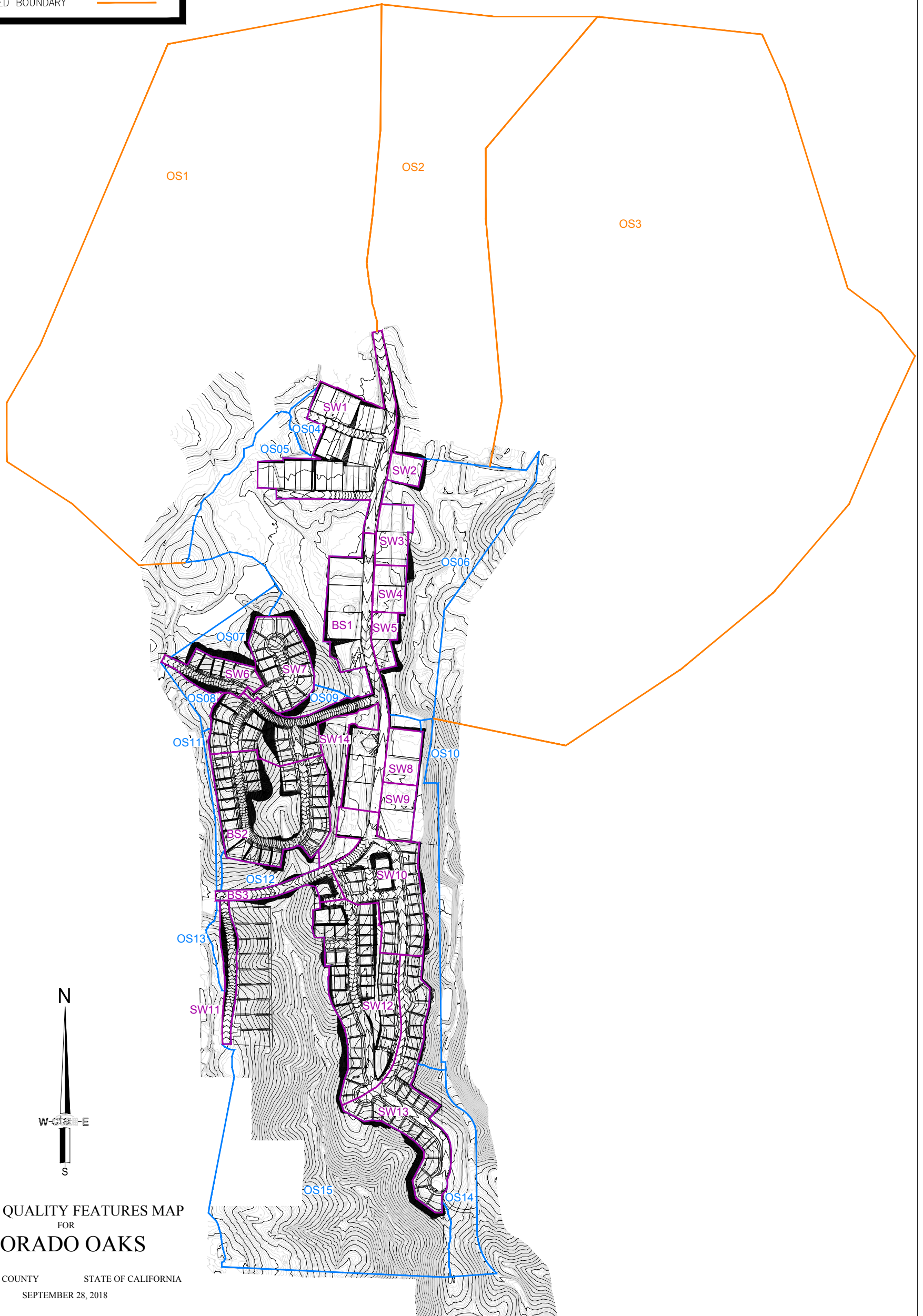
## WATER QUALITY FEATURES MAP FOR DORADO OAKS

EL DORADO COUNTY STATE OF CALIFORNIA  
SEPTEMBER 28, 2018

# PROPOSED SHED MAP

## LEGEND

- PROPOSED DEVELOPED SHED BOUNDARY ———
- PROPOSED OPENSOURCE SHED BOUNDARY ———
- EXISTING SHED BOUNDARY ———



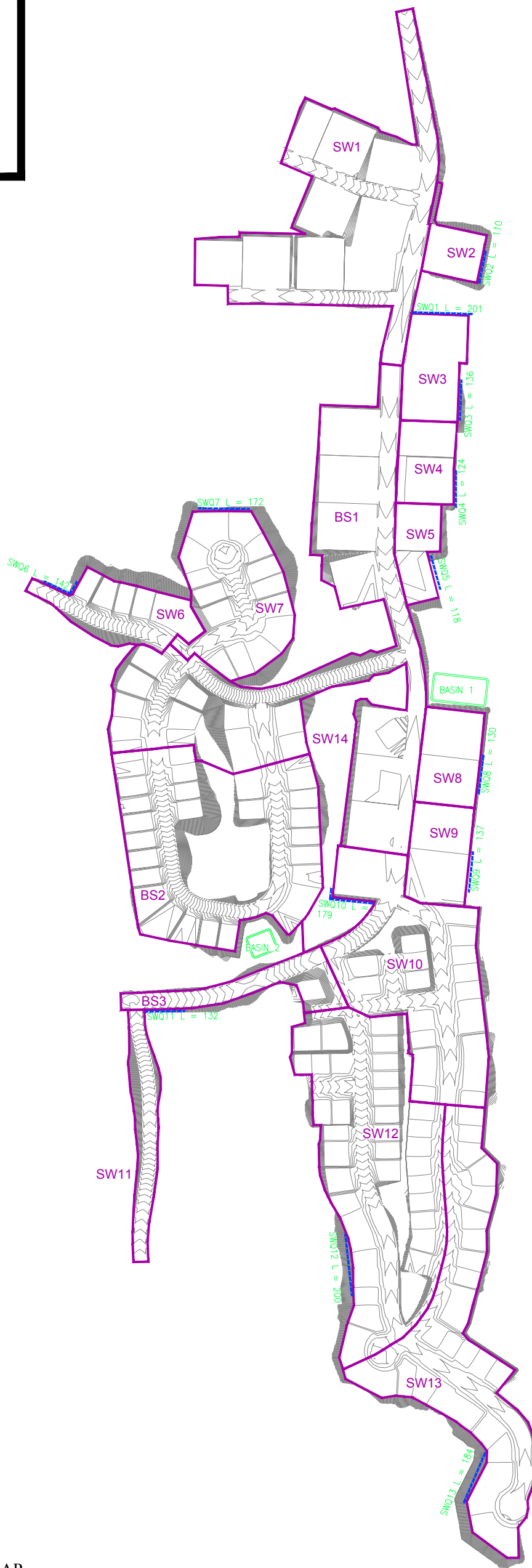
### WATER QUALITY FEATURES MAP FOR DORADO OAKS

EL DORADO COUNTY STATE OF CALIFORNIA  
SEPTEMBER 28, 2018

# PROPOSED DRAINAGE FEATURES MAP

## LEGEND

- STORMWATER QUALITY SWALE ---
- DETENTION BASIN ---
- PROPOSED DEVELOPED  
SHED BOUNDARY ---



## WATER QUALITY FEATURES MAP FOR DORADO OAKS

EL DORADO COUNTY STATE OF CALIFORNIA  
SEPTEMBER 28, 2018

# COMPLIANCE POINT LOCATION MAP

## LEGEND

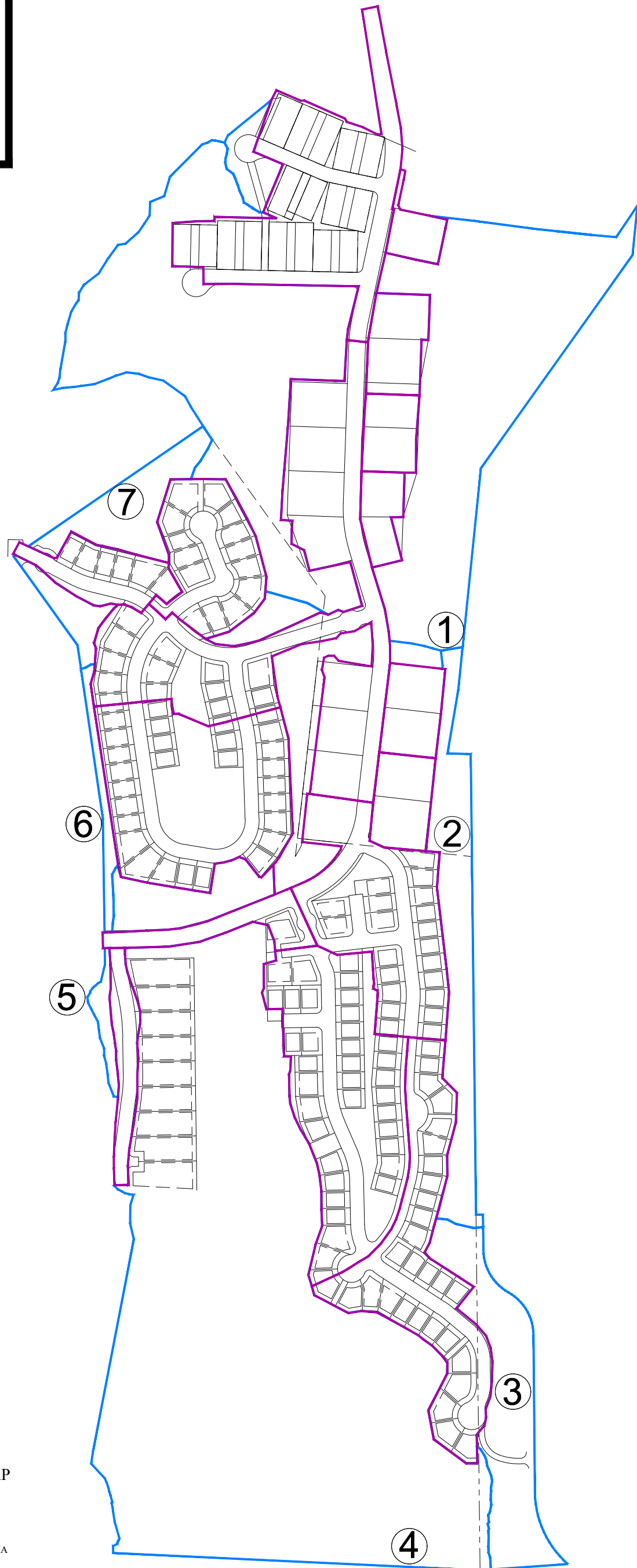
COMPLIANCE POINT



PROPOSED DEVELOPED  
SHED BOUNDARY



PROPOSED OPENSOURCE  
SHED BOUNDARY



## WATER QUALITY FEATURES MAP FOR DORADO OAKS

EL DORADO COUNTY STATE OF CALIFORNIA  
SEPTEMBER 28, 2018

# Appendix B





2) Lag Time : Existing

| SUB BASIN | Travel Time   |          |        |       |           |                      |          |        |       |          |      |              |          |        |        |      |      |                            | Lag time<br>(min) |
|-----------|---------------|----------|--------|-------|-----------|----------------------|----------|--------|-------|----------|------|--------------|----------|--------|--------|------|------|----------------------------|-------------------|
|           | Overland flow |          |        |       |           | Shallow Concentrated |          |        |       |          |      | Channel flow |          |        |        |      |      | total travel time<br>(min) |                   |
|           | Start Elev    | End Elev | Length | Slope | time(min) | Start Elev           | End Elev | Length | Slope | vel(fps) | time | Start Elev   | End Elev | Length | slope  | vel  | time |                            |                   |
| OS1       | 1830          | 1822     | 300    | 0.027 | 21        | 1822                 | 1814     | 265    | 0.030 | 2.80     | 1.6  | 1814.0       | 1768.0   | 2343   | 0.0196 | 2.5  | 15.5 | 37.77                      | <b>22.7</b>       |
| OS2       | 1875          | 1870     | 300    | 0.017 | 25        | 1870                 | 1860     | 265    | 0.038 | 3.13     | 1.4  | 1860.0       | 1800.0   | 1210   | 0.0496 | 4.0  | 5.0  | 31.43                      | <b>18.9</b>       |
| OS3       | 1813          | 1808     | 300    | 0.017 | 25        | 1808                 | 1800     | 265    | 0.030 | 2.80     | 1.6  | 1800.0       | 1748.0   | 2534   | 0.0205 | 2.6  | 16.4 | 42.95                      | <b>25.8</b>       |
| OS5       | 1784          | 1764     | 300    | 0.067 | 14        | 1764                 | 1748     | 539    | 0.030 | 2.78     | 3.2  | 1748.0       | 1747.0   | 1      | 1.0000 | 10.0 | 0.0  | 17.58                      | <b>10.6</b>       |
| OS6       | 1810          | 1800     | 300    | 0.033 | 13        | 1800                 | 1734     | 1210   | 0.055 | 3.77     | 5.4  | 1734.0       | 1698.0   | 1513   | 0.0238 | 2.8  | 9.1  | 27.44                      | <b>16.5</b>       |
| OS4       | 1769          | 1759     | 300    | 0.033 | 13        | 1759                 | 1744     | 838    | 0.018 | 2.16     | 6.5  | 1744.0       | 1743.0   | 1      | 1.0000 | 10.0 | 0.0  | 19.48                      | <b>11.7</b>       |
| OS7       | 1805          | 1784     | 100    | 0.210 | 3         | 1784                 | 1766     | 336    | 0.054 | 3.73     | 1.5  | 1766.0       | 1765.0   | 1      | 1.0000 | 10.0 | 0.0  | 4.09                       | <b>2.5</b>        |
| OS8       | 1774          | 1749     | 166    | 0.151 | 4         | 1749                 | 1746     | 273    | 0.011 | 1.69     | 2.7  | 1746.0       | 1738.0   | 723    | 0.0111 | 1.9  | 6.4  | 13.49                      | <b>8.1</b>        |
| OS9       | 1836          | 1809     | 232    | 0.116 | 6         | 1809                 | 1808     | 1      | 1.000 | 16.13    | 0.0  | 1808.0       | 1807.0   | 1      | 1.0000 | 10.0 | 0.0  | 6.42                       | <b>3.9</b>        |
| OS11      | 1754          | 1691     | 239    | 0.264 | 5         | 1691                 | 1690     | 1      | 1.000 | 16.13    | 0.0  | 1690.0       | 1689.0   | 1      | 1.0000 | 10.0 | 0.0  | 4.74                       | <b>2.8</b>        |
| OS12.1    | 1740          | 1720     | 279    | 0.072 | 9         | 1720                 | 1686     | 584    | 0.058 | 3.89     | 2.5  | 1686.0       | 1685.0   | 1      | 1.0000 | 10.0 | 0.0  | 11.54                      | <b>6.9</b>        |
| OS12.2    | 1740          | 1714     | 300    | 0.087 | 9         | 1714                 | 1676     | 389    | 0.098 | 5.04     | 1.3  | 1676.0       | 1675.0   | 1      | 1.0000 | 10.0 | 0.0  | 10.16                      | <b>6.1</b>        |
| OS10      | 1836          | 1791     | 300    | 0.150 | 7         | 1791                 | 1751     | 494    | 0.081 | 4.59     | 1.8  | 1751.0       | 1622.0   | 2881   | 0.0448 | 3.8  | 12.6 | 21.52                      | <b>12.9</b>       |

Overland time per equation 3-3 TR 55:  $n=0.24$  or  $0.15$ ,  $p=7.0$ ,  $Max L=300$ ,  $Tt=(.007(nL)^.8)/((P)^.5 (s)^.4)$

Shallow concentrated flow velocity based on Figure 3-1, TR-55:  $Length(ft) = 2000$  max

Channel flow based on Manning's equation

Lag time = total travel time x 0.6

3) Loss RatePer SCS Method (now NRCS)

SOIL TYPES C throughout the watershed

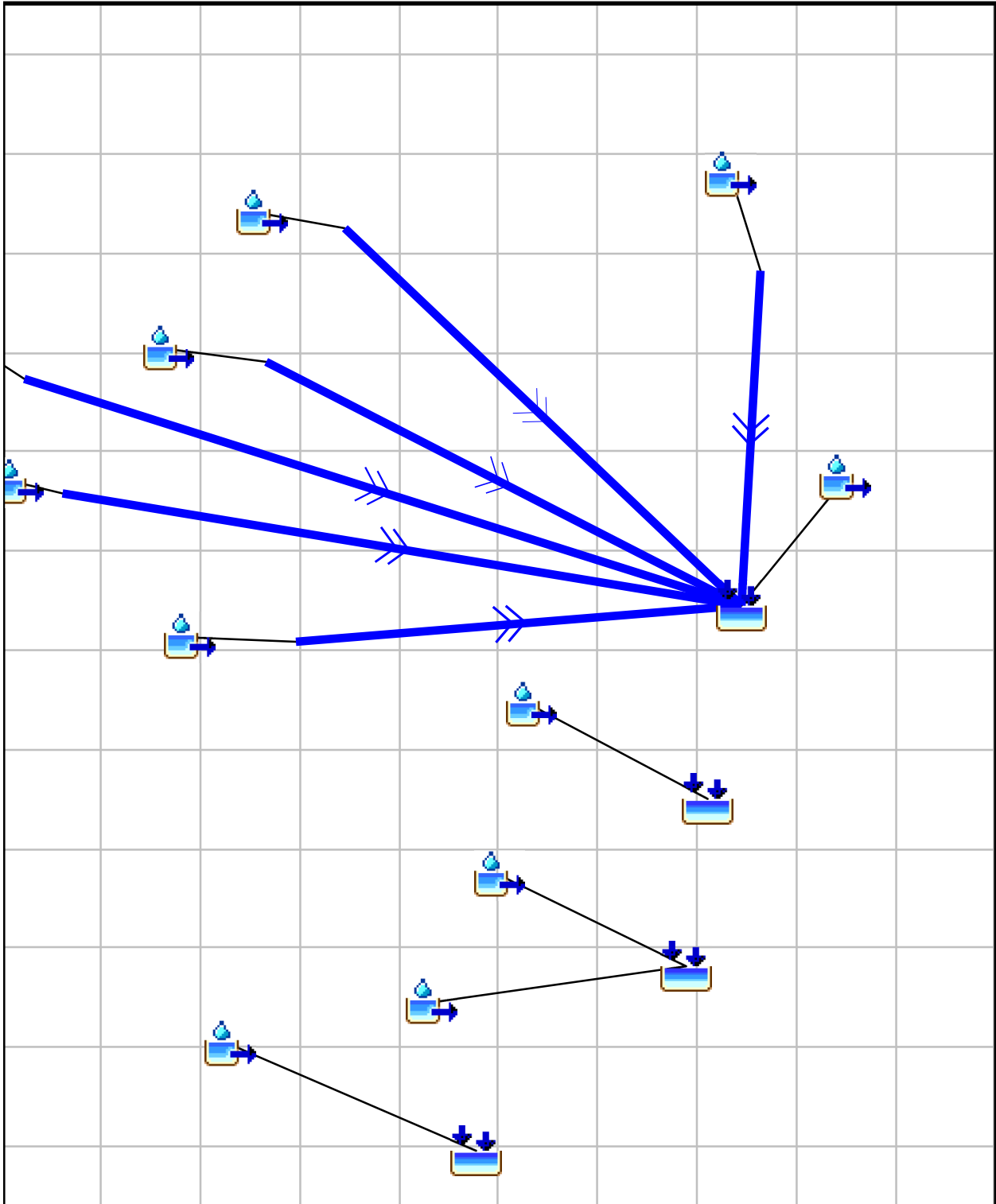
SCS CURVE NUMBER(average moisture C Soil)=81



HEC-HMS

# Project : Dorado Oaks

Basin Model : Dorado Oaks Ex  
Sep 28 13:13:54 PDT 2018



Project: Dorado Oaks Simulation Run: Dorado Oaks 10yr

Start of Run: 01Jan2007, 00:00 Basin Model: Dorado Oaks Ex  
 End of Run: 02Jan2007, 00:00 Meteorologic Model: 10 YR-24IN  
 Compute Time: 28Sep2018, 13:11:49 Control Specifications: 1 DAY

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (IN) |
|--------------------|----------------------------------|----------------------|------------------|-------------|
| OS3                | 0.2817                           | 155.6                | 01Jan2007, 12:28 | 3.05        |
| ROS3-1             | 0.2817                           | 155.3                | 01Jan2007, 12:36 | 3.03        |
| OS1                | 0.1690                           | 99.6                 | 01Jan2007, 12:24 | 3.06        |
| ROS1-1             | 0.1690                           | 99.2                 | 01Jan2007, 12:37 | 3.03        |
| OS2                | 0.0700                           | 45.1                 | 01Jan2007, 12:20 | 3.06        |
| ROS2-1             | 0.0700                           | 44.9                 | 01Jan2007, 12:39 | 3.02        |
| DOE03              | 0.0440                           | 35.5                 | 01Jan2007, 12:13 | 3.08        |
| RDOE3-1            | 0.0440                           | 35.1                 | 01Jan2007, 12:20 | 3.06        |
| DOE05              | 0.0275                           | 29.6                 | 01Jan2007, 12:09 | 3.51        |
| RDOE5-1            | 0.0275                           | 29.1                 | 01Jan2007, 12:17 | 3.49        |
| DOE02              | 0.0260                           | 18.3                 | 01Jan2007, 12:18 | 3.14        |
| DOE01              | 0.0130                           | 11.0                 | 01Jan2007, 12:12 | 3.08        |
| RDOE1-1            | 0.0130                           | 10.8                 | 01Jan2007, 12:28 | 3.05        |
| CP1                | 0.6312                           | 347.4                | 01Jan2007, 12:35 | 3.06        |
| DOE10              | 0.1123                           | 86.6                 | 01Jan2007, 12:14 | 3.08        |
| CP4                | 0.1123                           | 86.6                 | 01Jan2007, 12:14 | 3.08        |
| DOE09              | 0.0380                           | 40.7                 | 01Jan2007, 12:07 | 3.09        |
| DOE08              | 0.0075                           | 7.6                  | 01Jan2007, 12:08 | 3.09        |
| CP3                | 0.0455                           | 48.2                 | 01Jan2007, 12:07 | 3.09        |
| DOE07              | 0.0127                           | 17.2                 | 01Jan2007, 12:04 | 3.09        |
| CP2                | 0.0127                           | 17.2                 | 01Jan2007, 12:04 | 3.09        |
| DOE04              | 0.0121                           | 18.5                 | 01Jan2007, 12:04 | 3.45        |
| CP6                | 0.0121                           | 18.5                 | 01Jan2007, 12:04 | 3.45        |
| DOE06              | 0.0035                           | 4.4                  | 01Jan2007, 12:05 | 3.09        |
| CP5                | 0.0035                           | 4.4                  | 01Jan2007, 12:05 | 3.09        |



2) Lag Time : Developed

| SUB BASIN | Travel Time   |          |        |       |           |                      |          |        |       |          |      |              |          |        |        |     |      |                            | Lag time<br>(min) |
|-----------|---------------|----------|--------|-------|-----------|----------------------|----------|--------|-------|----------|------|--------------|----------|--------|--------|-----|------|----------------------------|-------------------|
|           | Overland flow |          |        |       |           | Shallow Concentrated |          |        |       |          |      | Channel flow |          |        |        |     |      | total travel time<br>(min) |                   |
|           | Start Elev    | End Elev | Length | Slope | time(min) | Start Elev           | End Elev | Length | Slope | vel(fps) | time | Start Elev   | End Elev | Length | slope  | vel | time |                            |                   |
| OS1       | 1830          | 1822     | 300    | 0.027 | 21        | 1822                 | 1814     | 265    | 0.030 | 2.80     | 1.6  | 1814.0       | 1768.0   | 2343   | 0.0196 | 2.5 | 15.5 | 37.77                      | 22.7              |
| OS2       | 1875          | 1870     | 300    | 0.017 | 25        | 1870                 | 1860     | 265    | 0.038 | 3.13     | 1.4  | 1860.0       | 1800.0   | 1210   | 0.0496 | 4.0 | 5.0  | 31.43                      | 18.9              |
| OS3       | 1813          | 1808     | 300    | 0.017 | 25        | 1808                 | 1800     | 265    | 0.030 | 2.80     | 1.6  | 1800.0       | 1748.0   | 2534   | 0.0205 | 2.6 | 16.4 | 42.95                      | 25.8              |
| OS4       | 1780          | 1768     | 100    | 0.120 | 5         | 1768                 | 1768     | 0      |       |          | 0.0  | 1768.0       | 1768.0   | 0      |        |     | -    | 4.71                       | 2.8               |
| OS5       | 1822          | 1790     | 300    | 0.107 | 12        | 1790                 | 1770     | 500    | 0.040 | 3.23     | 2.6  | 1770.0       | 1754.0   | 510    | 0.0314 | 7.4 | 1.2  | 15.63                      | 9.4               |
| OS6       | 1754          | 1720     | 300    | 0.113 | 12        | 1720                 | 1710     | 300    | 0.033 | 2.95     | 1.7  | 1710.0       | 1700.0   | 940    | 0.0106 | 4.3 | 3.7  | 16.96                      | 10.2              |
| OS7       | 1785          | 1760     | 200    | 0.125 | 8         | 1760                 | 1740     | 87     | 0.230 | 7.74     | 0.2  | 1740.0       | 1740.0   | 0      | 0.0000 | 0.0 | -    | 8.26                       | 5.0               |
| OS8       | 1810          | 1790     | 200    | 0.100 | 9         | 1790                 | 1790     | 0      | 0.000 | 0.00     | 0.0  | 1790.0       | 1790.0   | 0      | 0.0000 | 0.0 | -    | 8.82                       | 5.3               |
| OS9       | 1800          | 1776     | 100    | 0.240 | 4         | 1776                 | 1760     | 270    | 0.059 | 3.93     | 1.1  | 1760.0       | 1760.0   | 0      | 0.0000 | 0.0 | -    | 4.72                       | 2.8               |
| OS10      | 1750          | 1710     | 161    | 0.248 | 5         | 1710                 | 1710     | 0      | 0.000 | 0.00     | 0.0  | 1710.0       | 1710.0   | 0      | 0.0000 | 0.0 | -    | 5.16                       | 3.1               |
| OS11      | 1815          | 1805     | 30     | 0.333 | 1         | 1805                 | 1800     | 0      | 0.000 | 0.00     | 0.0  | 1800.0       | 1800.0   | 0      | 0.0000 | 0.0 | -    | 1.20                       | 0.7               |
| OS12      | 1761          | 1748     | 300    | 0.043 | 17        | 1748                 | 1738     | 152    | 0.066 | 4.14     | 0.6  | 1738.0       | 1738.0   | 0      | 0.0000 | 0.0 | -    | 17.67                      | 10.6              |
| OS13      | 1790          | 1775     | 95     | 0.158 | 4         | 1775                 | 1775     | 0      | 0.000 | 0.00     | 0.0  | 1775.0       | 1775.0   | 0      | 0.0000 | 0.0 | -    | 4.05                       | 2.4               |
| OS14      | 1734          | 1714     | 157    | 0.127 | 7         | 1714                 | 1714     | 0      | 0.000 | 0.00     | 0.0  | 1714.0       | 1714.0   | 0      | 0.0000 | 0.0 | -    | 6.60                       | 4.0               |
| OS15      | 1760          | 1732     | 300    | 0.093 | 13        | 1732                 | 1732     | 0      | 0.000 | 0.00     | 0.0  | 1732.0       | 1624.0   | 2315   | 0.0467 | 9.0 | 4.3  | 16.85                      | 10.1              |
| SW1       | 1768          | 1767     | 100    | 0.010 | 13        | 1767                 | 1754     | 950    | 0.014 | 1.89     | 8.4  | 1754.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 21.12                      | 12.7              |
| SW2       | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1753     | 88     | 0.011 | 1.72     | 0.9  | 1753.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 13.58                      | 8.2               |
| SW3       | 1754          | 1753     | 100    | 0.010 | 13        | 1753                 | 1752     | 88     | 0.011 | 1.72     | 0.9  | 1752.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 13.58                      | 8.2               |
| SW4       | 1752          | 1751     | 100    | 0.010 | 13        | 1751                 | 1750     | 90     | 0.011 | 1.70     | 0.9  | 1750.0       | 1750.0   | 0      | 0.0000 | 0.0 | -    | 13.61                      | 8.2               |
| SW5       | 1750          | 1749     | 100    | 0.010 | 13        | 1749                 | 1748     | 88     | 0.011 | 1.72     | 0.9  | 1748.0       | 1748.0   | 0      | 0.0000 | 0.0 | -    | 13.58                      | 8.2               |
| SW6       | 1805          | 1804     | 87     | 0.011 | 11        | 1804                 | 1780     | 500    | 0.048 | 3.53     | 2.4  | 1780.0       | 1780.0   | 0      | 0.0000 | 0.0 | -    | 13.13                      | 7.9               |
| SW7       | 1803          | 1802     | 100    | 0.010 | 13        | 1802                 | 1789     | 590    | 0.022 | 2.39     | 4.1  | 1789.0       | 1789.0   | 0      | 0.0000 | 0.0 | -    | 16.84                      | 10.1              |
| SW8       | 1744          | 1743     | 100    | 0.010 | 13        | 1743                 | 1742     | 90     | 0.011 | 1.70     | 0.9  | 1742.0       | 1742.0   | 0      | 0.0000 | 0.0 | -    | 13.61                      | 8.2               |
| SW9       | 1744          | 1743     | 100    | 0.010 | 13        | 1743                 | 1742     | 90     | 0.011 | 1.70     | 0.9  | 1742.0       | 1742.0   | 0      | 0.0000 | 0.0 | -    | 13.61                      | 8.2               |
| SW10      | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1744     | 836    | 0.012 | 1.76     | 7.9  | 1744.0       | 1744.0   | 0      | 0.0000 | 0.0 | -    | 20.63                      | 12.4              |
| SW11      | 1798          | 1797     | 24     | 0.042 | 2         | 1797                 | 1761     | 847    | 0.043 | 3.33     | 4.2  | 1761.0       | 1761.0   | 0      | 0.0000 | 0.0 | -    | 6.54                       | 3.9               |
| SW12      | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1750     | 130    | 0.031 | 2.83     | 0.8  | 1750.0       | 1734.0   | 1000   | 0.0160 | 5.3 | 3.2  | 16.67                      | 10.0              |
| SW13      | 1753          | 1752     | 100    | 0.010 | 13        | 1752                 | 1746     | 400    | 0.015 | 1.98     | 3.4  | 1746.0       | 1734.0   | 1200   | 0.0100 | 4.2 | 4.8  | 20.92                      | 12.6              |
| BS1       | 1754          | 1753     | 100    | 0.010 | 13        | 1753                 | 1742     | 994    | 0.011 | 1.70     | 9.8  | 1742.0       | 1768.0   | 0      | 0.0000 | 0.0 | -    | 22.49                      | 13.5              |
| BS2       | 1817          | 1816     | 100    | 0.010 | 13        | 1816                 | 1768     | 710    | 0.068 | 4.20     | 2.8  | 1768.0       | 1768.0   | 0      | 0.0000 | 0.0 | -    | 15.55                      | 9.3               |
| BS3       | 1762          | 1761     | 10     | 0.100 | 1         | 1761                 | 1748     | 417    | 0.031 | 2.85     | 2.4  | 1748.0       | 1748.0   | 0      | 0.0000 | 0.0 | -    | 3.24                       | 1.9               |
| SW14      | 1779          | 1757     | 100    | 0.220 | 4         | 1757                 | 1749     | 720    | 0.011 | 1.70     | 7.1  | 1749.0       | 1749.0   | 0      | 0.0000 | 0.0 | -    | 10.75                      | 6.5               |

Overland time per equation 3-3 TR 55:  $n=0.24$  or  $0.15$ ,  $p=7.0$ ,  $Max L=300$ ,  $Tt=(.007(nL)^.8)/((P)^.5 (s)^.4)$

Shallow concentrated flow velocity based on Figure 3-1, TR-55:  $Length(ft) = 2000$  max

Channel flow based on Manning's equation

Lag time = total travel time x 0.6

3) Loss RatePer SCS Method (now NRCS)

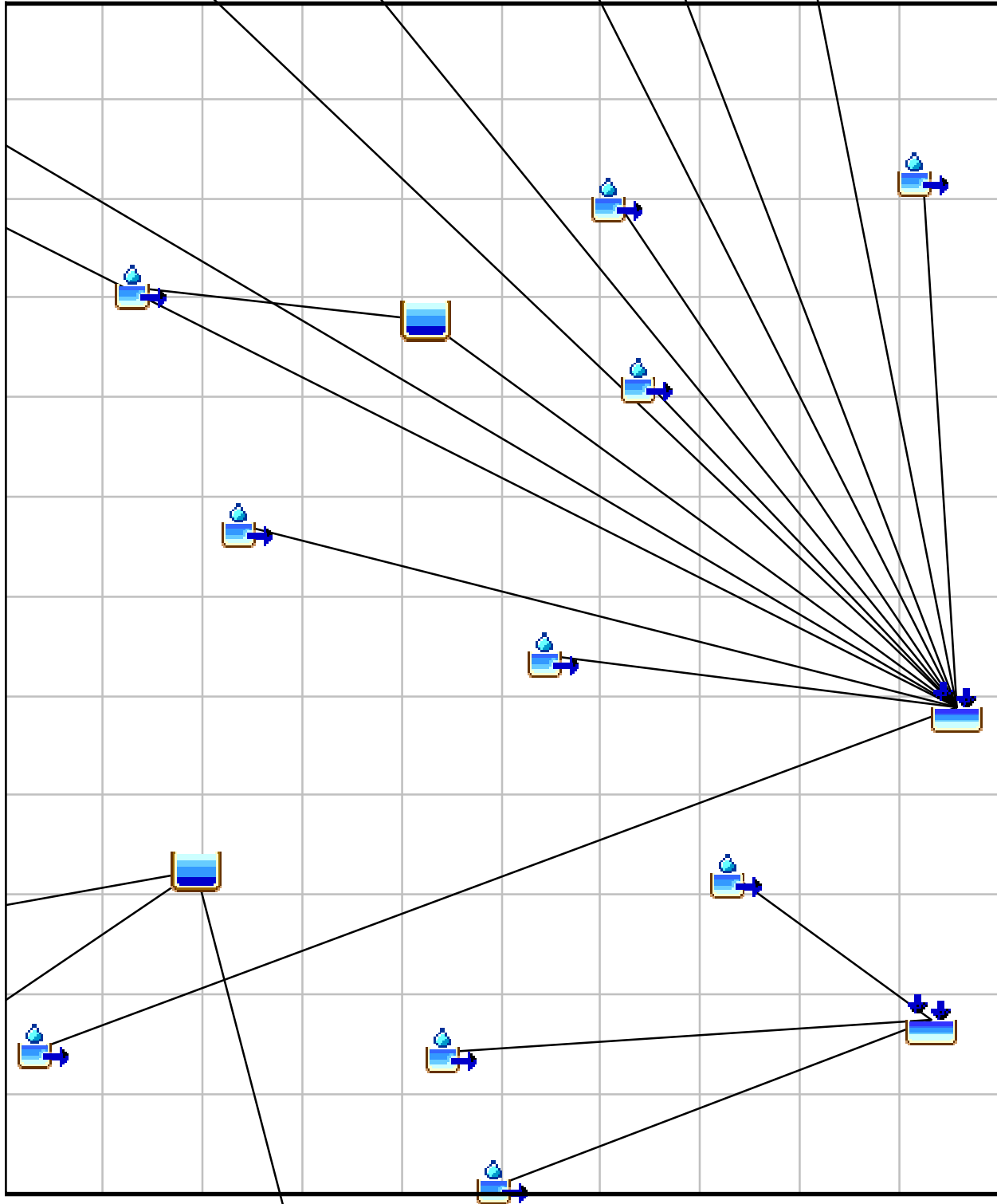
SOIL TYPES C throughout the watershed

SCS CURVE NUMBER(average moisture C Soil)= 81



HEC-HMS

**Project : Dorado Oaks**  
Basin Model : Dorado Oaks Dev  
Sep 28 13:20:09 PDT 2018



Project: Dorado Oaks Simulation Run: DO Dev 10yr

Start of Run: 01Jan2007, 00:00 Basin Model: Dorado Oaks Dev  
 End of Run: 02Jan2007, 00:00 Meteorologic Model: 10 YR-24IN  
 Compute Time: 28Sep2018, 13:24:10 Control Specifications:1 DAY

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (AC-FT) |
|--------------------|----------------------------------|----------------------|------------------|----------------|
| OS03               | 0.2817                           | 155.7                | 01Jan2007, 12:28 | 45.9           |
| OS01               | 0.169                            | 90.0                 | 01Jan2007, 12:30 | 27.5           |
| OS02               | 0.07                             | 41.4                 | 01Jan2007, 12:21 | 9.9            |
| OS04               | 0.0244                           | 33.9                 | 01Jan2007, 12:04 | 4.1            |
| OS05               | 0.0244                           | 21.7                 | 01Jan2007, 12:10 | 4.0            |
| OS06               | 0.023                            | 19.7                 | 01Jan2007, 12:11 | 3.8            |
| BS01               | 0.0199                           | 19.5                 | 01Jan2007, 12:14 | 4.6            |
| DB01               | 0.0199                           | 7.1                  | 01Jan2007, 12:40 | 4.5            |
| SW01               | 0.0142                           | 14.5                 | 01Jan2007, 12:14 | 3.4            |
| SW14               | 0.0044                           | 3.1                  | 01Jan2007, 12:15 | 0.6            |
| SW03               | 0.0026                           | 3.2                  | 01Jan2007, 12:09 | 0.6            |
| SW04               | 0.0019                           | 2.3                  | 01Jan2007, 12:09 | 0.4            |
| SW05               | 0.0016                           | 2.0                  | 01Jan2007, 12:09 | 0.4            |
| SW02               | 0.0012                           | 1.5                  | 01Jan2007, 12:09 | 0.3            |
| OS09               | 0.0012                           | 1.5                  | 01Jan2007, 12:04 | 0.2            |
| CP1                | 0.6395                           | 330.4                | 01Jan2007, 12:24 | 105.4          |
| OS15               | 0.0692                           | 54.8                 | 01Jan2007, 12:11 | 9.8            |
| BS02               | 0.0138                           | 14.9                 | 01Jan2007, 12:10 | 2.9            |
| BS03               | 0.0023                           | 2.9                  | 01Jan2007, 12:09 | 0.6            |
| DB02               | 0.0161                           | 3.8                  | 01Jan2007, 12:55 | 3.1            |
| SW12               | 0.0145                           | 15.1                 | 01Jan2007, 12:11 | 3.0            |
| SW10               | 0.0105                           | 9.9                  | 01Jan2007, 12:13 | 2.2            |
| OS12               | 0.0032                           | 2.5                  | 01Jan2007, 12:12 | 0.5            |
| SW11               | 0.0022                           | 3.7                  | 01Jan2007, 12:05 | 0.5            |
| CP4                | 0.1157                           | 86.8                 | 01Jan2007, 12:11 | 19.1           |
| SW13               | 0.0111                           | 10.4                 | 01Jan2007, 12:14 | 2.3            |
| OS14               | 0.0079                           | 9.0                  | 01Jan2007, 12:05 | 1.1            |



| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (AC-FT) |
|--------------------|----------------------------------|----------------------|------------------|----------------|
| CP3                | 0.0190                           | 16.0                 | 01Jan2007, 12:06 | 3.4            |
| SW07               | 0.006                            | 6.3                  | 01Jan2007, 12:11 | 1.3            |
| OS07               | 0.0038                           | 4.4                  | 01Jan2007, 12:06 | 0.6            |
| SW06               | 0.0032                           | 3.8                  | 01Jan2007, 12:09 | 0.7            |
| CP6                | 0.0130                           | 13.6                 | 01Jan2007, 12:08 | 2.6            |
| OS10               | 0.0075                           | 9.1                  | 01Jan2007, 12:04 | 1.1            |
| SW09               | 0.0025                           | 3.1                  | 01Jan2007, 12:09 | 0.6            |
| SW08               | 0.0023                           | 2.8                  | 01Jan2007, 12:09 | 0.5            |
| CP2                | 0.0123                           | 13.7                 | 01Jan2007, 12:05 | 2.2            |
| OS13               | 0.008                            | 10.3                 | 01Jan2007, 12:04 | 1.1            |
| OS08               | 0.0014                           | 1.3                  | 01Jan2007, 12:10 | 0.2            |
| OS11               | 0.0011                           | 1.5                  | 01Jan2007, 12:03 | 0.2            |
| CP5                | 0.0105                           | 12.4                 | 01Jan2007, 12:03 | 1.5            |

# Appendix C



2) Lag Time : Existing

| SUB BASIN | Travel Time   |          |        |       |           |                      |          |        |       |          |      |              |          |        |        |      |      |                            | Lag time<br>(min) |
|-----------|---------------|----------|--------|-------|-----------|----------------------|----------|--------|-------|----------|------|--------------|----------|--------|--------|------|------|----------------------------|-------------------|
|           | Overland flow |          |        |       |           | Shallow Concentrated |          |        |       |          |      | Channel flow |          |        |        |      |      | total travel time<br>(min) |                   |
|           | Start Elev    | End Elev | Length | Slope | time(min) | Start Elev           | End Elev | Length | Slope | vel(fps) | time | Start Elev   | End Elev | Length | slope  | vel  | time |                            |                   |
| OS1       | 1830          | 1822     | 300    | 0.027 | 21        | 1822                 | 1814     | 265    | 0.030 | 2.80     | 1.6  | 1814.0       | 1768.0   | 2343   | 0.0196 | 2.5  | 15.5 | 37.77                      | <b>22.7</b>       |
| OS2       | 1875          | 1870     | 300    | 0.017 | 25        | 1870                 | 1860     | 265    | 0.038 | 3.13     | 1.4  | 1860.0       | 1800.0   | 1210   | 0.0496 | 4.0  | 5.0  | 31.43                      | <b>18.9</b>       |
| OS3       | 1813          | 1808     | 300    | 0.017 | 25        | 1808                 | 1800     | 265    | 0.030 | 2.80     | 1.6  | 1800.0       | 1748.0   | 2534   | 0.0205 | 2.6  | 16.4 | 42.95                      | <b>25.8</b>       |
| OS5       | 1784          | 1764     | 300    | 0.067 | 14        | 1764                 | 1748     | 539    | 0.030 | 2.78     | 3.2  | 1748.0       | 1747.0   | 1      | 1.0000 | 10.0 | 0.0  | 17.58                      | <b>10.6</b>       |
| OS6       | 1810          | 1800     | 300    | 0.033 | 13        | 1800                 | 1734     | 1210   | 0.055 | 3.77     | 5.4  | 1734.0       | 1698.0   | 1513   | 0.0238 | 2.8  | 9.1  | 27.44                      | <b>16.5</b>       |
| OS4       | 1769          | 1759     | 300    | 0.033 | 13        | 1759                 | 1744     | 838    | 0.018 | 2.16     | 6.5  | 1744.0       | 1743.0   | 1      | 1.0000 | 10.0 | 0.0  | 19.48                      | <b>11.7</b>       |
| OS7       | 1805          | 1784     | 100    | 0.210 | 3         | 1784                 | 1766     | 336    | 0.054 | 3.73     | 1.5  | 1766.0       | 1765.0   | 1      | 1.0000 | 10.0 | 0.0  | 4.09                       | <b>2.5</b>        |
| OS8       | 1774          | 1749     | 166    | 0.151 | 4         | 1749                 | 1746     | 273    | 0.011 | 1.69     | 2.7  | 1746.0       | 1738.0   | 723    | 0.0111 | 1.9  | 6.4  | 13.49                      | <b>8.1</b>        |
| OS9       | 1836          | 1809     | 232    | 0.116 | 6         | 1809                 | 1808     | 1      | 1.000 | 16.13    | 0.0  | 1808.0       | 1807.0   | 1      | 1.0000 | 10.0 | 0.0  | 6.42                       | <b>3.9</b>        |
| OS11      | 1754          | 1691     | 239    | 0.264 | 5         | 1691                 | 1690     | 1      | 1.000 | 16.13    | 0.0  | 1690.0       | 1689.0   | 1      | 1.0000 | 10.0 | 0.0  | 4.74                       | <b>2.8</b>        |
| OS12.1    | 1740          | 1720     | 279    | 0.072 | 9         | 1720                 | 1686     | 584    | 0.058 | 3.89     | 2.5  | 1686.0       | 1685.0   | 1      | 1.0000 | 10.0 | 0.0  | 11.54                      | <b>6.9</b>        |
| OS12.2    | 1740          | 1714     | 300    | 0.087 | 9         | 1714                 | 1676     | 389    | 0.098 | 5.04     | 1.3  | 1676.0       | 1675.0   | 1      | 1.0000 | 10.0 | 0.0  | 10.16                      | <b>6.1</b>        |
| OS10      | 1836          | 1791     | 300    | 0.150 | 7         | 1791                 | 1751     | 494    | 0.081 | 4.59     | 1.8  | 1751.0       | 1622.0   | 2881   | 0.0448 | 3.8  | 12.6 | 21.52                      | <b>12.9</b>       |

Overland time per equation 3-3 TR 55:  $n=0.24$  or  $0.15$ ,  $p=7.0$ ,  $Max L=300$ ,  $Tt=(.007(nL)^.8)/((P)^.5 (s)^.4)$

Shallow concentrated flow velocity based on Figure 3-1, TR-55:  $Length(ft) = 2000$  max

Channel flow based on Manning's equation

Lag time = total travel time x 0.6

3) Loss RatePer SCS Method (now NRCS)

SOIL TYPES C throughout the watershed

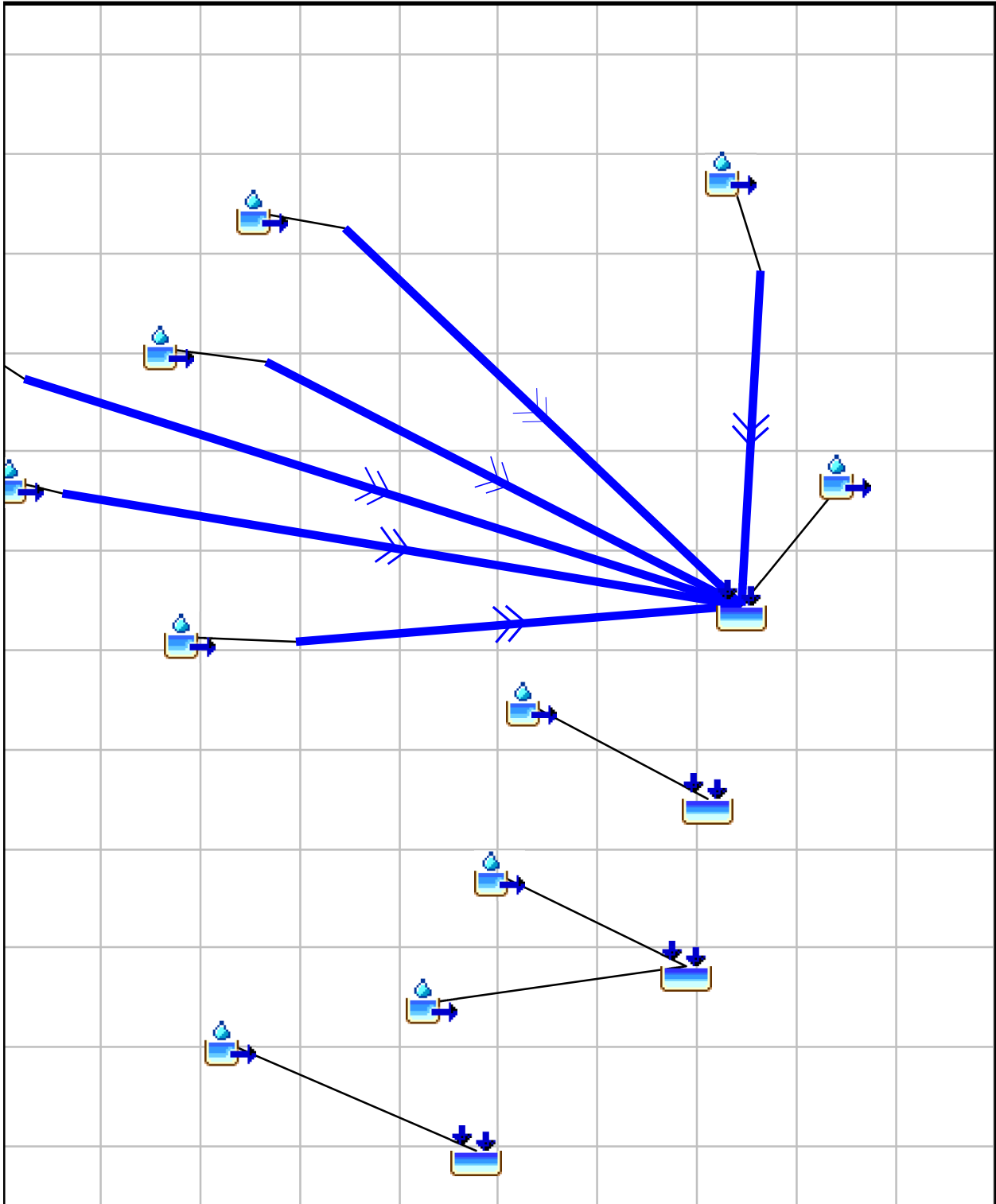
SCS CURVE NUMBER(average moisture C Soil)=81



HEC-HMS

# Project : Dorado Oaks

Basin Model : Dorado Oaks Ex  
Sep 28 13:13:54 PDT 2018



Project: Dorado Oaks Simulation Run: Dorado Oaks 100-yr

Start of Run: 01Jan2007, 00:00 Basin Model: Dorado Oaks Ex  
 End of Run: 02Jan2007, 00:00 Meteorologic Model: 100 YR-24IN  
 Compute Time: 28Sep2018, 13:11:26 Control Specifications: 1 DAY

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (AC-FT) |
|--------------------|----------------------------------|----------------------|------------------|----------------|
| OS3                | 0.2817                           | 256.6                | 01Jan2007, 12:28 | 77.0           |
| ROS3-1             | 0.2817                           | 256.2                | 01Jan2007, 12:35 | 76.6           |
| OS1                | 0.169                            | 163.7                | 01Jan2007, 12:24 | 46.3           |
| ROS1-1             | 0.169                            | 163.2                | 01Jan2007, 12:36 | 45.9           |
| OS2                | 0.070                            | 73.8                 | 01Jan2007, 12:20 | 19.2           |
| ROS2-1             | 0.070                            | 73.5                 | 01Jan2007, 12:37 | 19.0           |
| DOE03              | 0.044                            | 57.4                 | 01Jan2007, 12:13 | 12.1           |
| RDOE3-1            | 0.044                            | 57.0                 | 01Jan2007, 12:19 | 12.1           |
| DOE05              | 0.0275                           | 45.8                 | 01Jan2007, 12:09 | 8.4            |
| RDOE5-1            | 0.0275                           | 45.0                 | 01Jan2007, 12:16 | 8.3            |
| DOE02              | 0.026                            | 29.6                 | 01Jan2007, 12:18 | 7.3            |
| DOE01              | 0.013                            | 17.7                 | 01Jan2007, 12:12 | 3.6            |
| RDOE1-1            | 0.013                            | 17.6                 | 01Jan2007, 12:26 | 3.6            |
| CP1                | 0.6312                           | 574.9                | 01Jan2007, 12:33 | 172.6          |
| DOE10              | 0.1123                           | 140.5                | 01Jan2007, 12:14 | 30.9           |
| CP4                | 0.1123                           | 140.5                | 01Jan2007, 12:14 | 30.9           |
| DOE09              | 0.038                            | 65.4                 | 01Jan2007, 12:07 | 10.5           |
| DOE08              | 0.0075                           | 12.3                 | 01Jan2007, 12:08 | 2.1            |
| CP3                | 0.0455                           | 77.6                 | 01Jan2007, 12:07 | 12.6           |
| DOE07              | 0.0127                           | 27.6                 | 01Jan2007, 12:04 | 3.5            |
| CP2                | 0.0127                           | 27.6                 | 01Jan2007, 12:04 | 3.5            |
| DOE04              | 0.0121                           | 28.7                 | 01Jan2007, 12:04 | 3.6            |
| CP6                | 0.0121                           | 28.7                 | 01Jan2007, 12:04 | 3.6            |
| DOE06              | 0.0035                           | 7.0                  | 01Jan2007, 12:05 | 1.0            |
| CP5                | 0.0035                           | 7.0                  | 01Jan2007, 12:05 | 1.0            |



2) Lag Time : Developed

| SUB BASIN | Travel Time   |          |        |       |           |                      |          |        |       |          |      |              |          |        |        |     |      |                            | Lag time<br>(min) |
|-----------|---------------|----------|--------|-------|-----------|----------------------|----------|--------|-------|----------|------|--------------|----------|--------|--------|-----|------|----------------------------|-------------------|
|           | Overland flow |          |        |       |           | Shallow Concentrated |          |        |       |          |      | Channel flow |          |        |        |     |      | total travel time<br>(min) |                   |
|           | Start Elev    | End Elev | Length | Slope | time(min) | Start Elev           | End Elev | Length | Slope | vel(fps) | time | Start Elev   | End Elev | Length | slope  | vel | time |                            |                   |
| OS1       | 1830          | 1822     | 300    | 0.027 | 21        | 1822                 | 1814     | 265    | 0.030 | 2.80     | 1.6  | 1814.0       | 1768.0   | 2343   | 0.0196 | 2.5 | 15.5 | 37.77                      | 22.7              |
| OS2       | 1875          | 1870     | 300    | 0.017 | 25        | 1870                 | 1860     | 265    | 0.038 | 3.13     | 1.4  | 1860.0       | 1800.0   | 1210   | 0.0496 | 4.0 | 5.0  | 31.43                      | 18.9              |
| OS3       | 1813          | 1808     | 300    | 0.017 | 25        | 1808                 | 1800     | 265    | 0.030 | 2.80     | 1.6  | 1800.0       | 1748.0   | 2534   | 0.0205 | 2.6 | 16.4 | 42.95                      | 25.8              |
| OS4       | 1780          | 1768     | 100    | 0.120 | 5         | 1768                 | 1768     | 0      |       |          | 0.0  | 1768.0       | 1768.0   | 0      |        |     | -    | 4.71                       | 2.8               |
| OS5       | 1822          | 1790     | 300    | 0.107 | 12        | 1790                 | 1770     | 500    | 0.040 | 3.23     | 2.6  | 1770.0       | 1754.0   | 510    | 0.0314 | 7.4 | 1.2  | 15.63                      | 9.4               |
| OS6       | 1754          | 1720     | 300    | 0.113 | 12        | 1720                 | 1710     | 300    | 0.033 | 2.95     | 1.7  | 1710.0       | 1700.0   | 940    | 0.0106 | 4.3 | 3.7  | 16.96                      | 10.2              |
| OS7       | 1785          | 1760     | 200    | 0.125 | 8         | 1760                 | 1740     | 87     | 0.230 | 7.74     | 0.2  | 1740.0       | 1740.0   | 0      | 0.0000 | 0.0 | -    | 8.26                       | 5.0               |
| OS8       | 1810          | 1790     | 200    | 0.100 | 9         | 1790                 | 1790     | 0      | 0.000 | 0.00     | 0.0  | 1790.0       | 1790.0   | 0      | 0.0000 | 0.0 | -    | 8.82                       | 5.3               |
| OS9       | 1800          | 1776     | 100    | 0.240 | 4         | 1776                 | 1760     | 270    | 0.059 | 3.93     | 1.1  | 1760.0       | 1760.0   | 0      | 0.0000 | 0.0 | -    | 4.72                       | 2.8               |
| OS10      | 1750          | 1710     | 161    | 0.248 | 5         | 1710                 | 1710     | 0      | 0.000 | 0.00     | 0.0  | 1710.0       | 1710.0   | 0      | 0.0000 | 0.0 | -    | 5.16                       | 3.1               |
| OS11      | 1815          | 1805     | 30     | 0.333 | 1         | 1805                 | 1800     | 0      | 0.000 | 0.00     | 0.0  | 1800.0       | 1800.0   | 0      | 0.0000 | 0.0 | -    | 1.20                       | 0.7               |
| OS12      | 1761          | 1748     | 300    | 0.043 | 17        | 1748                 | 1738     | 152    | 0.066 | 4.14     | 0.6  | 1738.0       | 1738.0   | 0      | 0.0000 | 0.0 | -    | 17.67                      | 10.6              |
| OS13      | 1790          | 1775     | 95     | 0.158 | 4         | 1775                 | 1775     | 0      | 0.000 | 0.00     | 0.0  | 1775.0       | 1775.0   | 0      | 0.0000 | 0.0 | -    | 4.05                       | 2.4               |
| OS14      | 1734          | 1714     | 157    | 0.127 | 7         | 1714                 | 1714     | 0      | 0.000 | 0.00     | 0.0  | 1714.0       | 1714.0   | 0      | 0.0000 | 0.0 | -    | 6.60                       | 4.0               |
| OS15      | 1760          | 1732     | 300    | 0.093 | 13        | 1732                 | 1732     | 0      | 0.000 | 0.00     | 0.0  | 1732.0       | 1624.0   | 2315   | 0.0467 | 9.0 | 4.3  | 16.85                      | 10.1              |
| SW1       | 1768          | 1767     | 100    | 0.010 | 13        | 1767                 | 1754     | 950    | 0.014 | 1.89     | 8.4  | 1754.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 21.12                      | 12.7              |
| SW2       | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1753     | 88     | 0.011 | 1.72     | 0.9  | 1753.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 13.58                      | 8.2               |
| SW3       | 1754          | 1753     | 100    | 0.010 | 13        | 1753                 | 1752     | 88     | 0.011 | 1.72     | 0.9  | 1752.0       | 1754.0   | 0      | 0.0000 | 0.0 | -    | 13.58                      | 8.2               |
| SW4       | 1752          | 1751     | 100    | 0.010 | 13        | 1751                 | 1750     | 90     | 0.011 | 1.70     | 0.9  | 1750.0       | 1750.0   | 0      | 0.0000 | 0.0 | -    | 13.61                      | 8.2               |
| SW5       | 1750          | 1749     | 100    | 0.010 | 13        | 1749                 | 1748     | 88     | 0.011 | 1.72     | 0.9  | 1748.0       | 1748.0   | 0      | 0.0000 | 0.0 | -    | 13.58                      | 8.2               |
| SW6       | 1805          | 1804     | 87     | 0.011 | 11        | 1804                 | 1780     | 500    | 0.048 | 3.53     | 2.4  | 1780.0       | 1780.0   | 0      | 0.0000 | 0.0 | -    | 13.13                      | 7.9               |
| SW7       | 1803          | 1802     | 100    | 0.010 | 13        | 1802                 | 1789     | 590    | 0.022 | 2.39     | 4.1  | 1789.0       | 1789.0   | 0      | 0.0000 | 0.0 | -    | 16.84                      | 10.1              |
| SW8       | 1744          | 1743     | 100    | 0.010 | 13        | 1743                 | 1742     | 90     | 0.011 | 1.70     | 0.9  | 1742.0       | 1742.0   | 0      | 0.0000 | 0.0 | -    | 13.61                      | 8.2               |
| SW9       | 1744          | 1743     | 100    | 0.010 | 13        | 1743                 | 1742     | 90     | 0.011 | 1.70     | 0.9  | 1742.0       | 1742.0   | 0      | 0.0000 | 0.0 | -    | 13.61                      | 8.2               |
| SW10      | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1744     | 836    | 0.012 | 1.76     | 7.9  | 1744.0       | 1744.0   | 0      | 0.0000 | 0.0 | -    | 20.63                      | 12.4              |
| SW11      | 1798          | 1797     | 24     | 0.042 | 2         | 1797                 | 1761     | 847    | 0.043 | 3.33     | 4.2  | 1761.0       | 1761.0   | 0      | 0.0000 | 0.0 | -    | 6.54                       | 3.9               |
| SW12      | 1755          | 1754     | 100    | 0.010 | 13        | 1754                 | 1750     | 130    | 0.031 | 2.83     | 0.8  | 1750.0       | 1734.0   | 1000   | 0.0160 | 5.3 | 3.2  | 16.67                      | 10.0              |
| SW13      | 1753          | 1752     | 100    | 0.010 | 13        | 1752                 | 1746     | 400    | 0.015 | 1.98     | 3.4  | 1746.0       | 1734.0   | 1200   | 0.0100 | 4.2 | 4.8  | 20.92                      | 12.6              |
| BS1       | 1754          | 1753     | 100    | 0.010 | 13        | 1753                 | 1742     | 994    | 0.011 | 1.70     | 9.8  | 1742.0       | 1768.0   | 0      | 0.0000 | 0.0 | -    | 22.49                      | 13.5              |
| BS2       | 1817          | 1816     | 100    | 0.010 | 13        | 1816                 | 1768     | 710    | 0.068 | 4.20     | 2.8  | 1768.0       | 1768.0   | 0      | 0.0000 | 0.0 | -    | 15.55                      | 9.3               |
| BS3       | 1762          | 1761     | 10     | 0.100 | 1         | 1761                 | 1748     | 417    | 0.031 | 2.85     | 2.4  | 1748.0       | 1748.0   | 0      | 0.0000 | 0.0 | -    | 3.24                       | 1.9               |
| SW14      | 1779          | 1757     | 100    | 0.220 | 4         | 1757                 | 1749     | 720    | 0.011 | 1.70     | 7.1  | 1749.0       | 1749.0   | 0      | 0.0000 | 0.0 | -    | 10.75                      | 6.5               |

Overland time per equation 3-3 TR 55:  $n=0.24$  or  $0.15$ ,  $p=7.0$ ,  $Max L=300$ ,  $Tt=(.007(nL)^.8)/((P)^.5 (s)^.4)$

Shallow concentrated flow velocity based on Figure 3-1, TR-55:  $Length(ft) = 2000$  max

Channel flow based on Manning's equation

Lag time = total travel time x 0.6

3) Loss RatePer SCS Method (now NRCS)

SOIL TYPES C throughout the watershed

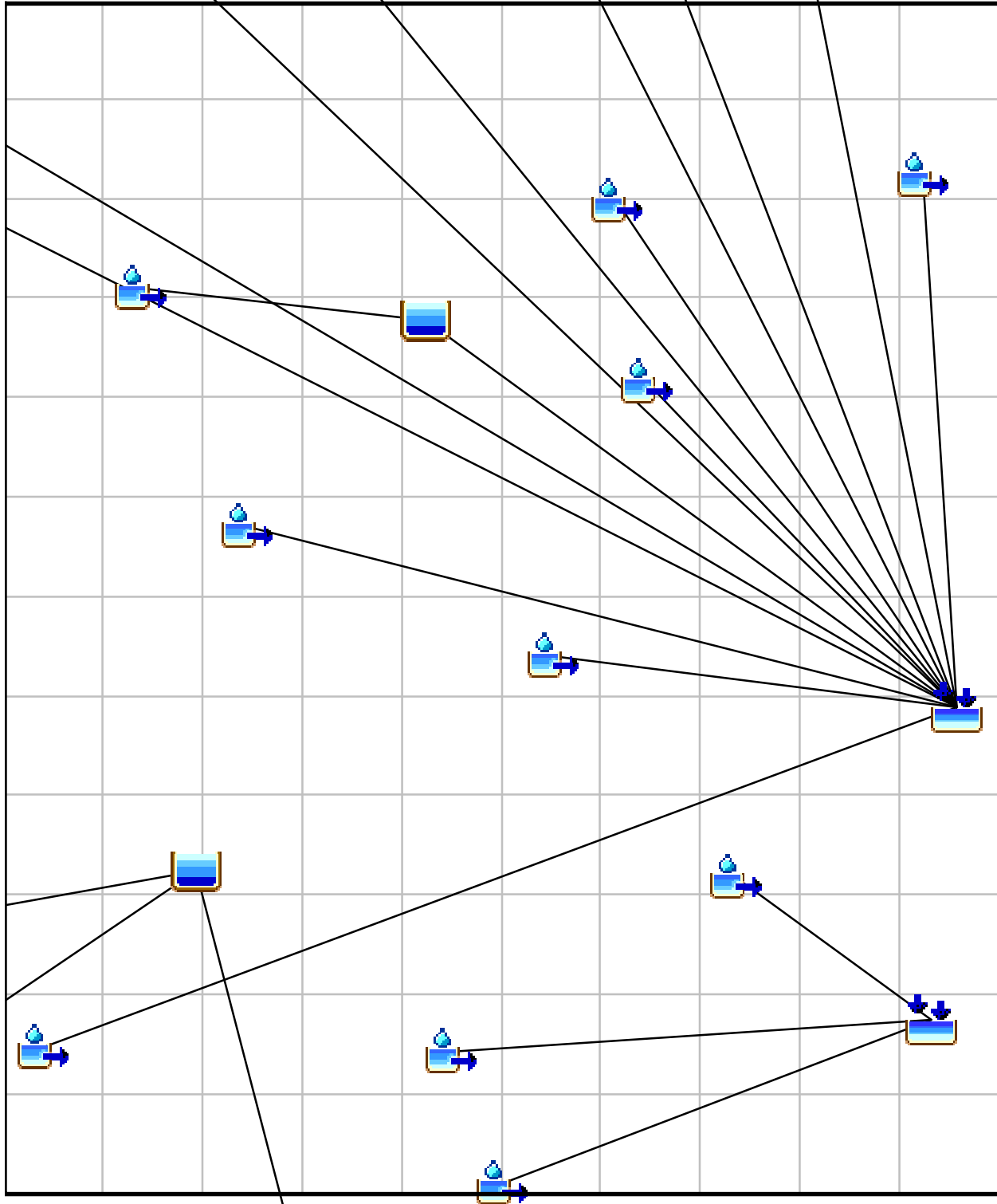
SCS CURVE NUMBER(average moisture C Soil)= 81





HEC-HMS

**Project : Dorado Oaks**  
Basin Model : Dorado Oaks Dev  
Sep 28 13:20:09 PDT 2018



Project: Dorado Oaks Simulation Run: DO Dev 100yr

Start of Run: 01Jan2007, 00:00 Basin Model: Dorado Oaks Dev  
 End of Run: 02Jan2007, 00:00 Meteorologic Model: 100 YR-24IN  
 Compute Time: 28Sep2018, 13:24:12 Control Specifications: 1 DAY

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (AC-FT) |
|--------------------|----------------------------------|----------------------|------------------|----------------|
| OS03               | 0.2817                           | 256.7                | 01Jan2007, 12:28 | 77.0           |
| OS01               | 0.169                            | 148.7                | 01Jan2007, 12:30 | 46.1           |
| OS02               | 0.07                             | 71.1                 | 01Jan2007, 12:20 | 17.6           |
| OS04               | 0.0244                           | 54.2                 | 01Jan2007, 12:04 | 6.9            |
| OS05               | 0.0244                           | 35.1                 | 01Jan2007, 12:10 | 6.7            |
| OS06               | 0.023                            | 31.9                 | 01Jan2007, 12:11 | 6.3            |
| BS01               | 0.0199                           | 28.7                 | 01Jan2007, 12:14 | 7.0            |
| DB01               | 0.0199                           | 10.3                 | 01Jan2007, 12:43 | 6.8            |
| SW01               | 0.0142                           | 21.2                 | 01Jan2007, 12:14 | 5.1            |
| SW14               | 0.0044                           | 5.2                  | 01Jan2007, 12:15 | 1.1            |
| SW03               | 0.0026                           | 4.6                  | 01Jan2007, 12:09 | 0.9            |
| SW04               | 0.0019                           | 3.4                  | 01Jan2007, 12:09 | 0.7            |
| SW05               | 0.0016                           | 2.9                  | 01Jan2007, 12:09 | 0.6            |
| SW02               | 0.0012                           | 2.1                  | 01Jan2007, 12:09 | 0.4            |
| OS09               | 0.0012                           | 2.5                  | 01Jan2007, 12:04 | 0.3            |
| CP1                | 0.6395                           | 546.2                | 01Jan2007, 12:24 | 176.5          |
| OS15               | 0.0692                           | 92.9                 | 01Jan2007, 12:11 | 17.5           |
| BS02               | 0.0138                           | 22.4                 | 01Jan2007, 12:10 | 4.5            |
| BS03               | 0.0023                           | 4.2                  | 01Jan2007, 12:09 | 0.8            |
| DB02               | 0.0161                           | 6.0                  | 01Jan2007, 12:54 | 4.8            |
| SW12               | 0.0145                           | 22.8                 | 01Jan2007, 12:11 | 4.7            |
| SW10               | 0.0105                           | 15.1                 | 01Jan2007, 12:13 | 3.4            |
| OS12               | 0.0032                           | 4.2                  | 01Jan2007, 12:12 | 0.8            |
| SW11               | 0.0022                           | 5.3                  | 01Jan2007, 12:05 | 0.8            |
| CP4                | 0.1157                           | 141.9                | 01Jan2007, 12:11 | 32.1           |
| SW13               | 0.0111                           | 15.8                 | 01Jan2007, 12:14 | 3.6            |
| OS14               | 0.0079                           | 15.2                 | 01Jan2007, 12:05 | 2.0            |

| Hydrologic Element | Drainage Area (MI <sup>2</sup> ) | Peak Discharge (CFS) | Time of Peak     | Volume (AC-FT) |
|--------------------|----------------------------------|----------------------|------------------|----------------|
| CP3                | 0.0190                           | 26.0                 | 01Jan2007, 12:06 | 5.6            |
| SW07               | 0.006                            | 9.5                  | 01Jan2007, 12:11 | 2.0            |
| OS07               | 0.0038                           | 7.0                  | 01Jan2007, 12:06 | 1.1            |
| SW06               | 0.0032                           | 5.6                  | 01Jan2007, 12:09 | 1.1            |
| CP6                | 0.0130                           | 20.7                 | 01Jan2007, 12:08 | 4.1            |
| OS10               | 0.0075                           | 15.4                 | 01Jan2007, 12:04 | 1.9            |
| SW09               | 0.0025                           | 4.5                  | 01Jan2007, 12:09 | 0.9            |
| SW08               | 0.0023                           | 4.1                  | 01Jan2007, 12:09 | 0.8            |
| CP2                | 0.0123                           | 21.9                 | 01Jan2007, 12:05 | 3.6            |
| OS13               | 0.008                            | 17.2                 | 01Jan2007, 12:04 | 2.0            |
| OS08               | 0.0014                           | 2.1                  | 01Jan2007, 12:10 | 0.4            |
| OS11               | 0.0011                           | 2.6                  | 01Jan2007, 12:03 | 0.3            |
| CP5                | 0.0105                           | 20.9                 | 01Jan2007, 12:03 | 2.7            |

# Appendix D

Project # 27082.00

Dorado Oaks

Date: 09-25-2018

Storm Water Quality Calculations

| Swale # | Design    | Runoff      | Tributary | Design | Swale        | Side  |        |       |       | Depth of          | Design Slope | Design Flow | Contact Time | Design Length |
|---------|-----------|-------------|-----------|--------|--------------|-------|--------|-------|-------|-------------------|--------------|-------------|--------------|---------------|
|         | Intensity | Coefficient | Area      | Flow   | Bottom Width | Slope | A      | A/P   | Q     | flow <sup>1</sup> | (1%)         | Velocity    |              |               |
|         | in/hr     |             | ac.       | cfs    | ft           | ft/ft |        |       |       | in                | ft/ft        | ft/sec      | min          | ft            |
| SW1     | 0.20      | 0.60        | 9.1       | 1.089  | 5.0          | 3     | 3.2500 | 0.541 | 1.310 | 6.0               | 0.010        | 0.3         | 10.0         | 201           |
| SW2     | 0.20      | 0.60        | 0.8       | 0.095  | 2.0          | 3     | 0.5200 | 0.294 | 0.114 | 2.4               | 0.010        | 0.2         | 10.0         | 110           |
| SW3     | 0.20      | 0.60        | 1.6       | 0.197  | 2.0          | 3     | 0.8700 | 0.368 | 0.239 | 3.6               | 0.010        | 0.2         | 10.0         | 136           |
| SW4     | 0.20      | 0.60        | 1.2       | 0.149  | 2.0          | 3     | 0.7228 | 0.340 | 0.183 | 3.1               | 0.010        | 0.2         | 10.0         | 124           |
| SW5     | 0.20      | 0.60        | 1.0       | 0.122  | 2.0          | 3     | 0.6187 | 0.318 | 0.146 | 2.8               | 0.010        | 0.2         | 10.0         | 118           |
| SW6     | 0.20      | 0.60        | 2.0       | 0.243  | 2.0          | 3     | 1.0268 | 0.394 | 0.301 | 4.1               | 0.010        | 0.2         | 10.0         | 142           |
| SW7     | 0.20      | 0.60        | 3.8       | 0.460  | 2.0          | 3     | 1.6027 | 0.470 | 0.561 | 5.6               | 0.010        | 0.3         | 10.0         | 172           |
| SW8     | 0.20      | 0.60        | 1.5       | 0.180  | 2.0          | 3     | 0.8323 | 0.361 | 0.224 | 3.5               | 0.010        | 0.2         | 10.0         | 130           |
| SW9     | 0.20      | 0.60        | 1.6       | 0.190  | 2.0          | 3     | 0.8323 | 0.361 | 0.224 | 3.5               | 0.010        | 0.2         | 10.0         | 137           |
| SW10    | 0.20      | 0.60        | 6.7       | 0.806  | 5.0          | 3     | 2.7047 | 0.497 | 1.001 | 5.2               | 0.010        | 0.3         | 10.0         | 179           |
| SW11    | 0.20      | 0.60        | 1.4       | 0.167  | 2.0          | 3     | 0.7587 | 0.347 | 0.196 | 3.2               | 0.010        | 0.2         | 10.0         | 132           |
| SW12    | 0.20      | 0.60        | 9.3       | 1.110  | 5.0          | 3     | 3.3303 | 0.547 | 1.358 | 6.1               | 0.010        | 0.3         | 10.0         | 200           |
| SW13    | 0.20      | 0.60        | 7.1       | 0.852  | 5.0          | 3     | 2.7808 | 0.504 | 1.043 | 5.3               | 0.010        | 0.3         | 10.0         | 184           |

**DORADO OAKS TENTATIVE SUBDIVISION MAP  
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)  
(STATE CLEARINGHOUSE #2019071041)**

**APPENDIX H  
TRANSPORTATION**

## TECHNICAL MEMORANDUM - DRAFT

**Date:** April 19, 2021

**To:** Mike Foote – Stonehenge Springs, LLC

**From:** David B. Robinson – Fehr & Peers

**Subject:** Dorado Oaks VMT Analysis

RS20-3992

---

This memorandum presents vehicle miles traveled (VMT) analysis of the proposed Dorado Oaks Tentative Subdivision Map Project in El Dorado County.

With the implementation of Senate Bill (SB) 743, local agencies such as El Dorado County may no longer rely on vehicular delay or capacity-based analyses for California Environmental Quality Act (CEQA) impact determination. Instead, agencies must analyze transportation impacts utilizing VMT, a measure of the total distance traveled by vehicles for trips beginning or ending in the County on a typical weekday. This memorandum covers the following topics:

- SB 743
- VMT Thresholds of Significance
- VMT Estimation Methodology
- Project Summary
- VMT for Dorado Oaks Tentative Subdivision Map Project

### **SB 743**

Passed in 2013, SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers, to measuring the impact of driving. The change is being made by replacing LOS with vehicle miles of travel (VMT). This shift in transportation impact focus is intended to better align transportation impact analysis and mitigation outcomes with the State's goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through more active transportation. Level of service or other delay metrics may still be used to evaluate the impact of projects on drivers as part of land use entitlement review and impact fee programs.

In January 2019, the Natural Resources Agency finalized updates to the CEQA Guidelines including the incorporation of SB 743 modifications. The Guidelines' changes were approved by the Office of

Administrative Law and are now in effect. Specific to SB 743, Section 15064.3(c) states, “A lead agency may elect to be governed by the provisions of this section immediately. The provisions apply statewide as of July 1, 2020.

To help aid lead agencies with SB 743 implementation, the Governor’s Office of Planning and Research (OPR) produced the *Technical Advisory on Evaluating Transportation Impacts in CEQA*<sup>1</sup> (December 2018) that provides guidance about the variety of implementation questions they face with respect to shifting to a VMT metric. Key guidance from this document includes:

- VMT is the most appropriate metric to evaluate a project’s transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT, but ultimately defers to local agencies to determine the appropriate tools.
- OPR recommends measuring VMT for residential and office projects on a “per rate” basis.
- OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold. In other words, an office project that generates VMT per employee that is more than 85 percent of the regional VMT per employee could result in a significant impact. OPR notes that this threshold is supported by evidence that connects this level of reduction to the State’s emissions goals.
- OPR recommends that where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact. If the project leads to a net overall increase in VMT, then the thresholds described above should apply.
- Lead agencies have the discretion to set or apply their own significance thresholds.

### ***VMT Thresholds of Significance***

In 2019, the El Dorado County Transportation Commission completed the *El Dorado County and City of Placerville SB 743 Implementation Plan*<sup>2</sup> (July 19, 2019) to support El Dorado County and the City of Placerville with implementation of SB 743, including the selection of VMT analysis methodology, setting thresholds of significance, and potential mitigation.

---

<sup>1</sup> Governor’s Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018. [https://opr.ca.gov/docs/20190122-743\\_Technical\\_Advisory.pdf](https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf)

<sup>2</sup> El Dorado County Transportation Commission. *El Dorado County and City of Placerville SB 743 Implementation Plan*. July 19, 2019. <https://www.edcgov.us/Government/dot/Documents/Transportation%20Planning/EDCTC%20SB743%20Implementation%20Plan.pdf>



With Resolution 141-2020<sup>3</sup> (October 6, 2020), the Board of Supervisors of the County of El Dorado adopted VMT thresholds of significance for purposes of analyzing transportation impacts under CEQA.

The County's VMT thresholds consider the VMT performance of residential and office components of a project separately, using the efficiency metrics of VMT per capita and VMT per employee, respectively. For retail components of a project, the county-wide VMT effect is analyzed. The El Dorado County VMT thresholds of significance are summarized below for each of these components:

- Residential – 15% below baseline unincorporated countywide VMT per Capita
- Commercial Office – 15% below baseline unincorporated countywide VMT per Employee
- Commercial Retail – No net increase in VMT

### ***VMT Estimation Methodology***

Consistent with Resolution 141-2020, VMT estimation was conducted using the El Dorado County Travel Demand Forecasting Model (EDCTDM). The VMT estimation process generates estimates in a manner that is consistent with OPRs Technical Advisory and the selected VMT significance thresholds outlined above.

The following section from the Technical Advisory suggests that lead agencies should use VMT estimation methodologies that account for the “full extent of vehicle travel”.

**Considerations for All Projects.** Lead agencies should not truncate any VMT analysis because of jurisdictional or other boundaries, for example, by failing to count the portion of a trip that falls outside the jurisdiction or by discounting the VMT from a trip that crosses a jurisdictional boundary. CEQA requires environmental analyses to reflect a “good faith effort at full disclosure.” (CEQA Guidelines, § 15151.) Thus, where methodologies exist that can estimate the full extent of vehicle travel from a project, the lead agency should apply them to do so. Where those VMT effects will grow over time, analyses should consider both a project’s short-term and long-term effects on VMT.

To provide a full accounting of vehicle travel, the EDCTDM provides VMT estimates that include the VMT from intrazonal vehicle trips and trip length adjustments for the trips that enter or exit the area covered by the EDCTDM.

### Intrazonal Trips and Trip Lengths

The VMT estimation process includes intrazonal trips in its estimates. Intrazonal trips are trips that have their origin and destination within the same traffic analysis zone (TAZ). Because these trips do not leave a TAZ, they are not assigned to the EDCTDM’s roadway network. Consequently, intrazonal trips cannot be

---

<sup>3</sup> Board of Supervisors of the County of El Dorado Resolution 141-2020.  
<https://www.edcgov.us/Government/dot/Documents/Transportation%20Planning/Executed%20Resolution%20141-2020.pdf>

directly derived from the EDCTDM's network and must be estimated to provide a more complete VMT analysis. The intrazonal trip lengths are estimated by calculating half of the shortest travel distance between a given TAZ and all the other TAZs, using the EDCTDM's midday assignment. The EDCTDM uses the following four assignment periods to develop a 24-hour travel assignment:

- AM3VS.NET – AM 3-Hour Assignment
- MDVS.NET – Midday 5-Hour Assignment
- P3V.NET – PM 3-Hour Assignment
- EVV.NET – Evening 13-Hour Assignment

The different assignment periods are used to account for the affect that congestion has on accessibility (i.e., the ability to travel between two locations). It typically takes longer to travel the same distance during peak periods than it does during other times of the day. The midday 5-hour assignment period is used to calculate intrazonal travel because there is generally less traffic and less congestion (i.e., compared to the AM or PM peak periods) and is more representative of average daily conditions.

#### Gateway Trip Length Adjustments

The EDCTDM includes a buffer area that extends along Highway 50 from El Dorado County into eastern Sacramento County, including the City of Folsom and City of Rancho Cordova. **Figure 1** shows the model area, including the TAZs that represent El Dorado County (purple), the buffer area (yellow), and the state highway system. The buffer area allows for more detailed modeling of travel interaction between El Dorado County and eastern Sacramento County. However, even with the buffer area, adjustments to the length of trips passing through the EDCTDM's gateway locations are necessary to account for the full length of trips throughout California.

**Table 1** summarizes the average trip lengths for trips entering (XI) and exiting (IX) the EDCTDM developed using the California Statewide Travel Demand Model (CSTDm). Although not as detailed as the EDCTDM, the CSTDm can summarize the general patterns of trips made by El Dorado County residents and employees entering and leaving the County throughout California. The CSTDm scale makes it a useful tool to generate trip length estimates for trips entering or leaving the EDCTDM coverage area.

Because of the sample size limitations with the California Household Travel Survey (CHTS) data (i.e., only 163 recorded trips), trip length adjustments from the CSTDm are used. The average additional travel distance from the CSTDm shown in **Table 1** indicate the additional lengths added to the trips that pass through the EDCTDM's gateway locations.

**Table 1: Average Trip Length Adjustments for Each Gateway Location**

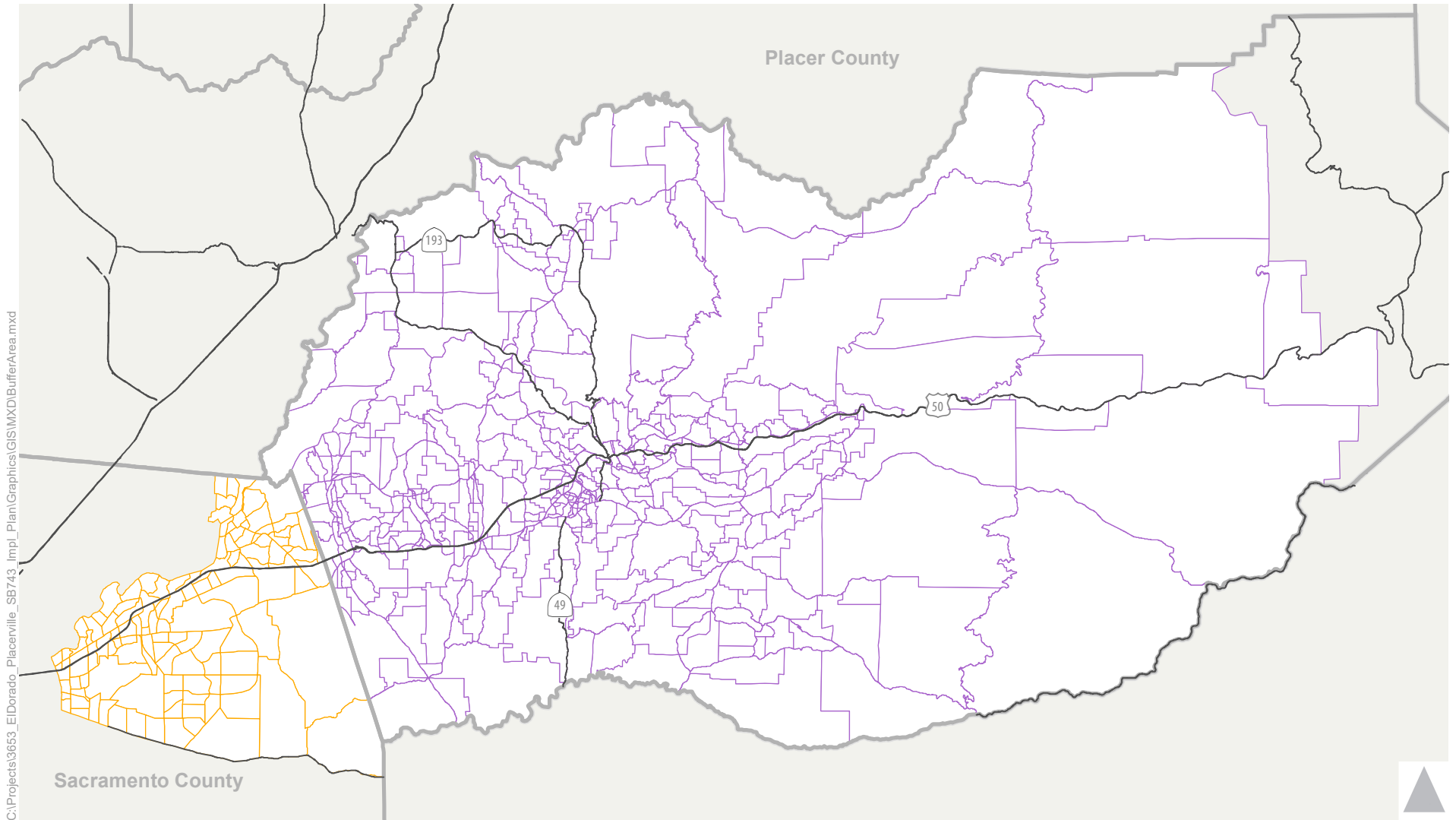
| Gateway Location                                      | Direction | Gateway Node ID | Average Additional Travel Distance (miles) |                                 |
|---|-----------|-----------------|--|---------------------------------|
|   |           |                 | Internal to External (IX) Trips            | External to Internal (XI) Trips |
| US 50   | West      | 650             | 12.41                                      | 13.08                           |
| Dillard Road  | South     | 651             | 4.11                                       | 3.96                            |
| Sloughhouse Road                                      | South     | 652             | 0.00                                       | 0.00                            |
| Grant Line Rd/Sunrise Boulevard                       | South     | 653             | 31.33                                      | 20.39                           |
| Excelsior Road  | South     | 654             | 11.07                                      | 10.38                           |
| Bradshaw Road   | South     | 655             | 11.32                                      | 8.80                            |
| Mayhew Road   | South     | 656             | 0.00                                       | 0.00                            |
| Jackson Road (SR 16)                                  | West      | 657             | 6.91                                       | 6.40                            |
| Local Access between Bradshaw Road and Excelsior Road | South     | 658             | 0.00                                       | 0.00                            |
| Eagles Nest Road                                      | South     | 659             | 0.00                                       | 0.00                            |
| Folsom Boulevard                                      | West      | 660             | 7.73                                       | 7.19                            |
| Kiefer Boulevard                                      | West      | 661             | 8.88                                       | 8.54                            |
| Sunrise Boulevard                                     | North     | 662             | 5.47                                       | 6.14                            |
| Hazel Avenue  | North     | 663             | 8.16                                       | 5.41                            |
| Folsom Auburn Road                                    | North     | 664             | 10.17                                      | 12.66                           |
| Greenback Lane  | West      | 665             | 5.43                                       | 5.17                            |
| Oak Avenue  | West      | 666             | 6.97                                       | 7.44                            |
| SR 49   | South     | 667             | 0.00                                       | 0.00                            |
| Jackson Road/Latrobe Road/SR 49/Omo Ranch Road        | South     | 668             | 15.96                                      | 14.21                           |
| Jackson Road  | South     | 669             | 0.00                                       | 0.00                            |
| Latrobe Road  | South     | 670             | 0.00                                       | 0.00                            |
| SR 49   | North     | 671             | 18.61                                      | 16.28                           |
| SR 88   | East      | 672             | 0.00                                       | 0.00                            |
| N. South Rd   | South     | 673             | 3.73                                       | 3.82                            |
| US 50   | East      | 674             | 19.21                                      | 18.38                           |

Notes:

Internal to External (IX) trips are trips that begin inside the El Dorado County model area and end outside.

External to Internal (XI) trips are trips that begin outside the El Dorado County model area and end inside.

Source: California Statewide Travel Demand Model



C:\Projects\3653\_ElDorado\_Placerville\_SB743\_impl\_Plan\Graphics\GISMXD\BufferArea.mxd

- Traffic Analysis Zones (TAZs)
- TAZs within the County
  - Buffer Area
  - Regional Centerlines
  - SACOG Counties



Figure 1  
El Dorado County Model (2018)  
Traffic Analysis Zones within El Dorado County and the Buffer Area

## Network Refinements

The EDCTDM is a countywide model developed and maintained by the County for traffic analysis related to the General Plan and Traffic Impact Fee Program. Consistent with these applications, the model includes major transportation facilities, including County arterials like El Dorado Hills Boulevard and State facilities like US 50, and a TAZ system that is at a corresponding level of detail. The EDCTDM does not include local and collector roadways. Therefore, the EDCTDM may require refinement for different applications.

The 2017 California Regional Transportation Plan Guidelines (CTC, January 2017) provides guidance on the application of travel demand models. Specifically, that travel demand models should be at an appropriate scale relative to the analysis being conducted. Consistent with this guidance, additional roadway network and TAZ detail was added in El Dorado Hills north of US 50, south of Green Valley Road, east of Sophia Parkway, and west of El Dorado Hills Boulevard to better reflect actual travel time and distance between El Dorado Hills and the City of Folsom. **Figure 2** compares the traffic analysis zone and roadway network detail with and without modification.

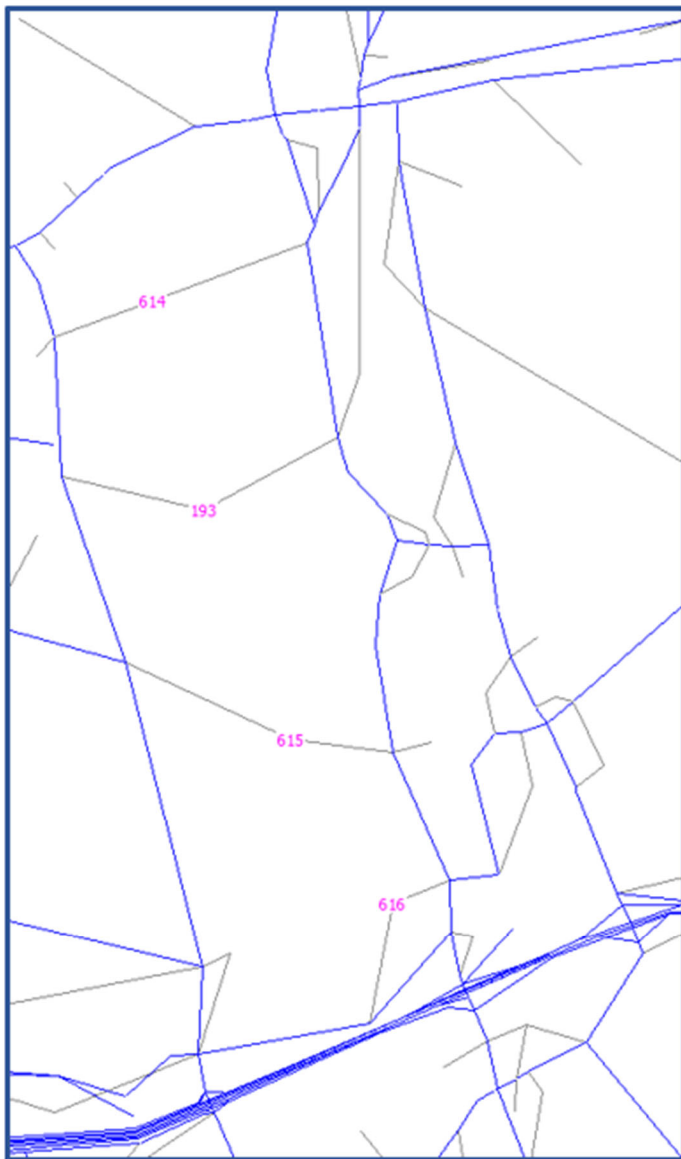
Without modification, the EDCTDM uses 4 TAZs to represent most of the land use in this area with local roadway access modeled using special model links, referred to as TAZ centroid connectors. TAZ centroid connectors provide access for the local development but not for other trips on the network. With this roadway network coding trip lengths are shorter for the land uses represented by the 4 TAZs.

The modified network increased the TAZ detail from 4 to 22 and added roadway links, instead of TAZ centroid connectors, for local access between El Dorado Hills and the City of Folsom in this area. The following public roadway connections were added between El Dorado Hills Boulevard and Sophia Parkway/Empire Ranch Road:

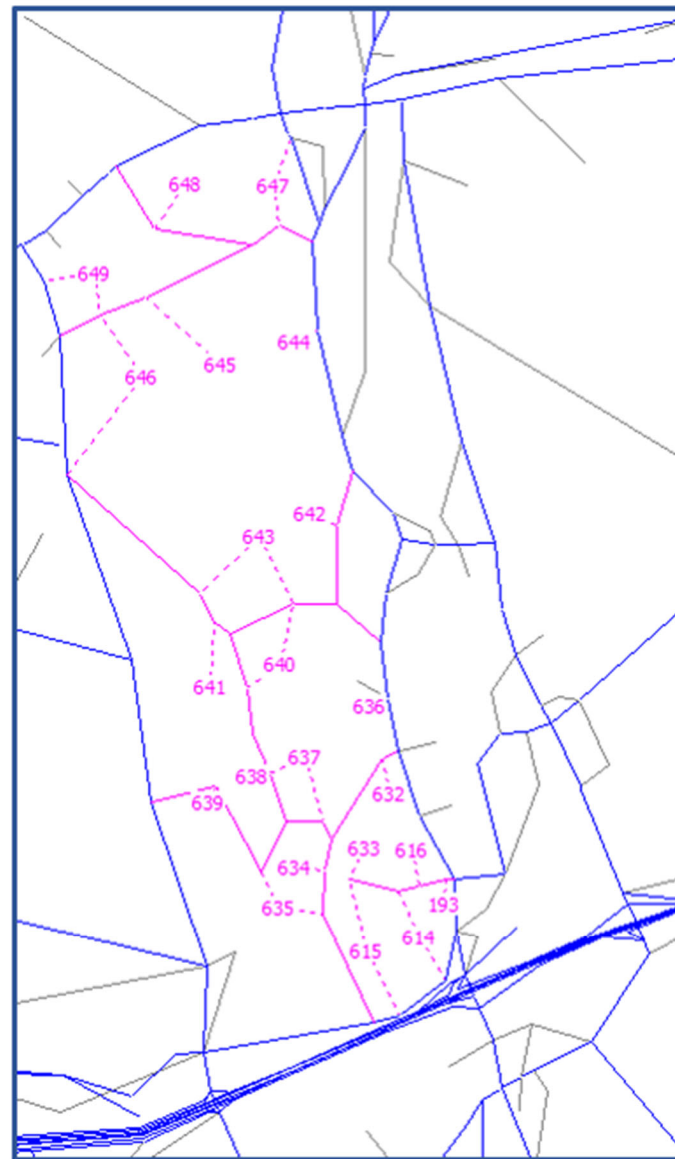
- North Connection: Brittany Way – Suffolk Way – Elmores Way
- North Central Connection: Olson Lane – Gillette Drive – Ridgeview Drive – Muse Drive – Mossridge Way – Powers Drive – Julie Ann Way – Beatty Drive – Alexandra Drive
- South Central Connection: Wilson Boulevard –Ridgeview Drive – Powers Drive – Montridge Way – Crestline Circle – Via Treviso – Via Barlogio – Hildebrand Circle – Woodhead Street
- South Connection: Wilson Boulevard (El Dorado Hills Boulevard to Saratoga Way)

Figure 2 – EDCTDM Model Network Refinements

**Without Modification**



**With Modification**



**Table 2** compares the estimated travel time from the EDCTDM after modification to field measured travel times. As shown, the model's estimated travel time is consistent with and comparable to field measurements. Therefore, the model is appropriate for application and is more representative of actual travel times and distance than the EDCTDM prior to modification since the model did not include these connections.

| <b>Table 2: Travel Time Comparison (Model Estimate vs Field Measurement)</b> |                              |                          |                                   |
|--|------------------------------|--------------------------|-----------------------------------|
| <b>Added Roadway Connection</b>  | <b>Travel Time (minutes)</b> |                          |                                   |
|  | <b>Model Estimate</b>        | <b>Field Measurement</b> | <b>Difference (Model – Field)</b> |
| North  | 3.3                          | 3.0                      | +0.3                              |
| North Central  | 5.2                          | 5.1                      | +0.1                              |
| South Central  | 4.4                          | 4.7                      | -0.3                              |
| South  | 2.5                          | 2.7                      | -0.2                              |

The TAZ and roadway network modifications shown in **Figure 2** were made to both the Base Year (2018) and Cumulative Year (2040) EDCTDMs. The modified models were used for the analysis of the proposed project to maintain analysis consistency.

**Table 3** compares the VMT efficiency metrics for residential and commercial office land uses in unincorporated El Dorado County with and without the roadway network refinements outlined above and on **Figure 2**. As shown, the VMT efficiency metrics for both residential and commercial office land use increased with the network refinement. The direction and magnitude of the change is reasonable and in the correct direction relative to the network refinements made.

| <b>Table 3: VMT Efficiency Metrics with Network Refinements</b> |   |                         |                   |   |
|---|---|-------------------------|-------------------|---|
| <b>Land Use</b>   | <b>VMT Efficiency Metrics (Unincorporated El Dorado County)</b> |                         |                   | <b>VMT Threshold (With Refinements)<sup>1</sup></b> |
|   | <b>Without Refinements</b>                                      | <b>With Refinements</b> | <b>Difference</b> |   |
| 2018  |   |                         |                   |   |
| Residential   | 22.5  | 22.7                    | +0.2              | 19.3  |
| Commercial Office   | 12.8  | 13.0                    | +0.2              | 11.1  |
| 2040  |   |                         |                   |   |
| Residential   | 16.9  | 17.1                    | +0.2              | 14.5  |
| Commercial Office   | 11.7  | 12.0                    | +0.3              | 10.2  |

Notes:

<sup>1</sup>85% of Unincorporated El Dorado County VMT per Capita (Residential) and VMT per Employee (Commercial Office)

### Study Area Network Refinements

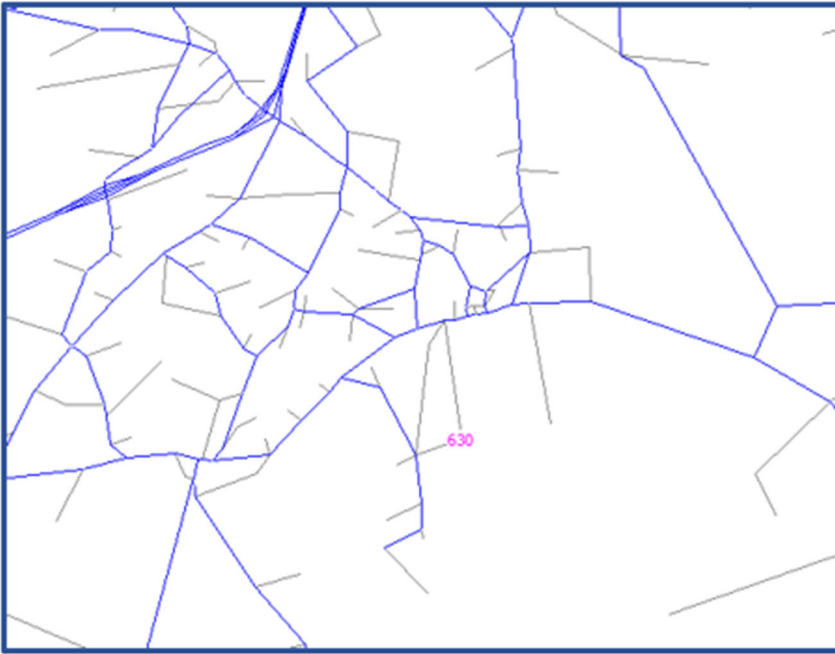
In addition to the model-wide network edits discussed above, the study area required refinement of the TAZ system to better reflect the project land use and geography. In the study area, the EDCTDM did not include a TAZ that was a good representation of the proposed project area. One new TAZ was added in the project area. **Figure 3** shows the study area network with and without the network refinements.



Figure 3 – EDCTDM Study Area Network Refinements

Without Modification

With Modification



The following steps outline the method we used to forecast VMT under existing and cumulative conditions:

- Existing Conditions (2018) – For existing conditions (i.e., baseline conditions), the base year model land use and transportation network were used to estimate baseline (2018) average VMT per capita and average VMT per employee for unincorporated El Dorado County.

For existing plus project conditions, the project's land use was added to the model, increasing the base year population and employment. Project-generated average VMT per capita.

- Cumulative Conditions (2040) – For cumulative conditions, the future year model was used to estimate cumulative (2040) average VMT per capita.

For cumulative plus project conditions, the project's land use was added to the model, increasing the cumulative year population and employment. Project-generated average VMT per capita was calculated.

### VMT Calculation for Each TAZ

VMT is estimated using a three-step process. In the first step, travel distance between each pair of TAZs for using the loaded networks for the four model time periods (AM Peak Period, Midday Period, PM Peak Period, and Evening Period). Using the loaded network accounts for any increases in trip distance that may result from traffic congestion. In this process, the additional trip lengths associated with the model gateways are added to the trip length estimates. The distance of intrazonal trips is estimated as outlined above.

The second step of the process calculates the VMT for travel between each TAZ pair. The number of vehicle trips modeled between each TAZ pair is multiplied by the trip lengths to estimate the VMT associated with the travel between each TAZ pair for each time period. The VMT from the intrazonal trips is also included in the VMT estimates.

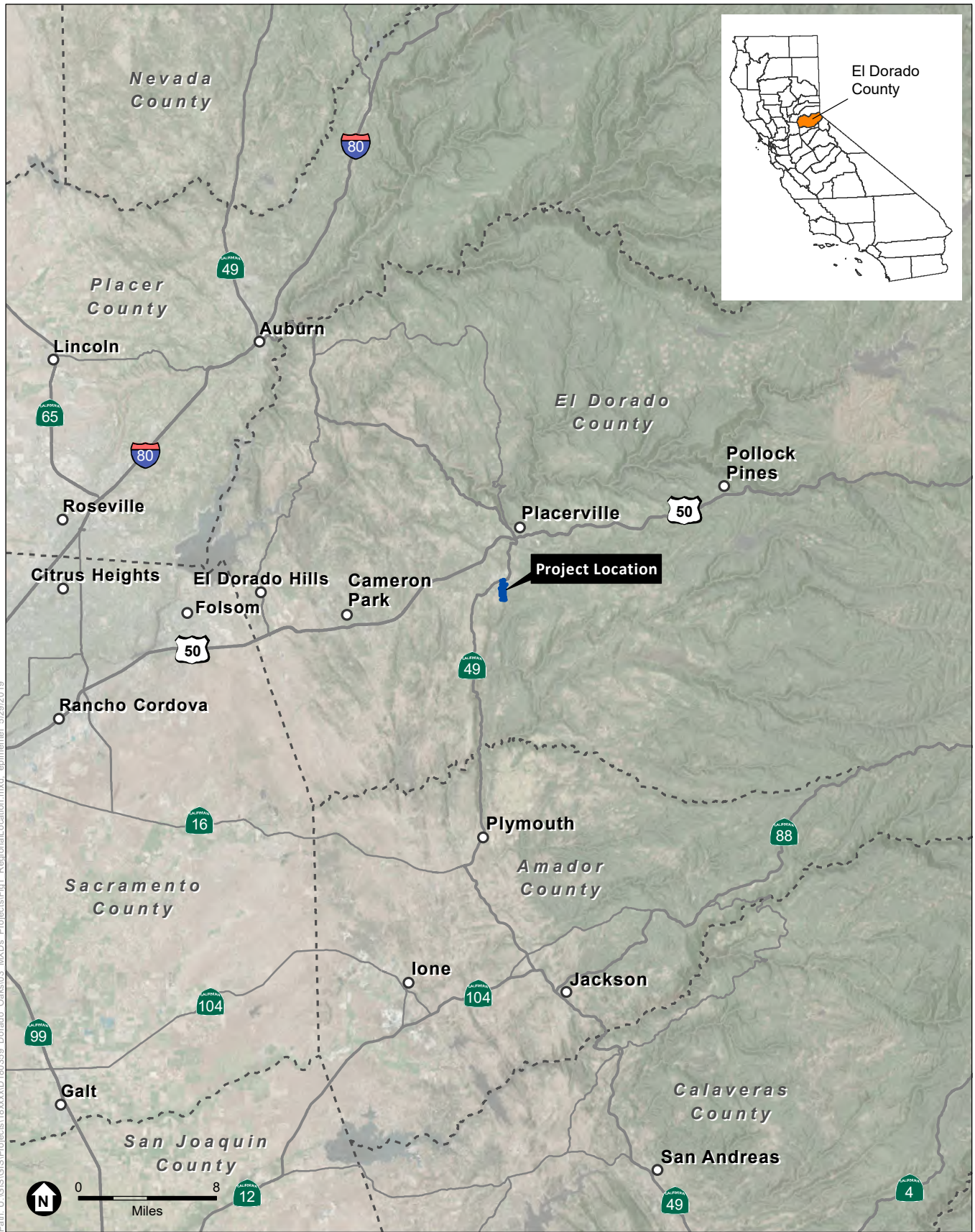
The third step estimates the home-based and home-based work VMT. These estimates are calculated by determining the percentage of vehicle productions and attractions by trip purpose and direction (departures and returns). These percentages are then applied to the total VMT estimates, to determine the VMT by trip purpose and direction. The home-based VMT summarizes VMT by the origin TAZ. The home-based work VMT summarizes VMT by the destination TAZ. The use of home-based and home-based work VMT allows independent analysis of residential and commercial project components.

### ***Project Summary***

The proposed Dorado Oaks Tentative Subdivision Map Project is in the unincorporated Diamond Springs Community Region in El Dorado County. **Figure 4** shows the location of the project. As proposed, the

project includes single family and multi-family residential land use. **Table 4** summarizes the project’s trip generating land uses.

| <b>Table 4: Dorado Oaks Tentative Subdivision Map Project</b> |               |           |                 |
|---|---------------|-----------|-----------------|
| <b>Land Use</b>   |               |           | <b>Quantity</b> |
| <b>Category</b>   | <b>Units</b>  |           |                 |
| Residential   | Single Family | Dwellings | 157             |
|   | Multi-Family  |           | 225             |
|   | Total         |           | 382             |



SOURCE: Esri, 2018; ESA, 2019

Dorado Oaks Tentative Subdivision Map Project

**Figure 4**  
Project Location

**VMT for Dorado Oaks Tentative Subdivision Map Project**

**Table 5** summarizes the VMT analysis for Dorado Oaks. The VMT calculations for all scenarios are included in **Attachment A**.

| <b>Table 5: Dorado Oaks Tentative Subdivision's VMT</b>                                       |                                 |           |                  |                |
|---|---------------------------------|-----------|------------------|----------------|
| Scenario  | Analysis Geography              | VMT       | Total Population | VMT per Capita |
| 2018 Baseline   | Unincorporated El Dorado County | 3,088,005 | 136,108          | 22.7           |
| 2018 Baseline Threshold (85% of Unincorporated El Dorado County Total Average VMT per Capita) |                                 |           |                  | 19.3           |
| 2018 Baseline Plus Project  | Project Area                    | 8,544     | 847              | 10.1           |
| <b>VMT Threshold Exceeded?</b>  |                                 |           |                  | <b>No</b>      |
| 2040 Baseline   | Unincorporated El Dorado County | 3,102,953 | 181,914          | 17.1           |
| 2040 Baseline Threshold (85% of Unincorporated El Dorado County Total Average VMT per Capita) |                                 |           |                  | 14.5           |
| 2040 Baseline Plus Project  | Project Area                    | 5,981     | 847              | 7.1            |
| <b>VMT Threshold Exceeded?</b>  |                                 |           |                  | <b>No</b>      |

As shown, the project's VMT per Capita would not exceed the VMT threshold under existing or cumulative conditions. Therefore, the project's impact on VMT would be less than significant.

## Attachment A

---

## 2018 No Project

---

**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| Jurisdiction                    | VMT Estimates |                   |  | VMT Efficiency Metrics           |                           |                                  | Population Details |                  |                  |                          |                       |
|---------------------------------|---------------|-------------------|--|----------------------------------|---------------------------|----------------------------------|--------------------|------------------|------------------|--------------------------|-----------------------|
|                                 | Total OD VMT  | Home-based PA VMT | Home-based Work PA VMT                             | Total VMT per Service Population | Home-based VMT per Capita | Home-based Work VMT per Employee | Total Households   | Total Population | Total Employment | Total Service Population | Persons Per Household |
| City of Placerville             | 297,880       | 69,463            | 90,185   | 20.9                             | 10.6                      | 11.8                             | 2,914              | 6,581            | 7,639            | 14,220                   | 2.26                  |
| Unincorporated El Dorado County | 3,697,567     | 3,088,005         | 428,483  | 21.9                             | 22.7                      | 13.0                             | 55,055             | 136,108          | 33,076           | 169,184                  | 2.47                  |
|                                 |               |                   | Threshold (85% of Unincorporated El Dorado County) |                                  | 19.3                      | 11.0                             |                    |                  |                  |                          |                       |



**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ   | Community Region                                 | In the City of Placerville (1=Yes, 0=N | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|-------|--|--|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 1.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,166        | 2,626             | 327                    | 46         | 75         | 16         | 91                 | 46.0                                |
| 2.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 23,118       | 32,047            | 463                    | 525        | 1,185      | 34         | 1,219              | 19.0                                |
| 3.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,949        | 3,745             | 42                     | 34         | 88         | 0          | 88                 | 33.6                                |
| 4.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,536        | 1,540             | 52                     | 16         | 34         | 2          | 36                 | 43.0                                |
| 5.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,866        | 4,046             | 27                     | 33         | 73         | 0          | 73                 | 39.5                                |
| 6.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 12,336       | 15,861            | 354                    | 270        | 646        | 9          | 655                | 18.8                                |
| 7.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 25,856       | 33,452            | 993                    | 516        | 1,119      | 71         | 1,190              | 21.7                                |
| 8.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,718        | 792               | 751                    | 14         | 36         | 60         | 96                 | 28.3                                |
| 9.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 28,499       | 33,395            | 1,708                  | 482        | 1,240      | 117        | 1,357              | 21.0                                |
| 10.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 11.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 12.00 | Outside of County                                | 0                                      | 39,353       | 30,977            | 1,872                  | 663        | 1,741      | 96         | 1,837              | 21.4                                |
| 13.00 | Outside of County                                | 0                                      | 31,126       | 35,939            | 676                    | 775        | 1,995      | 0          | 1,995              | 15.6                                |
| 14.00 | Outside of County                                | 0                                      | 64,157       | 72,184            | 1,543                  | 1,502      | 4,068      | 32         | 4,100              | 15.6                                |
| 15.00 | Outside of County                                | 0                                      | 497          | 523               | 10                     | 10         | 23         | 0          | 23                 | 22.1                                |
| 16.00 | Outside of County                                | 0                                      | 56,270       | 8,955             | 7,530                  | 149        | 378        | 434        | 812                | 69.3                                |
| 17.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 18.00 | Outside of County                                | 0                                      | 1,564        | 620               | 67                     | 41         | 116        | 0          | 116                | 13.5                                |
| 19.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 20.00 | Outside of County                                | 0                                      | 219          | 18                | 118                    | 1          | 1          | 5          | 6                  | 36.5                                |
| 21.00 | Outside of County                                | 0                                      | 5,220        | 50                | 2,538                  | 1          | 2          | 112        | 114                | 45.8                                |
| 22.00 | Outside of County                                | 0                                      | 2,239        | 269               | 579                    | 2          | 6          | 23         | 29                 | 77.2                                |
| 23.00 | Outside of County                                | 0                                      | 58,930       | 23,741            | 6,314                  | 101        | 273        | 244        | 517                | 114.1                               |
| 24.00 | Outside of County                                | 0                                      | 48           | 30                | 1                      | 1          | 1          | 0          | 1                  | 47.5                                |
| 25.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 26.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 27.00 | Outside of County                                | 0                                      | 1,320        | 266               | 500                    | 2          | 6          | 22         | 28                 | 47.1                                |
| 28.00 | Outside of County                                | 0                                      | 12,524       | 14,738            | 377                    | 123        | 332        | 6          | 338                | 37.0                                |
| 29.00 | Outside of County                                | 0                                      | 7,845        | 9,174             | 242                    | 72         | 192        | 5          | 197                | 39.8                                |
| 30.00 | Outside of County                                | 0                                      | 6,050        | 0                 | 3,192                  | 0          | 0          | 133        | 133                | 45.5                                |
| 31.00 | Outside of County                                | 0                                      | 5,557        | 4,119             | 1,039                  | 44         | 94         | 45         | 139                | 39.9                                |
| 32.00 | Outside of County                                | 0                                      | 24,953       | 6,831             | 622                    | 676        | 1,526      | 0          | 1,526              | 16.3                                |
| 33.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 34.00 | Outside of County                                | 0                                      | 8,755        | 9,498             | 584                    | 75         | 191        | 16         | 207                | 42.3                                |
| 35.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 36.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 37.00 | Outside of County                                | 0                                      | 5,042        | 0                 | 2,670                  | 0          | 0          | 178        | 178                | 28.3                                |
| 38.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 39.00 | Outside of County                                | 0                                      | 24,310       | 22,457            | 3,316                  | 666        | 1,569      | 227        | 1,796              | 13.5                                |
| 40.00 | Outside of County                                | 0                                      | 112,464      | 25,842            | 18,883                 | 916        | 2,079      | 1,839      | 3,918              | 28.7                                |
| 41.00 | Outside of County                                | 0                                      | 30,906       | 26,574            | 3,958                  | 544        | 1,271      | 203        | 1,474              | 21.0                                |
| 42.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 43.00 | Outside of County                                | 0                                      | 53,527       | 63,304            | 1,203                  | 828        | 2,045      | 0          | 2,045              | 26.2                                |
| 44.00 | Outside of County                                | 0                                      | 79,459       | 76,876            | 3,256                  | 1,069      | 2,614      | 95         | 2,709              | 29.3                                |
| 45.00 | Outside of County                                | 0                                      | 101,352      | 24,241            | 14,670                 | 906        | 2,057      | 1,357      | 3,414              | 29.7                                |
| 46.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 47.00 | Outside of County                                | 0                                      | 100,800      | 0                 | 42,751                 | 0          | 0          | 2,398      | 2,398              | 42.0                                |
| 48.00 | Outside of County                                | 0                                      | 71,735       | 71,936            | 3,413                  | 1,203      | 3,068      | 121        | 3,189              | 22.5                                |
| 49.00 | Outside of County                                | 0                                      | 152,679      | 0                 | 78,101                 | 0          | 0          | 4,642      | 4,642              | 32.9                                |
| 50.00 | Outside of County                                | 0                                      | 120,870      | 85,622            | 19,287                 | 1,025      | 2,430      | 826        | 3,256              | 37.1                                |
| 51.00 | Outside of County                                | 0                                      | 127,937      | 69,592            | 18,217                 | 1,768      | 4,253      | 1,237      | 5,490              | 23.3                                |
| 52.00 | Outside of County                                | 0                                      | 45,479       | 25,262            | 4,454                  | 297        | 667        | 240        | 907                | 50.1                                |
| 53.00 | Outside of County                                | 0                                      | 113,884      | 87,730            | 8,465                  | 1,335      | 3,452      | 377        | 3,829              | 29.7                                |
| 54.00 | Outside of County                                | 0                                      | 93,497       | 36,350            | 38,701                 | 476        | 1,153      | 1,827      | 2,980              | 31.4                                |
| 55.00 | Outside of County                                | 0                                      | 82,632       | 38,237            | 12,452                 | 675        | 1,583      | 800        | 2,383              | 34.7                                |
| 56.00 | Outside of County                                | 0                                      | 34,972       | 40,102            | 993                    | 820        | 1,933      | 4          | 1,937              | 18.1                                |
| 57.00 | Outside of County                                | 0                                      | 162,092      | 0                 | 113,336                | 0          | 0          | 7,375      | 7,375              | 22.0                                |
| 58.00 | Outside of County                                | 0                                      | 43,751       | 24,397            | 6,802                  | 465        | 1,160      | 388        | 1,548              | 28.3                                |
| 59.00 | Outside of County                                | 0                                      | 426          | 110               | 173                    | 2          | 4          | 9          | 13                 | 32.7                                |
| 60.00 | Outside of County                                | 0                                      | 205,449      | 17,434            | 103,017                | 238        | 478        | 4,236      | 4,714              | 43.6                                |
| 61.00 | Outside of County                                | 0                                      | 277,015      | 193,125           | 22,414                 | 2,205      | 5,227      | 797        | 6,024              | 46.0                                |
| 62.00 | Outside of County                                | 0                                      | 55,666       | 318               | 26,745                 | 4          | 8          | 1,150      | 1,158              | 48.1                                |

**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ    | Community Region  | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|-------------------|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 63.00  | Outside of County | 0                                       | 114,425      | 18,521            | 51,559                 | 340        | 756        | 3,083      | 3,839              | 29.8                                |
| 64.00  | Outside of County | 0                                       | 79,435       | 60,433            | 11,462                 | 865        | 2,156      | 560        | 2,716              | 29.2                                |
| 65.00  | Outside of County | 0                                       | 10,503       | 11,624            | 218                    | 136        | 338        | 0          | 338                | 31.1                                |
| 66.00  | Outside of County | 0                                       | 62,374       | 51,041            | 4,282                  | 826        | 1,950      | 172        | 2,122              | 29.4                                |
| 67.00  | Outside of County | 0                                       | 10,409       | 0                 | 2,797                  | 0          | 0          | 178        | 178                | 58.5                                |
| 68.00  | Outside of County | 0                                       | 55,078       | 32,867            | 11,777                 | 616        | 1,314      | 679        | 1,993              | 27.6                                |
| 69.00  | Outside of County | 0                                       | 143,872      | 90,934            | 38,058                 | 1,588      | 4,122      | 2,320      | 6,442              | 22.3                                |
| 70.00  | Outside of County | 0                                       | 210,170      | 801               | 126,672                | 0          | 0          | 6,956      | 6,956              | 30.2                                |
| 71.00  | Outside of County | 0                                       | 107,548      | 111,353           | 4,863                  | 1,231      | 3,088      | 121        | 3,209              | 33.5                                |
| 72.00  | Outside of County | 0                                       | 247,277      | 358               | 132,064                | 0          | 0          | 5,133      | 5,133              | 48.2                                |
| 73.00  | Outside of County | 0                                       | 122,122      | 0                 | 80,001                 | 0          | 0          | 5,627      | 5,627              | 21.7                                |
| 74.00  | Outside of County | 0                                       | 176,117      | 21,981            | 81,378                 | 435        | 1,022      | 4,728      | 5,750              | 30.6                                |
| 75.00  | Outside of County | 0                                       | 106,895      | 77,981            | 27,259                 | 1,936      | 4,401      | 1,866      | 6,267              | 17.1                                |
| 76.00  | Outside of County | 0                                       | 42,176       | 23,721            | 5,013                  | 508        | 1,352      | 297        | 1,649              | 25.6                                |
| 77.00  | Outside of County | 0                                       | 160,532      | 79,023            | 34,071                 | 1,155      | 2,810      | 1,659      | 4,469              | 35.9                                |
| 78.00  | Outside of County | 0                                       | 88,858       | 0                 | 23,882                 | 0          | 0          | 1,567      | 1,567              | 56.7                                |
| 79.00  | Outside of County | 0                                       | 971          | 0                 | 0                      | 0          | 0          | 20         | 20                 | 48.6                                |
| 80.00  | Outside of County | 0                                       | 50,636       | 0                 | 23,931                 | 0          | 0          | 1,410      | 1,410              | 35.9                                |
| 81.00  | Outside of County | 0                                       | 160,628      | 0                 | 83,068                 | 0          | 0          | 4,951      | 4,951              | 32.4                                |
| 82.00  | Outside of County | 0                                       | 56,271       | 0                 | 29,838                 | 0          | 0          | 1,787      | 1,787              | 31.5                                |
| 83.00  | Outside of County | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 84.00  | Outside of County | 0                                       | 64,935       | 48,607            | 6,599                  | 1,226      | 2,817      | 405        | 3,222              | 20.2                                |
| 85.00  | Outside of County | 0                                       | 71,715       | 60,548            | 4,739                  | 1,295      | 3,246      | 253        | 3,499              | 20.5                                |
| 86.00  | Outside of County | 0                                       | 111,986      | 74,912            | 11,544                 | 1,968      | 4,487      | 754        | 5,241              | 21.4                                |
| 87.00  | Outside of County | 0                                       | 102,508      | 66,622            | 12,953                 | 2,114      | 4,344      | 800        | 5,144              | 19.9                                |
| 88.00  | Outside of County | 0                                       | 86,778       | 48,055            | 11,980                 | 1,099      | 2,679      | 762        | 3,441              | 25.2                                |
| 89.00  | Outside of County | 0                                       | 11,255       | 0                 | 4,682                  | 0          | 0          | 293        | 293                | 38.4                                |
| 90.00  | Outside of County | 0                                       | 53,226       | 0                 | 10,922                 | 0          | 0          | 592        | 592                | 89.9                                |
| 91.00  | Outside of County | 0                                       | 123,481      | 16,293            | 50,210                 | 383        | 961        | 4,100      | 5,061              | 24.4                                |
| 92.00  | Outside of County | 0                                       | 59,947       | 56,565            | 3,275                  | 1,139      | 2,709      | 141        | 2,850              | 21.0                                |
| 93.00  | Outside of County | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 94.00  | Outside of County | 0                                       | 432          | 480               | 9                      | 6          | 15         | 0          | 15                 | 28.8                                |
| 95.00  | Outside of County | 0                                       | 924          | 0                 | 440                    | 0          | 0          | 27         | 27                 | 34.2                                |
| 96.00  | Outside of County | 0                                       | 343          | 0                 | 174                    | 0          | 0          | 12         | 12                 | 28.6                                |
| 97.00  | Outside of County | 0                                       | 110          | 103               | 2                      | 2          | 4          | 0          | 4                  | 27.5                                |
| 98.00  | Outside of County | 0                                       | 75,981       | 352               | 27,272                 | 10         | 25         | 2,289      | 2,314              | 32.8                                |
| 99.00  | Outside of County | 0                                       | 49,798       | 27,047            | 11,872                 | 791        | 1,944      | 958        | 2,902              | 17.2                                |
| 100.00 | Outside of County | 0                                       | 6,021        | 7,034             | 128                    | 84         | 203        | 0          | 203                | 29.6                                |
| 101.00 | Outside of County | 0                                       | 12,099       | 0                 | 6,018                  | 0          | 0          | 320        | 320                | 37.8                                |
| 102.00 | Outside of County | 0                                       | 6,000        | 5,243             | 996                    | 51         | 153        | 53         | 206                | 29.1                                |
| 103.00 | Outside of County | 0                                       | 58,984       | 68,339            | 1,381                  | 910        | 2,200      | 0          | 2,200              | 26.8                                |
| 104.00 | Outside of County | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 105.00 | Outside of County | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 106.00 | Outside of County | 0                                       | 2,868        | 0                 | 1,439                  | 0          | 0          | 70         | 70                 | 41.0                                |
| 107.00 | Outside of County | 0                                       | 86,625       | 0                 | 45,771                 | 0          | 0          | 3,135      | 3,135              | 27.6                                |
| 108.00 | Outside of County | 0                                       | 437          | 0                 | 202                    | 0          | 0          | 15         | 15                 | 29.1                                |
| 109.00 | Outside of County | 0                                       | 18,922       | 0                 | 4,255                  | 0          | 0          | 238        | 238                | 79.5                                |
| 110.00 | Outside of County | 0                                       | 63,976       | 8,774             | 28,943                 | 205        | 426        | 1,610      | 2,036              | 31.4                                |
| 111.00 | Outside of County | 0                                       | 136,717      | 12,325            | 24,963                 | 350        | 728        | 1,151      | 1,879              | 72.8                                |
| 112.00 | Outside of County | 0                                       | 195,988      | 38,217            | 41,788                 | 747        | 1,946      | 2,117      | 4,063              | 48.2                                |
| 113.00 | Outside of County | 0                                       | 88,904       | 0                 | 47,000                 | 0          | 0          | 4,022      | 4,022              | 22.1                                |
| 114.00 | Outside of County | 0                                       | 40,814       | 30,283            | 7,763                  | 770        | 1,950      | 660        | 2,610              | 15.6                                |
| 115.00 | Outside of County | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 116.00 | Outside of County | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 117.00 | Outside of County | 0                                       | 87,124       | 32,807            | 23,801                 | 401        | 1,031      | 1,492      | 2,523              | 34.5                                |
| 118.00 | Outside of County | 0                                       | 89,463       | 81,373            | 3,775                  | 2,313      | 5,898      | 187        | 6,085              | 14.7                                |
| 119.00 | Outside of County | 0                                       | 171,753      | 7,945             | 75,523                 | 214        | 522        | 6,545      | 7,067              | 24.3                                |
| 120.00 | Outside of County | 0                                       | 203,382      | 0                 | 58,569                 | 0          | 0          | 4,131      | 4,131              | 49.2                                |
| 121.00 | Outside of County | 0                                       | 166,199      | 57,288            | 22,361                 | 1,642      | 4,261      | 1,724      | 5,985              | 27.8                                |
| 122.00 | Outside of County | 0                                       | 67,095       | 20,235            | 12,428                 | 619        | 1,530      | 1,071      | 2,601              | 25.8                                |
| 123.00 | Outside of County | 0                                       | 52,834       | 7,535             | 10,726                 | 200        | 529        | 855        | 1,384              | 38.2                                |
| 124.00 | Outside of County | 0                                       | 80,923       | 55,078            | 5,562                  | 1,240      | 2,628      | 328        | 2,956              | 27.4                                |

**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|--|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 125.00 | Outside of County                                | 0                                      | 59,993       | 10,940            | 9,293                  | 389        | 801        | 781        | 1,582              | 37.9                                |
| 126.00 | Outside of County                                | 0                                      | 15,688       | 4,356             | 1,784                  | 136        | 279        | 129        | 408                | 38.4                                |
| 127.00 | Outside of County                                | 0                                      | 38,513       | 34,433            | 2,025                  | 800        | 1,693      | 117        | 1,810              | 21.3                                |
| 128.00 | Outside of County                                | 0                                      | 85,653       | 40,306            | 11,052                 | 999        | 2,062      | 767        | 2,829              | 30.3                                |
| 129.00 | Outside of County                                | 0                                      | 42,715       | 46,640            | 819                    | 994        | 2,246      | 0          | 2,246              | 19.0                                |
| 130.00 | Outside of County                                | 0                                      | 31,447       | 10,020            | 4,065                  | 369        | 740        | 416        | 1,156              | 27.2                                |
| 131.00 | Outside of County                                | 0                                      | 75,374       | 20,584            | 13,616                 | 607        | 1,234      | 1,278      | 2,512              | 30.0                                |
| 132.00 | Outside of County                                | 0                                      | 33,903       | 20,607            | 3,968                  | 407        | 894        | 260        | 1,154              | 29.4                                |
| 133.00 | Outside of County                                | 0                                      | 132,673      | 63,999            | 14,735                 | 2,087      | 5,211      | 1,475      | 6,686              | 19.8                                |
| 134.00 | Outside of County                                | 0                                      | 70,311       | 32,120            | 18,482                 | 1,075      | 2,460      | 1,492      | 3,952              | 17.8                                |
| 135.00 | Outside of County                                | 0                                      | 43,514       | 0                 | 23,772                 | 0          | 0          | 2,114      | 2,114              | 20.6                                |
| 136.00 | Outside of County                                | 0                                      | 31,862       | 28,679            | 1,647                  | 669        | 1,669      | 82         | 1,751              | 18.2                                |
| 137.00 | Outside of County                                | 0                                      | 138,587      | 104,455           | 9,379                  | 2,349      | 6,735      | 673        | 7,408              | 18.7                                |
| 138.00 | El Dorado Diamond Springs                        | 0                                      | 5,531        | 5,338             | 430                    | 161        | 367        | 25         | 392                | 14.1                                |
| 139.00 | El Dorado Diamond Springs                        | 0                                      | 3,994        | 1,768             | 670                    | 62         | 135        | 55         | 190                | 21.0                                |
| 140.00 | El Dorado Diamond Springs                        | 0                                      | 24,371       | 265               | 5,033                  | 10         | 27         | 383        | 410                | 59.4                                |
| 141.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,082        | 1,974             | 80                     | 21         | 49         | 2          | 51                 | 41.0                                |
| 142.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,364        | 7,976             | 178                    | 157        | 353        | 0          | 353                | 20.9                                |
| 143.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,601        | 3,742             | 133                    | 93         | 209        | 4          | 213                | 16.9                                |
| 144.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,896        | 4,004             | 290                    | 74         | 186        | 19         | 205                | 19.0                                |
| 145.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 802          | 837               | 22                     | 30         | 69         | 0          | 69                 | 11.7                                |
| 146.00 | El Dorado Diamond Springs                        | 0                                      | 3,810        | 1,778             | 632                    | 64         | 145        | 51         | 196                | 19.5                                |
| 147.00 | El Dorado Diamond Springs                        | 0                                      | 4,298        | 4,544             | 135                    | 159        | 359        | 0          | 359                | 12.0                                |
| 148.00 | Outside of County                                | 0                                      | 189,218      | 257,141           | 6,738                  | 2,250      | 5,293      | 137        | 5,430              | 34.8                                |
| 149.00 | Shingle Springs                                  | 0                                      | 6,891        | 1,697             | 1,466                  | 37         | 98         | 112        | 210                | 32.8                                |
| 150.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,722        | 8,487             | 225                    | 109        | 260        | 3          | 263                | 29.4                                |
| 151.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,453        | 2,003             | 20                     | 23         | 67         | 0          | 67                 | 21.6                                |
| 152.00 | Shingle Springs                                  | 0                                      | 9,916        | 6,134             | 1,454                  | 122        | 315        | 99         | 414                | 24.0                                |
| 153.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 6,431        | 6,651             | 217                    | 178        | 388        | 5          | 393                | 16.4                                |
| 154.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,340        | 3,259             | 235                    | 84         | 196        | 16         | 212                | 15.7                                |
| 155.00 | Shingle Springs                                  | 0                                      | 2,686        | 3,144             | 57                     | 62         | 161        | 0          | 161                | 16.6                                |
| 156.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,329        | 2,755             | 39                     | 27         | 67         | 0          | 67                 | 34.6                                |
| 157.00 | El Dorado Hills                                  | 0                                      | 11,314       | 14,582            | 188                    | 274        | 807        | 0          | 807                | 14.0                                |
| 158.00 | Cameron Park                                     | 0                                      | 22,047       | 24,487            | 1,060                  | 598        | 1,373      | 72         | 1,445              | 15.3                                |
| 159.00 | Cameron Park                                     | 0                                      | 12,635       | 16,235            | 239                    | 340        | 878        | 1          | 879                | 14.4                                |
| 160.00 | Shingle Springs                                  | 0                                      | 7,853        | 9,562             | 164                    | 194        | 501        | 0          | 501                | 15.7                                |
| 161.00 | El Dorado Hills                                  | 0                                      | 6,106        | 7,825             | 93                     | 105        | 283        | 0          | 283                | 21.6                                |
| 162.00 | El Dorado Hills                                  | 0                                      | 71,569       | 99,177            | 978                    | 1,503      | 4,414      | 0          | 4,414              | 16.2                                |
| 163.00 | El Dorado Hills                                  | 0                                      | 350          | 364               | 39                     | 7          | 21         | 4          | 25                 | 14.2                                |
| 164.00 | El Dorado Hills                                  | 0                                      | 27,784       | 0                 | 14,365                 | 0          | 0          | 1,232      | 1,232              | 22.6                                |
| 165.00 | El Dorado Hills                                  | 0                                      | 16,363       | 19,623            | 373                    | 373        | 997        | 0          | 997                | 16.4                                |
| 166.00 | Outside of County                                | 0                                      | 41,447       | 42,198            | 1,373                  | 749        | 1,892      | 49         | 1,941              | 21.4                                |
| 167.00 | El Dorado Hills                                  | 0                                      | 50,123       | 52,254            | 2,138                  | 1,297      | 2,904      | 55         | 2,959              | 16.9                                |
| 168.00 | El Dorado Hills                                  | 0                                      | 30,546       | 36,220            | 944                    | 1,125      | 2,519      | 9          | 2,528              | 12.1                                |
| 169.00 | El Dorado Hills                                  | 0                                      | 102,894      | 154               | 21,197                 | 0          | 0          | 1,688      | 1,688              | 61.0                                |
| 170.00 | El Dorado Hills                                  | 0                                      | 27,560       | 0                 | 15,243                 | 0          | 0          | 1,357      | 1,357              | 20.3                                |
| 171.00 | El Dorado Hills                                  | 0                                      | 14,234       | 12,753            | 758                    | 441        | 790        | 20         | 810                | 17.6                                |
| 172.00 | El Dorado Hills                                  | 0                                      | 8,204        | 0                 | 1,963                  | 0          | 0          | 168        | 168                | 48.8                                |
| 173.00 | El Dorado Hills                                  | 0                                      | 29,687       | 0                 | 6,376                  | 0          | 0          | 547        | 547                | 54.3                                |
| 174.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,218        | 1,539             | 249                    | 15         | 37         | 11         | 48                 | 45.9                                |
| 175.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 955          | 876               | 97                     | 11         | 26         | 5          | 31                 | 30.6                                |
| 176.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,048        | 2,324             | 41                     | 29         | 69         | 0          | 69                 | 29.6                                |
| 177.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 827          | 702               | 119                    | 10         | 25         | 7          | 32                 | 25.9                                |
| 178.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,085        | 2,421             | 40                     | 30         | 77         | 0          | 77                 | 27.0                                |
| 179.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 10           | 17                | 0                      | 1          | 3          | 0          | 3                  | 3.7                                 |
| 180.00 | El Dorado Hills                                  | 0                                      | 3,243        | 3,924             | 54                     | 58         | 149        | 0          | 149                | 21.7                                |
| 181.00 | El Dorado Hills                                  | 0                                      | 1,418        | 8                 | 645                    | 1          | 3          | 58         | 61                 | 23.4                                |
| 182.00 | Cameron Park                                     | 0                                      | 51,882       | 68,033            | 795                    | 1,186      | 3,202      | 0          | 3,202              | 16.2                                |
| 183.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 6,525        | 7,645             | 127                    | 152        | 355        | 0          | 355                | 18.4                                |
| 184.00 | Cameron Park                                     | 0                                      | 28,763       | 20,492            | 3,325                  | 357        | 964        | 300        | 1,264              | 22.8                                |
| 185.00 | Cameron Park                                     | 0                                      | 5,401        | 6,636             | 94                     | 149        | 342        | 0          | 342                | 15.8                                |
| 186.00 | Cameron Park                                     | 0                                      | 647          | 102               | 236                    | 3          | 7          | 28         | 35                 | 18.5                                |

**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|--|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 187.00 | Cameron Park                                     | 0                                      | 10,281       | 9,793             | 1,023                  | 239        | 549        | 85         | 634                | 16.2                                |
| 188.00 | Cameron Park                                     | 0                                      | 7,327        | 7,048             | 803                    | 188        | 432        | 69         | 501                | 14.6                                |
| 189.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,895        | 3,688             | 44                     | 37         | 104        | 0          | 104                | 28.0                                |
| 190.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 11,290       | 14,830            | 175                    | 237        | 663        | 0          | 663                | 17.0                                |
| 191.00 | El Dorado Hills                                  | 0                                      | 824          | 1,100             | 11                     | 19         | 53         | 0          | 53                 | 15.5                                |
| 192.00 | El Dorado Hills                                  | 0                                      | 1,093        | 1,444             | 15                     | 25         | 70         | 0          | 70                 | 15.7                                |
| 193.00 | El Dorado Hills                                  | 0                                      | 8,893        | 4,380             | 2,565                  | 100        | 253        | 246        | 499                | 17.8                                |
| 194.00 | El Dorado Hills                                  | 0                                      | 18,209       | 23,760            | 280                    | 439        | 1,285      | 0          | 1,285              | 14.2                                |
| 195.00 | El Dorado Hills                                  | 0                                      | 1,605        | 531               | 184                    | 10         | 26         | 14         | 40                 | 40.6                                |
| 196.00 | Outside of County                                | 0                                      | 45,981       | 51,299            | 1,506                  | 923        | 2,503      | 82         | 2,585              | 17.8                                |
| 197.00 | El Dorado Hills                                  | 0                                      | 3,954        | 4,957             | 65                     | 86         | 219        | 0          | 219                | 18.0                                |
| 198.00 | El Dorado Hills                                  | 0                                      | 58,474       | 46,936            | 4,592                  | 887        | 2,482      | 453        | 2,935              | 19.9                                |
| 199.00 | El Dorado Hills                                  | 0                                      | 11,088       | 3,692             | 1,539                  | 62         | 173        | 120        | 293                | 37.8                                |
| 200.00 | El Dorado Hills                                  | 0                                      | 3,335        | 333               | 740                    | 7          | 18         | 67         | 85                 | 39.3                                |
| 201.00 | El Dorado Hills                                  | 0                                      | 13,472       | 8,479             | 2,757                  | 150        | 439        | 301        | 740                | 18.2                                |
| 202.00 | El Dorado Hills                                  | 0                                      | 41,829       | 41,531            | 2,356                  | 737        | 2,062      | 199        | 2,261              | 18.5                                |
| 203.00 | El Dorado Hills                                  | 0                                      | 52,615       | 66,781            | 1,839                  | 1,043      | 3,061      | 139        | 3,200              | 16.4                                |
| 204.00 | El Dorado Hills                                  | 0                                      | 18,761       | 20,036            | 597                    | 362        | 1,067      | 41         | 1,108              | 16.9                                |
| 205.00 | El Dorado Hills                                  | 0                                      | 628          | 0                 | 288                    | 0          | 0          | 30         | 30                 | 20.9                                |
| 206.00 | El Dorado Hills                                  | 0                                      | 2,124        | 2,756             | 30                     | 52         | 153        | 0          | 153                | 13.9                                |
| 207.00 | El Dorado Hills                                  | 0                                      | 15,051       | 19,923            | 231                    | 296        | 869        | 0          | 869                | 17.3                                |
| 208.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 412          | 558               | 5                      | 9          | 26         | 0          | 26                 | 15.6                                |
| 209.00 | El Dorado Hills                                  | 0                                      | 2,999        | 3,557             | 172                    | 55         | 161        | 14         | 175                | 17.1                                |
| 210.00 | El Dorado Hills                                  | 0                                      | 5,743        | 7,581             | 87                     | 125        | 366        | 0          | 366                | 15.7                                |
| 211.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 167          | 231               | 2                      | 4          | 11         | 0          | 11                 | 15.0                                |
| 212.00 | El Dorado Hills                                  | 0                                      | 1,871        | 2,523             | 25                     | 35         | 103        | 0          | 103                | 18.2                                |
| 213.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 6,812        | 8,992             | 101                    | 116        | 323        | 0          | 323                | 21.1                                |
| 214.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 686          | 922               | 10                     | 8          | 19         | 0          | 19                 | 35.4                                |
| 215.00 | El Dorado Hills                                  | 0                                      | 6,138        | 8,031             | 95                     | 113        | 316        | 0          | 316                | 19.4                                |
| 216.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 400          | 520               | 5                      | 5          | 12         | 0          | 12                 | 33.1                                |
| 217.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 740          | 957               | 10                     | 11         | 31         | 0          | 31                 | 24.0                                |
| 218.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,723        | 2,237             | 25                     | 28         | 78         | 0          | 78                 | 22.0                                |
| 219.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,456        | 2,399             | 1,004                  | 28         | 78         | 77         | 155                | 28.8                                |
| 220.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 581          | 762               | 8                      | 9          | 25         | 0          | 25                 | 23.2                                |
| 221.00 | El Dorado Hills                                  | 0                                      | 43,247       | 59,070            | 587                    | 876        | 2,359      | 0          | 2,359              | 18.3                                |
| 222.00 | Cameron Park                                     | 0                                      | 2,699        | 1,423             | 256                    | 26         | 71         | 26         | 97                 | 28.0                                |
| 223.00 | Cameron Park                                     | 0                                      | 4,072        | 5,524             | 52                     | 103        | 279        | 0          | 279                | 14.6                                |
| 224.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,457        | 6,394             | 348                    | 95         | 258        | 29         | 287                | 19.0                                |
| 225.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 11,249       | 7,664             | 978                    | 92         | 270        | 79         | 349                | 32.2                                |
| 226.00 | Cameron Park                                     | 0                                      | 10,028       | 8,755             | 771                    | 131        | 384        | 76         | 460                | 21.8                                |
| 227.00 | Cameron Park                                     | 0                                      | 182          | 177               | 13                     | 5          | 12         | 2          | 14                 | 12.9                                |
| 228.00 | Cameron Park                                     | 0                                      | 23,398       | 31,104            | 509                    | 705        | 1,703      | 20         | 1,723              | 13.6                                |
| 229.00 | El Dorado Hills                                  | 0                                      | 405          | 556               | 4                      | 9          | 24         | 0          | 24                 | 16.7                                |
| 230.00 | El Dorado Hills                                  | 0                                      | 590          | 809               | 6                      | 12         | 35         | 0          | 35                 | 16.7                                |
| 231.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,019        | 332               | 239                    | 5          | 15         | 28         | 43                 | 23.9                                |
| 232.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,109        | 2,821             | 28                     | 33         | 92         | 0          | 92                 | 23.0                                |
| 233.00 | Cameron Park                                     | 0                                      | 6,653        | 3,846             | 768                    | 92         | 211        | 101        | 312                | 21.3                                |
| 234.00 | Cameron Park                                     | 0                                      | 47,144       | 41,546            | 4,548                  | 1,004      | 2,306      | 587        | 2,893              | 16.3                                |
| 235.00 | Cameron Park                                     | 0                                      | 33,832       | 44,754            | 479                    | 861        | 2,214      | 0          | 2,214              | 15.3                                |
| 236.00 | Cameron Park                                     | 0                                      | 17,939       | 24,296            | 298                    | 468        | 1,204      | 9          | 1,213              | 14.8                                |
| 237.00 | Cameron Park                                     | 0                                      | 2,846        | 3,551             | 47                     | 75         | 172        | 0          | 172                | 16.5                                |
| 238.00 | Cameron Park                                     | 0                                      | 15,143       | 13,696            | 2,017                  | 280        | 676        | 199        | 875                | 17.3                                |
| 239.00 | Cameron Park                                     | 0                                      | 1,950        | 1,618             | 135                    | 32         | 87         | 16         | 103                | 19.0                                |
| 240.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,287        | 9,730             | 107                    | 127        | 345        | 0          | 345                | 21.1                                |
| 241.00 | Cameron Park                                     | 0                                      | 6,848        | 9,117             | 105                    | 164        | 445        | 2          | 447                | 15.3                                |
| 242.00 | Cameron Park                                     | 0                                      | 806          | 1,102             | 9                      | 22         | 60         | 0          | 60                 | 13.5                                |
| 243.00 | Cameron Park                                     | 0                                      | 2,409        | 2,931             | 120                    | 52         | 141        | 13         | 154                | 15.6                                |
| 244.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,391        | 1,801             | 23                     | 22         | 57         | 0          | 57                 | 24.6                                |
| 245.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 842          | 1,066             | 11                     | 10         | 29         | 0          | 29                 | 29.1                                |
| 246.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,452        | 6,056             | 59                     | 63         | 182        | 0          | 182                | 24.4                                |
| 247.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 14,550       | 16,665            | 351                    | 296        | 646        | 0          | 646                | 22.5                                |
| 248.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 10,727       | 13,056            | 226                    | 185        | 441        | 0          | 441                | 24.3                                |

**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 249.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,911        | 2,086             | 39                     | 27         | 59         | 0          | 59                 | 32.4                                |
| 250.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,223        | 3,854             | 63                     | 53         | 123        | 0          | 123                | 26.2                                |
| 251.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,465        | 5,223             | 91                     | 88         | 224        | 0          | 224                | 20.0                                |
| 252.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 20,232       | 24,935            | 422                    | 434        | 1,130      | 0          | 1,130              | 17.9                                |
| 253.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,637        | 10,809            | 166                    | 147        | 403        | 0          | 403                | 21.4                                |
| 254.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,155        | 7,315             | 128                    | 116        | 295        | 0          | 295                | 20.9                                |
| 255.00 | Cameron Park                                     | 0                                       | 17,028       | 0                 | 5,087                  | 0          | 0          | 426        | 426                | 40.0                                |
| 256.00 | Cameron Park                                     | 0                                       | 46,408       | 1,915             | 13,815                 | 47         | 121        | 1,042      | 1,163              | 39.9                                |
| 257.00 | Shingle Springs                                  | 0                                       | 30,259       | 6,774             | 11,179                 | 153        | 389        | 960        | 1,349              | 22.4                                |
| 258.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,485        | 1,749             | 51                     | 21         | 58         | 2          | 60                 | 25.0                                |
| 259.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,819        | 2,262             | 31                     | 30         | 78         | 0          | 78                 | 23.3                                |
| 260.00 | Shingle Springs                                  | 0                                       | 5,677        | 58                | 1,817                  | 2          | 4          | 146        | 150                | 37.7                                |
| 261.00 | Shingle Springs                                  | 0                                       | 15,334       | 4,173             | 3,626                  | 92         | 252        | 282        | 534                | 28.7                                |
| 262.00 | Shingle Springs                                  | 0                                       | 12,901       | 4,871             | 3,014                  | 121        | 308        | 238        | 546                | 23.6                                |
| 263.00 | Shingle Springs                                  | 0                                       | 6,135        | 4,995             | 534                    | 108        | 296        | 35         | 331                | 18.5                                |
| 264.00 | Shingle Springs                                  | 0                                       | 4,761        | 2,290             | 629                    | 50         | 137        | 45         | 182                | 26.2                                |
| 265.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,408        | 2,965             | 44                     | 45         | 117        | 0          | 117                | 20.6                                |
| 266.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,362        | 2,170             | 117                    | 42         | 92         | 4          | 96                 | 24.7                                |
| 267.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,496        | 6,891             | 127                    | 129        | 336        | 0          | 336                | 16.4                                |
| 268.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,278        | 3,761             | 133                    | 69         | 180        | 6          | 186                | 17.7                                |
| 269.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,325        | 10,939            | 228                    | 204        | 516        | 1          | 517                | 18.0                                |
| 270.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,473        | 3,221             | 42                     | 44         | 113        | 0          | 113                | 21.8                                |
| 271.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,088        | 10,053            | 199                    | 150        | 379        | 5          | 384                | 21.0                                |
| 272.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,800        | 7,760             | 363                    | 131        | 347        | 23         | 370                | 18.4                                |
| 273.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,904        | 10,189            | 255                    | 134        | 391        | 12         | 403                | 19.6                                |
| 274.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,445       | 13,859            | 1,331                  | 233        | 618        | 99         | 717                | 21.6                                |
| 275.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,495       | 18,287            | 458                    | 321        | 828        | 13         | 841                | 18.4                                |
| 276.00 | Cameron Park                                     | 0                                       | 9,014        | 10,844            | 268                    | 224        | 541        | 12         | 553                | 16.3                                |
| 277.00 | Cameron Park                                     | 0                                       | 6,258        | 7,932             | 106                    | 161        | 416        | 0          | 416                | 15.1                                |
| 278.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,210        | 6,797             | 84                     | 91         | 247        | 0          | 247                | 21.1                                |
| 279.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,678        | 3,507             | 42                     | 45         | 122        | 0          | 122                | 21.9                                |
| 280.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,778        | 2,200             | 33                     | 37         | 98         | 0          | 98                 | 18.1                                |
| 281.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,869        | 3,572             | 543                    | 59         | 156        | 36         | 192                | 20.1                                |
| 282.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,747        | 2,152             | 33                     | 39         | 103        | 0          | 103                | 16.9                                |
| 283.00 | Shingle Springs                                  | 0                                       | 16,088       | 3,776             | 2,073                  | 0          | 0          | 161        | 161                | 99.9                                |
| 284.00 | Shingle Springs                                  | 0                                       | 1,621        | 1,091             | 305                    | 25         | 65         | 25         | 90                 | 18.1                                |
| 285.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,130        | 1,491             | 887                    | 12         | 26         | 66         | 92                 | 55.5                                |
| 286.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,776        | 2,318             | 29                     | 36         | 95         | 0          | 95                 | 18.6                                |
| 287.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,717        | 2,179             | 29                     | 34         | 88         | 0          | 88                 | 19.6                                |
| 288.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,632        | 3,324             | 46                     | 51         | 135        | 0          | 135                | 19.5                                |
| 289.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 360          | 514               | 4                      | 8          | 23         | 0          | 23                 | 15.4                                |
| 290.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,416        | 3,228             | 37                     | 44         | 129        | 0          | 129                | 18.8                                |
| 291.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,922        | 12,933            | 181                    | 188        | 463        | 0          | 463                | 21.4                                |
| 292.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,576        | 6,311             | 64                     | 72         | 210        | 0          | 210                | 21.8                                |
| 293.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,230        | 1,276             | 32                     | 34         | 77         | 0          | 77                 | 15.9                                |
| 294.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,021        | 4,645             | 94                     | 97         | 247        | 0          | 247                | 16.3                                |
| 295.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 148,908      | 5,014             | 26,719                 | 110        | 284        | 1,491      | 1,775              | 83.9                                |
| 296.00 | El Dorado Diamond Springs                        | 0                                       | 9,633        | 6,665             | 855                    | 117        | 305        | 56         | 361                | 26.7                                |
| 297.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,430        | 3,140             | 57                     | 70         | 182        | 0          | 182                | 13.3                                |
| 298.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,313        | 3,810             | 75                     | 79         | 206        | 0          | 206                | 16.1                                |
| 299.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,090        | 6,062             | 106                    | 106        | 268        | 0          | 268                | 19.0                                |
| 300.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,197        | 1,390             | 26                     | 28         | 71         | 0          | 71                 | 16.9                                |
| 301.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 1          | 2          | 0          | 2                  | 0.1                                 |
| 302.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,967        | 2,475             | 500                    | 57         | 130        | 33         | 163                | 24.4                                |
| 303.00 | El Dorado Diamond Springs                        | 0                                       | 3,470        | 3,661             | 91                     | 106        | 231        | 0          | 231                | 15.0                                |
| 304.00 | El Dorado Diamond Springs                        | 0                                       | 6,356        | 379               | 2,386                  | 12         | 27         | 224        | 251                | 25.3                                |
| 305.00 | El Dorado Diamond Springs                        | 0                                       | 7,603        | 0                 | 3,158                  | 1          | 2          | 283        | 285                | 26.7                                |
| 306.00 | El Dorado Diamond Springs                        | 0                                       | 1,629        | 375               | 629                    | 10         | 22         | 55         | 77                 | 21.2                                |
| 307.00 | El Dorado Diamond Springs                        | 0                                       | 617          | 494               | 38                     | 16         | 36         | 2          | 38                 | 16.2                                |
| 308.00 | El Dorado Diamond Springs                        | 0                                       | 272          | 273               | 15                     | 11         | 25         | 1          | 26                 | 10.5                                |
| 309.00 | El Dorado Diamond Springs                        | 0                                       | 533          | 434               | 52                     | 14         | 32         | 4          | 36                 | 14.8                                |
| 310.00 | El Dorado Diamond Springs                        | 0                                       | 4,146        | 794               | 1,294                  | 26         | 59         | 122        | 181                | 22.9                                |

**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 311.00 | El Dorado Diamond Springs                        | 0                                       | 8,533        | 1,197             | 2,120                  | 38         | 87         | 158        | 245                | 34.9                                |
| 312.00 | El Dorado Diamond Springs                        | 0                                       | 870          | 891               | 49                     | 31         | 70         | 3          | 73                 | 11.9                                |
| 313.00 | El Dorado Diamond Springs                        | 0                                       | 23,390       | 4,175             | 6,912                  | 38         | 99         | 506        | 605                | 38.7                                |
| 314.00 | El Dorado Diamond Springs                        | 0                                       | 2,981        | 3,093             | 154                    | 81         | 206        | 8          | 214                | 13.9                                |
| 315.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 316.00 | El Dorado Diamond Springs                        | 0                                       | 342          | 346               | 9                      | 13         | 30         | 0          | 30                 | 11.5                                |
| 317.00 | El Dorado Diamond Springs                        | 0                                       | 206          | 210               | 5                      | 8          | 18         | 0          | 18                 | 11.3                                |
| 318.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,322        | 4,680             | 137                    | 128        | 326        | 2          | 328                | 13.2                                |
| 319.00 | El Dorado Diamond Springs                        | 0                                       | 1,220        | 1,220             | 91                     | 38         | 99         | 6          | 105                | 11.6                                |
| 320.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,096        | 2,179             | 537                    | 18         | 44         | 39         | 83                 | 61.1                                |
| 321.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,291        | 6,703             | 102                    | 104        | 256        | 0          | 256                | 20.6                                |
| 322.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,460        | 8,020             | 553                    | 153        | 387        | 33         | 420                | 17.8                                |
| 323.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,846        | 3,454             | 85                     | 51         | 129        | 4          | 133                | 21.4                                |
| 324.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,638        | 4,777             | 61                     | 64         | 165        | 0          | 165                | 22.1                                |
| 325.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 706          | 878               | 14                     | 16         | 39         | 0          | 39                 | 17.9                                |
| 326.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,171        | 2,731             | 54                     | 49         | 121        | 1          | 122                | 17.8                                |
| 327.00 | Placerville                                      | 0                                       | 1,704        | 2,003             | 39                     | 40         | 101        | 0          | 101                | 16.9                                |
| 328.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 847          | 998               | 18                     | 19         | 48         | 0          | 48                 | 17.7                                |
| 329.00 | Placerville                                      | 0                                       | 4,862        | 5,451             | 124                    | 139        | 317        | 0          | 317                | 15.3                                |
| 330.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,701        | 3,124             | 65                     | 73         | 184        | 0          | 184                | 14.7                                |
| 331.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,824        | 7,134             | 116                    | 110        | 274        | 0          | 274                | 21.3                                |
| 332.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,541        | 1,805             | 36                     | 47         | 104        | 0          | 104                | 14.8                                |
| 333.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,529        | 5,675             | 86                     | 91         | 226        | 0          | 226                | 20.1                                |
| 334.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,809        | 1,175             | 1,315                  | 26         | 58         | 110        | 168                | 22.7                                |
| 335.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,013        | 3,285             | 124                    | 77         | 165        | 5          | 170                | 17.7                                |
| 336.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,225        | 1,475             | 25                     | 30         | 70         | 0          | 70                 | 17.4                                |
| 337.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,197        | 7,630             | 869                    | 121        | 302        | 62         | 364                | 25.3                                |
| 338.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 14,133       | 17,909            | 370                    | 322        | 831        | 14         | 845                | 16.7                                |
| 339.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,581        | 12,365            | 118                    | 188        | 410        | 0          | 410                | 20.9                                |
| 340.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,896        | 8,586             | 224                    | 93         | 205        | 14         | 219                | 31.5                                |
| 341.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,489        | 1,918             | 86                     | 31         | 71         | 8          | 79                 | 18.9                                |
| 342.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,620        | 3,271             | 48                     | 48         | 124        | 0          | 124                | 21.2                                |
| 343.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,485        | 4,097             | 63                     | 53         | 116        | 0          | 116                | 30.1                                |
| 344.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,762        | 4,481             | 68                     | 55         | 120        | 0          | 120                | 31.3                                |
| 345.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,796        | 1,949             | 35                     | 29         | 63         | 0          | 63                 | 28.4                                |
| 346.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,272        | 1,399             | 24                     | 22         | 49         | 0          | 49                 | 25.7                                |
| 347.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,911        | 3,675             | 48                     | 42         | 108        | 0          | 108                | 26.9                                |
| 348.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,799        | 2,993             | 63                     | 49         | 110        | 0          | 110                | 25.4                                |
| 349.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,297        | 8,014             | 252                    | 83         | 191        | 18         | 209                | 30.1                                |
| 350.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,179        | 1,682             | 17                     | 22         | 48         | 0          | 48                 | 24.5                                |
| 351.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,305        | 1,880             | 16                     | 23         | 50         | 0          | 50                 | 26.0                                |
| 352.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,857        | 2,624             | 24                     | 29         | 63         | 0          | 63                 | 29.3                                |
| 353.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,027        | 13,265            | 99                     | 167        | 365        | 1          | 366                | 24.7                                |
| 354.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,501        | 3,517             | 746                    | 53         | 116        | 77         | 193                | 28.5                                |
| 355.00 | Placerville                                      | 1                                       | 14,292       | 6,555             | 2,957                  | 241        | 550        | 244        | 794                | 18.0                                |
| 356.00 | Placerville                                      | 1                                       | 2,499        | 2,652             | 73                     | 91         | 195        | 0          | 195                | 12.8                                |
| 357.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,889        | 3,827             | 367                    | 89         | 209        | 21         | 230                | 21.3                                |
| 358.00 | Placerville                                      | 0                                       | 5,870        | 2,945             | 1,187                  | 81         | 190        | 98         | 288                | 20.4                                |
| 359.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,285        | 5,085             | 93                     | 105        | 254        | 0          | 254                | 16.9                                |
| 360.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,338        | 5,780             | 239                    | 98         | 237        | 10         | 247                | 21.6                                |
| 361.00 | Placerville                                      | 1                                       | 17,728       | 10,267            | 4,156                  | 458        | 938        | 392        | 1,330              | 13.3                                |
| 362.00 | Placerville                                      | 1                                       | 46,119       | 5,945             | 10,928                 | 252        | 591        | 876        | 1,467              | 31.4                                |
| 363.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 327          | 343               | 9                      | 13         | 31         | 0          | 31                 | 10.6                                |
| 364.00 | Placerville                                      | 0                                       | 4,044        | 3,540             | 416                    | 138        | 328        | 30         | 358                | 11.3                                |
| 365.00 | El Dorado Diamond Springs                        | 0                                       | 10,889       | 8,653             | 1,046                  | 322        | 722        | 71         | 793                | 13.7                                |
| 366.00 | El Dorado Diamond Springs                        | 0                                       | 380          | 274               | 42                     | 15         | 31         | 4          | 35                 | 10.8                                |
| 367.00 | El Dorado Diamond Springs                        | 0                                       | 4,054        | 0                 | 1,960                  | 0          | 0          | 197        | 197                | 20.6                                |
| 368.00 | El Dorado Diamond Springs                        | 0                                       | 1,589        | 1,730             | 48                     | 68         | 149        | 0          | 149                | 10.7                                |
| 369.00 | El Dorado Diamond Springs                        | 0                                       | 5,670        | 5,750             | 283                    | 228        | 507        | 13         | 520                | 10.9                                |
| 370.00 | El Dorado Diamond Springs                        | 0                                       | 6,432        | 0                 | 3,038                  | 0          | 0          | 303        | 303                | 21.2                                |
| 371.00 | El Dorado Diamond Springs                        | 0                                       | 740          | 795               | 18                     | 21         | 47         | 0          | 47                 | 15.9                                |
| 372.00 | El Dorado Diamond Springs                        | 0                                       | 16,774       | 7,739             | 2,417                  | 195        | 433        | 211        | 644                | 26.0                                |

**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 373.00 | El Dorado Diamond Springs                        | 0                                       | 652          | 643               | 19                     | 26         | 59         | 0          | 59                 | 11.1                                |
| 374.00 | El Dorado Diamond Springs                        | 0                                       | 414          | 329               | 29                     | 13         | 28         | 2          | 30                 | 13.6                                |
| 375.00 | El Dorado Diamond Springs                        | 0                                       | 368          | 368               | 10                     | 14         | 32         | 0          | 32                 | 11.7                                |
| 376.00 | El Dorado Diamond Springs                        | 0                                       | 973          | 935               | 57                     | 34         | 77         | 3          | 80                 | 12.2                                |
| 377.00 | El Dorado Diamond Springs                        | 0                                       | 561          | 329               | 157                    | 13         | 29         | 14         | 43                 | 12.9                                |
| 378.00 | El Dorado Diamond Springs                        | 0                                       | 667          | 652               | 19                     | 27         | 59         | 0          | 59                 | 11.3                                |
| 379.00 | El Dorado Diamond Springs                        | 0                                       | 1,102        | 1,113             | 31                     | 48         | 105        | 0          | 105                | 10.5                                |
| 380.00 | El Dorado Diamond Springs                        | 0                                       | 256          | 245               | 7                      | 12         | 26         | 0          | 26                 | 9.7                                 |
| 381.00 | El Dorado Diamond Springs                        | 0                                       | 158          | 143               | 5                      | 7          | 15         | 0          | 15                 | 10.3                                |
| 382.00 | El Dorado Diamond Springs                        | 0                                       | 261          | 239               | 8                      | 11         | 24         | 0          | 24                 | 10.8                                |
| 383.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,591        | 1,742             | 40                     | 46         | 102        | 0          | 102                | 15.6                                |
| 384.00 | El Dorado Diamond Springs                        | 0                                       | 3,654        | 3,970             | 95                     | 120        | 267        | 0          | 267                | 13.7                                |
| 385.00 | El Dorado Diamond Springs                        | 0                                       | 11,717       | 13,659            | 337                    | 451        | 1,002      | 0          | 1,002              | 11.7                                |
| 386.00 | El Dorado Diamond Springs                        | 0                                       | 2,657        | 2,922             | 67                     | 90         | 200        | 0          | 200                | 13.3                                |
| 387.00 | El Dorado Diamond Springs                        | 0                                       | 1,172        | 929               | 107                    | 36         | 80         | 8          | 88                 | 13.3                                |
| 388.00 | El Dorado Diamond Springs                        | 0                                       | 6,359        | 0                 | 3,067                  | 0          | 0          | 303        | 303                | 21.0                                |
| 389.00 | El Dorado Diamond Springs                        | 0                                       | 6,129        | 11                | 2,616                  | 2          | 4          | 264        | 268                | 22.8                                |
| 390.00 | El Dorado Diamond Springs                        | 0                                       | 4,307        | 3,894             | 359                    | 182        | 379        | 23         | 402                | 10.7                                |
| 391.00 | El Dorado Diamond Springs                        | 0                                       | 2,173        | 196               | 547                    | 11         | 23         | 54         | 77                 | 28.3                                |
| 392.00 | El Dorado Diamond Springs                        | 0                                       | 671          | 600               | 23                     | 28         | 58         | 0          | 58                 | 11.5                                |
| 393.00 | El Dorado Diamond Springs                        | 0                                       | 9,002        | 6,354             | 1,004                  | 268        | 605        | 68         | 673                | 13.4                                |
| 394.00 | El Dorado Diamond Springs                        | 0                                       | 186          | 202               | 5                      | 8          | 22         | 0          | 22                 | 8.5                                 |
| 395.00 | Placerville                                      | 1                                       | 62,226       | 1,584             | 26,085                 | 74         | 166        | 2,253      | 2,419              | 25.7                                |
| 396.00 | El Dorado Diamond Springs                        | 0                                       | 28,140       | 0                 | 5,846                  | 0          | 0          | 439        | 439                | 64.1                                |
| 397.00 | El Dorado Diamond Springs                        | 0                                       | 1,329        | 1,264             | 69                     | 50         | 114        | 3          | 117                | 11.4                                |
| 398.00 | El Dorado Diamond Springs                        | 0                                       | 413          | 322               | 38                     | 14         | 32         | 3          | 35                 | 11.9                                |
| 399.00 | El Dorado Diamond Springs                        | 0                                       | 1,126        | 1,133             | 32                     | 43         | 97         | 0          | 97                 | 11.6                                |
| 400.00 | El Dorado Diamond Springs                        | 0                                       | 313          | 262               | 11                     | 16         | 33         | 0          | 33                 | 9.4                                 |
| 401.00 | Placerville                                      | 0                                       | 8,987        | 658               | 2,628                  | 28         | 63         | 213        | 276                | 32.6                                |
| 402.00 | El Dorado Diamond Springs                        | 0                                       | 3,541        | 1,448             | 1,078                  | 51         | 133        | 106        | 239                | 14.8                                |
| 403.00 | El Dorado Diamond Springs                        | 0                                       | 23,814       | 3,632             | 7,792                  | 124        | 258        | 654        | 912                | 26.1                                |
| 404.00 | El Dorado Diamond Springs                        | 0                                       | 1,343        | 409               | 459                    | 19         | 42         | 49         | 91                 | 14.8                                |
| 405.00 | El Dorado Diamond Springs                        | 0                                       | 169          | 150               | 5                      | 9          | 20         | 0          | 20                 | 8.6                                 |
| 406.00 | El Dorado Diamond Springs                        | 0                                       | 18,956       | 553               | 3,787                  | 24         | 53         | 286        | 339                | 56.0                                |
| 407.00 | El Dorado Diamond Springs                        | 0                                       | 9,540        | 18                | 3,373                  | 1          | 2          | 309        | 311                | 30.7                                |
| 408.00 | El Dorado Diamond Springs                        | 0                                       | 4,167        | 22                | 1,742                  | 1          | 2          | 182        | 184                | 22.6                                |
| 409.00 | Placerville                                      | 0                                       | 18,695       | 3,018             | 5,656                  | 104        | 248        | 445        | 693                | 27.0                                |
| 410.00 | El Dorado Diamond Springs                        | 0                                       | 24,455       | 14,637            | 3,607                  | 426        | 1,031      | 277        | 1,308              | 18.7                                |
| 411.00 | Placerville                                      | 1                                       | 50,523       | 6,155             | 13,292                 | 298        | 712        | 1,271      | 1,983              | 25.5                                |
| 412.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,967        | 3,203             | 79                     | 86         | 206        | 0          | 206                | 14.4                                |
| 413.00 | Placerville                                      | 0                                       | 3,607        | 3,787             | 102                    | 126        | 301        | 0          | 301                | 12.0                                |
| 414.00 | El Dorado Diamond Springs                        | 0                                       | 2,618        | 129               | 1,180                  | 7          | 15         | 120        | 135                | 19.5                                |
| 415.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 434          | 442               | 12                     | 18         | 40         | 0          | 40                 | 10.7                                |
| 416.00 | El Dorado Diamond Springs                        | 0                                       | 148          | 145               | 4                      | 9          | 19         | 0          | 19                 | 7.9                                 |
| 417.00 | Placerville                                      | 1                                       | 9,685        | 1,098             | 2,868                  | 45         | 114        | 278        | 392                | 24.7                                |
| 418.00 | Placerville                                      | 1                                       | 3,170        | 0                 | 673                    | 0          | 0          | 64         | 64                 | 49.5                                |
| 419.00 | Placerville                                      | 1                                       | 3,283        | 0                 | 844                    | 0          | 0          | 85         | 85                 | 38.6                                |
| 420.00 | Placerville                                      | 1                                       | 1,760        | 957               | 498                    | 42         | 100        | 52         | 152                | 11.5                                |
| 421.00 | Placerville                                      | 1                                       | 1,662        | 1,578             | 97                     | 68         | 163        | 5          | 168                | 9.9                                 |
| 422.00 | Placerville                                      | 1                                       | 52,703       | 6,323             | 24,673                 | 278        | 652        | 1,907      | 2,559              | 20.6                                |
| 423.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 460          | 482               | 12                     | 20         | 48         | 0          | 48                 | 9.6                                 |
| 424.00 | Placerville                                      | 0                                       | 10,237       | 4,839             | 2,517                  | 171        | 391        | 228        | 619                | 16.6                                |
| 425.00 | Placerville                                      | 0                                       | 52,855       | 32,203            | 5,947                  | 1,167      | 2,617      | 563        | 3,180              | 16.6                                |
| 426.00 | Placerville                                      | 0                                       | 859          | 990               | 19                     | 33         | 82         | 0          | 82                 | 10.5                                |
| 427.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,962        | 4,548             | 92                     | 93         | 232        | 0          | 232                | 17.1                                |
| 428.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 643          | 741               | 15                     | 22         | 55         | 0          | 55                 | 11.7                                |
| 429.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,310        | 1,650             | 34                     | 35         | 83         | 0          | 83                 | 15.9                                |
| 430.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,529        | 2,476             | 178                    | 58         | 137        | 10         | 147                | 17.2                                |
| 431.00 | Placerville                                      | 1                                       | 1,794        | 471               | 655                    | 22         | 45         | 60         | 105                | 17.1                                |
| 432.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,284       | 10,519            | 2,696                  | 309        | 729        | 229        | 958                | 16.0                                |
| 433.00 | Placerville                                      | 1                                       | 10,428       | 9,659             | 707                    | 481        | 1,041      | 36         | 1,077              | 9.7                                 |
| 434.00 | Placerville                                      | 1                                       | 673          | 587               | 23                     | 33         | 71         | 0          | 71                 | 9.5                                 |

**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|--|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 435.00 | Placerville                                      | 1                                      | 1,186        | 645               | 243                    | 36         | 77         | 27         | 104                | 11.4                                |
| 436.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 970          | 1,150             | 20                     | 25         | 62         | 0          | 62                 | 15.6                                |
| 437.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,377        | 5,676             | 248                    | 117        | 287        | 12         | 299                | 18.0                                |
| 438.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,578        | 5,269             | 232                    | 124        | 278        | 11         | 289                | 19.3                                |
| 439.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,421        | 6,310             | 172                    | 156        | 350        | 3          | 353                | 15.4                                |
| 440.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,394        | 1,100             | 177                    | 28         | 63         | 15         | 78                 | 17.9                                |
| 441.00 | Placerville                                      | 1                                      | 362          | 377               | 9                      | 12         | 29         | 0          | 29                 | 12.6                                |
| 442.00 | Placerville                                      | 1                                      | 13,108       | 10,677            | 1,035                  | 313        | 768        | 69         | 837                | 15.7                                |
| 443.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,458        | 1,567             | 36                     | 38         | 85         | 0          | 85                 | 17.1                                |
| 444.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 200          | 220               | 5                      | 8          | 19         | 0          | 19                 | 10.4                                |
| 445.00 | Placerville                                      | 0                                      | 1,044        | 902               | 151                    | 23         | 56         | 11         | 67                 | 15.5                                |
| 446.00 | Placerville                                      | 1                                      | 1,761        | 851               | 247                    | 25         | 59         | 19         | 78                 | 22.7                                |
| 447.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,244        | 3,964             | 67                     | 76         | 189        | 0          | 189                | 17.1                                |
| 448.00 | Placerville                                      | 0                                      | 1,803        | 2,094             | 74                     | 53         | 130        | 4          | 134                | 13.5                                |
| 449.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 540          | 573               | 14                     | 14         | 30         | 0          | 30                 | 18.0                                |
| 450.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,267        | 2,678             | 392                    | 84         | 180        | 31         | 211                | 15.5                                |
| 451.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 980          | 1,034             | 25                     | 27         | 58         | 0          | 58                 | 16.9                                |
| 452.00 | Placerville                                      | 0                                      | 6,274        | 4,034             | 500                    | 121        | 259        | 33         | 292                | 21.5                                |
| 453.00 | Placerville                                      | 1                                      | 2,919        | 3,086             | 120                    | 145        | 310        | 1          | 311                | 9.4                                 |
| 454.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 567          | 544               | 18                     | 25         | 54         | 0          | 54                 | 10.6                                |
| 455.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,712        | 3,062             | 67                     | 73         | 172        | 0          | 172                | 15.8                                |
| 456.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,880        | 2,061             | 48                     | 51         | 109        | 0          | 109                | 17.2                                |
| 457.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,808        | 3,060             | 129                    | 62         | 137        | 5          | 142                | 19.8                                |
| 458.00 | Placerville                                      | 0                                      | 2,940        | 2,602             | 343                    | 67         | 157        | 26         | 183                | 16.0                                |
| 459.00 | Placerville                                      | 0                                      | 309          | 353               | 7                      | 11         | 26         | 0          | 26                 | 12.0                                |
| 460.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,457        | 966               | 264                    | 22         | 47         | 20         | 67                 | 21.7                                |
| 461.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,567        | 222               | 616                    | 6          | 14         | 59         | 73                 | 21.4                                |
| 462.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,224        | 1,278             | 1,752                  | 31         | 66         | 125        | 191                | 27.3                                |
| 463.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,473        | 7,256             | 39                     | 85         | 194        | 0          | 194                | 23.0                                |
| 464.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,526        | 3,312             | 39                     | 47         | 104        | 0          | 104                | 24.4                                |
| 465.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,956        | 5,701             | 114                    | 58         | 134        | 16         | 150                | 26.4                                |
| 466.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,542        | 4,418             | 201                    | 61         | 139        | 22         | 161                | 22.0                                |
| 467.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,484        | 3,848             | 23                     | 39         | 89         | 0          | 89                 | 27.9                                |
| 468.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 6,778        | 9,766             | 125                    | 120        | 277        | 6          | 283                | 24.0                                |
| 469.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,092        | 5,682             | 136                    | 59         | 131        | 15         | 146                | 28.1                                |
| 470.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,031        | 3,078             | 27                     | 32         | 73         | 1          | 74                 | 27.4                                |
| 471.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,477        | 2,039             | 54                     | 23         | 53         | 6          | 59                 | 25.2                                |
| 472.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,953        | 2,297             | 146                    | 26         | 59         | 20         | 79                 | 24.6                                |
| 473.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 602          | 576               | 30                     | 10         | 23         | 2          | 25                 | 24.1                                |
| 474.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,692        | 2,178             | 28                     | 37         | 81         | 0          | 81                 | 20.9                                |
| 475.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,797        | 2,384             | 27                     | 38         | 83         | 0          | 83                 | 21.7                                |
| 476.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 859          | 1,123             | 12                     | 16         | 41         | 0          | 41                 | 20.8                                |
| 477.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,038        | 2,558             | 124                    | 30         | 69         | 15         | 84                 | 24.2                                |
| 478.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,481        | 1,914             | 24                     | 30         | 66         | 0          | 66                 | 22.5                                |
| 479.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,068        | 3,155             | 440                    | 51         | 118        | 37         | 155                | 26.3                                |
| 480.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,298        | 1,999             | 13                     | 20         | 46         | 0          | 46                 | 28.4                                |
| 481.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,335        | 2,030             | 15                     | 20         | 44         | 0          | 44                 | 30.4                                |
| 482.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,633        | 7,942             | 92                     | 74         | 163        | 3          | 166                | 34.0                                |
| 483.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,435        | 5,257             | 173                    | 115        | 249        | 9          | 258                | 17.2                                |
| 484.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 6,755        | 5,646             | 945                    | 91         | 227        | 114        | 341                | 19.8                                |
| 485.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,058        | 1,522             | 11                     | 15         | 37         | 0          | 37                 | 28.3                                |
| 486.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,063        | 5,882             | 47                     | 69         | 156        | 0          | 156                | 26.1                                |
| 487.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 11,817       | 11,343            | 739                    | 221        | 519        | 36         | 555                | 21.3                                |
| 488.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,531        | 7,566             | 86                     | 107        | 242        | 0          | 242                | 22.9                                |
| 489.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 6,881        | 7,088             | 660                    | 133        | 300        | 58         | 358                | 19.2                                |
| 490.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,174        | 1,529             | 19                     | 24         | 60         | 0          | 60                 | 19.6                                |
| 491.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,374        | 9,114             | 177                    | 160        | 399        | 3          | 402                | 18.3                                |
| 492.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,053        | 4,473             | 408                    | 71         | 176        | 31         | 207                | 24.4                                |
| 493.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,090        | 4,560             | 369                    | 72         | 178        | 26         | 204                | 24.9                                |
| 494.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,256        | 3,963             | 138                    | 68         | 170        | 10         | 180                | 18.1                                |
| 495.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 652          | 851               | 11                     | 16         | 40         | 0          | 40                 | 16.4                                |
| 496.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,363        | 4,566             | 830                    | 81         | 201        | 67         | 268                | 27.5                                |



**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|--|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 497.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,324        | 5,722             | 101                    | 88         | 224        | 3          | 227                | 19.0                                |
| 498.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,446        | 4,471             | 104                    | 70         | 158        | 6          | 164                | 21.0                                |
| 499.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,340        | 1,788             | 22                     | 30         | 75         | 0          | 75                 | 17.9                                |
| 500.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,091        | 1,341             | 603                    | 11         | 26         | 51         | 77                 | 53.3                                |
| 501.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,805        | 1,018             | 768                    | 22         | 49         | 83         | 132                | 21.3                                |
| 502.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,007        | 7,684             | 351                    | 117        | 272        | 18         | 290                | 24.2                                |
| 503.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,159        | 0                 | 1,010                  | 1          | 2          | 76         | 78                 | 53.2                                |
| 504.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 6,094        | 6,503             | 344                    | 141        | 313        | 19         | 332                | 18.4                                |
| 505.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 73           | 86                | 1                      | 3          | 7          | 0          | 7                  | 11.0                                |
| 506.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,026        | 1,245             | 22                     | 28         | 62         | 0          | 62                 | 16.5                                |
| 507.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,748        | 2,382             | 392                    | 50         | 116        | 37         | 153                | 17.9                                |
| 508.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 6,688        | 3,507             | 1,838                  | 85         | 184        | 186        | 370                | 18.1                                |
| 509.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 392          | 428               | 22                     | 12         | 27         | 2          | 29                 | 13.7                                |
| 510.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,230        | 3,509             | 157                    | 92         | 199        | 10         | 209                | 15.5                                |
| 511.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,738        | 1,886             | 359                    | 45         | 105        | 33         | 138                | 19.9                                |
| 512.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,833        | 1,982             | 367                    | 37         | 86         | 27         | 113                | 25.1                                |
| 513.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,428        | 10,752            | 84                     | 142        | 354        | 0          | 354                | 21.0                                |
| 514.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 31,897       | 46,989            | 311                    | 622        | 1,551      | 0          | 1,551              | 20.6                                |
| 515.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,604        | 4,785             | 105                    | 69         | 176        | 8          | 184                | 19.6                                |
| 516.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 8,117        | 11,779            | 87                     | 142        | 362        | 0          | 362                | 22.4                                |
| 517.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 18,953       | 21,253            | 1,114                  | 388        | 857        | 101        | 958                | 19.8                                |
| 518.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 11,917       | 15,759            | 307                    | 289        | 671        | 17         | 688                | 17.3                                |
| 519.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,880        | 7,837             | 191                    | 142        | 330        | 12         | 342                | 17.2                                |
| 520.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 11,943       | 16,149            | 268                    | 266        | 617        | 12         | 629                | 19.0                                |
| 521.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 10,860       | 13,145            | 581                    | 290        | 641        | 60         | 701                | 15.5                                |
| 522.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,096        | 7,230             | 64                     | 85         | 221        | 0          | 221                | 23.1                                |
| 523.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 16,440       | 10,403            | 1,911                  | 240        | 588        | 206        | 794                | 20.7                                |
| 524.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 14,687       | 12,653            | 1,114                  | 205        | 490        | 103        | 593                | 24.8                                |
| 525.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,887        | 7,158             | 44                     | 85         | 199        | 0          | 199                | 24.5                                |
| 526.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 245          | 336               | 3                      | 5          | 12         | 0          | 12                 | 20.1                                |
| 527.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,769        | 9,527             | 361                    | 162        | 380        | 38         | 418                | 18.6                                |
| 528.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 59,936       | 84,546            | 793                    | 1,001      | 2,429      | 72         | 2,501              | 24.0                                |
| 529.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 918          | 1,150             | 13                     | 15         | 36         | 0          | 36                 | 25.3                                |
| 530.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 12,922       | 17,323            | 192                    | 191        | 462        | 0          | 462                | 28.0                                |
| 531.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,524        | 3,389             | 35                     | 34         | 82         | 0          | 82                 | 30.7                                |
| 532.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,996        | 5,157             | 59                     | 61         | 147        | 0          | 147                | 27.1                                |
| 533.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 9,310        | 8,574             | 645                    | 105        | 271        | 34         | 305                | 30.5                                |
| 534.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,782        | 4,952             | 52                     | 53         | 128        | 0          | 128                | 29.5                                |
| 535.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,931        | 7,811             | 74                     | 91         | 221        | 0          | 221                | 26.8                                |
| 536.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,088        | 6,583             | 64                     | 82         | 200        | 0          | 200                | 25.5                                |
| 537.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 10,390       | 14,148            | 106                    | 165        | 402        | 0          | 402                | 25.9                                |
| 538.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,965        | 3,049             | 304                    | 44         | 107        | 22         | 129                | 30.8                                |
| 539.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 12,990       | 1,298             | 2,075                  | 6          | 15         | 166        | 181                | 72.0                                |
| 540.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,856        | 0                 | 572                    | 0          | 0          | 53         | 53                 | 53.9                                |
| 541.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,050        | 1,118             | 61                     | 18         | 42         | 6          | 48                 | 21.8                                |
| 542.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,610        | 3,094             | 413                    | 52         | 123        | 37         | 160                | 22.6                                |
| 543.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 10,542       | 2,434             | 1,775                  | 49         | 114        | 107        | 221                | 47.6                                |
| 544.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 679          | 496               | 104                    | 9          | 21         | 8          | 29                 | 23.4                                |
| 545.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,521        | 2,046             | 16                     | 23         | 54         | 0          | 54                 | 28.3                                |
| 546.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,811        | 6,428             | 54                     | 61         | 143        | 0          | 143                | 33.8                                |
| 547.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,019        | 523               | 481                    | 10         | 23         | 46         | 69                 | 57.9                                |
| 548.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 17,475       | 23,311            | 467                    | 386        | 910        | 22         | 932                | 18.7                                |
| 549.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,160        | 2,718             | 39                     | 42         | 99         | 0          | 99                 | 21.8                                |
| 550.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 265          | 347               | 4                      | 7          | 18         | 0          | 18                 | 14.7                                |
| 551.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,421        | 2,524             | 783                    | 41         | 105        | 54         | 159                | 34.0                                |
| 552.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,436        | 423               | 500                    | 8          | 19         | 32         | 51                 | 48.0                                |
| 553.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,568        | 2,058             | 26                     | 32         | 75         | 0          | 75                 | 21.0                                |
| 554.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,047        | 5,248             | 105                    | 83         | 194        | 4          | 198                | 20.4                                |
| 555.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,654        | 2,238             | 24                     | 34         | 80         | 0          | 80                 | 20.6                                |
| 556.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,091        | 6,971             | 66                     | 82         | 192        | 0          | 192                | 26.6                                |
| 557.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,694        | 2,093             | 31                     | 35         | 82         | 1          | 83                 | 20.5                                |
| 558.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,716        | 2,988             | 163                    | 36         | 84         | 19         | 103                | 26.3                                |

**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 559.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,381        | 1,831             | 17                     | 25         | 59         | 0          | 59                 | 23.6                                |
| 560.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,604        | 1,673             | 100                    | 27         | 63         | 10         | 73                 | 21.9                                |
| 561.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,182        | 1,578             | 18                     | 22         | 52         | 0          | 52                 | 22.7                                |
| 562.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,016        | 5,900             | 39                     | 62         | 145        | 0          | 145                | 27.6                                |
| 563.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,211        | 3,362             | 17                     | 32         | 71         | 0          | 71                 | 31.3                                |
| 564.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 620          | 834               | 10                     | 14         | 33         | 0          | 33                 | 18.5                                |
| 565.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,632        | 3,669             | 38                     | 56         | 129        | 0          | 129                | 20.4                                |
| 566.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,996        | 5,387             | 70                     | 93         | 220        | 1          | 221                | 18.1                                |
| 567.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 671          | 816               | 25                     | 18         | 42         | 2          | 44                 | 15.4                                |
| 568.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 931          | 1,259             | 14                     | 26         | 62         | 0          | 62                 | 15.1                                |
| 569.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,705        | 2,852             | 298                    | 61         | 144        | 31         | 175                | 21.1                                |
| 570.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,738        | 2,119             | 775                    | 40         | 92         | 92         | 184                | 25.7                                |
| 571.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,371        | 1,843             | 22                     | 33         | 76         | 0          | 76                 | 18.0                                |
| 572.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,867        | 1,377             | 262                    | 25         | 61         | 34         | 95                 | 19.6                                |
| 573.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,504        | 7,840             | 121                    | 89         | 197        | 2          | 199                | 32.7                                |
| 574.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,059        | 8,006             | 30                     | 71         | 174        | 0          | 174                | 29.1                                |
| 575.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,777        | 4,117             | 16                     | 29         | 71         | 0          | 71                 | 39.1                                |
| 576.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,093        | 1,543             | 16                     | 19         | 42         | 1          | 43                 | 25.4                                |
| 577.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 753          | 1,117             | 7                      | 13         | 29         | 0          | 29                 | 26.2                                |
| 578.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 23,468       | 37,261            | 106                    | 370        | 817        | 0          | 817                | 28.7                                |
| 579.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,788        | 5,279             | 100                    | 38         | 96         | 12         | 108                | 34.9                                |
| 580.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,893        | 4,142             | 62                     | 35         | 89         | 5          | 94                 | 30.8                                |
| 581.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,278        | 5,106             | 291                    | 43         | 95         | 32         | 127                | 33.8                                |
| 582.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,258        | 1,708             | 16                     | 13         | 34         | 0          | 34                 | 37.2                                |
| 583.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 27,736       | 43,328            | 212                    | 352        | 774        | 10         | 784                | 35.4                                |
| 584.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,736        | 2,097             | 55                     | 18         | 40         | 3          | 43                 | 40.7                                |
| 585.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,569        | 14,366            | 78                     | 124        | 273        | 0          | 273                | 35.1                                |
| 586.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,837        | 2,525             | 1,555                  | 51         | 91         | 92         | 183                | 32.0                                |
| 587.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,277        | 3,414             | 17                     | 39         | 99         | 0          | 99                 | 22.9                                |
| 588.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 19,726       | 30,121            | 125                    | 323        | 805        | 0          | 805                | 24.5                                |
| 589.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 393          | 627               | 2                      | 3          | 12         | 0          | 12                 | 32.7                                |
| 590.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 830          | 1,145             | 12                     | 18         | 46         | 0          | 46                 | 18.2                                |
| 591.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 86           | 122               | 1                      | 3          | 8          | 0          | 8                  | 11.3                                |
| 592.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 12,714       | 13,276            | 739                    | 339        | 749        | 91         | 840                | 15.1                                |
| 593.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,940        | 9,089             | 265                    | 151        | 382        | 28         | 410                | 16.9                                |
| 594.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 16,945       | 24,780            | 182                    | 312        | 790        | 5          | 795                | 21.3                                |
| 595.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,939        | 1,825             | 265                    | 25         | 56         | 31         | 87                 | 22.2                                |
| 596.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,829        | 2,777             | 221                    | 34         | 85         | 25         | 110                | 25.8                                |
| 597.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,029       | 4,036             | 1,914                  | 106        | 234        | 278        | 512                | 21.5                                |
| 598.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,719        | 544               | 259                    | 14         | 31         | 35         | 66                 | 26.1                                |
| 599.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 712          | 969               | 11                     | 17         | 38         | 0          | 38                 | 18.9                                |
| 600.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,268       | 11,074            | 1,266                  | 205        | 453        | 130        | 583                | 19.3                                |
| 601.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,338        | 1,903             | 4                      | 10         | 22         | 0          | 22                 | 60.9                                |
| 602.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 433          | 137               | 53                     | 3          | 5          | 2          | 7                  | 59.0                                |
| 603.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 906          | 729               | 84                     | 11         | 20         | 2          | 22                 | 42.0                                |
| 604.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,419        | 1,776             | 109                    | 17         | 33         | 3          | 36                 | 39.3                                |
| 605.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,653        | 1,766             | 86                     | 18         | 38         | 2          | 40                 | 41.3                                |
| 606.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 607.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,530        | 4,854             | 12                     | 19         | 49         | 0          | 49                 | 71.5                                |
| 608.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6            | 0                 | 0                      | 1          | 2          | 0          | 2                  | 2.9                                 |
| 609.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,028        | 3,208             | 117                    | 34         | 72         | 4          | 76                 | 40.0                                |
| 610.00 | El Dorado Hills                                  | 0                                       | 38,894       | 185               | 20,450                 | 0          | 0          | 1,745      | 1,745              | 22.3                                |
| 611.00 | El Dorado Hills                                  | 0                                       | 315          | 0                 | 10                     | 153        | 0          | 1          | 1                  | 315.1                               |
| 612.00 | El Dorado Hills                                  | 0                                       | 79,244       | 0                 | 44,405                 | 0          | 0          | 3,121      | 3,121              | 25.4                                |
| 613.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 71           | 67                | 1                      | 2          | 5          | 0          | 5                  | 13.8                                |
| 614.00 | El Dorado Hills                                  | 0                                       | 5,951        | 7,036             | 115                    | 150        | 383        | 0          | 383                | 15.6                                |
| 615.00 | El Dorado Hills                                  | 0                                       | 12,122       | 9,014             | 1,032                  | 150        | 402        | 75         | 477                | 25.4                                |
| 616.00 | El Dorado Hills                                  | 0                                       | 1,374        | 1,639             | 25                     | 37         | 94         | 0          | 94                 | 14.7                                |
| 617.00 | El Dorado Hills                                  | 0                                       | 20,608       | 12,689            | 1,251                  | 187        | 547        | 118        | 665                | 31.0                                |
| 618.00 | El Dorado Hills                                  | 0                                       | 3,136        | 0                 | 1,248                  | 0          | 0          | 146        | 146                | 21.5                                |
| 619.00 | El Dorado Hills                                  | 0                                       | 3,458        | 0                 | 1,252                  | 0          | 0          | 151        | 151                | 22.9                                |
| 620.00 | El Dorado Hills                                  | 0                                       | 17,790       | 3,464             | 1,776                  | 0          | 0          | 188        | 188                | 94.6                                |

**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 621.00 | El Dorado Hills                                  | 0                                       | 14,299       | 18,797            | 223                    | 327        | 957        | 0          | 957                | 14.9                                |
| 622.00 | El Dorado Hills                                  | 0                                       | 21,947       | 21,514            | 1,625                  | 370        | 1,083      | 147        | 1,230              | 17.8                                |
| 623.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 393          | 0                 | 173                    | 0          | 0          | 16         | 16                 | 24.5                                |
| 624.00 | El Dorado Hills                                  | 0                                       | 15,659       | 17,550            | 1,193                  | 308        | 905        | 96         | 1,001              | 15.7                                |
| 625.00 | El Dorado Hills                                  | 0                                       | 861          | 0                 | 418                    | 0          | 0          | 40         | 40                 | 21.5                                |
| 626.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,700        | 7,509             | 1,120                  | 164        | 383        | 98         | 481                | 18.1                                |
| 627.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 54,214       | 0                 | 11,337                 | 0          | 0          | 897        | 897                | 60.4                                |
| 628.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 629.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 630.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 631.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 632.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,446        | 1,742             | 25                     | 37         | 94         | 0          | 94                 | 15.4                                |
| 633.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,287        | 7,481             | 122                    | 150        | 379        | 0          | 379                | 16.6                                |
| 634.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,451        | 7,748             | 122                    | 150        | 379        | 0          | 379                | 17.0                                |
| 635.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,874        | 5,840             | 92                     | 113        | 286        | 0          | 286                | 17.0                                |
| 636.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,366        | 6,094             | 81                     | 120        | 322        | 0          | 322                | 13.6                                |
| 637.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,062        | 9,923             | 140                    | 171        | 458        | 0          | 458                | 17.6                                |
| 638.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,037        | 1,266             | 16                     | 23         | 62         | 0          | 62                 | 16.8                                |
| 639.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,263        | 2,810             | 36                     | 46         | 123        | 0          | 123                | 18.4                                |
| 640.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,666        | 9,534             | 125                    | 176        | 472        | 0          | 472                | 16.2                                |
| 641.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,088        | 2,601             | 33                     | 46         | 123        | 0          | 123                | 16.9                                |
| 642.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 28,454       | 33,516            | 1,269                  | 637        | 1,708      | 93         | 1,801              | 15.8                                |
| 643.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,822        | 12,118            | 163                    | 216        | 579        | 0          | 579                | 17.0                                |
| 644.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,922        | 3,676             | 47                     | 76         | 194        | 0          | 194                | 15.1                                |
| 645.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 21,198       | 24,639            | 949                    | 415        | 1,059      | 51         | 1,110              | 19.1                                |
| 646.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,819        | 11,040            | 154                    | 192        | 490        | 0          | 490                | 18.0                                |
| 647.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,587        | 1,896             | 69                     | 38         | 97         | 6          | 103                | 15.4                                |
| 648.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,814        | 2,169             | 46                     | 38         | 97         | 2          | 99                 | 18.3                                |
| 649.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,510        | 3,117             | 31                     | 38         | 97         | 0          | 97                 | 56.8                                |
| 650.00 | Outside of County                                | 0                                       | 3,018,017    | 1,487,652         | 470,023                | 0          | 0          | 0          | 0                  | -                                   |
| 651.00 | Outside of County                                | 0                                       | 28,430       | 14,325            | 4,161                  | 0          | 0          | 0          | 0                  | -                                   |
| 652.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 653.00 | Outside of County                                | 0                                       | 391,601      | 159,733           | 51,129                 | 0          | 0          | 0          | 0                  | -                                   |
| 654.00 | Outside of County                                | 0                                       | 56,157       | 9,082             | 2,855                  | 0          | 0          | 0          | 0                  | -                                   |
| 655.00 | Outside of County                                | 0                                       | 269,259      | 107,794           | 35,163                 | 0          | 0          | 0          | 0                  | -                                   |
| 656.00 | Outside of County                                | 0                                       | 76,873       | 18,147            | 8,671                  | 0          | 0          | 0          | 0                  | -                                   |
| 657.00 | Outside of County                                | 0                                       | 186,257      | 8,193             | 3,831                  | 0          | 0          | 0          | 0                  | -                                   |
| 658.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 659.00 | Outside of County                                | 0                                       | 7,525        | 3,130             | 1,406                  | 0          | 0          | 0          | 0                  | -                                   |
| 660.00 | Outside of County                                | 0                                       | 164,217      | 81,865            | 31,549                 | 0          | 0          | 0          | 0                  | -                                   |
| 661.00 | Outside of County                                | 0                                       | 156,422      | 71,575            | 25,672                 | 0          | 0          | 0          | 0                  | -                                   |
| 662.00 | Outside of County                                | 0                                       | 700,690      | 338,333           | 119,222                | 0          | 0          | 0          | 0                  | -                                   |
| 663.00 | Outside of County                                | 0                                       | 679,400      | 227,123           | 80,896                 | 0          | 0          | 0          | 0                  | -                                   |
| 664.00 | Outside of County                                | 0                                       | 347,429      | 190,135           | 54,774                 | 0          | 0          | 0          | 0                  | -                                   |
| 665.00 | Outside of County                                | 0                                       | 199,364      | 79,618            | 30,980                 | 0          | 0          | 0          | 0                  | -                                   |
| 666.00 | Outside of County                                | 0                                       | 88,161       | 45,079            | 14,335                 | 0          | 0          | 0          | 0                  | -                                   |
| 667.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 668.00 | Outside of County                                | 0                                       | 512,377      | 310,784           | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 669.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 670.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 671.00 | Outside of County                                | 0                                       | 169,913      | 96,013            | 23,735                 | 0          | 0          | 0          | 0                  | -                                   |
| 672.00 | Outside of County                                | 0                                       | 33,262       | 34,250            | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 673.00 | Outside of County                                | 0                                       | 24,884       | 14,900            | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 674.00 | Outside of County                                | 0                                       | 355,415      | 29,972            | 0                      | 0          | 0          | 0          | 0                  | -                                   |

## 2040 No Project

---

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| Jurisdiction                    | VMT Estimates |                   |  | VMT Efficiency Metrics           |                           |                                  | Population Details |                  |                  |                          |                       |
|---------------------------------|---------------|-------------------|--|----------------------------------|---------------------------|----------------------------------|--------------------|------------------|------------------|--------------------------|-----------------------|
|                                 | Total OD VMT  | Home-based PA VMT | Home-based Work PA VMT                             | Total VMT per Service Population | Home-based VMT per Capita | Home-based Work VMT per Employee | Total Households   | Total Population | Total Employment | Total Service Population | Persons Per Household |
| City of Placerville             | 403,646       | 62,940            | 105,579  | 24.8                             | 8.2                       | 12.2                             | 3,429              | 7,658            | 8,649            | 16,307                   | 2.23                  |
| Unincorporated El Dorado County | 5,042,237     | 3,102,953         | 675,594  | 21.2                             | 17.1                      | 12.0                             | 73,092             | 181,914          | 56,413           | 238,327                  | 2.49                  |
|                                 |               |                   | Threshold (85% of Unincorporated El Dorado County) |                                  | 14.5                      | 10.2                             |                    |                  |                  |                          |                       |

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ   | Community Region                                 | In the City of Placerville (1=Yes, 0=N | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|-------|--|--|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 1.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,577        | 1,771             | 819                    | 47         | 99         | 36         | 135                | 41.3                                |
| 2.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 23,283       | 24,630            | 870                    | 592        | 1,338      | 77         | 1,415              | 16.5                                |
| 3.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 5,275        | 6,532             | 98                     | 74         | 180        | 0          | 180                | 29.4                                |
| 4.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,065        | 1,368             | 17                     | 16         | 35         | 0          | 35                 | 30.7                                |
| 5.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,584        | 3,591             | 26                     | 33         | 73         | 0          | 73                 | 35.4                                |
| 6.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 13,805       | 15,958            | 505                    | 366        | 847        | 14         | 861                | 16.0                                |
| 7.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 24,308       | 26,914            | 1,345                  | 565        | 1,223      | 92         | 1,315              | 18.5                                |
| 8.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 11,267       | 575               | 1,969                  | 15         | 38         | 129        | 167                | 67.6                                |
| 9.00  | Unincorporated El Dorado County (Remainder Area) | 0                                      | 25,132       | 30,522            | 627                    | 559        | 1,400      | 13         | 1,413              | 17.8                                |
| 10.00 | Outside of County                                | 0                                      | 108,486      | 87,346            | 11,383                 | 2,178      | 5,588      | 1,056      | 6,644              | 16.3                                |
| 11.00 | Outside of County                                | 0                                      | 111,997      | 80,769            | 13,767                 | 2,148      | 5,511      | 1,297      | 6,808              | 16.5                                |
| 12.00 | Outside of County                                | 0                                      | 58,773       | 44,883            | 4,878                  | 1,179      | 3,234      | 437        | 3,671              | 16.0                                |
| 13.00 | Outside of County                                | 0                                      | 34,464       | 40,043            | 1,540                  | 906        | 2,458      | 99         | 2,557              | 13.5                                |
| 14.00 | Outside of County                                | 0                                      | 59,225       | 68,150            | 1,704                  | 1,511      | 4,120      | 78         | 4,198              | 14.1                                |
| 15.00 | Outside of County                                | 0                                      | 3,041        | 3,912             | 59                     | 58         | 166        | 0          | 166                | 18.4                                |
| 16.00 | Outside of County                                | 0                                      | 56,181       | 21,685            | 7,600                  | 659        | 1,614      | 689        | 2,303              | 24.4                                |
| 17.00 | Outside of County                                | 0                                      | 161,000      | 141,146           | 14,049                 | 2,811      | 7,160      | 1,363      | 8,523              | 18.9                                |
| 18.00 | Outside of County                                | 0                                      | 84,904       | 96,958            | 3,631                  | 1,930      | 4,652      | 246        | 4,898              | 17.3                                |
| 19.00 | Outside of County                                | 0                                      | 10,270       | 5,762             | 1,091                  | 96         | 217        | 103        | 320                | 32.1                                |
| 20.00 | Outside of County                                | 0                                      | 7,630        | 143               | 4,060                  | 2          | 7          | 283        | 290                | 26.3                                |
| 21.00 | Outside of County                                | 0                                      | 26,219       | 73                | 13,535                 | 2          | 4          | 1,082      | 1,086              | 24.1                                |
| 22.00 | Outside of County                                | 0                                      | 1,683        | 10                | 335                    | 1          | 1          | 21         | 22                 | 76.5                                |
| 23.00 | Outside of County                                | 0                                      | 29,007       | 12,699            | 3,659                  | 115        | 322        | 261        | 583                | 49.7                                |
| 24.00 | Outside of County                                | 0                                      | 4,209        | 3,133             | 139                    | 133        | 133        | 0          | 133                | 31.6                                |
| 25.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 26.00 | Outside of County                                | 0                                      | 109,636      | 103,251           | 7,988                  | 2,238      | 5,070      | 642        | 5,712              | 19.2                                |
| 27.00 | Outside of County                                | 0                                      | 8,221        | 76                | 3,043                  | 2          | 5          | 338        | 343                | 24.0                                |
| 28.00 | Outside of County                                | 0                                      | 240,481      | 201,753           | 17,253                 | 4,828      | 12,553     | 1,923      | 14,476             | 16.6                                |
| 29.00 | Outside of County                                | 0                                      | 8,677        | 11,086            | 163                    | 170        | 486        | 0          | 486                | 17.9                                |
| 30.00 | Outside of County                                | 0                                      | 71,035       | 73,528            | 5,820                  | 1,194      | 3,041      | 368        | 3,409              | 20.8                                |
| 31.00 | Outside of County                                | 0                                      | 10,189       | 5,261             | 599                    | 41         | 106        | 44         | 150                | 67.7                                |
| 32.00 | Outside of County                                | 0                                      | 30,011       | 38,869            | 687                    | 692        | 1,811      | 21         | 1,832              | 16.4                                |
| 33.00 | Outside of County                                | 0                                      | 38,665       | 48,142            | 1,368                  | 857        | 2,183      | 69         | 2,252              | 17.2                                |
| 34.00 | Outside of County                                | 0                                      | 6,133        | 5,984             | 702                    | 69         | 156        | 32         | 188                | 32.6                                |
| 35.00 | Outside of County                                | 0                                      | 30,842       | 37,467            | 774                    | 812        | 2,092      | 0          | 2,092              | 14.7                                |
| 36.00 | Outside of County                                | 0                                      | 37,373       | 45,280            | 905                    | 910        | 2,318      | 0          | 2,318              | 16.1                                |
| 37.00 | Outside of County                                | 0                                      | 58,191       | 2,570             | 21,985                 | 57         | 142        | 1,643      | 1,785              | 32.6                                |
| 38.00 | Outside of County                                | 0                                      | 6,657        | 3,876             | 635                    | 57         | 142        | 45         | 187                | 35.7                                |
| 39.00 | Outside of County                                | 0                                      | 16,965       | 14,560            | 2,117                  | 514        | 1,180      | 181        | 1,361              | 12.5                                |
| 40.00 | Outside of County                                | 0                                      | 75,695       | 22,144            | 16,170                 | 851        | 1,972      | 1,905      | 3,877              | 19.5                                |
| 41.00 | Outside of County                                | 0                                      | 35,443       | 24,462            | 7,537                  | 592        | 1,368      | 567        | 1,935              | 18.3                                |
| 42.00 | Outside of County                                | 0                                      | 175,509      | 97,906            | 24,675                 | 2,081      | 5,108      | 1,911      | 7,019              | 25.0                                |
| 43.00 | Outside of County                                | 0                                      | 34,551       | 40,416            | 973                    | 849        | 2,170      | 46         | 2,216              | 15.6                                |
| 44.00 | Outside of County                                | 0                                      | 110,572      | 81,356            | 8,862                  | 1,827      | 4,654      | 791        | 5,445              | 20.3                                |
| 45.00 | Outside of County                                | 0                                      | 72,610       | 23,160            | 12,084                 | 846        | 1,936      | 1,262      | 3,198              | 22.7                                |
| 46.00 | Outside of County                                | 0                                      | 5,984        | 6,531             | 150                    | 164        | 375        | 0          | 375                | 15.9                                |
| 47.00 | Outside of County                                | 0                                      | 201,201      | 9,498             | 80,144                 | 284        | 681        | 5,991      | 6,672              | 30.2                                |
| 48.00 | Outside of County                                | 0                                      | 48,147       | 42,713            | 3,724                  | 1,211      | 3,071      | 266        | 3,337              | 14.4                                |
| 49.00 | Outside of County                                | 0                                      | 109,811      | 586               | 49,788                 | 18         | 45         | 4,248      | 4,293              | 25.6                                |
| 50.00 | Outside of County                                | 0                                      | 73,223       | 36,351            | 21,786                 | 981        | 2,487      | 1,736      | 4,223              | 17.3                                |
| 51.00 | Outside of County                                | 0                                      | 97,988       | 51,789            | 15,576                 | 1,710      | 4,116      | 1,373      | 5,489              | 17.9                                |
| 52.00 | Outside of County                                | 0                                      | 30,503       | 15,044            | 3,151                  | 279        | 629        | 279        | 908                | 33.6                                |
| 53.00 | Outside of County                                | 0                                      | 78,930       | 47,997            | 10,799                 | 1,399      | 3,606      | 983        | 4,589              | 17.2                                |
| 54.00 | Outside of County                                | 0                                      | 59,817       | 22,507            | 22,177                 | 494        | 1,220      | 1,748      | 2,968              | 20.2                                |
| 55.00 | Outside of County                                | 0                                      | 76,816       | 30,242            | 13,824                 | 639        | 1,471      | 1,127      | 2,598              | 29.6                                |
| 56.00 | Outside of County                                | 0                                      | 36,016       | 40,247            | 1,285                  | 872        | 2,337      | 56         | 2,393              | 15.0                                |
| 57.00 | Outside of County                                | 0                                      | 107,258      | 24,206            | 46,054                 | 660        | 1,466      | 4,152      | 5,618              | 19.1                                |
| 58.00 | Outside of County                                | 0                                      | 36,017       | 26,091            | 4,381                  | 613        | 1,587      | 352        | 1,939              | 18.6                                |
| 59.00 | Outside of County                                | 0                                      | 45,084       | 90                | 26,765                 | 2          | 5          | 2,191      | 2,196              | 20.5                                |
| 60.00 | Outside of County                                | 0                                      | 67,902       | 8,286             | 30,755                 | 240        | 512        | 2,711      | 3,223              | 21.1                                |
| 61.00 | Outside of County                                | 0                                      | 140,399      | 87,296            | 22,426                 | 2,381      | 5,595      | 1,810      | 7,405              | 19.0                                |
| 62.00 | Outside of County                                | 0                                      | 51,641       | 1,929             | 23,725                 | 33         | 110        | 2,000      | 2,110              | 24.5                                |

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ    | Community Region  | In the City of Placerville (1=Yes, 0=N | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|-------------------|--|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 63.00  | Outside of County | 0                                      | 65,971       | 5,287             | 26,981                 | 143        | 350        | 2,462      | 2,812              | 23.5                                |
| 64.00  | Outside of County | 0                                      | 128,949      | 73,483            | 20,622                 | 2,031      | 5,053      | 1,733      | 6,786              | 19.0                                |
| 65.00  | Outside of County | 0                                      | 5,599        | 6,327             | 125                    | 127        | 328        | 0          | 328                | 17.1                                |
| 66.00  | Outside of County | 0                                      | 37,694       | 28,192            | 4,165                  | 887        | 2,117      | 331        | 2,448              | 15.4                                |
| 67.00  | Outside of County | 0                                      | 117,020      | 21,912            | 38,405                 | 633        | 1,374      | 3,381      | 4,755              | 24.6                                |
| 68.00  | Outside of County | 0                                      | 38,606       | 12,450            | 10,773                 | 453        | 946        | 1,002      | 1,948              | 19.8                                |
| 69.00  | Outside of County | 0                                      | 240,406      | 69,515            | 96,278                 | 1,950      | 5,172      | 7,364      | 12,536             | 19.2                                |
| 70.00  | Outside of County | 0                                      | 160,478      | 1,049             | 96,174                 | 15         | 38         | 7,503      | 7,541              | 21.3                                |
| 71.00  | Outside of County | 0                                      | 216,856      | 131,337           | 32,088                 | 2,596      | 6,730      | 2,417      | 9,147              | 23.7                                |
| 72.00  | Outside of County | 0                                      | 269,467      | 750               | 154,094                | 0          | 0          | 10,084     | 10,084             | 26.7                                |
| 73.00  | Outside of County | 0                                      | 96,236       | 0                 | 60,285                 | 0          | 0          | 4,612      | 4,612              | 20.9                                |
| 74.00  | Outside of County | 0                                      | 134,490      | 17,437            | 65,999                 | 546        | 1,335      | 5,255      | 6,590              | 20.4                                |
| 75.00  | Outside of County | 0                                      | 84,202       | 62,232            | 16,925                 | 1,946      | 4,535      | 1,072      | 5,607              | 15.0                                |
| 76.00  | Outside of County | 0                                      | 27,691       | 16,903            | 3,797                  | 497        | 1,333      | 313        | 1,646              | 16.8                                |
| 77.00  | Outside of County | 0                                      | 80,840       | 41,776            | 19,346                 | 1,068      | 2,684      | 1,384      | 4,068              | 19.9                                |
| 78.00  | Outside of County | 0                                      | 70,420       | 0                 | 20,196                 | 1          | 2          | 1,777      | 1,779              | 39.6                                |
| 79.00  | Outside of County | 0                                      | 75,763       | 58,024            | 9,204                  | 1,345      | 3,258      | 620        | 3,878              | 19.5                                |
| 80.00  | Outside of County | 0                                      | 33,570       | 0                 | 16,311                 | 0          | 0          | 1,306      | 1,306              | 25.7                                |
| 81.00  | Outside of County | 0                                      | 178,581      | 0                 | 99,760                 | 0          | 0          | 7,809      | 7,809              | 22.9                                |
| 82.00  | Outside of County | 0                                      | 52,351       | 0                 | 25,971                 | 0          | 0          | 2,171      | 2,171              | 24.1                                |
| 83.00  | Outside of County | 0                                      | 51,010       | 34,487            | 6,753                  | 590        | 1,536      | 460        | 1,996              | 25.6                                |
| 84.00  | Outside of County | 0                                      | 51,746       | 42,015            | 4,072                  | 1,305      | 3,049      | 306        | 3,355              | 15.4                                |
| 85.00  | Outside of County | 0                                      | 54,629       | 45,545            | 4,618                  | 1,261      | 3,154      | 354        | 3,508              | 15.6                                |
| 86.00  | Outside of County | 0                                      | 84,779       | 60,757            | 8,187                  | 1,996      | 4,538      | 681        | 5,219              | 16.2                                |
| 87.00  | Outside of County | 0                                      | 63,414       | 50,564            | 7,466                  | 1,845      | 3,996      | 613        | 4,609              | 13.8                                |
| 88.00  | Outside of County | 0                                      | 71,073       | 42,292            | 8,187                  | 1,184      | 2,955      | 696        | 3,651              | 19.5                                |
| 89.00  | Outside of County | 0                                      | 18,652       | 0                 | 6,015                  | 0          | 0          | 455        | 455                | 41.0                                |
| 90.00  | Outside of County | 0                                      | 56,882       | 2,014             | 28,031                 | 92         | 157        | 2,453      | 2,610              | 21.8                                |
| 91.00  | Outside of County | 0                                      | 99,198       | 13,519            | 36,251                 | 389        | 997        | 3,846      | 4,843              | 20.5                                |
| 92.00  | Outside of County | 0                                      | 50,863       | 47,767            | 2,466                  | 1,234      | 2,964      | 133        | 3,097              | 16.4                                |
| 93.00  | Outside of County | 0                                      | 93,216       | 64,870            | 18,649                 | 1,374      | 3,459      | 1,484      | 4,943              | 18.9                                |
| 94.00  | Outside of County | 0                                      | 1,125        | 102               | 456                    | 2          | 4          | 41         | 45                 | 25.0                                |
| 95.00  | Outside of County | 0                                      | 119,957      | 0                 | 63,185                 | 0          | 0          | 4,542      | 4,542              | 26.4                                |
| 96.00  | Outside of County | 0                                      | 160,963      | 53,684            | 54,076                 | 1,026      | 2,520      | 3,884      | 6,404              | 25.1                                |
| 97.00  | Outside of County | 0                                      | 57,299       | 51,467            | 4,469                  | 1,030      | 2,624      | 349        | 2,973              | 19.3                                |
| 98.00  | Outside of County | 0                                      | 84,308       | 13,260            | 27,261                 | 375        | 984        | 2,705      | 3,689              | 22.9                                |
| 99.00  | Outside of County | 0                                      | 71,250       | 27,674            | 23,074                 | 806        | 1,976      | 2,391      | 4,367              | 16.3                                |
| 100.00 | Outside of County | 0                                      | 21,474       | 26,993            | 440                    | 470        | 1,178      | 0          | 1,178              | 18.2                                |
| 101.00 | Outside of County | 0                                      | 54,838       | 41,910            | 8,797                  | 869        | 2,253      | 822        | 3,075              | 17.8                                |
| 102.00 | Outside of County | 0                                      | 22,160       | 5,203             | 6,155                  | 92         | 237        | 467        | 704                | 31.5                                |
| 103.00 | Outside of County | 0                                      | 96,154       | 107,011           | 3,994                  | 2,474      | 5,823      | 281        | 6,104              | 15.8                                |
| 104.00 | Outside of County | 0                                      | 60,057       | 9,222             | 12,931                 | 184        | 451        | 868        | 1,319              | 45.5                                |
| 105.00 | Outside of County | 0                                      | 40,776       | 52,407            | 879                    | 1,011      | 2,513      | 10         | 2,523              | 16.2                                |
| 106.00 | Outside of County | 0                                      | 6,839        | 0                 | 3,166                  | 0          | 0          | 283        | 283                | 24.2                                |
| 107.00 | Outside of County | 0                                      | 296,406      | 40,382            | 94,449                 | 1,362      | 3,008      | 7,445      | 10,453             | 28.4                                |
| 108.00 | Outside of County | 0                                      | 27,008       | 16,940            | 5,680                  | 370        | 988        | 479        | 1,467              | 18.4                                |
| 109.00 | Outside of County | 0                                      | 16,618       | 0                 | 7,326                  | 0          | 0          | 563        | 563                | 29.5                                |
| 110.00 | Outside of County | 0                                      | 62,156       | 8,647             | 28,456                 | 209        | 495        | 2,207      | 2,702              | 23.0                                |
| 111.00 | Outside of County | 0                                      | 81,795       | 7,429             | 15,287                 | 223        | 512        | 1,049      | 1,561              | 52.4                                |
| 112.00 | Outside of County | 0                                      | 133,552      | 30,397            | 26,842                 | 763        | 2,056      | 2,119      | 4,175              | 32.0                                |
| 113.00 | Outside of County | 0                                      | 53,819       | 115               | 23,681                 | 0          | 0          | 2,386      | 2,386              | 22.6                                |
| 114.00 | Outside of County | 0                                      | 36,060       | 29,492            | 6,410                  | 809        | 2,141      | 572        | 2,713              | 13.3                                |
| 115.00 | Outside of County | 0                                      | 153,182      | 86,205            | 20,787                 | 1,900      | 4,875      | 1,584      | 6,459              | 23.7                                |
| 116.00 | Outside of County | 0                                      | 2,991        | 0                 | 1,474                  | 0          | 0          | 116        | 116                | 25.8                                |
| 117.00 | Outside of County | 0                                      | 51,596       | 17,174            | 15,342                 | 327        | 920        | 1,448      | 2,368              | 21.8                                |
| 118.00 | Outside of County | 0                                      | 76,582       | 80,927            | 3,240                  | 2,338      | 6,182      | 191        | 6,373              | 12.0                                |
| 119.00 | Outside of County | 0                                      | 133,930      | 7,155             | 62,174                 | 216        | 540        | 6,222      | 6,762              | 19.8                                |
| 120.00 | Outside of County | 0                                      | 176,902      | 0                 | 43,368                 | 0          | 0          | 4,669      | 4,669              | 37.9                                |
| 121.00 | Outside of County | 0                                      | 137,388      | 48,395            | 19,509                 | 1,513      | 3,882      | 1,917      | 5,799              | 23.7                                |
| 122.00 | Outside of County | 0                                      | 56,501       | 14,997            | 10,481                 | 533        | 1,248      | 1,125      | 2,373              | 23.8                                |
| 123.00 | Outside of County | 0                                      | 28,595       | 6,998             | 5,098                  | 200        | 547        | 536        | 1,083              | 26.4                                |
| 124.00 | Outside of County | 0                                      | 52,817       | 48,084            | 2,776                  | 1,044      | 2,229      | 168        | 2,397              | 22.0                                |

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 125.00 | Outside of County                                | 0                                       | 27,933       | 9,995             | 5,545                  | 414        | 817        | 583        | 1,400              | 20.0                                |
| 126.00 | Outside of County                                | 0                                       | 16,243       | 4,837             | 2,898                  | 156        | 342        | 274        | 616                | 26.4                                |
| 127.00 | Outside of County                                | 0                                       | 38,646       | 33,709            | 2,382                  | 870        | 1,855      | 169        | 2,024              | 19.1                                |
| 128.00 | Outside of County                                | 0                                       | 66,050       | 47,193            | 6,765                  | 1,262      | 2,600      | 538        | 3,138              | 21.0                                |
| 129.00 | Outside of County                                | 0                                       | 41,333       | 43,608            | 1,825                  | 1,045      | 2,302      | 117        | 2,419              | 17.1                                |
| 130.00 | Outside of County                                | 0                                       | 21,004       | 9,167             | 2,657                  | 342        | 786        | 298        | 1,084              | 19.4                                |
| 131.00 | Outside of County                                | 0                                       | 47,353       | 14,668            | 11,269                 | 494        | 1,013      | 1,272      | 2,285              | 20.7                                |
| 132.00 | Outside of County                                | 0                                       | 27,968       | 23,222            | 2,759                  | 556        | 1,258      | 235        | 1,493              | 18.7                                |
| 133.00 | Outside of County                                | 0                                       | 118,100      | 58,239            | 14,396                 | 2,077      | 5,182      | 1,628      | 6,810              | 17.3                                |
| 134.00 | Outside of County                                | 0                                       | 61,149       | 30,010            | 18,017                 | 1,074      | 2,483      | 1,578      | 4,061              | 15.1                                |
| 135.00 | Outside of County                                | 0                                       | 50,360       | 0                 | 27,533                 | 0          | 0          | 2,740      | 2,740              | 18.4                                |
| 136.00 | Outside of County                                | 0                                       | 25,821       | 27,605            | 1,369                  | 661        | 1,688      | 93         | 1,781              | 14.5                                |
| 137.00 | Outside of County                                | 0                                       | 112,329      | 102,589           | 6,994                  | 2,426      | 6,986      | 595        | 7,581              | 14.8                                |
| 138.00 | El Dorado Diamond Springs                        | 0                                       | 21,919       | 6,082             | 4,329                  | 264        | 577        | 297        | 874                | 25.1                                |
| 139.00 | El Dorado Diamond Springs                        | 0                                       | 10,536       | 1,345             | 1,705                  | 67         | 144        | 156        | 300                | 35.1                                |
| 140.00 | El Dorado Diamond Springs                        | 0                                       | 56,900       | 127               | 10,262                 | 10         | 22         | 811        | 833                | 68.3                                |
| 141.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,488        | 1,667             | 28                     | 21         | 49         | 0          | 49                 | 30.3                                |
| 142.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,586        | 6,517             | 171                    | 156        | 347        | 0          | 347                | 19.0                                |
| 143.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,208        | 3,324             | 255                    | 108        | 240        | 12         | 252                | 16.7                                |
| 144.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,019        | 3,572             | 339                    | 80         | 200        | 21         | 221                | 18.2                                |
| 145.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 742          | 650               | 25                     | 30         | 70         | 0          | 70                 | 10.6                                |
| 146.00 | El Dorado Diamond Springs                        | 0                                       | 6,251        | 2,345             | 1,107                  | 114        | 261        | 98         | 359                | 17.4                                |
| 147.00 | El Dorado Diamond Springs                        | 0                                       | 3,727        | 3,553             | 131                    | 165        | 378        | 0          | 378                | 9.8                                 |
| 148.00 | Outside of County                                | 0                                       | 155,420      | 185,969           | 5,362                  | 2,264      | 5,302      | 120        | 5,422              | 28.7                                |
| 149.00 | Shingle Springs                                  | 0                                       | 16,644       | 1,750             | 3,538                  | 53         | 149        | 287        | 436                | 38.2                                |
| 150.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,010        | 6,830             | 131                    | 107        | 254        | 0          | 254                | 23.7                                |
| 151.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,302        | 1,727             | 19                     | 23         | 67         | 0          | 67                 | 19.5                                |
| 152.00 | Shingle Springs                                  | 0                                       | 34,226       | 6,129             | 5,240                  | 201        | 488        | 370        | 858                | 39.9                                |
| 153.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,548        | 8,130             | 247                    | 290        | 623        | 0          | 623                | 13.7                                |
| 154.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,923        | 7,061             | 192                    | 254        | 597        | 0          | 597                | 11.6                                |
| 155.00 | Shingle Springs                                  | 0                                       | 5,210        | 5,654             | 133                    | 154        | 406        | 0          | 406                | 12.8                                |
| 156.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,047        | 2,316             | 57                     | 27         | 68         | 1          | 69                 | 29.7                                |
| 157.00 | El Dorado Hills                                  | 0                                       | 8,646        | 10,861            | 168                    | 273        | 790        | 0          | 790                | 10.9                                |
| 158.00 | Cameron Park                                     | 0                                       | 17,384       | 18,613            | 505                    | 624        | 1,431      | 11         | 1,442              | 12.1                                |
| 159.00 | Cameron Park                                     | 0                                       | 15,343       | 14,559            | 1,449                  | 446        | 1,082      | 114        | 1,196              | 12.8                                |
| 160.00 | Shingle Springs                                  | 0                                       | 18,392       | 16,609            | 1,167                  | 504        | 1,223      | 70         | 1,293              | 14.2                                |
| 161.00 | El Dorado Hills                                  | 0                                       | 11,353       | 14,244            | 210                    | 290        | 754        | 0          | 754                | 15.1                                |
| 162.00 | El Dorado Hills                                  | 0                                       | 57,372       | 77,615            | 887                    | 1,503      | 4,465      | 0          | 4,465              | 12.8                                |
| 163.00 | El Dorado Hills                                  | 0                                       | 37,646       | 7,638             | 5,100                  | 165        | 490        | 438        | 928                | 40.6                                |
| 164.00 | El Dorado Hills                                  | 0                                       | 61,232       | 0                 | 32,391                 | 0          | 0          | 3,124      | 3,124              | 19.6                                |
| 165.00 | El Dorado Hills                                  | 0                                       | 17,367       | 20,569            | 424                    | 551        | 1,369      | 0          | 1,369              | 12.7                                |
| 166.00 | Outside of County                                | 0                                       | 28,692       | 30,496            | 1,012                  | 766        | 1,965      | 50         | 2,015              | 14.2                                |
| 167.00 | El Dorado Hills                                  | 0                                       | 47,835       | 46,337            | 2,359                  | 1,520      | 3,531      | 111        | 3,641              | 13.1                                |
| 168.00 | El Dorado Hills                                  | 0                                       | 26,965       | 29,653            | 1,084                  | 1,133      | 2,632      | 35         | 2,667              | 10.1                                |
| 169.00 | El Dorado Hills                                  | 0                                       | 118,869      | 5,595             | 25,708                 | 208        | 517        | 2,484      | 3,001              | 39.6                                |
| 170.00 | El Dorado Hills                                  | 0                                       | 46,923       | 722               | 23,705                 | 26         | 65         | 2,562      | 2,627              | 17.9                                |
| 171.00 | El Dorado Hills                                  | 0                                       | 16,341       | 16,278            | 1,064                  | 441        | 1,081      | 68         | 1,148              | 14.2                                |
| 172.00 | El Dorado Hills                                  | 0                                       | 9,465        | 0                 | 1,696                  | 0          | 0          | 158        | 158                | 59.9                                |
| 173.00 | El Dorado Hills                                  | 0                                       | 46,417       | 0                 | 11,158                 | 0          | 0          | 1,140      | 1,140              | 40.7                                |
| 174.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,863        | 1,487             | 1,078                  | 15         | 38         | 54         | 92                 | 42.1                                |
| 175.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,612        | 630               | 484                    | 10         | 24         | 22         | 46                 | 57.1                                |
| 176.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,211        | 3,633             | 70                     | 58         | 137        | 0          | 137                | 23.4                                |
| 177.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,090       | 8,569             | 1,814                  | 147        | 370        | 130        | 500                | 22.2                                |
| 178.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,884        | 5,616             | 138                    | 87         | 223        | 3          | 226                | 21.6                                |
| 179.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 737          | 932               | 12                     | 21         | 55         | 0          | 55                 | 13.5                                |
| 180.00 | El Dorado Hills                                  | 0                                       | 18,216       | 22,374            | 354                    | 450        | 1,155      | 0          | 1,155              | 15.8                                |
| 181.00 | El Dorado Hills                                  | 0                                       | 6,992        | 5,404             | 692                    | 120        | 315        | 61         | 376                | 18.6                                |
| 182.00 | Cameron Park                                     | 0                                       | 39,176       | 47,651            | 767                    | 1,244      | 3,262      | 0          | 3,262              | 12.0                                |
| 183.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,007       | 11,993            | 270                    | 354        | 832        | 0          | 832                | 13.2                                |
| 184.00 | Cameron Park                                     | 0                                       | 39,181       | 16,173            | 4,511                  | 417        | 1,093      | 425        | 1,518              | 25.8                                |
| 185.00 | Cameron Park                                     | 0                                       | 3,898        | 4,376             | 86                     | 152        | 349        | 0          | 349                | 11.2                                |
| 186.00 | Cameron Park                                     | 0                                       | 50,840       | 4,599             | 8,898                  | 170        | 390        | 896        | 1,286              | 39.5                                |



**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 187.00 | Cameron Park                                     | 0                                       | 10,759       | 7,112             | 1,208                  | 247        | 566        | 104        | 670                | 16.0                                |
| 188.00 | Cameron Park                                     | 0                                       | 6,611        | 5,630             | 598                    | 213        | 489        | 49         | 538                | 12.3                                |
| 189.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,454        | 3,141             | 40                     | 36         | 100        | 0          | 100                | 24.4                                |
| 190.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,416       | 13,307            | 182                    | 255        | 712        | 0          | 712                | 14.6                                |
| 191.00 | El Dorado Hills                                  | 0                                       | 1,437        | 1,825             | 24                     | 39         | 109        | 0          | 109                | 13.2                                |
| 192.00 | El Dorado Hills                                  | 0                                       | 866          | 1,089             | 14                     | 25         | 69         | 0          | 69                 | 12.5                                |
| 193.00 | El Dorado Hills                                  | 0                                       | 14,290       | 5,231             | 3,682                  | 156        | 406        | 361        | 768                | 18.6                                |
| 194.00 | El Dorado Hills                                  | 0                                       | 15,034       | 19,467            | 268                    | 439        | 1,297      | 0          | 1,297              | 11.6                                |
| 195.00 | El Dorado Hills                                  | 0                                       | 9,027        | 469               | 2,007                  | 10         | 26         | 176        | 203                | 44.5                                |
| 196.00 | Outside of County                                | 0                                       | 52,397       | 59,847            | 1,724                  | 1,148      | 3,198      | 97         | 3,295              | 15.9                                |
| 197.00 | El Dorado Hills                                  | 0                                       | 3,186        | 3,921             | 56                     | 85         | 225        | 0          | 225                | 14.2                                |
| 198.00 | El Dorado Hills                                  | 0                                       | 69,020       | 39,116            | 6,079                  | 887        | 2,476      | 623        | 3,099              | 22.3                                |
| 199.00 | El Dorado Hills                                  | 0                                       | 11,332       | 2,877             | 1,620                  | 62         | 173        | 143        | 316                | 35.9                                |
| 200.00 | El Dorado Hills                                  | 0                                       | 6,394        | 305               | 1,223                  | 7          | 19         | 121        | 140                | 45.8                                |
| 201.00 | El Dorado Hills                                  | 0                                       | 20,651       | 6,786             | 2,765                  | 150        | 443        | 269        | 712                | 29.0                                |
| 202.00 | El Dorado Hills                                  | 0                                       | 37,475       | 35,429            | 2,120                  | 762        | 2,127      | 169        | 2,296              | 16.3                                |
| 203.00 | El Dorado Hills                                  | 0                                       | 51,666       | 65,660            | 1,162                  | 1,300      | 3,762      | 43         | 3,805              | 13.6                                |
| 204.00 | El Dorado Hills                                  | 0                                       | 17,153       | 16,147            | 639                    | 362        | 1,048      | 48         | 1,096              | 15.6                                |
| 205.00 | El Dorado Hills                                  | 0                                       | 504          | 0                 | 244                    | 0          | 0          | 30         | 30                 | 16.8                                |
| 206.00 | El Dorado Hills                                  | 0                                       | 1,622        | 2,074             | 28                     | 51         | 148        | 0          | 148                | 11.0                                |
| 207.00 | El Dorado Hills                                  | 0                                       | 12,923       | 16,554            | 220                    | 304        | 880        | 0          | 880                | 14.7                                |
| 208.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 325          | 424               | 5                      | 9          | 26         | 0          | 26                 | 12.5                                |
| 209.00 | El Dorado Hills                                  | 0                                       | 11,559       | 4,446             | 1,414                  | 88         | 254        | 118        | 372                | 31.1                                |
| 210.00 | El Dorado Hills                                  | 0                                       | 6,340        | 8,147             | 109                    | 162        | 479        | 0          | 479                | 13.2                                |
| 211.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 135          | 178               | 2                      | 4          | 11         | 0          | 11                 | 11.9                                |
| 212.00 | El Dorado Hills                                  | 0                                       | 2,394        | 3,100             | 38                     | 53         | 153        | 0          | 153                | 15.6                                |
| 213.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,180        | 11,783            | 154                    | 193        | 534        | 0          | 534                | 17.2                                |
| 214.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,328        | 3,353             | 31                     | 31         | 76         | 0          | 76                 | 30.8                                |
| 215.00 | El Dorado Hills                                  | 0                                       | 6,798        | 8,623             | 121                    | 148        | 413        | 0          | 413                | 16.5                                |
| 216.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,749        | 2,460             | 26                     | 23         | 56         | 0          | 56                 | 31.2                                |
| 217.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 587          | 759               | 9                      | 11         | 31         | 0          | 31                 | 19.1                                |
| 218.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,510        | 1,891             | 26                     | 28         | 78         | 0          | 78                 | 19.3                                |
| 219.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,903        | 4,955             | 67                     | 69         | 191        | 0          | 191                | 20.4                                |
| 220.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 471          | 632               | 6                      | 9          | 25         | 0          | 25                 | 18.9                                |
| 221.00 | El Dorado Hills                                  | 0                                       | 37,326       | 48,591            | 581                    | 999        | 2,596      | 0          | 2,596              | 14.4                                |
| 222.00 | Cameron Park                                     | 0                                       | 2,165        | 1,463             | 427                    | 34         | 90         | 58         | 148                | 14.6                                |
| 223.00 | Cameron Park                                     | 0                                       | 5,504        | 7,081             | 79                     | 174        | 461        | 0          | 461                | 11.9                                |
| 224.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,565        | 7,314             | 500                    | 144        | 382        | 37         | 419                | 20.5                                |
| 225.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 23,221       | 10,893            | 2,967                  | 147        | 424        | 277        | 702                | 33.1                                |
| 226.00 | Cameron Park                                     | 0                                       | 27,514       | 26,959            | 1,255                  | 550        | 1,591      | 118        | 1,709              | 16.1                                |
| 227.00 | Cameron Park                                     | 0                                       | 8,651        | 10,994            | 207                    | 281        | 689        | 10         | 699                | 12.4                                |
| 228.00 | Cameron Park                                     | 0                                       | 20,463       | 24,983            | 508                    | 724        | 1,775      | 25         | 1,800              | 11.4                                |
| 229.00 | El Dorado Hills                                  | 0                                       | 41,462       | 34,471            | 2,382                  | 793        | 2,061      | 237        | 2,298              | 18.0                                |
| 230.00 | El Dorado Hills                                  | 0                                       | 22,862       | 27,784            | 343                    | 557        | 1,655      | 0          | 1,655              | 13.8                                |
| 231.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,978        | 6,651             | 73                     | 134        | 388        | 0          | 388                | 12.8                                |
| 232.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,539        | 5,862             | 73                     | 87         | 241        | 0          | 241                | 18.9                                |
| 233.00 | Cameron Park                                     | 0                                       | 8,471        | 3,660             | 748                    | 116        | 266        | 100        | 366                | 23.1                                |
| 234.00 | Cameron Park                                     | 0                                       | 55,511       | 33,426            | 5,094                  | 1,085      | 2,488      | 670        | 3,158              | 17.6                                |
| 235.00 | Cameron Park                                     | 0                                       | 42,235       | 54,330            | 640                    | 1,322      | 3,580      | 2          | 3,582              | 11.8                                |
| 236.00 | Cameron Park                                     | 0                                       | 14,727       | 19,307            | 262                    | 473        | 1,281      | 9          | 1,290              | 11.4                                |
| 237.00 | Cameron Park                                     | 0                                       | 2,247        | 2,615             | 46                     | 78         | 179        | 0          | 179                | 12.6                                |
| 238.00 | Cameron Park                                     | 0                                       | 39,546       | 15,069            | 5,313                  | 415        | 1,018      | 527        | 1,545              | 25.6                                |
| 239.00 | Cameron Park                                     | 0                                       | 2,338        | 3,345             | 35                     | 86         | 228        | 0          | 228                | 10.3                                |
| 240.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,561        | 8,295             | 109                    | 137        | 363        | 0          | 363                | 18.1                                |
| 241.00 | Cameron Park                                     | 0                                       | 14,966       | 7,538             | 1,277                  | 181        | 480        | 151        | 631                | 23.7                                |
| 242.00 | Cameron Park                                     | 0                                       | 698          | 904               | 9                      | 24         | 64         | 0          | 64                 | 11.0                                |
| 243.00 | Cameron Park                                     | 0                                       | 2,017        | 2,585             | 32                     | 61         | 162        | 1          | 163                | 12.4                                |
| 244.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,006        | 3,713             | 57                     | 51         | 128        | 0          | 128                | 23.5                                |
| 245.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 772          | 999               | 11                     | 10         | 30         | 0          | 30                 | 25.7                                |
| 246.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,912        | 5,184             | 56                     | 63         | 189        | 0          | 189                | 20.7                                |
| 247.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,625       | 14,348            | 352                    | 296        | 636        | 0          | 636                | 21.4                                |
| 248.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,273       | 10,381            | 942                    | 182        | 431        | 39         | 470                | 28.2                                |

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 249.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,358        | 1,860             | 529                    | 26         | 56         | 25         | 81                 | 41.5                                |
| 250.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,870        | 3,279             | 60                     | 53         | 124        | 0          | 124                | 23.1                                |
| 251.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,625        | 6,213             | 136                    | 139        | 363        | 0          | 363                | 15.5                                |
| 252.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 24,724       | 28,716            | 576                    | 666        | 1,756      | 0          | 1,756              | 14.1                                |
| 253.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,485        | 8,850             | 159                    | 149        | 410        | 0          | 410                | 18.3                                |
| 254.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,268        | 5,898             | 122                    | 119        | 311        | 0          | 311                | 16.9                                |
| 255.00 | Cameron Park                                     | 0                                       | 64,954       | 0                 | 14,885                 | 0          | 0          | 1,405      | 1,405              | 46.2                                |
| 256.00 | Cameron Park                                     | 0                                       | 44,527       | 1,998             | 10,490                 | 72         | 175        | 872        | 1,047              | 42.5                                |
| 257.00 | Shingle Springs                                  | 0                                       | 62,227       | 15,348            | 14,601                 | 511        | 1,335      | 1,312      | 2,647              | 23.5                                |
| 258.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,120        | 2,523             | 40                     | 36         | 99         | 0          | 99                 | 21.4                                |
| 259.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,603        | 3,101             | 52                     | 50         | 132        | 0          | 132                | 19.8                                |
| 260.00 | Shingle Springs                                  | 0                                       | 27,087       | 140               | 5,665                  | 5          | 15         | 441        | 456                | 59.4                                |
| 261.00 | Shingle Springs                                  | 0                                       | 27,150       | 3,584             | 4,859                  | 121        | 333        | 388        | 721                | 37.7                                |
| 262.00 | Shingle Springs                                  | 0                                       | 40,675       | 5,472             | 6,539                  | 203        | 530        | 514        | 1,044              | 39.0                                |
| 263.00 | Shingle Springs                                  | 0                                       | 10,047       | 3,816             | 1,485                  | 121        | 333        | 119        | 452                | 22.2                                |
| 264.00 | Shingle Springs                                  | 0                                       | 7,892        | 3,089             | 1,056                  | 97         | 267        | 82         | 349                | 22.6                                |
| 265.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,956        | 2,209             | 43                     | 44         | 116        | 0          | 116                | 16.9                                |
| 266.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,118        | 1,664             | 666                    | 41         | 88         | 33         | 121                | 50.5                                |
| 267.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,695        | 10,038            | 219                    | 240        | 633        | 0          | 633                | 13.7                                |
| 268.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,023        | 3,094             | 171                    | 72         | 190        | 10         | 200                | 15.1                                |
| 269.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,580       | 9,332             | 1,442                  | 217        | 558        | 81         | 639                | 21.2                                |
| 270.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,207        | 2,667             | 678                    | 54         | 135        | 39         | 174                | 35.7                                |
| 271.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,840        | 9,935             | 735                    | 172        | 442        | 50         | 492                | 20.0                                |
| 272.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,795        | 6,482             | 806                    | 145        | 407        | 55         | 462                | 21.2                                |
| 273.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,439        | 8,885             | 376                    | 138        | 400        | 22         | 422                | 17.6                                |
| 274.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 21,558       | 18,879            | 1,567                  | 411        | 1,153      | 122        | 1,275              | 16.9                                |
| 275.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 14,758       | 17,112            | 337                    | 379        | 971        | 0          | 971                | 15.2                                |
| 276.00 | Cameron Park                                     | 0                                       | 28,055       | 18,733            | 2,074                  | 535        | 1,312      | 179        | 1,491              | 18.8                                |
| 277.00 | Cameron Park                                     | 0                                       | 4,944        | 5,796             | 100                    | 176        | 427        | 0          | 427                | 11.6                                |
| 278.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,749        | 5,977             | 217                    | 100        | 265        | 10         | 275                | 20.9                                |
| 279.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,919        | 3,719             | 49                     | 55         | 146        | 0          | 146                | 20.0                                |
| 280.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,438        | 1,677             | 31                     | 37         | 103        | 0          | 103                | 14.0                                |
| 281.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,881        | 4,202             | 427                    | 85         | 238        | 28         | 266                | 18.3                                |
| 282.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,390        | 1,617             | 30                     | 39         | 109        | 0          | 109                | 12.7                                |
| 283.00 | Shingle Springs                                  | 0                                       | 15,332       | 3,049             | 2,225                  | 0          | 0          | 197        | 197                | 77.8                                |
| 284.00 | Shingle Springs                                  | 0                                       | 4,299        | 1,009             | 657                    | 36         | 87         | 53         | 140                | 30.6                                |
| 285.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 14,061       | 2,737             | 2,962                  | 53         | 154        | 233        | 387                | 36.3                                |
| 286.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,660        | 2,071             | 30                     | 36         | 101        | 0          | 101                | 16.4                                |
| 287.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,395        | 1,685             | 27                     | 34         | 87         | 0          | 87                 | 16.0                                |
| 288.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,174        | 2,688             | 40                     | 50         | 140        | 0          | 140                | 15.5                                |
| 289.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 320          | 421               | 5                      | 8          | 23         | 0          | 23                 | 13.8                                |
| 290.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,045        | 2,614             | 35                     | 44         | 128        | 0          | 128                | 16.0                                |
| 291.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 12,413       | 15,726            | 238                    | 254        | 647        | 0          | 647                | 19.2                                |
| 292.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,243        | 5,672             | 64                     | 72         | 209        | 0          | 209                | 20.3                                |
| 293.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,294        | 1,289             | 36                     | 41         | 90         | 0          | 90                 | 14.4                                |
| 294.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,477        | 4,692             | 122                    | 129        | 321        | 0          | 321                | 14.0                                |
| 295.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 62,264       | 4,926             | 22,499                 | 110        | 282        | 1,540      | 1,822              | 34.2                                |
| 296.00 | El Dorado Diamond Springs                        | 0                                       | 52,128       | 6,599             | 9,732                  | 188        | 496        | 729        | 1,225              | 42.6                                |
| 297.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,262        | 2,673             | 62                     | 79         | 208        | 0          | 208                | 10.9                                |
| 298.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,829        | 3,081             | 71                     | 79         | 208        | 0          | 208                | 13.6                                |
| 299.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,994        | 5,716             | 112                    | 114        | 293        | 0          | 293                | 17.0                                |
| 300.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,728        | 1,917             | 41                     | 45         | 116        | 0          | 116                | 14.9                                |
| 301.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 624          | 549               | 41                     | 20         | 44         | 3          | 47                 | 13.4                                |
| 302.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,867        | 2,605             | 208                    | 89         | 194        | 10         | 204                | 18.9                                |
| 303.00 | El Dorado Diamond Springs                        | 0                                       | 4,188        | 2,682             | 443                    | 106        | 228        | 28         | 255                | 16.4                                |
| 304.00 | El Dorado Diamond Springs                        | 0                                       | 8,292        | 283               | 2,652                  | 12         | 26         | 269        | 296                | 28.1                                |
| 305.00 | El Dorado Diamond Springs                        | 0                                       | 10,709       | 0                 | 4,971                  | 1          | 2          | 536        | 539                | 19.9                                |
| 306.00 | El Dorado Diamond Springs                        | 0                                       | 7,895        | 3,170             | 1,348                  | 128        | 275        | 110        | 386                | 20.5                                |
| 307.00 | El Dorado Diamond Springs                        | 0                                       | 2,949        | 2,816             | 92                     | 112        | 257        | 0          | 257                | 11.5                                |
| 308.00 | El Dorado Diamond Springs                        | 0                                       | 239          | 245               | 6                      | 12         | 28         | 0          | 28                 | 8.7                                 |
| 309.00 | El Dorado Diamond Springs                        | 0                                       | 808          | 720               | 26                     | 34         | 74         | 0          | 74                 | 10.9                                |
| 310.00 | El Dorado Diamond Springs                        | 0                                       | 13,788       | 638               | 2,504                  | 29         | 66         | 220        | 286                | 48.2                                |

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 311.00 | El Dorado Diamond Springs                        | 0                                       | 3,547        | 1,728             | 438                    | 75         | 164        | 33         | 197                | 18.0                                |
| 312.00 | El Dorado Diamond Springs                        | 0                                       | 9,915        | 6,814             | 976                    | 310        | 711        | 71         | 782                | 12.7                                |
| 313.00 | El Dorado Diamond Springs                        | 0                                       | 23,526       | 3,405             | 7,013                  | 71         | 178        | 534        | 712                | 33.0                                |
| 314.00 | El Dorado Diamond Springs                        | 0                                       | 10,542       | 2,505             | 1,454                  | 100        | 249        | 103        | 352                | 30.0                                |
| 315.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 316.00 | El Dorado Diamond Springs                        | 0                                       | 674          | 642               | 22                     | 31         | 68         | 0          | 68                 | 10.0                                |
| 317.00 | El Dorado Diamond Springs                        | 0                                       | 140          | 126               | 4                      | 8          | 17         | 0          | 17                 | 8.0                                 |
| 318.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,111        | 4,743             | 732                    | 182        | 452        | 41         | 493                | 16.4                                |
| 319.00 | El Dorado Diamond Springs                        | 0                                       | 1,396        | 1,289             | 45                     | 57         | 143        | 0          | 143                | 9.8                                 |
| 320.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,885        | 1,581             | 810                    | 19         | 48         | 61         | 109                | 44.7                                |
| 321.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,212        | 6,158             | 137                    | 116        | 295        | 2          | 297                | 17.5                                |
| 322.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,673       | 10,591            | 570                    | 242        | 623        | 26         | 649                | 16.5                                |
| 323.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,272        | 3,756             | 1,838                  | 67         | 172        | 139        | 311                | 26.6                                |
| 324.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,025        | 3,631             | 697                    | 73         | 183        | 39         | 222                | 31.7                                |
| 325.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 717          | 836               | 16                     | 20         | 51         | 0          | 51                 | 14.1                                |
| 326.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,083        | 2,471             | 49                     | 57         | 145        | 0          | 145                | 14.4                                |
| 327.00 | Placerville                                      | 0                                       | 3,209        | 3,505             | 82                     | 84         | 210        | 0          | 210                | 15.3                                |
| 328.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 696          | 793               | 16                     | 19         | 48         | 0          | 48                 | 14.6                                |
| 329.00 | Placerville                                      | 0                                       | 4,820        | 4,856             | 140                    | 156        | 360        | 0          | 360                | 13.4                                |
| 330.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,484        | 3,705             | 94                     | 109        | 273        | 0          | 273                | 12.8                                |
| 331.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,120        | 6,990             | 140                    | 130        | 325        | 0          | 325                | 18.8                                |
| 332.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,432        | 1,528             | 38                     | 47         | 105        | 0          | 105                | 13.6                                |
| 333.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,938        | 4,510             | 87                     | 91         | 225        | 0          | 225                | 17.5                                |
| 334.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,640        | 1,002             | 256                    | 26         | 58         | 18         | 76                 | 21.5                                |
| 335.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,801        | 3,021             | 73                     | 76         | 163        | 0          | 163                | 17.2                                |
| 336.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,045        | 1,118             | 26                     | 30         | 66         | 0          | 66                 | 15.8                                |
| 337.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,198       | 6,044             | 1,758                  | 124        | 304        | 128        | 432                | 23.6                                |
| 338.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,834       | 15,709            | 397                    | 350        | 900        | 11         | 911                | 15.2                                |
| 339.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,273        | 12,029            | 145                    | 224        | 508        | 0          | 508                | 18.3                                |
| 340.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,019        | 5,276             | 510                    | 95         | 202        | 30         | 232                | 34.5                                |
| 341.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,630        | 1,556             | 172                    | 34         | 75         | 16         | 91                 | 18.0                                |
| 342.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,375        | 2,733             | 49                     | 48         | 123        | 0          | 123                | 19.2                                |
| 343.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,958        | 5,767             | 91                     | 78         | 177        | 0          | 177                | 28.1                                |
| 344.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,861        | 6,947             | 107                    | 92         | 208        | 0          | 208                | 28.1                                |
| 345.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,005        | 2,121             | 39                     | 34         | 77         | 0          | 77                 | 26.1                                |
| 346.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,267        | 1,247             | 28                     | 23         | 51         | 0          | 51                 | 24.8                                |
| 347.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,642        | 3,127             | 49                     | 42         | 108        | 0          | 108                | 24.5                                |
| 348.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,505        | 2,468             | 59                     | 48         | 107        | 0          | 107                | 23.5                                |
| 349.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,160        | 4,922             | 577                    | 94         | 193        | 34         | 227                | 35.9                                |
| 350.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 987          | 1,147             | 17                     | 20         | 45         | 0          | 45                 | 21.8                                |
| 351.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,469        | 1,853             | 23                     | 31         | 70         | 0          | 70                 | 20.9                                |
| 352.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,102        | 2,701             | 31                     | 38         | 86         | 0          | 86                 | 24.4                                |
| 353.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,678       | 10,292            | 512                    | 200        | 453        | 43         | 496                | 21.5                                |
| 354.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,011        | 4,699             | 456                    | 68         | 154        | 43         | 197                | 35.6                                |
| 355.00 | Placerville                                      | 1                                       | 27,205       | 5,137             | 4,963                  | 257        | 594        | 387        | 981                | 27.7                                |
| 356.00 | Placerville                                      | 1                                       | 2,711        | 2,556             | 91                     | 109        | 235        | 0          | 235                | 11.6                                |
| 357.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,042        | 4,243             | 728                    | 133        | 294        | 42         | 336                | 23.9                                |
| 358.00 | Placerville                                      | 0                                       | 10,297       | 3,363             | 1,630                  | 128        | 283        | 123        | 406                | 25.4                                |
| 359.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,540        | 3,686             | 94                     | 105        | 247        | 0          | 247                | 14.3                                |
| 360.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,180        | 4,550             | 98                     | 97         | 228        | 0          | 228                | 18.3                                |
| 361.00 | Placerville                                      | 1                                       | 26,989       | 10,058            | 4,607                  | 570        | 1,189      | 370        | 1,558              | 17.3                                |
| 362.00 | Placerville                                      | 1                                       | 46,670       | 3,856             | 7,966                  | 194        | 457        | 616        | 1,073              | 43.5                                |
| 363.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 416          | 428               | 12                     | 19         | 48         | 0          | 48                 | 8.7                                 |
| 364.00 | Placerville                                      | 0                                       | 4,535        | 3,718             | 415                    | 173        | 439        | 28         | 466                | 9.7                                 |
| 365.00 | El Dorado Diamond Springs                        | 0                                       | 24,235       | 9,333             | 2,984                  | 541        | 1,147      | 223        | 1,370              | 17.7                                |
| 366.00 | El Dorado Diamond Springs                        | 0                                       | 10,584       | 1,561             | 1,636                  | 108        | 232        | 146        | 378                | 28.0                                |
| 367.00 | El Dorado Diamond Springs                        | 0                                       | 7,168        | 0                 | 3,549                  | 0          | 0          | 398        | 398                | 18.0                                |
| 368.00 | El Dorado Diamond Springs                        | 0                                       | 4,905        | 1,336             | 823                    | 68         | 157        | 81         | 238                | 20.6                                |
| 369.00 | El Dorado Diamond Springs                        | 0                                       | 14,199       | 8,875             | 1,412                  | 485        | 1,088      | 114        | 1,202              | 11.8                                |
| 370.00 | El Dorado Diamond Springs                        | 0                                       | 6,930        | 78                | 2,913                  | 0          | 0          | 317        | 317                | 21.9                                |
| 371.00 | El Dorado Diamond Springs                        | 0                                       | 2,152        | 2,077             | 61                     | 69         | 155        | 0          | 155                | 13.9                                |
| 372.00 | El Dorado Diamond Springs                        | 0                                       | 28,663       | 14,060            | 3,147                  | 559        | 1,254      | 296        | 1,550              | 18.5                                |

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 373.00 | El Dorado Diamond Springs                        | 0                                       | 556          | 494               | 18                     | 27         | 62         | 0          | 62                 | 9.0                                 |
| 374.00 | El Dorado Diamond Springs                        | 0                                       | 1,046        | 276               | 116                    | 14         | 32         | 10         | 42                 | 24.8                                |
| 375.00 | El Dorado Diamond Springs                        | 0                                       | 361          | 329               | 11                     | 15         | 34         | 0          | 34                 | 10.5                                |
| 376.00 | El Dorado Diamond Springs                        | 0                                       | 1,492        | 726               | 219                    | 34         | 78         | 17         | 95                 | 15.7                                |
| 377.00 | El Dorado Diamond Springs                        | 0                                       | 723          | 318               | 170                    | 14         | 32         | 16         | 48                 | 15.0                                |
| 378.00 | El Dorado Diamond Springs                        | 0                                       | 547          | 518               | 16                     | 27         | 62         | 0          | 62                 | 8.8                                 |
| 379.00 | El Dorado Diamond Springs                        | 0                                       | 941          | 874               | 29                     | 48         | 111        | 0          | 111                | 8.5                                 |
| 380.00 | El Dorado Diamond Springs                        | 0                                       | 196          | 186               | 6                      | 12         | 28         | 0          | 28                 | 7.1                                 |
| 381.00 | El Dorado Diamond Springs                        | 0                                       | 115          | 111               | 3                      | 7          | 16         | 0          | 16                 | 7.2                                 |
| 382.00 | El Dorado Diamond Springs                        | 0                                       | 222          | 184               | 8                      | 11         | 25         | 0          | 25                 | 8.7                                 |
| 383.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,357        | 2,392             | 64                     | 80         | 179        | 0          | 179                | 13.1                                |
| 384.00 | El Dorado Diamond Springs                        | 0                                       | 4,504        | 4,469             | 123                    | 174        | 390        | 0          | 390                | 11.5                                |
| 385.00 | El Dorado Diamond Springs                        | 0                                       | 14,274       | 13,898            | 540                    | 600        | 1,346      | 14         | 1,360              | 10.5                                |
| 386.00 | El Dorado Diamond Springs                        | 0                                       | 2,238        | 2,243             | 60                     | 90         | 202        | 0          | 202                | 11.1                                |
| 387.00 | El Dorado Diamond Springs                        | 0                                       | 3,281        | 744               | 471                    | 36         | 81         | 44         | 124                | 26.4                                |
| 388.00 | El Dorado Diamond Springs                        | 0                                       | 5,459        | 0                 | 2,606                  | 0          | 0          | 278        | 278                | 19.6                                |
| 389.00 | El Dorado Diamond Springs                        | 0                                       | 5,903        | 19                | 2,148                  | 2          | 5          | 240        | 245                | 24.1                                |
| 390.00 | El Dorado Diamond Springs                        | 0                                       | 7,345        | 4,866             | 735                    | 311        | 670        | 54         | 724                | 10.1                                |
| 391.00 | El Dorado Diamond Springs                        | 0                                       | 6,028        | 144               | 968                    | 11         | 24         | 92         | 116                | 52.0                                |
| 392.00 | El Dorado Diamond Springs                        | 0                                       | 1,014        | 475               | 89                     | 28         | 60         | 5          | 66                 | 15.5                                |
| 393.00 | El Dorado Diamond Springs                        | 0                                       | 25,639       | 4,760             | 3,793                  | 281        | 645        | 288        | 932                | 27.5                                |
| 394.00 | El Dorado Diamond Springs                        | 0                                       | 6,140        | 111               | 2,051                  | 8          | 18         | 168        | 186                | 33.0                                |
| 395.00 | Placerville                                      | 1                                       | 80,005       | 1,459             | 29,650                 | 98         | 206        | 2,613      | 2,819              | 28.4                                |
| 396.00 | El Dorado Diamond Springs                        | 0                                       | 30,664       | 0                 | 5,532                  | 0          | 0          | 425        | 425                | 72.2                                |
| 397.00 | El Dorado Diamond Springs                        | 0                                       | 1,453        | 905               | 120                    | 50         | 109        | 7          | 116                | 12.5                                |
| 398.00 | El Dorado Diamond Springs                        | 0                                       | 1,155        | 266               | 144                    | 14         | 32         | 11         | 43                 | 26.7                                |
| 399.00 | El Dorado Diamond Springs                        | 0                                       | 959          | 834               | 33                     | 43         | 99         | 0          | 99                 | 9.7                                 |
| 400.00 | El Dorado Diamond Springs                        | 0                                       | 7,340        | 210               | 1,237                  | 16         | 35         | 97         | 132                | 55.8                                |
| 401.00 | Placerville                                      | 0                                       | 26,880       | 942               | 4,574                  | 57         | 121        | 337        | 458                | 58.7                                |
| 402.00 | El Dorado Diamond Springs                        | 0                                       | 4,675        | 2,567             | 1,032                  | 137        | 344        | 103        | 447                | 10.5                                |
| 403.00 | El Dorado Diamond Springs                        | 0                                       | 31,547       | 2,590             | 12,686                 | 124        | 267        | 906        | 1,174              | 26.9                                |
| 404.00 | El Dorado Diamond Springs                        | 0                                       | 1,727        | 303               | 333                    | 19         | 44         | 32         | 76                 | 22.8                                |
| 405.00 | El Dorado Diamond Springs                        | 0                                       | 1,669        | 148               | 251                    | 9          | 21         | 21         | 41                 | 40.2                                |
| 406.00 | El Dorado Diamond Springs                        | 0                                       | 26,221       | 386               | 4,385                  | 24         | 55         | 339        | 395                | 66.5                                |
| 407.00 | El Dorado Diamond Springs                        | 0                                       | 16,201       | 554               | 3,223                  | 39         | 84         | 285        | 369                | 43.9                                |
| 408.00 | El Dorado Diamond Springs                        | 0                                       | 5,521        | 0                 | 2,366                  | 1          | 2          | 279        | 281                | 19.6                                |
| 409.00 | Placerville                                      | 0                                       | 37,977       | 3,517             | 8,041                  | 162        | 410        | 610        | 1,019              | 37.3                                |
| 410.00 | El Dorado Diamond Springs                        | 0                                       | 40,316       | 14,331            | 5,587                  | 602        | 1,418      | 423        | 1,840              | 21.9                                |
| 411.00 | Placerville                                      | 1                                       | 55,481       | 5,299             | 11,419                 | 335        | 793        | 982        | 1,775              | 31.3                                |
| 412.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,441        | 3,309             | 105                    | 114        | 271        | 0          | 271                | 12.7                                |
| 413.00 | Placerville                                      | 0                                       | 4,918        | 4,594             | 170                    | 199        | 472        | 1          | 473                | 10.4                                |
| 414.00 | El Dorado Diamond Springs                        | 0                                       | 20,103       | 92                | 5,325                  | 7          | 15         | 561        | 576                | 34.9                                |
| 415.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 437          | 320               | 42                     | 18         | 38         | 4          | 42                 | 10.3                                |
| 416.00 | El Dorado Diamond Springs                        | 0                                       | 267          | 129               | 54                     | 9          | 19         | 7          | 26                 | 10.1                                |
| 417.00 | Placerville                                      | 1                                       | 22,868       | 912               | 4,798                  | 55         | 124        | 424        | 548                | 41.8                                |
| 418.00 | Placerville                                      | 1                                       | 5,504        | 0                 | 1,376                  | 0          | 0          | 130        | 130                | 42.3                                |
| 419.00 | Placerville                                      | 1                                       | 6,891        | 0                 | 1,208                  | 0          | 0          | 112        | 112                | 61.6                                |
| 420.00 | Placerville                                      | 1                                       | 5,272        | 970               | 1,322                  | 56         | 132        | 117        | 249                | 21.2                                |
| 421.00 | Placerville                                      | 1                                       | 2,553        | 1,466             | 406                    | 81         | 191        | 28         | 219                | 11.7                                |
| 422.00 | Placerville                                      | 1                                       | 67,392       | 5,183             | 31,184                 | 303        | 714        | 2,392      | 3,106              | 21.7                                |
| 423.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 448          | 391               | 26                     | 21         | 49         | 1          | 50                 | 9.0                                 |
| 424.00 | Placerville                                      | 0                                       | 25,597       | 5,377             | 4,430                  | 252        | 582        | 351        | 934                | 27.4                                |
| 425.00 | Placerville                                      | 0                                       | 67,430       | 28,934            | 8,086                  | 1,390      | 3,090      | 730        | 3,820              | 17.7                                |
| 426.00 | Placerville                                      | 0                                       | 706          | 726               | 18                     | 32         | 80         | 0          | 80                 | 8.8                                 |
| 427.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,813        | 4,038             | 100                    | 102        | 255        | 0          | 255                | 15.0                                |
| 428.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 551          | 584               | 14                     | 22         | 55         | 0          | 55                 | 10.0                                |
| 429.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,193        | 1,395             | 35                     | 35         | 87         | 0          | 87                 | 13.8                                |
| 430.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,098        | 2,008             | 547                    | 59         | 146        | 44         | 190                | 16.3                                |
| 431.00 | Placerville                                      | 1                                       | 13,596       | 511               | 2,247                  | 28         | 59         | 167        | 226                | 60.1                                |
| 432.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,626       | 10,622            | 3,103                  | 363        | 900        | 241        | 1,140              | 13.7                                |
| 433.00 | Placerville                                      | 1                                       | 16,918       | 10,023            | 2,268                  | 678        | 1,398      | 175        | 1,572              | 10.8                                |
| 434.00 | Placerville                                      | 1                                       | 828          | 640               | 30                     | 44         | 95         | 0          | 95                 | 8.7                                 |

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 435.00 | Placerville                                      | 1                                       | 1,290        | 671               | 231                    | 47         | 100        | 27         | 127                | 10.2                                |
| 436.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,146        | 1,171             | 49                     | 32         | 79         | 2          | 81                 | 14.2                                |
| 437.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,360        | 5,919             | 131                    | 147        | 371        | 0          | 371                | 14.5                                |
| 438.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,837        | 4,262             | 505                    | 143        | 303        | 32         | 335                | 17.4                                |
| 439.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,608        | 4,644             | 1,525                  | 169        | 359        | 90         | 449                | 21.4                                |
| 440.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,939        | 863               | 1,570                  | 31         | 66         | 111        | 177                | 33.6                                |
| 441.00 | Placerville                                      | 1                                       | 399          | 393               | 11                     | 15         | 35         | 0          | 35                 | 11.4                                |
| 442.00 | Placerville                                      | 1                                       | 13,545       | 9,872             | 968                    | 350        | 882        | 56         | 939                | 14.4                                |
| 443.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,946        | 1,882             | 56                     | 59         | 125        | 0          | 125                | 15.5                                |
| 444.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 273          | 179               | 17                     | 8          | 19         | 1          | 20                 | 13.7                                |
| 445.00 | Placerville                                      | 0                                       | 839          | 789               | 56                     | 26         | 65         | 3          | 68                 | 12.3                                |
| 446.00 | Placerville                                      | 1                                       | 4,234        | 763               | 694                    | 28         | 65         | 53         | 119                | 35.7                                |
| 447.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,302        | 3,155             | 1,566                  | 81         | 199        | 116        | 314                | 26.4                                |
| 448.00 | Placerville                                      | 0                                       | 1,804        | 2,034             | 52                     | 64         | 161        | 0          | 161                | 11.2                                |
| 449.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 465          | 476               | 12                     | 14         | 30         | 0          | 30                 | 15.5                                |
| 450.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,337        | 2,203             | 75                     | 84         | 180        | 0          | 180                | 13.0                                |
| 451.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 894          | 868               | 26                     | 27         | 58         | 0          | 58                 | 15.4                                |
| 452.00 | Placerville                                      | 0                                       | 6,873        | 3,649             | 920                    | 150        | 321        | 66         | 387                | 17.7                                |
| 453.00 | Placerville                                      | 1                                       | 3,297        | 3,171             | 139                    | 182        | 391        | 0          | 391                | 8.4                                 |
| 454.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 543          | 478               | 19                     | 28         | 59         | 0          | 59                 | 9.2                                 |
| 455.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,531        | 2,663             | 67                     | 73         | 181        | 0          | 181                | 14.0                                |
| 456.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,775        | 1,772             | 50                     | 51         | 109        | 0          | 109                | 16.2                                |
| 457.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,115        | 3,005             | 249                    | 68         | 153        | 13         | 166                | 18.7                                |
| 458.00 | Placerville                                      | 0                                       | 11,360       | 1,923             | 1,822                  | 71         | 157        | 130        | 287                | 39.6                                |
| 459.00 | Placerville                                      | 0                                       | 726          | 702               | 21                     | 28         | 62         | 0          | 62                 | 11.7                                |
| 460.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 823          | 792               | 23                     | 22         | 47         | 0          | 47                 | 17.4                                |
| 461.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 113          | 128               | 2                      | 6          | 13         | 0          | 13                 | 8.6                                 |
| 462.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,602        | 1,238             | 402                    | 31         | 67         | 24         | 91                 | 28.7                                |
| 463.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,727        | 5,338             | 47                     | 89         | 195        | 0          | 195                | 19.1                                |
| 464.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,789        | 3,416             | 47                     | 55         | 129        | 0          | 129                | 21.7                                |
| 465.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,725        | 5,388             | 32                     | 65         | 163        | 0          | 163                | 22.8                                |
| 466.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,077        | 3,406             | 113                    | 65         | 143        | 7          | 150                | 20.6                                |
| 467.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,487        | 3,499             | 29                     | 49         | 107        | 0          | 107                | 23.2                                |
| 468.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,812        | 6,924             | 96                     | 128        | 263        | 0          | 263                | 22.1                                |
| 469.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,786        | 5,171             | 42                     | 70         | 156        | 0          | 156                | 24.3                                |
| 470.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,666        | 2,153             | 23                     | 33         | 72         | 0          | 72                 | 23.0                                |
| 471.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,208        | 1,595             | 17                     | 26         | 57         | 0          | 57                 | 21.2                                |
| 472.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,206        | 1,631             | 17                     | 26         | 57         | 0          | 57                 | 21.1                                |
| 473.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,175        | 676               | 222                    | 13         | 33         | 25         | 58                 | 20.4                                |
| 474.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,758        | 2,037             | 35                     | 42         | 95         | 0          | 95                 | 18.5                                |
| 475.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,837        | 2,192             | 33                     | 42         | 95         | 0          | 95                 | 19.3                                |
| 476.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,009        | 899               | 523                    | 16         | 41         | 34         | 75                 | 53.4                                |
| 477.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,570        | 2,180             | 20                     | 31         | 78         | 0          | 78                 | 20.2                                |
| 478.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,224        | 1,437             | 24                     | 30         | 66         | 0          | 66                 | 18.4                                |
| 479.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,057        | 3,301             | 420                    | 62         | 156        | 29         | 185                | 27.4                                |
| 480.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,693        | 2,440             | 28                     | 31         | 68         | 1          | 69                 | 24.5                                |
| 481.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,353        | 1,928             | 18                     | 24         | 53         | 0          | 53                 | 25.5                                |
| 482.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,439        | 8,493             | 87                     | 102        | 226        | 0          | 226                | 28.5                                |
| 483.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,535        | 4,695             | 1,031                  | 132        | 285        | 76         | 361                | 26.4                                |
| 484.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,636        | 4,829             | 1,170                  | 104        | 267        | 118        | 384                | 22.5                                |
| 485.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,234        | 3,011             | 30                     | 40         | 103        | 0          | 103                | 21.8                                |
| 486.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,286        | 7,069             | 75                     | 110        | 249        | 0          | 249                | 21.3                                |
| 487.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 18,701       | 8,250             | 3,045                  | 228        | 504        | 184        | 688                | 27.2                                |
| 488.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,732        | 7,282             | 104                    | 125        | 283        | 0          | 283                | 20.3                                |
| 489.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,396        | 6,626             | 406                    | 157        | 355        | 24         | 379                | 19.5                                |
| 490.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,515        | 1,805             | 31                     | 35         | 86         | 0          | 86                 | 17.6                                |
| 491.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,401        | 8,785             | 160                    | 181        | 444        | 0          | 444                | 16.7                                |
| 492.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,812        | 3,449             | 1,038                  | 76         | 188        | 72         | 259                | 34.0                                |
| 493.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,816        | 3,608             | 1,461                  | 79         | 195        | 101        | 296                | 33.1                                |
| 494.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,332        | 2,995             | 757                    | 71         | 174        | 55         | 229                | 27.7                                |
| 495.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 642          | 749               | 14                     | 17         | 42         | 0          | 42                 | 15.4                                |
| 496.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,203        | 4,221             | 709                    | 94         | 232        | 52         | 284                | 25.3                                |

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 497.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,446        | 4,990             | 1,004                  | 109        | 263        | 75         | 338                | 27.9                                |
| 498.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,590        | 4,033             | 175                    | 78         | 176        | 13         | 189                | 19.0                                |
| 499.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,503        | 1,832             | 30                     | 38         | 93         | 0          | 93                 | 16.1                                |
| 500.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,290        | 1,094             | 1,164                  | 11         | 24         | 97         | 121                | 43.6                                |
| 501.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,232        | 817               | 553                    | 22         | 49         | 58         | 107                | 20.8                                |
| 502.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,254        | 8,928             | 139                    | 147        | 349        | 0          | 349                | 20.8                                |
| 503.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,070        | 10                | 842                    | 1          | 2          | 56         | 58                 | 87.1                                |
| 504.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,658       | 5,066             | 1,629                  | 140        | 313        | 103        | 416                | 32.8                                |
| 505.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 80           | 95                | 1                      | 3          | 7          | 0          | 7                  | 11.9                                |
| 506.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 995          | 1,020             | 35                     | 28         | 64         | 1          | 65                 | 15.4                                |
| 507.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,130        | 2,501             | 48                     | 61         | 145        | 0          | 145                | 14.7                                |
| 508.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,878        | 2,870             | 1,160                  | 85         | 184        | 114        | 298                | 16.4                                |
| 509.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,068        | 407               | 651                    | 12         | 27         | 77         | 104                | 19.9                                |
| 510.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,520        | 2,933             | 223                    | 92         | 200        | 15         | 215                | 16.3                                |
| 511.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,993        | 1,574             | 132                    | 46         | 109        | 9          | 118                | 16.8                                |
| 512.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,909        | 2,176             | 43                     | 45         | 107        | 0          | 107                | 17.9                                |
| 513.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,016        | 10,349            | 170                    | 178        | 456        | 7          | 463                | 17.3                                |
| 514.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 31,462       | 43,123            | 374                    | 714        | 1,830      | 0          | 1,830              | 17.2                                |
| 515.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,165        | 4,073             | 54                     | 78         | 188        | 0          | 188                | 16.8                                |
| 516.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,404        | 10,018            | 101                    | 162        | 391        | 0          | 391                | 18.9                                |
| 517.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 23,471       | 18,996            | 1,723                  | 489        | 1,085      | 139        | 1,224              | 19.2                                |
| 518.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,133       | 12,367            | 799                    | 325        | 745        | 53         | 799                | 16.4                                |
| 519.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,739        | 6,213             | 744                    | 162        | 371        | 60         | 432                | 17.9                                |
| 520.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,964       | 12,163            | 1,168                  | 296        | 678        | 99         | 778                | 18.0                                |
| 521.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,913       | 9,284             | 1,662                  | 309        | 686        | 167        | 853                | 18.6                                |
| 522.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,836        | 5,854             | 167                    | 96         | 236        | 9          | 245                | 19.7                                |
| 523.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 24,551       | 10,064            | 3,120                  | 302        | 698        | 272        | 970                | 25.3                                |
| 524.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 19,198       | 8,822             | 2,532                  | 214        | 495        | 207        | 702                | 27.3                                |
| 525.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,565        | 5,782             | 59                     | 97         | 233        | 0          | 233                | 19.6                                |
| 526.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,206        | 4,031             | 56                     | 55         | 142        | 0          | 142                | 22.6                                |
| 527.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,811        | 6,976             | 838                    | 186        | 447        | 71         | 517                | 17.0                                |
| 528.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 51,708       | 63,975            | 888                    | 1,061      | 2,556      | 51         | 2,607              | 19.8                                |
| 529.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,259        | 1,222             | 124                    | 19         | 46         | 8          | 54                 | 23.2                                |
| 530.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,300       | 17,586            | 223                    | 226        | 551        | 0          | 551                | 24.2                                |
| 531.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,817        | 5,010             | 62                     | 59         | 144        | 0          | 144                | 26.6                                |
| 532.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,640        | 4,570             | 64                     | 64         | 156        | 0          | 156                | 23.4                                |
| 533.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,659       | 9,338             | 984                    | 151        | 367        | 53         | 420                | 27.8                                |
| 534.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,280        | 5,431             | 71                     | 69         | 168        | 0          | 168                | 25.5                                |
| 535.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,371        | 6,745             | 84                     | 95         | 245        | 0          | 245                | 21.9                                |
| 536.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,499        | 6,973             | 82                     | 106        | 273        | 0          | 273                | 20.1                                |
| 537.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,964       | 14,381            | 138                    | 208        | 536        | 0          | 536                | 20.4                                |
| 538.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,597       | 7,381             | 1,837                  | 159        | 382        | 137        | 519                | 30.0                                |
| 539.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,553       | 1,922             | 1,903                  | 11         | 27         | 142        | 169                | 80.2                                |
| 540.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,633        | 0                 | 1,686                  | 0          | 0          | 132        | 132                | 72.8                                |
| 541.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,568        | 840               | 299                    | 18         | 43         | 24         | 67                 | 38.2                                |
| 542.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,153        | 2,205             | 963                    | 55         | 130        | 76         | 206                | 29.9                                |
| 543.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 32,304       | 1,673             | 6,353                  | 50         | 118        | 368        | 486                | 66.4                                |
| 544.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,506        | 2,672             | 63                     | 58         | 137        | 0          | 137                | 18.2                                |
| 545.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,419        | 1,758             | 20                     | 27         | 64         | 0          | 64                 | 22.2                                |
| 546.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,991        | 10,043            | 115                    | 131        | 310        | 0          | 310                | 25.8                                |
| 547.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,914        | 533               | 758                    | 13         | 31         | 64         | 95                 | 51.8                                |
| 548.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,338       | 17,576            | 597                    | 405        | 960        | 27         | 987                | 15.5                                |
| 549.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,386        | 2,760             | 64                     | 54         | 128        | 1          | 129                | 18.5                                |
| 550.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,354        | 1,696             | 996                    | 40         | 100        | 62         | 162                | 39.1                                |
| 551.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,972        | 1,812             | 1,357                  | 46         | 115        | 87         | 202                | 44.4                                |
| 552.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,059        | 454               | 106                    | 11         | 26         | 6          | 32                 | 33.1                                |
| 553.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,477        | 1,741             | 32                     | 35         | 83         | 0          | 83                 | 17.8                                |
| 554.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,782        | 7,946             | 189                    | 185        | 438        | 5          | 443                | 15.3                                |
| 555.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,558        | 1,761             | 31                     | 39         | 92         | 0          | 92                 | 16.9                                |
| 556.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,503        | 5,469             | 80                     | 89         | 211        | 0          | 211                | 21.4                                |
| 557.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,811        | 1,549             | 214                    | 34         | 81         | 20         | 101                | 18.0                                |
| 558.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,005        | 2,503             | 27                     | 40         | 96         | 0          | 96                 | 20.9                                |

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 559.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,256        | 1,459             | 22                     | 28         | 67         | 0          | 67                 | 18.7                                |
| 560.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,897        | 1,198             | 1,745                  | 28         | 66         | 172        | 238                | 24.7                                |
| 561.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 901          | 1,024             | 19                     | 23         | 54         | 0          | 54                 | 16.6                                |
| 562.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,761        | 4,664             | 55                     | 73         | 175        | 0          | 175                | 21.4                                |
| 563.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,095        | 2,703             | 24                     | 40         | 90         | 0          | 90                 | 23.2                                |
| 564.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,035        | 1,214             | 24                     | 27         | 62         | 0          | 62                 | 16.6                                |
| 565.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,174        | 2,329             | 52                     | 69         | 143        | 0          | 143                | 15.2                                |
| 566.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,929        | 3,986             | 140                    | 112        | 264        | 5          | 269                | 14.6                                |
| 567.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,065        | 694               | 580                    | 29         | 60         | 50         | 110                | 27.9                                |
| 568.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,929        | 754               | 551                    | 26         | 61         | 47         | 108                | 27.1                                |
| 569.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,998        | 1,996             | 1,081                  | 72         | 169        | 96         | 265                | 26.4                                |
| 570.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,639        | 1,184             | 1,851                  | 53         | 109        | 169        | 278                | 31.1                                |
| 571.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,099        | 1,130             | 28                     | 38         | 79         | 0          | 79                 | 14.0                                |
| 572.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,739        | 1,232             | 962                    | 39         | 90         | 89         | 178                | 26.6                                |
| 573.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,934        | 9,693             | 125                    | 126        | 284        | 0          | 284                | 27.9                                |
| 574.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,398        | 5,592             | 54                     | 88         | 204        | 1          | 205                | 21.5                                |
| 575.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,797        | 4,029             | 21                     | 37         | 86         | 0          | 86                 | 32.7                                |
| 576.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,740        | 856               | 322                    | 19         | 43         | 33         | 76                 | 36.1                                |
| 577.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 527          | 635               | 8                      | 14         | 32         | 0          | 32                 | 16.7                                |
| 578.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 25,033       | 38,183            | 125                    | 451        | 1,016      | 0          | 1,016              | 24.6                                |
| 579.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,783        | 4,024             | 21                     | 41         | 96         | 0          | 96                 | 29.0                                |
| 580.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,454        | 3,330             | 26                     | 42         | 98         | 0          | 98                 | 24.9                                |
| 581.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,765        | 7,005             | 39                     | 66         | 146        | 0          | 146                | 32.6                                |
| 582.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,111       | 992               | 1,606                  | 15         | 37         | 65         | 102                | 128.6                               |
| 583.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 30,927       | 46,535            | 291                    | 446        | 987        | 15         | 1,002              | 30.9                                |
| 584.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,103        | 2,052             | 106                    | 22         | 47         | 6          | 53                 | 39.8                                |
| 585.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,922        | 14,081            | 94                     | 148        | 327        | 0          | 327                | 30.3                                |
| 586.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,736        | 2,865             | 258                    | 56         | 105        | 10         | 115                | 32.5                                |
| 587.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,958        | 2,756             | 23                     | 48         | 116        | 0          | 116                | 16.9                                |
| 588.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,965       | 22,673            | 145                    | 348        | 892        | 0          | 892                | 17.9                                |
| 589.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 239          | 290               | 6                      | 8          | 16         | 0          | 16                 | 14.9                                |
| 590.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 819          | 1,034             | 14                     | 23         | 55         | 0          | 55                 | 14.9                                |
| 591.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 67           | 87                | 1                      | 3          | 7          | 0          | 7                  | 9.3                                 |
| 592.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 14,394       | 9,407             | 1,281                  | 361        | 801        | 146        | 947                | 15.2                                |
| 593.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,848        | 5,889             | 529                    | 155        | 370        | 56         | 426                | 16.1                                |
| 594.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,293       | 15,053            | 163                    | 316        | 754        | 0          | 754                | 15.0                                |
| 595.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,038        | 2,673             | 251                    | 46         | 104        | 27         | 131                | 30.8                                |
| 596.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,258        | 3,064             | 493                    | 59         | 151        | 48         | 199                | 26.4                                |
| 597.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 12,298       | 3,074             | 1,753                  | 122        | 271        | 214        | 485                | 25.3                                |
| 598.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,757        | 386               | 1,441                  | 15         | 33         | 166        | 200                | 43.9                                |
| 599.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 622          | 765               | 12                     | 18         | 40         | 0          | 40                 | 15.6                                |
| 600.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,409       | 8,190             | 1,044                  | 217        | 481        | 94         | 575                | 19.8                                |
| 601.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,335        | 1,856             | 5                      | 11         | 24         | 0          | 24                 | 54.9                                |
| 602.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,851        | 116               | 235                    | 3          | 6          | 9          | 15                 | 126.6                               |
| 603.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,571        | 470               | 923                    | 12         | 23         | 32         | 55                 | 65.5                                |
| 604.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,261        | 634               | 449                    | 17         | 31         | 13         | 44                 | 74.4                                |
| 605.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,835        | 914               | 807                    | 21         | 46         | 29         | 75                 | 38.0                                |
| 606.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 607.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,216        | 4,498             | 12                     | 19         | 47         | 0          | 47                 | 68.8                                |
| 608.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 30           | 41                | 0                      | 1          | 2          | 0          | 2                  | 13.8                                |
| 609.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,749        | 1,528             | 1,526                  | 37         | 80         | 61         | 141                | 69.0                                |
| 610.00 | El Dorado Hills                                  | 0                                       | 60,722       | 137               | 28,105                 | 0          | 0          | 2,725      | 2,725              | 22.3                                |
| 611.00 | El Dorado Hills                                  | 0                                       | 59,180       | 34,796            | 8,774                  | 1,023      | 2,614      | 672        | 3,286              | 18.0                                |
| 612.00 | El Dorado Hills                                  | 0                                       | 128,483      | 1,046             | 62,207                 | 0          | 0          | 5,778      | 5,778              | 22.2                                |
| 613.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 119          | 102               | 18                     | 4          | 10         | 3          | 13                 | 9.3                                 |
| 614.00 | El Dorado Hills                                  | 0                                       | 6,284        | 7,424             | 137                    | 211        | 550        | 0          | 550                | 11.4                                |
| 615.00 | El Dorado Hills                                  | 0                                       | 10,543       | 8,776             | 725                    | 211        | 550        | 60         | 609                | 17.3                                |
| 616.00 | El Dorado Hills                                  | 0                                       | 1,568        | 1,862             | 33                     | 53         | 138        | 0          | 138                | 11.4                                |
| 617.00 | El Dorado Hills                                  | 0                                       | 13,981       | 9,746             | 904                    | 187        | 553        | 89         | 642                | 21.8                                |
| 618.00 | El Dorado Hills                                  | 0                                       | 4,693        | 0                 | 2,128                  | 0          | 0          | 265        | 265                | 17.7                                |
| 619.00 | El Dorado Hills                                  | 0                                       | 3,485        | 0                 | 566                    | 0          | 0          | 60         | 60                 | 58.1                                |
| 620.00 | El Dorado Hills                                  | 0                                       | 17,466       | 3,715             | 1,583                  | 0          | 0          | 178        | 178                | 98.1                                |

**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|--|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 621.00 | El Dorado Hills                                  | 0                                      | 12,558       | 16,345            | 218                    | 326        | 963        | 0          | 963                | 13.0                                |
| 622.00 | El Dorado Hills                                  | 0                                      | 19,304       | 18,056            | 1,112                  | 370        | 1,094      | 90         | 1,184              | 16.3                                |
| 623.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 624.00 | El Dorado Hills                                  | 0                                      | 15,290       | 14,513            | 684                    | 309        | 918        | 54         | 972                | 15.7                                |
| 625.00 | El Dorado Hills                                  | 0                                      | 182          | 0                 | 105                    | 0          | 0          | 12         | 12                 | 15.2                                |
| 626.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 42,077       | 4,866             | 6,506                  | 164        | 386        | 554        | 939                | 44.8                                |
| 627.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 59,517       | 0                 | 11,017                 | 0          | 0          | 966        | 966                | 61.6                                |
| 628.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 19,745       | 23,460            | 458                    | 515        | 1,322      | 0          | 1,322              | 14.9                                |
| 629.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 630.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 631.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 632.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,660        | 2,025             | 33                     | 53         | 138        | 0          | 138                | 12.0                                |
| 633.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,027        | 8,434             | 150                    | 211        | 550        | 0          | 550                | 12.8                                |
| 634.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,361        | 8,924             | 151                    | 212        | 552        | 0          | 552                | 13.3                                |
| 635.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,605        | 4,362             | 72                     | 106        | 276        | 0          | 276                | 13.1                                |
| 636.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 6,042        | 8,294             | 136                    | 212        | 556        | 0          | 556                | 10.9                                |
| 637.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 9,445        | 11,545            | 188                    | 265        | 695        | 0          | 695                | 13.6                                |
| 638.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,274        | 1,595             | 22                     | 36         | 94         | 0          | 94                 | 13.5                                |
| 639.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,735        | 3,343             | 52                     | 72         | 189        | 0          | 189                | 14.5                                |
| 640.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 9,539        | 11,832            | 183                    | 272        | 713        | 0          | 713                | 13.4                                |
| 641.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 2,759        | 3,405             | 52                     | 72         | 189        | 0          | 189                | 14.6                                |
| 642.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 36,495       | 38,459            | 1,582                  | 926        | 2,421      | 96         | 2,517              | 14.5                                |
| 643.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 9,281        | 11,512            | 180                    | 257        | 672        | 0          | 672                | 13.8                                |
| 644.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,071        | 3,879             | 54                     | 90         | 238        | 0          | 238                | 12.9                                |
| 645.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 21,188       | 24,962            | 914                    | 495        | 1,311      | 56         | 1,367              | 15.5                                |
| 646.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 7,088        | 8,875             | 124                    | 180        | 477        | 0          | 477                | 14.9                                |
| 647.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 1,499        | 1,883             | 26                     | 45         | 119        | 0          | 119                | 12.6                                |
| 648.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 3,880        | 2,218             | 512                    | 45         | 119        | 42         | 161                | 24.1                                |
| 649.00 | Unincorporated El Dorado County (Remainder Area) | 0                                      | 4,695        | 2,830             | 29                     | 45         | 119        | 0          | 119                | 39.4                                |
| 650.00 | Outside of County                                | 0                                      | 2,924,327    | 1,494,977         | 488,244                | 0          | 0          | 0          | 0                  | -                                   |
| 651.00 | Outside of County                                | 0                                      | 29,889       | 17,048            | 4,074                  | 0          | 0          | 0          | 0                  | -                                   |
| 652.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 653.00 | Outside of County                                | 0                                      | 418,098      | 187,954           | 51,242                 | 0          | 0          | 0          | 0                  | -                                   |
| 654.00 | Outside of County                                | 0                                      | 41,830       | 9,395             | 2,400                  | 0          | 0          | 0          | 0                  | -                                   |
| 655.00 | Outside of County                                | 0                                      | 352,832      | 120,373           | 33,664                 | 0          | 0          | 0          | 0                  | -                                   |
| 656.00 | Outside of County                                | 0                                      | 56,354       | 18,723            | 6,997                  | 0          | 0          | 0          | 0                  | -                                   |
| 657.00 | Outside of County                                | 0                                      | 196,519      | 9,096             | 3,547                  | 0          | 0          | 0          | 0                  | -                                   |
| 658.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 659.00 | Outside of County                                | 0                                      | 5,729        | 3,013             | 928                    | 0          | 0          | 0          | 0                  | -                                   |
| 660.00 | Outside of County                                | 0                                      | 181,521      | 102,048           | 33,425                 | 0          | 0          | 0          | 0                  | -                                   |
| 661.00 | Outside of County                                | 0                                      | 148,492      | 79,165            | 24,191                 | 0          | 0          | 0          | 0                  | -                                   |
| 662.00 | Outside of County                                | 0                                      | 710,514      | 374,713           | 120,676                | 0          | 0          | 0          | 0                  | -                                   |
| 663.00 | Outside of County                                | 0                                      | 733,804      | 259,751           | 80,292                 | 0          | 0          | 0          | 0                  | -                                   |
| 664.00 | Outside of County                                | 0                                      | 451,825      | 247,011           | 65,947                 | 0          | 0          | 0          | 0                  | -                                   |
| 665.00 | Outside of County                                | 0                                      | 221,136      | 97,356            | 35,746                 | 0          | 0          | 0          | 0                  | -                                   |
| 666.00 | Outside of County                                | 0                                      | 102,261      | 56,553            | 17,165                 | 0          | 0          | 0          | 0                  | -                                   |
| 667.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 668.00 | Outside of County                                | 0                                      | 535,637      | 361,820           | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 669.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 670.00 | Outside of County                                | 0                                      | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 671.00 | Outside of County                                | 0                                      | 203,230      | 110,554           | 30,430                 | 0          | 0          | 0          | 0                  | -                                   |
| 672.00 | Outside of County                                | 0                                      | 38,760       | 38,854            | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 673.00 | Outside of County                                | 0                                      | 33,691       | 16,694            | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 674.00 | Outside of County                                | 0                                      | 405,139      | 27,678            | 0                      | 0          | 0          | 0          | 0                  | -                                   |





**VMT Summary by Jurisdiction - 2018 Baseline Scenario**

| Jurisdiction                    | VMT Estimates |                   |                        | VMT Efficiency Metrics           |                           |                                  | Population Details |                  |                  |                          |                       |
|---------------------------------|---------------|-------------------|------------------------|----------------------------------|---------------------------|----------------------------------|--------------------|------------------|------------------|--------------------------|-----------------------|
|                                 | Total OD VMT  | Home-based PA VMT | Home-based Work PA VMT | Total VMT per Service Population | Home-based VMT per Capita | Home-based Work VMT per Employee | Total Households   | Total Population | Total Employment | Total Service Population | Persons Per Household |
| City of Placerville             | 296,846       | 69,992            | 89,498                 | 20.9                             | 10.6                      | 11.7                             | 2,914              | 6,581            | 7,639            | 14,220                   | 2.26                  |
| Unincorporated El Dorado County | 3,706,740     | 3,105,525         | 427,564                | 21.8                             | 22.7                      | 12.9                             | 55,436             | 136,955          | 33,076           | 170,031                  | 2.47                  |
| 630                             | 7,832         | 8,544             | 203                    | 9.3                              | 10.1                      | #DIV/0!                          | 381                | 847              | 0                | 847                      | 2.22                  |
|                                 |               |                   |                        | Threshold                        | 19.3                      |                                  |                    |                  |                  |                          |                       |

| TAZ   | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|-------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 1.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,166        | 2,625             | 327                    | 46         | 75         | 16         | 91                 | 46.0                                |
| 2.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 23,175       | 32,167            | 464                    | 525        | 1,185      | 34         | 1,219              | 19.0                                |
| 3.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,950        | 3,748             | 42                     | 34         | 88         | 0          | 88                 | 33.6                                |
| 4.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,537        | 1,542             | 52                     | 16         | 34         | 2          | 36                 | 43.0                                |
| 5.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,870        | 4,053             | 27                     | 33         | 73         | 0          | 73                 | 39.6                                |
| 6.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 12,361       | 15,911            | 354                    | 270        | 646        | 9          | 655                | 18.9                                |
| 7.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 25,937       | 33,665            | 994                    | 516        | 1,119      | 71         | 1,190              | 21.8                                |
| 8.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,720        | 794               | 751                    | 14         | 36         | 60         | 96                 | 28.3                                |
| 9.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 28,526       | 33,472            | 1,709                  | 482        | 1,240      | 117        | 1,357              | 21.0                                |
| 10.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 11.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 12.00 | Outside of County                                | 0                                       | 39,557       | 31,070            | 1,879                  | 663        | 1,741      | 96         | 1,837              | 21.5                                |
| 13.00 | Outside of County                                | 0                                       | 31,202       | 35,912            | 687                    | 775        | 1,995      | 0          | 1,995              | 15.6                                |
| 14.00 | Outside of County                                | 0                                       | 64,341       | 72,216            | 1,553                  | 1,502      | 4,068      | 32         | 4,100              | 15.7                                |
| 15.00 | Outside of County                                | 0                                       | 498          | 525               | 10                     | 10         | 23         | 0          | 23                 | 22.1                                |
| 16.00 | Outside of County                                | 0                                       | 56,488       | 8,982             | 7,537                  | 149        | 378        | 434        | 812                | 69.6                                |
| 17.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 18.00 | Outside of County                                | 0                                       | 1,557        | 620               | 67                     | 41         | 116        | 0          | 116                | 13.4                                |
| 19.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 20.00 | Outside of County                                | 0                                       | 219          | 18                | 118                    | 1          | 1          | 5          | 6                  | 36.6                                |
| 21.00 | Outside of County                                | 0                                       | 5,225        | 50                | 2,540                  | 1          | 2          | 112        | 114                | 45.8                                |
| 22.00 | Outside of County                                | 0                                       | 2,226        | 269               | 579                    | 2          | 6          | 23         | 29                 | 76.7                                |
| 23.00 | Outside of County                                | 0                                       | 58,622       | 23,692            | 6,309                  | 101        | 273        | 244        | 517                | 113.5                               |
| 24.00 | Outside of County                                | 0                                       | 48           | 30                | 1                      | 1          | 1          | 0          | 1                  | 47.7                                |
| 25.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 26.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 27.00 | Outside of County                                | 0                                       | 1,313        | 265               | 500                    | 2          | 6          | 22         | 28                 | 46.9                                |
| 28.00 | Outside of County                                | 0                                       | 12,538       | 14,745            | 378                    | 123        | 332        | 6          | 338                | 37.1                                |
| 29.00 | Outside of County                                | 0                                       | 7,851        | 9,177             | 243                    | 72         | 192        | 5          | 197                | 39.9                                |
| 30.00 | Outside of County                                | 0                                       | 6,058        | 0                 | 3,208                  | 0          | 0          | 133        | 133                | 45.5                                |
| 31.00 | Outside of County                                | 0                                       | 5,562        | 4,124             | 1,046                  | 44         | 94         | 45         | 139                | 40.0                                |
| 32.00 | Outside of County                                | 0                                       | 24,963       | 6,856             | 622                    | 676        | 1,526      | 0          | 1,526              | 16.4                                |
| 33.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 34.00 | Outside of County                                | 0                                       | 8,759        | 9,505             | 587                    | 75         | 191        | 16         | 207                | 42.4                                |
| 35.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 36.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 37.00 | Outside of County                                | 0                                       | 5,077        | 0                 | 2,683                  | 0          | 0          | 178        | 178                | 28.5                                |
| 38.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 39.00 | Outside of County                                | 0                                       | 24,409       | 22,415            | 3,316                  | 666        | 1,569      | 227        | 1,796              | 13.6                                |
| 40.00 | Outside of County                                | 0                                       | 114,027      | 26,280            | 18,898                 | 916        | 2,079      | 1,839      | 3,918              | 29.1                                |
| 41.00 | Outside of County                                | 0                                       | 30,903       | 26,562            | 3,968                  | 544        | 1,271      | 203        | 1,474              | 21.0                                |
| 42.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 43.00 | Outside of County                                | 0                                       | 53,546       | 63,323            | 1,211                  | 828        | 2,045      | 0          | 2,045              | 26.2                                |
| 44.00 | Outside of County                                | 0                                       | 79,515       | 76,843            | 3,283                  | 1,069      | 2,614      | 95         | 2,709              | 29.3                                |
| 45.00 | Outside of County                                | 0                                       | 100,974      | 24,084            | 14,614                 | 906        | 2,057      | 1,357      | 3,414              | 29.6                                |
| 46.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 47.00 | Outside of County                                | 0                                       | 100,903      | 0                 | 42,767                 | 0          | 0          | 2,398      | 2,398              | 42.1                                |
| 48.00 | Outside of County                                | 0                                       | 72,021       | 71,910            | 3,399                  | 1,203      | 3,068      | 121        | 3,189              | 22.6                                |
| 49.00 | Outside of County                                | 0                                       | 152,877      | 0                 | 78,281                 | 0          | 0          | 4,642      | 4,642              | 32.9                                |
| 50.00 | Outside of County                                | 0                                       | 120,751      | 85,355            | 19,328                 | 1,025      | 2,430      | 826        | 3,256              | 37.1                                |
| 51.00 | Outside of County                                | 0                                       | 125,778      | 68,968            | 18,107                 | 1,768      | 4,253      | 1,237      | 5,490              | 22.9                                |
| 52.00 | Outside of County                                | 0                                       | 45,557       | 25,284            | 4,462                  | 297        | 667        | 240        | 907                | 50.2                                |
| 53.00 | Outside of County                                | 0                                       | 114,364      | 87,605            | 8,475                  | 1,335      | 3,452      | 377        | 3,829              | 29.9                                |
| 54.00 | Outside of County                                | 0                                       | 92,757       | 36,191            | 38,638                 | 476        | 1,153      | 1,827      | 2,980              | 31.1                                |
| 55.00 | Outside of County                                | 0                                       | 83,197       | 38,439            | 12,495                 | 675        | 1,583      | 800        | 2,383              | 34.9                                |
| 56.00 | Outside of County                                | 0                                       | 34,951       | 40,059            | 997                    | 820        | 1,933      | 4          | 1,937              | 18.0                                |
| 57.00 | Outside of County                                | 0                                       | 162,345      | 0                 | 113,472                | 0          | 0          | 7,375      | 7,375              | 22.0                                |
| 58.00 | Outside of County                                | 0                                       | 43,828       | 24,407            | 6,807                  | 465        | 1,160      | 388        | 1,548              | 28.3                                |
| 59.00 | Outside of County                                | 0                                       | 424          | 111               | 173                    | 2          | 4          | 9          | 13                 | 32.6                                |
| 60.00 | Outside of County                                | 0                                       | 205,947      | 17,439            | 103,299                | 238        | 478        | 4,236      | 4,714              | 43.7                                |
| 61.00 | Outside of County                                | 0                                       | 273,229      | 191,705           | 22,350                 | 2,205      | 5,227      | 797        | 6,024              | 45.4                                |
| 62.00 | Outside of County                                | 0                                       | 55,259       | 318               | 26,741                 | 4          | 8          | 1,150      | 1,158              | 47.7                                |
| 63.00 | Outside of County                                | 0                                       | 114,397      | 18,488            | 51,583                 | 340        | 756        | 3,083      | 3,839              | 29.8                                |
| 64.00 | Outside of County                                | 0                                       | 79,847       | 60,542            | 11,474                 | 865        | 2,156      | 560        | 2,716              | 29.4                                |
| 65.00 | Outside of County                                | 0                                       | 10,454       | 11,583            | 218                    | 136        | 338        | 0          | 338                | 30.9                                |
| 66.00 | Outside of County                                | 0                                       | 62,386       | 50,971            | 4,294                  | 826        | 1,950      | 172        | 2,122              | 29.4                                |
| 67.00 | Outside of County                                | 0                                       | 10,434       | 0                 | 2,800                  | 0          | 0          | 178        | 178                | 58.6                                |
| 68.00 | Outside of County                                | 0                                       | 55,236       | 32,773            | 11,805                 | 616        | 1,314      | 679        | 1,993              | 27.7                                |
| 69.00 | Outside of County                                | 0                                       | 144,045      | 90,878            | 38,324                 | 1,588      | 4,122      | 2,320      | 6,442              | 22.4                                |
| 70.00 | Outside of County                                | 0                                       | 210,261      | 803               | 126,756                | 0          | 0          | 6,956      | 6,956              | 30.2                                |
| 71.00 | Outside of County                                | 0                                       | 107,476      | 110,943           | 4,894                  | 1,231      | 3,088      | 121        | 3,209              | 33.5                                |
| 72.00 | Outside of County                                | 0                                       | 254,150      | 362               | 133,950                | 0          | 0          | 5,133      | 5,133              | 49.5                                |
| 73.00 | Outside of County                                | 0                                       | 122,244      | 0                 | 80,137                 | 0          | 0          | 5,627      | 5,627              | 21.7                                |
| 74.00 | Outside of County                                | 0                                       | 176,414      | 22,019            | 81,675                 | 435        | 1,022      | 4,728      | 5,750              | 30.7                                |
| 75.00 | Outside of County                                | 0                                       | 106,845      | 77,617            | 27,254                 | 1,936      | 4,401      | 1,866      | 6,267              | 17.0                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 76.00  | Outside of County                                | 0                                       | 42,197       | 23,716            | 5,010                  | 508        | 1,352      | 297        | 1,649              | 25.6                                |
| 77.00  | Outside of County                                | 0                                       | 159,336      | 78,382            | 33,960                 | 1,155      | 2,810      | 1,659      | 4,469              | 35.7                                |
| 78.00  | Outside of County                                | 0                                       | 88,917       | 0                 | 23,853                 | 0          | 0          | 1,567      | 1,567              | 56.7                                |
| 79.00  | Outside of County                                | 0                                       | 972          | 0                 | 0                      | 0          | 0          | 20         | 20                 | 48.6                                |
| 80.00  | Outside of County                                | 0                                       | 50,703       | 0                 | 24,019                 | 0          | 0          | 1,410      | 1,410              | 36.0                                |
| 81.00  | Outside of County                                | 0                                       | 160,995      | 0                 | 83,600                 | 0          | 0          | 4,951      | 4,951              | 32.5                                |
| 82.00  | Outside of County                                | 0                                       | 56,242       | 0                 | 29,992                 | 0          | 0          | 1,787      | 1,787              | 31.5                                |
| 83.00  | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 84.00  | Outside of County                                | 0                                       | 64,953       | 48,646            | 6,578                  | 1,226      | 2,817      | 405        | 3,222              | 20.2                                |
| 85.00  | Outside of County                                | 0                                       | 71,860       | 60,400            | 4,725                  | 1,295      | 3,246      | 253        | 3,499              | 20.5                                |
| 86.00  | Outside of County                                | 0                                       | 111,525      | 74,857            | 11,412                 | 1,968      | 4,487      | 754        | 5,241              | 21.3                                |
| 87.00  | Outside of County                                | 0                                       | 103,011      | 66,720            | 12,944                 | 2,114      | 4,344      | 800        | 5,144              | 20.0                                |
| 88.00  | Outside of County                                | 0                                       | 86,708       | 47,979            | 12,034                 | 1,099      | 2,679      | 762        | 3,441              | 25.2                                |
| 89.00  | Outside of County                                | 0                                       | 11,271       | 0                 | 4,692                  | 0          | 0          | 293        | 293                | 38.5                                |
| 90.00  | Outside of County                                | 0                                       | 53,443       | 0                 | 10,929                 | 0          | 0          | 592        | 592                | 90.3                                |
| 91.00  | Outside of County                                | 0                                       | 123,374      | 16,289            | 50,240                 | 383        | 961        | 4,100      | 5,061              | 24.4                                |
| 92.00  | Outside of County                                | 0                                       | 60,116       | 56,666            | 3,294                  | 1,139      | 2,709      | 141        | 2,850              | 21.1                                |
| 93.00  | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 94.00  | Outside of County                                | 0                                       | 432          | 480               | 9                      | 6          | 15         | 0          | 15                 | 28.8                                |
| 95.00  | Outside of County                                | 0                                       | 933          | 0                 | 443                    | 0          | 0          | 27         | 27                 | 34.6                                |
| 96.00  | Outside of County                                | 0                                       | 343          | 0                 | 175                    | 0          | 0          | 12         | 12                 | 28.6                                |
| 97.00  | Outside of County                                | 0                                       | 110          | 103               | 2                      | 2          | 4          | 0          | 4                  | 27.5                                |
| 98.00  | Outside of County                                | 0                                       | 76,362       | 353               | 27,351                 | 10         | 25         | 2,289      | 2,314              | 33.0                                |
| 99.00  | Outside of County                                | 0                                       | 49,979       | 27,128            | 11,910                 | 791        | 1,944      | 958        | 2,902              | 17.2                                |
| 100.00 | Outside of County                                | 0                                       | 6,022        | 7,038             | 129                    | 84         | 203        | 0          | 203                | 29.7                                |
| 101.00 | Outside of County                                | 0                                       | 12,116       | 0                 | 6,071                  | 0          | 0          | 320        | 320                | 37.9                                |
| 102.00 | Outside of County                                | 0                                       | 6,006        | 5,244             | 1,003                  | 51         | 153        | 53         | 206                | 29.2                                |
| 103.00 | Outside of County                                | 0                                       | 58,981       | 68,339            | 1,392                  | 910        | 2,200      | 0          | 2,200              | 26.8                                |
| 104.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 105.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 106.00 | Outside of County                                | 0                                       | 2,872        | 0                 | 1,452                  | 0          | 0          | 70         | 70                 | 41.0                                |
| 107.00 | Outside of County                                | 0                                       | 85,509       | 0                 | 45,750                 | 0          | 0          | 3,135      | 3,135              | 27.3                                |
| 108.00 | Outside of County                                | 0                                       | 438          | 0                 | 203                    | 0          | 0          | 15         | 15                 | 29.2                                |
| 109.00 | Outside of County                                | 0                                       | 18,947       | 0                 | 4,266                  | 0          | 0          | 238        | 238                | 79.6                                |
| 110.00 | Outside of County                                | 0                                       | 63,919       | 8,697             | 29,033                 | 205        | 426        | 1,610      | 2,036              | 31.4                                |
| 111.00 | Outside of County                                | 0                                       | 136,473      | 12,304            | 25,039                 | 350        | 728        | 1,151      | 1,879              | 72.6                                |
| 112.00 | Outside of County                                | 0                                       | 195,323      | 38,200            | 41,925                 | 747        | 1,946      | 2,117      | 4,063              | 48.1                                |
| 113.00 | Outside of County                                | 0                                       | 91,651       | 0                 | 47,411                 | 0          | 0          | 4,022      | 4,022              | 22.8                                |
| 114.00 | Outside of County                                | 0                                       | 40,947       | 30,305            | 7,771                  | 770        | 1,950      | 660        | 2,610              | 15.7                                |
| 115.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 116.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 117.00 | Outside of County                                | 0                                       | 87,037       | 32,789            | 23,806                 | 401        | 1,031      | 1,492      | 2,523              | 34.5                                |
| 118.00 | Outside of County                                | 0                                       | 89,831       | 82,262            | 3,773                  | 2,313      | 5,898      | 187        | 6,085              | 14.8                                |
| 119.00 | Outside of County                                | 0                                       | 170,437      | 7,875             | 75,248                 | 214        | 522        | 6,545      | 7,067              | 24.1                                |
| 120.00 | Outside of County                                | 0                                       | 204,281      | 0                 | 58,715                 | 0          | 0          | 4,131      | 4,131              | 49.5                                |
| 121.00 | Outside of County                                | 0                                       | 167,320      | 57,282            | 22,438                 | 1,642      | 4,261      | 1,724      | 5,985              | 28.0                                |
| 122.00 | Outside of County                                | 0                                       | 67,418       | 20,201            | 12,462                 | 619        | 1,530      | 1,071      | 2,601              | 25.9                                |
| 123.00 | Outside of County                                | 0                                       | 53,068       | 7,523             | 10,754                 | 200        | 529        | 855        | 1,384              | 38.3                                |
| 124.00 | Outside of County                                | 0                                       | 81,216       | 55,211            | 5,578                  | 1,240      | 2,628      | 328        | 2,956              | 27.5                                |
| 125.00 | Outside of County                                | 0                                       | 60,250       | 10,925            | 9,301                  | 389        | 801        | 781        | 1,582              | 38.1                                |
| 126.00 | Outside of County                                | 0                                       | 15,766       | 4,406             | 1,787                  | 136        | 279        | 129        | 408                | 38.6                                |
| 127.00 | Outside of County                                | 0                                       | 38,604       | 34,442            | 2,025                  | 800        | 1,693      | 117        | 1,810              | 21.3                                |
| 128.00 | Outside of County                                | 0                                       | 85,988       | 40,348            | 11,057                 | 999        | 2,062      | 767        | 2,829              | 30.4                                |
| 129.00 | Outside of County                                | 0                                       | 42,845       | 46,721            | 819                    | 994        | 2,246      | 0          | 2,246              | 19.1                                |
| 130.00 | Outside of County                                | 0                                       | 31,619       | 10,039            | 4,055                  | 369        | 740        | 416        | 1,156              | 27.3                                |
| 131.00 | Outside of County                                | 0                                       | 75,719       | 20,681            | 13,598                 | 607        | 1,234      | 1,278      | 2,512              | 30.1                                |
| 132.00 | Outside of County                                | 0                                       | 34,016       | 20,648            | 3,981                  | 407        | 894        | 260        | 1,154              | 29.5                                |
| 133.00 | Outside of County                                | 0                                       | 133,279      | 63,740            | 14,736                 | 2,087      | 5,211      | 1,475      | 6,686              | 19.9                                |
| 134.00 | Outside of County                                | 0                                       | 70,518       | 32,161            | 18,485                 | 1,075      | 2,460      | 1,492      | 3,952              | 17.8                                |
| 135.00 | Outside of County                                | 0                                       | 43,651       | 0                 | 23,802                 | 0          | 0          | 2,114      | 2,114              | 20.6                                |
| 136.00 | Outside of County                                | 0                                       | 31,832       | 28,600            | 1,650                  | 669        | 1,669      | 82         | 1,751              | 18.2                                |
| 137.00 | Outside of County                                | 0                                       | 139,035      | 104,371           | 9,388                  | 2,349      | 6,735      | 673        | 7,408              | 18.8                                |
| 138.00 | El Dorado Diamond Springs                        | 0                                       | 5,541        | 5,386             | 426                    | 161        | 367        | 25         | 392                | 14.1                                |
| 139.00 | El Dorado Diamond Springs                        | 0                                       | 3,959        | 1,788             | 651                    | 62         | 135        | 55         | 190                | 20.8                                |
| 140.00 | El Dorado Diamond Springs                        | 0                                       | 24,045       | 268               | 4,960                  | 10         | 27         | 383        | 410                | 58.6                                |
| 141.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,084        | 1,977             | 80                     | 21         | 49         | 2          | 51                 | 41.0                                |
| 142.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,385        | 8,041             | 176                    | 157        | 353        | 0          | 353                | 20.9                                |
| 143.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,601        | 3,775             | 131                    | 93         | 209        | 4          | 213                | 16.9                                |
| 144.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,902        | 4,025             | 289                    | 74         | 186        | 19         | 205                | 19.0                                |
| 145.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 804          | 845               | 22                     | 30         | 69         | 0          | 69                 | 11.7                                |
| 146.00 | El Dorado Diamond Springs                        | 0                                       | 3,784        | 1,802             | 617                    | 64         | 145        | 51         | 196                | 19.3                                |
| 147.00 | El Dorado Diamond Springs                        | 0                                       | 4,301        | 4,592             | 133                    | 159        | 359        | 0          | 359                | 12.0                                |
| 148.00 | Outside of County                                | 0                                       | 189,288      | 257,284           | 6,816                  | 2,250      | 5,293      | 137        | 5,430              | 34.9                                |
| 149.00 | Shingle Springs                                  | 0                                       | 6,891        | 1,700             | 1,464                  | 37         | 98         | 112        | 210                | 32.8                                |
| 150.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,736        | 8,499             | 226                    | 109        | 260        | 3          | 263                | 29.4                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 151.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,458        | 2,010             | 20                     | 23         | 67         | 0          | 67                 | 21.7                                |
| 152.00 | Shingle Springs                                  | 0                                       | 9,938        | 6,156             | 1,453                  | 122        | 315        | 99         | 414                | 24.0                                |
| 153.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,439        | 6,695             | 215                    | 178        | 388        | 5          | 393                | 16.4                                |
| 154.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,341        | 3,262             | 235                    | 84         | 196        | 16         | 212                | 15.8                                |
| 155.00 | Shingle Springs                                  | 0                                       | 2,688        | 3,155             | 57                     | 62         | 161        | 0          | 161                | 16.6                                |
| 156.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,333        | 2,762             | 39                     | 27         | 67         | 0          | 67                 | 34.7                                |
| 157.00 | El Dorado Hills                                  | 0                                       | 11,334       | 14,582            | 189                    | 274        | 807        | 0          | 807                | 14.0                                |
| 158.00 | Cameron Park                                     | 0                                       | 22,049       | 24,490            | 1,061                  | 598        | 1,373      | 72         | 1,445              | 15.3                                |
| 159.00 | Cameron Park                                     | 0                                       | 12,633       | 16,235            | 239                    | 340        | 878        | 1          | 879                | 14.4                                |
| 160.00 | Shingle Springs                                  | 0                                       | 7,856        | 9,574             | 164                    | 194        | 501        | 0          | 501                | 15.7                                |
| 161.00 | El Dorado Hills                                  | 0                                       | 6,108        | 7,831             | 93                     | 105        | 283        | 0          | 283                | 21.6                                |
| 162.00 | El Dorado Hills                                  | 0                                       | 71,555       | 99,144            | 984                    | 1,503      | 4,414      | 0          | 4,414              | 16.2                                |
| 163.00 | El Dorado Hills                                  | 0                                       | 350          | 364               | 39                     | 7          | 21         | 4          | 25                 | 14.3                                |
| 164.00 | El Dorado Hills                                  | 0                                       | 27,844       | 0                 | 14,459                 | 0          | 0          | 1,232      | 1,232              | 22.6                                |
| 165.00 | El Dorado Hills                                  | 0                                       | 16,412       | 19,748            | 375                    | 373        | 997        | 0          | 997                | 16.5                                |
| 166.00 | Outside of County                                | 0                                       | 41,597       | 42,319            | 1,381                  | 749        | 1,892      | 49         | 1,941              | 21.4                                |
| 167.00 | El Dorado Hills                                  | 0                                       | 50,454       | 52,569            | 2,149                  | 1,297      | 2,904      | 55         | 2,959              | 17.0                                |
| 168.00 | El Dorado Hills                                  | 0                                       | 30,639       | 36,326            | 951                    | 1,125      | 2,519      | 9          | 2,528              | 12.1                                |
| 169.00 | El Dorado Hills                                  | 0                                       | 103,276      | 155               | 21,372                 | 0          | 0          | 1,688      | 1,688              | 61.2                                |
| 170.00 | El Dorado Hills                                  | 0                                       | 27,612       | 0                 | 15,362                 | 0          | 0          | 1,357      | 1,357              | 20.3                                |
| 171.00 | El Dorado Hills                                  | 0                                       | 14,284       | 12,802            | 761                    | 441        | 790        | 20         | 810                | 17.6                                |
| 172.00 | El Dorado Hills                                  | 0                                       | 8,232        | 0                 | 1,981                  | 0          | 0          | 168        | 168                | 49.0                                |
| 173.00 | El Dorado Hills                                  | 0                                       | 29,784       | 0                 | 6,431                  | 0          | 0          | 547        | 547                | 54.4                                |
| 174.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,221        | 1,543             | 250                    | 15         | 37         | 11         | 48                 | 45.9                                |
| 175.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 957          | 879               | 97                     | 11         | 26         | 5          | 31                 | 30.7                                |
| 176.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,052        | 2,328             | 41                     | 29         | 69         | 0          | 69                 | 29.7                                |
| 177.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 828          | 703               | 119                    | 10         | 25         | 7          | 32                 | 26.0                                |
| 178.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,087        | 2,423             | 40                     | 30         | 77         | 0          | 77                 | 27.0                                |
| 179.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10           | 17                | 0                      | 1          | 3          | 0          | 3                  | 3.7                                 |
| 180.00 | El Dorado Hills                                  | 0                                       | 3,245        | 3,927             | 54                     | 58         | 149        | 0          | 149                | 21.7                                |
| 181.00 | El Dorado Hills                                  | 0                                       | 1,419        | 8                 | 646                    | 1          | 3          | 58         | 61                 | 23.4                                |
| 182.00 | Cameron Park                                     | 0                                       | 51,586       | 67,846            | 794                    | 1,186      | 3,202      | 0          | 3,202              | 16.1                                |
| 183.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,533        | 7,659             | 127                    | 152        | 355        | 0          | 355                | 18.4                                |
| 184.00 | Cameron Park                                     | 0                                       | 28,794       | 20,519            | 3,330                  | 357        | 964        | 300        | 1,264              | 22.8                                |
| 185.00 | Cameron Park                                     | 0                                       | 5,408        | 6,647             | 94                     | 149        | 342        | 0          | 342                | 15.8                                |
| 186.00 | Cameron Park                                     | 0                                       | 648          | 102               | 236                    | 3          | 7          | 28         | 35                 | 18.6                                |
| 187.00 | Cameron Park                                     | 0                                       | 10,288       | 9,804             | 1,024                  | 239        | 549        | 85         | 634                | 16.2                                |
| 188.00 | Cameron Park                                     | 0                                       | 7,328        | 7,051             | 803                    | 188        | 432        | 69         | 501                | 14.6                                |
| 189.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,894        | 3,688             | 44                     | 37         | 104        | 0          | 104                | 27.9                                |
| 190.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,317       | 14,858            | 175                    | 237        | 663        | 0          | 663                | 17.1                                |
| 191.00 | El Dorado Hills                                  | 0                                       | 823          | 1,100             | 11                     | 19         | 53         | 0          | 53                 | 15.5                                |
| 192.00 | El Dorado Hills                                  | 0                                       | 1,092        | 1,444             | 15                     | 25         | 70         | 0          | 70                 | 15.7                                |
| 193.00 | El Dorado Hills                                  | 0                                       | 8,915        | 4,379             | 2,586                  | 100        | 253        | 246        | 499                | 17.9                                |
| 194.00 | El Dorado Hills                                  | 0                                       | 18,219       | 23,720            | 283                    | 439        | 1,285      | 0          | 1,285              | 14.2                                |
| 195.00 | El Dorado Hills                                  | 0                                       | 1,611        | 534               | 185                    | 10         | 26         | 14         | 40                 | 40.8                                |
| 196.00 | Outside of County                                | 0                                       | 46,107       | 51,403            | 1,517                  | 923        | 2,503      | 82         | 2,585              | 17.8                                |
| 197.00 | El Dorado Hills                                  | 0                                       | 3,967        | 4,971             | 65                     | 86         | 219        | 0          | 219                | 18.1                                |
| 198.00 | El Dorado Hills                                  | 0                                       | 58,704       | 47,097            | 4,612                  | 887        | 2,482      | 453        | 2,935              | 20.0                                |
| 199.00 | El Dorado Hills                                  | 0                                       | 11,114       | 3,698             | 1,549                  | 62         | 173        | 120        | 293                | 37.9                                |
| 200.00 | El Dorado Hills                                  | 0                                       | 3,342        | 334               | 744                    | 7          | 18         | 67         | 85                 | 39.4                                |
| 201.00 | El Dorado Hills                                  | 0                                       | 13,491       | 8,477             | 2,770                  | 150        | 439        | 301        | 740                | 18.2                                |
| 202.00 | El Dorado Hills                                  | 0                                       | 41,912       | 41,630            | 2,365                  | 737        | 2,062      | 199        | 2,261              | 18.5                                |
| 203.00 | El Dorado Hills                                  | 0                                       | 52,551       | 66,701            | 1,849                  | 1,043      | 3,061      | 139        | 3,200              | 16.4                                |
| 204.00 | El Dorado Hills                                  | 0                                       | 19,398       | 20,408            | 604                    | 362        | 1,067      | 41         | 1,108              | 17.5                                |
| 205.00 | El Dorado Hills                                  | 0                                       | 628          | 0                 | 289                    | 0          | 0          | 30         | 30                 | 20.9                                |
| 206.00 | El Dorado Hills                                  | 0                                       | 2,154        | 2,779             | 30                     | 52         | 153        | 0          | 153                | 14.1                                |
| 207.00 | El Dorado Hills                                  | 0                                       | 15,041       | 19,912            | 231                    | 296        | 869        | 0          | 869                | 17.3                                |
| 208.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 412          | 559               | 5                      | 9          | 26         | 0          | 26                 | 15.6                                |
| 209.00 | El Dorado Hills                                  | 0                                       | 2,997        | 3,556             | 173                    | 55         | 161        | 14         | 175                | 17.1                                |
| 210.00 | El Dorado Hills                                  | 0                                       | 5,752        | 7,580             | 87                     | 125        | 366        | 0          | 366                | 15.7                                |
| 211.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 167          | 231               | 2                      | 4          | 11         | 0          | 11                 | 15.0                                |
| 212.00 | El Dorado Hills                                  | 0                                       | 1,872        | 2,524             | 25                     | 35         | 103        | 0          | 103                | 18.2                                |
| 213.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,818        | 8,998             | 101                    | 116        | 323        | 0          | 323                | 21.1                                |
| 214.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 688          | 924               | 10                     | 8          | 19         | 0          | 19                 | 35.6                                |
| 215.00 | El Dorado Hills                                  | 0                                       | 6,139        | 8,033             | 96                     | 113        | 316        | 0          | 316                | 19.4                                |
| 216.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 400          | 521               | 5                      | 5          | 12         | 0          | 12                 | 33.1                                |
| 217.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 739          | 957               | 10                     | 11         | 31         | 0          | 31                 | 24.0                                |
| 218.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,724        | 2,237             | 25                     | 28         | 78         | 0          | 78                 | 22.0                                |
| 219.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,458        | 2,398             | 1,006                  | 28         | 78         | 77         | 155                | 28.8                                |
| 220.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 581          | 763               | 8                      | 9          | 25         | 0          | 25                 | 23.2                                |
| 221.00 | El Dorado Hills                                  | 0                                       | 43,251       | 59,086            | 589                    | 876        | 2,359      | 0          | 2,359              | 18.3                                |
| 222.00 | Cameron Park                                     | 0                                       | 2,702        | 1,424             | 257                    | 26         | 71         | 26         | 97                 | 28.0                                |
| 223.00 | Cameron Park                                     | 0                                       | 4,073        | 5,524             | 52                     | 103        | 279        | 0          | 279                | 14.6                                |
| 224.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,455        | 6,396             | 349                    | 95         | 258        | 29         | 287                | 19.0                                |
| 225.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,267       | 7,673             | 981                    | 92         | 270        | 79         | 349                | 32.3                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 226.00 | Cameron Park                                     | 0                                       | 10,024       | 8,754             | 772                    | 131        | 384        | 76         | 460                | 21.8                                |
| 227.00 | Cameron Park                                     | 0                                       | 182          | 177               | 13                     | 5          | 12         | 2          | 14                 | 12.9                                |
| 228.00 | Cameron Park                                     | 0                                       | 23,424       | 31,138            | 510                    | 705        | 1,703      | 20         | 1,723              | 13.6                                |
| 229.00 | El Dorado Hills                                  | 0                                       | 406          | 557               | 4                      | 9          | 24         | 0          | 24                 | 16.8                                |
| 230.00 | El Dorado Hills                                  | 0                                       | 595          | 814               | 6                      | 12         | 35         | 0          | 35                 | 16.9                                |
| 231.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,020        | 332               | 240                    | 5          | 15         | 28         | 43                 | 23.9                                |
| 232.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,110        | 2,823             | 28                     | 33         | 92         | 0          | 92                 | 23.0                                |
| 233.00 | Cameron Park                                     | 0                                       | 6,653        | 3,846             | 769                    | 92         | 211        | 101        | 312                | 21.3                                |
| 234.00 | Cameron Park                                     | 0                                       | 47,163       | 41,559            | 4,553                  | 1,004      | 2,306      | 587        | 2,893              | 16.3                                |
| 235.00 | Cameron Park                                     | 0                                       | 33,875       | 44,796            | 480                    | 861        | 2,214      | 0          | 2,214              | 15.3                                |
| 236.00 | Cameron Park                                     | 0                                       | 17,956       | 24,314            | 299                    | 468        | 1,204      | 9          | 1,213              | 14.8                                |
| 237.00 | Cameron Park                                     | 0                                       | 2,848        | 3,555             | 47                     | 75         | 172        | 0          | 172                | 16.5                                |
| 238.00 | Cameron Park                                     | 0                                       | 15,153       | 13,703            | 2,021                  | 280        | 676        | 199        | 875                | 17.3                                |
| 239.00 | Cameron Park                                     | 0                                       | 1,950        | 1,617             | 135                    | 32         | 87         | 16         | 103                | 19.0                                |
| 240.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,280        | 9,725             | 107                    | 127        | 345        | 0          | 345                | 21.1                                |
| 241.00 | Cameron Park                                     | 0                                       | 6,840        | 9,110             | 106                    | 164        | 445        | 2          | 447                | 15.3                                |
| 242.00 | Cameron Park                                     | 0                                       | 805          | 1,102             | 9                      | 22         | 60         | 0          | 60                 | 13.5                                |
| 243.00 | Cameron Park                                     | 0                                       | 2,408        | 2,931             | 120                    | 52         | 141        | 13         | 154                | 15.6                                |
| 244.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,394        | 1,807             | 23                     | 22         | 57         | 0          | 57                 | 24.6                                |
| 245.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 840          | 1,065             | 11                     | 10         | 29         | 0          | 29                 | 29.0                                |
| 246.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,465        | 6,071             | 59                     | 63         | 182        | 0          | 182                | 24.5                                |
| 247.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 14,649       | 16,841            | 349                    | 296        | 646        | 0          | 646                | 22.7                                |
| 248.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,776       | 13,133            | 226                    | 185        | 441        | 0          | 441                | 24.4                                |
| 249.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,933        | 2,105             | 39                     | 27         | 59         | 0          | 59                 | 32.8                                |
| 250.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,242        | 3,878             | 63                     | 53         | 123        | 0          | 123                | 26.3                                |
| 251.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,466        | 5,231             | 91                     | 88         | 224        | 0          | 224                | 20.0                                |
| 252.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 20,267       | 25,005            | 421                    | 434        | 1,130      | 0          | 1,130              | 17.9                                |
| 253.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,666        | 10,848            | 166                    | 147        | 403        | 0          | 403                | 21.5                                |
| 254.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,290        | 7,427             | 128                    | 116        | 295        | 0          | 295                | 21.3                                |
| 255.00 | Cameron Park                                     | 0                                       | 17,030       | 0                 | 5,089                  | 0          | 0          | 426        | 426                | 40.0                                |
| 256.00 | Cameron Park                                     | 0                                       | 46,450       | 1,918             | 13,816                 | 47         | 121        | 1,042      | 1,163              | 39.9                                |
| 257.00 | Shingle Springs                                  | 0                                       | 30,255       | 6,784             | 11,172                 | 153        | 389        | 960        | 1,349              | 22.4                                |
| 258.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,492        | 1,760             | 51                     | 21         | 58         | 2          | 60                 | 25.1                                |
| 259.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,827        | 2,275             | 31                     | 30         | 78         | 0          | 78                 | 23.4                                |
| 260.00 | Shingle Springs                                  | 0                                       | 5,679        | 58                | 1,814                  | 2          | 4          | 146        | 150                | 37.8                                |
| 261.00 | Shingle Springs                                  | 0                                       | 15,350       | 4,187             | 3,621                  | 92         | 252        | 282        | 534                | 28.7                                |
| 262.00 | Shingle Springs                                  | 0                                       | 12,903       | 4,881             | 3,010                  | 121        | 308        | 238        | 546                | 23.7                                |
| 263.00 | Shingle Springs                                  | 0                                       | 6,152        | 5,016             | 533                    | 108        | 296        | 35         | 331                | 18.6                                |
| 264.00 | Shingle Springs                                  | 0                                       | 4,768        | 2,299             | 627                    | 50         | 137        | 45         | 182                | 26.2                                |
| 265.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,413        | 2,977             | 44                     | 45         | 117        | 0          | 117                | 20.6                                |
| 266.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,367        | 2,189             | 116                    | 42         | 92         | 4          | 96                 | 24.7                                |
| 267.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,503        | 6,922             | 126                    | 129        | 336        | 0          | 336                | 16.4                                |
| 268.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,283        | 3,779             | 132                    | 69         | 180        | 6          | 186                | 17.7                                |
| 269.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,368        | 11,029            | 227                    | 204        | 516        | 1          | 517                | 18.1                                |
| 270.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,477        | 3,229             | 42                     | 44         | 113        | 0          | 113                | 21.9                                |
| 271.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,104        | 10,082            | 199                    | 150        | 379        | 5          | 384                | 21.1                                |
| 272.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,804        | 7,766             | 363                    | 131        | 347        | 23         | 370                | 18.4                                |
| 273.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,914        | 10,200            | 255                    | 134        | 391        | 12         | 403                | 19.6                                |
| 274.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,456       | 13,876            | 1,333                  | 233        | 618        | 99         | 717                | 21.6                                |
| 275.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,523       | 18,344            | 457                    | 321        | 828        | 13         | 841                | 18.5                                |
| 276.00 | Cameron Park                                     | 0                                       | 9,011        | 10,845            | 268                    | 224        | 541        | 12         | 553                | 16.3                                |
| 277.00 | Cameron Park                                     | 0                                       | 6,266        | 7,941             | 106                    | 161        | 416        | 0          | 416                | 15.1                                |
| 278.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,238        | 6,824             | 85                     | 91         | 247        | 0          | 247                | 21.2                                |
| 279.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,686        | 3,518             | 42                     | 45         | 122        | 0          | 122                | 22.0                                |
| 280.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,780        | 2,204             | 33                     | 37         | 98         | 0          | 98                 | 18.1                                |
| 281.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,870        | 3,577             | 542                    | 59         | 156        | 36         | 192                | 20.1                                |
| 282.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,773        | 2,174             | 33                     | 39         | 103        | 0          | 103                | 17.2                                |
| 283.00 | Shingle Springs                                  | 0                                       | 16,094       | 3,774             | 2,072                  | 0          | 0          | 161        | 161                | 100.0                               |
| 284.00 | Shingle Springs                                  | 0                                       | 1,623        | 1,093             | 304                    | 25         | 65         | 25         | 90                 | 18.1                                |
| 285.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,119        | 1,486             | 884                    | 12         | 26         | 66         | 92                 | 55.4                                |
| 286.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,779        | 2,322             | 29                     | 36         | 95         | 0          | 95                 | 18.6                                |
| 287.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,719        | 2,183             | 29                     | 34         | 88         | 0          | 88                 | 19.6                                |
| 288.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,634        | 3,329             | 46                     | 51         | 135        | 0          | 135                | 19.5                                |
| 289.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 360          | 515               | 4                      | 8          | 23         | 0          | 23                 | 15.4                                |
| 290.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,418        | 3,233             | 37                     | 44         | 129        | 0          | 129                | 18.8                                |
| 291.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,937        | 12,966            | 182                    | 188        | 463        | 0          | 463                | 21.4                                |
| 292.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,557        | 6,305             | 65                     | 72         | 210        | 0          | 210                | 21.7                                |
| 293.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,230        | 1,281             | 32                     | 34         | 77         | 0          | 77                 | 15.9                                |
| 294.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,031        | 4,677             | 94                     | 97         | 247        | 0          | 247                | 16.3                                |
| 295.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 148,483      | 5,038             | 26,624                 | 110        | 284        | 1,491      | 1,775              | 83.7                                |
| 296.00 | El Dorado Diamond Springs                        | 0                                       | 9,620        | 6,696             | 853                    | 117        | 305        | 56         | 361                | 26.7                                |
| 297.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,435        | 3,154             | 57                     | 70         | 182        | 0          | 182                | 13.4                                |
| 298.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,323        | 3,834             | 74                     | 79         | 206        | 0          | 206                | 16.2                                |
| 299.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,094        | 6,082             | 106                    | 106        | 268        | 0          | 268                | 19.0                                |
| 300.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,198        | 1,397             | 26                     | 28         | 71         | 0          | 71                 | 16.9                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 301.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 1          | 2          | 0          | 2                  | 0.1                                 |
| 302.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,937        | 2,473             | 495                    | 57         | 130        | 33         | 163                | 24.2                                |
| 303.00 | El Dorado Diamond Springs                        | 0                                       | 3,474        | 3,686             | 90                     | 106        | 231        | 0          | 231                | 15.0                                |
| 304.00 | El Dorado Diamond Springs                        | 0                                       | 6,342        | 382               | 2,363                  | 12         | 27         | 224        | 251                | 25.2                                |
| 305.00 | El Dorado Diamond Springs                        | 0                                       | 7,574        | 0                 | 3,121                  | 1          | 2          | 283        | 285                | 26.5                                |
| 306.00 | El Dorado Diamond Springs                        | 0                                       | 1,637        | 381               | 618                    | 10         | 22         | 55         | 77                 | 21.3                                |
| 307.00 | El Dorado Diamond Springs                        | 0                                       | 617          | 499               | 37                     | 16         | 36         | 2          | 38                 | 16.2                                |
| 308.00 | El Dorado Diamond Springs                        | 0                                       | 273          | 275               | 15                     | 11         | 25         | 1          | 26                 | 10.6                                |
| 309.00 | El Dorado Diamond Springs                        | 0                                       | 534          | 439               | 52                     | 14         | 32         | 4          | 36                 | 14.9                                |
| 310.00 | El Dorado Diamond Springs                        | 0                                       | 4,128        | 802               | 1,276                  | 26         | 59         | 122        | 181                | 22.8                                |
| 311.00 | El Dorado Diamond Springs                        | 0                                       | 8,497        | 1,209             | 2,100                  | 38         | 87         | 158        | 245                | 34.7                                |
| 312.00 | El Dorado Diamond Springs                        | 0                                       | 869          | 899               | 47                     | 31         | 70         | 3          | 73                 | 11.9                                |
| 313.00 | El Dorado Diamond Springs                        | 0                                       | 23,148       | 4,069             | 6,852                  | 38         | 99         | 506        | 605                | 38.3                                |
| 314.00 | El Dorado Diamond Springs                        | 0                                       | 2,986        | 3,122             | 152                    | 81         | 206        | 8          | 214                | 13.9                                |
| 315.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 316.00 | El Dorado Diamond Springs                        | 0                                       | 343          | 349               | 9                      | 13         | 30         | 0          | 30                 | 11.6                                |
| 317.00 | El Dorado Diamond Springs                        | 0                                       | 206          | 212               | 5                      | 8          | 18         | 0          | 18                 | 11.3                                |
| 318.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,326        | 4,720             | 136                    | 128        | 326        | 2          | 328                | 13.2                                |
| 319.00 | El Dorado Diamond Springs                        | 0                                       | 1,220        | 1,230             | 90                     | 38         | 99         | 6          | 105                | 11.6                                |
| 320.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,078        | 2,169             | 536                    | 18         | 44         | 39         | 83                 | 60.9                                |
| 321.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,310        | 6,735             | 102                    | 104        | 256        | 0          | 256                | 20.7                                |
| 322.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,473        | 8,061             | 552                    | 153        | 387        | 33         | 420                | 17.8                                |
| 323.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,853        | 3,469             | 85                     | 51         | 129        | 4          | 133                | 21.5                                |
| 324.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,650        | 4,796             | 61                     | 64         | 165        | 0          | 165                | 22.2                                |
| 325.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 707          | 880               | 14                     | 16         | 39         | 0          | 39                 | 17.9                                |
| 326.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,175        | 2,737             | 54                     | 49         | 121        | 1          | 122                | 17.9                                |
| 327.00 | Placerville                                      | 0                                       | 1,709        | 2,017             | 38                     | 40         | 101        | 0          | 101                | 17.0                                |
| 328.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 849          | 1,003             | 18                     | 19         | 48         | 0          | 48                 | 17.7                                |
| 329.00 | Placerville                                      | 0                                       | 4,871        | 5,484             | 123                    | 139        | 317        | 0          | 317                | 15.3                                |
| 330.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,710        | 3,145             | 65                     | 73         | 184        | 0          | 184                | 14.7                                |
| 331.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,836        | 7,163             | 116                    | 110        | 274        | 0          | 274                | 21.3                                |
| 332.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,544        | 1,813             | 36                     | 47         | 104        | 0          | 104                | 14.8                                |
| 333.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,551        | 5,716             | 85                     | 91         | 226        | 0          | 226                | 20.2                                |
| 334.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,814        | 1,182             | 1,314                  | 26         | 58         | 110        | 168                | 22.7                                |
| 335.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,031        | 3,312             | 77                     | 77         | 165        | 5          | 170                | 17.8                                |
| 336.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,228        | 1,482             | 25                     | 30         | 70         | 0          | 70                 | 17.4                                |
| 337.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,193        | 7,655             | 867                    | 121        | 302        | 62         | 364                | 25.3                                |
| 338.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 14,199       | 18,039            | 368                    | 322        | 831        | 14         | 845                | 16.8                                |
| 339.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,620        | 12,464            | 118                    | 188        | 410        | 0          | 410                | 21.0                                |
| 340.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,906        | 8,609             | 224                    | 93         | 205        | 14         | 219                | 31.5                                |
| 341.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,496        | 1,933             | 86                     | 31         | 71         | 8          | 79                 | 19.0                                |
| 342.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,639        | 3,303             | 48                     | 48         | 124        | 0          | 124                | 21.3                                |
| 343.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,507        | 4,134             | 63                     | 53         | 116        | 0          | 116                | 30.3                                |
| 344.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,782        | 4,519             | 68                     | 55         | 120        | 0          | 120                | 31.5                                |
| 345.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,806        | 1,967             | 34                     | 29         | 63         | 0          | 63                 | 28.5                                |
| 346.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,280        | 1,413             | 24                     | 22         | 49         | 0          | 49                 | 25.9                                |
| 347.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,937        | 3,717             | 48                     | 42         | 108        | 0          | 108                | 27.1                                |
| 348.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,821        | 3,031             | 62                     | 49         | 110        | 0          | 110                | 25.6                                |
| 349.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,310        | 8,045             | 252                    | 83         | 191        | 18         | 209                | 30.1                                |
| 350.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,183        | 1,693             | 17                     | 22         | 48         | 0          | 48                 | 24.6                                |
| 351.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,312        | 1,895             | 16                     | 23         | 50         | 0          | 50                 | 26.1                                |
| 352.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,861        | 2,638             | 24                     | 29         | 63         | 0          | 63                 | 29.4                                |
| 353.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,072        | 13,371            | 99                     | 167        | 365        | 1          | 366                | 24.8                                |
| 354.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,513        | 3,539             | 745                    | 53         | 116        | 77         | 193                | 28.6                                |
| 355.00 | Placerville                                      | 1                                       | 14,273       | 6,615             | 2,937                  | 241        | 550        | 244        | 794                | 18.0                                |
| 356.00 | Placerville                                      | 1                                       | 2,503        | 2,667             | 73                     | 91         | 195        | 0          | 195                | 12.8                                |
| 357.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,895        | 3,846             | 366                    | 89         | 209        | 21         | 230                | 21.3                                |
| 358.00 | Placerville                                      | 0                                       | 5,871        | 2,963             | 1,182                  | 81         | 190        | 98         | 288                | 20.4                                |
| 359.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,290        | 5,119             | 92                     | 105        | 254        | 0          | 254                | 16.9                                |
| 360.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,362        | 5,834             | 238                    | 98         | 237        | 10         | 247                | 21.7                                |
| 361.00 | Placerville                                      | 1                                       | 17,724       | 10,344            | 4,128                  | 458        | 938        | 392        | 1,330              | 13.3                                |
| 362.00 | Placerville                                      | 1                                       | 45,971       | 5,999             | 10,867                 | 252        | 591        | 876        | 1,467              | 31.3                                |
| 363.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 327          | 346               | 8                      | 13         | 31         | 0          | 31                 | 10.6                                |
| 364.00 | Placerville                                      | 0                                       | 4,045        | 3,574             | 410                    | 138        | 328        | 30         | 358                | 11.3                                |
| 365.00 | El Dorado Diamond Springs                        | 0                                       | 10,762       | 8,707             | 1,005                  | 322        | 722        | 71         | 793                | 13.6                                |
| 366.00 | El Dorado Diamond Springs                        | 0                                       | 370          | 272               | 39                     | 15         | 31         | 4          | 35                 | 10.5                                |
| 367.00 | El Dorado Diamond Springs                        | 0                                       | 4,001        | 0                 | 1,869                  | 0          | 0          | 197        | 197                | 20.3                                |
| 368.00 | El Dorado Diamond Springs                        | 0                                       | 1,584        | 1,748             | 46                     | 68         | 149        | 0          | 149                | 10.6                                |
| 369.00 | El Dorado Diamond Springs                        | 0                                       | 5,570        | 5,767             | 257                    | 228        | 507        | 13         | 520                | 10.7                                |
| 370.00 | El Dorado Diamond Springs                        | 0                                       | 6,329        | 0                 | 2,888                  | 0          | 0          | 303        | 303                | 20.9                                |
| 371.00 | El Dorado Diamond Springs                        | 0                                       | 740          | 801               | 17                     | 21         | 47         | 0          | 47                 | 15.9                                |
| 372.00 | El Dorado Diamond Springs                        | 0                                       | 16,340       | 7,581             | 2,331                  | 195        | 433        | 211        | 644                | 25.4                                |
| 373.00 | El Dorado Diamond Springs                        | 0                                       | 648          | 650               | 18                     | 26         | 59         | 0          | 59                 | 11.0                                |
| 374.00 | El Dorado Diamond Springs                        | 0                                       | 412          | 332               | 28                     | 13         | 28         | 2          | 30                 | 13.5                                |
| 375.00 | El Dorado Diamond Springs                        | 0                                       | 368          | 372               | 10                     | 14         | 32         | 0          | 32                 | 11.6                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 376.00 | El Dorado Diamond Springs                        | 0                                       | 973          | 944               | 56                     | 34         | 77         | 3          | 80                 | 12.2                                |
| 377.00 | El Dorado Diamond Springs                        | 0                                       | 558          | 333               | 153                    | 13         | 29         | 14         | 43                 | 12.9                                |
| 378.00 | El Dorado Diamond Springs                        | 0                                       | 663          | 659               | 19                     | 27         | 59         | 0          | 59                 | 11.2                                |
| 379.00 | El Dorado Diamond Springs                        | 0                                       | 1,092        | 1,123             | 30                     | 48         | 105        | 0          | 105                | 10.4                                |
| 380.00 | El Dorado Diamond Springs                        | 0                                       | 253          | 247               | 7                      | 12         | 26         | 0          | 26                 | 9.6                                 |
| 381.00 | El Dorado Diamond Springs                        | 0                                       | 157          | 145               | 5                      | 7          | 15         | 0          | 15                 | 10.2                                |
| 382.00 | El Dorado Diamond Springs                        | 0                                       | 259          | 240               | 8                      | 11         | 24         | 0          | 24                 | 10.7                                |
| 383.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,567        | 1,739             | 38                     | 46         | 102        | 0          | 102                | 15.3                                |
| 384.00 | El Dorado Diamond Springs                        | 0                                       | 3,568        | 3,936             | 87                     | 120        | 267        | 0          | 267                | 13.4                                |
| 385.00 | El Dorado Diamond Springs                        | 0                                       | 11,080       | 13,199            | 273                    | 451        | 1,002      | 0          | 1,002              | 11.1                                |
| 386.00 | El Dorado Diamond Springs                        | 0                                       | 2,617        | 2,918             | 62                     | 90         | 200        | 0          | 200                | 13.1                                |
| 387.00 | El Dorado Diamond Springs                        | 0                                       | 1,154        | 934               | 100                    | 36         | 80         | 8          | 88                 | 13.1                                |
| 388.00 | El Dorado Diamond Springs                        | 0                                       | 6,259        | 0                 | 2,918                  | 0          | 0          | 303        | 303                | 20.7                                |
| 389.00 | El Dorado Diamond Springs                        | 0                                       | 6,008        | 11                | 2,476                  | 2          | 4          | 264        | 268                | 22.4                                |
| 390.00 | El Dorado Diamond Springs                        | 0                                       | 4,209        | 3,897             | 325                    | 182        | 379        | 23         | 402                | 10.5                                |
| 391.00 | El Dorado Diamond Springs                        | 0                                       | 2,084        | 196               | 497                    | 11         | 23         | 54         | 77                 | 27.1                                |
| 392.00 | El Dorado Diamond Springs                        | 0                                       | 667          | 606               | 23                     | 28         | 58         | 0          | 58                 | 11.4                                |
| 393.00 | El Dorado Diamond Springs                        | 0                                       | 8,964        | 6,449             | 985                    | 268        | 605        | 68         | 673                | 13.3                                |
| 394.00 | El Dorado Diamond Springs                        | 0                                       | 187          | 204               | 5                      | 8          | 22         | 0          | 22                 | 8.5                                 |
| 395.00 | Placerville                                      | 1                                       | 61,866       | 1,594             | 25,869                 | 74         | 166        | 2,253      | 2,419              | 25.6                                |
| 396.00 | El Dorado Diamond Springs                        | 0                                       | 27,749       | 0                 | 5,758                  | 0          | 0          | 439        | 439                | 63.2                                |
| 397.00 | El Dorado Diamond Springs                        | 0                                       | 1,332        | 1,280             | 68                     | 50         | 114        | 3          | 117                | 11.4                                |
| 398.00 | El Dorado Diamond Springs                        | 0                                       | 413          | 326               | 38                     | 14         | 32         | 3          | 35                 | 11.9                                |
| 399.00 | El Dorado Diamond Springs                        | 0                                       | 1,125        | 1,146             | 32                     | 43         | 97         | 0          | 97                 | 11.6                                |
| 400.00 | El Dorado Diamond Springs                        | 0                                       | 311          | 265               | 11                     | 16         | 33         | 0          | 33                 | 9.3                                 |
| 401.00 | Placerville                                      | 0                                       | 8,935        | 661               | 2,609                  | 28         | 63         | 213        | 276                | 32.4                                |
| 402.00 | El Dorado Diamond Springs                        | 0                                       | 3,530        | 1,465             | 1,062                  | 51         | 133        | 106        | 239                | 14.8                                |
| 403.00 | El Dorado Diamond Springs                        | 0                                       | 23,330       | 3,554             | 7,600                  | 124        | 258        | 654        | 912                | 25.6                                |
| 404.00 | El Dorado Diamond Springs                        | 0                                       | 1,325        | 413               | 438                    | 19         | 42         | 49         | 91                 | 14.6                                |
| 405.00 | El Dorado Diamond Springs                        | 0                                       | 168          | 151               | 5                      | 9          | 20         | 0          | 20                 | 8.5                                 |
| 406.00 | El Dorado Diamond Springs                        | 0                                       | 18,585       | 561               | 3,710                  | 24         | 53         | 286        | 339                | 54.9                                |
| 407.00 | El Dorado Diamond Springs                        | 0                                       | 9,260        | 16                | 3,169                  | 1          | 2          | 309        | 311                | 29.8                                |
| 408.00 | El Dorado Diamond Springs                        | 0                                       | 4,088        | 22                | 1,650                  | 2          | 2          | 182        | 184                | 22.2                                |
| 409.00 | Placerville                                      | 0                                       | 18,571       | 3,050             | 5,597                  | 104        | 248        | 445        | 693                | 26.8                                |
| 410.00 | El Dorado Diamond Springs                        | 0                                       | 24,162       | 14,758            | 3,492                  | 426        | 1,031      | 277        | 1,308              | 18.5                                |
| 411.00 | Placerville                                      | 1                                       | 50,279       | 6,214             | 13,167                 | 298        | 712        | 1,271      | 1,983              | 25.4                                |
| 412.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,978        | 3,233             | 78                     | 86         | 206        | 0          | 206                | 14.5                                |
| 413.00 | Placerville                                      | 0                                       | 3,605        | 3,815             | 101                    | 126        | 301        | 0          | 301                | 12.0                                |
| 414.00 | El Dorado Diamond Springs                        | 0                                       | 2,582        | 130               | 1,131                  | 7          | 15         | 120        | 135                | 19.2                                |
| 415.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 430          | 444               | 12                     | 18         | 40         | 0          | 40                 | 10.7                                |
| 416.00 | El Dorado Diamond Springs                        | 0                                       | 146          | 146               | 4                      | 9          | 19         | 0          | 19                 | 7.8                                 |
| 417.00 | Placerville                                      | 1                                       | 9,644        | 1,107             | 2,840                  | 45         | 114        | 278        | 392                | 24.6                                |
| 418.00 | Placerville                                      | 1                                       | 3,147        | 0                 | 665                    | 0          | 0          | 64         | 64                 | 49.2                                |
| 419.00 | Placerville                                      | 1                                       | 3,263        | 0                 | 836                    | 0          | 0          | 85         | 85                 | 38.4                                |
| 420.00 | Placerville                                      | 1                                       | 1,759        | 966               | 493                    | 42         | 100        | 52         | 152                | 11.5                                |
| 421.00 | Placerville                                      | 1                                       | 1,662        | 1,588             | 97                     | 68         | 163        | 5          | 168                | 9.9                                 |
| 422.00 | Placerville                                      | 1                                       | 52,501       | 6,352             | 24,504                 | 278        | 652        | 1,907      | 2,559              | 20.5                                |
| 423.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 461          | 485               | 12                     | 20         | 48         | 0          | 48                 | 9.6                                 |
| 424.00 | Placerville                                      | 0                                       | 10,233       | 4,880             | 2,502                  | 171        | 391        | 228        | 619                | 16.5                                |
| 425.00 | Placerville                                      | 0                                       | 52,759       | 32,330            | 5,918                  | 1,167      | 2,617      | 563        | 3,180              | 16.6                                |
| 426.00 | Placerville                                      | 0                                       | 861          | 996               | 19                     | 33         | 82         | 0          | 82                 | 10.5                                |
| 427.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,970        | 4,574             | 92                     | 93         | 232        | 0          | 232                | 17.1                                |
| 428.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 646          | 746               | 14                     | 22         | 55         | 0          | 55                 | 11.8                                |
| 429.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,315        | 1,663             | 34                     | 35         | 83         | 0          | 83                 | 15.9                                |
| 430.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,534        | 2,494             | 177                    | 58         | 137        | 10         | 147                | 17.3                                |
| 431.00 | Placerville                                      | 1                                       | 1,791        | 475               | 650                    | 22         | 45         | 60         | 105                | 17.0                                |
| 432.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,295       | 10,599            | 2,683                  | 309        | 729        | 229        | 958                | 16.0                                |
| 433.00 | Placerville                                      | 1                                       | 10,441       | 9,739             | 700                    | 481        | 1,041      | 36         | 1,077              | 9.7                                 |
| 434.00 | Placerville                                      | 1                                       | 673          | 591               | 23                     | 33         | 71         | 0          | 71                 | 9.5                                 |
| 435.00 | Placerville                                      | 1                                       | 1,188        | 651               | 241                    | 36         | 77         | 27         | 104                | 11.4                                |
| 436.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 970          | 1,156             | 20                     | 25         | 62         | 0          | 62                 | 15.6                                |
| 437.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,387        | 5,706             | 247                    | 117        | 287        | 12         | 299                | 18.0                                |
| 438.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,584        | 5,298             | 231                    | 124        | 278        | 11         | 289                | 19.3                                |
| 439.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,422        | 6,350             | 170                    | 156        | 350        | 3          | 353                | 15.4                                |
| 440.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,391        | 1,104             | 175                    | 28         | 63         | 15         | 78                 | 17.9                                |
| 441.00 | Placerville                                      | 1                                       | 362          | 379               | 9                      | 12         | 29         | 0          | 29                 | 12.6                                |
| 442.00 | Placerville                                      | 1                                       | 13,119       | 10,749            | 1,032                  | 313        | 768        | 69         | 837                | 15.7                                |
| 443.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,461        | 1,578             | 36                     | 38         | 85         | 0          | 85                 | 17.1                                |
| 444.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 200          | 221               | 5                      | 8          | 19         | 0          | 19                 | 10.4                                |
| 445.00 | Placerville                                      | 0                                       | 1,044        | 907               | 150                    | 23         | 56         | 11         | 67                 | 15.5                                |
| 446.00 | Placerville                                      | 1                                       | 1,761        | 856               | 246                    | 25         | 59         | 19         | 78                 | 22.7                                |
| 447.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,251        | 3,985             | 66                     | 76         | 189        | 0          | 189                | 17.2                                |
| 448.00 | Placerville                                      | 0                                       | 1,807        | 2,106             | 74                     | 53         | 130        | 4          | 134                | 13.5                                |
| 449.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 542          | 577               | 14                     | 14         | 30         | 0          | 30                 | 18.1                                |
| 450.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,275        | 2,698             | 391                    | 84         | 180        | 31         | 211                | 15.5                                |



| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 451.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 982          | 1,040             | 25                     | 27         | 58         | 0          | 58                 | 17.0                                |
| 452.00 | Placerville                                      | 0                                       | 6,244        | 4,033             | 497                    | 121        | 259        | 33         | 292                | 21.4                                |
| 453.00 | Placerville                                      | 1                                       | 2,920        | 3,105             | 120                    | 145        | 310        | 1          | 311                | 9.4                                 |
| 454.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 568          | 549               | 18                     | 25         | 54         | 0          | 54                 | 10.6                                |
| 455.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,721        | 3,086             | 66                     | 73         | 172        | 0          | 172                | 15.8                                |
| 456.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,886        | 2,077             | 48                     | 51         | 109        | 0          | 109                | 17.3                                |
| 457.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,819        | 3,085             | 129                    | 62         | 137        | 5          | 142                | 19.9                                |
| 458.00 | Placerville                                      | 0                                       | 2,946        | 2,619             | 342                    | 67         | 157        | 26         | 183                | 16.1                                |
| 459.00 | Placerville                                      | 0                                       | 310          | 355               | 7                      | 11         | 26         | 0          | 26                 | 12.0                                |
| 460.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,460        | 972               | 263                    | 22         | 47         | 20         | 67                 | 21.8                                |
| 461.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,565        | 223               | 615                    | 6          | 14         | 59         | 73                 | 21.4                                |
| 462.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,228        | 1,290             | 1,750                  | 31         | 66         | 125        | 191                | 27.3                                |
| 463.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,488        | 7,292             | 39                     | 85         | 194        | 0          | 194                | 23.1                                |
| 464.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,536        | 3,336             | 39                     | 47         | 104        | 0          | 104                | 24.5                                |
| 465.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,964        | 5,720             | 114                    | 58         | 134        | 16         | 150                | 26.5                                |
| 466.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,555        | 4,448             | 201                    | 61         | 139        | 22         | 161                | 22.0                                |
| 467.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,490        | 3,859             | 23                     | 39         | 89         | 0          | 89                 | 28.0                                |
| 468.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,806        | 9,831             | 125                    | 120        | 277        | 6          | 283                | 24.1                                |
| 469.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,097        | 5,697             | 136                    | 59         | 131        | 15         | 146                | 28.1                                |
| 470.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,035        | 3,086             | 27                     | 32         | 73         | 1          | 74                 | 27.5                                |
| 471.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,481        | 2,048             | 54                     | 23         | 53         | 6          | 59                 | 25.3                                |
| 472.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,959        | 2,309             | 147                    | 26         | 59         | 20         | 79                 | 24.7                                |
| 473.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 605          | 580               | 30                     | 10         | 23         | 2          | 25                 | 24.2                                |
| 474.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,699        | 2,191             | 28                     | 37         | 81         | 0          | 81                 | 21.0                                |
| 475.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,805        | 2,399             | 27                     | 38         | 83         | 0          | 83                 | 21.8                                |
| 476.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 864          | 1,133             | 12                     | 16         | 41         | 0          | 41                 | 20.9                                |
| 477.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,045        | 2,573             | 124                    | 30         | 69         | 15         | 84                 | 24.3                                |
| 478.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,487        | 1,927             | 24                     | 30         | 66         | 0          | 66                 | 22.6                                |
| 479.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,077        | 3,172             | 440                    | 51         | 118        | 37         | 155                | 26.4                                |
| 480.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,300        | 2,003             | 13                     | 20         | 46         | 0          | 46                 | 28.5                                |
| 481.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,338        | 2,036             | 15                     | 20         | 44         | 0          | 44                 | 30.4                                |
| 482.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,646        | 7,976             | 92                     | 74         | 163        | 3          | 166                | 34.1                                |
| 483.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,445        | 5,275             | 173                    | 115        | 249        | 9          | 258                | 17.3                                |
| 484.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,777        | 5,680             | 946                    | 91         | 227        | 114        | 341                | 19.9                                |
| 485.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,063        | 1,531             | 11                     | 15         | 37         | 0          | 37                 | 28.4                                |
| 486.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,083        | 5,928             | 47                     | 69         | 156        | 0          | 156                | 26.2                                |
| 487.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,842       | 11,399            | 738                    | 221        | 519        | 36         | 555                | 21.4                                |
| 488.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,557        | 7,619             | 86                     | 107        | 242        | 0          | 242                | 23.0                                |
| 489.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,896        | 7,117             | 660                    | 133        | 300        | 58         | 358                | 19.3                                |
| 490.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,178        | 1,538             | 19                     | 24         | 60         | 0          | 60                 | 19.7                                |
| 491.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,409        | 9,176             | 177                    | 160        | 399        | 3          | 402                | 18.4                                |
| 492.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,070        | 4,500             | 409                    | 71         | 176        | 31         | 207                | 24.5                                |
| 493.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,096        | 4,579             | 369                    | 72         | 178        | 26         | 204                | 24.9                                |
| 494.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,263        | 3,979             | 138                    | 68         | 170        | 10         | 180                | 18.2                                |
| 495.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 656          | 856               | 11                     | 16         | 40         | 0          | 40                 | 16.4                                |
| 496.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,379        | 4,590             | 830                    | 81         | 201        | 67         | 268                | 27.6                                |
| 497.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,347        | 5,756             | 101                    | 88         | 224        | 3          | 227                | 19.1                                |
| 498.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,454        | 4,492             | 104                    | 70         | 158        | 6          | 164                | 21.1                                |
| 499.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,346        | 1,798             | 22                     | 30         | 75         | 0          | 75                 | 18.0                                |
| 500.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,083        | 1,337             | 603                    | 11         | 26         | 51         | 77                 | 53.2                                |
| 501.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,808        | 1,022             | 768                    | 22         | 49         | 83         | 132                | 21.3                                |
| 502.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,033        | 7,736             | 352                    | 117        | 272        | 18         | 290                | 24.2                                |
| 503.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,153        | 0                 | 1,008                  | 1          | 2          | 76         | 78                 | 53.1                                |
| 504.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,108        | 6,534             | 343                    | 141        | 313        | 19         | 332                | 18.4                                |
| 505.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 74           | 87                | 1                      | 3          | 7          | 0          | 7                  | 11.1                                |
| 506.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,029        | 1,250             | 22                     | 28         | 62         | 0          | 62                 | 16.6                                |
| 507.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,752        | 2,393             | 392                    | 50         | 116        | 37         | 153                | 18.0                                |
| 508.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,692        | 3,518             | 1,838                  | 85         | 184        | 186        | 370                | 18.1                                |
| 509.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 393          | 429               | 22                     | 12         | 27         | 2          | 29                 | 13.7                                |
| 510.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,234        | 3,520             | 157                    | 92         | 199        | 10         | 209                | 15.5                                |
| 511.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,740        | 1,892             | 359                    | 45         | 105        | 33         | 138                | 19.9                                |
| 512.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,838        | 1,992             | 367                    | 37         | 86         | 27         | 113                | 25.1                                |
| 513.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,477        | 10,836            | 84                     | 142        | 354        | 0          | 354                | 21.1                                |
| 514.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 32,106       | 47,391            | 312                    | 622        | 1,551      | 0          | 1,551              | 20.7                                |
| 515.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,629        | 4,821             | 105                    | 69         | 176        | 8          | 184                | 19.7                                |
| 516.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,173        | 11,879            | 87                     | 142        | 362        | 0          | 362                | 22.6                                |
| 517.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 19,039       | 21,380            | 1,115                  | 388        | 857        | 101        | 958                | 19.9                                |
| 518.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,960       | 15,832            | 307                    | 289        | 671        | 17         | 688                | 17.4                                |
| 519.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,901        | 7,870             | 191                    | 142        | 330        | 12         | 342                | 17.3                                |
| 520.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,992       | 16,228            | 269                    | 266        | 617        | 12         | 629                | 19.1                                |
| 521.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,889       | 13,191            | 582                    | 290        | 641        | 60         | 701                | 15.5                                |
| 522.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,120        | 7,270             | 64                     | 85         | 221        | 0          | 221                | 23.2                                |
| 523.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 16,443       | 10,406            | 1,915                  | 240        | 588        | 206        | 794                | 20.7                                |
| 524.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 14,718       | 12,705            | 1,116                  | 205        | 490        | 103        | 593                | 24.8                                |
| 525.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,898        | 7,178             | 44                     | 85         | 199        | 0          | 199                | 24.6                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=No) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|--|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 526.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 245          | 337               | 3                      | 5          | 12         | 0          | 12                 | 20.1                                |
| 527.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 7,774        | 9,539             | 362                    | 162        | 380        | 38         | 418                | 18.6                                |
| 528.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 60,006       | 84,666            | 795                    | 1,001      | 2,429      | 72         | 2,501              | 24.0                                |
| 529.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 918          | 1,151             | 13                     | 15         | 36         | 0          | 36                 | 25.3                                |
| 530.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 12,935       | 17,342            | 192                    | 191        | 462        | 0          | 462                | 28.0                                |
| 531.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,532        | 3,399             | 35                     | 34         | 82         | 0          | 82                 | 30.8                                |
| 532.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,004        | 5,168             | 59                     | 61         | 147        | 0          | 147                | 27.2                                |
| 533.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 9,332        | 8,598             | 646                    | 105        | 271        | 34         | 305                | 30.6                                |
| 534.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 3,792        | 4,964             | 52                     | 53         | 128        | 0          | 128                | 29.6                                |
| 535.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 5,939        | 7,821             | 74                     | 91         | 221        | 0          | 221                | 26.8                                |
| 536.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 5,094        | 6,591             | 64                     | 82         | 200        | 0          | 200                | 25.5                                |
| 537.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 10,402       | 14,167            | 106                    | 165        | 402        | 0          | 402                | 25.9                                |
| 538.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 3,968        | 3,050             | 305                    | 44         | 107        | 22         | 129                | 30.8                                |
| 539.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 13,010       | 1,306             | 2,081                  | 6          | 15         | 166        | 181                | 72.1                                |
| 540.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,858        | 0                 | 573                    | 0          | 0          | 53         | 53                 | 53.9                                |
| 541.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,053        | 1,120             | 61                     | 18         | 42         | 6          | 48                 | 21.8                                |
| 542.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 3,614        | 3,101             | 413                    | 52         | 123        | 37         | 160                | 22.6                                |
| 543.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 10,542       | 2,441             | 1,776                  | 49         | 114        | 107        | 221                | 47.6                                |
| 544.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 681          | 498               | 104                    | 9          | 21         | 8          | 29                 | 23.4                                |
| 545.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,523        | 2,049             | 16                     | 23         | 54         | 0          | 54                 | 28.3                                |
| 546.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,817        | 6,440             | 54                     | 61         | 143        | 0          | 143                | 33.8                                |
| 547.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,023        | 524               | 482                    | 10         | 23         | 46         | 69                 | 58.0                                |
| 548.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 17,510       | 23,380            | 468                    | 386        | 910        | 22         | 932                | 18.8                                |
| 549.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,163        | 2,726             | 39                     | 42         | 99         | 0          | 99                 | 21.8                                |
| 550.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 265          | 348               | 4                      | 7          | 18         | 0          | 18                 | 14.7                                |
| 551.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 5,423        | 2,531             | 783                    | 41         | 105        | 54         | 159                | 34.0                                |
| 552.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,435        | 424               | 501                    | 8          | 19         | 32         | 51                 | 48.0                                |
| 553.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,569        | 2,062             | 26                     | 32         | 75         | 0          | 75                 | 21.0                                |
| 554.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,054        | 5,262             | 105                    | 83         | 194        | 4          | 198                | 20.5                                |
| 555.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,656        | 2,243             | 24                     | 34         | 80         | 0          | 80                 | 20.6                                |
| 556.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 5,106        | 6,998             | 66                     | 82         | 192        | 0          | 192                | 26.6                                |
| 557.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,697        | 2,098             | 31                     | 35         | 82         | 1          | 83                 | 20.5                                |
| 558.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,721        | 2,996             | 163                    | 36         | 84         | 19         | 103                | 26.3                                |
| 559.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,378        | 1,831             | 17                     | 25         | 59         | 0          | 59                 | 23.5                                |
| 560.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,606        | 1,676             | 100                    | 27         | 63         | 10         | 73                 | 22.0                                |
| 561.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,184        | 1,583             | 18                     | 22         | 52         | 0          | 52                 | 22.7                                |
| 562.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,027        | 5,917             | 39                     | 62         | 145        | 0          | 145                | 27.7                                |
| 563.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,212        | 3,368             | 17                     | 32         | 71         | 0          | 71                 | 31.3                                |
| 564.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 623          | 838               | 10                     | 14         | 33         | 0          | 33                 | 18.6                                |
| 565.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,638        | 3,681             | 39                     | 56         | 129        | 0          | 129                | 20.4                                |
| 566.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,003        | 5,401             | 70                     | 93         | 220        | 1          | 221                | 18.1                                |
| 567.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 671          | 816               | 26                     | 18         | 42         | 2          | 44                 | 15.4                                |
| 568.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 930          | 1,259             | 14                     | 26         | 62         | 0          | 62                 | 15.1                                |
| 569.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 3,704        | 2,851             | 298                    | 61         | 144        | 31         | 175                | 21.1                                |
| 570.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,744        | 2,123             | 776                    | 40         | 92         | 92         | 184                | 25.7                                |
| 571.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,372        | 1,845             | 22                     | 33         | 76         | 0          | 76                 | 18.0                                |
| 572.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,866        | 1,378             | 263                    | 25         | 61         | 34         | 95                 | 19.6                                |
| 573.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 6,528        | 7,898             | 121                    | 89         | 197        | 2          | 199                | 32.9                                |
| 574.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 5,058        | 8,013             | 30                     | 71         | 174        | 0          | 174                | 29.1                                |
| 575.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,778        | 4,123             | 16                     | 29         | 71         | 0          | 71                 | 39.1                                |
| 576.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,095        | 1,547             | 16                     | 19         | 42         | 1          | 43                 | 25.5                                |
| 577.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 753          | 1,118             | 7                      | 13         | 29         | 0          | 29                 | 26.2                                |
| 578.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 23,503       | 37,350            | 106                    | 370        | 817        | 0          | 817                | 28.8                                |
| 579.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 3,792        | 5,287             | 101                    | 38         | 96         | 12         | 108                | 35.0                                |
| 580.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,896        | 4,149             | 62                     | 35         | 89         | 5          | 94                 | 30.9                                |
| 581.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,282        | 5,114             | 291                    | 43         | 95         | 32         | 127                | 33.8                                |
| 582.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,261        | 1,714             | 16                     | 13         | 34         | 0          | 34                 | 37.3                                |
| 583.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 27,771       | 43,413            | 212                    | 352        | 774        | 10         | 784                | 35.4                                |
| 584.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,740        | 2,103             | 55                     | 18         | 40         | 3          | 43                 | 40.8                                |
| 585.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 9,588        | 14,403            | 78                     | 124        | 273        | 0          | 273                | 35.2                                |
| 586.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 5,843        | 2,533             | 1,558                  | 51         | 91         | 92         | 183                | 32.0                                |
| 587.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,289        | 3,436             | 17                     | 39         | 99         | 0          | 99                 | 23.0                                |
| 588.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 19,823       | 30,328            | 126                    | 323        | 805        | 0          | 805                | 24.6                                |
| 589.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 395          | 630               | 2                      | 3          | 12         | 0          | 12                 | 32.9                                |
| 590.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 833          | 1,150             | 12                     | 18         | 46         | 0          | 46                 | 18.3                                |
| 591.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 86           | 123               | 1                      | 3          | 8          | 0          | 8                  | 11.4                                |
| 592.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 12,739       | 13,315            | 740                    | 339        | 749        | 91         | 840                | 15.2                                |
| 593.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 6,965        | 9,126             | 265                    | 151        | 382        | 28         | 410                | 17.0                                |
| 594.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 17,030       | 24,924            | 182                    | 312        | 790        | 5          | 795                | 21.4                                |
| 595.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,946        | 1,834             | 265                    | 25         | 56         | 31         | 87                 | 22.3                                |
| 596.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,840        | 2,795             | 221                    | 34         | 85         | 25         | 110                | 25.9                                |
| 597.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 11,039       | 4,049             | 1,918                  | 106        | 234        | 278        | 512                | 21.5                                |
| 598.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,720        | 545               | 259                    | 14         | 31         | 35         | 66                 | 26.1                                |
| 599.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 715          | 973               | 11                     | 17         | 38         | 0          | 38                 | 19.0                                |
| 600.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 11,306       | 11,133            | 1,269                  | 205        | 453        | 130        | 583                | 19.4                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 601.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,342        | 1,908             | 4                      | 10         | 22         | 0          | 22                 | 61.0                                |
| 602.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 433          | 137               | 53                     | 3          | 5          | 2          | 7                  | 59.0                                |
| 603.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 906          | 730               | 84                     | 11         | 20         | 2          | 22                 | 42.0                                |
| 604.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,420        | 1,780             | 109                    | 17         | 33         | 3          | 36                 | 39.3                                |
| 605.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,654        | 1,772             | 86                     | 18         | 38         | 2          | 40                 | 41.4                                |
| 606.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 607.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,532        | 4,860             | 12                     | 19         | 49         | 0          | 49                 | 71.5                                |
| 608.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6            | 0                 | 0                      | 1          | 2          | 0          | 2                  | 2.9                                 |
| 609.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,028        | 3,206             | 117                    | 34         | 72         | 4          | 76                 | 40.0                                |
| 610.00 | El Dorado Hills                                  | 0                                       | 38,969       | 187               | 20,583                 | 0          | 0          | 1,745      | 1,745              | 22.3                                |
| 611.00 | El Dorado Hills                                  | 0                                       | 316          | 0                 | 0                      | 10         | 153        | 0          | 1                  | 315.9                               |
| 612.00 | El Dorado Hills                                  | 0                                       | 79,458       | 0                 | 44,736                 | 0          | 0          | 3,121      | 3,121              | 25.5                                |
| 613.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 71           | 67                | 1                      | 2          | 5          | 0          | 5                  | 13.8                                |
| 614.00 | El Dorado Hills                                  | 0                                       | 5,975        | 7,100             | 116                    | 150        | 383        | 0          | 383                | 15.6                                |
| 615.00 | El Dorado Hills                                  | 0                                       | 12,188       | 9,071             | 1,040                  | 150        | 402        | 75         | 477                | 25.5                                |
| 616.00 | El Dorado Hills                                  | 0                                       | 1,376        | 1,639             | 25                     | 37         | 94         | 0          | 94                 | 14.7                                |
| 617.00 | El Dorado Hills                                  | 0                                       | 20,632       | 12,687            | 1,258                  | 187        | 547        | 118        | 665                | 31.0                                |
| 618.00 | El Dorado Hills                                  | 0                                       | 3,139        | 0                 | 1,256                  | 0          | 0          | 146        | 146                | 21.5                                |
| 619.00 | El Dorado Hills                                  | 0                                       | 3,467        | 0                 | 1,261                  | 0          | 0          | 151        | 151                | 23.0                                |
| 620.00 | El Dorado Hills                                  | 0                                       | 17,865       | 3,490             | 1,790                  | 0          | 0          | 188        | 188                | 95.0                                |
| 621.00 | El Dorado Hills                                  | 0                                       | 14,208       | 18,720            | 224                    | 327        | 957        | 0          | 957                | 14.8                                |
| 622.00 | El Dorado Hills                                  | 0                                       | 21,968       | 21,498            | 1,636                  | 370        | 1,083      | 147        | 1,230              | 17.9                                |
| 623.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 393          | 0                 | 174                    | 0          | 0          | 16         | 16                 | 24.6                                |
| 624.00 | El Dorado Hills                                  | 0                                       | 15,651       | 17,525            | 1,200                  | 308        | 905        | 96         | 1,001              | 15.6                                |
| 625.00 | El Dorado Hills                                  | 0                                       | 863          | 0                 | 420                    | 0          | 0          | 40         | 40                 | 21.6                                |
| 626.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,711        | 7,521             | 1,121                  | 164        | 383        | 98         | 481                | 18.1                                |
| 627.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 54,253       | 0                 | 11,339                 | 0          | 0          | 897        | 897                | 60.5                                |
| 628.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 629.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 630.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,832        | 8,544             | 203                    | 381        | 847        | 0          | 847                | 9.3                                 |
| 631.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 632.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,447        | 1,741             | 25                     | 37         | 94         | 0          | 94                 | 15.5                                |
| 633.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,290        | 7,468             | 123                    | 150        | 379        | 0          | 379                | 16.6                                |
| 634.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,482        | 7,797             | 122                    | 150        | 379        | 0          | 379                | 17.1                                |
| 635.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,991        | 5,916             | 94                     | 113        | 286        | 0          | 286                | 17.5                                |
| 636.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,368        | 6,089             | 81                     | 120        | 322        | 0          | 322                | 13.6                                |
| 637.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,992        | 9,863             | 140                    | 171        | 458        | 0          | 458                | 17.4                                |
| 638.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,039        | 1,269             | 16                     | 23         | 62         | 0          | 62                 | 16.8                                |
| 639.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,274        | 2,819             | 36                     | 46         | 123        | 0          | 123                | 18.4                                |
| 640.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,716        | 9,618             | 127                    | 176        | 472        | 0          | 472                | 16.4                                |
| 641.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,087        | 2,600             | 34                     | 46         | 123        | 0          | 123                | 16.9                                |
| 642.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 29,024       | 33,878            | 1,281                  | 637        | 1,708      | 93         | 1,801              | 16.1                                |
| 643.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,808        | 12,090            | 163                    | 216        | 579        | 0          | 579                | 16.9                                |
| 644.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,919        | 3,670             | 47                     | 76         | 194        | 0          | 194                | 15.1                                |
| 645.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 21,271       | 24,691            | 955                    | 415        | 1,059      | 51         | 1,110              | 19.2                                |
| 646.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,837        | 11,046            | 155                    | 192        | 490        | 0          | 490                | 18.0                                |
| 647.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,587        | 1,894             | 69                     | 38         | 97         | 6          | 103                | 15.4                                |
| 648.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,808        | 2,170             | 46                     | 38         | 97         | 2          | 99                 | 18.3                                |
| 649.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,525        | 3,129             | 31                     | 38         | 97         | 0          | 97                 | 57.0                                |
| 650.00 | Outside of County                                | 0                                       | 3,020,646    | 1,488,289         | 470,784                | 0          | 0          | 0          | 0                  | -                                   |
| 651.00 | Outside of County                                | 0                                       | 28,450       | 14,302            | 4,198                  | 0          | 0          | 0          | 0                  | -                                   |
| 652.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 653.00 | Outside of County                                | 0                                       | 391,721      | 159,741           | 51,481                 | 0          | 0          | 0          | 0                  | -                                   |
| 654.00 | Outside of County                                | 0                                       | 56,173       | 9,086             | 2,880                  | 0          | 0          | 0          | 0                  | -                                   |
| 655.00 | Outside of County                                | 0                                       | 269,519      | 107,646           | 35,175                 | 0          | 0          | 0          | 0                  | -                                   |
| 656.00 | Outside of County                                | 0                                       | 77,253       | 18,161            | 8,701                  | 0          | 0          | 0          | 0                  | -                                   |
| 657.00 | Outside of County                                | 0                                       | 186,669      | 8,198             | 3,843                  | 0          | 0          | 0          | 0                  | -                                   |
| 658.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 659.00 | Outside of County                                | 0                                       | 7,533        | 3,128             | 1,419                  | 0          | 0          | 0          | 0                  | -                                   |
| 660.00 | Outside of County                                | 0                                       | 164,229      | 81,861            | 31,508                 | 0          | 0          | 0          | 0                  | -                                   |
| 661.00 | Outside of County                                | 0                                       | 156,627      | 71,475            | 25,660                 | 0          | 0          | 0          | 0                  | -                                   |
| 662.00 | Outside of County                                | 0                                       | 700,907      | 338,567           | 119,749                | 0          | 0          | 0          | 0                  | -                                   |
| 663.00 | Outside of County                                | 0                                       | 679,389      | 227,243           | 81,123                 | 0          | 0          | 0          | 0                  | -                                   |
| 664.00 | Outside of County                                | 0                                       | 348,270      | 190,199           | 55,021                 | 0          | 0          | 0          | 0                  | -                                   |
| 665.00 | Outside of County                                | 0                                       | 199,541      | 79,509            | 31,009                 | 0          | 0          | 0          | 0                  | -                                   |
| 666.00 | Outside of County                                | 0                                       | 88,362       | 45,073            | 14,353                 | 0          | 0          | 0          | 0                  | -                                   |
| 667.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 668.00 | Outside of County                                | 0                                       | 513,118      | 311,624           | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 669.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 670.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 671.00 | Outside of County                                | 0                                       | 170,014      | 96,042            | 23,797                 | 0          | 0          | 0          | 0                  | -                                   |
| 672.00 | Outside of County                                | 0                                       | 33,285       | 34,313            | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 673.00 | Outside of County                                | 0                                       | 24,906       | 14,947            | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 674.00 | Outside of County                                | 0                                       | 355,394      | 30,005            | 0                      | 0          | 0          | 0          | 0                  | -                                   |



**VMT Summary by Jurisdiction - 2040 Baseline Scenario**

| Jurisdiction                    | VMT Estimates |                   |                        | VMT Efficiency Metrics           |                           |                                  | Population Details |                  |                  |                          |                       |
|---------------------------------|---------------|-------------------|------------------------|----------------------------------|---------------------------|----------------------------------|--------------------|------------------|------------------|--------------------------|-----------------------|
|                                 | Total OD VMT  | Home-based PA VMT | Home-based Work PA VMT | Total VMT per Service Population | Home-based VMT per Capita | Home-based Work VMT per Employee | Total Households   | Total Population | Total Employment | Total Service Population | Persons Per Household |
| City of Placerville             | 401,612       | 63,156            | 104,882                | 24.6                             | 8.2                       | 12.1                             | 3,429              | 7,658            | 8,649            | 16,307                   | 2.23                  |
| Unincorporated El Dorado County | 5,040,987     | 3,109,752         | 673,703                | 21.1                             | 17.0                      | 11.9                             | 73,473             | 182,760          | 56,413           | 239,174                  | 2.49                  |
| 630                             | 6,276         | 5,981             | 185                    | 7.41                             | 7.06                      | #DIV/0!                          | 381                | 847              | 0                | 847                      | 2.22                  |
|                                 |               |                   |                        | Threshold                        | 14.5                      |                                  |                    |                  |                  |                          |                       |

| TAZ   | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|-------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 1.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,579        | 1,769             | 820                    | 47         | 99         | 36         | 135                | 41.3                                |
| 2.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 23,316       | 24,675            | 870                    | 592        | 1,338      | 77         | 1,415              | 16.5                                |
| 3.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,272        | 6,535             | 98                     | 74         | 180        | 0          | 180                | 29.4                                |
| 4.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,066        | 1,369             | 17                     | 16         | 35         | 0          | 35                 | 30.7                                |
| 5.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,591        | 3,600             | 26                     | 33         | 73         | 0          | 73                 | 35.5                                |
| 6.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,826       | 15,986            | 505                    | 366        | 847        | 14         | 861                | 16.1                                |
| 7.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 24,305       | 26,908            | 1,345                  | 565        | 1,223      | 92         | 1,315              | 18.5                                |
| 8.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,252       | 575               | 1,967                  | 15         | 38         | 129        | 167                | 67.5                                |
| 9.00  | Unincorporated El Dorado County (Remainder Area) | 0                                       | 25,143       | 30,540            | 627                    | 559        | 1,400      | 13         | 1,413              | 17.8                                |
| 10.00 | Outside of County                                | 0                                       | 108,475      | 87,151            | 11,414                 | 2,178      | 5,588      | 1,056      | 6,644              | 16.3                                |
| 11.00 | Outside of County                                | 0                                       | 112,003      | 80,623            | 13,801                 | 2,148      | 5,511      | 1,297      | 6,808              | 16.5                                |
| 12.00 | Outside of County                                | 0                                       | 58,744       | 44,768            | 4,887                  | 1,179      | 3,234      | 437        | 3,671              | 16.0                                |
| 13.00 | Outside of County                                | 0                                       | 34,414       | 39,916            | 1,543                  | 906        | 2,458      | 99         | 2,557              | 13.5                                |
| 14.00 | Outside of County                                | 0                                       | 58,412       | 67,433            | 1,704                  | 1,511      | 4,120      | 78         | 4,198              | 13.9                                |
| 15.00 | Outside of County                                | 0                                       | 3,038        | 3,906             | 59                     | 58         | 166        | 0          | 166                | 18.3                                |
| 16.00 | Outside of County                                | 0                                       | 56,196       | 21,626            | 7,618                  | 659        | 1,614      | 689        | 2,303              | 24.4                                |
| 17.00 | Outside of County                                | 0                                       | 160,298      | 140,470           | 14,052                 | 2,811      | 7,160      | 1,363      | 8,523              | 18.8                                |
| 18.00 | Outside of County                                | 0                                       | 84,505       | 96,522            | 3,631                  | 1,930      | 4,652      | 246        | 4,898              | 17.3                                |
| 19.00 | Outside of County                                | 0                                       | 10,281       | 5,760             | 1,092                  | 96         | 217        | 103        | 320                | 32.1                                |
| 20.00 | Outside of County                                | 0                                       | 7,647        | 142               | 4,091                  | 2          | 7          | 283        | 290                | 26.4                                |
| 21.00 | Outside of County                                | 0                                       | 26,259       | 73                | 13,609                 | 2          | 4          | 1,082      | 1,086              | 24.2                                |
| 22.00 | Outside of County                                | 0                                       | 1,685        | 10                | 337                    | 1          | 1          | 21         | 22                 | 76.6                                |
| 23.00 | Outside of County                                | 0                                       | 29,029       | 12,699            | 3,678                  | 115        | 322        | 261        | 583                | 49.8                                |
| 24.00 | Outside of County                                | 0                                       | 4,212        | 3,131             | 140                    | 133        | 133        | 0          | 133                | 31.7                                |
| 25.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 26.00 | Outside of County                                | 0                                       | 109,238      | 102,903           | 7,983                  | 2,238      | 5,070      | 642        | 5,712              | 19.1                                |
| 27.00 | Outside of County                                | 0                                       | 8,215        | 76                | 3,031                  | 2          | 5          | 338        | 343                | 24.0                                |
| 28.00 | Outside of County                                | 0                                       | 240,362      | 201,435           | 17,135                 | 4,828      | 12,553     | 1,923      | 14,476             | 16.6                                |
| 29.00 | Outside of County                                | 0                                       | 8,668        | 11,058            | 162                    | 170        | 486        | 0          | 486                | 17.8                                |
| 30.00 | Outside of County                                | 0                                       | 70,998       | 73,400            | 5,815                  | 1,194      | 3,041      | 368        | 3,409              | 20.8                                |
| 31.00 | Outside of County                                | 0                                       | 10,201       | 5,264             | 599                    | 41         | 106        | 44         | 150                | 67.8                                |
| 32.00 | Outside of County                                | 0                                       | 29,860       | 38,625            | 686                    | 692        | 1,811      | 21         | 1,832              | 16.3                                |
| 33.00 | Outside of County                                | 0                                       | 38,475       | 47,860            | 1,366                  | 857        | 2,183      | 69         | 2,252              | 17.1                                |
| 34.00 | Outside of County                                | 0                                       | 6,130        | 5,972             | 702                    | 69         | 156        | 32         | 188                | 32.6                                |
| 35.00 | Outside of County                                | 0                                       | 30,792       | 37,343            | 777                    | 812        | 2,092      | 0          | 2,092              | 14.7                                |
| 36.00 | Outside of County                                | 0                                       | 37,316       | 45,139            | 908                    | 910        | 2,318      | 0          | 2,318              | 16.1                                |
| 37.00 | Outside of County                                | 0                                       | 58,282       | 2,562             | 21,925                 | 57         | 142        | 1,643      | 1,785              | 32.7                                |
| 38.00 | Outside of County                                | 0                                       | 6,665        | 3,876             | 636                    | 57         | 142        | 45         | 187                | 35.7                                |
| 39.00 | Outside of County                                | 0                                       | 17,108       | 14,630            | 2,127                  | 514        | 1,180      | 181        | 1,361              | 12.6                                |
| 40.00 | Outside of County                                | 0                                       | 76,320       | 22,269            | 16,275                 | 851        | 1,972      | 1,905      | 3,877              | 19.7                                |
| 41.00 | Outside of County                                | 0                                       | 35,512       | 24,476            | 7,541                  | 592        | 1,368      | 567        | 1,935              | 18.3                                |
| 42.00 | Outside of County                                | 0                                       | 175,394      | 97,698            | 24,764                 | 2,081      | 5,108      | 1,911      | 7,019              | 25.0                                |
| 43.00 | Outside of County                                | 0                                       | 34,519       | 40,317            | 974                    | 849        | 2,170      | 46         | 2,216              | 15.6                                |
| 44.00 | Outside of County                                | 0                                       | 110,555      | 81,184            | 8,898                  | 1,827      | 4,654      | 791        | 5,445              | 20.3                                |
| 45.00 | Outside of County                                | 0                                       | 72,863       | 23,227            | 12,149                 | 846        | 1,936      | 1,262      | 3,198              | 22.8                                |
| 46.00 | Outside of County                                | 0                                       | 5,976        | 6,512             | 151                    | 164        | 375        | 0          | 375                | 15.9                                |
| 47.00 | Outside of County                                | 0                                       | 201,607      | 9,484             | 80,719                 | 284        | 681        | 5,991      | 6,672              | 30.2                                |
| 48.00 | Outside of County                                | 0                                       | 48,383       | 43,166            | 3,747                  | 1,211      | 3,071      | 266        | 3,337              | 14.5                                |
| 49.00 | Outside of County                                | 0                                       | 109,980      | 585               | 50,000                 | 18         | 45         | 4,248      | 4,293              | 25.6                                |
| 50.00 | Outside of County                                | 0                                       | 73,353       | 36,460            | 21,911                 | 981        | 2,487      | 1,736      | 4,223              | 17.4                                |
| 51.00 | Outside of County                                | 0                                       | 98,059       | 51,828            | 15,654                 | 1,710      | 4,116      | 1,373      | 5,489              | 17.9                                |
| 52.00 | Outside of County                                | 0                                       | 30,590       | 15,166            | 3,168                  | 279        | 629        | 279        | 908                | 33.7                                |
| 53.00 | Outside of County                                | 0                                       | 79,332       | 48,635            | 10,884                 | 1,399      | 3,606      | 983        | 4,589              | 17.3                                |
| 54.00 | Outside of County                                | 0                                       | 60,029       | 22,517            | 22,306                 | 494        | 1,220      | 1,748      | 2,968              | 20.2                                |
| 55.00 | Outside of County                                | 0                                       | 76,830       | 30,209            | 13,814                 | 639        | 1,471      | 1,127      | 2,598              | 29.6                                |
| 56.00 | Outside of County                                | 0                                       | 36,176       | 40,532            | 1,296                  | 872        | 2,337      | 56         | 2,393              | 15.1                                |
| 57.00 | Outside of County                                | 0                                       | 107,517      | 24,353            | 46,409                 | 660        | 1,466      | 4,152      | 5,618              | 19.1                                |
| 58.00 | Outside of County                                | 0                                       | 36,143       | 26,285            | 4,421                  | 613        | 1,587      | 352        | 1,939              | 18.6                                |
| 59.00 | Outside of County                                | 0                                       | 45,142       | 90                | 26,872                 | 2          | 5          | 2,191      | 2,196              | 20.6                                |
| 60.00 | Outside of County                                | 0                                       | 67,979       | 8,281             | 30,885                 | 240        | 512        | 2,711      | 3,223              | 21.1                                |
| 61.00 | Outside of County                                | 0                                       | 140,521      | 87,253            | 22,573                 | 2,381      | 5,595      | 1,810      | 7,405              | 19.0                                |
| 62.00 | Outside of County                                | 0                                       | 51,740       | 1,926             | 23,906                 | 33         | 110        | 2,000      | 2,110              | 24.5                                |
| 63.00 | Outside of County                                | 0                                       | 66,088       | 5,334             | 27,148                 | 143        | 350        | 2,462      | 2,812              | 23.5                                |
| 64.00 | Outside of County                                | 0                                       | 129,040      | 74,096            | 20,741                 | 2,031      | 5,053      | 1,733      | 6,786              | 19.0                                |
| 65.00 | Outside of County                                | 0                                       | 5,629        | 6,366             | 126                    | 127        | 328        | 0          | 328                | 17.2                                |
| 66.00 | Outside of County                                | 0                                       | 37,802       | 28,377            | 4,191                  | 887        | 2,117      | 331        | 2,448              | 15.4                                |
| 67.00 | Outside of County                                | 0                                       | 117,344      | 22,079            | 38,646                 | 633        | 1,374      | 3,381      | 4,755              | 24.7                                |
| 68.00 | Outside of County                                | 0                                       | 38,691       | 12,546            | 10,830                 | 453        | 946        | 1,002      | 1,948              | 19.9                                |
| 69.00 | Outside of County                                | 0                                       | 240,406      | 69,411            | 96,412                 | 1,950      | 5,172      | 7,364      | 12,536             | 19.2                                |
| 70.00 | Outside of County                                | 0                                       | 160,829      | 1,048             | 97,010                 | 15         | 38         | 7,503      | 7,541              | 21.3                                |
| 71.00 | Outside of County                                | 0                                       | 216,841      | 131,089           | 32,137                 | 2,596      | 6,730      | 2,417      | 9,147              | 23.7                                |
| 72.00 | Outside of County                                | 0                                       | 270,161      | 753               | 155,227                | 0          | 0          | 10,084     | 10,084             | 26.8                                |
| 73.00 | Outside of County                                | 0                                       | 96,287       | 0                 | 60,297                 | 0          | 0          | 4,612      | 4,612              | 20.9                                |
| 74.00 | Outside of County                                | 0                                       | 134,613      | 17,384            | 66,208                 | 546        | 1,335      | 5,255      | 6,590              | 20.4                                |
| 75.00 | Outside of County                                | 0                                       | 84,326       | 62,447            | 16,943                 | 1,946      | 4,535      | 1,072      | 5,607              | 15.0                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 76.00  | Outside of County                                | 0                                       | 27,689       | 16,867            | 3,811                  | 497        | 1,333      | 313        | 1,646              | 16.8                                |
| 77.00  | Outside of County                                | 0                                       | 81,150       | 42,260            | 19,399                 | 1,068      | 2,684      | 1,384      | 4,068              | 19.9                                |
| 78.00  | Outside of County                                | 0                                       | 70,536       | 0                 | 20,297                 | 1          | 2          | 1,777      | 1,779              | 39.6                                |
| 79.00  | Outside of County                                | 0                                       | 75,775       | 57,941            | 9,235                  | 1,345      | 3,258      | 620        | 3,878              | 19.5                                |
| 80.00  | Outside of County                                | 0                                       | 33,623       | 0                 | 16,401                 | 0          | 0          | 1,306      | 1,306              | 25.7                                |
| 81.00  | Outside of County                                | 0                                       | 178,905      | 0                 | 100,318                | 0          | 0          | 7,809      | 7,809              | 22.9                                |
| 82.00  | Outside of County                                | 0                                       | 52,426       | 0                 | 25,960                 | 0          | 0          | 2,171      | 2,171              | 24.1                                |
| 83.00  | Outside of County                                | 0                                       | 51,016       | 34,421            | 6,781                  | 590        | 1,536      | 460        | 1,996              | 25.6                                |
| 84.00  | Outside of County                                | 0                                       | 51,732       | 41,969            | 4,058                  | 1,305      | 3,049      | 306        | 3,355              | 15.4                                |
| 85.00  | Outside of County                                | 0                                       | 55,056       | 46,209            | 4,634                  | 1,261      | 3,154      | 354        | 3,508              | 15.7                                |
| 86.00  | Outside of County                                | 0                                       | 84,727       | 60,596            | 8,187                  | 1,996      | 4,538      | 681        | 5,219              | 16.2                                |
| 87.00  | Outside of County                                | 0                                       | 63,399       | 50,418            | 7,524                  | 1,845      | 3,996      | 613        | 4,609              | 13.8                                |
| 88.00  | Outside of County                                | 0                                       | 71,139       | 42,295            | 8,237                  | 1,184      | 2,955      | 696        | 3,651              | 19.5                                |
| 89.00  | Outside of County                                | 0                                       | 18,650       | 0                 | 6,027                  | 0          | 0          | 455        | 455                | 41.0                                |
| 90.00  | Outside of County                                | 0                                       | 56,984       | 2,014             | 28,180                 | 92         | 157        | 2,453      | 2,610              | 21.8                                |
| 91.00  | Outside of County                                | 0                                       | 99,137       | 13,504            | 36,166                 | 389        | 997        | 3,846      | 4,843              | 20.5                                |
| 92.00  | Outside of County                                | 0                                       | 50,870       | 47,753            | 2,478                  | 1,234      | 2,964      | 133        | 3,097              | 16.4                                |
| 93.00  | Outside of County                                | 0                                       | 93,264       | 64,867            | 18,700                 | 1,374      | 3,459      | 1,484      | 4,943              | 18.9                                |
| 94.00  | Outside of County                                | 0                                       | 1,126        | 102               | 457                    | 2          | 4          | 41         | 45                 | 25.0                                |
| 95.00  | Outside of County                                | 0                                       | 120,091      | 0                 | 63,367                 | 0          | 0          | 4,542      | 4,542              | 26.4                                |
| 96.00  | Outside of County                                | 0                                       | 161,279      | 53,660            | 54,244                 | 1,026      | 2,520      | 3,884      | 6,404              | 25.2                                |
| 97.00  | Outside of County                                | 0                                       | 57,253       | 51,315            | 4,477                  | 1,030      | 2,624      | 349        | 2,973              | 19.3                                |
| 98.00  | Outside of County                                | 0                                       | 84,323       | 13,320            | 27,370                 | 375        | 984        | 2,705      | 3,689              | 22.9                                |
| 99.00  | Outside of County                                | 0                                       | 71,276       | 27,643            | 23,150                 | 806        | 1,976      | 2,391      | 4,367              | 16.3                                |
| 100.00 | Outside of County                                | 0                                       | 21,449       | 26,928            | 441                    | 470        | 1,178      | 0          | 1,178              | 18.2                                |
| 101.00 | Outside of County                                | 0                                       | 54,746       | 41,741            | 8,809                  | 869        | 2,253      | 822        | 3,075              | 17.8                                |
| 102.00 | Outside of County                                | 0                                       | 22,173       | 5,190             | 6,166                  | 92         | 237        | 467        | 704                | 31.5                                |
| 103.00 | Outside of County                                | 0                                       | 96,062       | 106,739           | 4,003                  | 2,474      | 5,823      | 281        | 6,104              | 15.7                                |
| 104.00 | Outside of County                                | 0                                       | 60,111       | 9,199             | 12,967                 | 184        | 451        | 868        | 1,319              | 45.6                                |
| 105.00 | Outside of County                                | 0                                       | 40,719       | 52,262            | 882                    | 1,011      | 2,513      | 10         | 2,523              | 16.1                                |
| 106.00 | Outside of County                                | 0                                       | 6,843        | 0                 | 3,173                  | 0          | 0          | 283        | 283                | 24.2                                |
| 107.00 | Outside of County                                | 0                                       | 296,735      | 40,404            | 94,681                 | 1,362      | 3,008      | 7,445      | 10,453             | 28.4                                |
| 108.00 | Outside of County                                | 0                                       | 27,055       | 16,969            | 5,693                  | 370        | 988        | 479        | 1,467              | 18.4                                |
| 109.00 | Outside of County                                | 0                                       | 16,634       | 0                 | 7,351                  | 0          | 0          | 563        | 563                | 29.5                                |
| 110.00 | Outside of County                                | 0                                       | 62,320       | 8,660             | 28,476                 | 209        | 495        | 2,207      | 2,702              | 23.1                                |
| 111.00 | Outside of County                                | 0                                       | 82,138       | 7,447             | 15,315                 | 223        | 512        | 1,049      | 1,561              | 52.6                                |
| 112.00 | Outside of County                                | 0                                       | 133,955      | 30,412            | 26,942                 | 763        | 2,056      | 2,119      | 4,175              | 32.1                                |
| 113.00 | Outside of County                                | 0                                       | 53,816       | 116               | 23,736                 | 0          | 0          | 2,386      | 2,386              | 22.6                                |
| 114.00 | Outside of County                                | 0                                       | 35,988       | 29,349            | 6,433                  | 809        | 2,141      | 572        | 2,713              | 13.3                                |
| 115.00 | Outside of County                                | 0                                       | 153,121      | 86,149            | 20,887                 | 1,900      | 4,875      | 1,584      | 6,459              | 23.7                                |
| 116.00 | Outside of County                                | 0                                       | 2,994        | 0                 | 1,478                  | 0          | 0          | 116        | 116                | 25.8                                |
| 117.00 | Outside of County                                | 0                                       | 51,651       | 17,172            | 15,424                 | 327        | 920        | 1,448      | 2,368              | 21.8                                |
| 118.00 | Outside of County                                | 0                                       | 76,589       | 80,883            | 3,257                  | 2,338      | 6,182      | 191        | 6,373              | 12.0                                |
| 119.00 | Outside of County                                | 0                                       | 134,133      | 7,149             | 62,456                 | 216        | 540        | 6,222      | 6,762              | 19.8                                |
| 120.00 | Outside of County                                | 0                                       | 177,138      | 0                 | 43,476                 | 0          | 0          | 4,669      | 4,669              | 37.9                                |
| 121.00 | Outside of County                                | 0                                       | 137,428      | 48,181            | 19,563                 | 1,513      | 3,882      | 1,917      | 5,799              | 23.7                                |
| 122.00 | Outside of County                                | 0                                       | 56,523       | 14,942            | 10,513                 | 533        | 1,248      | 1,125      | 2,373              | 23.8                                |
| 123.00 | Outside of County                                | 0                                       | 28,606       | 6,973             | 5,112                  | 200        | 547        | 536        | 1,083              | 26.4                                |
| 124.00 | Outside of County                                | 0                                       | 52,847       | 48,210            | 2,789                  | 1,044      | 2,229      | 168        | 2,397              | 22.1                                |
| 125.00 | Outside of County                                | 0                                       | 27,928       | 10,040            | 5,558                  | 414        | 817        | 583        | 1,400              | 20.0                                |
| 126.00 | Outside of County                                | 0                                       | 16,122       | 4,834             | 2,904                  | 156        | 342        | 274        | 616                | 26.2                                |
| 127.00 | Outside of County                                | 0                                       | 38,734       | 33,884            | 2,393                  | 870        | 1,855      | 169        | 2,024              | 19.1                                |
| 128.00 | Outside of County                                | 0                                       | 66,133       | 47,581            | 6,815                  | 1,262      | 2,600      | 538        | 3,138              | 21.1                                |
| 129.00 | Outside of County                                | 0                                       | 41,390       | 43,793            | 1,835                  | 1,045      | 2,302      | 117        | 2,419              | 17.1                                |
| 130.00 | Outside of County                                | 0                                       | 21,005       | 9,187             | 2,667                  | 342        | 786        | 298        | 1,084              | 19.4                                |
| 131.00 | Outside of County                                | 0                                       | 47,379       | 14,752            | 11,314                 | 494        | 1,013      | 1,272      | 2,285              | 20.7                                |
| 132.00 | Outside of County                                | 0                                       | 27,982       | 23,287            | 2,770                  | 556        | 1,258      | 235        | 1,493              | 18.7                                |
| 133.00 | Outside of County                                | 0                                       | 118,975      | 58,572            | 14,486                 | 2,077      | 5,182      | 1,628      | 6,810              | 17.5                                |
| 134.00 | Outside of County                                | 0                                       | 61,590       | 30,144            | 18,095                 | 1,074      | 2,483      | 1,578      | 4,061              | 15.2                                |
| 135.00 | Outside of County                                | 0                                       | 50,368       | 0                 | 27,603                 | 0          | 0          | 2,740      | 2,740              | 18.4                                |
| 136.00 | Outside of County                                | 0                                       | 25,741       | 27,471            | 1,373                  | 661        | 1,688      | 93         | 1,781              | 14.5                                |
| 137.00 | Outside of County                                | 0                                       | 112,109      | 102,156           | 7,010                  | 2,426      | 6,986      | 595        | 7,581              | 14.8                                |
| 138.00 | El Dorado Diamond Springs                        | 0                                       | 21,857       | 6,118             | 4,299                  | 264        | 577        | 297        | 874                | 25.0                                |
| 139.00 | El Dorado Diamond Springs                        | 0                                       | 10,440       | 1,353             | 1,680                  | 67         | 144        | 156        | 300                | 34.8                                |
| 140.00 | El Dorado Diamond Springs                        | 0                                       | 56,312       | 129               | 10,130                 | 10         | 22         | 811        | 833                | 67.6                                |
| 141.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,488        | 1,671             | 28                     | 21         | 49         | 0          | 49                 | 30.3                                |
| 142.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,598        | 6,556             | 170                    | 156        | 347        | 0          | 347                | 19.0                                |
| 143.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,201        | 3,341             | 253                    | 108        | 240        | 12         | 252                | 16.7                                |
| 144.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,019        | 3,582             | 338                    | 80         | 200        | 21         | 221                | 18.2                                |
| 145.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 740          | 652               | 25                     | 30         | 70         | 0          | 70                 | 10.6                                |
| 146.00 | El Dorado Diamond Springs                        | 0                                       | 6,215        | 2,363             | 1,092                  | 114        | 261        | 98         | 359                | 17.3                                |
| 147.00 | El Dorado Diamond Springs                        | 0                                       | 3,722        | 3,578             | 130                    | 165        | 378        | 0          | 378                | 9.8                                 |
| 148.00 | Outside of County                                | 0                                       | 155,364      | 185,717           | 5,374                  | 2,264      | 5,302      | 120        | 5,422              | 28.7                                |
| 149.00 | Shingle Springs                                  | 0                                       | 16,644       | 1,747             | 3,538                  | 53         | 149        | 287        | 436                | 38.2                                |
| 150.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,007        | 6,849             | 132                    | 107        | 254        | 0          | 254                | 23.7                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 151.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,304        | 1,730             | 19                     | 23         | 67         | 0          | 67                 | 19.5                                |
| 152.00 | Shingle Springs                                  | 0                                       | 34,233       | 6,118             | 5,240                  | 201        | 488        | 370        | 858                | 39.9                                |
| 153.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,554        | 8,160             | 246                    | 290        | 623        | 0          | 623                | 13.7                                |
| 154.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,914        | 7,042             | 193                    | 254        | 597        | 0          | 597                | 11.6                                |
| 155.00 | Shingle Springs                                  | 0                                       | 5,209        | 5,654             | 133                    | 154        | 406        | 0          | 406                | 12.8                                |
| 156.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,048        | 2,322             | 58                     | 27         | 68         | 1          | 69                 | 29.7                                |
| 157.00 | El Dorado Hills                                  | 0                                       | 8,631        | 10,833            | 168                    | 273        | 790        | 0          | 790                | 10.9                                |
| 158.00 | Cameron Park                                     | 0                                       | 17,360       | 18,545            | 508                    | 624        | 1,431      | 11         | 1,442              | 12.0                                |
| 159.00 | Cameron Park                                     | 0                                       | 15,333       | 14,515            | 1,454                  | 446        | 1,082      | 114        | 1,196              | 12.8                                |
| 160.00 | Shingle Springs                                  | 0                                       | 18,373       | 16,567            | 1,169                  | 504        | 1,223      | 70         | 1,293              | 14.2                                |
| 161.00 | El Dorado Hills                                  | 0                                       | 11,338       | 14,216            | 209                    | 290        | 754        | 0          | 754                | 15.0                                |
| 162.00 | El Dorado Hills                                  | 0                                       | 57,308       | 77,477            | 888                    | 1,503      | 4,465      | 0          | 4,465              | 12.8                                |
| 163.00 | El Dorado Hills                                  | 0                                       | 37,663       | 7,618             | 5,109                  | 165        | 490        | 438        | 928                | 40.6                                |
| 164.00 | El Dorado Hills                                  | 0                                       | 61,278       | 0                 | 32,462                 | 0          | 0          | 3,124      | 3,124              | 19.6                                |
| 165.00 | El Dorado Hills                                  | 0                                       | 17,357       | 20,543            | 425                    | 551        | 1,369      | 0          | 1,369              | 12.7                                |
| 166.00 | Outside of County                                | 0                                       | 28,690       | 30,497            | 1,016                  | 766        | 1,965      | 50         | 2,015              | 14.2                                |
| 167.00 | El Dorado Hills                                  | 0                                       | 47,806       | 46,471            | 2,372                  | 1,520      | 3,531      | 111        | 3,641              | 13.1                                |
| 168.00 | El Dorado Hills                                  | 0                                       | 26,959       | 29,622            | 1,086                  | 1,133      | 2,632      | 35         | 2,667              | 10.1                                |
| 169.00 | El Dorado Hills                                  | 0                                       | 118,930      | 5,576             | 25,772                 | 208        | 517        | 2,484      | 3,001              | 39.6                                |
| 170.00 | El Dorado Hills                                  | 0                                       | 46,960       | 721               | 23,759                 | 26         | 65         | 2,562      | 2,627              | 17.9                                |
| 171.00 | El Dorado Hills                                  | 0                                       | 16,335       | 16,257            | 1,066                  | 441        | 1,081      | 68         | 1,148              | 14.2                                |
| 172.00 | El Dorado Hills                                  | 0                                       | 9,474        | 0                 | 1,700                  | 0          | 0          | 158        | 158                | 60.0                                |
| 173.00 | El Dorado Hills                                  | 0                                       | 46,456       | 0                 | 11,188                 | 0          | 0          | 1,140      | 1,140              | 40.8                                |
| 174.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,866        | 1,489             | 1,080                  | 15         | 38         | 54         | 92                 | 42.1                                |
| 175.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,615        | 632               | 485                    | 10         | 24         | 22         | 46                 | 57.2                                |
| 176.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,210        | 3,644             | 70                     | 58         | 137        | 0          | 137                | 23.4                                |
| 177.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,090       | 8,590             | 1,821                  | 147        | 370        | 130        | 500                | 22.2                                |
| 178.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,883        | 5,633             | 139                    | 87         | 223        | 3          | 226                | 21.6                                |
| 179.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 736          | 929               | 12                     | 21         | 55         | 0          | 55                 | 13.5                                |
| 180.00 | El Dorado Hills                                  | 0                                       | 18,183       | 22,312            | 354                    | 450        | 1,155      | 0          | 1,155              | 15.7                                |
| 181.00 | El Dorado Hills                                  | 0                                       | 6,986        | 5,396             | 693                    | 120        | 315        | 61         | 376                | 18.6                                |
| 182.00 | Cameron Park                                     | 0                                       | 39,144       | 47,584            | 772                    | 1,244      | 3,262      | 0          | 3,262              | 12.0                                |
| 183.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,991       | 11,963            | 269                    | 354        | 832        | 0          | 832                | 13.2                                |
| 184.00 | Cameron Park                                     | 0                                       | 39,190       | 16,157            | 4,519                  | 417        | 1,093      | 425        | 1,518              | 25.8                                |
| 185.00 | Cameron Park                                     | 0                                       | 3,895        | 4,368             | 87                     | 152        | 349        | 0          | 349                | 11.2                                |
| 186.00 | Cameron Park                                     | 0                                       | 50,984       | 4,595             | 8,943                  | 170        | 390        | 896        | 1,286              | 39.7                                |
| 187.00 | Cameron Park                                     | 0                                       | 10,760       | 7,155             | 1,217                  | 247        | 566        | 104        | 670                | 16.0                                |
| 188.00 | Cameron Park                                     | 0                                       | 6,610        | 5,625             | 600                    | 213        | 489        | 49         | 538                | 12.3                                |
| 189.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,453        | 3,143             | 40                     | 36         | 100        | 0          | 100                | 24.4                                |
| 190.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,405       | 13,307            | 183                    | 255        | 712        | 0          | 712                | 14.6                                |
| 191.00 | El Dorado Hills                                  | 0                                       | 1,434        | 1,825             | 24                     | 39         | 109        | 0          | 109                | 13.2                                |
| 192.00 | El Dorado Hills                                  | 0                                       | 865          | 1,090             | 14                     | 25         | 69         | 0          | 69                 | 12.5                                |
| 193.00 | El Dorado Hills                                  | 0                                       | 14,296       | 5,218             | 3,692                  | 156        | 406        | 361        | 768                | 18.6                                |
| 194.00 | El Dorado Hills                                  | 0                                       | 15,021       | 19,443            | 268                    | 439        | 1,297      | 0          | 1,297              | 11.6                                |
| 195.00 | El Dorado Hills                                  | 0                                       | 9,034        | 468               | 2,013                  | 10         | 26         | 176        | 203                | 44.6                                |
| 196.00 | Outside of County                                | 0                                       | 52,335       | 59,703            | 1,729                  | 1,148      | 3,198      | 97         | 3,295              | 15.9                                |
| 197.00 | El Dorado Hills                                  | 0                                       | 3,180        | 3,913             | 56                     | 85         | 225        | 0          | 225                | 14.1                                |
| 198.00 | El Dorado Hills                                  | 0                                       | 69,010       | 39,068            | 6,095                  | 887        | 2,476      | 623        | 3,099              | 22.3                                |
| 199.00 | El Dorado Hills                                  | 0                                       | 11,333       | 2,868             | 1,625                  | 62         | 173        | 143        | 316                | 35.9                                |
| 200.00 | El Dorado Hills                                  | 0                                       | 6,397        | 304               | 1,226                  | 7          | 19         | 121        | 140                | 45.8                                |
| 201.00 | El Dorado Hills                                  | 0                                       | 20,655       | 6,772             | 2,772                  | 150        | 443        | 269        | 712                | 29.0                                |
| 202.00 | El Dorado Hills                                  | 0                                       | 37,451       | 35,355            | 2,124                  | 762        | 2,127      | 169        | 2,296              | 16.3                                |
| 203.00 | El Dorado Hills                                  | 0                                       | 51,614       | 65,540            | 1,164                  | 1,300      | 3,762      | 43         | 3,805              | 13.6                                |
| 204.00 | El Dorado Hills                                  | 0                                       | 17,144       | 16,115            | 640                    | 362        | 1,048      | 48         | 1,096              | 15.6                                |
| 205.00 | El Dorado Hills                                  | 0                                       | 504          | 0                 | 245                    | 0          | 0          | 30         | 30                 | 16.8                                |
| 206.00 | El Dorado Hills                                  | 0                                       | 1,620        | 2,069             | 28                     | 51         | 148        | 0          | 148                | 11.0                                |
| 207.00 | El Dorado Hills                                  | 0                                       | 12,927       | 16,533            | 221                    | 304        | 880        | 0          | 880                | 14.7                                |
| 208.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 325          | 425               | 5                      | 9          | 26         | 0          | 26                 | 12.5                                |
| 209.00 | El Dorado Hills                                  | 0                                       | 11,561       | 4,445             | 1,420                  | 88         | 254        | 118        | 372                | 31.1                                |
| 210.00 | El Dorado Hills                                  | 0                                       | 6,336        | 8,133             | 109                    | 162        | 479        | 0          | 479                | 13.2                                |
| 211.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 134          | 178               | 2                      | 4          | 11         | 0          | 11                 | 11.9                                |
| 212.00 | El Dorado Hills                                  | 0                                       | 2,396        | 3,100             | 39                     | 53         | 153        | 0          | 153                | 15.6                                |
| 213.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,173        | 11,793            | 154                    | 193        | 534        | 0          | 534                | 17.2                                |
| 214.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,329        | 3,357             | 31                     | 31         | 76         | 0          | 76                 | 30.8                                |
| 215.00 | El Dorado Hills                                  | 0                                       | 6,785        | 8,619             | 122                    | 148        | 413        | 0          | 413                | 16.4                                |
| 216.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,748        | 2,460             | 26                     | 23         | 56         | 0          | 56                 | 31.2                                |
| 217.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 586          | 759               | 9                      | 11         | 31         | 0          | 31                 | 19.1                                |
| 218.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,509        | 1,892             | 26                     | 28         | 78         | 0          | 78                 | 19.3                                |
| 219.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,899        | 4,955             | 68                     | 69         | 191        | 0          | 191                | 20.4                                |
| 220.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 470          | 633               | 6                      | 9          | 25         | 0          | 25                 | 18.9                                |
| 221.00 | El Dorado Hills                                  | 0                                       | 37,290       | 48,504            | 582                    | 999        | 2,596      | 0          | 2,596              | 14.4                                |
| 222.00 | Cameron Park                                     | 0                                       | 2,166        | 1,462             | 428                    | 34         | 90         | 58         | 148                | 14.6                                |
| 223.00 | Cameron Park                                     | 0                                       | 5,502        | 7,074             | 79                     | 174        | 461        | 0          | 461                | 11.9                                |
| 224.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,562        | 7,304             | 502                    | 144        | 382        | 37         | 419                | 20.4                                |
| 225.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 23,238       | 10,896            | 2,974                  | 147        | 424        | 277        | 702                | 33.1                                |



| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=No) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|--|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 226.00 | Cameron Park                                     | 0  | 27,511       | 26,935            | 1,259                  | 550        | 1,591      | 118        | 1,709              | 16.1                                |
| 227.00 | Cameron Park                                     | 0  | 8,648        | 10,989            | 208                    | 281        | 689        | 10         | 699                | 12.4                                |
| 228.00 | Cameron Park                                     | 0  | 20,455       | 24,962            | 510                    | 724        | 1,775      | 25         | 1,800              | 11.4                                |
| 229.00 | El Dorado Hills                                  | 0  | 41,453       | 34,408            | 2,383                  | 793        | 2,061      | 237        | 2,298              | 18.0                                |
| 230.00 | El Dorado Hills                                  | 0  | 22,827       | 27,709            | 343                    | 557        | 1,655      | 0          | 1,655              | 13.8                                |
| 231.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,969        | 6,636             | 73                     | 134        | 388        | 0          | 388                | 12.8                                |
| 232.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,540        | 5,860             | 73                     | 87         | 241        | 0          | 241                | 18.9                                |
| 233.00 | Cameron Park                                     | 0  | 8,473        | 3,657             | 750                    | 116        | 266        | 100        | 366                | 23.1                                |
| 234.00 | Cameron Park                                     | 0  | 55,517       | 33,403            | 5,112                  | 1,085      | 2,488      | 670        | 3,158              | 17.6                                |
| 235.00 | Cameron Park                                     | 0  | 42,214       | 54,278            | 643                    | 1,322      | 3,580      | 2          | 3,582              | 11.8                                |
| 236.00 | Cameron Park                                     | 0  | 14,737       | 19,295            | 263                    | 473        | 1,281      | 9          | 1,290              | 11.4                                |
| 237.00 | Cameron Park                                     | 0  | 2,246        | 2,612             | 46                     | 78         | 179        | 0          | 179                | 12.6                                |
| 238.00 | Cameron Park                                     | 0  | 39,561       | 15,063            | 5,326                  | 415        | 1,018      | 527        | 1,545              | 25.6                                |
| 239.00 | Cameron Park                                     | 0  | 2,338        | 3,344             | 35                     | 86         | 228        | 0          | 228                | 10.3                                |
| 240.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 6,564        | 8,292             | 110                    | 137        | 363        | 0          | 363                | 18.1                                |
| 241.00 | Cameron Park                                     | 0  | 14,967       | 7,533             | 1,281                  | 181        | 480        | 151        | 631                | 23.7                                |
| 242.00 | Cameron Park                                     | 0  | 698          | 903               | 9                      | 24         | 64         | 0          | 64                 | 11.0                                |
| 243.00 | Cameron Park                                     | 0  | 2,018        | 2,585             | 32                     | 61         | 162        | 1          | 163                | 12.4                                |
| 244.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 3,011        | 3,719             | 57                     | 51         | 128        | 0          | 128                | 23.6                                |
| 245.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 772          | 1,000             | 11                     | 10         | 30         | 0          | 30                 | 25.7                                |
| 246.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 3,912        | 5,183             | 56                     | 63         | 189        | 0          | 189                | 20.7                                |
| 247.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 13,702       | 14,472            | 352                    | 296        | 636        | 0          | 636                | 21.5                                |
| 248.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 13,461       | 10,485            | 945                    | 182        | 431        | 39         | 470                | 28.6                                |
| 249.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 3,356        | 1,861             | 530                    | 26         | 56         | 25         | 81                 | 41.5                                |
| 250.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,873        | 3,282             | 60                     | 53         | 124        | 0          | 124                | 23.2                                |
| 251.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 5,624        | 6,207             | 136                    | 139        | 363        | 0          | 363                | 15.5                                |
| 252.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 24,853       | 28,786            | 577                    | 666        | 1,756      | 0          | 1,756              | 14.2                                |
| 253.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 7,492        | 8,852             | 159                    | 149        | 410        | 0          | 410                | 18.3                                |
| 254.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 5,267        | 5,894             | 123                    | 119        | 311        | 0          | 311                | 16.9                                |
| 255.00 | Cameron Park                                     | 0  | 65,000       | 0                 | 14,931                 | 0          | 0          | 1,405      | 1,405              | 46.3                                |
| 256.00 | Cameron Park                                     | 0  | 44,564       | 1,991             | 10,526                 | 72         | 175        | 872        | 1,047              | 42.6                                |
| 257.00 | Shingle Springs                                  | 0  | 62,244       | 15,314            | 14,621                 | 511        | 1,335      | 1,312      | 2,647              | 23.5                                |
| 258.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,125        | 2,529             | 40                     | 36         | 99         | 0          | 99                 | 21.5                                |
| 259.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,609        | 3,108             | 52                     | 50         | 132        | 0          | 132                | 19.8                                |
| 260.00 | Shingle Springs                                  | 0  | 27,091       | 140               | 5,662                  | 5          | 15         | 441        | 456                | 59.4                                |
| 261.00 | Shingle Springs                                  | 0  | 27,149       | 3,576             | 4,858                  | 121        | 333        | 388        | 721                | 37.7                                |
| 262.00 | Shingle Springs                                  | 0  | 40,676       | 5,459             | 6,543                  | 203        | 530        | 514        | 1,044              | 39.0                                |
| 263.00 | Shingle Springs                                  | 0  | 10,043       | 3,812             | 1,483                  | 121        | 333        | 119        | 452                | 22.2                                |
| 264.00 | Shingle Springs                                  | 0  | 7,888        | 3,085             | 1,054                  | 97         | 267        | 82         | 349                | 22.6                                |
| 265.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,958        | 2,212             | 43                     | 44         | 116        | 0          | 116                | 16.9                                |
| 266.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 6,107        | 1,675             | 663                    | 41         | 88         | 33         | 121                | 50.4                                |
| 267.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 8,702        | 10,057            | 218                    | 240        | 633        | 0          | 633                | 13.8                                |
| 268.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 3,043        | 3,109             | 171                    | 72         | 190        | 10         | 200                | 15.2                                |
| 269.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 13,580       | 9,377             | 1,436                  | 217        | 558        | 81         | 639                | 21.2                                |
| 270.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 6,206        | 2,673             | 678                    | 54         | 135        | 39         | 174                | 35.7                                |
| 271.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 9,854        | 9,955             | 735                    | 172        | 442        | 50         | 492                | 20.0                                |
| 272.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 9,793        | 6,472             | 807                    | 145        | 407        | 55         | 462                | 21.2                                |
| 273.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 7,462        | 8,896             | 377                    | 138        | 400        | 22         | 422                | 17.7                                |
| 274.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 21,554       | 18,871            | 1,569                  | 411        | 1,153      | 122        | 1,275              | 16.9                                |
| 275.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 14,761       | 17,116            | 337                    | 379        | 971        | 0          | 971                | 15.2                                |
| 276.00 | Cameron Park                                     | 0  | 28,073       | 18,733            | 2,079                  | 535        | 1,312      | 179        | 1,491              | 18.8                                |
| 277.00 | Cameron Park                                     | 0  | 4,942        | 5,794             | 100                    | 176        | 427        | 0          | 427                | 11.6                                |
| 278.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 5,751        | 5,980             | 218                    | 100        | 265        | 10         | 275                | 20.9                                |
| 279.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,923        | 3,723             | 49                     | 55         | 146        | 0          | 146                | 20.0                                |
| 280.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,437        | 1,674             | 31                     | 37         | 103        | 0          | 103                | 14.0                                |
| 281.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,878        | 4,198             | 427                    | 85         | 238        | 28         | 266                | 18.3                                |
| 282.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,389        | 1,615             | 30                     | 39         | 109        | 0          | 109                | 12.7                                |
| 283.00 | Shingle Springs                                  | 0  | 15,342       | 3,059             | 2,226                  | 0          | 0          | 197        | 197                | 77.9                                |
| 284.00 | Shingle Springs                                  | 0  | 4,297        | 1,006             | 657                    | 36         | 87         | 53         | 140                | 30.6                                |
| 285.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 14,052       | 2,733             | 2,958                  | 53         | 154        | 233        | 387                | 36.3                                |
| 286.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,660        | 2,071             | 30                     | 36         | 101        | 0          | 101                | 16.4                                |
| 287.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,395        | 1,684             | 27                     | 34         | 87         | 0          | 87                 | 16.0                                |
| 288.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,175        | 2,688             | 40                     | 50         | 140        | 0          | 140                | 15.5                                |
| 289.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 320          | 421               | 5                      | 8          | 23         | 0          | 23                 | 13.8                                |
| 290.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,045        | 2,615             | 35                     | 44         | 128        | 0          | 128                | 16.0                                |
| 291.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 12,428       | 15,748            | 238                    | 254        | 647        | 0          | 647                | 19.2                                |
| 292.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,250        | 5,680             | 64                     | 72         | 209        | 0          | 209                | 20.3                                |
| 293.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,295        | 1,293             | 36                     | 41         | 90         | 0          | 90                 | 14.4                                |
| 294.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 4,480        | 4,711             | 122                    | 129        | 321        | 0          | 321                | 14.0                                |
| 295.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 62,242       | 4,932             | 22,453                 | 110        | 282        | 1,540      | 1,822              | 34.2                                |
| 296.00 | El Dorado Diamond Springs                        | 0  | 52,060       | 6,594             | 9,703                  | 188        | 496        | 729        | 1,225              | 42.5                                |
| 297.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,263        | 2,679             | 61                     | 79         | 208        | 0          | 208                | 10.9                                |
| 298.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 2,831        | 3,090             | 71                     | 79         | 208        | 0          | 208                | 13.6                                |
| 299.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 5,004        | 5,738             | 112                    | 114        | 293        | 0          | 293                | 17.1                                |
| 300.00 | Unincorporated El Dorado County (Remainder Area) | 0  | 1,731        | 1,925             | 41                     | 45         | 116        | 0          | 116                | 15.0                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 301.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 624          | 550               | 41                     | 20         | 44         | 3          | 47                 | 13.4                                |
| 302.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,845        | 2,600             | 206                    | 89         | 194        | 10         | 204                | 18.8                                |
| 303.00 | El Dorado Diamond Springs                        | 0                                       | 4,184        | 2,690             | 440                    | 106        | 228        | 28         | 255                | 16.4                                |
| 304.00 | El Dorado Diamond Springs                        | 0                                       | 8,274        | 284               | 2,637                  | 12         | 26         | 269        | 296                | 28.0                                |
| 305.00 | El Dorado Diamond Springs                        | 0                                       | 10,690       | 0                 | 4,934                  | 1          | 2          | 536        | 539                | 19.9                                |
| 306.00 | El Dorado Diamond Springs                        | 0                                       | 7,868        | 3,187             | 1,335                  | 128        | 275        | 110        | 386                | 20.4                                |
| 307.00 | El Dorado Diamond Springs                        | 0                                       | 2,949        | 2,833             | 91                     | 112        | 257        | 0          | 257                | 11.5                                |
| 308.00 | El Dorado Diamond Springs                        | 0                                       | 240          | 246               | 6                      | 12         | 28         | 0          | 28                 | 8.7                                 |
| 309.00 | El Dorado Diamond Springs                        | 0                                       | 808          | 725               | 26                     | 34         | 74         | 0          | 74                 | 10.9                                |
| 310.00 | El Dorado Diamond Springs                        | 0                                       | 13,709       | 642               | 2,482                  | 29         | 66         | 220        | 286                | 47.9                                |
| 311.00 | El Dorado Diamond Springs                        | 0                                       | 3,541        | 1,737             | 435                    | 75         | 164        | 33         | 197                | 18.0                                |
| 312.00 | El Dorado Diamond Springs                        | 0                                       | 9,892        | 6,856             | 964                    | 310        | 711        | 71         | 782                | 12.6                                |
| 313.00 | El Dorado Diamond Springs                        | 0                                       | 23,368       | 3,354             | 6,963                  | 71         | 178        | 534        | 712                | 32.8                                |
| 314.00 | El Dorado Diamond Springs                        | 0                                       | 10,492       | 2,521             | 1,442                  | 100        | 249        | 103        | 352                | 29.8                                |
| 315.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 316.00 | El Dorado Diamond Springs                        | 0                                       | 675          | 645               | 22                     | 31         | 68         | 0          | 68                 | 10.0                                |
| 317.00 | El Dorado Diamond Springs                        | 0                                       | 140          | 127               | 4                      | 8          | 17         | 0          | 17                 | 8.0                                 |
| 318.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,081        | 4,764             | 726                    | 182        | 452        | 41         | 493                | 16.4                                |
| 319.00 | El Dorado Diamond Springs                        | 0                                       | 1,393        | 1,293             | 45                     | 57         | 143        | 0          | 143                | 9.7                                 |
| 320.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,871        | 1,574             | 809                    | 19         | 48         | 61         | 109                | 44.5                                |
| 321.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,216        | 6,169             | 137                    | 116        | 295        | 2          | 297                | 17.5                                |
| 322.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,687       | 10,628            | 568                    | 242        | 623        | 26         | 649                | 16.5                                |
| 323.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,269        | 3,764             | 1,835                  | 67         | 172        | 139        | 311                | 26.5                                |
| 324.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,026        | 3,637             | 696                    | 73         | 183        | 39         | 222                | 31.7                                |
| 325.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 718          | 837               | 16                     | 20         | 51         | 0          | 51                 | 14.1                                |
| 326.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,085        | 2,472             | 49                     | 57         | 145        | 0          | 145                | 14.4                                |
| 327.00 | Placerville                                      | 0                                       | 3,213        | 3,517             | 82                     | 84         | 210        | 0          | 210                | 15.3                                |
| 328.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 698          | 796               | 15                     | 19         | 48         | 0          | 48                 | 14.7                                |
| 329.00 | Placerville                                      | 0                                       | 4,822        | 4,870             | 140                    | 156        | 360        | 0          | 360                | 13.4                                |
| 330.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,485        | 3,717             | 94                     | 109        | 273        | 0          | 273                | 12.8                                |
| 331.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,130        | 7,010             | 140                    | 130        | 325        | 0          | 325                | 18.9                                |
| 332.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,433        | 1,532             | 38                     | 47         | 105        | 0          | 105                | 13.6                                |
| 333.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,947        | 4,535             | 87                     | 91         | 225        | 0          | 225                | 17.6                                |
| 334.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,640        | 1,005             | 256                    | 26         | 58         | 18         | 76                 | 21.5                                |
| 335.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,813        | 3,039             | 73                     | 76         | 163        | 0          | 163                | 17.2                                |
| 336.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,047        | 1,123             | 26                     | 30         | 66         | 0          | 66                 | 15.8                                |
| 337.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,177       | 6,049             | 1,756                  | 124        | 304        | 128        | 432                | 23.5                                |
| 338.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,876       | 15,829            | 396                    | 350        | 900        | 11         | 911                | 15.2                                |
| 339.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,287        | 12,032            | 145                    | 224        | 508        | 0          | 508                | 18.3                                |
| 340.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,024        | 5,281             | 509                    | 95         | 202        | 30         | 232                | 34.5                                |
| 341.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,631        | 1,556             | 173                    | 34         | 75         | 16         | 91                 | 18.0                                |
| 342.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,391        | 2,766             | 49                     | 48         | 123        | 0          | 123                | 19.4                                |
| 343.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,976        | 5,794             | 91                     | 78         | 177        | 0          | 177                | 28.2                                |
| 344.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,878        | 6,978             | 106                    | 92         | 208        | 0          | 208                | 28.2                                |
| 345.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,019        | 2,139             | 39                     | 34         | 77         | 0          | 77                 | 26.2                                |
| 346.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,271        | 1,255             | 27                     | 23         | 51         | 0          | 51                 | 24.8                                |
| 347.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,656        | 3,154             | 49                     | 42         | 108        | 0          | 108                | 24.6                                |
| 348.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,519        | 2,492             | 58                     | 48         | 107        | 0          | 107                | 23.6                                |
| 349.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,166        | 4,926             | 577                    | 94         | 193        | 34         | 227                | 35.9                                |
| 350.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 988          | 1,147             | 17                     | 20         | 45         | 0          | 45                 | 21.8                                |
| 351.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,471        | 1,857             | 23                     | 31         | 70         | 0          | 70                 | 20.9                                |
| 352.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,104        | 2,704             | 31                     | 38         | 86         | 0          | 86                 | 24.4                                |
| 353.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,687       | 10,315            | 513                    | 200        | 453        | 43         | 496                | 21.5                                |
| 354.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,014        | 4,698             | 456                    | 68         | 154        | 43         | 197                | 35.6                                |
| 355.00 | Placerville                                      | 1                                       | 27,093       | 5,158             | 4,932                  | 257        | 594        | 387        | 981                | 27.6                                |
| 356.00 | Placerville                                      | 1                                       | 2,711        | 2,564             | 91                     | 109        | 235        | 0          | 235                | 11.6                                |
| 357.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,037        | 4,256             | 727                    | 133        | 294        | 42         | 336                | 23.9                                |
| 358.00 | Placerville                                      | 0                                       | 10,277       | 3,375             | 1,625                  | 128        | 283        | 123        | 406                | 25.3                                |
| 359.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,541        | 3,718             | 93                     | 105        | 247        | 0          | 247                | 14.3                                |
| 360.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,201        | 4,599             | 97                     | 97         | 228        | 0          | 228                | 18.4                                |
| 361.00 | Placerville                                      | 1                                       | 26,883       | 10,093            | 4,583                  | 570        | 1,189      | 370        | 1,558              | 17.3                                |
| 362.00 | Placerville                                      | 1                                       | 46,470       | 3,872             | 7,929                  | 194        | 457        | 616        | 1,073              | 43.3                                |
| 363.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 414          | 429               | 11                     | 19         | 48         | 0          | 48                 | 8.6                                 |
| 364.00 | Placerville                                      | 0                                       | 4,529        | 3,737             | 411                    | 173        | 439        | 28         | 466                | 9.7                                 |
| 365.00 | El Dorado Diamond Springs                        | 0                                       | 23,891       | 9,410             | 2,902                  | 541        | 1,147      | 223        | 1,370              | 17.4                                |
| 366.00 | El Dorado Diamond Springs                        | 0                                       | 10,290       | 1,572             | 1,547                  | 108        | 232        | 146        | 378                | 27.2                                |
| 367.00 | El Dorado Diamond Springs                        | 0                                       | 7,104        | 0                 | 3,431                  | 0          | 0          | 398        | 398                | 17.9                                |
| 368.00 | El Dorado Diamond Springs                        | 0                                       | 4,857        | 1,347             | 807                    | 68         | 157        | 81         | 238                | 20.4                                |
| 369.00 | El Dorado Diamond Springs                        | 0                                       | 13,862       | 8,846             | 1,310                  | 485        | 1,088      | 114        | 1,202              | 11.5                                |
| 370.00 | El Dorado Diamond Springs                        | 0                                       | 6,831        | 0                 | 2,807                  | 0          | 0          | 317        | 317                | 21.6                                |
| 371.00 | El Dorado Diamond Springs                        | 0                                       | 2,151        | 2,090             | 60                     | 69         | 155        | 0          | 155                | 13.9                                |
| 372.00 | El Dorado Diamond Springs                        | 0                                       | 28,232       | 13,956            | 3,089                  | 559        | 1,254      | 296        | 1,550              | 18.2                                |
| 373.00 | El Dorado Diamond Springs                        | 0                                       | 554          | 498               | 17                     | 27         | 62         | 0          | 62                 | 8.9                                 |
| 374.00 | El Dorado Diamond Springs                        | 0                                       | 1,036        | 278               | 114                    | 14         | 32         | 10         | 42                 | 24.5                                |
| 375.00 | El Dorado Diamond Springs                        | 0                                       | 360          | 332               | 11                     | 15         | 34         | 0          | 34                 | 10.5                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 376.00 | El Dorado Diamond Springs                        | 0                                       | 1,486        | 730               | 216                    | 34         | 78         | 17         | 95                 | 15.7                                |
| 377.00 | El Dorado Diamond Springs                        | 0                                       | 714          | 316               | 167                    | 14         | 32         | 16         | 48                 | 14.8                                |
| 378.00 | El Dorado Diamond Springs                        | 0                                       | 543          | 520               | 15                     | 27         | 62         | 0          | 62                 | 8.7                                 |
| 379.00 | El Dorado Diamond Springs                        | 0                                       | 935          | 879               | 28                     | 48         | 111        | 0          | 111                | 8.4                                 |
| 380.00 | El Dorado Diamond Springs                        | 0                                       | 195          | 187               | 6                      | 12         | 28         | 0          | 28                 | 7.0                                 |
| 381.00 | El Dorado Diamond Springs                        | 0                                       | 115          | 113               | 3                      | 7          | 16         | 0          | 16                 | 7.1                                 |
| 382.00 | El Dorado Diamond Springs                        | 0                                       | 219          | 185               | 7                      | 11         | 25         | 0          | 25                 | 8.6                                 |
| 383.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,330        | 2,390             | 62                     | 80         | 179        | 0          | 179                | 13.0                                |
| 384.00 | El Dorado Diamond Springs                        | 0                                       | 4,397        | 4,410             | 115                    | 174        | 390        | 0          | 390                | 11.3                                |
| 385.00 | El Dorado Diamond Springs                        | 0                                       | 13,528       | 13,365            | 452                    | 600        | 1,346      | 14         | 1,360              | 9.9                                 |
| 386.00 | El Dorado Diamond Springs                        | 0                                       | 2,188        | 2,210             | 56                     | 90         | 202        | 0          | 202                | 10.8                                |
| 387.00 | El Dorado Diamond Springs                        | 0                                       | 3,238        | 749               | 449                    | 36         | 81         | 44         | 124                | 26.0                                |
| 388.00 | El Dorado Diamond Springs                        | 0                                       | 5,394        | 0                 | 2,511                  | 0          | 0          | 278        | 278                | 19.4                                |
| 389.00 | El Dorado Diamond Springs                        | 0                                       | 5,811        | 19                | 2,063                  | 2          | 5          | 240        | 245                | 23.8                                |
| 390.00 | El Dorado Diamond Springs                        | 0                                       | 7,164        | 4,869             | 681                    | 311        | 670        | 54         | 724                | 9.9                                 |
| 391.00 | El Dorado Diamond Springs                        | 0                                       | 5,829        | 143               | 904                    | 11         | 24         | 92         | 116                | 50.3                                |
| 392.00 | El Dorado Diamond Springs                        | 0                                       | 1,006        | 479               | 87                     | 28         | 60         | 5          | 66                 | 15.3                                |
| 393.00 | El Dorado Diamond Springs                        | 0                                       | 25,347       | 4,805             | 3,728                  | 281        | 645        | 288        | 932                | 27.2                                |
| 394.00 | El Dorado Diamond Springs                        | 0                                       | 6,088        | 112               | 2,026                  | 8          | 18         | 168        | 186                | 32.8                                |
| 395.00 | Placerville                                      | 1                                       | 79,545       | 1,468             | 29,419                 | 98         | 206        | 2,613      | 2,819              | 28.2                                |
| 396.00 | El Dorado Diamond Springs                        | 0                                       | 30,339       | 0                 | 5,461                  | 0          | 0          | 425        | 425                | 71.5                                |
| 397.00 | El Dorado Diamond Springs                        | 0                                       | 1,450        | 913               | 119                    | 50         | 109        | 7          | 116                | 12.5                                |
| 398.00 | El Dorado Diamond Springs                        | 0                                       | 1,145        | 267               | 142                    | 14         | 32         | 11         | 43                 | 26.4                                |
| 399.00 | El Dorado Diamond Springs                        | 0                                       | 956          | 840               | 32                     | 43         | 99         | 0          | 99                 | 9.7                                 |
| 400.00 | El Dorado Diamond Springs                        | 0                                       | 7,244        | 212               | 1,215                  | 16         | 35         | 97         | 132                | 55.1                                |
| 401.00 | Placerville                                      | 0                                       | 26,725       | 947               | 4,545                  | 57         | 121        | 337        | 458                | 58.4                                |
| 402.00 | El Dorado Diamond Springs                        | 0                                       | 4,663        | 2,586             | 1,018                  | 137        | 344        | 103        | 447                | 10.4                                |
| 403.00 | El Dorado Diamond Springs                        | 0                                       | 31,030       | 2,548             | 12,377                 | 124        | 267        | 906        | 1,174              | 26.4                                |
| 404.00 | El Dorado Diamond Springs                        | 0                                       | 1,693        | 305               | 320                    | 19         | 44         | 32         | 76                 | 22.4                                |
| 405.00 | El Dorado Diamond Springs                        | 0                                       | 1,637        | 149               | 242                    | 9          | 21         | 21         | 41                 | 39.5                                |
| 406.00 | El Dorado Diamond Springs                        | 0                                       | 25,826       | 390               | 4,299                  | 24         | 55         | 339        | 395                | 65.5                                |
| 407.00 | El Dorado Diamond Springs                        | 0                                       | 15,798       | 558               | 3,068                  | 39         | 84         | 285        | 369                | 42.8                                |
| 408.00 | El Dorado Diamond Springs                        | 0                                       | 5,448        | 0                 | 2,274                  | 1          | 2          | 279        | 281                | 19.4                                |
| 409.00 | Placerville                                      | 0                                       | 37,714       | 3,540             | 7,957                  | 162        | 410        | 610        | 1,019              | 37.0                                |
| 410.00 | El Dorado Diamond Springs                        | 0                                       | 39,727       | 14,469            | 5,458                  | 602        | 1,418      | 423        | 1,840              | 21.6                                |
| 411.00 | Placerville                                      | 1                                       | 54,993       | 5,309             | 11,324                 | 335        | 793        | 982        | 1,775              | 31.0                                |
| 412.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,443        | 3,328             | 104                    | 114        | 271        | 0          | 271                | 12.7                                |
| 413.00 | Placerville                                      | 0                                       | 4,909        | 4,618             | 168                    | 199        | 472        | 1          | 473                | 10.4                                |
| 414.00 | El Dorado Diamond Springs                        | 0                                       | 19,753       | 93                | 5,161                  | 7          | 15         | 561        | 576                | 34.3                                |
| 415.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 433          | 322               | 41                     | 18         | 38         | 4          | 42                 | 10.3                                |
| 416.00 | El Dorado Diamond Springs                        | 0                                       | 265          | 129               | 53                     | 9          | 19         | 7          | 26                 | 10.1                                |
| 417.00 | Placerville                                      | 1                                       | 22,722       | 916               | 4,761                  | 55         | 124        | 424        | 548                | 41.5                                |
| 418.00 | Placerville                                      | 1                                       | 5,468        | 0                 | 1,367                  | 0          | 0          | 130        | 130                | 42.1                                |
| 419.00 | Placerville                                      | 1                                       | 6,847        | 0                 | 1,199                  | 0          | 0          | 112        | 112                | 61.2                                |
| 420.00 | Placerville                                      | 1                                       | 5,241        | 975               | 1,309                  | 56         | 132        | 117        | 249                | 21.1                                |
| 421.00 | Placerville                                      | 1                                       | 2,546        | 1,471             | 404                    | 81         | 191        | 28         | 219                | 11.6                                |
| 422.00 | Placerville                                      | 1                                       | 67,123       | 5,191             | 31,006                 | 303        | 714        | 2,392      | 3,106              | 21.6                                |
| 423.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 448          | 392               | 26                     | 21         | 49         | 1          | 50                 | 9.0                                 |
| 424.00 | Placerville                                      | 0                                       | 25,499       | 5,390             | 4,408                  | 252        | 582        | 351        | 934                | 27.3                                |
| 425.00 | Placerville                                      | 0                                       | 66,785       | 28,851            | 8,028                  | 1,390      | 3,090      | 730        | 3,820              | 17.5                                |
| 426.00 | Placerville                                      | 0                                       | 705          | 728               | 18                     | 32         | 80         | 0          | 80                 | 8.8                                 |
| 427.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,813        | 4,049             | 100                    | 102        | 255        | 0          | 255                | 15.0                                |
| 428.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 550          | 586               | 14                     | 22         | 55         | 0          | 55                 | 10.0                                |
| 429.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,195        | 1,401             | 35                     | 35         | 87         | 0          | 87                 | 13.8                                |
| 430.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,100        | 2,021             | 545                    | 59         | 146        | 44         | 190                | 16.3                                |
| 431.00 | Placerville                                      | 1                                       | 13,523       | 513               | 2,238                  | 28         | 59         | 167        | 226                | 59.8                                |
| 432.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,629       | 10,664            | 3,090                  | 363        | 900        | 241        | 1,140              | 13.7                                |
| 433.00 | Placerville                                      | 1                                       | 16,881       | 10,065            | 2,255                  | 678        | 1,398      | 175        | 1,572              | 10.7                                |
| 434.00 | Placerville                                      | 1                                       | 826          | 642               | 30                     | 44         | 95         | 0          | 95                 | 8.7                                 |
| 435.00 | Placerville                                      | 1                                       | 1,289        | 673               | 230                    | 47         | 100        | 27         | 127                | 10.2                                |
| 436.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,146        | 1,177             | 49                     | 32         | 79         | 2          | 81                 | 14.2                                |
| 437.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,373        | 5,949             | 131                    | 147        | 371        | 0          | 371                | 14.5                                |
| 438.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,831        | 4,284             | 504                    | 143        | 303        | 32         | 335                | 17.4                                |
| 439.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,557        | 4,677             | 1,511                  | 169        | 359        | 90         | 449                | 21.3                                |
| 440.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,900        | 868               | 1,557                  | 31         | 66         | 111        | 177                | 33.4                                |
| 441.00 | Placerville                                      | 1                                       | 399          | 394               | 11                     | 15         | 35         | 0          | 35                 | 11.4                                |
| 442.00 | Placerville                                      | 1                                       | 13,532       | 9,903             | 964                    | 350        | 882        | 56         | 939                | 14.4                                |
| 443.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,947        | 1,891             | 56                     | 59         | 125        | 0          | 125                | 15.5                                |
| 444.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 273          | 180               | 17                     | 8          | 19         | 1          | 20                 | 13.7                                |
| 445.00 | Placerville                                      | 0                                       | 839          | 791               | 55                     | 26         | 65         | 3          | 68                 | 12.3                                |
| 446.00 | Placerville                                      | 1                                       | 4,223        | 766               | 692                    | 28         | 65         | 53         | 119                | 35.6                                |
| 447.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,279        | 3,171             | 1,560                  | 81         | 199        | 116        | 314                | 26.3                                |
| 448.00 | Placerville                                      | 0                                       | 1,807        | 2,042             | 51                     | 64         | 161        | 0          | 161                | 11.2                                |
| 449.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 467          | 479               | 12                     | 14         | 30         | 0          | 30                 | 15.5                                |
| 450.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,337        | 2,209             | 75                     | 84         | 180        | 0          | 180                | 13.0                                |

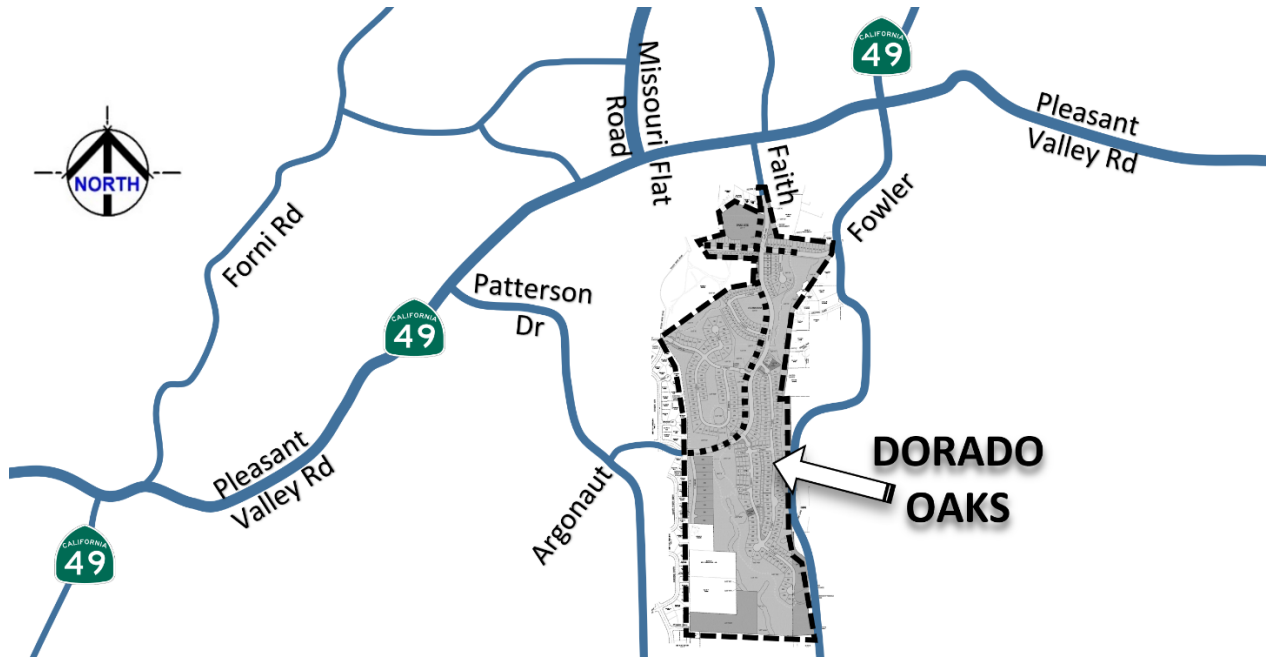
| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 451.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 896          | 872               | 26                     | 27         | 58         | 0          | 58                 | 15.5                                |
| 452.00 | Placerville                                      | 0                                       | 6,846        | 3,645             | 916                    | 150        | 321        | 66         | 387                | 17.7                                |
| 453.00 | Placerville                                      | 1                                       | 3,296        | 3,183             | 138                    | 182        | 391        | 0          | 391                | 8.4                                 |
| 454.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 542          | 479               | 18                     | 28         | 59         | 0          | 59                 | 9.2                                 |
| 455.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,540        | 2,677             | 67                     | 73         | 181        | 0          | 181                | 14.0                                |
| 456.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,778        | 1,781             | 50                     | 51         | 109        | 0          | 109                | 16.2                                |
| 457.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,129        | 3,027             | 248                    | 68         | 153        | 13         | 166                | 18.8                                |
| 458.00 | Placerville                                      | 0                                       | 11,332       | 1,930             | 1,817                  | 71         | 157        | 130        | 287                | 39.5                                |
| 459.00 | Placerville                                      | 0                                       | 727          | 704               | 21                     | 28         | 62         | 0          | 62                 | 11.7                                |
| 460.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 826          | 797               | 23                     | 22         | 47         | 0          | 47                 | 17.5                                |
| 461.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 114          | 128               | 2                      | 6          | 13         | 0          | 13                 | 8.6                                 |
| 462.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,606        | 1,247             | 401                    | 31         | 67         | 24         | 91                 | 28.8                                |
| 463.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,736        | 5,345             | 47                     | 89         | 195        | 0          | 195                | 19.1                                |
| 464.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,795        | 3,419             | 47                     | 55         | 129        | 0          | 129                | 21.7                                |
| 465.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,735        | 5,401             | 33                     | 65         | 163        | 0          | 163                | 22.9                                |
| 466.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,081        | 3,407             | 113                    | 65         | 143        | 7          | 150                | 20.6                                |
| 467.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,493        | 3,506             | 29                     | 49         | 107        | 0          | 107                | 23.2                                |
| 468.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,822        | 6,929             | 96                     | 128        | 263        | 0          | 263                | 22.1                                |
| 469.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,795        | 5,180             | 42                     | 70         | 156        | 0          | 156                | 24.3                                |
| 470.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,669        | 2,156             | 23                     | 33         | 72         | 0          | 72                 | 23.1                                |
| 471.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,210        | 1,597             | 17                     | 26         | 57         | 0          | 57                 | 21.2                                |
| 472.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,208        | 1,633             | 17                     | 26         | 57         | 0          | 57                 | 21.2                                |
| 473.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,175        | 675               | 222                    | 13         | 33         | 25         | 58                 | 20.4                                |
| 474.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,758        | 2,041             | 35                     | 42         | 95         | 0          | 95                 | 18.5                                |
| 475.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,840        | 2,198             | 33                     | 42         | 95         | 0          | 95                 | 19.3                                |
| 476.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,005        | 905               | 523                    | 16         | 41         | 34         | 75                 | 53.3                                |
| 477.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,575        | 2,183             | 20                     | 31         | 78         | 0          | 78                 | 20.2                                |
| 478.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,227        | 1,441             | 24                     | 30         | 66         | 0          | 66                 | 18.5                                |
| 479.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,061        | 3,304             | 420                    | 62         | 156        | 29         | 185                | 27.4                                |
| 480.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,697        | 2,445             | 28                     | 31         | 68         | 1          | 69                 | 24.6                                |
| 481.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,356        | 1,932             | 18                     | 24         | 53         | 0          | 53                 | 25.5                                |
| 482.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,451        | 8,506             | 87                     | 102        | 226        | 0          | 226                | 28.6                                |
| 483.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,533        | 4,703             | 1,030                  | 132        | 285        | 76         | 361                | 26.4                                |
| 484.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,644        | 4,850             | 1,171                  | 104        | 267        | 118        | 384                | 22.5                                |
| 485.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,237        | 3,016             | 30                     | 40         | 103        | 0          | 103                | 21.8                                |
| 486.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,298        | 7,084             | 75                     | 110        | 249        | 0          | 249                | 21.3                                |
| 487.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 18,692       | 8,278             | 3,040                  | 228        | 504        | 184        | 688                | 27.2                                |
| 488.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,753        | 7,311             | 104                    | 125        | 283        | 0          | 283                | 20.4                                |
| 489.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,399        | 6,636             | 405                    | 157        | 355        | 24         | 379                | 19.5                                |
| 490.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,521        | 1,813             | 31                     | 35         | 86         | 0          | 86                 | 17.7                                |
| 491.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,430        | 8,832             | 160                    | 181        | 444        | 0          | 444                | 16.7                                |
| 492.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,810        | 3,464             | 1,039                  | 76         | 188        | 72         | 259                | 34.0                                |
| 493.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,793        | 3,613             | 1,460                  | 79         | 195        | 101        | 296                | 33.1                                |
| 494.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,327        | 3,004             | 757                    | 71         | 174        | 55         | 229                | 27.7                                |
| 495.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 644          | 752               | 14                     | 17         | 42         | 0          | 42                 | 15.4                                |
| 496.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,206        | 4,235             | 709                    | 94         | 232        | 52         | 284                | 25.3                                |
| 497.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,450        | 5,010             | 1,005                  | 109        | 263        | 75         | 338                | 28.0                                |
| 498.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,598        | 4,048             | 175                    | 78         | 176        | 13         | 189                | 19.0                                |
| 499.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,510        | 1,841             | 30                     | 38         | 93         | 0          | 93                 | 16.2                                |
| 500.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,284        | 1,091             | 1,164                  | 11         | 24         | 97         | 121                | 43.6                                |
| 501.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,231        | 818               | 552                    | 22         | 49         | 58         | 107                | 20.8                                |
| 502.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,282        | 8,965             | 139                    | 147        | 349        | 0          | 349                | 20.8                                |
| 503.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,058        | 10                | 841                    | 1          | 2          | 56         | 58                 | 86.9                                |
| 504.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,640       | 5,078             | 1,626                  | 140        | 313        | 103        | 416                | 32.8                                |
| 505.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 80           | 96                | 1                      | 3          | 7          | 0          | 7                  | 12.0                                |
| 506.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 995          | 1,021             | 35                     | 28         | 64         | 1          | 65                 | 15.4                                |
| 507.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,133        | 2,505             | 48                     | 61         | 145        | 0          | 145                | 14.7                                |
| 508.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,879        | 2,873             | 1,159                  | 85         | 184        | 114        | 298                | 16.4                                |
| 509.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,067        | 408               | 650                    | 12         | 27         | 77         | 104                | 19.9                                |
| 510.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,521        | 2,937             | 223                    | 92         | 200        | 15         | 215                | 16.4                                |
| 511.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,992        | 1,577             | 132                    | 46         | 109        | 9          | 118                | 16.8                                |
| 512.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,913        | 2,182             | 43                     | 45         | 107        | 0          | 107                | 17.9                                |
| 513.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,041        | 10,386            | 170                    | 178        | 456        | 7          | 463                | 17.4                                |
| 514.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 31,586       | 43,289            | 374                    | 714        | 1,830      | 0          | 1,830              | 17.3                                |
| 515.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,176        | 4,090             | 54                     | 78         | 188        | 0          | 188                | 16.9                                |
| 516.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,426        | 10,049            | 102                    | 162        | 391        | 0          | 391                | 19.0                                |
| 517.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 23,520       | 19,064            | 1,723                  | 489        | 1,085      | 139        | 1,224              | 19.2                                |
| 518.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,162       | 12,408            | 799                    | 325        | 745        | 53         | 799                | 16.5                                |
| 519.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,752        | 6,233             | 744                    | 162        | 371        | 60         | 432                | 18.0                                |
| 520.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,996       | 12,205            | 1,168                  | 296        | 678        | 99         | 778                | 18.0                                |
| 521.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,920       | 9,299             | 1,662                  | 309        | 686        | 167        | 853                | 18.7                                |
| 522.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,848        | 5,866             | 167                    | 96         | 236        | 9          | 245                | 19.8                                |
| 523.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 24,559       | 10,068            | 3,122                  | 302        | 698        | 272        | 970                | 25.3                                |
| 524.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 19,187       | 8,816             | 2,531                  | 214        | 495        | 207        | 702                | 27.3                                |
| 525.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,566        | 5,788             | 59                     | 97         | 233        | 0          | 233                | 19.6                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 526.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,209        | 4,038             | 56                     | 55         | 142        | 0          | 142                | 22.6                                |
| 527.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,815        | 6,977             | 839                    | 186        | 447        | 71         | 517                | 17.0                                |
| 528.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 51,707       | 63,997            | 890                    | 1,061      | 2,556      | 51         | 2,607              | 19.8                                |
| 529.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,259        | 1,222             | 124                    | 19         | 46         | 8          | 54                 | 23.2                                |
| 530.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,295       | 17,592            | 223                    | 226        | 551        | 0          | 551                | 24.1                                |
| 531.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,815        | 5,011             | 62                     | 59         | 144        | 0          | 144                | 26.6                                |
| 532.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,640        | 4,572             | 65                     | 64         | 156        | 0          | 156                | 23.3                                |
| 533.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,666       | 9,349             | 986                    | 151        | 367        | 53         | 420                | 27.8                                |
| 534.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,280        | 5,433             | 72                     | 69         | 168        | 0          | 168                | 25.5                                |
| 535.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,369        | 6,746             | 84                     | 95         | 245        | 0          | 245                | 21.9                                |
| 536.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,498        | 6,975             | 83                     | 106        | 273        | 0          | 273                | 20.1                                |
| 537.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 10,965       | 14,386            | 138                    | 208        | 536        | 0          | 536                | 20.4                                |
| 538.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,602       | 7,382             | 1,840                  | 159        | 382        | 137        | 519                | 30.0                                |
| 539.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,563       | 1,924             | 1,909                  | 11         | 27         | 142        | 169                | 80.2                                |
| 540.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,637        | 0                 | 1,690                  | 0          | 0          | 132        | 132                | 72.8                                |
| 541.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,569        | 842               | 300                    | 18         | 43         | 24         | 67                 | 38.2                                |
| 542.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,150        | 2,203             | 963                    | 55         | 130        | 76         | 206                | 29.9                                |
| 543.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 32,285       | 1,678             | 6,353                  | 50         | 118        | 368        | 486                | 66.4                                |
| 544.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,509        | 2,678             | 62                     | 58         | 137        | 0          | 137                | 18.3                                |
| 545.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,420        | 1,758             | 20                     | 27         | 64         | 0          | 64                 | 22.2                                |
| 546.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,992        | 10,049            | 115                    | 131        | 310        | 0          | 310                | 25.8                                |
| 547.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,916        | 533               | 759                    | 13         | 31         | 64         | 95                 | 51.9                                |
| 548.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 15,335       | 17,568            | 597                    | 405        | 960        | 27         | 987                | 15.5                                |
| 549.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,385        | 2,762             | 64                     | 54         | 128        | 1          | 129                | 18.5                                |
| 550.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,351        | 1,699             | 995                    | 40         | 100        | 62         | 162                | 39.1                                |
| 551.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,967        | 1,814             | 1,356                  | 46         | 115        | 87         | 202                | 44.4                                |
| 552.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,059        | 455               | 106                    | 11         | 26         | 6          | 32                 | 33.1                                |
| 553.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,476        | 1,740             | 32                     | 35         | 83         | 0          | 83                 | 17.8                                |
| 554.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,779        | 7,941             | 189                    | 185        | 438        | 5          | 443                | 15.3                                |
| 555.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,558        | 1,761             | 31                     | 39         | 92         | 0          | 92                 | 16.9                                |
| 556.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,505        | 5,470             | 80                     | 89         | 211        | 0          | 211                | 21.4                                |
| 557.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,812        | 1,550             | 214                    | 34         | 81         | 20         | 101                | 18.0                                |
| 558.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,008        | 2,508             | 27                     | 40         | 96         | 0          | 96                 | 20.9                                |
| 559.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,258        | 1,460             | 22                     | 28         | 67         | 0          | 67                 | 18.7                                |
| 560.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,898        | 1,198             | 1,747                  | 28         | 66         | 172        | 238                | 24.7                                |
| 561.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 901          | 1,024             | 19                     | 23         | 54         | 0          | 54                 | 16.6                                |
| 562.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,766        | 4,669             | 55                     | 73         | 175        | 0          | 175                | 21.5                                |
| 563.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,092        | 2,700             | 24                     | 40         | 90         | 0          | 90                 | 23.2                                |
| 564.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,035        | 1,213             | 24                     | 27         | 62         | 0          | 62                 | 16.6                                |
| 565.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,173        | 2,327             | 52                     | 69         | 143        | 0          | 143                | 15.2                                |
| 566.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,929        | 3,985             | 140                    | 112        | 264        | 5          | 269                | 14.6                                |
| 567.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,065        | 693               | 580                    | 29         | 60         | 50         | 110                | 27.9                                |
| 568.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,929        | 755               | 551                    | 26         | 61         | 47         | 108                | 27.1                                |
| 569.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,998        | 1,995             | 1,081                  | 72         | 169        | 96         | 265                | 26.4                                |
| 570.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,640        | 1,182             | 1,852                  | 53         | 109        | 169        | 278                | 31.1                                |
| 571.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,099        | 1,130             | 28                     | 38         | 79         | 0          | 79                 | 14.0                                |
| 572.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,740        | 1,232             | 963                    | 39         | 90         | 89         | 178                | 26.6                                |
| 573.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,941        | 9,708             | 125                    | 126        | 284        | 0          | 284                | 28.0                                |
| 574.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,395        | 5,588             | 54                     | 88         | 204        | 1          | 205                | 21.5                                |
| 575.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,799        | 4,034             | 21                     | 37         | 86         | 0          | 86                 | 32.7                                |
| 576.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,739        | 856               | 322                    | 19         | 43         | 33         | 76                 | 36.1                                |
| 577.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 528          | 635               | 8                      | 14         | 32         | 0          | 32                 | 16.7                                |
| 578.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 25,070       | 38,261            | 125                    | 451        | 1,016      | 0          | 1,016              | 24.7                                |
| 579.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,784        | 4,027             | 21                     | 41         | 96         | 0          | 96                 | 29.0                                |
| 580.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,452        | 3,329             | 26                     | 42         | 98         | 0          | 98                 | 24.9                                |
| 581.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,778        | 7,019             | 39                     | 66         | 146        | 0          | 146                | 32.7                                |
| 582.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 13,104       | 991               | 1,608                  | 15         | 37         | 65         | 102                | 128.6                               |
| 583.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 30,996       | 46,668            | 291                    | 446        | 987        | 15         | 1,002              | 30.9                                |
| 584.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,108        | 2,056             | 106                    | 22         | 47         | 6          | 53                 | 39.8                                |
| 585.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,944        | 14,109            | 94                     | 148        | 327        | 0          | 327                | 30.4                                |
| 586.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,737        | 2,867             | 259                    | 56         | 105        | 10         | 115                | 32.5                                |
| 587.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,961        | 2,760             | 23                     | 48         | 116        | 0          | 116                | 16.9                                |
| 588.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 16,006       | 22,725            | 145                    | 348        | 892        | 0          | 892                | 17.9                                |
| 589.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 240          | 290               | 6                      | 8          | 16         | 0          | 16                 | 15.0                                |
| 590.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 822          | 1,037             | 14                     | 23         | 55         | 0          | 55                 | 15.0                                |
| 591.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 67           | 87                | 1                      | 3          | 7          | 0          | 7                  | 9.4                                 |
| 592.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 14,401       | 9,417             | 1,282                  | 361        | 801        | 146        | 947                | 15.2                                |
| 593.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,853        | 5,894             | 529                    | 155        | 370        | 56         | 426                | 16.1                                |
| 594.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,302       | 15,065            | 163                    | 316        | 754        | 0          | 754                | 15.0                                |
| 595.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,041        | 2,675             | 251                    | 46         | 104        | 27         | 131                | 30.9                                |
| 596.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 5,261        | 3,067             | 494                    | 59         | 151        | 48         | 199                | 26.4                                |
| 597.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 12,299       | 3,078             | 1,754                  | 122        | 271        | 214        | 485                | 25.3                                |
| 598.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 8,753        | 388               | 1,442                  | 15         | 33         | 166        | 200                | 43.8                                |
| 599.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 623          | 766               | 12                     | 18         | 40         | 0          | 40                 | 15.6                                |
| 600.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 11,423       | 8,211             | 1,044                  | 217        | 481        | 94         | 575                | 19.9                                |

| TAZ    | Community Region                                 | In the City of Placerville (1=Yes, 0=N) | Total OD VMT | Home-based PA VMT | Home-Based Work PA VMT | Households | Population | Employment | Service Population | Total OD VMT per Service Population |
|--------|--|---|--------------|-------------------|------------------------|------------|------------|------------|--------------------|-------------------------------------|
| 601.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,338        | 1,863             | 5                      | 11         | 24         | 0          | 24                 | 55.0                                |
| 602.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,849        | 116               | 235                    | 3          | 6          | 9          | 15                 | 126.4                               |
| 603.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,572        | 469               | 923                    | 12         | 23         | 32         | 55                 | 65.5                                |
| 604.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,262        | 633               | 449                    | 17         | 31         | 13         | 44                 | 74.5                                |
| 605.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,836        | 913               | 808                    | 21         | 46         | 29         | 75                 | 38.0                                |
| 606.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 607.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,220        | 4,505             | 12                     | 19         | 47         | 0          | 47                 | 68.9                                |
| 608.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 30           | 41                | 0                      | 1          | 2          | 0          | 2                  | 13.8                                |
| 609.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,754        | 1,526             | 1,529                  | 37         | 80         | 61         | 141                | 69.0                                |
| 610.00 | El Dorado Hills                                  | 0                                       | 60,769       | 138               | 28,171                 | 0          | 0          | 2,725      | 2,725              | 22.3                                |
| 611.00 | El Dorado Hills                                  | 0                                       | 59,181       | 34,725            | 8,794                  | 1,023      | 2,614      | 672        | 3,286              | 18.0                                |
| 612.00 | El Dorado Hills                                  | 0                                       | 128,597      | 1,051             | 62,339                 | 0          | 0          | 5,778      | 5,778              | 22.3                                |
| 613.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 119          | 102               | 18                     | 4          | 10         | 3          | 13                 | 9.3                                 |
| 614.00 | El Dorado Hills                                  | 0                                       | 6,273        | 7,403             | 137                    | 211        | 550        | 0          | 550                | 11.4                                |
| 615.00 | El Dorado Hills                                  | 0                                       | 10,538       | 8,759             | 727                    | 211        | 550        | 60         | 609                | 17.3                                |
| 616.00 | El Dorado Hills                                  | 0                                       | 1,566        | 1,856             | 33                     | 53         | 138        | 0          | 138                | 11.3                                |
| 617.00 | El Dorado Hills                                  | 0                                       | 13,981       | 9,728             | 906                    | 187        | 553        | 89         | 642                | 21.8                                |
| 618.00 | El Dorado Hills                                  | 0                                       | 4,697        | 0                 | 2,133                  | 0          | 0          | 265        | 265                | 17.7                                |
| 619.00 | El Dorado Hills                                  | 0                                       | 3,488        | 0                 | 567                    | 0          | 0          | 60         | 60                 | 58.1                                |
| 620.00 | El Dorado Hills                                  | 0                                       | 17,491       | 3,731             | 1,587                  | 0          | 0          | 178        | 178                | 98.3                                |
| 621.00 | El Dorado Hills                                  | 0                                       | 12,551       | 16,316            | 218                    | 326        | 963        | 0          | 963                | 13.0                                |
| 622.00 | El Dorado Hills                                  | 0                                       | 19,292       | 18,024            | 1,115                  | 370        | 1,094      | 90         | 1,184              | 16.3                                |
| 623.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 624.00 | El Dorado Hills                                  | 0                                       | 15,275       | 14,470            | 685                    | 309        | 918        | 54         | 972                | 15.7                                |
| 625.00 | El Dorado Hills                                  | 0                                       | 182          | 0                 | 105                    | 0          | 0          | 12         | 12                 | 15.2                                |
| 626.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 42,071       | 4,854             | 6,465                  | 164        | 386        | 554        | 939                | 44.8                                |
| 627.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 59,560       | 0                 | 11,048                 | 0          | 0          | 966        | 966                | 61.6                                |
| 628.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 19,724       | 23,410            | 459                    | 515        | 1,322      | 0          | 1,322              | 14.9                                |
| 629.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 630.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,276        | 5,981             | 185                    | 381        | 847        | 0          | 847                | 7.4                                 |
| 631.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 632.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,657        | 2,021             | 33                     | 53         | 138        | 0          | 138                | 12.0                                |
| 633.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,018        | 8,409             | 150                    | 211        | 550        | 0          | 550                | 12.8                                |
| 634.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,344        | 8,892             | 151                    | 212        | 552        | 0          | 552                | 13.3                                |
| 635.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,602        | 4,358             | 72                     | 106        | 276        | 0          | 276                | 13.0                                |
| 636.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 6,033        | 8,273             | 136                    | 212        | 556        | 0          | 556                | 10.9                                |
| 637.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,439        | 11,533            | 188                    | 265        | 695        | 0          | 695                | 13.6                                |
| 638.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,269        | 1,586             | 22                     | 36         | 94         | 0          | 94                 | 13.4                                |
| 639.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,731        | 3,337             | 52                     | 72         | 189        | 0          | 189                | 14.5                                |
| 640.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,530        | 11,811            | 184                    | 272        | 713        | 0          | 713                | 13.4                                |
| 641.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 2,757        | 3,401             | 52                     | 72         | 189        | 0          | 189                | 14.6                                |
| 642.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 36,457       | 38,355            | 1,587                  | 926        | 2,421      | 96         | 2,517              | 14.5                                |
| 643.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 9,271        | 11,487            | 181                    | 257        | 672        | 0          | 672                | 13.8                                |
| 644.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,070        | 3,871             | 55                     | 90         | 238        | 0          | 238                | 12.9                                |
| 645.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 21,125       | 24,897            | 915                    | 495        | 1,311      | 56         | 1,367              | 15.5                                |
| 646.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 7,078        | 8,856             | 124                    | 180        | 477        | 0          | 477                | 14.9                                |
| 647.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 1,496        | 1,879             | 26                     | 45         | 119        | 0          | 119                | 12.6                                |
| 648.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 3,878        | 2,212             | 513                    | 45         | 119        | 42         | 161                | 24.1                                |
| 649.00 | Unincorporated El Dorado County (Remainder Area) | 0                                       | 4,693        | 2,826             | 29                     | 45         | 119        | 0          | 119                | 39.4                                |
| 650.00 | Outside of County                                | 0                                       | 2,923,045    | 1,492,985         | 485,017                | 0          | 0          | 0          | 0                  | -                                   |
| 651.00 | Outside of County                                | 0                                       | 29,899       | 17,035            | 4,083                  | 0          | 0          | 0          | 0                  | -                                   |
| 652.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 653.00 | Outside of County                                | 0                                       | 418,190      | 187,854           | 51,322                 | 0          | 0          | 0          | 0                  | -                                   |
| 654.00 | Outside of County                                | 0                                       | 41,840       | 9,389             | 2,402                  | 0          | 0          | 0          | 0                  | -                                   |
| 655.00 | Outside of County                                | 0                                       | 353,211      | 120,197           | 33,946                 | 0          | 0          | 0          | 0                  | -                                   |
| 656.00 | Outside of County                                | 0                                       | 56,414       | 18,662            | 7,083                  | 0          | 0          | 0          | 0                  | -                                   |
| 657.00 | Outside of County                                | 0                                       | 196,539      | 9,077             | 3,578                  | 0          | 0          | 0          | 0                  | -                                   |
| 658.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 659.00 | Outside of County                                | 0                                       | 5,732        | 3,008             | 929                    | 0          | 0          | 0          | 0                  | -                                   |
| 660.00 | Outside of County                                | 0                                       | 181,639      | 101,837           | 33,495                 | 0          | 0          | 0          | 0                  | -                                   |
| 661.00 | Outside of County                                | 0                                       | 148,611      | 79,005            | 24,375                 | 0          | 0          | 0          | 0                  | -                                   |
| 662.00 | Outside of County                                | 0                                       | 710,868      | 374,372           | 120,909                | 0          | 0          | 0          | 0                  | -                                   |
| 663.00 | Outside of County                                | 0                                       | 734,778      | 259,940           | 80,418                 | 0          | 0          | 0          | 0                  | -                                   |
| 664.00 | Outside of County                                | 0                                       | 452,102      | 247,211           | 66,140                 | 0          | 0          | 0          | 0                  | -                                   |
| 665.00 | Outside of County                                | 0                                       | 221,284      | 97,434            | 35,913                 | 0          | 0          | 0          | 0                  | -                                   |
| 666.00 | Outside of County                                | 0                                       | 102,333      | 56,627            | 17,239                 | 0          | 0          | 0          | 0                  | -                                   |
| 667.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 668.00 | Outside of County                                | 0                                       | 535,699      | 362,051           | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 669.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 670.00 | Outside of County                                | 0                                       | 0            | 0                 | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 671.00 | Outside of County                                | 0                                       | 203,275      | 110,582           | 30,497                 | 0          | 0          | 0          | 0                  | -                                   |
| 672.00 | Outside of County                                | 0                                       | 38,797       | 38,920            | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 673.00 | Outside of County                                | 0                                       | 33,719       | 16,724            | 0                      | 0          | 0          | 0          | 0                  | -                                   |
| 674.00 | Outside of County                                | 0                                       | 405,093      | 27,679            | 0                      | 0          | 0          | 0          | 0                  | -                                   |

# Traffic Impact Study – Final Report

## for Dorado Oaks



in El Dorado County, CA

March 20, 2021

*Prepared in accordance with study guidelines set forth by:*



Prepared by:



*This report has been prepared and certified by Grant P. Johnson, TE, Principal*



[WWW.PRISM.ENGINEERING](http://WWW.PRISM.ENGINEERING)

fresno, sacramento

## Table of Contents

|   |           |
|---|-----------|
| <b>I. EXECUTIVE SUMMARY</b>   | <b>1</b>  |
| Year 2018 Existing Conditions, with and without the Project           | 1         |
| Future Conditions (Year 2027 and Year 2035).                          | 2         |
| Conclusions   | 4         |
| Mitigation Recommendations for Pleasant Valley Road                   | 8         |
| Intersection Turn Pocket Queues                                       | 9         |
| <b>II. BACKGROUND</b>   | <b>10</b> |
| PROJECT DESCRIPTION   | 10        |
| STUDY AREA  | 15        |
| ANALYSIS METHODOLOGY  | 16        |
| Operating Conditions and Criteria for Intersections                   | 17        |
| Thresholds of Significance for Intersections and Segments             | 18        |
| <b>III. EXISTING CONDITIONS</b>                                       | <b>20</b> |
| Existing Street Network and Transportation Systems                    | 20        |
| Existing Bicycle and Pedestrian Facilities                            | 22        |
| Existing Transit Facilities   | 23        |
| Traffic Counts and Data Collection, Saturation Flow Rates             | 23        |
| Arterial Roadway Segment Analyses and Methodology                     | 24        |
| Year 2018 Roadway Segment Analyses Results                            | 25        |
| Saturation Flow Rates in Study Area                                   | 25        |
| Existing Bicycle and Pedestrian Facilities                            | 32        |
| Existing Transit Facilities   | 32        |
| <b>IV. Existing (Year 2018) Plus Project Conditions</b>               | <b>35</b> |
| Project Trip Generation and Distribution                              | 35        |
| Year 2018 Roadway Segment Analyses Results                            | 43        |
| Traffic Signal Warrants, Year 2018 Scenarios                          | 45        |
| Project Impacts for this Year 2018 plus Project Scenario              | 47        |
| <b>V. Near Term Future Year 2027 Conditions</b>                       | <b>48</b> |
| Nearby Roadway Development Projects                                   | 48        |
| Calculation of Future Growth for Background Traffic.                  | 48        |
| Traffic Signal Warrants, Year 2027 Scenarios                          | 57        |
| Project Impacts for the Year 2027 plus Project Scenario               | 57        |
| <b>VI. Cumulative 2035, Plus Project Conditions</b>                   | <b>59</b> |
| Nearby Roadway and Development Projects                               | 59        |
| Calculation of Future Growth for Background Traffic.                  | 59        |
| Traffic Signal Warrants, Year 2035 Scenarios                          | 65        |
| Project Impacts for this scenario                                     | 68        |
| <b>VII. Other Considerations</b>                                      | <b>69</b> |
| Freeway Analysis, All Scenarios.                                      | 71        |
| <b>VIII. Mitigations</b>  | <b>72</b> |
| Measure E Considerations  | 72        |
| Year 2018 Existing Conditions   | 74        |
| Year 2018 Mitigation Recommendations Corresponding with this scenario | 74        |
| Year 2018 Plus Project Mitigation Recommendations for this scenario   | 74        |



|  |    |
|--|----|
| Year 2027 Conditions Mitigation Recommendations for this scenario              | 79 |
| Year 2027 Plus Project Conditions Mitigation Recommendations for this scenario | 80 |
| Year 2035 Conditions Mitigation Recommendations for this scenario              | 80 |
| Year 2035 Plus Project Conditions Mitigation Recommendations for this scenario | 80 |

**APPENDIX 81**

|  |     |
|--|-----|
| Section A.2. Microsimulation Model Calibration: Synchro/SimTraffic Software                  | 83  |
| Section A.3. Traffic Counts and Update Methodology   | 83  |
| Section A.4. Roundabout Analysis Considerations and Factors                                  | 84  |
| Section A.5 Missouri Flat Road Corridor Arterial Segment Analyses                            | 86  |
| Section A.6 Planning Level Segment Analyses  | 89  |
| Planning Level Impacts: Roadway Street Segment Planning LOS                                  | 94  |
| Section A.7 Traffic Counts   | 95  |
| Section A.8. El Dorado County DOT Travel Demand Model Outputs, AM and PM Peak                | 110 |
| Section A.9. Synchro and SimTraffic Microsimulation HCM 2010 Capacity Analyses Output Sheets | 112 |
| Section A.10 Synchro and SimTraffic Instructions   | 113 |
| Missouri Flat Road New Signal Installation Plan Sheets                                       | 114 |
| Section A.11 Signal Warrant Analysis Worksheets  | 115 |

## List of Tables

|  |           |
|--|-----------|
| <b>I. EXECUTIVE SUMMARY</b>  | <b>1</b>  |
| Table ES.1 Project Trip Generation   | 1         |
| Table ES.2 Year 2018 Unmitigated Capacity Analysis Summary                           | 2         |
| Table ES.3 Year 2027 Mitigated Capacity Analysis Summary                             | 3         |
| Table ES.4 Year 2035 Mitigated Capacity Analysis Summary                             | 4         |
| <b>II. BACKGROUND</b>  | <b>10</b> |
| Table 1. Project Parcels and APN Information   | 10        |
| Table 2. Dorado Oaks Project Trip Generation   | 15        |
| Table 3. Intersection Level of Service Definitions                                   | 18        |
| <b>III. EXISTING CONDITIONS</b>  | <b>20</b> |
| Table 4. Existing Year 2018 Link Segment Roadway Level of Service Summary            | 25        |
| <b>IV. Existing (Year 2018) Plus Project Conditions</b>                              | <b>35</b> |
| Table 5. Trip Generation Summary for AM, PM, and Daily                               | 35        |
| Table 6. AM Peak Hour Trip Distribution of Project Traffic, Local Roads and Highways | 35        |
| Table 7. PM Peak Hour Trip Distribution of Project Traffic, Local Roads and Highways | 35        |
| Table 8. Existing (2018) Plus Project Intersections Level of Service Summary         | 42        |
| Table 9. Year 2018 Scenarios Roadway Segment Level of Service Summary                | 43        |
| Table 10 Year 2018 AM Peak Signalized Intersection Queues Summary                    | 44        |
| Table 11 Year 2018 PM Peak Signalized Intersection Queues Summary                    | 44        |
| Table 12. Signal Warrants for Year 2018 AM & PM Peak Hour Scenarios                  | 46        |
| <b>V. Near Term Future Year 2027 Conditions</b>                                      | <b>48</b> |
| Table 13. Growth Rate Calculations for Study Area Roadways                           | 49        |
| Table 14. Year 2027 Plus Project Intersections Level of Service Summary              | 54        |
| Table 15. Year 2027 Scenarios Roadway Segment Level of Service Summary               | 55        |
| Table 16. Year 2027 AM Peak Signalized Intersection Queues Summary                   | 56        |
| Table 17. Year 2027 PM Peak Signalized Intersection Queues Summary                   | 56        |
| Table 18. Signal Warrants Status for Year 2027 AM & PM Peak Hour Scenarios           | 58        |
| <b>VI. Cumulative 2035, Plus Project Conditions</b>                                  | <b>59</b> |
| Table 19. Year 2035 Plus Project Intersections Level of Service Summary              | 64        |
| Table 20. Year 2035 Scenarios Roadway Segment Level of Service Summary               | 65        |
| Table 21. Year 2035 AM Peak Signalized Intersection Queues Summary                   | 66        |
| Table 22. Year 2035 PM Peak Signalized Intersection Queues Summary                   | 66        |
| Table 23. Signal Warrants for Year 2035 AM & PM Peak Hour Scenarios                  | 67        |
| <b>VII. Other Considerations</b>   | <b>69</b> |
| Table 24. 2017 Accidents on Study Roadways   | 70        |
| Table 25. Freeway Capacity Analysis Summary  | 71        |
| <b>VIII. Mitigations</b>   | <b>72</b> |
| <b>APPENDIX</b>  | <b>81</b> |
| Table A.1. Saturation Flow Rate Studies, Missouri Flat Road                          | 82        |

## List of Figures

|  |           |
|--|-----------|
| <b>I. EXECUTIVE SUMMARY</b>  | <b>1</b>  |
| Figure ES.1 Roundabout Concept and Mitigation, Source: PRISM Engineering                 | 6         |
| Figure ES.2 Two Signals Concept Mitigation, LOS A and LOS A result for Year 2035 PM Peak | 7         |
| <b>II. BACKGROUND</b>  | <b>10</b> |
| Figure 1 Vicinity Map and Project Site Location  | 12        |
| Figure 2 Project Site Location and Study Intersections                                   | 13        |
| Figure 3 Proposed Project Site   | 14        |
| <b>III. EXISTING CONDITIONS</b>  | <b>20</b> |
| Figure 4A. Existing Year 2018 ADT Volumes on Study Roadways                              | 27        |
| Figure 4B. Year 2027 Projected ADT Volumes on Study Roadways                             | 28        |
| Figure 4C. Year 2035 Projected ADT Volumes on Study Roadways                             | 29        |
| Figure 5 –AM Peak Hour Existing Year 2018 Intersection Turn Volumes                      | 30        |
| Figure 6 –PM Peak Hour Existing Year 2018 Intersection Turn Volumes                      | 31        |
| Figure 7 – Bike Map for Diamond Springs Vicinity, and Missouri Flat Road                 | 33        |
| Figure 8 –Transit Map for El Dorado & Diamond Springs Vicinity                           | 34        |
| <b>IV. Existing (Year 2018) Plus Project Conditions</b>                                  | <b>35</b> |
| Figure 9 – Trip Distribution Pattern for Project Traffic                                 | 36        |
| Figure 10. AM Project Only Peak Hour Turning Movements                                   | 38        |
| Figure 11. PM Project Only Peak Hour Turning Movements                                   | 39        |
| Figure 12. AM Existing 2018 plus Project Peak Hour Turning Movements                     | 40        |
| Figure 13. PM Existing Year 2018 plus Project Peak Hour Turning Movements                | 41        |
| <b>V. Near Term Future Year 2027 Conditions</b>  | <b>48</b> |
| Figure 14 AM Year 2027 Only Peak Hour Turning Movements                                  | 50        |
| Figure 15 PM Year 2027 Only Peak Hour Turning Movements                                  | 51        |
| Figure 16 AM Year 2027 plus Project Peak Hour Turning Movements                          | 52        |
| Figure 17 PM Year 2027 plus Project Peak Hour Turning Movements                          | 53        |
| <b>VI. Cumulative 2035, Plus Project Conditions</b>                                      | <b>59</b> |
| Figure 18. AM Year 2035 Only Peak Hour Turning Movements                                 | 60        |
| Figure 19. PM Year 2035 Only Peak Hour Turning Movements                                 | 61        |
| Figure 20. AM Year 2035 plus Project Peak Hour Turning Movements                         | 62        |
| Figure 21. PM Year 2035 plus Project Peak Hour Turning Movements                         | 63        |
| <b>VII. Other Considerations</b>   | <b>69</b> |
| <b>VIII. Mitigations</b>   | <b>72</b> |
| Figure 22. Caltrans, El Dorado County Transportation Projects                            | 73        |
| Figure 23. Roundabout Concept and Mitigation, LOS C                                      | 78        |

## I. EXECUTIVE SUMMARY

This report analyzed short term and long term scenarios for the proposed Dorado Oaks residential development, consistent with the requirements found in El Dorado County Community Development Agency’s *Transportation Impact Study Guidelines*. The “with and without project” scenario analysis results are summarized in several tables and graphics in the body of this report, and duplicated in this section for convenience. The study area consisted primarily of the Missouri Flat corridor from Pleasant Valley Road to the US 50 freeway interchange, as well as Pleasant Valley Road at SR 49 (south) to Fowler Lane/SR 49 on the east. There is a total of nineteen (19) intersections analyzed in the study area, two of which are future intersections of the programmed Diamond Springs Parkway, which would connect Missouri Flat Road just north of China Garden Road easterly to SR 49 just south of Bradley Drive. Figure 2 in the next section shows where these study intersections are located.

### Year 2018 Existing Conditions, with and without the Project

The project’s trip generation is summarized in Table ES.1 which shows that in the pm peak hour there would be 274 trip ends, with 177 inbound to the project and 97 outbound from the project site.

**Table ES.1 Project Trip Generation**

| Description/ITE Code                           | Units | Trip Rates |      |      | Directionality |        |       |        | Dwelling Units | TRIP ENDS   |            |            | Directionality |            |            |           |
|--|-------|------------|------|------|----------------|--------|-------|--------|----------------|-------------|------------|------------|----------------|------------|------------|-----------|
|  |       | Week day   | AM   | PM   | AM In          | AM Out | PM In | PM Out |                | Daily       | AM         | PM         | AM In          | AM Out     | PM In      | PM Out    |
| Single Family Homes<br>(ITE Landuse Code: 210) | DU    | 9.52       | 0.75 | 1.00 | 25%            | 75%    | 63%   | 37%    | 157            | 1495        | 118        | 157        | 29             | 88         | 99         | 58        |
| Condo / Townhouse<br>(ITE Landuse Code: 230)   | DU    | 5.81       | 0.44 | 0.52 | 17%            | 83%    | 67%   | 33%    | 225            | 1307        | 99         | 117        | 17             | 82         | 78         | 39        |
|  |       |            |      |      |                |        |       |        | <b>382</b>     | <b>2802</b> | <b>217</b> | <b>274</b> | <b>46</b>      | <b>170</b> | <b>177</b> | <b>97</b> |

Source: ITE Trip Generation Manual, 9th ed.

This trip generation was assigned to the surrounding roads. The existing Year 2018 level of service at all study intersections without the project is at an acceptable LOS E or better conditions, with a range of LOS A to LOS E conditions for the overall level of service at any intersection. The side street level of service at unsignalized intersections ranged from LOS C to LOS D, with LOS D side street conditions at the intersection of Missouri Flat Road and China Garden Road. Per El Dorado County Policy TC-Xa Missouri Flat Road is allowed to operate at LOS F provided ratios of volume to capacity do not exceed 1.12 from US Highway 50 to Motherlode Drive or 1.20 from Motherlode Drive to China Garden Road.

Table ES.2 summarizes the capacity analysis calculations for the Year 2018 scenarios, with and without the project. It can be seen from the table that when the project traffic is added in, the Pleasant Valley Road / Faith Lane (Intersection #11) goes from LOS E to LOS F conditions for the Faith Lane approach (side street). This is a significant impact requiring mitigation. The project did not significantly change the level of service at any of the other 14 existing study intersections, therefore, the project is required only to mitigate the one intersection for the Existing plus Project condition base on intersection level of service. Mitigation is done by payment of TIM fees, and construction of a roundabout at Faith Lane and SR 49.

**Table ES.2 Year 2018 Unmitigated Capacity Analysis Summary**

| INTERSECTION LOCATION | Control                                | YEAR 2018 AM Peak |        |        |        | YEAR 2018 PM Peak |        |        |        |      |
|-----------------------|--|-------------------|--------|--------|--------|-------------------|--------|--------|--------|------|
|                       |  | No PROJ           |        | w/PROJ |        | No PROJ           |        | w/PROJ |        |      |
|                       |  | LOS               | Delay  | LOS    | Delay  | LOS               | Delay  | LOS    | Delay  |      |
| 1                     | Missouri Flat Rd at Plaza Dr           | S                 | C      | 20.3   | C      | 20.7              | C      | 27.4   | C      | 28.7 |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | S                 | B      | 15.9   | B      | 15.9              | B      | 18.3   | B      | 18.3 |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | S                 | B      | 16.6   | B      | 16.6              | C      | 24.6   | C      | 24.6 |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | S                 | A      | 9.0    | A      | 9.1               | C      | 22.0   | C      | 22.0 |
| 5                     | Missouri Flat Rd at Forni Rd           | S                 | C      | 20.5   | C      | 23.5              | C      | 26.0   | C      | 26.0 |
| 6                     | Missouri Flat Rd at Golden Center Dr   | S                 | C      | 28.9   | C      | 28.9              | C      | 25.6   | C      | 25.6 |
| 7                     | Missouri Flat Rd at China Garden Rd    | TW                | A      | 2.8    | A      | 3.1               | A      | 2.3    | A      | 2.4  |
|                       |  | WB                | D      | 25.5   | D      | 31.8              | C      | 22.5   | D      | 26.2 |
| 8                     | Missouri Flat Rd at Industrial Dr      | S                 | A      | 3.6    | A      | 3.7               | B      | 10.6   | B      | 11.5 |
| 9                     | Missouri Flat Rd at Enterprise Dr      | S                 | A      | 4.7    | A      | 4.9               | A      | 15.1   | B      | 15.1 |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | S                 | B      | 13.9   | B      | 15.2              | C      | 28.1   | D      | 42.5 |
| 11                    | Pleasant Valley Rd at Faith Ln         | TW                | A      | 0.1    | A      | 8.4               | A      | 0.5    | B      | 13.5 |
|                       |  | NB                | C      | 17.1   | F      | 84.1              | E      | 47.9   | F      | 254  |
| 12                    | Pleasant Valley Rd at China Garden Rd  | TW                | A      | 0.3    | A      | 0.3               | A      | 0.8    | A      | 0.8  |
|                       |  | SB                | C      | 20.2   | C      | 20.3              | D      | 29.5   | D      | 30.3 |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | S                 | E      | 62.3   | E      | 62.3              | D      | 41.1   | D      | 45.1 |
| 14                    | Pleasant Valley Rd at Commerce Way     | TW                | A      | 1.4    | A      | 1.4               | A      | 2.8    | A      | 2.8  |
|                       |  | SB                | C      | 21.5   | C      | 21.6              | C      | 23.5   | C      | 23.9 |
| 15                    | Pleasant Valley Rd at Patterson Dr     | S                 | A      | 6.5    | A      | 7.0               | A      | 7.6    | A      | 8.5  |
| 16                    | Pleasant Valley Rd at Forni Rd         | TW                | A      | 4.3    | A      | 4.4               | A      | 3.8    | A      | 3.9  |
|                       |  | SB                | C      | 21.2   | C      | 22.0              | C      | 15.1   | C      | 15.5 |
| 17                    | Pleasant Valley Rd at SR 49 S          | AW                | E      | 44.2   | E      | 45.9              | C      | 22.3   | C      | 24.0 |
| 18                    | Diamond Springs Parkway at SR 49       |                   | Future |        | Future |                   | Future |        | Future |      |
| 19                    | Diamond Springs Pkwy at Missouri Flat  |                   | Future |        | Future |                   | Future |        | Future |      |

Control: S=Signal, AW=All-Way Stop, TW=Stop Sign Side Street, NB=NB approach Stop  
 NOTE: Calculations based on HCM 2010 methodology for intersection level of service (signal, two-way, and all-way stop)

**Future Conditions (Year 2027 and Year 2035).**

The background traffic for these two future scenarios was increased by an average of 0.7% per year according to the growth rates obtained from the County’s travel demand models for Year 2010 and 2035 conditions (detailed description and table of this process is in the Analysis section of this report). On Missouri Flat Road this yearly growth rate was higher at about 1.6% per year. On the average in the study area, there would be an additional 13% growth on top of existing traffic yielding Year 2035 traffic levels consistent with the County’s travel demand model. The growth on Missouri Flat Road north and south of Forni Road, however, was much higher ranging from 25-28%. These differences were applied to various study area roadways as defined in Table 13 documented in Section V of this report. Table ES.3 shows the unmitigated Capacity Analysis Summary for the future condition, Year 2027. Table ES.3 shows the unmitigated Capacity Analysis Summary for the worst-case future condition, Year 2035.

**Table ES.3 Year 2027 Mitigated Capacity Analysis Summary**

| INTERSECTION LOCATION | Control                                | YEAR 2027 AM Peak |       |        |       | YEAR 2027 PM Peak |       |        |       |      |
|-----------------------|--|-------------------|-------|--------|-------|-------------------|-------|--------|-------|------|
|                       |  | No PROJ           |       | w/PROJ |       | No PROJ           |       | w/PROJ |       |      |
|                       |  | LOS               | Delay | LOS    | Delay | LOS               | Delay | LOS    | Delay |      |
| 1                     | Missouri Flat Rd at Plaza Dr           | S                 | C     | 20.8   | C     | 21.7              | C     | 28.4   | C     | 32.7 |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | S                 | B     | 15.8   | B     | 15.8              | B     | 17.3   | B     | 17.4 |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | S                 | B     | 17.4   | B     | 17.4              | C     | 21.9   | C     | 23.9 |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | S                 | A     | 9.5    | A     | 9.8               | B     | 15.6   | B     | 15.6 |
| 5                     | Missouri Flat Rd at Forni Rd           | S                 | C     | 23.7   | C     | 25.3              | C     | 33.1   | D     | 37.5 |
| 6                     | Missouri Flat Rd at Golden Center Dr   | S                 | C     | 31.5   | C     | 31.5              | C     | 31.1   | D     | 50.6 |
| 7                     | Missouri Flat Rd at China Garden Rd    | TW                | A     | 2.2    | A     | 2.2               | A     | 2.0    | A     | 2.0  |
|                       |  | WB                | C     | 15.7   | C     | 18.2              | C     | 20.2   | C     | 22.8 |
| 8                     | Missouri Flat Rd at Industrial Dr      | S                 | A     | 4.1    | A     | 4.3               | A     | 6.6    | A     | 8.6  |
| 9                     | Missouri Flat Rd at Enterprise Dr      | S                 | A     | 3.7    | A     | 4.5               | A     | 8.1    | A     | 8.9  |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | S                 | B     | 12.9   | B     | 13.2              | B     | 13.9   | C     | 24.4 |
| 11                    | Pleasant Valley Rd at Faith Ln         | TW                | A     | 0.1    | A     | 5.4               | A     | 0.4    | B     | 10.5 |
|                       |  | NB                | C     | 15.4   | E     | 48.1              | E     | 41.7   | F     | 191  |
| 12                    | Pleasant Valley Rd at China Garden Rd  | TW                | A     | 0.3    | A     | 0.3               | A     | 0.7    | A     | 0.7  |
|                       |  | SB                | C     | 16.0   | C     | 16.1              | D     | 25.8   | D     | 26.7 |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | S                 | B     | 14.5   | B     | 15.5              | C     | 21.5   | C     | 21.5 |
| 14                    | Pleasant Valley Rd at Commerce Way     | TW                | A     | 1.5    | A     | 1.5               | A     | 3.1    | A     | 3.1  |
|                       |  | SB                | C     | 23.5   | C     | 23.5              | D     | 26.3   | D     | 26.5 |
| 15                    | Pleasant Valley Rd at Patterson Dr     | S                 | A     | 7.5    | A     | 8.1               | A     | 7.4    | A     | 7.4  |
| 16                    | Pleasant Valley Rd at Forni Rd         | TW                | A     | 4.9    | A     | 5.0               | A     | 4.1    | A     | 4.1  |
|                       |  | SB                | D     | 25.1   | D     | 26.2              | C     | 16.3   | C     | 16.8 |
| 17                    | Pleasant Valley Rd at SR 49 S          | AW                | F     | 56.7   | F     | 58.9              | D     | 28.4   | D     | 31.0 |
| 18                    | Diamond Springs Parkway at SR 49       | S                 | B     | 11.0   | B     | 11.3              | B     | 12.3   | B     | 12.9 |
| 19                    | Diamond Springs Pkwy at Missouri Flat  | S                 | B     | 15.2   | B     | 15.2              | B     | 17.3   | B     | 19.1 |

Control: S=Signal, AW=All-Way Stop, TW=Stop Sign Side Street, NB=NB approach Stop

NOTE: Calculations based on HCM 2010 methodology for intersection level of service (signal, two-way, and all-way stop)

**Table ES.4 Year 2035 Mitigated Capacity Analysis Summary**

| INTERSECTION LOCATION | Control                                | YEAR 2035 AM Peak |       |        |       | YEAR 2035 PM Peak |       |        |       |      |
|-----------------------|--|-------------------|-------|--------|-------|-------------------|-------|--------|-------|------|
|                       |  | No PROJ           |       | w/PROJ |       | No PROJ           |       | w/PROJ |       |      |
|                       |  | LOS               | Delay | LOS    | Delay | LOS               | Delay | LOS    | Delay |      |
| 1                     | Missouri Flat Rd at Plaza Dr           | S                 | C     | 21.7   | C     | 21.7              | D     | 46.6   | D     | 46.6 |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | S                 | B     | 15.9   | B     | 15.9              | C     | 25.5   | C     | 34.2 |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | S                 | B     | 14.2   | B     | 18.0              | C     | 30.3   | D     | 39.0 |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | S                 | B     | 10.5   | B     | 10.8              | B     | 14.3   | B     | 16.3 |
| 5                     | Missouri Flat Rd at Forni Rd           | S                 | C     | 29.9   | C     | 30.2              | C     | 34.2   | D     | 49.4 |
| 6                     | Missouri Flat Rd at Golden Center Dr   | S                 | C     | 28.8   | C     | 31.0              | D     | 48.6   | D     | 48.6 |
| 7                     | Missouri Flat Rd at China Garden Rd    | TW                | A     | 2.2    | A     | 2.3               | A     | 1.9    | A     | 1.9  |
|                       |  | WB                | C     | 18.3   | C     | 21.8              | C     | 18.9   | C     | 21.1 |
| 8                     | Missouri Flat Rd at Industrial Dr      | S                 | A     | 4.1    | A     | 7.9               | A     | 2.6    | A     | 4.5  |
| 9                     | Missouri Flat Rd at Enterprise Dr      | S                 | A     | 4.6    | A     | 6.0               | A     | 3.7    | A     | 3.7  |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | S                 | B     | 14.4   | B     | 19.6              | B     | 13.8   | C     | 22.9 |
| 11                    | Pleasant Valley Rd at Faith Ln         | TW                | A     | 0.1    | A     | 6.8               | A     | 0.4    | A     | 8.3  |
|                       |  | NB                | C     | 16.3   | F     | 65.2              | E     | 36.6   | F     | 142  |
| 12                    | Pleasant Valley Rd at China Garden Rd  | TW                | A     | 0.4    | A     | 0.4               | A     | 0.7    | A     | 0.7  |
|                       |  | SB                | C     | 18.4   | C     | 18.5              | C     | 23.6   | C     | 24.3 |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | S                 | B     | 18.8   | C     | 22.7              | C     | 33.5   | D     | 37.9 |
| 14                    | Pleasant Valley Rd at Commerce Way     | TW                | A     | 1.7    | A     | 1.7               | A     | 3.5    | A     | 3.6  |
|                       |  | SB                | D     | 25.9   | D     | 26.0              | D     | 29.9   | D     | 30.3 |
| 15                    | Pleasant Valley Rd at Patterson Dr     | S                 | A     | 8.1    | A     | 8.1               | A     | 7.8    | A     | 8.0  |
| 16                    | Pleasant Valley Rd at Forni Rd         | TW                | A     | 5.5    | A     | 5.7               | A     | 4.5    | A     | 4.5  |
|                       |  | SB                | D     | 30.1   | D     | 32.0              | C     | 18.2   | C     | 18.8 |
| 17                    | Pleasant Valley Rd at SR 49 S          | AW                | F     | 76.1   | F     | 78.8              | E     | 37.8   | E     | 41.1 |
| 18                    | Diamond Springs Parkway at SR 49       | S                 | B     | 11.3   | B     | 11.5              | B     | 14.5   | B     | 17.4 |
| 19                    | Diamond Springs Pkwy at Missouri Flat  | S                 | B     | 16.5   | B     | 17.6              | C     | 33.9   | C     | 33.9 |

Control: S=Signal, AW=All-Way Stop, TW=Stop Sign Side Street, NB=NB approach Stop

NOTE: Calculations based on HCM 2010 methodology for intersection level of service (signal, two-way, and all-way stop)

## Conclusions

There are three different significant criteria in the County’s Traffic Impact Study Guidelines, p.12 upon which conclusions in this report are based. These are: 1) LOS, 2) Queuing, and 3) SB 743 and 375. The first and foremost criteria is intersection level of service. Tables ES.2, Table ES.3, and Table ES.4 indicate that based on the outcome of an HCM 2010 level of service analysis for intersections, 17 out of 19 study intersection locations would be at acceptable levels of service for the year 2035. The exceptions are the following two intersections impacted by the project:

- 1) Pleasant Valley Road at Faith Lane: LOS A (8.3) / LOS F (142)
- 2) Pleasant Valley Road at SR 49 S: LOS F (76.1) / LOS F (78.8)

***The intersection of Pleasant Valley Road at Faith Lane*** goes to LOS F conditions for the Faith Lane approach after the project traffic is added in, and is therefore a significant impact requiring mitigation. The intersection of Pleasant Valley Road and Faith Lane is not anticipated in the County's CIP, so the project would need to mitigate this impact. Since this intersection is very close (100 feet away) to the intersection of China Garden Road, it is not possible to mitigate the intersection of Faith Lane without looking at the bigger picture. For example, it is not easy to install a signal at these existing intersection locations without the widening of Pleasant Valley Road to make room for left turn pockets to turn into Faith Lane or into China Garden Road. This would require the installation of two close signals designed to operate at one system, and left turn pocket storage would be too short to be back-to-back. In other words, there would need to be two median lanes for each left turn pocket which could then only be 100 feet long each. This means that Pleasant Valley Road would need to be widened to at least a four-lane cross section for at least two hundred feet west of Faith lane and 200 feet east of China Garden Road to accommodate tapering of lanes back to a two-lane cross section. There is not current right of way to accomplish this idea without impacting numerous buildings directly fronting Pleasant Valley Road on several different properties (possibly more than 10 properties).

***MITIGATION 1 -- China Garden Road and Faith Lane on Pleasant Valley Road with a Modern Roundabout:***

Figure ES.1 shows a concept roundabout that would fit within existing right of way for three of its four approaches, but needing the additional right-of-way from one piece of property on the southeast quadrant of the intersection of Pleasant Valley Road and Faith Lane, and Faith Lane would be realigned to meet the circle. In this roundabout intersection, China Garden Road and Faith Lane are combined into the same modern roundabout intersection as shown in Figure ES.1.

***MITIGATION 2 – Pleasant Valley Road at SR 49 South:*** This intersection goes to LOS F conditions without the project in the Year 2027 am peak hour scenario (also for Year 2035), and the project traffic only slightly increases delay by less than 3 seconds. This intersection is at LOS E conditions for the Year 2018 in the am peak hour (76.1 to 78.8 seconds). The project should pay its fair share towards signalization of this intersection as anticipated in the County's CIP, by paying into the County's traffic mitigation fee program based on trip generation of the project. A signal is warranted for existing conditions traffic without the project. Mitigation can be accomplished by lane widening resulting in satisfactory LOS D or better conditions, or by installing a traffic signal (LOS B conditions).



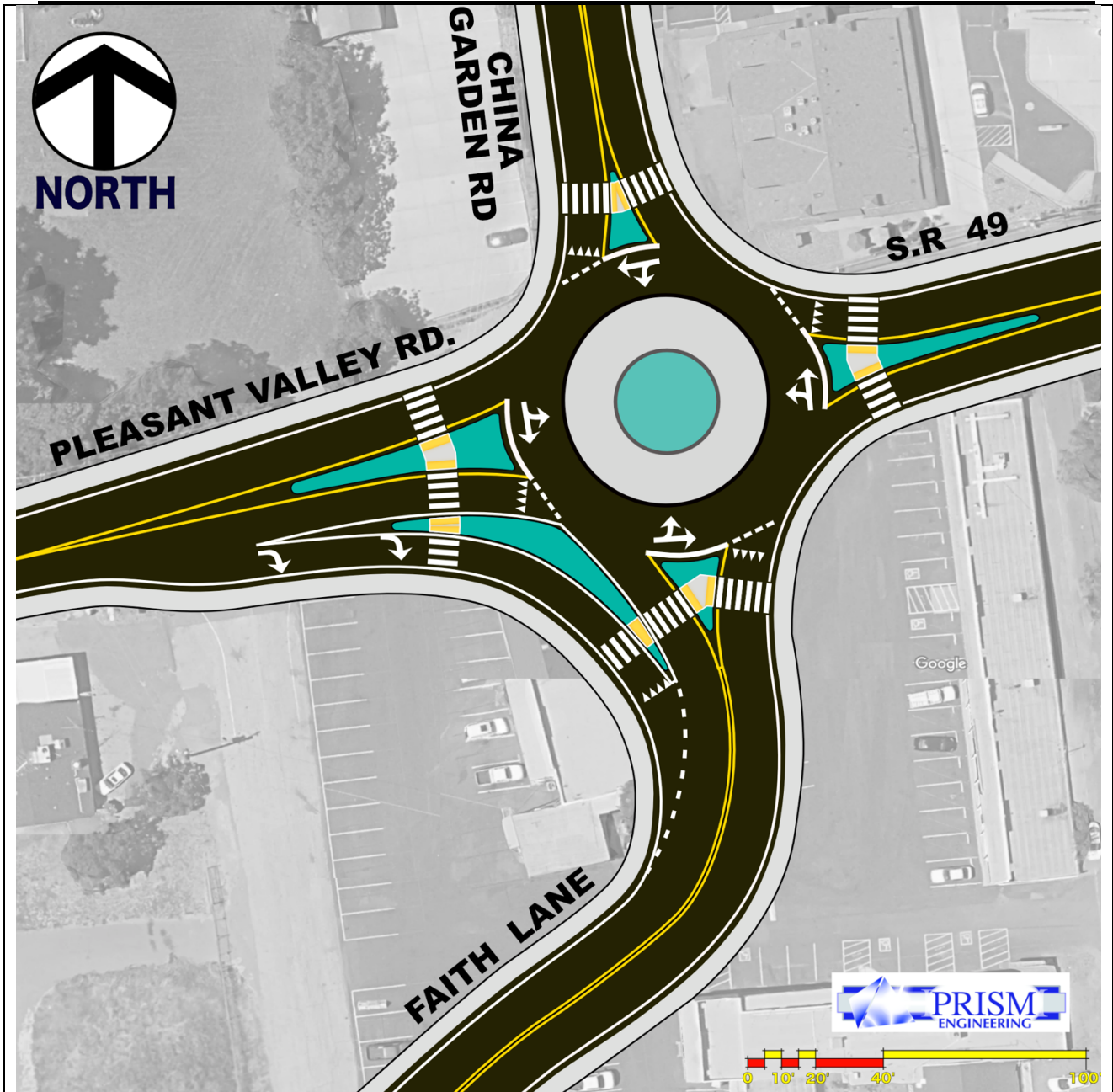
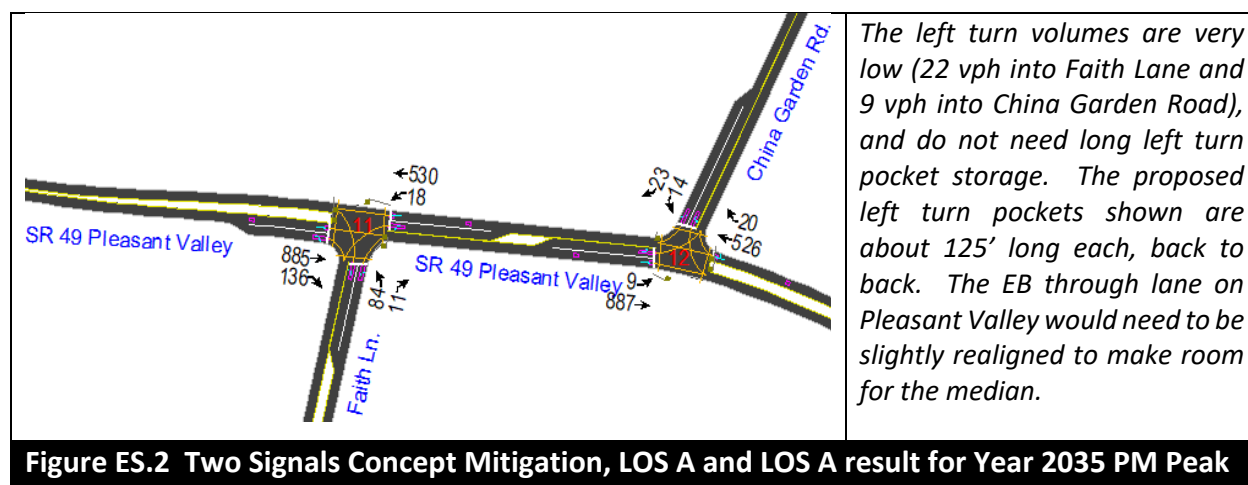


Figure ES.1 Roundabout Concept and Mitigation, Source: PRISM Engineering

This roundabout conceptual design has been analyzed as shown, and will operate at LOS C conditions ranging from 19-21 seconds of average delay for Year 2035 conditions (am or pm). This is a significant improvement over the existing conditions along Pleasant Valley Road in this vicinity, and also provides several safety factors (no left turn conflicts, slower yield on entry movements, traffic calming at 15-20 mph speeds). It is also compatible with Caltrans' vision of active transportation alternatives for the SR 49 corridor in this vicinity (from Patterson Drive to Faith Lane). The roundabout as shown with sidewalks and crosswalks is compatible with bike and pedestrian facilities, and significantly improves safety and access for pedestrians and bikes over the existing condition. Microsimulation analysis of this corridor with this

roundabout in place showed Year 2018-2035 traffic volumes passing through with no significant queues for roundabout approaches. Most of the simulation showed no queues at all. More specifics on roundabout analyses documentation can be found in the appendix.

**Alternative Mitigation: Two Signalized Intersections.** As an alternative intersection configuration to the proposed roundabout, a new signalized intersection and access could be developed for the existing Silver Drive intersection with Pleasant Valley Road. Faith Lane is only 150 feet away from China Garden Road. Silver Lane is 400 feet away from China Garden Road. By abandoning the existing Faith Lane intersection and realigning Faith Lane to become Silver Drive, a newer upgraded signalized intersection can be developed at Pleasant Valley Road and Silver Drive. The distance between intersections would allow for ample storage and would even make it possible for the intersections to operate independently as needed based on traffic demand (lessening delays), or coordinated if traffic flows are busy. This alternative would allow for left turn pocket storage of up to 150 feet for each intersection, making it possible to have longer signal cycles on Pleasant Valley Road through movements (longer phases) without spill over from the left turn pockets. However, the road-width right-of-way constraints along Pleasant Valley Road between Silver Drive and Faith Lane, are significant. There needs to be enough room for a three-lane cross-section of road, sidewalks, etc., plus distance for transitioning back to two lanes. This will be very difficult to accomplish east of China Garden Road where historical buildings now exist right up to the edge of the road, and widening of Pleasant Valley Road in this section is not very feasible. This alternative would also require acquisition of property to the west of Silver Drive to allow for transitioning of through lanes to make room for left turn pockets. This would require the acquisition of property to the east of existing Silver Drive all the way to China Garden Road to make room for the additional middle lane to accommodate the left turn pocket and eventual realignment of the EB through lane on Pleasant Valley Road to transition back to a two lane cross section. The intersection at Silver Drive is about 230 feet to the west of Faith Lane, and because of the 400 foot distance between Silver Drive and China Garden Road, would allow for sufficient left turn pocket storage to each of these intersections. The resulting level of service for these two new signalized intersections would be LOS B at Faith Lane / Pleasant Valley (realigned to the Silver Drive location), and LOS A at China Garden Road / Pleasant Valley. Figure ES.2 shows the dual traffic signal concept at this location. Signal cycle times would be approximately 70-90 seconds at peak times, or longer if longer phase times are given to Pleasant Valley Road through movements. Figure ES.2 shows the concept of this mitigation, along with Year 2035 plus project pm peak hour volumes and lane configurations.



**Figure ES.2 Two Signals Concept Mitigation, LOS A and LOS A result for Year 2035 PM Peak**

This mitigation concept would require acquisition of property on the south side of Pleasant Valley Road between Silver Drive (Faith Lane realigned) and China Garden Road. The main constraint of this alternative is the need for a significant length of right-of-way on the south side of Pleasant Valley Road just west of Silver Drive to China Garden Road. Making this work at China Garden Road is complex because of historical buildings and limited available right-of-way.

### **Mitigation Recommendations for Pleasant Valley Road**

*(based on Field Observations of LOS C to LOS D Free-flow Conditions)*

PRISM Engineering's observations of Pleasant Valley Road through traffic and subsequent observations of our video record of pm peak hour traffic flows including measuring of speeds, does not indicate that there is currently an LOS E or LOS F condition as shown by the Table 10 summary. This is true for side streets such as Faith Lane and China Garden Road, but for the through traffic on Pleasant Valley Road the flow appears to be at LOS C / LOS D conditions given the spacing in vehicle traffic (2-3 second headways), the speed of traffic, etc. Traffic is free flowing in both directions at or near the posted speed limit of 35 mph with some slowing to 25 mph in the eastbound direction after dark near Faith Lane. PRISM Engineering's view is that the traffic condition on Pleasant Valley Road does not warrant widening it to four lanes, but local traffic flows and access to and from side streets will benefit from making a modification to the existing traffic control situations at Faith Lane and China Garden Road. In the future Year 2035 condition with the project, the total volume on Pleasant Valley Road will be 1,655 vph. Year 2035 volumes without the project will be 1,435 vph. The microsimulation SimTraffic models of this corridor using these volumes do not show any significant queuing or slowing on SR 49. However, in order for the project traffic to adequately access Pleasant Valley Road /SR 49 at Faith Lane it will be necessary to mitigate these two intersections in the immediate vicinity of Faith Lane.

It has been recommended that a modern roundabout be installed on Pleasant Valley Road at China Garden Road (as shown in Figure ES.1), with Faith Lane being realigned to meet this same roundabout. A less desirable alternative would be to place the roundabout at Faith Lane, but it would have only three approaches to the roundabout. Existing development on the southwest corner would need to be removed. China Garden Road could not be a part of the roundabout (can't connect to the circle), and would need to be configured as a "right-in" / "right-out" street with no left turns in or out (a median would be needed). For this reason, this alternative is not recommended, but rather to modify the situation on the south side of the China Garden Road / Pleasant Valley Road intersection instead, by moving or modifying the historical buildings there to make sufficient room for the four legged roundabout. Even with traffic signals this same property would be impacted by a needed widening of Pleasant Valley Road on the south side to make room for an additional lane and median. The historical building at the intersection of China Garden Road and Pleasant Valley Road will be impacted no matter which alternative is selected in the future, unless China Garden Road is closed off to anything more than right in and right out movements.

The roundabout alternative shown in Figure ES.1 will result in LOS C conditions even for Year 2035 volumes with the full project, and will serve as a major mitigation to collector street access to and from Pleasant Valley Road, especially for fixing the projected LOS F conditions on Pleasant Valley Road between Silver Drive, Faith Lane, and China Garden Road. Note that the roundabout has a dedicated bypass lane for the EB right turn movement in to the project. This greatly improves the level of service and reduces any delays to through traffic on Pleasant Valley Road. With LOS C access for each of these side streets, the corridor will have been successfully mitigated from an LOS F condition to LOS C, for any of the analysis years once the roundabout is built.

### **Intersection Turn Pocket Queues**

The County's Traffic Impact Study Guidelines states that it is necessary to use the SimTraffic software to analyze traffic operations when the following conditions exist (or could exist in the future): "Over-capacity conditions (queues spill out of storage pockets)." PRISM Engineering used this software to analyze intersection queues and found that for Year 2035, traffic the project has no significant impacts to queue overflow conditions, and in nearly all cases, adds at the most, one car length to a queue over the 95<sup>th</sup> percentile. No mitigations based on queue length overages are recommended.

## II. BACKGROUND

### PROJECT DESCRIPTION

PRISM Engineering was retained to prepare a traffic study for the proposed Dorado Oaks residential development located in the heart of the Diamond Springs community, within El Dorado County, CA. Table 1 shows the project parcels, collectively known as Dorado Oaks, are located along Faith Lane south of Pleasant Valley Road.

**Table 1. Project Parcels and APN Information**

| Assessor’s Parcel Numbers | Location                      |
|---------------------------|-------------------------------|
| APN 054-402-18            | South of Pleasant Valley Road |
| APN 329-301-15            | South of Pleasant Valley Road |
| APN 329-301-20            | South of Pleasant Valley Road |
| APN 329-310-10            | South of Pleasant Valley Road |
| APN 329-310-11            | South of Pleasant Valley Road |
| APN 329-310-12            | South of Pleasant Valley Road |

Figure 1 shows the location of the project site on a vicinity map approximately 2.5 miles south of the US 50 freeway and within the Diamond Springs Community. Also shown are the 19 study intersections considered in this report on Figure 2. The project consists generally of 382 residential dwelling units and a small neighborhood park within a 142.3 acre site. The project’s 382 planned residential dwelling units are broken down as 156 single family residences, and 225 multi-family dwelling units (Condo / Townhouse) with two units per structure. The existing zoning for the project area consists of R1, R2, RE-10, C and RF as seen in Figure 3. The project remains consistent with the General Plan land use designations, being primarily residential in nature, and in providing open space areas and parks to net a number of residential dwelling units consistent with the existing zoning allowances. Table 2 details the Trip Generation of the Project.

#### **Project Site Parking Review and Assessment of Site Plan:**

The site plan map shown in Figure 3 shows varying widths of right-of-way for streets (according to the scale shown on the map) as being 60 feet of ROW for the Faith Lane corridor, 48 feet of ROW for streets “A Street” through “L Street”, and 24 feet of ROW designated for shared and unnamed driveway/access roads within the “RH” and “RM” attached multi-family DU lot areas. In the RH/RM areas, a paved shared driveway is proposed, with garage storage for vehicles on the lot itself. On-street parking on these shared driveways will not be allowed. In the cases of the normal roadways on site with sidewalks, there will be adequate pavement width for safe two-way vehicle travel, on-street parking on both sides, and on Faith Lane only, room for 6 foot exclusively striped bike lanes in each direction (located between parking and travel lanes). Based on the 60 foot ROW width proposed on the project site plan, Faith Lane is adequate to meet the parking and bike lane requirements in the County’s transportation policy elements, and as specifically defined in the following paragraph:

**Eldorado County Policy TC-1w:** New streets and improvements to existing rural roads necessitated by new development shall be designed to minimize visual impacts, preserve rural character, and ensure neighborhood quality to the maximum extent possible consistent with the needs of emergency access, on street parking, and vehicular and pedestrian safety.

Streets “A Street” through “L Street” shown in the plan have a 48 foot ROW and with parking and sidewalks there is not enough room to also stripe bike lanes, but these non-collector residential roads do not need specific striped bike lanes but can be facilities where bikes and cars share the road. Typical cross section for these streets would be 36 feet of pavement from curb to curb accommodating two 7 foot parking widths on each side, and 22 feet of two-way travel area for vehicles and bikes (sharing the road), for a total of 36 feet. The remaining 12 feet can accommodate 6 foot sidewalks on each side.

The Federal Highway Administration (FHWA) publishes various modified AASHTO examples for roadway cross-sections that include bike lanes and on-street parking<sup>1</sup> in their ***Road Diet Information Guide***, as shown in “Figure 20” of that FHWA document in the footnote below. This illustration shows that a 60 foot right of way (as shown in the site plan) allows for accommodating each cross-section element when the travel lane widths are 12 feet each, bike lanes are 6 feet each, parking width on each side is 7 feet, yielding a curb-to-curb width of 50 feet. With 10 feet left over, 5 foot wide sidewalk or walking paths can also be constructed on each side. If the lane widths for travel are narrowed to 10 feet each, to potentially slow speeds, then an additional 4 feet of cross-section width can go towards sidewalk width, yielding about 7 feet of walking width on each side of the road (behind curb face), even when there is on-street parking.

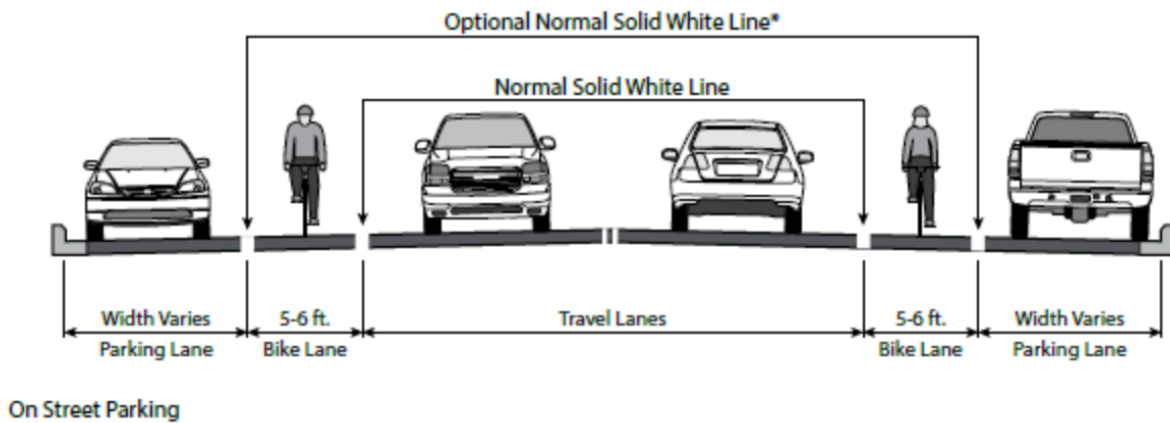
Based on these project site roadway facilities having room for bike lanes, on-street parking, and sidewalks for pedestrians, the parking, safety, and circulation needs for vehicles, bikes, and peds are adequately met in the project site plan as follows:

- On-street parking is possible on both sides of Faith Lane and streets “A Street” through “L Street”
- Bike lanes are possible on both sides of Faith Lane
- Sidewalks are possible on both sides of all residential and collector streets

The project site shown in Figure 3 has four primary access points as follows: 1) from Faith Lane south of Pleasant Valley Road, 2) to Argonaut/Patterson on the west, 3) to Tullis Mine Road via D Street, and 4) to Fowler Lane on the east via A Street.

<sup>1</sup> FOOTNOTE from FHWA ROAD DIET INFORMATIONAL GUIDE, Chapter 4:

**Figure 20. Typical Bike Lane Cross Sections**



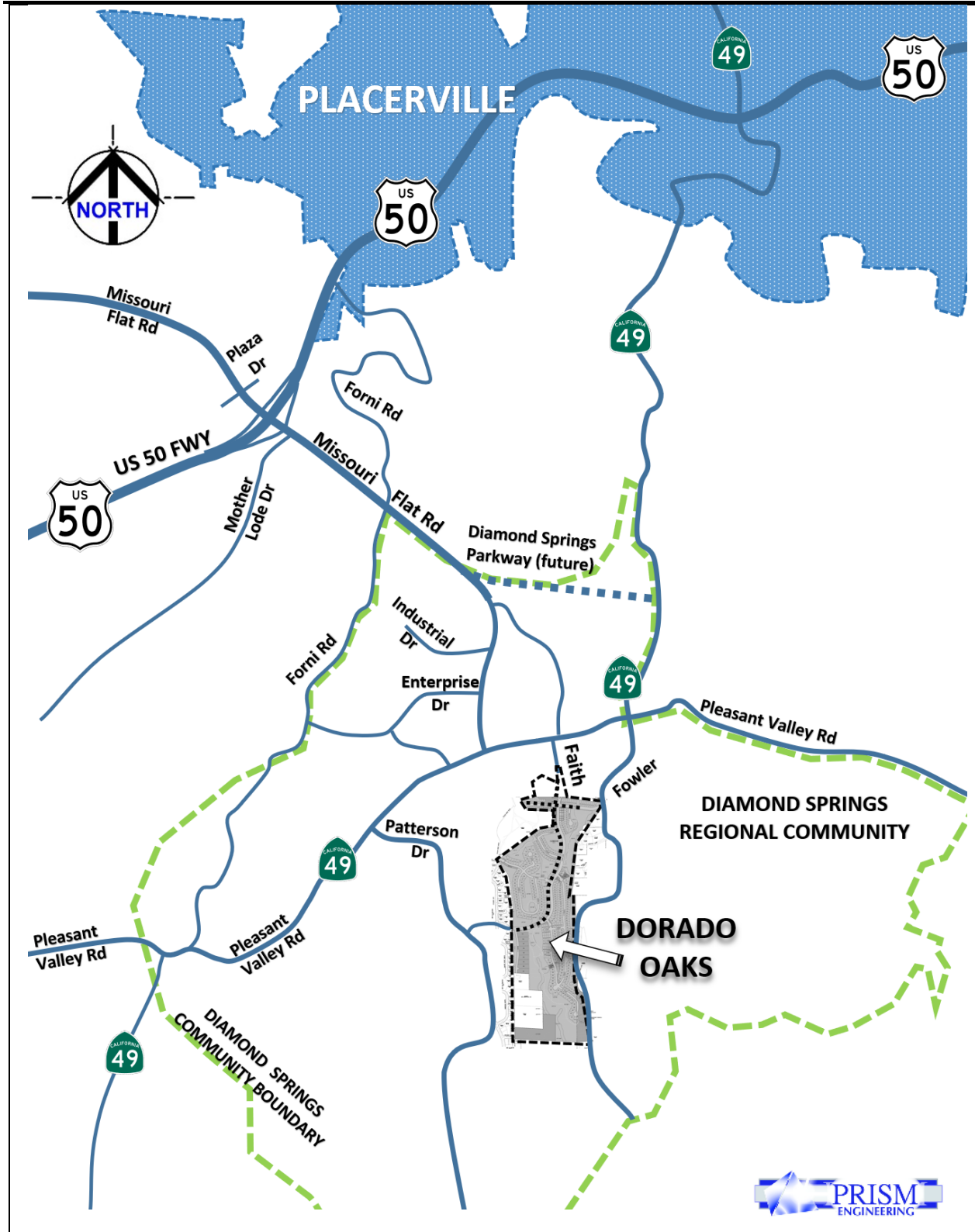
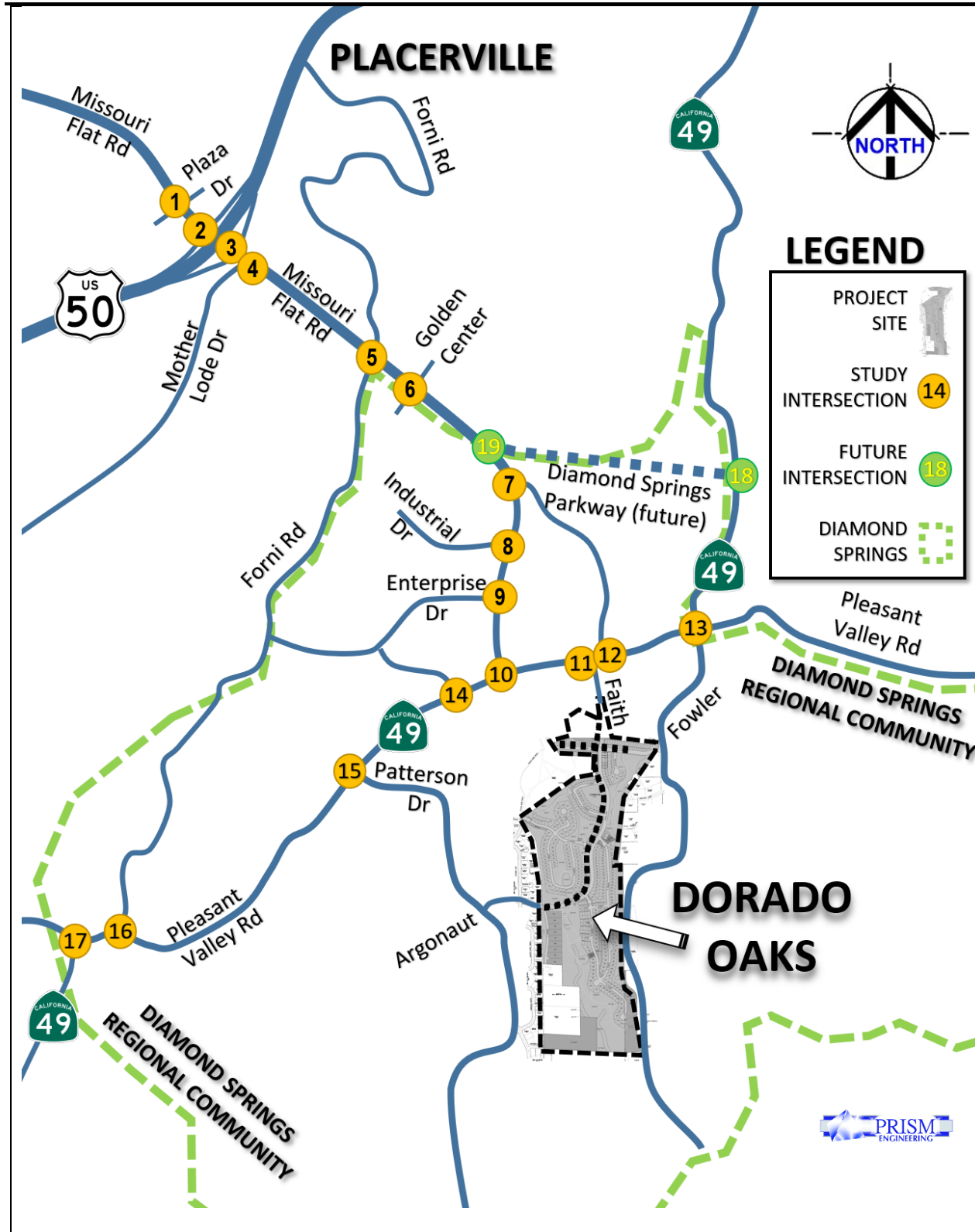


Figure 1 Vicinity Map and Project Site Location

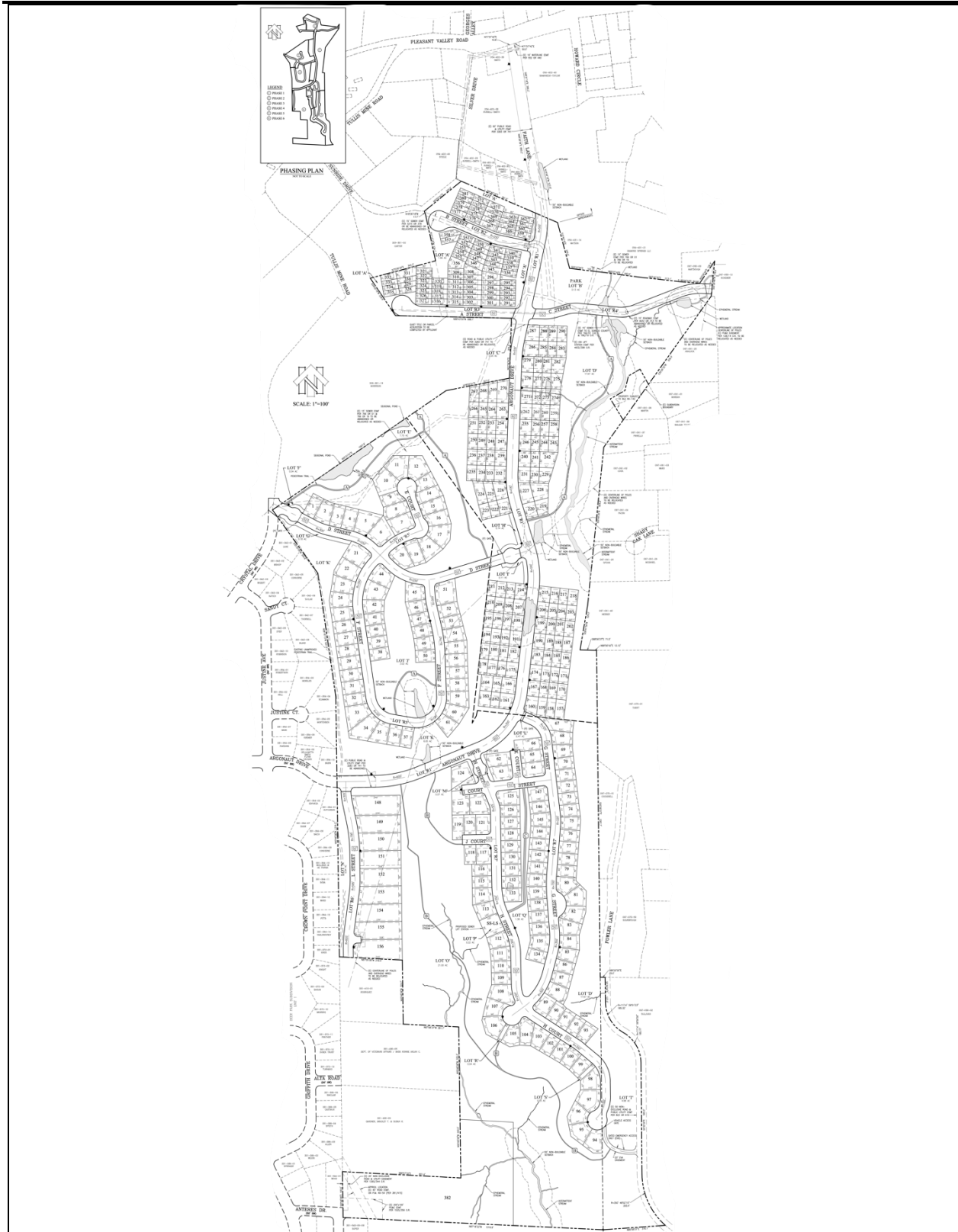
Source: PRISM Engineering



**Figure 2 Project Site Location and Study Intersections**

Source: PRISM Engineering





**Figure 3 Proposed Project Site**

Source: Dorado Oaks Development Team

This report evaluates the trip generation and resulting traffic impacts from the project site within the context of existing and future scenarios as follows:

1. Year 2018 Conditions for both the AM and PM Peak Hour
2. Year 2018 plus Project Conditions, AM, PM
3. Year 2027 Conditions, AM, PM
4. Year 2027 plus Project, AM, PM
5. Year 2035 Conditions, AM, PM
6. Year 2035 plus Project Conditions, AM, PM

**Table 2. Dorado Oaks Project Trip Generation**

| Description/ITE Code                           | Units | Trip Rates |      |      | Directionality |        |       |        | Dwelling Units | TRIP ENDS   |            |            | Directionality |            |            |           |
|--|-------|------------|------|------|----------------|--------|-------|--------|----------------|-------------|------------|------------|----------------|------------|------------|-----------|
|  |       | Week day   | AM   | PM   | AM In          | AM Out | PM In | PM Out |                | Daily       | AM         | PM         | AM In          | AM Out     | PM In      | PM Out    |
| Single Family Homes<br>(ITE Landuse Code: 210) | DU    | 9.52       | 0.75 | 1.00 | 25%            | 75%    | 63%   | 37%    | 157            | 1495        | 118        | 157        | 29             | 88         | 99         | 58        |
| Condo / Townhouse<br>(ITE Landuse Code: 230)   | DU    | 5.81       | 0.44 | 0.52 | 17%            | 83%    | 67%   | 33%    | 225            | 1307        | 99         | 117        | 17             | 82         | 78         | 39        |
|  |       |            |      |      |                |        |       |        | <b>382</b>     | <b>2802</b> | <b>217</b> | <b>274</b> | <b>46</b>      | <b>170</b> | <b>177</b> | <b>97</b> |

Source: ITE Trip Generation Manual, 9th ed.

The Dorado Oaks project is expected to generate 217 am peak hour trip ends and 274 pm peak hour trip ends, with 177 inbound and 97 outbound in the pm peak hour as shown in the table above. This traffic was assigned to the surrounding roadway as defined later in this report.

The analysis of traffic in this report identifies intersections and road segments that are expected to have congestion and unsatisfactory traffic conditions in the future<sup>2</sup>, determine if the project has made a significant impact towards these problems, and to develop and discuss mitigation measures that would solve the potential future traffic problems.

This traffic study scope and methodology was approved by the El Dorado County Community Development Agency, and this report follows the methodology and procedures outlined in the 2014 version of the *Transportation Impact Study Guidelines* document prepared by the Community Development Agency, Long Range Planning division.

## STUDY AREA

PRISM Engineering received a scope of work from the County that defines the study area for the Project consisting of Missouri Flat Road starting at Plaza Drive on the north (just north of the US 50 freeway WB Ramps) to Pleasant Valley Road / SR 49 on the south terminus. In addition, Pleasant Valley Road was also studied beginning with its SR 49 (south) intersection on the west to its Fowler Lane / SR 49 (north) intersection on the east. The Missouri Flat Road study corridor is a 1.9 mile segment with 10 existing study

<sup>2</sup> Impacts are based upon the significance criteria set forth in the El Dorado County Traffic Study Guidelines.

intersections (and two future). The Pleasant Valley Road study corridor is a 2.2 mile segment with 7 additional existing study intersections. There was a total of 19 study intersections. 17 of these are existing and 2 are future study intersections as follows:

1. Missouri Flat Rd. at Plaza Dr.
2. Missouri Flat Rd. at US 50 WB Ramps
3. Missouri Flat Rd. at US 50 EB Ramps
4. Missouri Flat Rd. at Mother Lode Dr.
5. Missouri Flat Rd. at Forni Rd
6. Missouri Flat Rd. at Golden Center Dr.
7. Missouri Flat Rd. at China Garden Rd.
8. Missouri Flat Rd. at Industrial Dr.
9. Missouri Flat Rd. at Enterprise Dr.
10. Missouri Flat Rd. at Pleasant Valley Rd.
11. Pleasant Valley Rd. at Faith Ln.
12. Pleasant Valley Rd. at China Garden Rd.
13. Pleasant Valley Rd. at SR 49 N / Fowler
14. Pleasant Valley Rd. at Commerce Way
15. Pleasant Valley Rd. at Patterson Dr.
16. Pleasant Valley Rd. at Forni Rd.
17. Pleasant Valley Rd. at SR 49 South
18. Diamond Springs Parkway at SR 49 (future)
19. Diamond Springs Parkway at Missouri Flat Rd. (future)

These include all roads which are contiguous to the project site and which would connect the site into the local street system. For example, the project would connect on its west side into Argonaut which connects to Patterson Drive which connects to Pleasant Valley Road. The project would connect on its east side to Fowler Lane which connects to Pleasant Valley Road / SR 49. To the north of the site, it connects directly with Faith Lane which connects to Pleasant Valley Road just west of China Garden Road.

In addition, the US 50 mainline freeway operations were to be studied also in the vicinity where the Missouri Flat Road freeway on and off-ramps intersect the mainline freeway in order to determine the impact of the project on mainline freeway flows. The sections of US 50 freeway studied as a part of this report were from the El Dorado Road interchange on the west to the Forni Road interchange on the east, inclusive of the Missouri Flat Road interchange.

## **ANALYSIS METHODOLOGY**

This report evaluates the trip generation and resulting traffic impacts from the project site within the context of existing and future scenarios as follows:

- Existing (2018) conditions unmitigated (identify any existing deficiencies) – Based on current traffic counts in 2018 and existing roadway geometry and traffic control.
- Existing (2018) plus Project conditions unmitigated (identify any existing deficiencies) – Based on current traffic counts in 2018 and existing roadway geometry and traffic control.
- Year 2027 Near-Term Base Traffic Condition (10 years out), unmitigated – Based on anticipated growth in baseline traffic volumes determined by straight-line interpolation between Year 2018 existing counts and Year 2035 traffic projections.

- Year 2027 Near-Term Base plus Project Traffic Condition (10 years out), unmitigated – Based on anticipated growth in baseline traffic volumes determined by straight-line interpolation between Year 2018 existing counts and Year 2035 traffic projections.
- Future Buildout Year Cumulative Long-Term (2035) Conditions, unmitigated – Based on 2035 future year traffic forecasts from the El Dorado County Demand Forecast model. Future year will correspond with approximate buildout of County’s General Plan.
- Future Buildout Year Cumulative Long-Term (2035) Conditions, with Mitigation – Based on 2035 future year traffic forecasts from El Dorado County’s Travel Demand Forecast model plus project. Future year will correspond with approximate buildout of County’s General Plan.

The analysis of traffic in this report identifies intersections and road segments that are expected to have congestion and unsatisfactory traffic conditions in the future<sup>3</sup>, determine if the project has made a significant impact towards these problems, and to develop and discuss mitigation measures that would solve the potential future traffic problems.

This traffic study scope and methodology was approved by the El Dorado County Community Development Agency, and this report follows the methodology and procedures outlined in the 2014 version of the *Transportation Impact Study Guidelines* document prepared by the Community Development Agency, Long Range Planning division.

### **Operating Conditions and Criteria for Intersections**

Analysis of significant environmental impacts at intersections is based on the concept of Level of Service (LOS). The LOS of an intersection is a qualitative measure used to describe operational conditions, and ranges from LOS A (best, minimal delay), to LOS F (worst, heavy delays) where the intersection is operating at or near its functional capacity. Levels of Service for this study were determined using the *Highway Capacity Manual, 2010* (HCM) methodologies which are implemented in the *Synchro* (Version 9) traffic analysis software<sup>4</sup> including SimTraffic micro-simulation. Table 3 relates the operational characteristics associated with each LOS category for signalized and unsignalized intersections. In addition to using the HCM 2010 calculation methodology for unsignalized intersections in this study, PRISM Engineering utilized microsimulation level of service calculation for the four closely spaced signalized intersections along Missouri Flat Road in the immediate vicinity of the US 50 freeway (Plaza Drive, US 50 WB Ramps, US 50 EB Ramps, and Mother Lode Drive). Coordination of signals on Missouri Flat Road in the vicinity of the US 50 freeway was assumed and implemented in a SimTraffic microsimulation traffic model developed for this study. The HCM 2010 includes procedures for analyzing side-street two-way stop controlled (TWSC), all-way stop-controlled (AWSC), and signalized intersections. This ability to calculate LOS and delay is also built into the SimTraffic module of Synchro. The TWSC procedure defines LOS as a function of average control delay for each minor street approach movement. Conversely, the AWSC and signalized intersection procedures define LOS as a function of average control delay for the intersection as a whole,

---

<sup>3</sup> Impacts are based upon the significance criteria set forth in the El Dorado County Traffic Study Guidelines.

<sup>4</sup> The HCM 2010 methodology was used in this study for signalized and unsignalized intersections (TWSC and AWS). The HCM 2010 method only works under limited circumstances and will not calculate U-Turns for instance. PRISM Engineering used SimTraffic microsimulation for calculation of levels of service based on actual traffic operations because of the closely spaced intersections at the US 50 and Missouri Flat Road interchange (only 100-400’ separations). The SimTraffic methods account for queues between intersections that can block traffic or significantly affect a closely spaced intersection.

or for individual approaches or even separate turning movements. For the purposes of this study, only intersection averages were summarized for each study intersection. For TWSC intersections, level of service is reported for the worst approach as well as for the intersection as a whole.

**Table 3. Intersection Level of Service Definitions**

| Level of Service | Description   | Avg. delay per vehicle, sec/veh |               |
|------------------|---|---------------------------------|---------------|
|                  |   | Signalized                      | Un-Signalized |
| A                | Free flow with no delays. Users are virtually unaffected by others in the traffic stream  | ≤ 10                            | ≤ 10          |
| B                | Stable traffic. Traffic flows smoothly with few delays.   | > 10 – 20                       | > 10 – 15     |
| C                | Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.  | > 20 – 35                       | > 15 – 25     |
| D                | Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours. | > 35 – 55                       | > 25 – 35     |
| E                | Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.   | > 55 – 80                       | > 35 – 50     |
| F                | Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.                               | > 80                            | > 50          |

*Sources: Transportation Research Board, Highway Capacity Manual 2010, National Research Council, 2010.*

### Thresholds of Significance for Intersections and Segments

General Plan Policy TC-Xd states that “*Level of Service (LOS) for County maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions, or LOS D in the Rural Centers and Rural Regions except as specified in Table TC-2.*” A project’s traffic impact at an intersection is considered to be significant under El Dorado County guidelines if the project causes an intersection to change from LOS E to LOS F. In other words, LOS E is considered acceptable by El Dorado County for roadways and state highways within the unincorporated areas of the County in the Community Regions and LOS D in the Rural Center and Rural Regions except as specified in the General Plan; the project is located within a Community Region. Worsening of conditions at facilities already operating at unacceptable levels of service is also considered a significant impact. The County’s General Plan Policy TCXe defines worsen as any of the following conditions:

- a 2% increase in traffic during the a.m. peak hour, p.m. peak hour or daily trips, or
- the addition of 100 or more daily trips, or
- the addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

When a project identifies an impact on the County’s roadway network for a scenario with or without the project, a separate analysis must be done to identify what improvements are needed for mitigation and when the improvements must be in place. The timing of the proposed mitigation must be in compliance with General Plan Policy TC-Xf:

At the time of approval of the tentative map for a single family residential subdivision of five or more parcels that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards as detailed in this Transportation and Circulation Element based on existing traffic plus traffic generated from the development plus forecasted traffic growth at 10-years from project submittal; or (2) ensure the commencement of construction of the necessary road improvements are included in the County’s 10-year CIP. For all other discretionary projects that worsen (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following:

- (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards as detailed in this Transportation and Circulation Element; or
- (2) ensure the construction of the necessary road improvements are included in the County’s 20-year CIP.

Projects that have impacts to Caltrans facilities shall use Caltrans LOS standards and significance thresholds in conjunction with the requirements of El Dorado County General Plan Circulation Policy TC-Xd.

The effects of vehicle queuing were also analyzed and the 95<sup>th</sup> percentile queue is reported for all study intersections. The 95th percentile queue length represents a condition where 95 percent of the time during the peak period, traffic volumes and related queuing will be at, or less, than the queue length determined by the analysis. This is referred to as the “95th percentile queue.” Average queuing is generally less. Queuing is considered a potentially significant impact since queues that exceed turn pocket length can create potentially hazardous conditions by blocking or disrupting through traffic in adjacent travel lanes. However, these potentially hazardous queues are typically associated with left-turn movements.

Locations where the right turn pocket storage is exceeded is not considered potentially hazardous because the right turn movement will go at the same time as the through movement and the additional vehicles that spill out over the turn pocket will not be hindering or disrupting the adjacent through traffic as would be the case in most left turn pockets.<sup>5</sup> Thus, for purposes of this analysis, a queuing impact is considered to occur under conditions where project traffic causes the queue in a left turn pocket to extend beyond the turn pocket by 25 feet or more (i.e., the length of one vehicle) into adjacent traffic lanes that operate (i.e., move) separately from the left turn lane. Where the vehicle queue already exceeds that turn pocket length under pre-project conditions, a project impact would occur if project traffic lengthens the queue by 25 feet or more.

---

<sup>5</sup> If a left turn movement operates (i.e. moves) at the same time as the through movement such as with split signal phasing, then a left turn queue that exceeds the turn storage is not considered an impact.

### III. EXISTING CONDITIONS

#### Existing Street Network and Transportation Systems

Below is a description of the principal roadways and intersections included in this study.

##### **ARTERIAL: Missouri Flat Road, LOS Range: LOS A to LOS C**

This arterial roadway transitions from a three lane cross section to a six lane cross section and then back to a three lane cross section as follows: North of the Plaza Drive shopping centers Missouri Flat Road has a three lane cross section (center left turn lanes). Between Plaza Drive and Golden Center Drive Missouri Flat Road generally has a six lane cross section (two lanes in each direction with variations of left and right turn pockets, such as dual left turns at the freeway ramps). South of Golden Center Drive it transitions back to a three lane cross section generally with a two-way left turn lane in the center all the way past Enterprise Drive on the south. From this intersection, Missouri Flat transitions to its intersection configuration with Pleasant Valley Road (two southbound, a left and right turn pocket, and two northbound lanes from Pleasant Valley Road). In the future, this arterial roadway will see some relief from future traffic growth with the construction of the Diamond Springs Parkway planned to connect to Missouri Flat Road a few hundred feet north of China Garden Road. This future four lane parkway will carry about 1000 vph in the Year 2035 peak hour time period, traffic that may have had to otherwise travel on Pleasant Valley Road to Missouri Flat Road in order to access the US 50 freeway, etc.

##### **INTERSECTION #1: Missouri Flat Road / Plaza Drive, LOS C Operations**

This intersection has a coordinated traffic signal installation with the US 50 freeway ramps where its north and southbound movements coordinate with the north and southbound through movements of the WB Ramps intersection. The Missouri Flat Road approaches feature protected left turn phasing (dual left for SB approach), and a separate southbound right turn lane into Plaza Drive. There is split phasing between the east and westbound approaches of Plaza Drive.

##### **INTERSECTION #2: Missouri Flat Road / Westbound US 50 ramps, LOS B Operations**

This intersection has a coordinated traffic signal installation. The Missouri Flat Road approaches feature dual northbound left turn lanes and a separate southbound right turn lane. The four lane exit from US 50 is configured with a dual left turn lane and dual right turn lanes.

##### **INTERSECTION #3: Missouri Flat Road / Eastbound US 50 ramps, LOS C Operations**

This intersection has a coordinated traffic signal installation. The Missouri Flat Road approaches feature dual southbound left turn lanes and a separate northbound right turn lane. The three lane exit from US 50 is configured with a separate left turn lane and right turn lanes, as well as a combined left, thru and right turn lane.

##### **INTERSECTION #4: Missouri Flat Road / Mother Lode Drive, LOS C Operations**

This intersection is signalized and located roughly 250 feet from the Eastbound US 50 ramps intersection. The Missouri Flat Road approaches have separate left turn and right turn lanes. The eastbound Mother Lode Drive approach has three lanes configured as dual left turns and a separate right turn lane.

##### **INTERSECTION #5: Missouri Flat Road / Forni Road, LOS C Operations**

This intersection is also signalized and located roughly ½ mile south of the Mother Lode Drive intersection. The Missouri Flat Road approaches each include separate left turn and right turn lanes. The Forni Road

approaches have separate left turn, through and right turn lanes, and a second left turn lane has been provided on the eastbound approach.

**INTERSECTION #6: Missouri Flat Road / Golden Center Drive, LOS C Operations**

This intersection is located about 1,100 feet south of Forni Road. This signalized intersection includes separate left turn lanes on the Missouri Flat Road approaches and a separate right turn lane on the southbound approach. The Golden Center Drive approaches are single lanes which operate with permitted phasing.

**INTERSECTION #7: Missouri Flat Road / China Garden Road, LOS A/D Operations**

This intersection is located about 2,100 feet south of Golden Center Drive. This unsignalized intersection includes single lanes along Missouri Flat Road with a separate left turn lane on the southbound approach. A TWLTL is present on the northbound approach of Missouri Flat Road and north of the southbound left turn lane. The China Garden Road approach consists of a single lane which is stop controlled.

**INTERSECTION #8: Missouri Flat Road / Industrial Drive, LOS B Operations**

This intersection is located about 600 feet south of China Garden Road. In the Year 2020, this intersection is controlled by a traffic signal. The two-way left turn lane on Missouri Flat Road approaches are converted to a short left turn pocket at the intersection.

**INTERSECTION #9: Missouri Flat Road / Enterprise Drive, LOS B Operations**

This intersection is located about 850 feet south of China Garden Road. In the Year 2020, this intersection is controlled by a traffic signal. The two-way left turn lane on Missouri Flat Road approaches are converted to a short left turn pocket at the intersection.

**INTERSECTION #10: Missouri Flat Road / Pleasant Valley Road, LOS C Operations**

This intersection is signalized and operates at LOS B in the am and LOS C in the pm peak hour. The EB approach of Pleasant Valley Road has a dual left turn pocket and one EB through lane. The SB approach has a single left turn and a single right turn pocket. The WB approach has a single right turn pocket and a single WB through lane. This intersection will continue to operate at LOS C or better conditions beyond the Year 2035.

**INTERSECTION #11: Pleasant Valley Road / Faith Lane, LOS A/E Operations**

This three-approach intersection is unsignalized with stop sign control only for Faith Lane northbound approach, and no control for the EB and WB Pleasant Valley Road approaches. Faith Lane is at LOS C in the am peak hour and LOS E in the pm peak hour. When the project traffic is added in Faith Lane goes to LOS F in the am or pm peak hour, and Pleasant Valley climbs to LOS C. This intersection is only 150 feet away from China Garden Road, centerline to centerline.

**INTERSECTION #12: Pleasant Valley Road / China Garden Road, LOS A/D Operations**

This three-approach intersection is unsignalized with stop sign control only for China Garden Road southbound approach, and no control for the EB and WB Pleasant Valley Road approaches. China Garden Road is at LOS C in the am and LOS D in the pm peak hour. When the project traffic is added in the level of service remains the same. This intersection is only 150 feet away from Faith Lane, centerline to centerline.



**INTERSECTION #13: Pleasant Valley Road / Fowler Lane (SR 49), LOS E Operations**

This signalized intersection is operating at LOS E in the am peak hour and LOS D in the pm peak hour. It is flared locally to accommodate three lane approaches on Pleasant Valley Road in the east and westbound directions, but quickly tapers back to a two-lane road west and south of the intersection, and to a two-lane road with a two-way left turn lane in the median north and east of the intersection.

**INTERSECTION #14: Pleasant Valley Road / Commerce Way, LOS A/C Operations**

This unsignalized intersection is operating at LOS A overall, but LOS C for the southbound stop sign controlled approach. It is a three-way intersection, with a right turn pocket for the westbound approach only. The other southbound and eastbound approaches are single lane only.

**INTERSECTION #15: Pleasant Valley Road / Patterson Drive, LOS A Operations**

This signalized intersection is operating at LOS A conditions for the am and pm peak hour. The intersection has separate turn pockets for each of the northbound, westbound, and eastbound approaches, consisting of two total approach lanes for each approach. There are also eastbound and westbound bike lanes striped at this intersection for only the Pleasant Valley Road approaches. These bike lanes taper and disappear at approximately 600 feet west and east of this intersection.

**INTERSECTION #16: Pleasant Valley Road / Forni Road, LOS A/C Operations**

This unsignalized intersection is operating at LOS A overall, but LOS C for the southbound stop sign controlled approach. It is a three-way intersection, with signal lane approaches all around. Forni Road is the stop sign controlled approach and is at a sharp skewed angle approximately 45 degrees from Pleasant Valley Road. Making a left turn from Forni Road to Pleasant Valley Road is therefore difficult because of the angle.

**INTERSECTION #17: Pleasant Valley Road / SR 49 (south), LOS E/F Operations**

This unsignalized intersection is a three-way stop sign controlled location. A traffic signal is warranted here for existing conditions traffic. It operates at LOS E/F in the am and LOS C in the pm peak hour. However, the eastbound approach has enough room to stripe a separate right turn pocket without any road widening. The northbound approach of SR 49 does not have enough room for any additional lanes without capital improvement widening of the approach. The westbound approach of this intersection has two striped lanes, a WB through and a WB left turn pocket. All other approaches are currently configured as a single shared lane, however, vehicles are using the eastbound approach as two lanes, because there is a 20' approach width, more than enough room for two vehicles side by side.

**Existing Bicycle and Pedestrian Facilities**

Sidewalks currently provide walking facilities along Missouri Flat Road in the vicinity of the US 50 freeway and towards the south just past Golden Center (south of the Walmart shopping center). After this point there are no sidewalks all the way down to Pleasant Valley Road. Pleasant Valley Road is without sidewalks in both east and westbound directions with few exceptions such as at the immediate vicinity of the signalized intersections at SR 49 / Fowler, as well as at Patterson Drive. Bike lanes, however, are striped throughout the study area along Missouri Flat Road north of Golden Center Drive, but generally not to the south of the location, or on Pleasant Valley Road (except in the immediate vicinity of Patterson Drive). The pavement width of Pleasant Valley Road is generally 24 feet from edge to edge.

### **Existing Transit Facilities**

El Dorado Transit serves the Diamond Springs community south of Golden Center Drive via Bus Routes 30 and 35. At the Missouri Flat Transfer Center (located in front of the Walmart shopping center along Missouri Flat Road), there are six Bus Routes that interact at this location including 60 to Pollock Pines, 20 to Placerville, 30 to Diamond Springs, 50 to US 50, 25 for Saturday, and 35 for Diamond Springs on Saturday. Weekday and Saturday schedules to Diamond Springs are generally 1-hour headways between buses, running from 6 am to 6 pm.

### **Traffic Counts and Data Collection, Saturation Flow Rates**

PRISM Engineering conducted am and pm peak hour turning movement counts at 16 existing study intersections, as well as 24 hour roadway counts in 15 minute intervals, explained in detail in Appendix Section A.3 of this report. All intersection turning movement counts were updated in 2018 with new traffic count data as explained in the appendix. Generally, the ADT traffic counts are approximately 10 times the peak hour value, typical in the study area.

## Arterial Roadway Segment Analyses and Methodology

PRISM Engineering explored several methods to calculate the appropriate level of service for roadway segments (not intersections). These included HCM 2010 compatible methods built in to the:

1. SimTraffic microsimulation model (*incorporates all roadway cross-section details including Two-way Left Turn Lane (TWLTL) medians, posted speeds, lane capacities, all details of lane geometry and vehicle types in microsimulation, etc, which includes the effects on delay to a roadway segment from adjacent intersections, signal timings, etc. It looks at the bigger picture of a system of traffic intersections and segments*)
2. the HCS 7 two-lane/multilane highways modules (*cannot handle TWLTL for two lane highways which is critical to accurately analyze much of Missouri Flat Road; It is not a microsimulation model and cannot take into account a longer corridor of potential delays at adjacent intersections, etc It can simply incorporate directionality, speed limits, truck percentages, lane widths, etc*) This method was ruled out because of inability to calculate level of service for the specific cross-section on much of Missouri Flat Road where TWLTL is present (see Appendix A.5).
3. the County's generic "planning level" method (*where the only variables are total two-way volume and number of lanes in the cross-section; this limited method does not consider lane widths, vehicle speeds, or whether there are two-way left turn lanes (TWLTL), etc*).

The County has indicated that the most accurate software methods should be used to calculate the street segment level of service for Missouri Flat Road or Pleasant Valley Road, whether it be the HCM 2010 analysis methods found in the SimTraffic microsimulation model or whether it is the County's proprietary "planning level thresholds" method. The criteria would be whichever method best reflects real world conditions, in other words, whether the calculated levels of service comport to what is happening in the field by verification. As a result, PRISM Engineering conducted two analyses for all roadway segments, to illustrate and show the differing results, but also offer an explanation as to why there are differences. PRISM Engineering also observed traffic conditions and speeds in the field, along Missouri Flat Road and Pleasant Valley Road, and found that the SimTraffic microsimulation HCM 2010 analysis tool best represented existing conditions. The planning level analyses did not seem to be sensitive to overall conditions, but correlated with side street conditions, even if there were only a few cars at LOS F conditions on the side street. These kinds of results did not represent the main volumes along Missouri Flat Road which were at LOS B or better conditions (over 95% of the total traffic volume being analyzed).

The County's planning-level segment analyses has been included as an appendix<sup>6</sup> for reference purposes only, since the results were limited to only a few variables of traffic conditions, whereas the SimTraffic microsimulation traffic models assembled for this study are more accurate and are based on measured roadway speeds, intersection signal timings and operations, specific median configurations and turn lanes, as well as variables such as closely spaced and complex intersections such as exist at the Missouri Flat Road / US 50 freeway interchange ramps and adjacent intersections.

LOS A/B conditions exists on Missouri Flat Road for the main "thru" traffic (as can be seen in Table ES.2 and ES.3). This through traffic is primarily moving at or near posted speed limits, indicating a lack of congestion. However, there are fewer gaps in this "thru" traffic due to the high volume of "thru" traffic, resulting in higher delays for side street traffic (much smaller volumes), trying to enter the road. Table 4

---

<sup>6</sup> See Appendix A.6: Planning Level Segment Analysis

summarizes the segment levels of service for Missouri Flat and Pleasant Valley Roads, using the SimTraffic microsimulation methodology. The SimTraffic HCM 2010 microsimulation method takes into consideration all adjacent intersections, signal timings, delays, turning movements, and medians which may be a two-way left turn lane (TWLTL) or a left turn pocket, or even a stop sign or signal. It also considers the specific speed limits and saturation flow rates determined from field data measurements. The results shown in Table 4 are summarized as an average vehicle delay for each roadway segment as well as the corresponding level of service (based on HCM 2010), and the resulting speeds of traffic. The level of service is based on the calculated delay, which is based on numerous factors built into the microsimulation model. The microsimulation method is calculating the delay for the segment and not the side streets.

**Table 4. Existing Year 2018 Link Segment Roadway Level of Service Summary**

| ARTERIAL SEGMENT LOCATION |   | Road Type | SIMTRAFFIC ARTERIAL SEGMENT ANALYSIS, HCM 2010 |           |           |                   |           |           |
|---------------------------|---|-----------|--|-----------|-----------|-------------------|-----------|-----------|
|                           |   |           | Year 2018 AM Peak                              |           |           | Year 2018 PM Peak |           |           |
|                           |   |           | LOS  | AVG DELAY | AVG SPEED | LOS               | AVG DELAY | AVG SPEED |
| 1                         | Missouri Flat Plaza to US 50 WB Ramps       | 4AD       | B  | 15.3      | 10        | C                 | 25.2      | 5         |
| 2                         | Missouri Flat US 50 WB Ramps to EB Ramps    | 4AD       | A  | 8.3       | 16        | A                 | 6.7       | 19        |
| 3                         | Missouri Flat US 50 EB Ramps to Mother Lode | 4AD       | A  | 9.5       | 10        | C                 | 22.8      | 4         |
| 4                         | Missouri Flat Mother Lode to Forni          | 4AD       | A  | 3.5       | 20        | C                 | 25.3      | 4         |
| 5                         | Missouri Flat Forni to Golden Center        | 4AD       | C  | 20.3      | 12        | C                 | 24.9      | 10        |
| 6                         | Missouri Flat Golden Center to China Garden | 2A        | B  | 13.6      | 16        | B                 | 10.0      | 20        |
| 7                         | Missouri Flat China Garden to Industrial    | 2A        | A  | 1.6       | 33        | A                 | 1.5       | 30        |
| 8                         | Missouri Flat Industrial to Enterprise      | 2A        | A  | 1.6       | 38        | A                 | 1.6       | 38        |
| 9                         | Missouri Flat Enterprise to Pleasant Valley | 2A        | A  | 1.4       | 40        | A                 | 5.0       | 29        |
| 10                        | Pleasant Valley Missouri Flat to Faith      | 2A        | C  | 15.2      | 22        | C                 | 15.5      | 21        |
| 11                        | Pleasant Valley Faith to China Garden       | 2A        | A  | 3.6       | 35        | C                 | 21.0      | 24        |
| 12                        | Pleasant Valley China Garden to Fowler      | 2A        | A  | 4.0       | 35        | C                 | 21.0      | 24        |
| 13                        | Pleasant Valley Missouri Flat to Commerce   | 2A        | A  | 3.2       | 36        | A                 | 2.6       | 39        |
| 14                        | Pleasant Valley Commerce to Patterson       | 2A        | A  | 5.3       | 37        | A                 | 7.3       | 34        |
| 15                        | Pleasant Valley Patterson to Forni          | 2A        | A  | 6.6       | 20        | A                 | 5.9       | 21        |
| 16                        | Pleasant Valley Forni to SR 49 (south)      | 2A        | B  | 10.5      | 15        | B                 | 10.7      | 15        |

Source: Year 2018 traffic counts taken by PRISM Engineering, mid-block totals, am, pm peak hour, plus Project

### Year 2018 Roadway Segment Analyses Results

Table 4 shows that there are satisfactory levels of service for roadway segments in the study area based on the microsimulation HCM 2010 analysis, and these results correlate well with the levels of service calculated for intersections (compare with Table ES.2), also using HCM 2010 methods for intersection level of service.

As per Policy TC-Xa (Table TC-2), Missouri Flat Road is allowed to operate at LOS F, provided the V/C ratio does not exceed 1.12 from U.S. Highway 50 to Mother Lode Drive, or 1.20 from Mother Lode Drive to China Garden Road.

### Saturation Flow Rates in Study Area

PRISM Engineering conducted extensive saturation flow rate data collection and analyses of existing traffic operations along the Missouri Flat corridor, in order to help ascertain the proper operating traffic flow

capacity of actual traffic in this area. Table A.1 in the appendix shows the summary of this saturation flow rate survey information and how it was applied in this study to properly calibrate and validate the micro-simulation models used with Synchro and SimTraffic along the Missouri Flat Road corridor and at the US 50 freeway interchange.

Section A.2 in the Appendix explains the details pertaining to the calibration and validation of the SimTraffic microsimulation traffic model. In summary, the Saturation Flow Rate (SFR) calculated for THRU movements in the study area was found to be 1825 vph, and LEFT TURN movements were 1730 vph. The average SFR near this interchange calculates to 1798 vph or about 1800 vph... which correlates with the values used by PRISM Engineering in the Synchro HCM 2010 software as a part of this study's capacity analyses.

Saturation Flow Rate may be derived from the steady state headway, which is defined as the average elapsed time between the passage of successive vehicles over the stop line in the same lane. The Highway Capacity Manual suggests recording the time of passage of the fourth and 10 vehicles over several cycles to determine this time value for 6 vehicles. This assumes that the initial queue at the start of green is at least 10 vehicles long. The first three vehicles in the queue of 10 are omitted because of startup speeds.

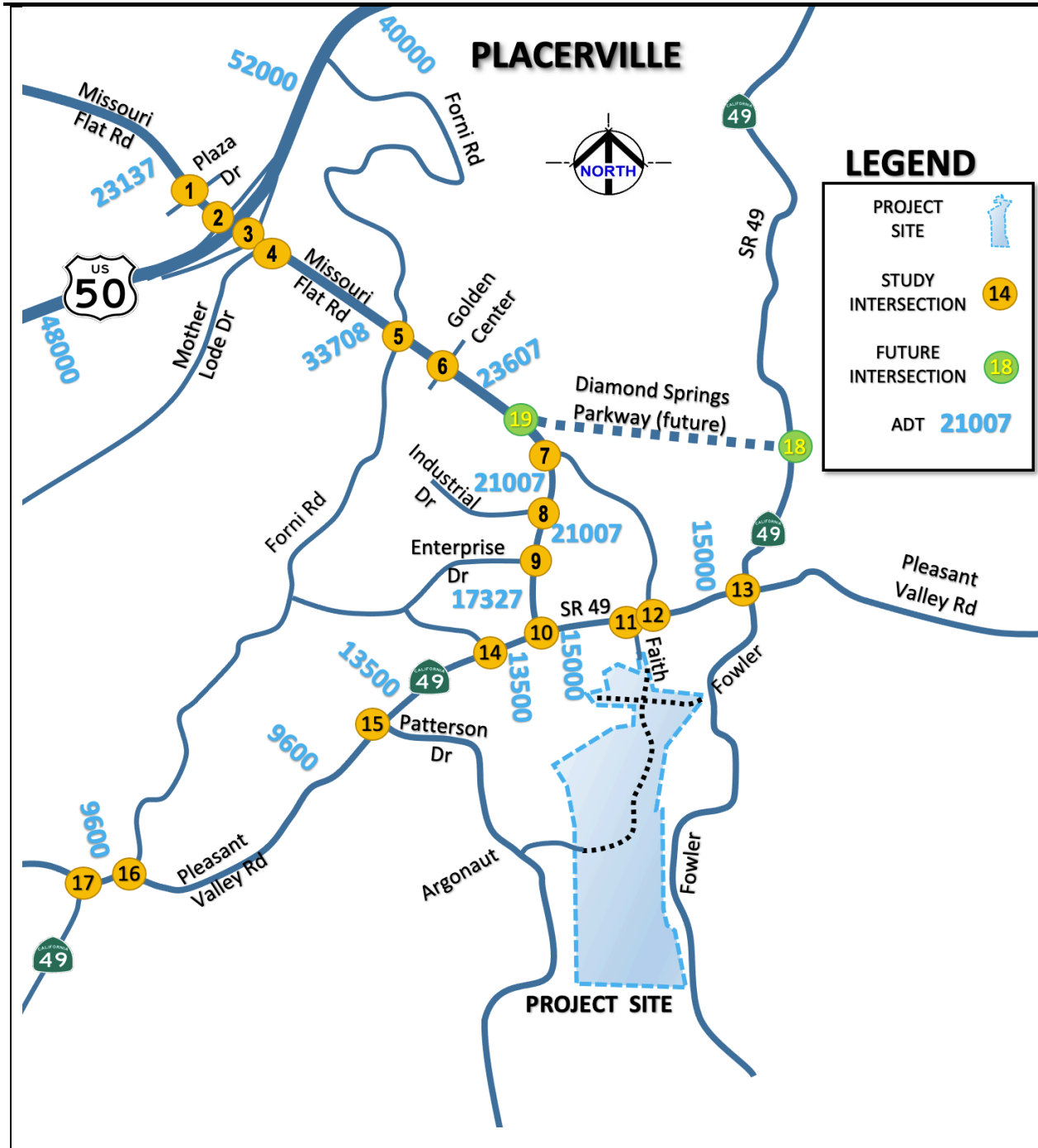
Saturation Flow is calculated as: **SFR= 3600 / [(t(10) – t(4)) / 6], OR SFR= 3600 / [(t(N) – t(4)) / (N-4)]**

Figure 4A shows the existing ADT and pm peak hour link segment vph on a map that has been derived from recent Year 2018 hose counts taken by PRISM Engineering, as well as Caltrans 2015 counts updated as needed to correspond with Year 2018 totals.

Figure 4B shows the projected Year 2027 ADT volumes using growth rates derived from the intersection turning movement counts for pm peak hour, and projected up or down in the same percent ratio as the peak hour SimTraffic model volumes. It should be noted that with the advent of the Diamond Springs Parkway, the County's traffic model showed volumes on SR 49 and parts of Missouri Flat Road going down in the future as some traffic reassigns in the region to take advantage of the shorter route. This is especially true for traffic going and coming from Pleasant Valley east of SR 49. A detailed discussion of this is found in the Trip Distribution section after Figure 9 under "Diamond Springs Parkway Effect."

Figure 4C shows the projected Year 2035 ADT volumes.

Figure 5 shows the existing am peak hour intersection turning movements, and Figure 6 shows the existing pm peak hour traffic volumes for each of 17 existing study intersections where existing data taken by PRISM Engineering is summarized.



**Figure 4A. Existing Year 2018 ADT Volumes on Study Roadways**

Note: Data is from new traffic counts taken in 2018 along study street segments

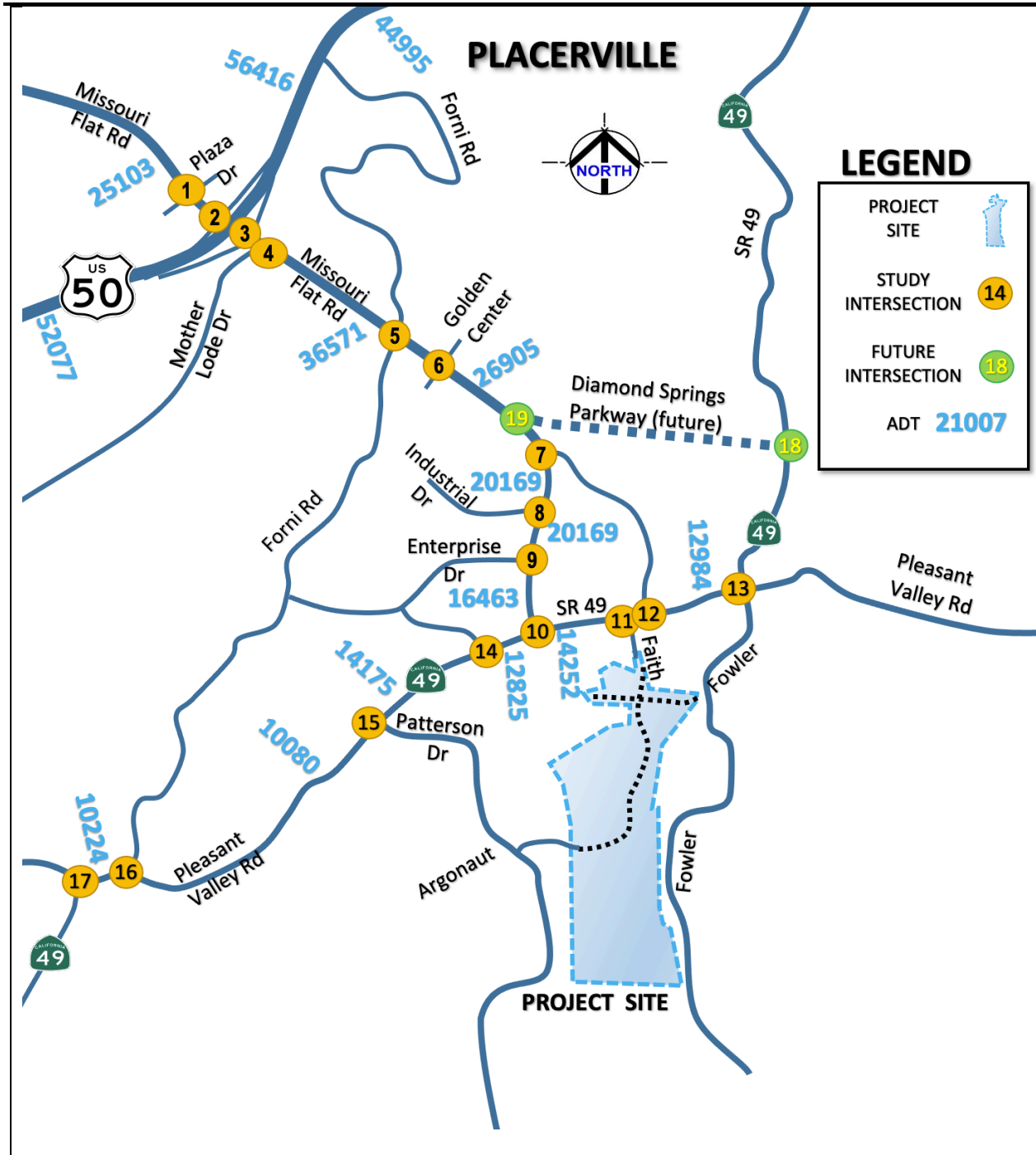


Figure 4B. Year 2027 Projected ADT Volumes on Study Roadways

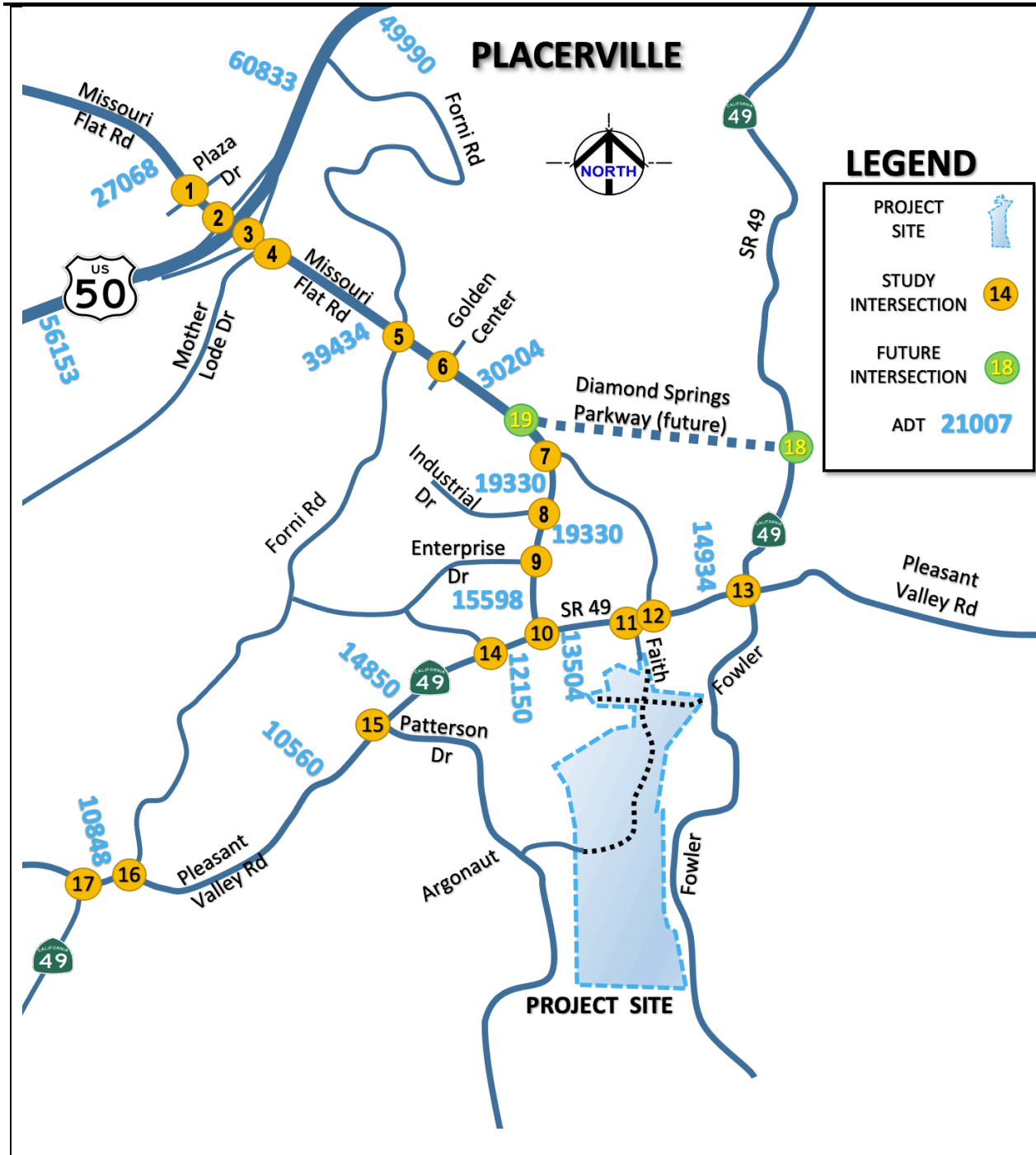
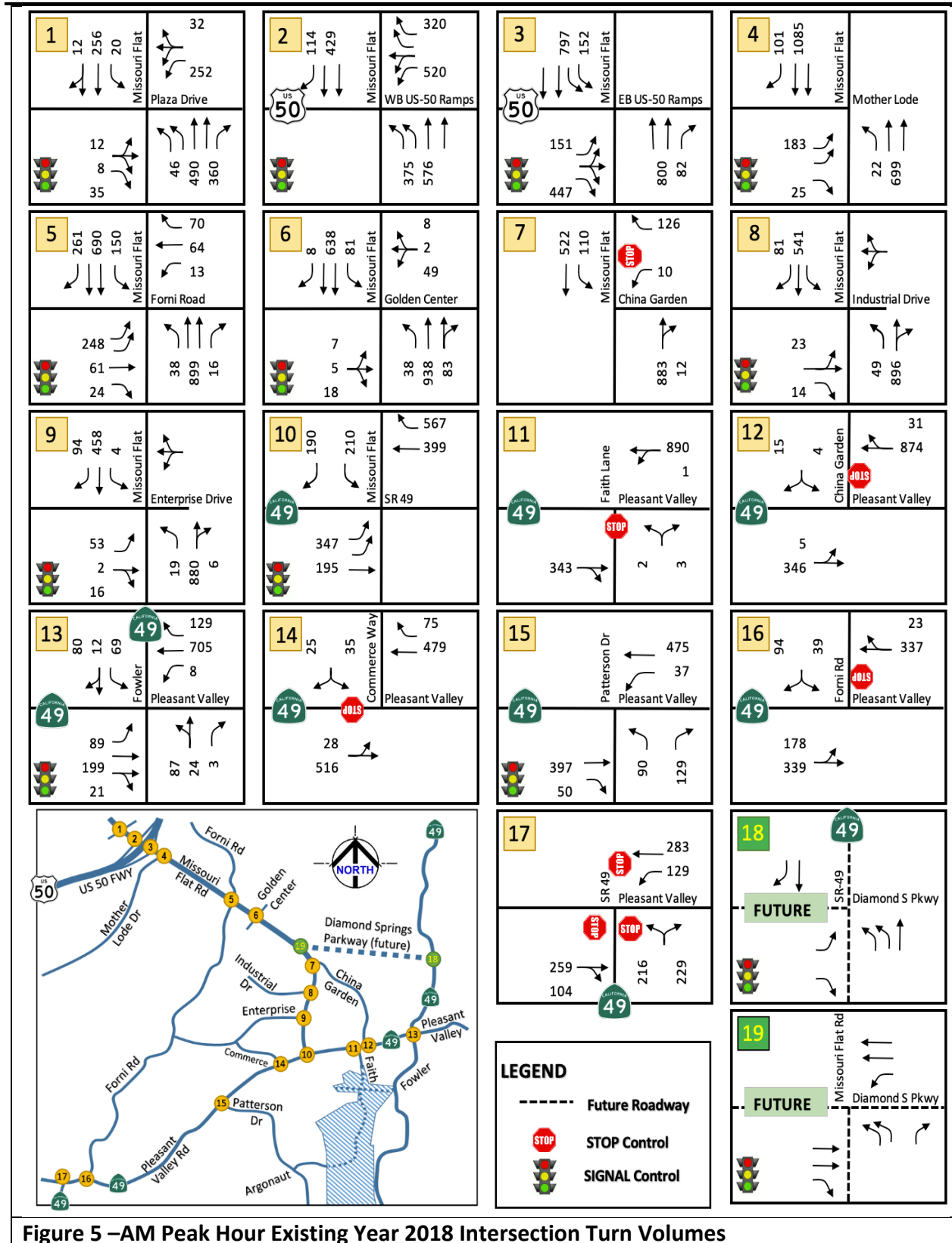
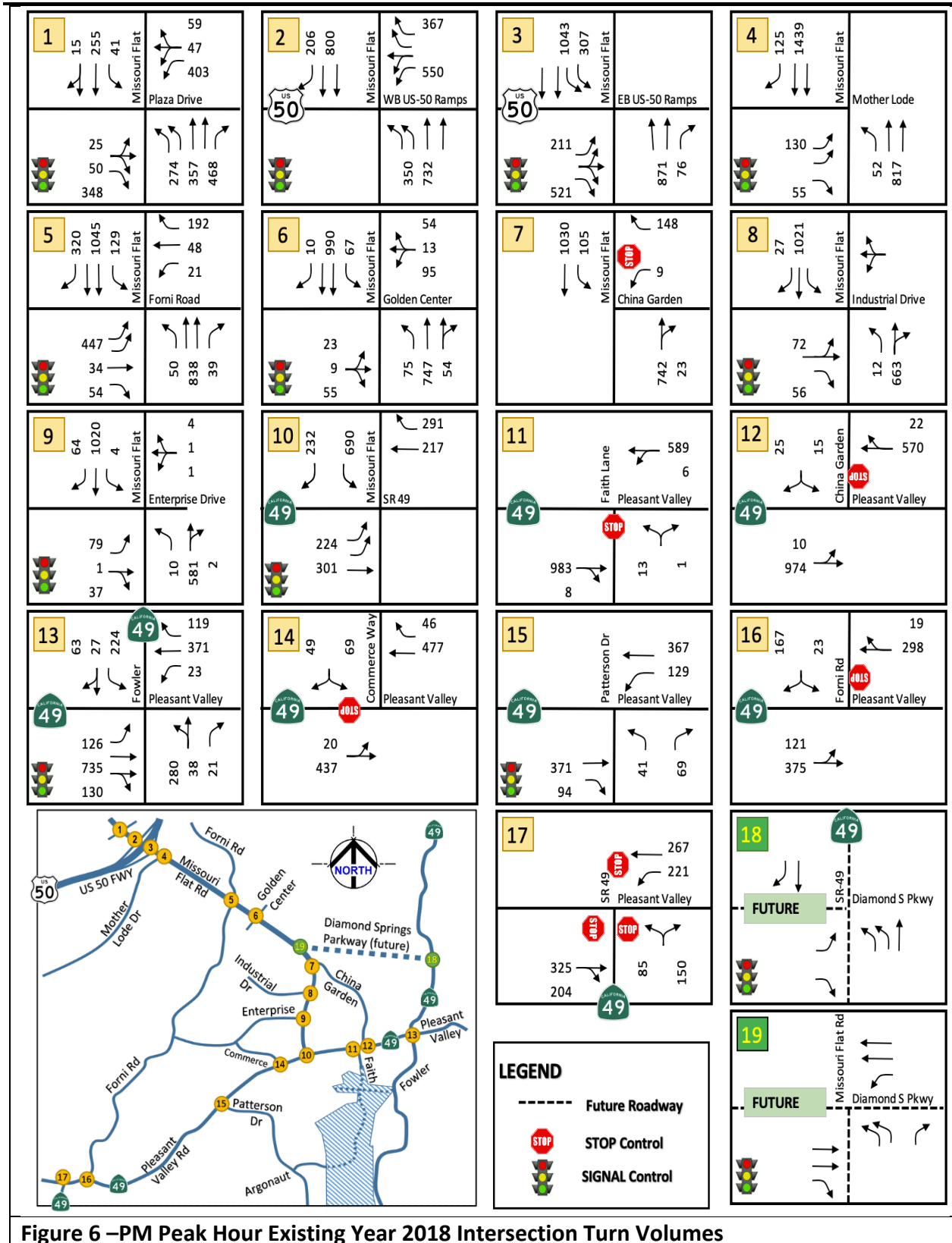


Figure 4C. Year 2035 Projected ADT Volumes on Study Roadways







## Existing Bicycle and Pedestrian Facilities

Bicycle and Pedestrian facilities are limited in the study. On Missouri Flat Road south of Golden Center Drive these facilities are very poor or non-existent because Missouri Flat Road transitions from a four-lane arterial to a two lane arterial. Figure 7 depicts the County's Bike Plan Map and shows the only Class 1 dedicated bike lane corridor, the El Dorado Trail, that intersects with Missouri Flat Road about 500 feet south of Golden Center Drive. There are Class II bikes lanes and sidewalks to the north of this location all the way to the US 50 freeway.

There are Class II bike facilities (striped bike lanes) on Missouri Flat Road from The El Dorado Trail just 500 feet south of Golden Center Drive, to the US 50 freeway WB ramp on the north, and then only sidewalks are available to Plaza Drive. North of Plaza Drive Class II bike lanes are again found on Missouri Flat Road. The map in Figure 7 also shows planned Class II bike lanes for Missouri Flat Road south of Golden Center Drive to Pleasant Valley Road, and for Pleasant Valley Road throughout the entire study area.

Sidewalks exist along Missouri Flat Road from the El Dorado Trail on the south to beyond Plaza Drive shopping center on the north, and then disappear to the north of the shopping center. South of the El Dorado Trail Class I bike lane parking lot there are no sidewalks on Missouri Flat Road all the way to its terminus at Pleasant Valley Road on the south. Sidewalks on Pleasant Valley Road do not exist except in a few instances in the immediate vicinity at the following intersections: 1) Fowler Lane/SR 49, 2) Patterson Drive, 3) and Koki Lane.

In the vicinity of the project on Pleasant Valley Road near Faith Lane there are no sidewalks along Pleasant Valley Road, and no Class II bike lanes for the one mile section of Pleasant Valley Road between Patterson Drive to Fowler Lane. The County has plans for Class II bikes lanes on Pleasant Valley Road throughout the entire study area, but this will take widening of the road to make this possible as the pavement width is only 24 feet in many locations.

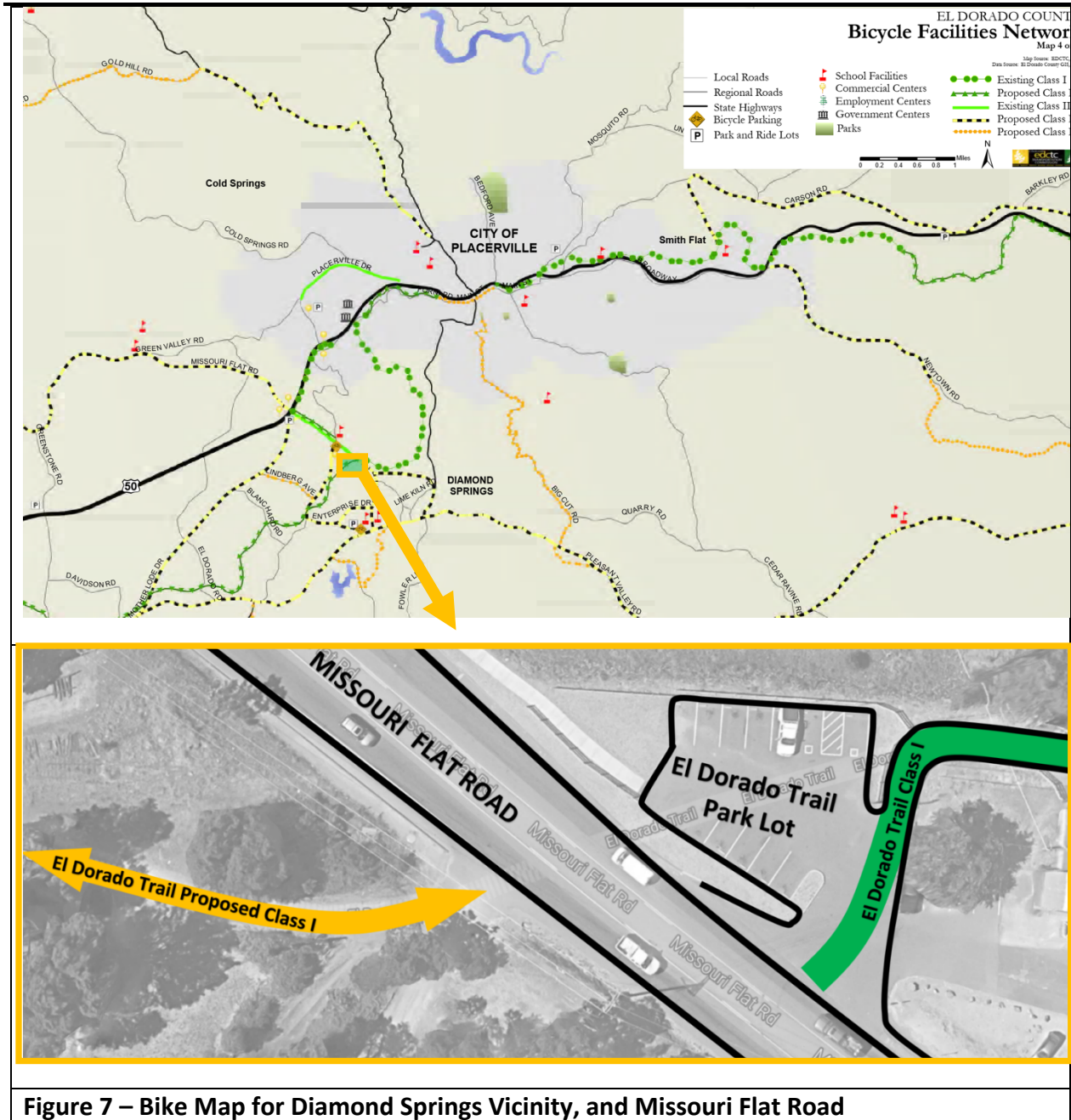
## Existing Transit Facilities

El Dorado Transit has several facilities that directly serve Missouri Flat Road in the study area. Figure 8 shows several bus stops in the study area where there is also a transfer center (Missouri Flat Road Transfer Center) along the frontage the Walmart shopping center just south of Forni Road.

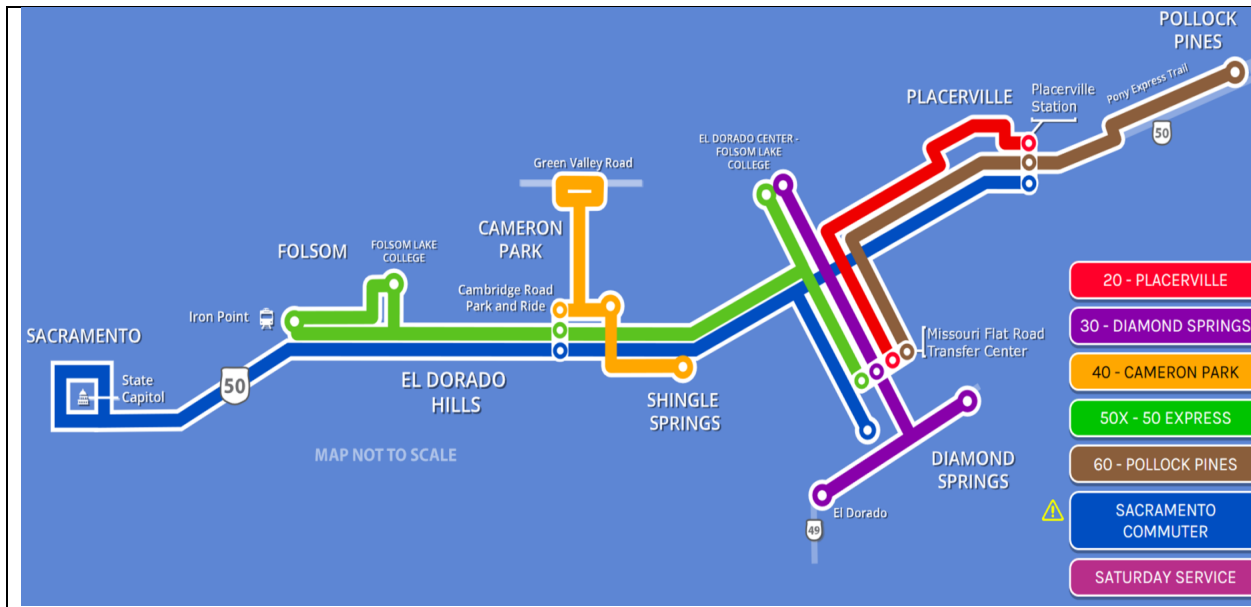
The lines that provide service to Missouri Flat Road and Pleasant Valley Road in the project study area are:

- LINE 30 which serves Missouri Flat Road from the El Dorado Center of Folsom Lake College on the north, to Diamond Springs Community (Pleasant Valley Road) on the south.

LINE 50X – 50 Express which serves the El Dorado Center of Folsom Lake College on the north and Missouri Flat Road Transfer Center at Forni Road on the south. It also enters the US 50 freeway to the western regions west of Missouri Flat Road as shown in Figure 8.



Source: El Dorado County Transportation Commission and El Dorado Transit



**Figure 8 –Transit Map for El Dorado & Diamond Springs Vicinity**

Source: El Dorado County Transportation Commission and El Dorado Transit

## IV. Existing (Year 2018) Plus Project Conditions

### Project Trip Generation and Distribution

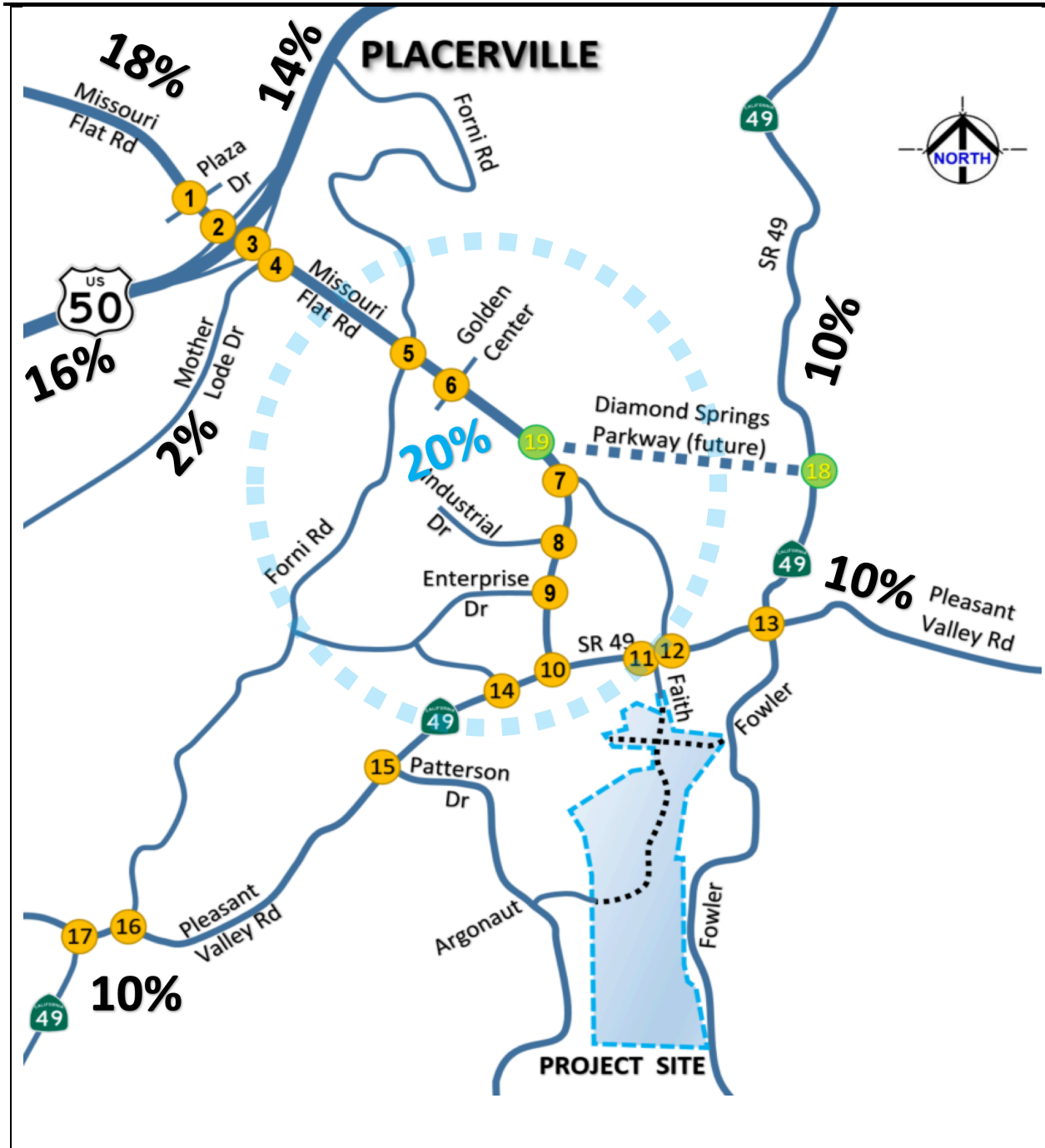
The project is currently zoned CC and RM. The project is to be developed as 157 single family residential units with 225 multi-family uses on 142.3 acres. Table 5 documents the trip generation summary by residential type for the am and pm peak hour time periods, as well as the daily total. Tables 6 and 7 document the trip distribution percentages used to assign traffic to the surrounding roadways for the am and pm peak hours, respectively. Figure 9 shows the graphical representation of the trip distribution information in Tables 6 and 7. These tables document specific project trip generation totals to and from various destinations for the am and pm peak hours, respectively. It should be noted that the trip distribution analysis has been updated from previous reports based on input from Caltrans, and 10% of the project traffic was reassigned to use SR 49 to the north towards Placerville. This partial shift in project only traffic lowered project traffic volumes on Missouri Flat Road and through the US 50 interchange. Tables 6 and 7 document these totals and how they were assigned.

**Table 5. Trip Generation Summary for AM, PM, and Daily**

| Description/ITE Code                           | Units | Trip Rates |      |      | Directionality |        |       |        | Dwelling Units | TRIP ENDS   |            |            | Directionality |            |            |           |
|--|-------|------------|------|------|----------------|--------|-------|--------|----------------|-------------|------------|------------|----------------|------------|------------|-----------|
|  |       | Week day   | AM   | PM   | AM In          | AM Out | PM In | PM Out |                | Daily       | AM         | PM         | AM In          | AM Out     | PM In      | PM Out    |
| Single Family Homes<br>(ITE Landuse Code: 210) | DU    | 9.52       | 0.75 | 1.00 | 25%            | 75%    | 63%   | 37%    | 157            | 1495        | 118        | 157        | 29             | 88         | 99         | 58        |
| Condo / Townhouse<br>(ITE Landuse Code: 230)   | DU    | 5.81       | 0.44 | 0.52 | 17%            | 83%    | 67%   | 33%    | 225            | 1307        | 99         | 117        | 17             | 82         | 78         | 39        |
|  |       |            |      |      |                |        |       |        | <b>382</b>     | <b>2802</b> | <b>217</b> | <b>274</b> | <b>46</b>      | <b>170</b> | <b>177</b> | <b>97</b> |

Source: ITE Trip Generation Manual, 9th ed.

| Table 6. AM Peak Hour Trip Distribution of Project Traffic, Local Roads and Highways |      |              |           |            | Table 7. PM Peak Hour Trip Distribution of Project Traffic, Local Roads and Highways |      |              |            |           |
|--|------|--------------|-----------|------------|--|------|--------------|------------|-----------|
|  | %    | AM Peak Hour |           |            |  | %    | PM Peak Hour |            |           |
|  |      | Total        | In        | Out        |  |      | Total        | In         | Out       |
| Missouri Flat Rd n/o Plaza   | 18%  | 39           | 8         | 31         | Missouri Flat Rd n/o Plaza   | 18%  | 49           | 32         | 17        |
| US 50 Freeway west   | 16%  | 35           | 7         | 27         | US 50 Freeway west   | 16%  | 44           | 28         | 15        |
| US 50 Freeway east   | 14%  | 30           | 6         | 24         | US 50 Freeway east   | 14%  | 38           | 25         | 14        |
| Mother Lode Dr west  | 2%   | 4            | 1         | 3          | Mother Lode Dr west  | 2%   | 5            | 4          | 2         |
| Missour Flat Rd Internal   | 20%  | 43           | 9         | 34         | Missour Flat Rd Internal   | 20%  | 55           | 35         | 19        |
| Pleasant Valley Rd west  | 10%  | 22           | 5         | 17         | Pleasant Valley Rd west  | 10%  | 27           | 18         | 10        |
| Pleasant Valley Rd east  | 10%  | 22           | 5         | 17         | Pleasant Valley Rd east  | 10%  | 27           | 18         | 10        |
| SR 49 north to Placerville   | 10%  | 22           | 5         | 17         | SR 49 north to Placerville   | 10%  | 27           | 18         | 10        |
|  | 100% | <b>217</b>   | <b>46</b> | <b>170</b> |  | 100% | <b>274</b>   | <b>177</b> | <b>97</b> |



**Figure 9 – Trip Distribution Pattern for Project Traffic**

Source: County’s Traffic Model Output, Local Traffic Patterns, and PRISM Engineering

Trip generation for development projects is typically calculated based on rates contained in the Institute of Transportation Engineer’s publication, *Trip Generation 9th Edition*<sup>7</sup>. *Trip Generation* is a standard reference used by jurisdictions throughout the United States for the estimation of trip generation potential of proposed developments. PRISM Engineering utilized the ITE Trip Generation Rates for

<sup>7</sup> *Trip Generation, 9th Edition*, Institute of Transportation Engineers, 2012.

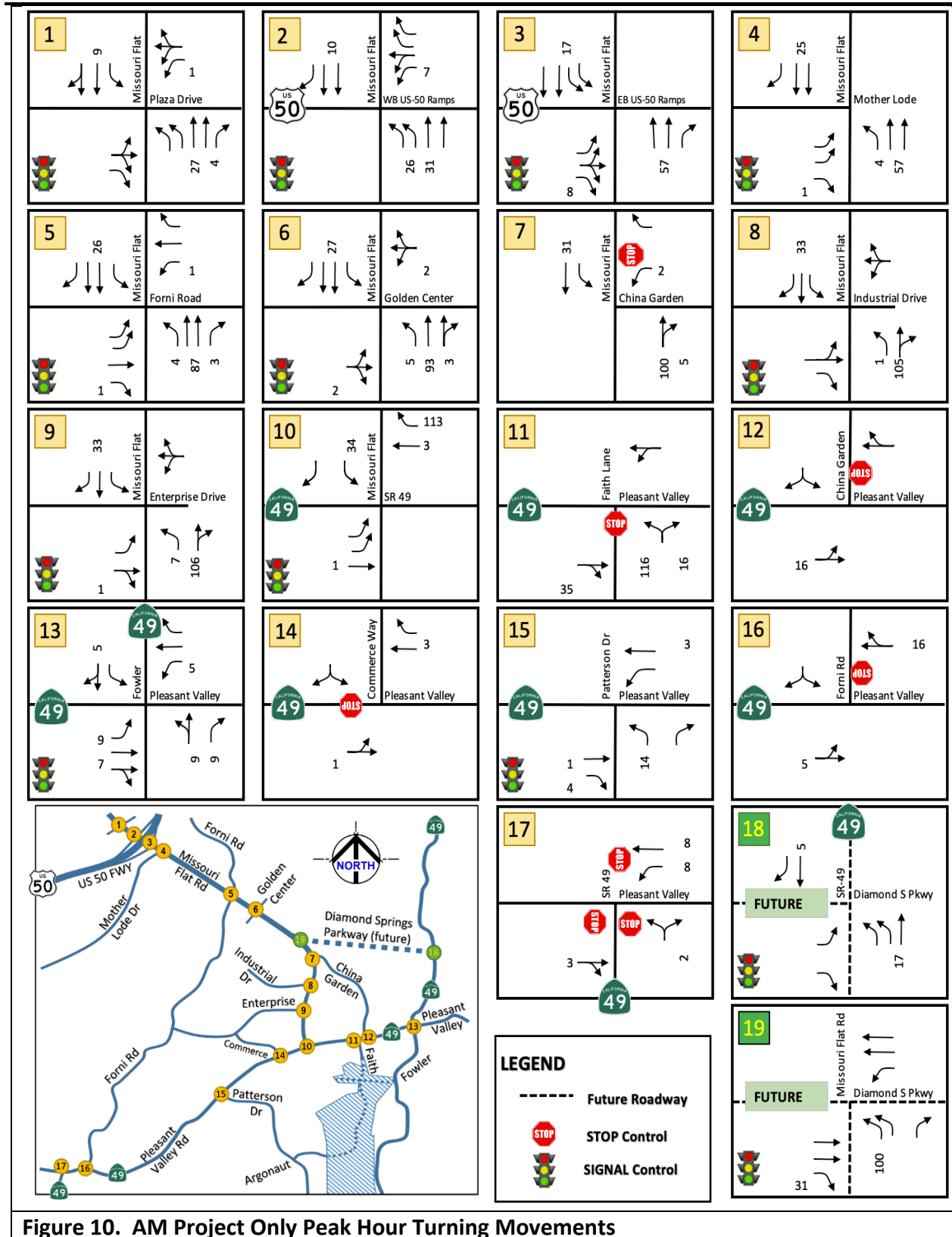
residential developments in this study to quantify and predict the future traffic for the Dorado Oaks project. Figures 10 and 11 are project only traffic for am and pm peak hours, respectively. Figures 12 and 13 show the turning movement diagrams for am and pm peak Year 2018 plus Project scenarios.

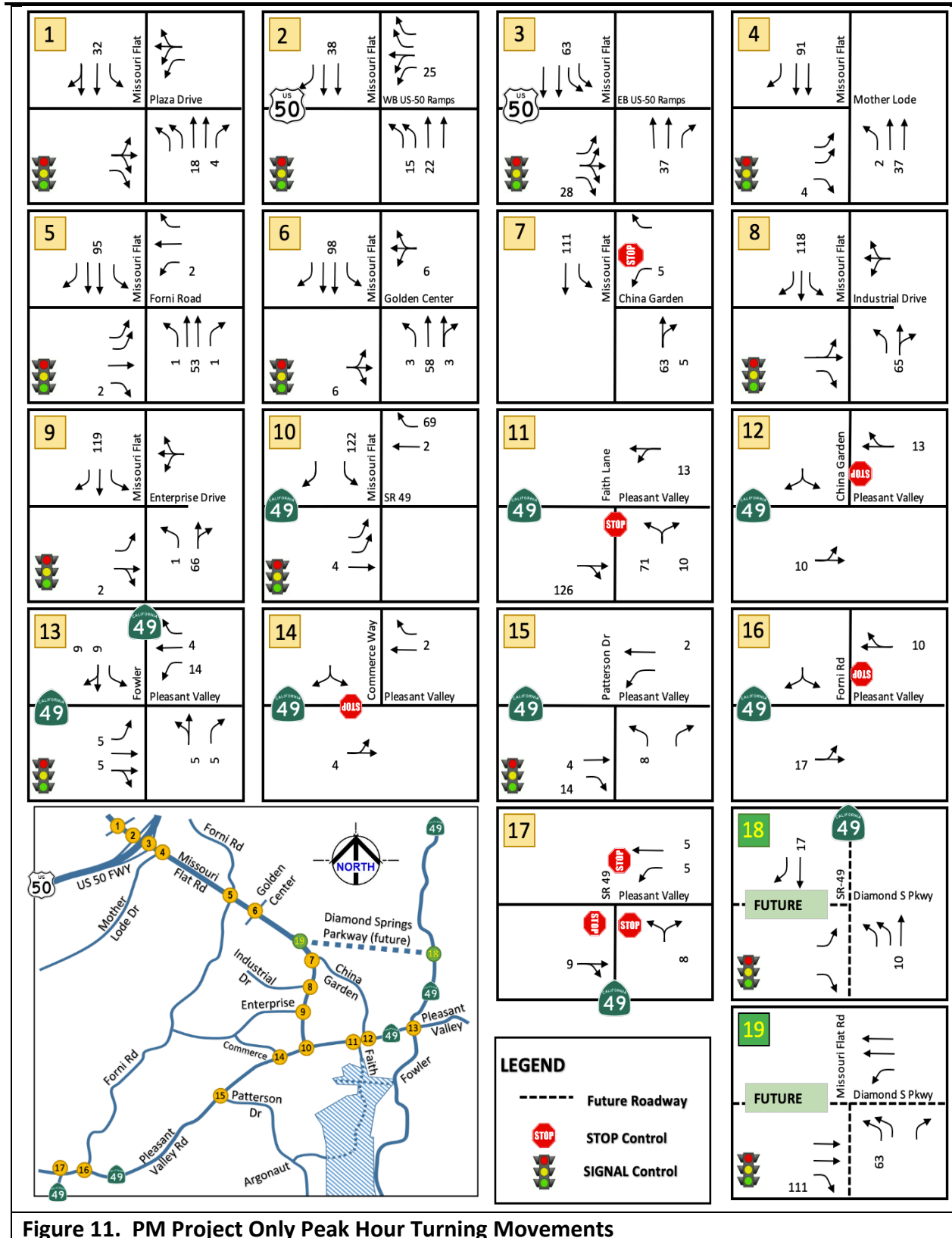
**Diamond Springs Parkway Effect.** The trip distribution of the project traffic was developed by PRISM Engineering using engineering judgment in interpreting the traffic model output volumes with and without the project. In addition, PRISM Engineering reviewed the Existing Conditions model outputs and compared these to future Cumulative Conditions traffic model outputs which also had the Diamond Springs Parkway connector road in the model which shifted traffic patterns. The Diamond Springs Parkway connector road would connect from SR 49 over to the Missouri Flat Road corridor just north of China Garden Road. The traffic model outputs with the Diamond Springs Parkway connector road in it, lowered future year 2035 traffic volumes along Pleasant Valley Road between SR 49 on the east and Missouri Flat Road on the west to a level about 90% of existing levels for the am peak hour (1,569 vph for Year 2035 and 1,736 vph for Year 2010 model). In other words, the Diamond Springs Parkway had the effect to lower traffic on Pleasant Valley Road as well as Missouri Flat Road from Pleasant Valley Road on the south to China Garden Road on the north.

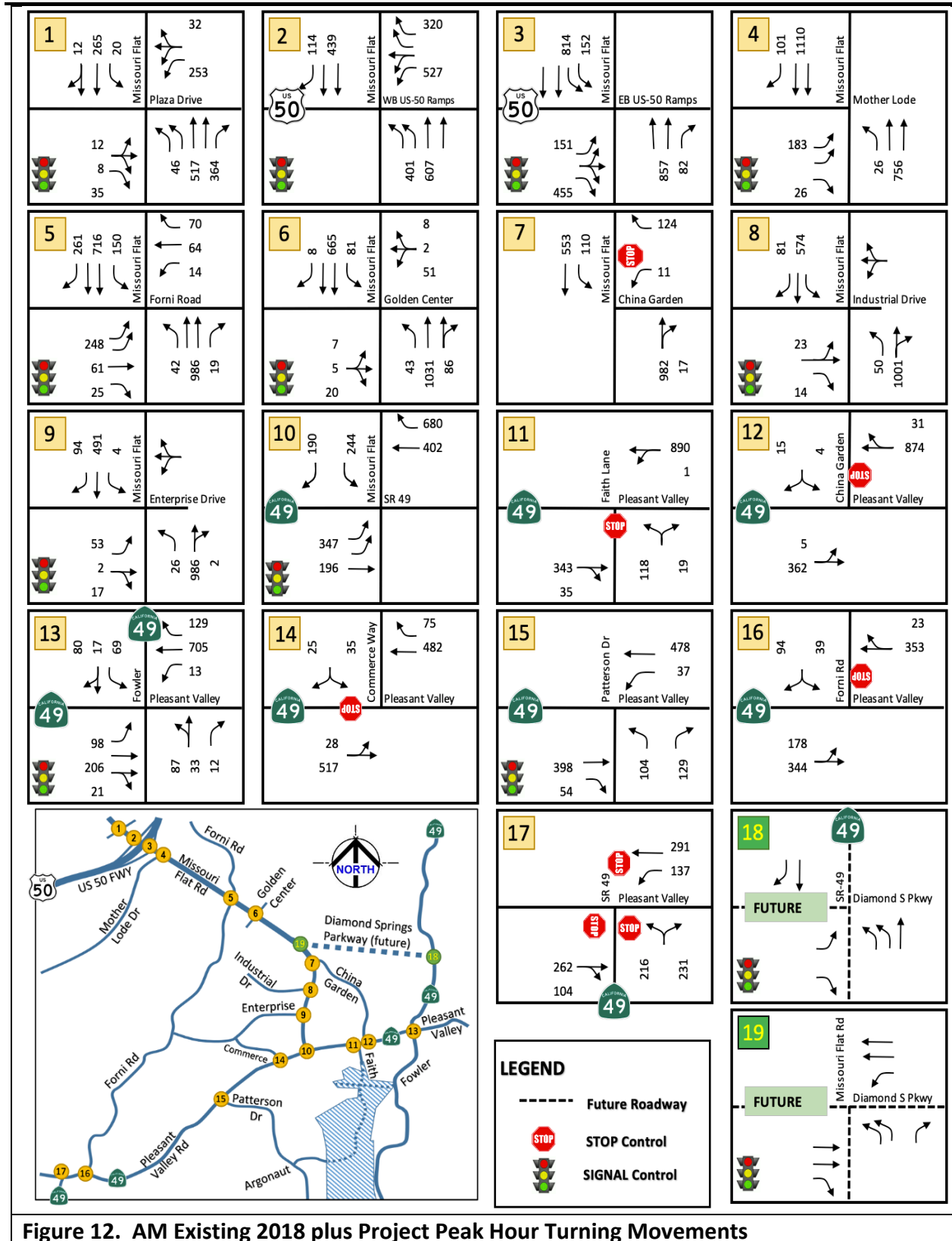
PRISM Engineering used the growth rates from existing to future and modified the existing traffic counts taken in the field to determine Year 2035 levels. This growth rate was calculated using straight line interpolation and coming up with a yearly growth rate, and applying this rate to year 2018 traffic counts to develop a year 2035 turning movement count database for all 18 study intersections. The intersection affected by the shift in traffic due to the Diamond Springs Parkway (intersections 13, 18, and 19) were further adjusted to shift future traffic to use the Diamond Springs Parkway corridor similar to the pattern that shifted in the County's travel demand model outputs. For example, if Pleasant Valley Road volumes for Year 2035 in the model were 10% lower than the year 2010 model because of the Diamond Springs Parkway connector, it was assumed that traffic obviously shifted with the faster more direct and less congested route in the model. This shift was reflected and adjusted in the Year 2035 turning movement counts used in the analyses of this traffic study. Through traffic on SR 49 to and from Pleasant Valley regions that would have normally used the SR 49/Pleasant Valley Road to make a right turn onto Missouri Flat Road and on to the US 50 freeway, were reassigned to use SR 49 to the north from the Fowler Road intersection and make a left turn onto the Diamond Springs Parkway which then connects up to and becomes Missouri Flat Road in the future.

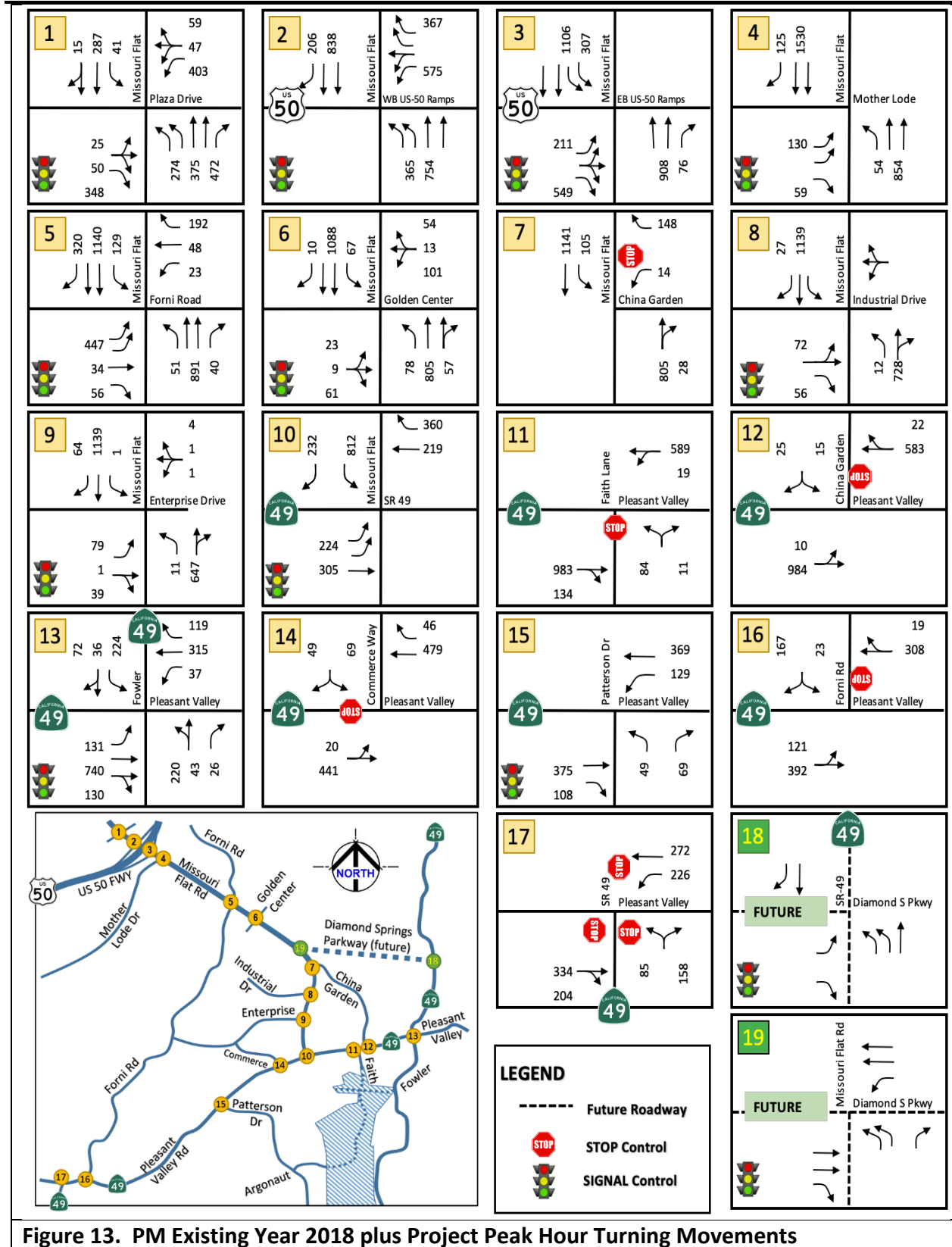
The project traffic was assigned to destinations for shopping and work, etc., in the peak hour time periods, consistent with the County's traffic model. A portion of the project traffic would "sink" to the commercial areas along Missouri Flat Road near Forni Road as a destination, and other portions of project traffic would seek regional destinations via the US 50 freeway, and other pathways to destinations east or west along the Pleasant Valley Road corridor. Some of the traffic that would go to Placerville was manually assigned to the SR 49 connection between Pleasant Valley Road and the City of Placerville (10%) as suggested by Caltrans, because the traffic model did not assign traffic via this route. This 10% was taken from the 24% assigned by the model to go east on US 50, to Placerville or beyond, and the resulting remainder was 14% of the project's total traffic using US 50 to get to Placerville, as shown in Figure 9. This trip distribution adjustment takes care of project traffic utilizing all possible routes (incl. SR 49) to and from Placerville, and not just Missouri Flat Road / US 50.











Tables 8 and 9 summarize the intersection capacity analysis results and link segment capacity analysis results for the Year 2018 scenarios, respectively. One location would be at LOS F with the addition of project traffic (Pleasant Valley Rd. at Faith Lane). Tables 10 and 11 summarize the signalized intersection queue analysis for this same scenario, for the am and pm peak hour time periods.

**Table 8. Existing (2018) Plus Project Intersections Level of Service Summary**

| INTERSECTION LOCATION |  | Control | YEAR 2018 AM Peak |       |        |       | YEAR 2018 PM Peak |       |        |       |
|-----------------------|--|---------|-------------------|-------|--------|-------|-------------------|-------|--------|-------|
|                       |  |         | No PROJ           |       | w/PROJ |       | No PROJ           |       | w/PROJ |       |
|                       |  |         | LOS               | Delay | LOS    | Delay | LOS               | Delay | LOS    | Delay |
| 1                     | Missouri Flat Rd at Plaza Dr           | S       | C                 | 20.3  | C      | 20.7  | C                 | 27.4  | C      | 28.7  |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | S       | B                 | 15.9  | B      | 15.9  | B                 | 18.3  | B      | 18.3  |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | S       | B                 | 16.6  | B      | 16.6  | C                 | 24.6  | C      | 24.6  |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | S       | A                 | 9.0   | A      | 9.1   | C                 | 22.0  | C      | 22.0  |
| 5                     | Missouri Flat Rd at Forni Rd           | S       | C                 | 20.5  | C      | 23.5  | C                 | 26.0  | C      | 26.0  |
| 6                     | Missouri Flat Rd at Golden Center Dr   | S       | C                 | 28.9  | C      | 28.9  | C                 | 25.6  | C      | 25.6  |
| 7                     | Missouri Flat Rd at China Garden Rd    | TW      | A                 | 2.8   | A      | 3.1   | A                 | 2.3   | A      | 2.4   |
|                       |  | WB      | D                 | 25.5  | D      | 31.8  | C                 | 22.5  | D      | 26.2  |
| 8                     | Missouri Flat Rd at Industrial Dr      | S       | A                 | 3.6   | A      | 3.7   | A                 | 10.6  | B      | 11.5  |
| 9                     | Missouri Flat Rd at Enterprise Dr      | S       | A                 | 4.7   | A      | 4.9   | B                 | 15.1  | B      | 15.1  |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | S       | B                 | 13.9  | B      | 15.2  | C                 | 28.1  | D      | 42.5  |
| 11                    | Pleasant Valley Rd at Faith Ln         | TW      | A                 | 0.1   | A      | 8.4   | A                 | 0.5   | B      | 13.5  |
|                       |  | NB      | C                 | 17.1  | F      | 84.1  | E                 | 47.9  | F      | 254   |
| 12                    | Pleasant Valley Rd at China Garden Rd  | TW      | A                 | 0.3   | A      | 0.3   | A                 | 0.8   | A      | 0.8   |
|                       |  | SB      | C                 | 20.2  | C      | 20.3  | D                 | 29.5  | D      | 30.3  |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | S       | E                 | 62.3  | E      | 62.3  | D                 | 41.1  | D      | 45.1  |
| 14                    | Pleasant Valley Rd at Commerce Way     | TW      | A                 | 1.4   | A      | 1.4   | A                 | 2.8   | A      | 2.8   |
|                       |  | SB      | C                 | 21.5  | C      | 21.6  | C                 | 23.5  | C      | 23.9  |
| 15                    | Pleasant Valley Rd at Patterson Dr     | S       | A                 | 6.5   | A      | 7.0   | A                 | 7.6   | A      | 8.5   |
| 16                    | Pleasant Valley Rd at Forni Rd         | TW      | A                 | 4.3   | A      | 4.4   | A                 | 3.8   | A      | 3.9   |
|                       |  | SB      | C                 | 21.2  | C      | 22.0  | C                 | 15.1  | C      | 15.5  |
| 17                    | Pleasant Valley Rd at SR 49 S          | AW      | E                 | 44.2  | E      | 45.9  | C                 | 22.3  | C      | 24.0  |
| 18                    | Diamond Springs Parkway at SR 49       |         | Future            |       | Future |       | Future            |       | Future |       |
| 19                    | Diamond Springs Pkwy at Missouri Flat  |         | Future            |       | Future |       | Future            |       | Future |       |

Control: S=Signal, AW=All-Way Stop, TW=Stop Sign Side Street, NB=NB approach Stop

NOTE: Calculations based on HCM 2010 methodology for intersection level of service (signal, two-way, and all-way stop)

Source: PRISM Engineering and HCM 2010 calculation in Synchro and/or Sim Traffic

It can be seen from Table 8 that the intersection of Pleasant Valley Road at Faith Lane goes from an acceptable LOS E condition in the pm peak hour to an unacceptable LOS F condition when the project traffic is added in. This intersection would provide primary access to the project site, and the change in level of service is due to addition of the project traffic to the Faith Lane approach.

**Table 9. Year 2018 Scenarios Roadway Segment Level of Service Summary**

| ARTERIAL SEGMENT LOCATION |   |     | SIMTRAFFIC ARTERIAL SEGMENT ANALYSIS, HCM 2010 |                   |           |           |        |           |           |                   |           |           |        |           |           |
|---------------------------|---|-----|--|-------------------|-----------|-----------|--------|-----------|-----------|-------------------|-----------|-----------|--------|-----------|-----------|
|                           |   |     | Road Type                                      | Year 2018 AM Peak |           |           |        |           |           | Year 2018 PM Peak |           |           |        |           |           |
|                           |   |     |  | No PROJ           |           |           | w/PROJ |           |           | No PROJ           |           |           | w/PROJ |           |           |
|                           |   |     |  | LOS               | AVG Delay | AVG Speed | LOS    | AVG Delay | AVG Speed | LOS               | AVG Delay | AVG Speed | LOS    | AVG Delay | AVG Speed |
| 1                         | Missouri Flat Plaza to US 50 WB Ramps       | 4AD | B  | 15.3              | 10        | B         | 18.7   | 10        | C         | 25.2              | 5         | C         | 24.6   | 5         |           |
| 2                         | Missouri Flat US 50 WB Ramps to EB Ramps    | 4AD | A  | 8.3               | 16        | B         | 12.0   | 14        | A         | 6.7               | 19        | B         | 15.8   | 10        |           |
| 3                         | Missouri Flat US 50 EB Ramps to Mother Lode | 4AD | A  | 9.5               | 10        | B         | 11.8   | 10        | C         | 22.8              | 4         | B         | 13.3   | 6         |           |
| 4                         | Missouri Flat Mother Lode to Forni          | 4AD | A  | 3.5               | 20        | A         | 5.9    | 14        | C         | 25.3              | 4         | A         | 5.7    | 16        |           |
| 5                         | Missouri Flat Forni to Golden Center        | 4AD | C  | 20.3              | 12        | C         | 22.6   | 11        | C         | 24.9              | 10        | B         | 16.0   | 15        |           |
| 6                         | Missouri Flat Golden Center to China Garden | 2A  | B  | 13.6              | 16        | A         | 8.8    | 16        | B         | 10.0              | 20        | A         | 7.1    | 19        |           |
| 7                         | Missouri Flat China Garden to Industrial    | 2A  | A  | 1.6               | 33        | A         | 1.4    | 24        | A         | 1.5               | 30        | A         | 2.7    | 22        |           |
| 8                         | Missouri Flat Industrial to Enterprise      | 2A  | A  | 1.6               | 38        | A         | 2.1    | 37        | A         | 1.6               | 38        | A         | 7.4    | 20        |           |
| 9                         | Missouri Flat Enterprise to Pleasant Valley | 2A  | A  | 1.4               | 40        | A         | 2.4    | 36        | A         | 5.0               | 29        | B         | 13.5   | 15        |           |
| 10                        | Pleasant Valley Missouri Flat to Faith      | 2A  | C  | 15.2              | 22        | C         | 16.0   | 21        | C         | 15.5              | 21        | C         | 17.0   | 20        |           |
| 11                        | Pleasant Valley Faith to China Garden       | 2A  | A  | 3.6               | 35        | A         | 4.0    | 35        | C         | 21.0              | 24        | C         | 21.0   | 24        |           |
| 12                        | Pleasant Valley China Garden to Fowler      | 2A  | A  | 4.0               | 35        | A         | 6.0    | 30        | C         | 22.0              | 24        | C         | 24.0   | 21        |           |
| 13                        | Pleasant Valley Missouri Flat to Commerce   | 2A  | A  | 3.2               | 36        | A         | 3.4    | 35        | A         | 2.6               | 39        | A         | 2.9    | 38        |           |
| 14                        | Pleasant Valley Commerce to Patterson       | 2A  | A  | 5.3               | 37        | A         | 6.4    | 35        | A         | 7.3               | 34        | A         | 9.0    | 33        |           |
| 15                        | Pleasant Valley Patterson to Forni          | 2A  | A  | 6.6               | 20        | A         | 6.7    | 20        | A         | 5.9               | 21        | A         | 6.3    | 20        |           |
| 16                        | Pleasant Valley Forni to SR 49 (south)      | 2A  | B  | 10.5              | 15        | B         | 10.5   | 15        | B         | 10.7              | 15        | B         | 10.9   | 15        |           |

Source: Year 2018 traffic counts taken by PRISM Engineering, mid-block totals, am, pm peak hour, plus Project

### Year 2018 Roadway Segment Analyses Results

Table 9 shows that all locations for roadway segments calculate to LOS C or better conditions based on the HCM 2010 microsimulation model SimTraffic (for Missouri Flat Road and Pleasant Valley Road segments). These are satisfactory levels of service for roadway segments, less than the allowable LOS F conditions for roadway segments as per Policy TC-Xa<sup>8</sup>. These results closely correspond to the levels of service calculated for intersections (see Table 8). The results in Table 9 indicate that LOS C or better conditions prevails on Missouri Flat Road and Pleasant Valley Road. The project, therefore, does not create a significant impact to levels of service on the Missouri Flat Road arterial road segments (LOS C is OK), nor does the project create any significant impact to any of the Pleasant Valley Road arterial road segments (all LOS C or better). No roadway segment widening mitigations are recommended for this scenario. In the queue analysis summary tables that follow, the signalized intersections were analyzed for queue lengths on left turn pockets for all approaches to determine if the estimated queues would exceed the existing storage length of these turn pockets. If so, the table reports this problem as a YES in a red highlighted cell in Table 10 or Table 11. Note that intersections #18 and #19 are marked as “N/A” because they are a future intersection that would be constructed with the Diamond Springs Parkway connecting Missouri Flat Road on its west end with SR 49 on the east end.

<sup>8</sup> As per Policy TC-Xa (Table TC-2), Missouri Flat Road is allowed to operate at LOS F, provided the V/C ratio does not exceed 1.12 from U.S. Highway 50 to Mother Lode Drive, or 1.20 from Mother Lode Drive to China Garden Road.

**Table 10 Year 2018 AM Peak Signalized Intersection Queues Summary**

| INTERSECTION LOCATION |  | AM Existing Year 2018 |        |           |       | AM Year 2018+Project |        |           |       |
|-----------------------|--|-----------------------|--------|-----------|-------|----------------------|--------|-----------|-------|
|                       |  | Lane                  | Length | 95% Queue | Over? | Lane                 | Length | 95% Queue | Over? |
| 1                     | Missouri Flat Rd at Plaza Dr           | NBL                   | 330    | 49        | NO    | NBL                  | 330    | 56        | NO    |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | NBL                   | 150    | 182       | YES   | NBL                  | 150    | 140       | NO    |
|                       |  | WBL                   | 500    | 253       | NO    | WBL                  | 500    | 156       | NO    |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | SBL                   | 150    | 132       | NO    | SBL                  | 150    | 106       | NO    |
|                       |  | EBR                   | 600    | 192       | NO    | EBR                  | 600    | 148       | NO    |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | EBL                   | 220    | 123       | NO    | EBL                  | 220    | 133       | NO    |
| 5                     | Missouri Flat Rd at Forni Rd           | EBL                   | 200    | 135       | NO    | EBL                  | 200    | 164       | NO    |
| 6                     | Missouri Flat Rd at Golden Center Dr   | NBL                   | 175    | 81        | NO    | NBL                  | 175    | 149       | NO    |
| 8                     | Missouri Flat Rd at Industrial Dr      | NBL                   | 75     | 36        | NO    | NBL                  | 75     | 36        | NO    |
| 9                     | Missouri Flat Rd at Enterprise Dr      | NBL                   | 90     | 32        | NO    | NBL                  | 90     | 40        | NO    |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | EBL                   | 150    | 144       | NO    | EBL                  | 150    | 173       | YES   |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | EBL                   | 225    | 99        | NO    | EBL                  | 225    | 110       | NO    |
| 15                    | Pleasant Valley Rd at Patterson Dr     | NBR                   | 200    | 88        | NO    | NBR                  | 200    | 96        | NO    |
| 18                    | Diamond Springs Parkway at SR 49       | N/A                   | N/A    | N/A       | N/A   | N/A                  | N/A    | N/A       | N/A   |
| 19                    | Diamond Springs Pkwy at Missouri Flat  | N/A                   | N/A    | N/A       | N/A   | N/A                  | N/A    | N/A       | N/A   |

Source: PRISM Engineering and Synchro 9.0 HCM 2010 methods

**Table 11 Year 2018 PM Peak Signalized Intersection Queues Summary**

| INTERSECTION LOCATION |  | PM Existing Year 2018 |        |           |       | PM Year 2018+Project |        |           |       |
|-----------------------|--|-----------------------|--------|-----------|-------|----------------------|--------|-----------|-------|
|                       |  | Lane                  | Length | 95% Queue | Over? | Lane                 | Length | 95% Queue | Over? |
| 1                     | Missouri Flat Rd at Plaza Dr           | NBL                   | 330    | 132       | NO    | NBL                  | 330    | 146       | NO    |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | NBL                   | 150    | 180       | YES   | NBL                  | 150    | 163       | YES   |
|                       |  | WBL                   | 500    | 277       | NO    | WBL                  | 500    | 201       | NO    |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | SBL                   | 150    | 174       | YES   | SBL                  | 150    | 180       | YES   |
|                       |  | EBR                   | 600    | 253       | NO    | EBR                  | 600    | 222       | NO    |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | EBL                   | 220    | 135       | NO    | EBL                  | 220    | 99        | NO    |
| 5                     | Missouri Flat Rd at Forni Rd           | EBL                   | 200    | 238       | YES   | EBL                  | 200    | 256       | YES   |
| 6                     | Missouri Flat Rd at Golden Center Dr   | NBL                   | 175    | 130       | NO    | NBL                  | 175    | 113       | NO    |
| 8                     | Missouri Flat Rd at Industrial Dr      | NBL                   | 75     | 28        | NO    | NBL                  | 75     | 21        | NO    |
| 9                     | Missouri Flat Rd at Enterprise Dr      | NBL                   | 90     | 26        | NO    | NBL                  | 90     | 22        | NO    |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | EBL                   | 150    | 141       | NO    | EBL                  | 150    | 126       | NO    |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | EBL                   | 225    | 340       | YES   | EBL                  | 225    | 347       | YES   |
| 15                    | Pleasant Valley Rd at Patterson Dr     | NBR                   | 200    | 74        | NO    | NBR                  | 200    | 68        | NO    |
| 18                    | Diamond Springs Parkway at SR 49       | N/A                   | N/A    | N/A       | N/A   | N/A                  | N/A    | N/A       | N/A   |
| 19                    | Diamond Springs Pkwy at Missouri Flat  | N/A                   | N/A    | N/A       | N/A   | N/A                  | N/A    | N/A       | N/A   |

Source: PRISM Engineering and Synchro 9.0 HCM 2010 methods

Four of the intersections had pm peak hour turn pocket overflow issues for the 95<sup>th</sup> percentile calculations in the HCM 2010 methodology. These intersections had the overflow problem with and without the project traffic. The intersections with overflows are identified in the tables with red highlighted cells for both the am and pm peak hour time periods.

Sometimes when a right turn pocket overflows, it stops progress of through lane traffic, and the same is true for left turn pockets that have overflow and exceed the capacity of their length. Tables 10 and 11 for the am peak hour and pm peak hour traffic patterns respectively, show the critical overflow areas highlighted in red with “YES” to show 95% queue lengths greater than the turn bay length.

### **Traffic Signal Warrants, Year 2018 Scenarios**

Table 12 reports the signal warrant analysis results for the Year 2018 am and pm peak hour scenarios (with and without project). Signals are warranted at four (4) out of the six (6) unsignalized study intersections. These are shown as “YES” in Table 12.

The California MUTCD stipulates thresholds for traffic conditions when a signal may be warranted based on the traffic volumes. The warrant for peak hour volumes was used in this report (Section 4C.04 Warrant 3, Peak Hour<sup>9</sup>). Based on this warrant, signals are currently warranted at five of the eight unsignalized study area intersections, even without the project, as shown in Table 12.

---

<sup>9</sup>The Peak Hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

Guidance: 06 If this warrant is the only warrant met and a traffic control signal is justified by an engineering study, the traffic control signal should be traffic-actuated.



**Table 12. Signal Warrants for Year 2018 AM & PM Peak Hour Scenarios**

| <b>Intersection</b>                          | <b>AM for YEAR 2018</b> | <b>AM+PROJ for YEAR 2018</b> | <b>PM for YEAR 2018</b> | <b>PM+PROJ for YEAR 2018</b> |
|--|-------------------------|------------------------------|-------------------------|------------------------------|
| <b>Missouri Flat Rd at China Garden Rd</b>   | YES                     | YES                          | YES                     | YES                          |
| <b>Pleasant Valley Rd at Faith Ln</b>        | NO                      | NO                           | NO                      | NO                           |
| <b>Pleasant Valley Rd at China Garden Rd</b> | NO                      | NO                           | NO                      | NO                           |
| <b>Pleasant Valley Rd at Commerce Way</b>    | NO                      | NO                           | YES                     | YES                          |
| <b>Pleasant Valley Rd at Forni Rd</b>        | YES                     | YES                          | YES                     | YES                          |
| <b>Pleasant Valley Rd at SR 49 South</b>     | YES                     | YES                          | YES                     | YES                          |

*Source: PRISM Engineering traffic counts and CA MUTCD Warrants analysis (see Appendix A.11 for details on specific volumes used in the signal warrant analysis, as well as various criteria for warrants depending on two lane road, four lane road, six or more lane roads, etc).*

### **Project Impacts for this Year 2018 plus Project Scenario**

- Intersection Level of Service: Within acceptable County thresholds with the exception of two unsignalized intersections shown in Table 8:
  - Pleasant Valley Road and Faith Lane would operate at LOS B overall for Year 2018 pm peak hour plus project, but LOS F for the side street. This changes from LOS E for the side street without the project.
  - Pleasant Valley Road and SR 49 S is currently at LOS E for existing am peak hour, a signal is warranted at this intersection, and remains at LOS E with the project.
- SIMTRAFFIC Arterial Segment Level of Service: All locations are at LOS D or better conditions using this microsimulation methodology. No further mitigations are necessary based on segment analysis.
- Signalized Intersection Queues: The project adds to the 95<sup>th</sup> percentile queue overflows. See Tables 10 and 11 for red cells where a problem exists and would also be slightly additionally impacted by the project, lengthening the queues by as much as one additional vehicle length (not significant increase).
- Signal Warrants: Significant. Warrants met at four of the six unsignalized intersections as shown in the green highlighted cells of Table 12.

## V. Near Term Future Year 2027 Conditions

### Nearby Roadway Development Projects

Certain improvements to the study area roadway network were assumed to be in place in the Year 2027 and beyond scenarios. These include the proposed Diamond Springs Parkway (DSP) connection of Missouri Flat Road to SR 49. This capital improvement was included in the County's traffic model, reassigning traffic in the study area and lessening traffic volumes on Missouri Flat Road south of the parkway. Pleasant Valley Road volumes were also relieved with the parkway because of reassignment of traffic to use the new and more efficient corridor pathway of Pleasant Valley Road to SR 49 to Diamond Springs Parkway to Missouri Flat Road to the US 50 freeway. In addition, China Garden Road at Missouri Flat Road will no longer have a left turn out onto Missouri Flat Road. We reassigned this movement to the through volumes on DSP.

In order to develop the Year 2027 volumes, PRISM Engineering utilized linear interpolation methods to find the appropriate growth rates to determine the Year 2027 volumes from existing Year 2018 counts. These same volumes were adjusted accordingly based on traffic reassignment patterns found in the differences between the year 2010 County traffic model and the year 2035 traffic model which had the Diamond Springs Parkway in it. We were able to determine the percent differences, by year, for each of the link segments in the model along Missouri Flat Road and Pleasant Valley Road in the study area, whether it be a net increase or a net decrease (negative growth) on account of traffic shifts away from Missouri Flat Road south of the Diamond Springs Parkway corridor. The near-term conditions (10 years out from project, or Year 2027) anticipated the growth assumptions in the County's travel demand model, or in other words, the County's travel demand model contains the assumed background growth.

### Calculation of Future Growth for Background Traffic.

PRISM Engineering obtained detailed output plots from the El Dorado County Department of Transportation staff<sup>10</sup> from their Travel Demand Forecast Model. The model anticipates future development within the County for the am and pm peak hour, Year 2010 and 2035 projections. The model output was used in linear interpolation to develop the Year 2027 traffic projection. Yearly growth rates for roads within the project study area were used to develop interim Year 2027 scenario background volumes for the analysis of the project. However, because of the shifts in traffic that would take place with the installation of the Diamond Springs Parkway, volumes on Missouri Flat Road would correspondingly go down. Also, Pleasant Valley Road between Missouri Flat Road and Fowler Lane would be reduced (by about 10%). Table 13 shows the growth rate calculations used. The difference in volume between the Year 2035 and Year 2010 models was used to get the 25 year increase, but only 18 years were used between 2018 and 2035. Specific roadway segment growth rates were used and not a global growth rate at all intersections. Volumes were balanced between intersections using the Volume Balance (VB) feature in the Synchro software. The Year 2027 and 2035 scenarios for both the am and pm peak hour and where all base volumes are balanced. Figures 14 and 15 show turning movements for the Year 2018 traffic projections only (no project traffic). Figures 16 and 17 show the turning movement diagrams for am and pm peak when the Project traffic is added in.

---

<sup>10</sup> Model plots received from DOT via Senior Civil Engineer Natalie Porter via email. Summarized in Appendix.

**Table 13. Growth Rate Calculations for Study Area Roadways**

|                                    | Peak Hour Volumes From 2010 and 2035 TDM Models |      |           |      |             |             |                |              |                |              |
|------------------------------------|---|------|-----------|------|-------------|-------------|----------------|--------------|----------------|--------------|
|                                    | Year 2010                                       |      | Year 2035 |      | % Per Year  |             | Year 2010-2035 |              | Year 2017-2035 |              |
|                                    | AM  | PM   | AM        | PM   | AM          | PM          | AM             | PM           | AM             | PM           |
| Missouri Flat north of Plaza       | 1117  | 1451 | 1385      | 1711 | 1.0%        | 0.7%        | 24.0%          | 17.9%        | 17.3%          | 12.9%        |
| Missour Flat south of Mother Lode  | 1656  | 1937 | 2236      | 2670 | 1.4%        | 1.5%        | 35.0%          | 37.8%        | 25.2%          | 27.2%        |
| Missouri Flat south of Forri       | 1292  | 1513 | 1796      | 2116 | 1.6%        | 1.6%        | 39.0%          | 39.9%        | 28.1%          | 28.7%        |
| Missour Flat south of China Garden | 1273  | 1352 | 1135      | 1234 | -0.4%       | -0.3%       | -10.8%         | -8.7%        | -7.8%          | -6.3%        |
| Missouri Flat north of SR 49       | 1186  | 1246 | 1021      | 1084 | -0.6%       | -0.5%       | -13.9%         | -13.0%       | -10.0%         | -9.4%        |
| SR 49 west of Missouri Flat        | 1300  | 1386 | 1478      | 1606 | 0.5%        | 0.6%        | 13.7%          | 15.9%        | 9.9%           | 11.4%        |
| SR 49 west of Pleasant Valley      | 1786  | 1943 | 1528      | 1626 | -0.6%       | -0.7%       | -14.4%         | -16.3%       | -10.4%         | -11.7%       |
| SR 49 west of Patterson            | 1175  | 1197 | 1344      | 1405 | 0.6%        | 0.7%        | 14.4%          | 17.4%        | 10.4%          | 12.5%        |
| SR 49 north of Pleasant Valley     | 893   | 1018 | 1117      | 1236 | 1.0%        | 0.9%        | 25.1%          | 21.4%        | 18.1%          | 15.4%        |
| US 50 FWY west of Missouri Flat    | 4221  | 4340 | 5160      | 5316 | 0.9%        | 0.9%        | 22.2%          | 22.5%        | 16.0%          | 16.2%        |
| US 50 FWY east of Missouri Flat    | 4257  | 4533 | 5009      | 5382 | 0.7%        | 0.7%        | 17.7%          | 18.7%        | 12.7%          | 13.5%        |
| US 50 EB Off at Missouri Flat      | 418   | 565  | 583       | 724  | 1.6%        | 1.1%        | 39.5%          | 28.1%        | 28.4%          | 20.3%        |
| US 50 WB on at Missouri Flat       | 521   | 430  | 673       | 558  | 1.2%        | 1.2%        | 29.2%          | 29.8%        | 21.0%          | 21.4%        |
| SR 49 south of Pleasant Valley     | 657   | 756  | 772       | 919  | 0.7%        | 0.9%        | 17.5%          | 21.6%        | 12.6%          | 15.5%        |
| Pleasant Valley west of SR 49      | 729   | 785  | 1000      | 1090 | 1.5%        | 1.6%        | 37.2%          | 38.9%        | 26.8%          | 28.0%        |
| <b>AVERAGE</b>                     |   |      |           |      | <b>0.7%</b> | <b>0.7%</b> | <b>18.3%</b>   | <b>18.1%</b> | <b>13.2%</b>   | <b>13.0%</b> |

Source: El Dorado County Traffic Model and PRISM Engineering

Using the annual growth rate calculated from the model, this was applied for 18 years growth over the existing condition to get the factor to multiply by the existing traffic count data collected in Year 2018, to convert to Year 2035 volumes. The average growth rate per year was 0.7% for either the am or pm peak hour in the study area. The average increase on study area roadways was 13.2% for the am peak, and 13% for the pm peak, as shown in Table 14. Even still, PRISM Engineering utilized specific growth rates for different parts of the Missouri Flat Road and Pleasant Valley Road corridors as shown in the table, so that the benefit of the Diamond Springs Parkway installation would be realized with lowered volumes on these roadway sections (due to reassignment of traffic as reflected in the County’s traffic model).

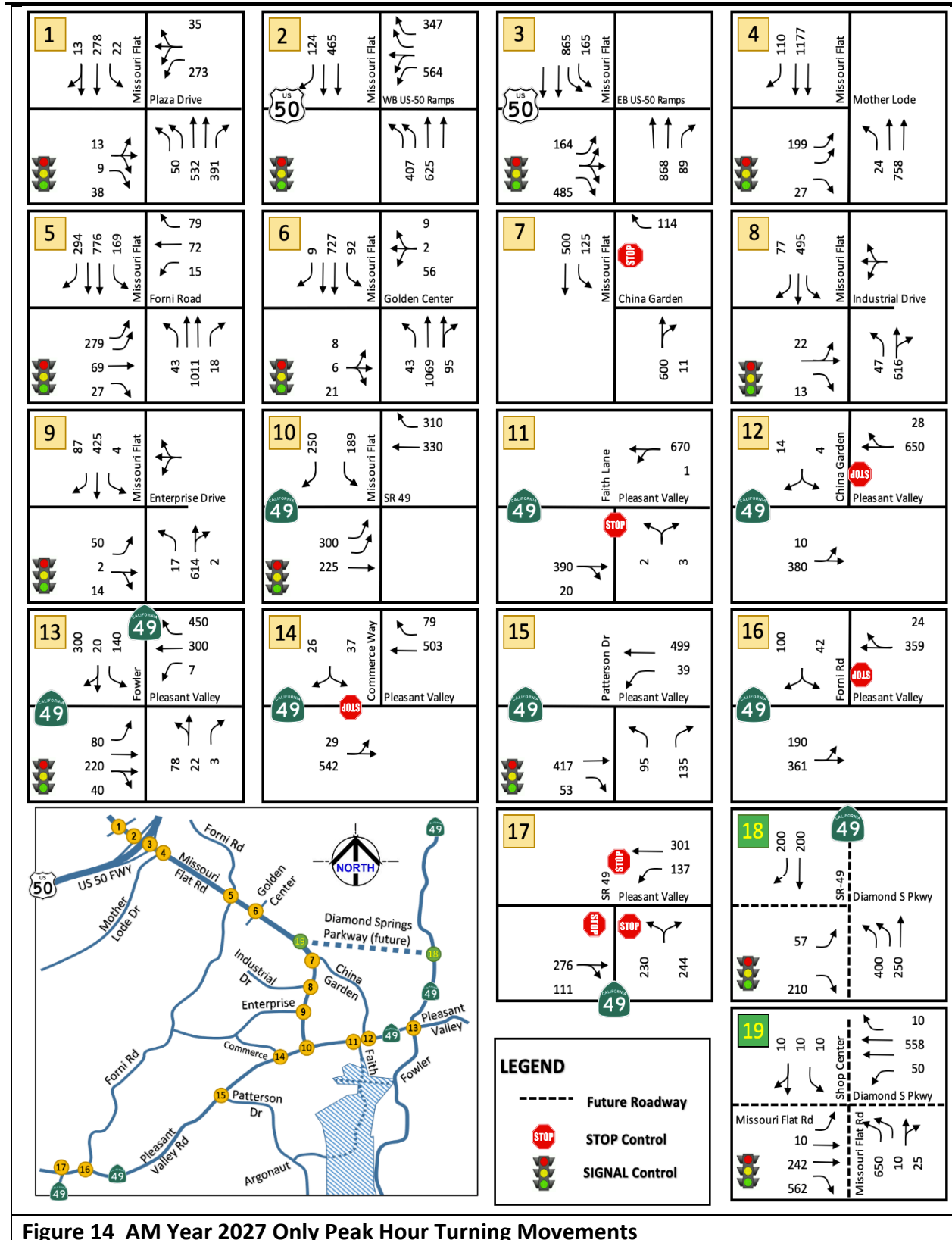
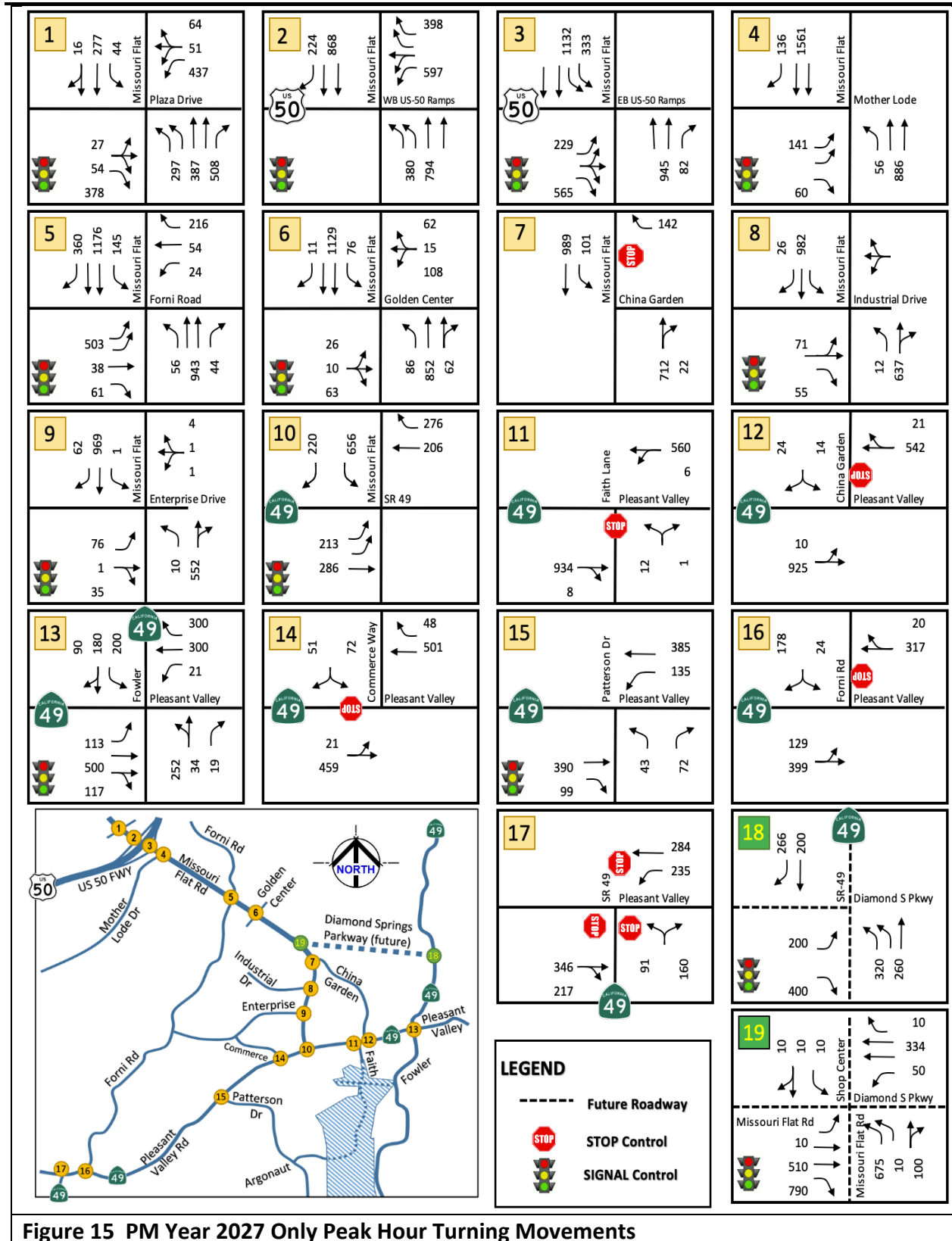
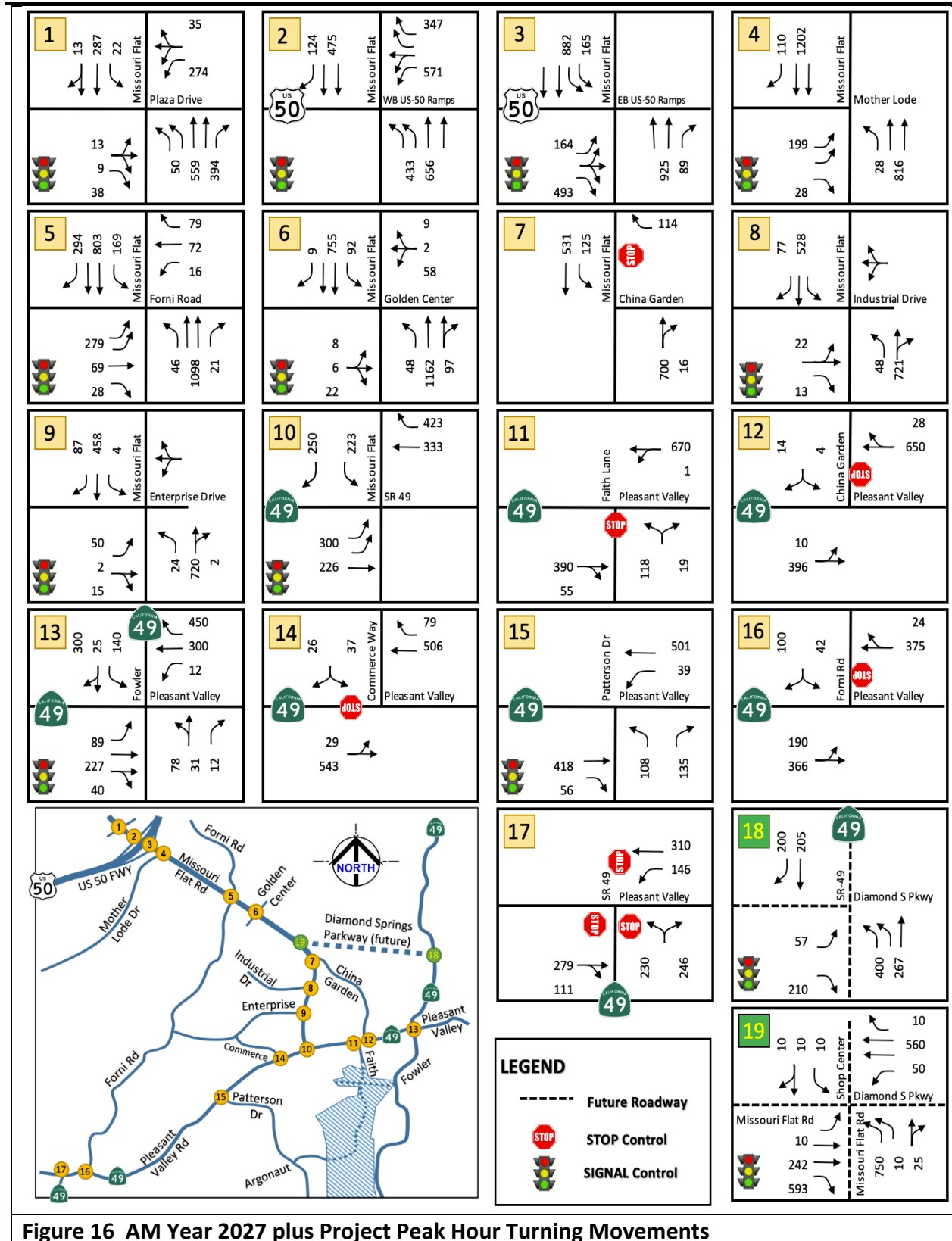
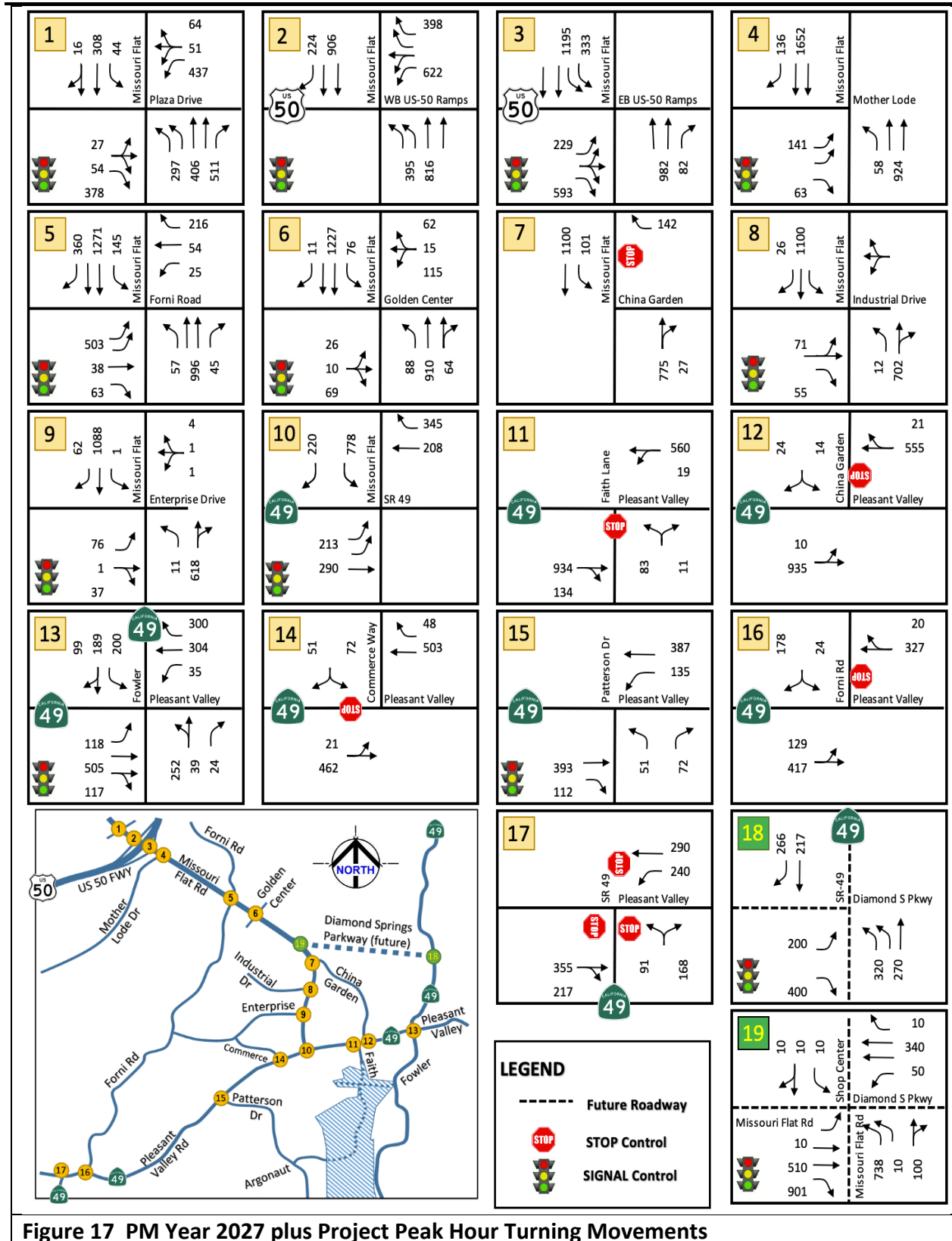


Figure 14 AM Year 2027 Only Peak Hour Turning Movements

Source: PRISM Engineering and El Dorado County









**Table 14. Year 2027 Plus Project Intersections Level of Service Summary**

| INTERSECTION LOCATION | Control                                | YEAR 2027 AM Peak |       |        |       | YEAR 2027 PM Peak |       |        |       |      |
|-----------------------|--|-------------------|-------|--------|-------|-------------------|-------|--------|-------|------|
|                       |  | No PROJ           |       | w/PROJ |       | No PROJ           |       | w/PROJ |       |      |
|                       |  | LOS               | Delay | LOS    | Delay | LOS               | Delay | LOS    | Delay |      |
| 1                     | Missouri Flat Rd at Plaza Dr           | S                 | C     | 20.8   | C     | 21.7              | C     | 28.4   | C     | 32.7 |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | S                 | B     | 15.8   | B     | 15.8              | B     | 17.3   | B     | 17.4 |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | S                 | B     | 17.4   | B     | 17.4              | C     | 21.9   | C     | 23.9 |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | S                 | A     | 9.5    | A     | 9.8               | B     | 15.6   | B     | 15.6 |
| 5                     | Missouri Flat Rd at Forni Rd           | S                 | C     | 23.7   | C     | 25.3              | C     | 33.1   | D     | 37.5 |
| 6                     | Missouri Flat Rd at Golden Center Dr   | S                 | C     | 31.5   | C     | 31.5              | C     | 31.1   | D     | 50.6 |
| 7                     | Missouri Flat Rd at China Garden Rd    | TW                | A     | 2.2    | A     | 2.2               | A     | 2.0    | A     | 2.0  |
|                       |  | WB                | C     | 15.7   | C     | 18.2              | C     | 20.2   | C     | 22.8 |
| 8                     | Missouri Flat Rd at Industrial Dr      | S                 | A     | 4.1    | A     | 4.3               | A     | 6.6    | A     | 8.6  |
| 9                     | Missouri Flat Rd at Enterprise Dr      | S                 | A     | 3.7    | A     | 4.5               | A     | 8.1    | A     | 8.9  |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | S                 | B     | 12.9   | B     | 13.2              | B     | 13.9   | C     | 24.4 |
| 11                    | Pleasant Valley Rd at Faith Ln         | TW                | A     | 0.1    | A     | 5.4               | A     | 0.4    | B     | 10.5 |
|                       |  | NB                | C     | 15.4   | E     | 48.1              | E     | 41.7   | F     | 191  |
| 12                    | Pleasant Valley Rd at China Garden Rd  | TW                | A     | 0.3    | A     | 0.3               | A     | 0.7    | A     | 0.7  |
|                       |  | SB                | C     | 16.0   | C     | 16.1              | D     | 25.8   | D     | 26.7 |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | S                 | B     | 14.5   | B     | 15.5              | C     | 21.5   | C     | 21.5 |
| 14                    | Pleasant Valley Rd at Commerce Way     | TW                | A     | 1.5    | A     | 1.5               | A     | 3.1    | A     | 3.1  |
|                       |  | SB                | C     | 23.5   | C     | 23.5              | D     | 26.3   | D     | 26.5 |
| 15                    | Pleasant Valley Rd at Patterson Dr     | S                 | A     | 7.5    | A     | 8.1               | A     | 7.4    | A     | 7.4  |
| 16                    | Pleasant Valley Rd at Forni Rd         | TW                | A     | 4.9    | A     | 5.0               | A     | 4.1    | A     | 4.1  |
|                       |  | SB                | D     | 25.1   | D     | 26.2              | C     | 16.3   | C     | 16.8 |
| 17                    | Pleasant Valley Rd at SR 49 S          | AW                | F     | 56.7   | F     | 58.9              | D     | 28.4   | D     | 31.0 |
| 18                    | Diamond Springs Parkway at SR 49       | S                 | B     | 11.0   | B     | 11.3              | B     | 12.3   | B     | 12.9 |
| 19                    | Diamond Springs Pkwy at Missouri Flat  | S                 | B     | 15.2   | B     | 15.2              | B     | 17.3   | B     | 19.1 |

Control: S=Signal, AW=All-Way Stop, TW=Stop Sign Side Street, NB=NB approach Stop

NOTE: Calculations based on HCM 2010 methodology for intersection level of service (signal, two-way, and all-way stop)

Source: PRISM Engineering and HCM 2010 calculation in Synchro and/or SimTraffic

It can be seen from Table 14 that there is only one intersection in the Year 2027 pm peak hour with a side street level of service at LOS F conditions when the project traffic is added in: Pleasant Valley Road at Faith Lane, which provides primary access to the project site.

For this Year 2027 scenario, one intersection (#11) had LOS F side street delay for the pm peak hour plus project scenario. There was a slight lowering of volumes on Missouri Flat Road after installation of the Diamond Springs Parkway, which results in some rerouting of through traffic to the new parkway, away from Missouri Flat Road and Pleasant Valley Road. Intersection #18 had LOS F conditions for the am peak hour.

**Table 15. Year 2027 Scenarios Roadway Segment Level of Service Summary**

| ARTERIAL SEGMENT LOCATION |   | Road Type | SIMTRAFFIC ARTERIAL SEGMENT ANALYSIS, HCM 2010 |           |           |        |           |           |                   |           |           |        |           |           |
|---------------------------|---|-----------|--|-----------|-----------|--------|-----------|-----------|-------------------|-----------|-----------|--------|-----------|-----------|
|                           |   |           | Year 2027 AM Peak                              |           |           |        |           |           | Year 2027 PM Peak |           |           |        |           |           |
|                           |   |           | No PROJ  |           |           | w/PROJ |           |           | No PROJ           |           |           | w/PROJ |           |           |
|                           |   |           | LOS  | AVG Delay | AVG Speed | LOS    | AVG Delay | AVG Speed | LOS               | AVG Delay | AVG Speed | LOS    | AVG Delay | AVG Speed |
| 1                         | Missouri Flat Plaza to US 50 WB Ramps       | 4AD       | B  | 17.2      | 9         | B      | 19.4      | 10        | C                 | 24.3      | 5         | D      | 35.7      | 5         |
| 2                         | Missouri Flat US 50 WB Ramps to EB Ramps    | 4AD       | A  | 9.0       | 15        | B      | 13.6      | 13        | A                 | 6.2       | 19        | B      | 19.9      | 9         |
| 3                         | Missouri Flat US 50 EB Ramps to Mother Lode | 4AD       | A  | 9.4       | 10        | B      | 10.4      | 8         | B                 | 10.1      | 8         | C      | 21.2      | 7         |
| 4                         | Missouri Flat Mother Lode to Forni          | 4AD       | A  | 4.3       | 18        | A      | 6.6       | 14        | A                 | 5.7       | 17        | A      | 9.1       | 12        |
| 5                         | Missouri Flat Forni to Golden Center        | 4AD       | C  | 23.0      | 11        | C      | 23.9      | 10        | C                 | 30.3      | 7         | D      | 39.1      | 6         |
| 6                         | Missouri Flat Golden Center to China Garden | 2A        | B  | 12.8      | 12        | B      | 12.4      | 12        | B                 | 10.5      | 13        | C      | 16.8      | 10        |
| 7                         | Missouri Flat China Garden to Industrial    | 2A        | A  | 1.6       | 24        | A      | 1.7       | 24        | A                 | 2.0       | 23        | A      | 3.3       | 19        |
| 8                         | Missouri Flat Industrial to Enterprise      | 2A        | A  | 1.4       | 39        | A      | 1.4       | 39        | A                 | 1.3       | 40        | A      | 2.6       | 35        |
| 9                         | Missouri Flat Enterprise to Pleasant Valley | 2A        | A  | 2.0       | 38        | A      | 1.8       | 37        | A                 | 1.9       | 39        | A      | 2.5       | 38        |
| 10                        | Pleasant Valley Missouri Flat to Faith      | 2A        | B  | 12.2      | 26        | B      | 14.0      | 24        | B                 | 12.5      | 24        | B      | 12.7      | 24        |
| 11                        | Pleasant Valley Faith to China Garden       | 2A        | A  | 3.5       | 35        | A      | 4.0       | 34        | A                 | 3.5       | 39        | A      | 4.0       | 37        |
| 12                        | Pleasant Valley China Garden to Fowler      | 2A        | A  | 3.7       | 32        | A      | 4.3       | 31        | A                 | 3.7       | 37        | A      | 4.2       | 33        |
| 13                        | Pleasant Valley Missouri Flat to Commerce   | 2A        | A  | 3.3       | 35        | A      | 3.4       | 35        | A                 | 2.5       | 40        | A      | 2.7       | 39        |
| 14                        | Pleasant Valley Commerce to Patterson       | 2A        | A  | 7.1       | 35        | A      | 7.6       | 34        | A                 | 7.6       | 34        | A      | 6.5       | 36        |
| 15                        | Pleasant Valley Patterson to Forni          | 2A        | A  | 7.2       | 19        | A      | 8.3       | 18        | A                 | 6.1       | 20        | A      | 6.0       | 21        |
| 16                        | Pleasant Valley Forni to SR 49 (south)      | 2A        | B  | 11.0      | 14        | B      | 11.4      | 14        | B                 | 10.4      | 15        | B      | 11.2      | 14        |

Source: Year 2018 traffic counts taken by PRISM Engineering, mid-block totals, am, pm peak hour, plus Project

Table 15 shows the capacity analysis results for link segments, which are at an acceptable LOS C or better condition without the project, and LOS D or better with the project. The values in Table 15 are the street segment level of service in the study area for the Year 2027 scenarios.

In the tables that follow, the signalized intersections were analyzed for queue lengths on left turn pockets for all approaches to determine if the estimated queues would exceed the existing storage length of these turn pockets. If so, the table reports this problem as a YES in a red highlighted cell in Table 16 or Table 17.

**Table 16. Year 2027 AM Peak Signalized Intersection Queues Summary**

| INTERSECTION LOCATION |  | AM Year 2027 |        |           |       | AM Year 2027+Project |        |           |       |
|-----------------------|--|--------------|--------|-----------|-------|----------------------|--------|-----------|-------|
|                       |  | Lane         | Length | 95% Queue | Over? | Lane                 | Length | 95% Queue | Over? |
| 1                     | Missouri Flat Rd at Plaza Dr           | NBL          | 330    | 63        | NO    | NBL                  | 330    | 53        | NO    |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | NBL          | 150    | 180       | YES   | NBL                  | 150    | 157       | YES   |
|                       |  | WBL          | 500    | 259       | NO    | WBL                  | 500    | 204       | NO    |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | SBL          | 150    | 104       | NO    | SBL                  | 150    | 124       | NO    |
|                       |  | EBR          | 600    | 199       | NO    | EBR                  | 600    | 160       | NO    |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | EBL          | 220    | 189       | NO    | EBL                  | 220    | 138       | NO    |
| 5                     | Missouri Flat Rd at Forni Rd           | EBL          | 200    | 136       | NO    | EBL                  | 200    | 152       | NO    |
| 6                     | Missouri Flat Rd at Golden Center Dr   | NBL          | 175    | 124       | NO    | NBL                  | 175    | 95        | NO    |
| 8                     | Missouri Flat Rd at Industrial Dr      | NBL          | 75     | 43        | NO    | NBL                  | 75     | 50        | NO    |
| 9                     | Missouri Flat Rd at Enterprise Dr      | NBL          | 90     | 26        | NO    | NBL                  | 90     | 27        | NO    |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | EBL          | 150    | 140       | NO    | EBL                  | 150    | 140       | NO    |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | EBL          | 225    | 88        | NO    | EBL                  | 225    | 90        | NO    |
| 15                    | Pleasant Valley Rd at Patterson Dr     | NBR          | 200    | 98        | NO    | NBR                  | 200    | 88        | NO    |
| 18                    | Diamond Springs Parkway at SR 49       | NBL          | 200    | 100       | NO    | NBL                  | 200    | 164       | NO    |
| 19                    | Diamond Springs Pkwy at Missouri Flat  | NBL          | 200    | 170       | NO    | NBL                  | 200    | 182       | NO    |

Source: PRISM Engineering and Synchro 9.0 HCM 2010 methods

**Table 17. Year 2027 PM Peak Signalized Intersection Queues Summary**

| INTERSECTION LOCATION |  | PM Year 2027 |        |           |       | PM Year 2027+Project |        |           |       |
|-----------------------|--|--------------|--------|-----------|-------|----------------------|--------|-----------|-------|
|                       |  | Lane         | Length | 95% Queue | Over? | Lane                 | Length | 95% Queue | Over? |
| 1                     | Missouri Flat Rd at Plaza Dr           | NBL          | 330    | 154       | NO    | NBL                  | 330    | 151       | NO    |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | NBL          | 150    | 187       | YES   | NBL                  | 150    | 163       | YES   |
|                       |  | WBL          | 500    | 255       | NO    | WBL                  | 500    | 220       | NO    |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | SBL          | 150    | 167       | YES   | SBL                  | 150    | 210       | YES   |
|                       |  | EBR          | 600    | 288       | NO    | EBR                  | 600    | 235       | NO    |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | EBL          | 220    | 211       | NO    | EBL                  | 220    | 122       | NO    |
| 5                     | Missouri Flat Rd at Forni Rd           | EBL          | 200    | 235       | YES   | EBL                  | 200    | 213       | YES   |
| 6                     | Missouri Flat Rd at Golden Center Dr   | NBL          | 175    | 172       | NO    | NBL                  | 175    | 145       | NO    |
| 8                     | Missouri Flat Rd at Industrial Dr      | NBL          | 75     | 24        | NO    | NBL                  | 75     | 37        | NO    |
| 9                     | Missouri Flat Rd at Enterprise Dr      | NBL          | 90     | 30        | NO    | NBL                  | 90     | 25        | NO    |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | EBL          | 150    | 133       | NO    | EBL                  | 150    | 115       | NO    |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | EBL          | 225    | 104       | NO    | EBL                  | 225    | 168       | NO    |
| 15                    | Pleasant Valley Rd at Patterson Dr     | NBR          | 200    | 76        | NO    | NBR                  | 200    | 73        | NO    |
| 18                    | Diamond Springs Parkway at SR 49       | NBL          | 200    | 117       | NO    | NBL                  | 200    | 111       | NO    |
| 19                    | Diamond Springs Pkwy at Missouri Flat  | NBL          | 200    | 180       | NO    | NBL                  | 200    | 199       | NO    |

Source: PRISM Engineering and Synchro 9.0 HCM 2010 methods

Intersections #18 and #19 are now operative in this scenario because they are the future intersections that would connect the future Diamond Springs Parkway between Missouri Flat Road on its west end with

SR 49 on the east end. Three of the intersections had turn pocket overflow issues without the project for the 95<sup>th</sup> percentile calculations in the HCM 2010 methodology (Missouri Flat Road at US 50 WB Ramp NBL, Missouri Flat Road at US 50 EB Ramp SBL, and at Forni Road EBL). These overflows are identified in the tables with red highlighted cells for both the am and pm peak hour time periods. When the pm peak hour project traffic is added in, there are no changes to the overflow status.

### **Traffic Signal Warrants, Year 2027 Scenarios**

Table 18 reports the signal warrant analysis results for the Year 2027 am and pm peak hour scenarios (with and without project). Table 18 shows that signal warrants are met for four out of the six intersections in the Year 2027 scenarios. The California MUTCD stipulates thresholds for traffic conditions when a signal may be warranted based on the traffic volumes. The warrant for peak hour volumes was used in this report (Section 4C.04 Warrant 3, Peak Hour<sup>11</sup>). Based on this warrant, and in the Year 2027 scenarios, signals are currently warranted at five of the eight unsignalized study area intersections, even without the project, as shown in Table 18.

### **Project Impacts for the Year 2027 plus Project Scenario**

- Intersection Level of Service: Within acceptable County thresholds with the exception of two unsignalized intersections shown in Table 14 with red highlighted cells including:
  - Pleasant Valley Road and Faith Lane at LOS B overall for Year 2027 pm peak hour plus project, but LOS F for side street (191 secs of average delay) with the full project impact.
  - Pleasant Valley Road and SR 49 S is at LOS F for Year 2027 am peak hour plus project, and a signal is warranted at this intersection. The intersection level of service remains at LOS F with the project with a slightly higher delay (58.9 secs of average delay compared to 56.7 without the project).
- SIMTRAFFIC Arterial Segment Level of Service: All locations are at LOS D or better conditions with this microsimulation methodology. No further mitigations necessary.
- Signalized Intersection Queues: The project adds to the 95% queue overflows. See Tables 16 and 17 for red cells where a problem exists and would also be slightly additionally impacted by the project, lengthening the queues by just a few feet (not significant increase). The queues clear quickly enough without significantly impacting LOS at adjacent intersections.
- Signal Warrants: Significant. Warrants met at four of the six unsignalized intersections as shown in Table 18.

---

<sup>11</sup>The Peak Hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

Guidance: 06 If this warrant is the only warrant met and a traffic control signal is justified by an engineering study, the traffic control signal should be traffic-actuated.

**Table 18. Signal Warrants Status for Year 2027 AM & PM Peak Hour Scenarios**

| <b>Intersection</b>                          | <b>AM for YEAR 2027</b> | <b>AM+PROJ for YEAR 2027</b> | <b>PM for YEAR 2027</b> | <b>PM+PROJ for YEAR 2027</b> |
|--|-------------------------|------------------------------|-------------------------|------------------------------|
| <b>Missouri Flat Rd at China Garden Rd</b>   | YES                     | YES                          | YES                     | YES                          |
| <b>Pleasant Valley Rd at Faith Ln</b>        | NO                      | NO                           | NO                      | NO                           |
| <b>Pleasant Valley Rd at China Garden Rd</b> | NO                      | NO                           | NO                      | NO                           |
| <b>Pleasant Valley Rd at Commerce Way</b>    | NO                      | NO                           | YES                     | YES                          |
| <b>Pleasant Valley Rd at Forni Rd</b>        | YES                     | YES                          | YES                     | YES                          |
| <b>Pleasant Valley Rd at SR 49 South</b>     | YES                     | YES                          | YES                     | YES                          |

*Source: PRISM Engineering traffic counts and CA MUTCD Warrants analysis (see Appendix A.11 for details on specific volumes used in the signal warrant analysis, as well as various criteria for warrants depending on two lane road, four lane road, six or more lane roads, etc).*

## VI. Cumulative 2035, Plus Project Conditions

### Nearby Roadway and Development Projects

The same CIP improvements assumed to be in place for the Year 2027 study area roadway network were assumed to be in place in these Year 2035 scenarios. These include the Diamond Springs Parkway. The Year 2035 growth assumptions in the County's travel demand model were applied here, along with the full 100% of the project's trip generation. Traffic growth rates applied to existing counts were adjusted based on the specific percentage increase or decrease for link segments in the County's traffic model output results between the Year 2010 model and the Year 2035 model, as explained in the next paragraphs.

### Calculation of Future Growth for Background Traffic.

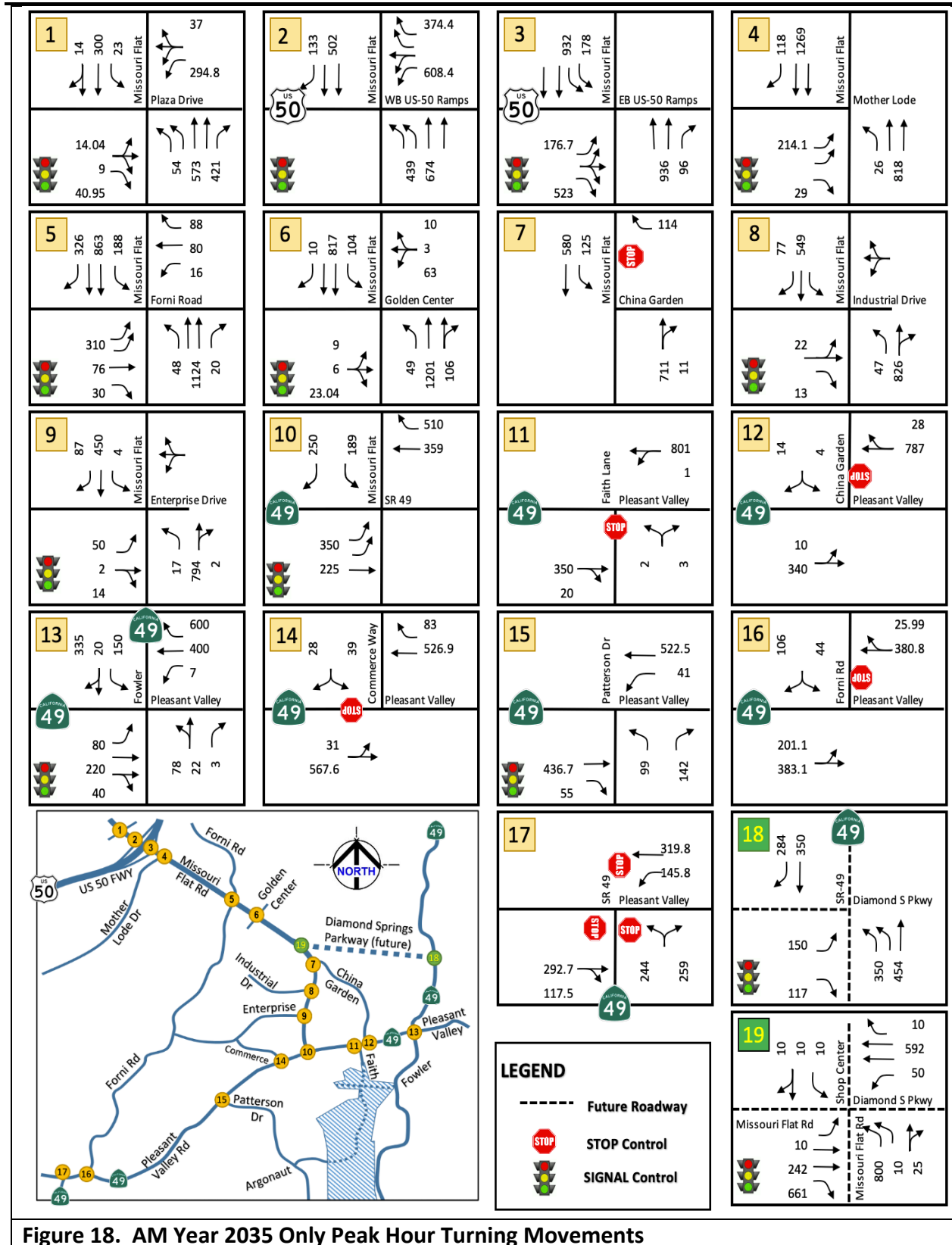
The calculation of the Year 2035 background traffic was explained in detail previously in the Year 2027 scenarios section (see *Section V. Near Term Future Year 2027 Conditions* of this report for a detailed discussion on this, as well as *Table 13 Growth Rate Calculations for Study Area Roadways* which documents the roadway volumes and growth rates calculated for all scenario years to determine specific growth rates by link segment).

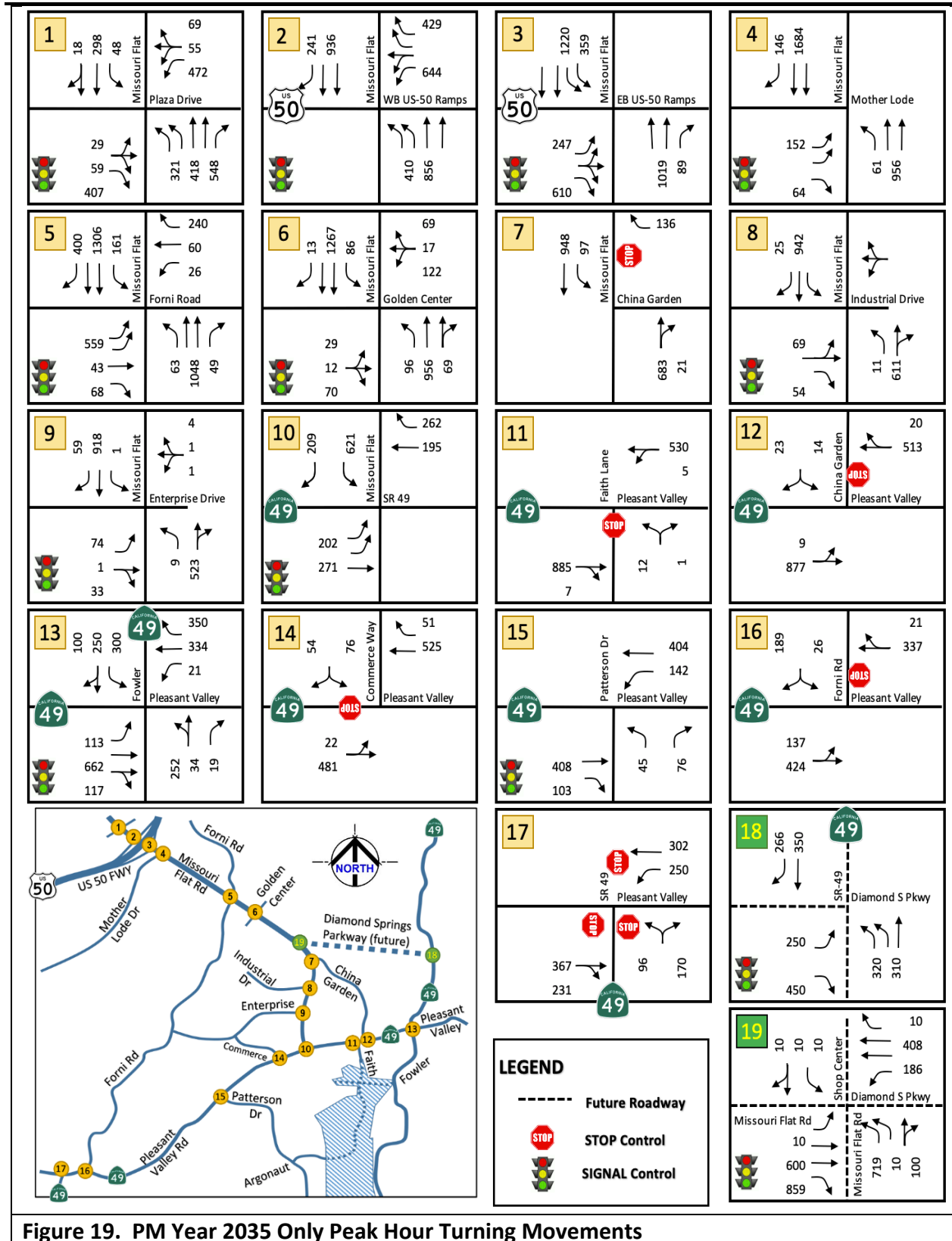
PRISM Engineering obtained detailed output plots from the El Dorado County Department of Transportation staff<sup>12</sup> from their Travel Demand Forecast Model. The average overall growth rate per year was 0.7% for either the am or pm peak hour in the study area. The average increase on study area roadways was 13.2% for the am peak, and 13% for the pm peak, as shown in Table 13, but PRISM Engineering used the specific growth rates for each specific roadway segment or intersection to calculate future growth locally and not globally. By doing this, the changes in traffic patterns after the installation of the Diamond Springs Parkway could be realized, as the County's traffic model did show Year 2035 traffic volumes on Missouri Flat Road south of China Garden Road to be slightly less than the Year 2010 model output, reflecting a shifting of traffic from this route over to the Diamond Springs Parkway, as expected.

The turning movement volumes for each of the nineteen study intersections are detailed in the following four figures for this Year 2035 scenario. Figures 18 and 19 show the Year 2035 traffic projections only, and 20 and 21 show the Year 2035 plus Project turning movement volumes.

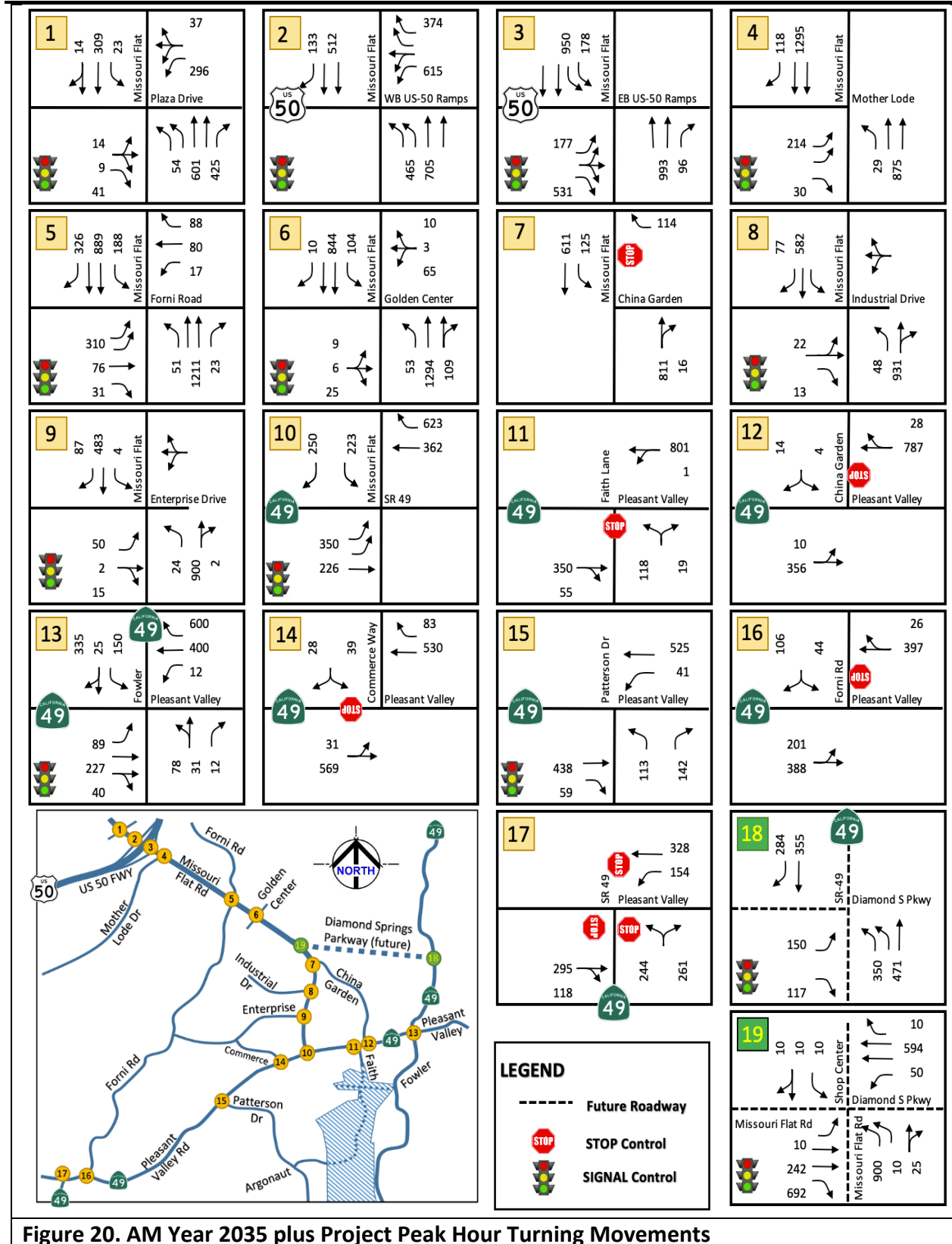
---

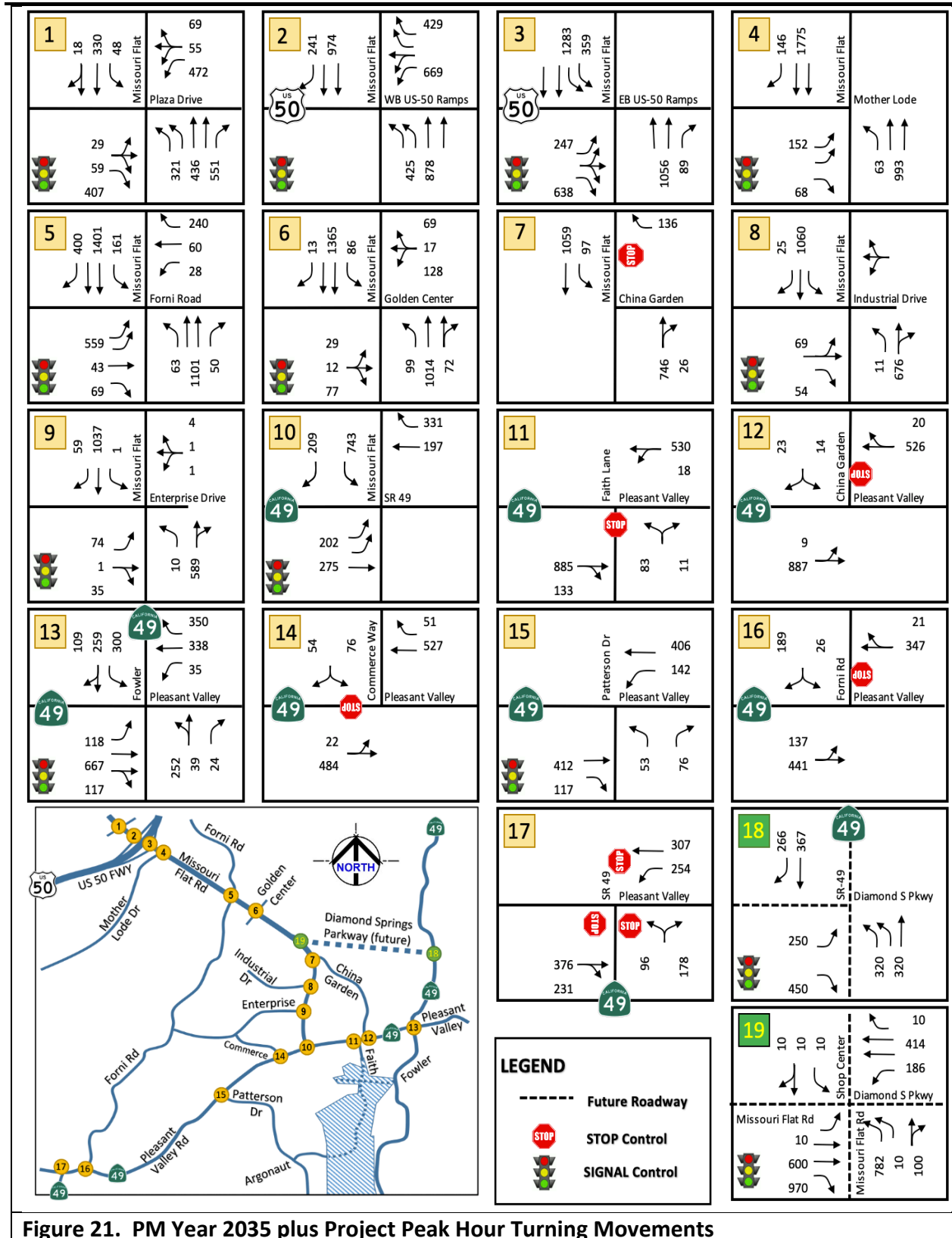
<sup>12</sup> Model plots received from DOT via Senior Civil Engineer Natalie Porter via email. Summarized in Appendix.











**Table 19. Year 2035 Plus Project Intersections Level of Service Summary**

| INTERSECTION LOCATION | Control                                | YEAR 2035 AM Peak |       |        |       | YEAR 2035 PM Peak |       |        |       |      |
|-----------------------|--|-------------------|-------|--------|-------|-------------------|-------|--------|-------|------|
|                       |  | No PROJ           |       | w/PROJ |       | No PROJ           |       | w/PROJ |       |      |
|                       |  | LOS               | Delay | LOS    | Delay | LOS               | Delay | LOS    | Delay |      |
| 1                     | Missouri Flat Rd at Plaza Dr           | S                 | C     | 21.7   | C     | 21.7              | D     | 46.6   | D     | 46.6 |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | S                 | B     | 15.9   | B     | 15.9              | C     | 25.5   | C     | 34.2 |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | S                 | B     | 14.2   | B     | 18.0              | C     | 30.3   | D     | 39.0 |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | S                 | B     | 10.5   | B     | 10.8              | B     | 14.3   | B     | 16.3 |
| 5                     | Missouri Flat Rd at Forni Rd           | S                 | C     | 29.9   | C     | 30.2              | C     | 34.2   | D     | 49.4 |
| 6                     | Missouri Flat Rd at Golden Center Dr   | S                 | C     | 28.8   | C     | 31.0              | D     | 48.6   | D     | 48.6 |
| 7                     | Missouri Flat Rd at China Garden Rd    | TW                | A     | 2.2    | A     | 2.3               | A     | 1.9    | A     | 1.9  |
|                       |  | WB                | C     | 18.3   | C     | 21.8              | C     | 18.9   | C     | 21.1 |
| 8                     | Missouri Flat Rd at Industrial Dr      | S                 | A     | 4.1    | A     | 7.9               | A     | 2.6    | A     | 4.5  |
| 9                     | Missouri Flat Rd at Enterprise Dr      | S                 | A     | 4.6    | A     | 6.0               | A     | 3.7    | A     | 3.7  |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | S                 | B     | 14.4   | B     | 19.6              | B     | 13.8   | C     | 22.9 |
| 11                    | Pleasant Valley Rd at Faith Ln         | TW                | A     | 0.1    | A     | 6.8               | A     | 0.4    | A     | 8.3  |
|                       |  | NB                | C     | 16.3   | F     | 65.2              | E     | 36.6   | F     | 142  |
| 12                    | Pleasant Valley Rd at China Garden Rd  | TW                | A     | 0.4    | A     | 0.4               | A     | 0.7    | A     | 0.7  |
|                       |  | SB                | C     | 18.4   | C     | 18.5              | C     | 23.6   | C     | 24.3 |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | S                 | B     | 18.8   | C     | 22.7              | C     | 33.5   | D     | 37.9 |
| 14                    | Pleasant Valley Rd at Commerce Way     | TW                | A     | 1.7    | A     | 1.7               | A     | 3.5    | A     | 3.6  |
|                       |  | SB                | D     | 25.9   | D     | 26.0              | D     | 29.9   | D     | 30.3 |
| 15                    | Pleasant Valley Rd at Patterson Dr     | S                 | A     | 8.1    | A     | 8.1               | A     | 7.8    | A     | 8.0  |
| 16                    | Pleasant Valley Rd at Forni Rd         | TW                | A     | 5.5    | A     | 5.7               | A     | 4.5    | A     | 4.5  |
|                       |  | SB                | D     | 30.1   | D     | 32.0              | C     | 18.2   | C     | 18.8 |
| 17                    | Pleasant Valley Rd at SR 49 S          | AW                | F     | 76.1   | F     | 78.8              | E     | 37.8   | E     | 41.1 |
| 18                    | Diamond Springs Parkway at SR 49       | S                 | B     | 11.3   | B     | 11.5              | B     | 14.5   | B     | 17.4 |
| 19                    | Diamond Springs Pkwy at Missouri Flat  | S                 | B     | 16.5   | B     | 17.6              | C     | 33.9   | C     | 33.9 |

Control: S=Signal, AW=All-Way Stop, TW=Stop Sign Side Street, NB=NB approach Stop

NOTE: Calculations based on HCM 2010 methodology for intersection level of service (signal, two-way, and all-way stop)

Source: PRISM Engineering and HCM 2010 calculation in Synchro and/or SimTraffic

For this Year 2035 scenario, there was a slight lowering of volumes on Missouri Flat Road after installation of the Diamond Springs Parkway, resulting in some rerouting of through traffic to the new parkway. It can be seen from Table 19 that when the project traffic is added in, Pleasant Valley Road at Faith Lane goes from an acceptable LOS E condition to an unacceptable LOS F condition. This is the intersection that would provide primary access to the project site.

Table 20 shows the Year 2035 capacity analysis results for *link segments* using the microsimulation method (using the SimTraffic software) as defined in the appendix. Missouri Flat Road was assumed to be widened from 2A to 4AD (four lanes as shown in Table 20) and capacity therefore increased. Also, there was a lowering of volumes on Missouri Flat Road and Pleasant Valley Road on account of the Diamond Springs Parkway diverting some regional through traffic away from these sections of these roads. The Diamond Springs Parkway will connect Missouri Flat Road on the west to SR 49 on the east. In addition, there are some roads which will interface with Diamond Springs Parkway (DSP) between these two intersections (Intersections #18 and #19 in this study), such as Throwita Way on the south side and another street on the north side of DSP at the same location. It was assumed that a small portion of traffic

would enter and leave at these locations in the analyses. For this reason, volumes between intersections #18 and #19 will not exactly match up because of this condition.

**Table 20. Year 2035 Scenarios Roadway Segment Level of Service Summary**

| ARTERIAL SEGMENT LOCATION |   | Road Type | SIMTRAFFIC ARTERIAL SEGMENT ANALYSIS, HCM 2010 |           |           |        |           |           |                   |           |           |        |           |           |
|---------------------------|---|-----------|--|-----------|-----------|--------|-----------|-----------|-------------------|-----------|-----------|--------|-----------|-----------|
|                           |   |           | Year 2035 AM Peak                              |           |           |        |           |           | Year 2035 PM Peak |           |           |        |           |           |
|                           |   |           | No PROJ  |           |           | w/PROJ |           |           | No PROJ           |           |           | w/PROJ |           |           |
|                           |   |           | LOS  | AVG Delay | AVG Speed | LOS    | AVG Delay | AVG Speed | LOS               | AVG Delay | AVG Speed | LOS    | AVG Delay | AVG Speed |
| 1                         | Missouri Flat Plaza to US 50 WB Ramps       | 4AD       | B  | 20.0      | 9         | B      | 19.8      | 9         | D                 | 51.4      | 3         | D      | 38.1      | 4         |
| 2                         | Missouri Flat US 50 WB Ramps to EB Ramps    | 4AD       | B  | 14.9      | 12        | B      | 14.7      | 12        | C                 | 31.3      | 6         | D      | 46.8      | 4         |
| 3                         | Missouri Flat US 50 EB Ramps to Mother Lode | 4AD       | B  | 11.3      | 8         | B      | 14.5      | 9         | C                 | 25.9      | 6         | C      | 31.8      | 6         |
| 4                         | Missouri Flat Mother Lode to Forni          | 4AD       | A  | 7.5       | 13        | A      | 8.2       | 13        | B                 | 11.7      | 11        | B      | 13.7      | 9         |
| 5                         | Missouri Flat Forni to Golden Center        | 4AD       | C  | 28.7      | 9         | C      | 30.1      | 8         | C                 | 33.2      | 7         | D      | 40.3      | 6         |
| 6                         | Missouri Flat Golden Center to China Garden | 4AD       | B  | 12.9      | 12        | B      | 15.5      | 11        | C                 | 25.7      | 8         | B      | 19.8      | 10        |
| 7                         | Missouri Flat China Garden to Industrial    | 4AD       | A  | 1.3       | 25        | A      | 1.6       | 24        | A                 | 2.5       | 19        | A      | 2.0       | 24        |
| 8                         | Missouri Flat Industrial to Enterprise      | 4AD       | A  | 2.0       | 38        | A      | 1.4       | 40        | A                 | 1.2       | 40        | A      | 1.2       | 40        |
| 9                         | Missouri Flat Enterprise to Pleasant Valley | 4AD       | A  | 1.8       | 38        | A      | 1.7       | 40        | A                 | 1.8       | 39        | A      | 2.0       | 39        |
| 10                        | Pleasant Valley Missouri Flat to Faith      | 2A        | B  | 15.0      | 23        | C      | 18.7      | 19        | B                 | 12.1      | 25        | B      | 10.3      | 27        |
| 11                        | Pleasant Valley Faith to China Garden       | 2A        | A  | 3.7       | 35        | A      | 3.8       | 34        | A                 | 3.5       | 39        | A      | 3.5       | 40        |
| 12                        | Pleasant Valley China Garden to Fowler      | 2A        | A  | 3.8       | 33        | A      | 4.0       | 31        | A                 | 3.7       | 36        | A      | 3.7       | 35        |
| 13                        | Pleasant Valley Missouri Flat to Commerce   | 2A        | A  | 3.5       | 35        | A      | 3.8       | 34        | A                 | 2.6       | 41        | A      | 2.4       | 41        |
| 14                        | Pleasant Valley Commerce to Patterson       | 2A        | A  | 6.7       | 35        | A      | 7.1       | 34        | A                 | 7.8       | 34        | A      | 6.1       | 36        |
| 15                        | Pleasant Valley Patterson to Forni          | 2A        | A  | 7.8       | 18        | A      | 8.3       | 17        | A                 | 6.9       | 19        | A      | 6.5       | 20        |
| 16                        | Pleasant Valley Forni to SR 49 (south)      | 2A        | B  | 12.1      | 13        | B      | 13.4      | 12        | B                 | 11.5      | 14        | B      | 10.4      | 15        |

Source: Year 2018 traffic counts taken by PRISM Engineering, mid-block totals, am, pm peak hour, plus Project

In the tables that follow, the signalized intersections were analyzed for queue lengths on left turn pockets for all approaches to determine if the estimated queues would exceed the existing storage length of these turn pockets. If so, the table reports this problem as a YES in a red highlighted cell in Table 21 or Table 22. Intersections #18 and #19 are operative in this scenario because they are the future intersections connecting the Diamond Springs Parkway into the existing street network from Missouri Flat Road on its west end to SR 49 on the east end. Five of the intersections had turn pocket overflow issues in the pm peak hour without the project for the 95<sup>th</sup> percentile calculations in the HCM 2010 methodology (Missouri Flat Road at: US 50 WB Ramp NBL, US 50 EB Ramp SBL, Forni Road EBL, Golden Center Drive NBL, and Pleasant Valley Road at: SR49/Fowler EBL). These overflows are identified in the tables with red highlighted cells for both the am and pm peak hour time periods. These five intersections are expected to have some turn pocket overflow with or without the project.

**Traffic Signal Warrants, Year 2035 Scenarios**

Table 23 reports the signal warrant analysis results for the Year 2035 am and pm peak hour scenarios (with and without project). Table 23 shows that signal warrants are met for each of the four Year 2035 scenarios, primarily for pm peak hour.

**Table 21. Year 2035 AM Peak Signalized Intersection Queues Summary**

| INTERSECTION LOCATION |  | AM Year 2035 |        |           |       | AM Year 2035+Project |        |           |       |
|-----------------------|--|--------------|--------|-----------|-------|----------------------|--------|-----------|-------|
|                       |  | Lane         | Length | 95% Queue | Over? | Lane                 | Length | 95% Queue | Over? |
| 1                     | Missouri Flat Rd at Plaza Dr           | NBL          | 330    | 61        | NO    | NBL                  | 330    | 61        | NO    |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | NBL          | 150    | 159       | YES   | NBL                  | 150    | 169       | YES   |
|                       |  | WBL          | 500    | 210       | NO    | WBL                  | 500    | 185       | NO    |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | SBL          | 150    | 112       | NO    | SBL                  | 150    | 120       | NO    |
|                       |  | EBR          | 600    | 175       | NO    | EBR                  | 600    | 232       | NO    |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | EBL          | 220    | 127       | NO    | EBL                  | 220    | 110       | NO    |
| 5                     | Missouri Flat Rd at Forni Rd           | EBL          | 200    | 174       | NO    | EBL                  | 200    | 171       | NO    |
| 6                     | Missouri Flat Rd at Golden Center Dr   | NBL          | 175    | 77        | NO    | NBL                  | 175    | 125       | NO    |
| 8                     | Missouri Flat Rd at Industrial Dr      | NBL          | 75     | 52        | NO    | NBL                  | 75     | 52        | NO    |
| 9                     | Missouri Flat Rd at Enterprise Dr      | NBL          | 90     | 36        | NO    | NBL                  | 90     | 18        | NO    |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | EBL          | 150    | 153       | YES   | EBL                  | 150    | 180       | YES   |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | EBL          | 225    | 117       | NO    | EBL                  | 225    | 81        | NO    |
| 15                    | Pleasant Valley Rd at Patterson Dr     | NBR          | 200    | 111       | NO    | NBR                  | 200    | 101       | NO    |
| 18                    | Diamond Springs Parkway at SR 49       | NBL          | 200    | 134       | NO    | NBL                  | 200    | 140       | NO    |
| 19                    | Diamond Springs Pkwy at Missouri Flat  | NBL          | 200    | 170       | NO    | NBL                  | 200    | 197       | NO    |

Source: PRISM Engineering and Synchro 9.0 HCM 2010 methods

**Table 22. Year 2035 PM Peak Signalized Intersection Queues Summary**

| INTERSECTION LOCATION |  | PM Year 2035 |        |           |       | PM Year 2035+Project |        |           |       |
|-----------------------|--|--------------|--------|-----------|-------|----------------------|--------|-----------|-------|
|                       |  | Lane         | Length | 95% Queue | Over? | Lane                 | Length | 95% Queue | Over? |
| 1                     | Missouri Flat Rd at Plaza Dr           | NBL          | 330    | 159       | NO    | NBL                  | 330    | 162       | NO    |
| 2                     | Missouri Flat Rd at US 50 WB Ramps     | NBL          | 150    | 162       | YES   | NBL                  | 150    | 165       | YES   |
|                       |  | WBL          | 500    | 267       | NO    | WBL                  | 500    | 345       | NO    |
| 3                     | Missouri Flat Rd at US 50 EB Ramps     | SBL          | 150    | 201       | YES   | SBL                  | 150    | 207       | YES   |
|                       |  | EBR          | 600    | 303       | NO    | EBR                  | 600    | 409       | NO    |
| 4                     | Missouri Flat Rd at Mother Lode Dr     | EBL          | 220    | 105       | NO    | EBL                  | 220    | 145       | NO    |
| 5                     | Missouri Flat Rd at Forni Rd           | EBL          | 200    | 246       | YES   | EBL                  | 200    | 243       | YES   |
| 6                     | Missouri Flat Rd at Golden Center Dr   | NBL          | 175    | 243       | YES   | NBL                  | 175    | 243       | YES   |
| 8                     | Missouri Flat Rd at Industrial Dr      | NBL          | 75     | 62        | NO    | NBL                  | 75     | 35        | NO    |
| 9                     | Missouri Flat Rd at Enterprise Dr      | NBL          | 90     | 22        | NO    | NBL                  | 90     | 19        | NO    |
| 10                    | Missouri Flat Rd at Pleasant Valley Rd | EBL          | 150    | 121       | NO    | EBL                  | 150    | 93        | NO    |
| 13                    | Pleasant Valley Rd at SR 49 N / Fowler | EBL          | 225    | 305       | YES   | EBL                  | 225    | 270       | YES   |
| 15                    | Pleasant Valley Rd at Patterson Dr     | NBR          | 200    | 75        | NO    | NBR                  | 200    | 73        | NO    |
| 18                    | Diamond Springs Parkway at SR 49       | NBL          | 200    | 128       | NO    | NBL                  | 200    | 109       | NO    |
| 19                    | Diamond Springs Pkwy at Missouri Flat  | NBL          | 200    | 187       | NO    | NBL                  | 200    | 191       | NO    |

Source: PRISM Engineering and Synchro 9.0 HCM 2010 methods

**Table 23. Signal Warrants for Year 2035 AM & PM Peak Hour Scenarios**

| Intersection                          | AM for YEAR 2035 | AM+PROJ for YEAR 2035 | PM for YEAR 2035 | PM+PROJ for YEAR 2035 |
|---------------------------------------|------------------|-----------------------|------------------|-----------------------|
| Missouri Flat Rd at China Garden Rd   | YES              | YES                   | YES              | YES                   |
| Pleasant Valley Rd at Faith Ln        | NO               | NO                    | NO               | NO                    |
| Pleasant Valley Rd at China Garden Rd | NO               | NO                    | NO               | NO                    |
| Pleasant Valley Rd at Commerce Way    | NO               | NO                    | YES              | YES                   |
| Pleasant Valley Rd at Forni Rd        | YES              | YES                   | YES              | YES                   |
| Pleasant Valley Rd at SR 49 South     | YES              | YES                   | YES              | YES                   |

Source: PRISM Engineering traffic counts and CA MUTCD Warrants analysis (see Appendix A.11 for details on specific volumes used in the signal warrant analysis, as well as various criteria for warrants depending on two lane road, four lane road, six or more lane roads, etc).

### Project Impacts for this scenario

- Intersection Level of Service: Within acceptable County thresholds with the exception of two unsignalized intersections shown in Table 19 with red highlighted cells including:
  - Pleasant Valley Road and Faith Lane at LOS A overall for Year 2035 pm peak hour plus project, but LOS F for side street (142 secs of average delay) with the full project impact. Mitigation is achieved by construction of a roundabout.
  - Pleasant Valley Road and SR 49 S is at LOS F for Year 2035 am peak hour without the project (delay=76.1). A signal is warranted at this intersection. When the project traffic is added in the delay increases to 78.8 seconds.
- SIMTRAFFIC Arterial Segment Level of Service: All locations are at LOS D or better conditions with this microsimulation methodology. No further mitigations necessary.
- Signalized Intersection Queues: The project adds to the 95% queue overflows. See Tables 21 and 22 for red cells where a problem exists and would also be slightly additionally impacted by the project, lengthening the queues by as much as one additional vehicle length (not significant increase). However, in the pm peak hour additional locations are impacted as shown at the bridge left turn pockets entering the US 50 freeway. However, the intersection level of service as calculated by micro-simulation (see Table 19) shows a satisfactory levels of service overall (LOS B to LOS D), and these queues clear quickly enough in the microsimulation model without significantly impacting LOS at adjacent intersections.
- Signal Warrants: Significant. Warrants met at four of the six unsignalized intersections as shown in Table 23.

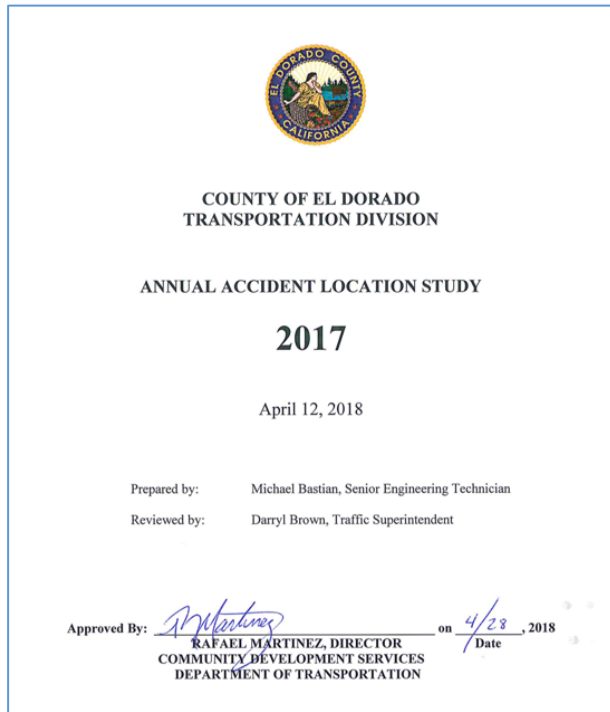
The California MUTCD stipulates thresholds *for* traffic conditions when a signal may be warranted based on the traffic volumes. The warrant for peak hour volumes was used in this report (Section 4C.04 Warrant 3, Peak Hour<sup>13</sup>). Based on this warrant, and in the Year 2035 scenarios, signals are currently warranted at five of the eight unsignalized study area intersections, even without the project, as shown in Table 23. With the project an additional signal is warranted at Faith Lane and Pleasant Valley Road.

---

<sup>13</sup>The Peak Hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

Guidance: 06 If this warrant is the only warrant met and a traffic control signal is justified by an engineering study, the traffic control signal should be traffic-actuated.

## VII. Other Considerations



### Accidents.

PRISM Engineering referenced the *County of El Dorado Transportation Division, Annual Accident Location Study 2017, APRIL 12, 2018* (see left) in developing the accident summary information for the study area roadways. Missouri Flat Road was identified for preliminary review in the County's Annual Accident Location Study (Chapters 1), but because the accident rate does not meet the threshold criteria as defined in the above document, or is less than 1.00 Acc/MEV for an intersection, etc., further review was deemed unnecessary. Table 24 below summarizes the accidents that did take place on Missouri Flat Road, but which overall did not meet the minimum thresholds to be a "Location Requiring Further Investigation."

In order to be considered as a "preliminary site selection" the following criteria must be met:

- Must be a site with 3 or more accidents in 2017
- Two or more accidents, one being fatal in 2017
- Sites with two or more in 2017, two or more with motorcycles within 0.25 mile section
- Sites with two or more in 2017, two or more with bicycles within 0.25 mile section
- Sites with two or more in 2017, two or more with pedestrians within 0.25 mile section
- Sections of homogeneous roadway with five (5) or more accidents of a similar type occurring within a quarter-mile section during 2017.

The list in Table 24 for Missouri Flat Road 2017 accidents shows 28 different accidents, 6 which involved injuries (total of 10 people injured); however, none were fatal. This list does not meet these set of criteria listed above, as there are no motorcycle accidents, no bike accidents, no pedestrian accidents, and no repeating patterns of accidents at the same location. The accident rate for Missouri Flat Road as reported in the document and shown in Table 24 was less than 1.0 ranging from 0.26 to 0.61.

There were no accidents on Pleasant Valley Road reported in the AALS that were also within the scope or study area of this traffic study, and were not included in Table 24.



**Table 24. 2017 Accidents on Study Roadways**

2017 ACCIDENT LOCATION SITES (Continued)

| Road No. | Street           | Mile Post | Dist (Ft) | Dir   | Cross Street          | Injury | Fatal | Lighting | Surface | Involved | Impair | Acc Type | CHP #       |
|----------|------------------|-----------|-----------|-------|-----------------------|--------|-------|----------|---------|----------|--------|----------|-------------|
| 9        | MISSOURI FLAT RD | 1.56      | 0         |       | of PLAZA DR           | 0      | 0     | DAY      | WET     | 2        | HNBD   | 2        | 20170402835 |
| 9        | MISSOURI FLAT RD | 1.58      | 100       | EAST  | of PLAZA DR           | 0      | 0     | DAY      | WET     | 2        | HNBD   | 3        | 20170100043 |
| 9        | MISSOURI FLAT RD | 1.62      | 12        | NORTH | of W/B US-50          | 0      | 0     | DAY      | DRY     | 2        | HNBD   | 3        | 20170703237 |
| 9        | MISSOURI FLAT RD | 1.63      | 0         |       | of US 50 W/B          | 0      | 0     | DAY      | DRY     | 2        | HNBD   | 4        | 20171203930 |
| 9        | MISSOURI FLAT RD | 1.63      | 0         |       | of US 50 W/B          | 0      | 0     | DAY      | DRY     | 2        | HNBD   | 2        | 20171103795 |
| 9        | MISSOURI FLAT RD | 1.77      | 0         |       | of E/B US-50 ON-RAMP  | 0      | 0     | DARK     | DRY     | 2        | DUI    | 4        | 20170402861 |
| 9        | MISSOURI FLAT RD | 1.77      | 0         |       | of E/B US-50          | 0      | 0     | DARK     | WET     | 2        | HNBD   | 4        | 20170402812 |
| 9        | MISSOURI FLAT RD | 1.82      | 0         |       | of MOTHER LODE DR     | 0      | 0     | DAY      | WET     | 2        | HNBD   | 2        | 20170402793 |
| 9        | MISSOURI FLAT RD | 1.83      | 60        | SOUTH | of MOTHER LODE DR     | 0      | 0     | DAY      | DRY     | 2        | IMP?   | 3        | 20170102477 |
| 9        | MISSOURI FLAT RD | 1.89      | 650       | SOUTH | of US50 E/B           | 1      | 0     | DAY      | DRY     | 2        | HNBD   | 3        | 20171003636 |
| 9        | MISSOURI FLAT RD | 1.92      | 100       | SOUTH | of PERKS CT           | 2      | 0     | DAY      | DRY     | 2        | HNBD   | 4        | 20170703266 |
| 9        | MISSOURI FLAT RD | 1.94      | 185       | SOUTH | of PERKS CT           | 1      | 0     | DARK     | DRY     | 3        | HNBD   | 3        | 20171103757 |
| 9        | MISSOURI FLAT RD | 2.01      | 10        | SOUTH | of MARANATHA LN       | 0      | 0     | DAY      | WET     | 2        | HNBD   | 10       | 20170202535 |
| 9        | MISSOURI FLAT RD | 2.28      | 75        | NORTH | of FORNI RD           | 1      | 0     | DAY      | DRY     | 2        | HNBD   | 3        | 20170703304 |
| 9        | MISSOURI FLAT RD | 2.29      | 0         | AT    | of FORNI RD           | 4      | 0     | DARK     | WET     | 3        | HNBD   | 2        | 20170102433 |
| 9        | MISSOURI FLAT RD | 2.35      | 300       | SOUTH | of FORNI RD           | 0      | 0     | DAY      | DRY     | 2        | HNBD   | 3        | 20170402887 |
| 9        | MISSOURI FLAT RD | 2.35      | 300       | SOUTH | of FORNI RD           | 0      | 0     | DAY      | DRY     | 2        | HNBD   | 2        | 20170402850 |
| 9        | MISSOURI FLAT RD | 2.60      | 528       | SOUTH | of GOLDEN CENTER DR   | 0      | 0     | DAY      | DRY     | 2        | HNBD   | 2        | 20170903472 |
| 9        | MISSOURI FLAT RD | 2.69      | 10        | NORTH | of HALYARD LN         | 0      | 0     | DARK     | DRY     | 2        | HNBD   | 3        | 20171203956 |
| 9        | MISSOURI FLAT RD | 2.98      | 310       | SOUTH | of CHINA GARDEN RD    | 0      | 0     | DAY      | DRY     | 2        | HNBD   | 4        | 20170703249 |
| 9        | MISSOURI FLAT RD | 3.02      | 25        | NORTH | of INDUSTRIAL DR      | 0      | 0     | DAY      | DRY     | 2        | IMP?   | 3        | 20171203965 |
| 9        | MISSOURI FLAT RD | 3.04      | 60        | SOUTH | of INDUSTRIAL DR      | 1      | 0     | DAY      | DRY     | 1        | HNBD   | 5        | 20170703247 |
| 9        | MISSOURI FLAT RD | 3.05      | 80        | SOUTH | of INDUSTRIAL DR      | 0      | 0     | DAY      | DRY     | 3        | HNBD   | 2        | 20171003638 |
| 9        | MISSOURI FLAT RD | 3.05      | 100       | SOUTH | of INDUSTRIAL DR      | 0      | 0     | DAY      | DRY     | 2        | HNBD   | 4        | 20170302688 |
| 9        | MISSOURI FLAT RD | 3.40      | 200       | NORTH | of PLEASANT VALLEY RD | 0      | 0     | DAY      | DRY     | 2        | HNBD   | 3        | 20170703252 |
| 9        | MISSOURI FLAT RD | 3.40      | 220       | NORTH | of PLEASANT VALLEY RD | 0      | 0     | DAY      | DRY     | 5        | HNBD   | 5        | 20170502945 |
| 9        | MISSOURI FLAT RD | 3.40      | 216       | NORTH | of PLEASANT VALLEY RD | 0      | 0     | DAY      | DRY     | 2        | HNBD   | 3        | 20170302686 |
| 9        | MISSOURI FLAT RD | 3.44      | 15        | NORTH | of PLEASANT VALLEY RD | 0      | 0     | DARK     | DRY     | 2        | DUI    | 3        | 20170302625 |

| Site | Street           | MP Reference | Reference Point                | # Veh | Injury | Fatal | Acc Rate per MEV | Action        |
|------|------------------|--------------|--------------------------------|-------|--------|-------|------------------|---------------|
| 26   | MISSOURI FLAT RD | 1.56 - 1.63  | VICINITY OF PLAZA DR           | 13    | 7      | 0     | 0.52             | None Required |
| 27   | MISSOURI FLAT RD | 1.77 - 2.01  | SOUTH OF US 50                 | 24    | 14     | 0     | 0.61             | None Required |
| 28   | MISSOURI FLAT RD | 2.28 - 2.35  | VICINITY OF FORNI RD           | 10    | 8      | 0     | 0.26             | None Required |
| 29   | MISSOURI FLAT RD | 2.98 - 3.05  | VICINITY OF INDUSTRIAL DR      | 7     | 1      | 0     | 0.28             | None Required |
| 30   | MISSOURI FLAT RD | 3.34 - 3.44  | VICINITY OF PLEASANT VALLEY RD | 6     | 0      | 0     | 0.29             | None Required |

Source: El Dorado County and SWITRS and PRISM Engineering

**Freeway Analysis, All Scenarios.**

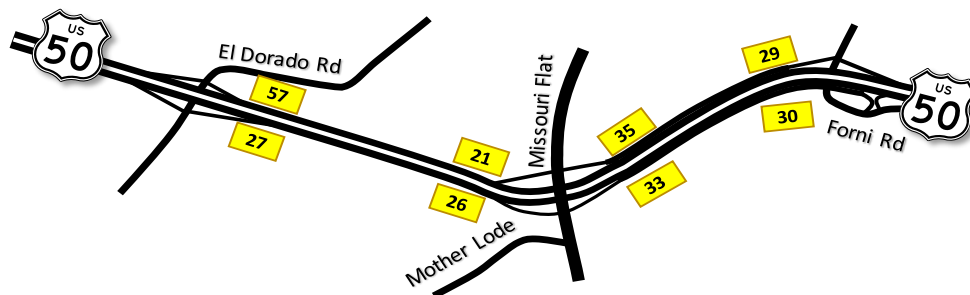
A freeway analysis was also conducted for the mainline US 50 freeway in the vicinity of the project site. Table 25 shows the level of service at each of these eight locations (identified graphically on map legend below), for each of the 12 scenarios examined in this report.

**Table 25. Freeway Capacity Analysis Summary**

| ANALYSIS SCENARIO |                                      | US 50 FREEWAY MAINLINE between:   |             |            |            |                               |             |            |               |
|-------------------|--------------------------------------|-----------------------------------|-------------|------------|------------|-------------------------------|-------------|------------|---------------|
|                   |                                      | El Dorado Rd and Missouri Flat Rd |             |            |            | Missouri Flat Rd and Forni Rd |             |            |               |
|                   |                                      | MERGE                             |             | DIVERGE    |            | MERGE*                        |             | DIVERGE*   |               |
|                   |                                      | EB                                | WB          | EB         | WB         | EB                            | WB          | EB         | WB            |
| <b>Node:</b>      |                                      | <b>27</b>                         | <b>21</b>   | <b>26</b>  | <b>57</b>  | <b>35</b>                     | <b>29</b>   | <b>30</b>  | <b>35</b>     |
| Year 2017         | Existing 2017 AM Peak                | LOS A, 3.3                        | LOS A, 3.4  | LOS A, 0.7 | LOS A, 0.8 | LOS A, 0.8                    | LOS A, 2.6  | LOS A, 0.3 | LOS A, 6.8    |
|                   | Existing Year 2017 AM Peak + Project | LOS A, 4.0                        | LOS A, 5.4  | LOS A, 0.7 | LOS A, 4.8 | LOS A, 1.0                    | LOS A, 6.5  | LOS A, 0.7 | LOS A, 7.3    |
|                   | Existing Year 2017 PM Peak           | LOS C, 21.4                       | LOS A, 1.3  | LOS A, 1.4 | LOS A, 0.3 | LOS B, 12.6                   | LOS A, 0.8  | LOS A, 4.3 | LOS A, 2.8    |
|                   | Existing Year 2017 PM Peak + Project | LOS C, 22.6                       | LOS A, 1.3  | LOS A, 1.5 | LOS A, 0.9 | LOS C, 16.8                   | LOS A, 1.1  | LOS A, 4.5 | LOS A, 2.5    |
| Year 2027         | Existing Year 2027 AM Peak           | LOS A, 3.8                        | LOS B, 11.9 | LOS A, 0.8 | LOS A, 4.1 | LOS A, 1.0                    | LOS A, 6.5  | LOS A, 0.3 | LOS A, 9.2    |
|                   | Existing Year 2027 AM Peak + Project | LOS A, 4.4                        | LOS B, 14.3 | LOS A, 0.8 | LOS A, 6.2 | LOS A, 1.2                    | LOS B, 12.2 | LOS A, 0.8 | LOS B, 11.7   |
|                   | Existing Year 2027 PM Peak           | LOS C, 22.7                       | LOS A, 1.6  | LOS A, 1.5 | LOS A, 0.4 | LOS C, 15.9                   | LOS A, 1.0  | LOS A, 4.4 | LOS A, 3.1    |
|                   | Existing Year 2027 PM Peak + Project | LOS C, 25.0                       | LOS A, 1.6  | LOS A, 1.9 | LOS A, 1.0 | LOS C, 19.4                   | LOS A, 1.2  | LOS A, 6.9 | LOS A, 3.1    |
| Year 2035         | Existing Year 2035 AM Peak           | LOS A, 4.2                        | LOS C, 18.7 | LOS A, 0.9 | LOS A, 6.7 | LOS A, 1.1                    | LOS A, 9.7  | LOS A, 0.3 | LOS B, 11.1   |
|                   | Existing Year 2035 AM Peak + Project | LOS A, 4.8                        | LOS C, 21.4 | LOS A, 0.8 | LOS A, 7.3 | LOS A, 1.3                    | LOS C, 16.7 | LOS A, 0.8 | LOS B/C, 15.3 |
|                   | Existing Year 2035 PM Peak           | LOS C, 23.8                       | LOS A, 1.9  | LOS A, 1.5 | LOS A, 0.5 | LOS C, 18.6                   | LOS A, 1.2  | LOS A, 4.4 | LOS A, 3.3    |
|                   | Existing Year 2035 PM Peak + Project | LOS D, 26.9                       | LOS A, 1.9  | LOS A, 2.2 | LOS A, 1.1 | LOS C, 21.4                   | LOS A, 1.3  | LOS A, 8.9 | LOS A, 3.5    |

Note: LOS calculated with HCM 2010 methodology

\*Analyzed as worst case weave with 100% merge and 100% diverge, since specific O&D info for AUX lane was not available.



## VIII. Mitigations

This section of the report provides more detail pertaining to recommended improvements being called for in this report. Generally, when intersections are at LOS A-E conditions in the study area, this is an acceptable condition. When LOS F conditions exist at an intersection, and when the project adds more than 10 peak hour trips to one of these intersections with LOS F conditions, the impact is considered significant by the County's standards.

### Measure E Considerations

Under Measure E the project is responsible to fully mitigate the impacts triggered under Existing Plus Project conditions<sup>14</sup> if the impacts are not mitigated by the County's CIP. Otherwise, the project merely has to pay its fair share TIM fee to mitigate impacts. Since the project falls under the category of being a residential project with five or more dwelling units, any capital improvement to be covered by the TIM fee payment must be in the County's 10 year CIP. The capital improvement projects in place that will mitigate impacts from the project are included in the County's 10 year CIP. Based on this report's analyses results using SimTraffic microsimulation calculations for Missouri Flat Road corridor sections where there are TWLTL medians, the overall level of service for Missouri Flat Road is LOS B or better conditions. The project does not trigger any need for immediate widening of Missouri Flat Road (to expand from two lanes to four lanes). Two new signal installations on Missouri Flat Road at Enterprise Drive and at Industrial Drive are either installed or currently under construction in the year 2020 as a part of the County's 10-year CIP. These are Project No: 73365 / 36105052 for Enterprise Drive, and Project No: 73366 / 36105053 for Industrial Drive.

**Planned Roadway Improvements.** The Cumulative analyses includes the planned roadway improvements anticipated in the County's CIP (such as the Diamond Springs Parkway, etc.), along with growth consistent with the 2004 General Plan, and with approved and reasonably foreseeable projects within the study area. Missouri Flat Road widening from Pleasant Valley Road on the south to China Garden Road on the north is not planned within the County's 10 year CIP, but is within the County's 20 year CIP. However, the project does not trigger the need for Missouri Flat Road to be widened from two lanes to four lanes in order to achieve or maintain satisfactory levels of service on the corridor. The two signal installations already installed or underway enable Missouri Flat Road to maintain at satisfactory levels of service at LOS B conditions at the two new signalized intersections. The County's traffic impact mitigation fee program provides a mechanism for collecting fair share contributions for improvements in the CIP, and in the case of the project being a residential project with more than 5 dwelling units planned, only roadway mitigations included in the County's 10 year CIP are applicable for the TIM fee as a mitigation measure for the project. If the needed mitigation is not included in the 10 year CIP, then the project is obligated to mitigate the impact directly. No roadway widening improvements are planned for Pleasant Valley Road

---

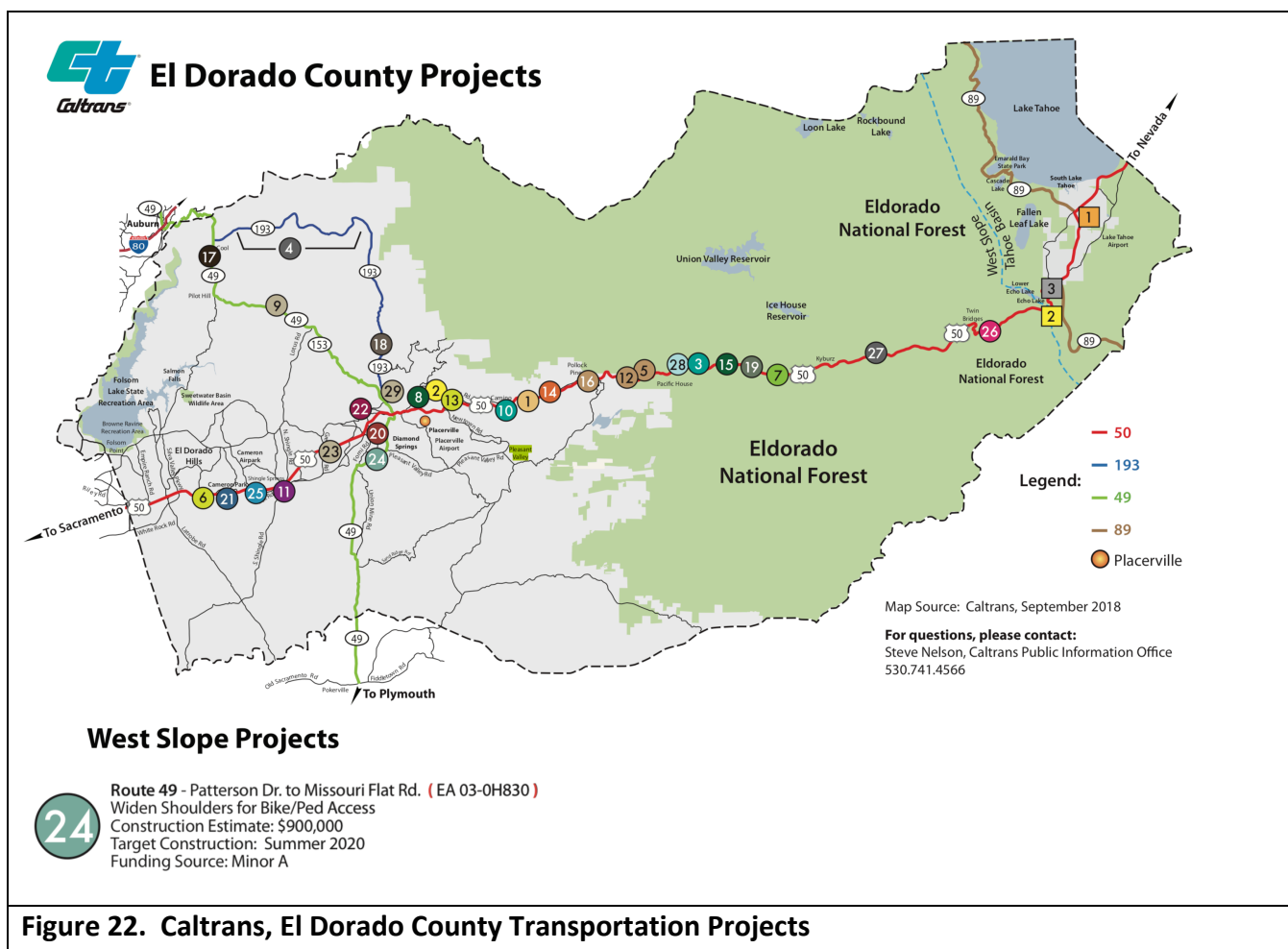
<sup>14</sup> This was previously a correct statement, until a court ruling this summer declaring portions of Measure E to be unconstitutional. The court ruled that the previous language contained in Measure Y was still valid as detailed below:

"For all other discretionary projects that worsen (defined as a project that triggers Policy TC-Xe [A] or [B] or [C] traffic on the County road system, the County shall do one of the following:

- (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards as detailed in this Transportation and Circulation Element; or
- (2) ensure the construction of the necessary road improvements are included in the County's 20-year CIP."

from Missouri Flat Road to Fowler Lane, but the level of service analysis results for roadway segments places the level of service at LOS D or better conditions for the Year 2018, 2028, and 2035 scenarios, with or without the project. No mitigations are recommended to widen Pleasant Valley Road from Missouri Flat Road to Fowler Lane based on the roadway segment analyses using SimTraffic microsimulation for all scenarios (microsimulation shows the maintaining of speeds in the general range of the posted speed limit of 35 mph, indicating minimal congestion).

In addition to County CIP improvements, Caltrans has several projects planned for their facilities in El Dorado County including some within the study area of this traffic study. Based on information in Caltrans’ PROJECT MONITORING REPORT, September 2018, there is a transportation project (#24) slated for construction in the summer of 2020. The project is to widen shoulders on SR 49 between Patterson Drive to Missouri Flat Road (a distance of 2,800 feet). The purpose of the shoulder widening is to allow for improved bike and pedestrian access along SR 49, and to encourage active transportation in the area. Funding source for this project is Minor A funds, and the construction estimate is \$900,000. Figure 22 shows the location of Caltrans El Dorado County projects including #24 on SR 49 between Patterson Drive and Missouri Flat Road.



**Figure 22. Caltrans, El Dorado County Transportation Projects**

Source: Caltrans PROJECT MONITORING REPORT, September 2018, p. 29

The design of the modern roundabout built as a mitigation in part for the Dorado Oaks Project needs to be compatible with Caltrans’ transportation plan, which has slated SR 49 (Pleasant Valley Road) between

Patterson Drive and Missouri Flat Road to be improved with bike and pedestrian facilities to make possible an “active transportation” plan in the study area. With the roundabout at Faith Lane being constructed with adequate pedestrian sidewalks and crosswalks, this active transportation plan can continue to expand contiguously along the Pleasant Valley Road corridor.

**Intersection Needs Prioritization Process.** The CIP includes a line item for unprogrammed traffic signal installation and operational and safety improvements at intersections, including improvements like construction of new traffic signals, construction of turn pockets, and the upgrade of existing traffic signal systems. The County annually monitors intersections with potential need for improvement through the Intersection Needs Prioritization Process. The Intersection Needs Prioritization Process is then used to inform the annual update to the CIP, and potential intersection improvements can be added, by the Board of Supervisors, to the CIP as funding becomes available.

**Payment of Traffic Impact Fees.** Therefore, appropriate mitigation, as determined by the CDS, would include payment of traffic impact mitigation fees to satisfy the project’s fair share obligation towards the improvements identified in this report, or construction of the improvement with reimbursement or fee credit for costs that exceed the project’s proportional share if the improvement is needed but not included in future updates to the CIP or constructed by others.”

### **Year 2018 Existing Conditions**

Table 8 for Year 2018 existing conditions at the beginning of this report shows all intersections at satisfactory levels of service for the existing condition.

Table 9 of this report shows the Missouri Flat Road link segment volumes and corresponding levels of service to be at LOS C or better conditions.

Traffic signals are warranted at four of the study intersections as shown in Table 12 for existing pm peak hour conditions. A signal warrant being met does not automatically require that a signal be installed, but is an indicator of needing further review based on safety, accident history, and level of service needs. These warranted intersections for existing pm peak hour traffic include:

- Missouri Flat Road at China Garden Road (warranted for CAMUTCD Peak Hour Warrant #4)
- Missouri Flat Road at Commerce way (warranted for CAMUTCD Peak Hour Warrant #4)
- Pleasant Valley Road at Forni Road (warranted for CAMUTCD Peak Hour Warrant #4)
- Pleasant Valley Road at SR 49 (south) (warranted for CAMUTCD Peak Hour Warrant #4)

### **Year 2018 Mitigation Recommendations Corresponding with this scenario**

Since the levels of service are satisfactory at 4 out of the 4 intersections above where a signal warrant is met (side street LOS D or better), no signal installations are recommended for these intersections for the 2018 without project scenario.

### **Year 2018 Plus Project Mitigation Recommendations for this scenario**


Table 8 shows LOS F conditions at one of the study intersections with project traffic, which is currently unsignalized and has one stop sign on the side street. This intersection is Pleasant Valley Road at Faith Lane. The mitigation may be installation of a traffic signal or roundabout:

- **Install Roundabout at Pleasant Valley / Faith Lane** (needed because of project)
  - **Alternative Option: Install Two Signals instead of Roundabout at Pleasant Valley Road at Faith Lane** realigned (to coincide with Silver Drive), and also at China Garden Road. These intersections would need to have coordinated signals to help keep traffic moving on Pleasant Valley Road (SR 49), and Pleasant Valley Road would need to be widened to three lanes to accommodate left turn pockets for the newly signalized intersections at Faith Lane (realigned to Silver Drive), and China Garden.

**Roundabout Installation.** The roundabout mitigation at Pleasant Valley Road at Faith Lane was not anticipated in the County's CIP, but a mitigation is needed to offset the project traffic impacts (causing existing Faith Lane LOS E conditions to go to LOS F conditions with the project). The project will need to mitigate this intersection with a modern roundabout to bring overall intersection traffic conditions to LOS D or better conditions in the Year 2018 plus Project scenario (an improvement over existing conditions), or as an alternative, install two signals as detailed below.

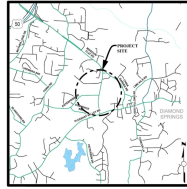
**Two Traffic Signals Installation.** It is also possible to mitigate this location with a set of two signals if Faith Lane is realigned to Silver Drive instead of its existing location. The three-way existing intersection of Pleasant Valley Road and Faith lane is almost immediately adjacent to the existing three-way intersection of Pleasant Valley Road and China Garden Road. Realigning Faith Lane to the Silver Drive location will provide 400 feet of separation between intersections, allowing for back to back left turn pocket storage (150' each) for each intersection. This is sufficient to prevent any left turn pocket overflow into Pleasant Valley Road through traffic, otherwise with the existing location of Faith Lane being only 110 feet away from China Garden Road, that situation would not allow sufficient left turn pocket lengths. It is not possible to install a single signal at China Garden Road (with Faith Lane realigned to meet it) because there would be no room for installing a left turn pocket on the WB approach without additional right of way takes and disruption of historical buildings. There is currently only room for a two lane cross section of pavement on Pleasant Valley Road to the east of China Garden Road, which is not an issue for the modern roundabout option. However, it would be an issue if the intersection was signalized. This is because there needs to be a left turn pocket turning in to China Garden Road from Pleasant Valley Road. This means that the through lane for eastbound traffic of Pleasant Valley Road will need to be shifted at least 12 feet to the south. There is some varying widths of paved shoulder which could be used, but a detailed civil engineering plan including sidewalks, curbs, and gutters would need to be completed to determine the feasibility of adding an additional lane on Pleasant Valley Road just east of China Garden Road, for the purpose of transitioning back in to a two lane road. Some telephone pole and utilities will also need to be moved to make such an improvement possible.

The County's CIP for Missouri Flat Road Widening (China Garden to Pleasant Valley Road/SR49) are scheduled for FY 28/29 – 37/38. County Long Range Planning annually monitors intersections with the potential need for improvements. The County's current Year 2018 CIP schedule and location is shown below.



**Missouri Flat Road Widening - China Garden to Pleasant Valley Road/SR49**

**Financing Plan & Tentative Schedule**



---

**Project No: 72142 / 36105027**                      **Type: Roadway**                      **Supervisor District(s) 3**

*All Figures in Thousands*

| Revenue       | by Funding Source | Prior FY* | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 | FY 23/24-27/28 | FY 28/29-37/38 | Total   |
|---------------|-------------------|-----------|----------|----------|----------|----------|----------|----------------|----------------|---------|
| TIM - Zns 1-7 |                   | \$0       | \$0      | \$0      | \$0      | \$0      | \$0      | \$0            | \$4,175        | \$4,175 |
| <b>Total</b>  |                   | \$0       | \$0      | \$0      | \$0      | \$0      | \$0      | \$0            | \$4,175        | \$4,175 |

*All Figures in Thousands*

| Expenditures                   | Prior FY* | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 | FY 23/24-27/28 | FY 28/29-37/38 | Total   |
|--------------------------------|-----------|----------|----------|----------|----------|----------|----------------|----------------|---------|
| Planning/Env - Consultant      | \$0       | \$0      | \$0      | \$0      | \$0      | \$0      | \$0            | \$181          | \$181   |
| Planning/Env - Staff           | \$0       | \$0      | \$0      | \$0      | \$0      | \$0      | \$0            | \$107          | \$107   |
| Design - Consultant            | \$0       | \$0      | \$0      | \$0      | \$0      | \$0      | \$0            | \$53           | \$53    |
| Design - Staff                 | \$0       | \$0      | \$0      | \$0      | \$0      | \$0      | \$0            | \$523          | \$523   |
| Construction Mgmt - Consultant | \$0       | \$0      | \$0      | \$0      | \$0      | \$0      | \$0            | \$21           | \$21    |
| Construction Mgmt - Staff      | \$0       | \$0      | \$0      | \$0      | \$0      | \$0      | \$0            | \$411          | \$411   |
| Direct Construction Costs      | \$0       | \$0      | \$0      | \$0      | \$0      | \$0      | \$0            | \$2,879        | \$2,879 |
| <b>Total</b>                   | \$0       | \$0      | \$0      | \$0      | \$0      | \$0      | \$0            | \$4,175        | \$4,175 |

| Project Schedule         | Prior FY* | FY 18/19 | FY 19/20 | FY 20/21 | FY 21/22 | FY 22/23 | FY 23/24-27/28 | FY 28/29-37/38 |
|--------------------------|-----------|----------|----------|----------|----------|----------|----------------|----------------|
| Planning/Environmental   |           |          |          |          |          |          |                |                |
| Design                   |           |          |          |          |          |          |                |                |
| Right Of Way             |           |          |          |          |          |          |                |                |
| Construction             |           |          |          |          |          |          |                |                |
| Environmental Monitoring |           |          |          |          |          |          |                |                |

\*Prior FY includes actual revenue and expenditures through 06/30/17, plus amounts estimated through 6/30/18.

Source: County CIP 2018, Page 104-105

**Right of Way Acquisitions.** It is important to note that this intersection cannot be satisfactorily mitigated without some impact to existing development on Pleasant Valley Road. Additional right of way, whether an extra wide intersection at China Garden for a roundabout, or an extra wide and much longer street segment on Pleasant Valley Road from west of Silver Drive to east of China Garden Road to accommodate signals and sidewalks, and long left turn pockets. Significant right of way acquisition over numerous parcels on the south side of Pleasant Valley Road is necessary to install signals. The signal option is not as feasible as roundabout construction, and is not recommended as the first alternative.

Figure 23 shows the proposed modern roundabout option which would operate at LOS C for Year 2035 plus Project in the pm peak hour, which is satisfactory for the Pleasant Valley Road corridor. In the future after the Diamond Springs Parkway is constructed, traffic volumes on Pleasant Valley Road will shift

partially to that new corridor, and volumes on Pleasant Valley Road between Fowler and Missouri Flat Road will decrease about 10%. This will result in LOS C conditions for this roundabout as shown in Figure 23. Through some right-of-way acquisition, it is possible to combine Faith Lane and China Garden Road into a modern roundabout by realigning Faith Lane to meet with China Garden Road as shown.

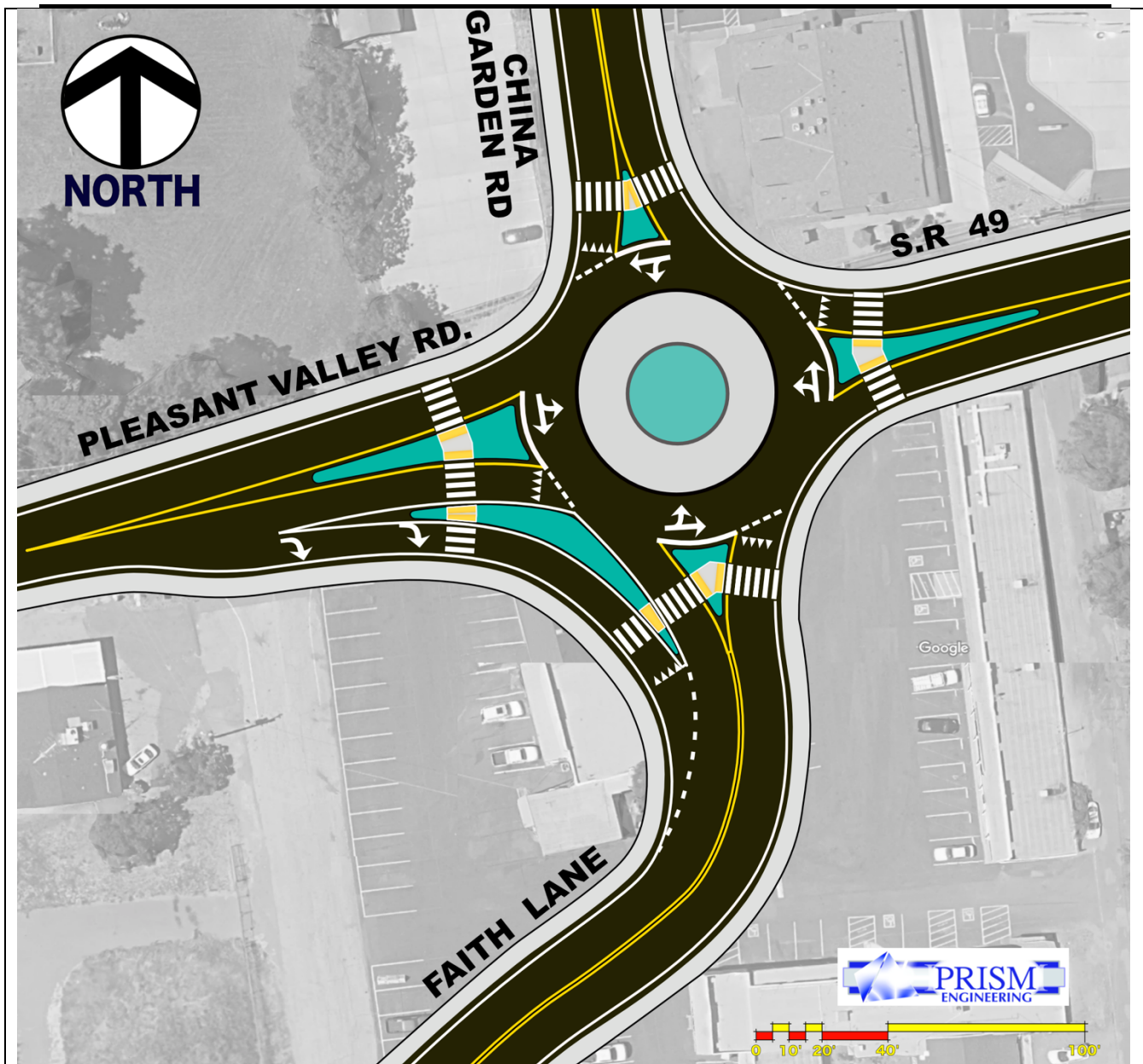
**Recommended Mitigation.** It is recommended that the modern roundabout as shown in Figure 23 be adopted as the mitigation of choice, since it will have the least impact overall to existing historical developments along Pleasant Valley Road, and Pleasant Valley Road can easily remain a two-lane cross section east of China Garden Road as well as west of Faith Lane all the way to transitioning with Missouri Flat Road. Roundabouts are known for “wide nodes” and “narrow roads” as a benefit to the surrounding road system. The right turn pocket for the eastbound approach acts as a roundabout bypass lane, and is helpful to the overall level of service, taking the project inbound volume out of the impact. It is necessary to achieve the LOS C condition, otherwise LOS D conditions would exist. The roundabout intersection will operate at LOS C conditions even beyond the Year 2035 including the full project traffic. It will also help to calm traffic and enhance the Pleasant Valley corridor in this area. There is a historical building on the south side of the China Garden Road intersection which could be moved to another location on the same parcel there, if it is determined that it has historical significance and must remain.

**Roundabout Analysis Methodology.** Current transportation plans indicate a historical nature of the Pleasant Valley Road corridor in the vicinity of the project. Pleasant Valley Road near Faith Lane is currently two lanes wide, and because of historical considerations with existing buildings to the east of Faith Lane, this road will never be more than two lanes without directly impacting the ability to have sidewalks or bike lanes. It is better to keep it at two lanes so that an active transportation plan can take place in the future including bikes and pedestrian walkways or sidewalks. For this reason, the roundabout improvement alternative provides the best solution that avoids the need to widen Pleasant Valley Road to the east of Faith Lane. For the purposes of this analysis, PRISM Engineering explored several ways to analyze traffic flows through the proposed roundabout solution, and after some deliberation determined that the most appropriate software for calculation of level of service for the single lane roundabout proposed at Faith Lane is the Synchro and SimTraffic software and analysis method<sup>15</sup>. This is because the roundabout will of necessity be small (single lane inside the circle), and many software programs over-estimate the capacity of these smaller roundabout, SIDRA being at the top of the list, especially if inside turning conflicts are low, which in this case, they are.

---

<sup>15</sup> See Appendix A.4 Roundabout Analysis Considerations and Factors





**Figure 23. Roundabout Concept and Mitigation, LOS C**

Source: PRISM Engineering

**Roundabout size limitations.** There is not sufficient room for the diameter of the roundabout to expand to allow for two lanes per approach without direct impact to historical buildings (Pleasant Valley Road would need to be four lanes wide to accomplish this). Therefore, the size of this roundabout would be limited to a single internal circulatory lane, and the appropriate analysis tool for this is Synchro/SimTraffic, based on HCM 2010 methods using relevant US empirical data, and offering a conservative result in the level of service calculation. Other programs far over-estimated entry capacity for a single lane roundabout (such as Sidra software being 80% higher compared to Synchro software for the volume and lanes in the Pleasant Valley / Faith Lane intersection scenario). The traffic volumes at Faith Lane and Pleasant Valley Road / SR 49 are currently 980 vph in the EB direction and 589 in the WB direction during the Year 2018

pm peak hour, and only 28 cars going to or from Faith Lane (just 2%). In the Year 2035 these volumes will drop about 10% to 885 EB and 530 WB, based on the traffic shift that will take place from the Pleasant Valley Road / Missouri Flat Road pathway, to the SR 49 / Diamond Springs Parkway pathway once the Diamond Springs Parkway is constructed. The existing Year 2018 volumes to and from Faith Lane are only 28 vph in the pm peak hour, and this turn movement represents what is called the “Conflicting Flow” in a roundabout at Faith Lane. It directly affects the capacity calculation for roundabouts. Since this volume is very low, most other software programs would over-estimate the capacity of the roundabout based upon their specific methods (see Appendix A.4 for more information and a comparative chart). For this reason, Synchro/SimTraffic was used in this analysis, to be conservative, and not over-estimate the capacity of the roundabout. Even with using the conservative Synchro HCM 2010 method, the level of service would be LOS C, indicating that this improvement would be successful at moving traffic long into the future.

**Analysis Validation.** PRISM Engineering validated by analysis and research the decision to use the most appropriate and conservative method for calculating roundabout level of service at the Faith Lane location. This was ultimately done by using Synchro and SimTraffic, both of which are based upon the HCM 2010 methodology contained in Chapters 21 and 33, and implemented in Synchro 9 and beyond. These HCM 2010 chapters inform that the method is robust and well developed, based on empirical data gathered from the US roundabout installations, and not based on traffic conditions in other countries such as the UK or Australia. The Synchro and SimTraffic tools are shown by detailed research to be much more conservative for analyzing smaller roundabouts, in that these yield lower roundabout capacities for small diameter, single lane roundabouts with low turn conflicts. This is exactly the kind of roundabout that will be installed on Pleasant Valley Road at Faith Lane, a single lane entry, single lane circulation inside circle, very low (2%) turning movement conflict, and a small diameter. Our calculations level of service came out to be LOS C conditions, but when compared to other software programs like SIDRA (which calculate capacities based on empirical data from other countries and is 80% higher than Synchro in overestimating capacity), or RODEL being based on UK traffic flows and specific geometry assumptions... Rodel tends to be 15-20% higher in capacity primarily because of UK driver familiarity with numerous roundabouts. SIDRA being based on conditions in Australia, has an “environment factor” for use in the US to change operation from standard defaults, but this method is guesswork. Synchro 9 handles even multi lane roundabouts which previous versions could not. SimTraffic is a simulation method based on Synchro inputs, and can also effectively calculate level of service for roundabouts. Some calibration is needed for all methods used, and PRISM Engineering utilized location specific data to enhance results for Synchro and SimTraffic. These included extensively measuring Saturation Flow Rates in the study area to determine how “aggressive” drivers are in the area based on vehicle headways.

### **Year 2027 Conditions Mitigation Recommendations for this scenario**

Table 14 shows LOS F conditions for the Year 2027 conditions at only one of the study intersections without the project. This intersection is Pleasant Valley Road at SR 49 S (Int. #17), which has LOS F conditions without the project. This locations needs mitigation such as installation of a traffic signal:

- **Install Signal** at Pleasant Valley Road and SR 49 S (needed without project)

The arterial roadway segment analyses using microsimulation for this scenario puts the level of service for all analysis roadways on Missouri Flat Road and Pleasant Valley Road at LOS D or better conditions, requiring no mitigation with or without the project. This is assuming that the County’s CIP improvements for signalization are in place, the new roundabout at Pleasant Valley Road and Faith Lane are in place, and

the Diamond Springs Parkway is in place which will mitigate future traffic (the volumes on Pleasant Valley Road will also slightly reduce in the future because of a rerouting of some regional traffic to use the Diamond Springs Parkway instead). The project has an impact at these intersections (based on the assumption of side-street stop-control), and the mitigation is signalization. The project would satisfy its obligation through payment of TIM fees

### **Year 2027 Plus Project Conditions Mitigation Recommendations for this scenario**

When the project traffic is added in, two intersections are adversely impacted, and would require mitigation for this scenario. The arterial roadway segment analyses using microsimulation for this scenario puts the level of service for all analysis roadways on Missouri Flat Road and Pleasant Valley Road at LOS D or better conditions, requiring no mitigation with or without the project. This is assuming that the County's CIP improvements for signalization are in place, and the Diamond Springs Parkway is in place which will mitigate future traffic (the volumes on Pleasant Valley Road will also slightly reduce in the future because of a rerouting of some regional traffic to use the Diamond Springs Parkway instead).

- **Install Roundabout at Pleasant Valley / Faith Lane** (needed because of project)
  - **Alternative Option: Install Two Signals instead of Roundabout at Pleasant Valley Road at Faith Lane and also at China Garden Road** (needed because of project). These intersections would need to have coordinated signals to help keep traffic moving on Pleasant Valley Road (SR 49), and Pleasant Valley Road would need to be widened to three lanes to accommodate left turn pockets for the newly signalized intersections at Faith and China Garden.
- **Install Signal at Pleasant Valley Road and SR 49 S** (needed without project)

### **Year 2035 Conditions Mitigation Recommendations for this scenario**

Table 19 shows LOS F conditions at only one of the study intersections, similar to the Year 2027 scenario. These intersection needs mitigation such as installation of a traffic signal:

- **Install Signal at Pleasant Valley Road and SR 49 S** (needed without project)

### **Year 2035 Plus Project Conditions Mitigation Recommendations for this scenario**

Table 19 shows LOS F conditions at two of the study intersections when the project traffic is added in, the same locations identified in the Year 2027 scenario. These include the following intersections which need mitigation such as installation of a traffic signal or roundabout:

- **1) Install Roundabout at Pleasant Valley / Faith Lane** (needed because of project)
  - **Alternative Option: Install Two Signals instead of Roundabout at Pleasant Valley Road at Faith Lane and also at China Garden Road** (needed because of project). These intersections would need to have coordinated signals to help keep traffic moving on Pleasant Valley Road (SR 49), and Pleasant Valley Road would need to be widened to three lanes to accommodate left turn pockets for the newly signalized intersections at Faith and China Garden.
- **2) Install Signal at Pleasant Valley Road and SR 49 S** (needed without project)

# APPENDIX

- Saturation Flow Rate Survey Summary Table A.1
- Section A.2. Microsimulation Model Calibration: Synchro/SimTraffic Software
- Section A.3. Year 2018 Traffic Counts and Update Methodology
- Section A.4. Roundabout Analysis Considerations and Factors
- Section A.5. Missouri Flat Road Corridor Arterial Segment Analysis
- Section A.6. Planning Level Segment Analysis
- Section A.7. 24-Hour Traffic Counts
- Section A.8. Travel Demand Model Outputs from El Dorado County for Year 2010 and 2035 AM and PM Peaks.
- Section A.9. Synchro and SimTraffic Microsimulation HCM 2010 Capacity Analyses Output Sheets (downloaded separately to County DOT Staff from DROPBOX location, and contained in separate and labeled PDF files for each scenario)
- Section A.10 Synchro and SimTraffic Instructions
- Section A.11 Signal Warrant Analysis Worksheets

**Table A.1. Saturation Flow Rate Studies, Missouri Flat Road**

| No. | CLOCK TIME  | LOCATION of Sample                                 | TIME (secs) | # of CARS | AVERAGE HEADWAY (secs) | Saturation Flow Rate (vph) | SFR for LEFT TURN Moves | SFR for THRU Moves |
|-----|-------------|--|-------------|-----------|------------------------|----------------------------|-------------------------|--------------------|
| 1   | 7:30-7:45am | Missouri Flat at US50 WB Ramp SBT                  | 13.7        | 6         | 2.3                    | 1577                       |                         | 1577               |
| 2   | 7:30-7:45am | Missouri Flat at Mother Lode SBT                   | 11.3        | 6         | 1.9                    | 1912                       |                         | 1912               |
| 3   | 7:30-7:45am | Missouri Flat at Mother Lode NBT                   | 10.9        | 6         | 1.8                    | 1982                       |                         | 1982               |
| 4   | 7:30-7:45am | Missouri Flat at Mother Lode NBT                   | 13.4        | 6         | 2.2                    | 1612                       |                         | 1612               |
| 5   | 7:30-7:45am | Missouri Flat at Mother Lode <b>EBL left turn</b>  | <b>13.3</b> | <b>6</b>  | <b>2.2</b>             | <b>1624</b>                | <b>1624</b>             |                    |
| 6   | 7:30-7:45am | Missouri Flat at US50 EB Ramp SBT                  | 8.9         | 4         | 2.2                    | 1618                       |                         | 1618               |
| 7   | 7:30-7:45am | Missouri Flat at US50 WB Off <b>WBL left turn</b>  | <b>10.8</b> | <b>5</b>  | <b>2.2</b>             | <b>1667</b>                | <b>1667</b>             |                    |
| 8   | 7:45-8:00am | Missouri Flat at Mother Lode NBT                   | 11          | 6         | 1.8                    | 1964                       |                         | 1964               |
| 9   | 7:45-8:00am | Missouri Flat at Mother Lode NBT                   | 20.2        | 14        | 1.4                    | 2495                       |                         | 2495               |
| 10  | 7:45-8:00am | Missouri Flat at Forni SBT                         | 14.6        | 6         | 2.4                    | 1479                       |                         | 1479               |
| 11  | 7:45-8:00am | Missouri Flat at Forni <b>SBL left turn</b>        | <b>10.9</b> | <b>5</b>  | <b>2.2</b>             | <b>1651</b>                | <b>1651</b>             |                    |
| 12  | 7:45-8:00am | Missouri Flat at Forni NBT                         | 12.2        | 5         | 2.4                    | 1475                       |                         | 1475               |
| 13  | 7:45-8:00am | Missouri Flat at Forni NBT                         | 22          | 9         | 2.4                    | 1473                       |                         | 1473               |
| 14  | 7:30-7:45am | Missouri Flat at US50 EB Ramp NBT                  | 7.4         | 3         | 2.5                    | 1459                       |                         | 1459               |
| 15  | 7:30-7:45am | Missouri Flat at US50 EB Ramp NBT                  | 11.2        | 7         | 1.6                    | 2250                       |                         | 2250               |
| 16  | 7:30-7:45am | Missouri Flat at Mother Lode SBT                   | 19.8        | 11        | 1.8                    | 2000                       |                         | 2000               |
| 17  | 5:00-5:15pm | Missouri Flat at US50 EB Ramp NBT                  | 22.1        | 12        | 1.8                    | 1955                       |                         | 1955               |
| 18  | 5:00-5:15pm | Missouri Flat at US50 EB Ramp SBT                  | 11.1        | 5         | 2.2                    | 1622                       |                         | 1622               |
| 19  | 5:00-5:15pm | Missouri Flat at US50 EB Ramp SBT                  | 18.5        | 9         | 2.1                    | 1751                       |                         | 1751               |
| 20  | 5:00-5:15pm | Missouri Flat at Mother Lode SBT                   | 8.1         | 5         | 1.6                    | 2222                       |                         | 2222               |
| 21  | 5:00-5:15pm | Missouri Flat at US50 EB Ramp SBT                  | 10.7        | 6         | 1.8                    | 2019                       |                         | 2019               |
| 22  | 5:00-5:15pm | Missouri Flat at US50 WB Ramp SBT                  | 10.7        | 6         | 1.8                    | 2019                       |                         | 2019               |
| 23  | 5:00-5:15pm | Missouri Flat at US50 WB Off <b>WBL left turn</b>  | <b>12.5</b> | <b>7</b>  | <b>1.8</b>             | <b>2016</b>                | <b>2016</b>             |                    |
| 24  | 5:00-5:15pm | Missouri Flat at US50 EB Off <b>EBR right turn</b> | <b>21.1</b> | <b>9</b>  | <b>2.3</b>             | <b>1536</b>                | <b>1536</b>             |                    |
| 25  | 5:00-5:15pm | Missouri Flat at US50 WB Off <b>WBL left turn</b>  | <b>7.2</b>  | <b>4</b>  | <b>1.8</b>             | <b>2000</b>                | <b>2000</b>             |                    |
| 26  | 5:00-5:15pm | Missouri Flat at US 50 EB Off <b>EBL left turn</b> | <b>9.7</b>  | <b>4</b>  | <b>2.4</b>             | <b>1485</b>                | <b>1485</b>             |                    |
| 27  | 5:00-5:15pm | Missouri Flat at US50 EB Off <b>EBR right turn</b> | <b>5.8</b>  | <b>3</b>  | <b>1.9</b>             | <b>1862</b>                | <b>1862</b>             |                    |
| 28  | 5:00-5:15pm | Missouri Flat at US50 EB Ramp SBT                  | 12.7        | 6         | 2.1                    | 1701                       |                         | 1701               |
| 29  | 5:00-5:15pm | Missouri Flat at US50 EB Ramp SBT                  | 18.7        | 9         | 2.1                    | 1733                       |                         | 1733               |

*average headway based on Saturation Flow samplings*

|            |             |             |             |
|------------|-------------|-------------|-------------|
| <b>2.0</b> | <b>1798</b> | <b>1730</b> | <b>1825</b> |
|            | AVG         | LEFT        | THRU        |
| AM         | 1765        | 1647        | 1792        |
| PM         | 1840        | 1780        | 1878        |

\*Total time of sample in seconds starting with 4th vehicle at stop line

SimTraffic uses 2.2 second headways for higher speed roads (50 mph+) and 1.8 secs for 20 mph, which is even more conservative than the 2.0 average PRISM used at the ramp intersections. This means that the SimTraffic is going to be showing a more worst case situation than actual, which means the analysis is conservative if SimTraffic DEFAULTS are used, which they were.

\*\* AM and PM averaged together  
 \*\*\* AM Saturation Flow values  
 \*\*\*\* PM Saturation Flow values

Source: PRISM Engineering

Data collected by PRISM Engineering in the field using video cameras, stop watches, and personal observations by Traffic Engineer during entire study.

## **Section A.2. Microsimulation Model Calibration: Synchro/SimTraffic Software**

PRISM Engineering utilized both Synchro and SimTraffic models in the development of analysis to determine macro level Level of Service and corresponding delay times. The SimTraffic model used all inputs from the Synchro model to animate traffic in a simulation that closely represents the real-world conditions. PRISM Engineering took video of all traffic flows at major intersections along Missouri Flat Road to document and have for a reference, the actual flows of traffic during am and pm peak hour time periods. This visual video reference of peak hour traffic, along with showing the number of cars in the queues, etc., provided a visual validation of animated traffic flows that were taking place in the SimTraffic model for peak hour traffic counts. Where the model needed slight adjustments due to a non-match in verifying animation, we adjusted speeds of the road, made any needed corrections to signal timing to more closely represent timing and signal cycle lengths in the field, as well as utilizing the saturation flow rate data in **Table A1** to represent what was included in the model for accuracy in acceleration and other traffic dynamics (the higher the saturation flow rate, the higher the aggressive factor in SimTraffic, and the headways are affected with this data increasing capacity, etc.).

Caltrans Guide for the Preparation of Traffic Impact Studies states on p.5 that the HCM method (used in Synchro) is not capable or sensitive to the dynamics of closely spaced intersections (and this is why a microsimulation model like SimTraffic is more appropriate):

"The procedures in the Highway Capacity Manual "do not explicitly address operations of closely spaced signalized intersections. Under such conditions, several unique characteristics must be considered, including spill-back potential from the downstream intersection to the upstream intersection, effects of downstream queues on upstream saturation flow rate, and unusual platoon dispersion or compression between intersections. An example of such closely spaced operations is signalized ramp terminals at urban interchanges. Queue interactions between closely spaced intersections may seriously distort the procedures in" the HCM.

For these reasons, PRISM Engineering used SimTraffic as the microsimulation analysis tool calibrated with specific saturation flow rates, video verification of traffic flows compared to animation, and adjustments of speeds for real world traffic flows for all five intersections at the Missouri Flat / US 50 interchange area where all intersections are closely spaced from 100 feet to 400 feet apart. We used SimTraffic to generate delay reports as required by El Dorado County and correlated this delay to level of service in the report tables. In our calibration we matched real-world conditions. We used multiple runs (20), averaged together the middle 10 runs to reduce the variability in results. We used a 10 minute seed time and 60 minute record time for analysis purposes.

## **Section A.3. Traffic Counts and Update Methodology**

PRISM Engineering originally conducted new two-hour am and pm peak hour traffic counts on Wednesday October 26, 2016 and also on Thursday December 8, 2016. We used HD video camera technology mounted at high locations on poles or signs to capture all turning movements at major intersections. These videos were counted later in the office on a computer, watching each video several times to count large volume approaches separately for higher accuracy, since some intersections were of extremely high volumes and difficult to fully count in the field, as well as be able to see all turning movements at street level). We counted smaller volume intersections in the field using electronic traffic counting software (TurnCount) on computer tablets, then converted into Microsoft Excel spreadsheets for each count, for both the am and pm peak hour traffic counts taken. Traffic counts were taken at all 16 existing intersections in the study, and this turning movement data was entered into the Synchro model software for intersection analysis, for each of the intersections, for both the am peak hour and pm peak hour time periods. PRISM Engineering balanced all volumes using the Synchro balancing feature, between intersections where intersections were closely spaced, and all volumes should match, and where there were no significant driveways or side streets where traffic could enter or leave the specific corridors like Missouri Flat Road, or SR 49. Engineering judgment was used to ensure the higher volumes of adjacent intersections were used in making the balance of traffic volumes.

For road segments, PRISM Engineering originally utilized the County's data from their 2015 Annual Traffic Count Summary document, as well as specific hourly totals from the same source along the Missouri Flat corridor which could be easily correlated with the peak hour intersection counts PRISM Engineering had taken in late 2016. Segment volumes from County counts between intersections could be compared to PRISM Engineering intersection count approach volumes or exit volumes to see if all traffic counts were within reasonable magnitudes of each other. If any anomalies arose, other adjacent counts were examined to determine where an adjustment might be needed so that traffic volumes between intersections were properly balanced according to engineering judgment.

On February 21, 2018, Traffic Counts Plus (whom PRISM Engineering hired) used roadway hose counters to gather new hourly directional roadway data for a 24 hour period on a Wednesday at 10 key locations so that any increases in traffic volumes observed on study roadways could be compared to the original existing 2016/2017 counts, and PRISM Engineering would make any needed adjustments upward to reflect growth, if any, updating all counts to current conditions. The methodology used was to take the corresponding hourly peak hour directional volumes (such as 5:00 to 6:00 pm) and compare these to the approach or departing totals from the adjacent intersection counts, and after noting any differences, update the intersection counts to reflect increases in traffic volume. Our method was to only increase the volumes of intersection counts and not decrease, to be conservative. The following new Feb 21, 2018 roadway segment 24 hour counts were taken for this purpose:

1. Forni Road north of SR 49,
2. Missouri Flat Road north of Plaza Drive,
3. Missouri Flat Road north of US 50 WB Ramps,
4. Missouri Flat Road north of Forni Road,
5. Missouri Flat Road south of Forni Road,
6. Missouri Flat Road south of China Garden Road,
7. Missouri Flat Road north of SR 49 / Pleasant Valley Road,
8. SR 49 / Pleasant Valley Road west of Faith Lane,
9. SR 49 / Pleasant Valley Road east of China Garden Road,
10. SR 49 / Pleasant Valley Road west of Missouri Flat Road.

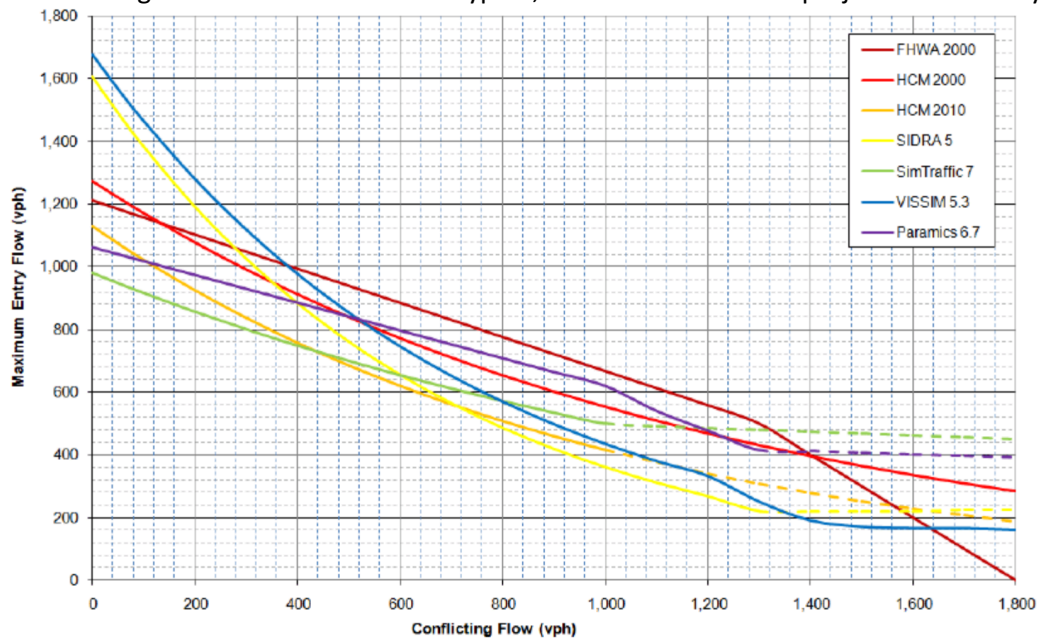
This traffic data collected by Traffic Counts Plus is included here for each of the 10 locations (follows next page). The counts report the directional volumes on the road segment in 15 minute consecutive intervals for a 24 time period. The count summary shows hourly totals as well, and identifies the actual am and pm peak hours. It shows the two way total, for both the am hours and the pm hours. PRISM Engineering used this data to fully update all original am and pm peak hour turning movement counts for the 16 study intersections, combined with the standard balancing technique in Synchro, and using engineering judgment to ensure a conservative adjustment is made (no decreasing of volumes, but increasing where needed to match new counts).

#### **Section A.4. Roundabout Analysis Considerations and Factors**

Analysis of roundabouts using the HCM 2010 methodology contained in Chapters 21 and 33, and implemented in Synchro 9 and beyond, was used in this study. SIDRA was considered, and outputs compared to Synchro and SimTraffic, but found to be inadequate by comparison for this particular roundabout problem. The proposed roundabout at Pleasant Valley Road and Faith Lane is small, with single lane entries, and has a very small conflicting flow. This is precisely the type of roundabout that calculations with SIDRA are in the outlier category. We carefully considered the outputs and limitations and decided to not use SIDRA because of its limitations in projecting extremely high capacities for entry traffic flows into single lane roundabouts when the inside circulating/conflicting volume is low. It is very low at this location. In fact, the capacity of the SIDRA software came out to be nearly DOUBLE the value in the Synchro/SimTraffic model (1600 vph maximum entry capacity versus 980 vph in the Synchro/SimTraffic model). This is not acceptable, or believable. In the case of the Faith Lane single lane roundabout, most all of the volume in the roundabout is pass through, and does not make a turning movement, which means that the "Conflicting Flow" in the roundabout is very small (actually only 28 vph today) . Since the proposed roundabout in this study is a single lane roundabout, with a single circulation lane internal,

SIDRA was not used because of this significant limitation. Instead, the Synchro and SimTraffic software combo was used, because Synchro 9, based on the HCM 2010 methods and empirical US data for roundabouts, takes into consideration more relevant and appropriate roundabout parameters. Also, the SimTraffic model is a more advanced tool, a microsimulation model that can be calibrated, and simulating traffic flows on screen while calculating any delays by virtue of direct conflicts of vehicles in the roundabout or approaches (level of service can be directly determined from delays). These HCM 2010 chapters 21 and 33 inform that the method is robust and is based on empirical Data within the US and not based on traffic conditions in other countries. The Synchro 9 and companion SimTraffic tools, based on the HCM 2010 methods, are more conservative, in that they yield lower roundabout capacities than in other software based on other countries (such as RODEL being based on UK traffic flows and specific geometry which tend to be 15-20% higher in capacity because of driver familiarity there, and SIDRA based on conditions in Australia but has an “environment factor” for use in the US to change operation from standard defaults, but is not based on US data directly). Synchro 9 can handle even multi lane roundabouts which previous versions could not. SimTraffic is a simulation method based on Synchro inputs, and can also effectively calculate level of service for roundabouts. Some calibration is needed for all methods used, and PRISM Engineering utilized location specific data to enhance results for Synchro and SimTraffic and these included measuring Saturation Flow Rate to determine how “aggressive” drivers are in the area based on vehicle headways.

Studies show that for the situation on Pleasant Valley Road, a road that is two lanes and because of historical considerations with existing buildings will never be more than two lanes, the roundabout at Faith Lane will need to be a single lane roundabout, with a single lane approach for all approaches. There is not sufficient room for the diameter of the roundabout to expand to two lanes without impact to historical buildings. The Synchro 9 and SimTraffic microsimulation model are the most appropriate tool to calculate the best capacity and level of service calculation for this location because of its conservative calculation for entry capacity as shown in the following “Figure 7” from software comparison research, where several software programs are compared for how they treat “Maximum Entry Flow” capacity for a single lane roundabout. It can be seen that the SimTraffic model (green line) had the lowest and most conservative result for single lane roundabouts where the internal circulating volume is very low. This condition matches closely the condition in the field at Faith Lane and Pleasant Valley Road / SR 49, where the primary existing volumes are through lane volumes on Pleasant Valley Road (Year 2018 983 EB+589WB=1572 and 28 vph turning, or only 2%, so that 98% of traffic going through the roundabout does not circulate. This places the “Conflicting Flow” at the left side of Figure 7 chart where the SimTraffic Maximum Entry Flow is around 980 vph). In the future Year 2035 condition, this EB entry volume is reduced based on reassignment of traffic with the bypass, and the EB volume is projected to be only 885 vph).



Source: Stanek, *Comparing Roundabout Capacity Methods, or How the Selection of Analysis Method Can Affect the Design* (Conference: *Transportation Research Board Annual Meeting, At Washington, DC*)

**FIGURE 7. Single-lane roundabout capacity**



|  |   |   |
|--|---|---|
| <p><b>HCM 2010 ROUNDABOUTS (CHAPTERS 21 &amp; 33)</b></p> <p>AGENDA<br/>Synchro<br/>HCM 2010<br/>SimTraffic</p> <ul style="list-style-type: none"> <li>• Based on empirical data within US</li> <li>• Lower capacities than other countries</li> <li>• Analysis of two-lane roundabouts             <ul style="list-style-type: none"> <li>- Lane-by-lane analysis for multilane roundabouts</li> </ul> </li> <li>• Entry, exit and conflicting flow rates</li> <li>• Capacity function of conflicting flow             <ul style="list-style-type: none"> <li>- Right &amp; left computed separately</li> </ul> </li> <li>• Right-turn by-pass lanes considered             <ul style="list-style-type: none"> <li>- Either yielding exits or free flowing</li> </ul> </li> <li>• Encouraged to calibrate to local conditions             <ul style="list-style-type: none"> <li>- Critical and follow-up headways</li> </ul> </li> </ul> | <p>can't have</p> <p><b>HCM 2010 LIMITATIONS</b></p> <p>AGENDA<br/>Synchro<br/>HCM 2010<br/>SimTraffic</p> <ul style="list-style-type: none"> <li>• Upstream/downstream roundabouts or signalized intersections</li> <li>• Extremely high entering traffic volumes</li> <li>• High volumes of pedestrians</li> <li>• More than two entry lanes</li> <li>• Limited or short entry designs</li> <li>• Pedestrian model not based on U.S. roundabouts</li> <li>• Bicycle operations not available</li> </ul> | <p>Defaults can be manipulated too easy</p> <p><b>SIDRA USER</b></p> <ul style="list-style-type: none"> <li>▪ Quite user friendly – quick &amp; easy to follow</li> <li>▪ Movement displays are nice for design reports</li> <li>▪ Data easily extracted from results</li> </ul> <p><b>SIDRA REVIEWER</b></p> <ul style="list-style-type: none"> <li>▪ Lots of output to review</li> <li>▪ Quite a few "defaults" can be altered to manipulate results</li> <li>▪ Really want actual file</li> <li>▪ Some user error is possible</li> </ul> |
| <p>Single lane roundabout SIDRA too high</p> <p>Single Lane FHWA Study</p>   |   |   |

## Section A.5 Missouri Flat Road Corridor Arterial Segment Analyses

Missouri Flat Road between Pleasant Valley Road on the south and Plaza Drive on the north, takes on *many different forms of cross-section and traffic control* such as large intersections with full signal control, small intersections with a side street stop control, two-way left turn lane medians, left turn pockets unsignalized at intersections, or no median at all (just double yellow centerline striping). Transitions between these type of cross sections are also complex, making it difficult to analyze Missouri Flat Road in a consistent and appropriate way, using an appropriate analysis tool. Most analysis tools such as HCS 7 based on the HCM 2010 methods and procedures, do not have a capability for instance, to analyze a two lane arterial if it has a TWLTL median. It can only analyze an arterial with four or more lanes. This is probably because of the hidden complexity of the two lane arterial. It is complex because cars cannot pass each other, and delays are governed by the slowest moving car or truck. Certain aggressions in driver behavior may be present such as tail-gating, etc., and gaps in traffic may be rare, making it very difficult for side street traffic to safely enter the main arterial.

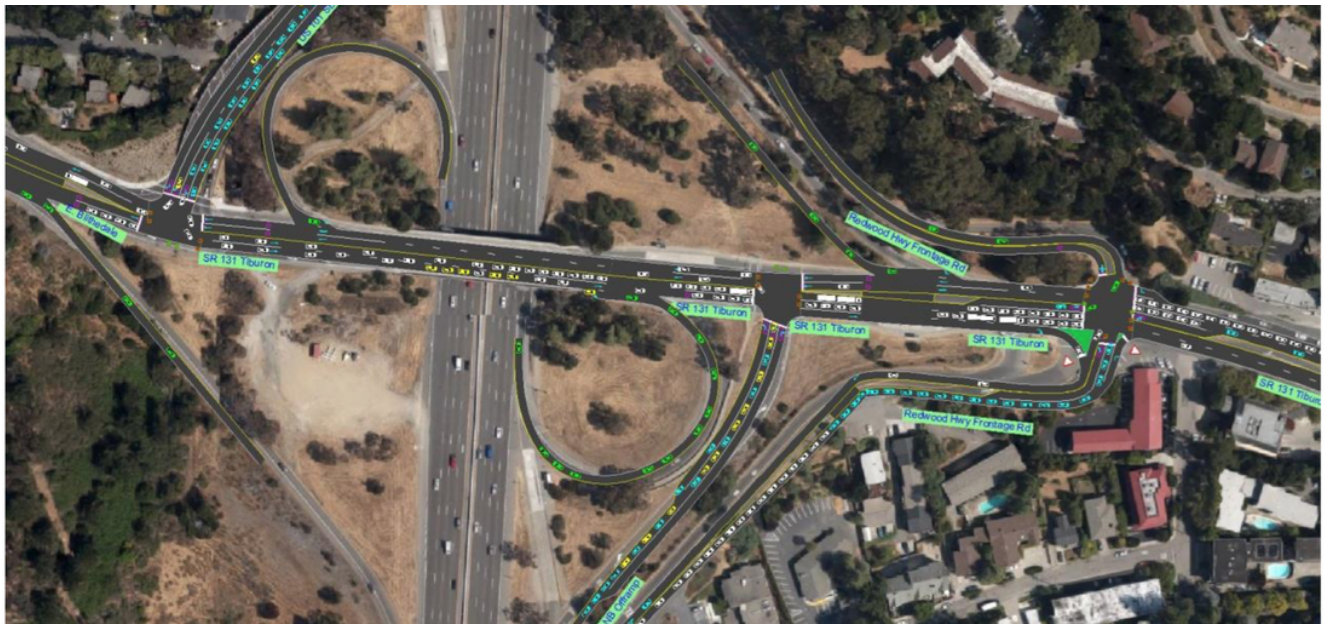
*HCS is software that generally analyzes only a single transportation element*, such as an intersection or a roadway segment, or a freeway ramp. It cannot analyze the bigger picture transportation problem, and it certainly can't account for changes or transitions in the system such as when a four lane road transitions into a two lane road, and the traffic dynamics that go along with those kinds of changes. It can't account for severe delays that may occur at a nearby adjacent intersection, where traffic is blocked and this traffic blockage extends back into another intersection but the HCS software calculates a satisfactory level of service based on the local volumes and turning movements only.

*This limitation can yield false results in some cases*, and is the main reason that in this report PRISM Engineering used the HCM 2010 compatible **Synchro** and **SimTraffic** models to analyze traffic, especially on Missouri Flat Road. Even though Synchro, being a macro model with lots of detail for road geometry and traffic profiles and signal timing / phasing control,

its companion software SimTraffic reads and utilizes all of this same information and takes the analysis much further. SimTraffic can actually place each car in its system individually, and animate the combined traffic in a realistic model that actually shows traffic moving at speed limits if possible, and slowing when there are real-world type physical limitations in capacity in getting traffic through an intersection or road segment. Cars moving are bound by physical limitations, if they can't proceed (cars ahead, or light is red, etc), the visual animations on the screen show this, and the transportation engineer can view these kinds of traffic flow problems and make appropriate mitigation adjustments to road sizing, intersection sizing, signal timings, traffic control choices, or even speed limits, etc. Interactively, the transportation system can be adjusted until a satisfactory capacity and throughput of traffic flows is achieved.

PRISM Engineering explored several methods to calculate the appropriate level of service for roadway segments (not intersections). These included HCM 2010 compatible methods built in to the SimTraffic software, the HCS 7 software, and the assumptions of the El Dorado County "Planning Level" roadway segment analysis method. These are briefly discussed in the following paragraphs:

1. The SimTraffic microsimulation model (incorporates all roadway cross-section details including Two-way Left Turn Lane (TWLTL) medians, posted speeds, lane capacities, all details of lane geometry and vehicle types in microsimulation, etc, which includes the effects on delay to a roadway segment from adjacent intersections, signal timings, etc. It looks at the bigger picture of a system of traffic intersections and segments) the sophisticated SimTraffic HCM 2010 microsimulation method which takes into consideration all adjacent intersections, signal timings, delays, turning movements, and medians which may be a two-way left turn lane (TWLTL) or a left turn pocket, or even a stop sign or signal. It also considers the specific speed limits and saturation flow rates determined from field data measurements.



**BEFORE CONDITION:**

*The picture above is a "screen shot" of the computerized SimTraffic microsimulation model which was calibrated to the existing PM peak hour traffic, and verified with video. The microsimulation shows vehicles queued up on the NB approach of the Redwood Highway Frontage Road at SR 131, as well as the WB approach on Tiburon Road, and also the US 101 NB Off-ramp and On-loop.*

*screen shot from SimTraffic software, in an analysis by PRISM Engineering, showing vehicle spacing and animation of traffic*

2. The **HCS 7** two-lane and multilane highways modules (cannot handle TWLTL for two lane highways which is critical to accurately analyze much of Missouri Flat Road; It is not a microsimulation model and cannot take into account a longer corridor of potential delays at adjacent intersections, etc It can simply incorporate directionality, speed limits, truck percentages, lane widths, etc) This method was ruled out because of inability

to calculate level of service for the specific cross-section on much of Missouri Flat Road where TWLTL is present (see notation in pop-up window in graphic: “Invalid Number of Lanes Value... Range is 2 to 9. Please try again”). The median type of TWLTL could be selected but only for two or more lanes in each direction of the roadway cross section. For this reason, the software would not analyze Missouri Flat Road which specifically had a single lane in each direction with the TWLTL median. HCS 7 also has a “Two Lane” highway calculation module, but has no feature to make the median configured as a TWLTL. This significant omission in the method makes it an inappropriate tool to try and analyze the traffic condition on Missouri Flat Road, and so the HCS 7 software was eliminated as a tool to analyze traffic in this report.

The screenshot displays the HCS 7 software interface with the following sections:

- Project Properties:** Analyst (Grant Johnson, TE), Agency (El Dorado County), Analysis Year (2019), Jurisdiction (El Dorado County), Time Period Analyzed, Date (4/24/2019), and Project Description.
- Geometric Data:**
  - Direction 1: Missouri Flat Road SB, Number of Lanes: 1, Measured FFS: , Base Free Flow Speed: 60.0, Median Type: TWLTL, Lane Width: 12, Right Side Clearance: 6, Median (Left) Side Clearance: 6, Access Point Density: 8.0, Terrain Type: Level, Percent Grade: -, Grade Length: -.
  - Direction 2: Missouri Flat Road NB, Number of Lanes: 2, Measured FFS: , Base Free Flow Speed: 60.0, Median Type: TWLTL, Lane Width: 12, Right Side Clearance: 6, Median (Left) Side Clearance: 6, Access Point Density: 0.0, Terrain Type: Level, Percent Grade: -, Grade Length: -.
- Demand Data:** Demand (1058), Peak Hour Factor (0.94), Total Trucks (6.00), Single-Unit Trucks (SUT) (-), Tractor-Trailers (TT) (-), Mixed Flow Model ().
- Adjustment Factors:** Driver Population (All Familiar), Capacity Adjustment Factor (1.000), Speed Adjustment Factor (1.000).

An error pop-up window is overlaid on the Demand Data section, stating: "Invalid Number of Lanes value" and "Number of Lanes : Range is 2 to 9. Please try again." The error message lists the values 1058, 0.94, and 6.00. A "Next" button is visible on the right side of the interface.

screen shot from HCS 7 software

- The El Dorado County “**planning level**” method (only variables are total two-way volume and number of lanes in the type of cross-section; the method is very limited” having no consideration for lane widths, speeds or ability to look at TWLTL, etc.). The method is very conservative and yields the worst-case results by consistently putting roads with high volumes into the LOS F category, when there is no consideration that the side street volumes might be very relatively low, and the overall average of vehicle delay is also low. If the speeds of traffic on the main street are maintained, and it operates more like a freeway lane in that there are no delays or stops, even though side street traffic may have a very difficult time finding gaps in traffic to be able to enter the Missouri Flat Road traffic during peak time periods at intersections or driveways where there are no traffic signals installed, if the speeds of the main road are still maintaining at the posted speed limit it is not appropriate to label the level of service on the facility to LOS F conditions. This inaccurately makes it appear that there is a traffic jam taking place, and speeds are slow, when in actuality it is only the side street vehicles that are delayed at the LOS F condition. It may also only be a small number of cars on the side streets, such as is the case along the Missouri Flat Road corridor at Enterprise or Industrial. In summary, this planning level method is a simple tool that enables a quick result, but the result if shown at say, LOS F, should be further evaluated to see if the LOS F condition would really exist given more information into the overall traffic profile

and lane geometry. This was the engineering judgment that was used in this report, to conduct the planning level roadway segment analysis, and then provide additional information from the microsimulation tool SimTraffic so that a more accurate calculation of vehicle delay could be produced. The tables in this report that summarize roadway segment levels of service show the results from both methods, the microsimulation SimTraffic method, as well as the El Dorado County planning level method. The microsimulation SimTraffic method, being more accurate, governs the results and over-rides any results from the planning method. Both are shown to provide clarification and understanding as to how different methods focus on different things. The SimTraffic microsimulation is by far the best and most accurate method, but the simple planning level method can give results where it is not feasible to build a microsimulation model (time and/or budget constraints).

In the report, the tables that show results for the arterial roadway segment analyses for all scenarios, have two parts. The first analysis method is shown at the top section of the table summarizing an average vehicle delay for each roadway segment analyzed with the SimTraffic microsimulation software (based on HCM 2010 procedures), and the resulting speeds of traffic. The level of service is based on the calculated delay for vehicles, based on numerous factors built into the microsimulation model.

The results in the lower half of the table are for the County's generic planning level analysis, also based on HCM 2010 and a limited cross-section description (such as 4AD which is a 4 lane divided arterial, and 2A which is a two lane arterial), but with numerous assumptions not necessarily specific to the roadway being analyzed. The total segment volume (both directions) is summed and divided by a single capacity to determine a level of service for the segment. This is a quick method, but it has many limitations including any ability to consider directionality of traffic, what kind of median is present or not, or whether there are any turn lanes, etc. or how wide are the lanes or the shoulders of the paved road. Based on comparisons between the two halves of the table, it can be seen that the LOS F conditions calculated using the planning method are actually LOS B or better in the microsimulation method, and the LOS B conditions also correlate with the intersection analyses for nearby intersections. This is because the microsimulation method is calculating the delay for the overall segment and not just the side streets.

## Section A.6 Planning Level Segment Analyses

*NOTE from County<sup>16</sup>: The County's TIA Guidelines allow the use of "planning level thresholds" as the default methodology for roadway segment analysis. These thresholds are quick to apply and result in conservative analysis results, but do not account for lane widths, speeds, and other roadway characteristics. The applicant may elect to provide HCM-based analysis, and this approach is generally preferred by the County DOT. Because the results of Prism's analysis using planning level thresholds were not consistent with field observations, County staff directed the applicant to perform HCM-based analysis.*

Planning Level Analysis yields LOS F results for many segment locations, but this is primarily indicative of an LOS F condition on the side streets, not the main road. This generic method does not correctly show the LOS A/B condition that exists on Missouri Flat Road through traffic (as can be seen in Table ES.2 and ES.3). This through traffic is primarily moving at or near posted speed limits, indicating a lack of congestion. However, there are fewer gaps in traffic due to the high volume of through traffic, resulting in higher delays for side street traffic (much smaller volumes), trying to enter the road. Table 4 summarizes the segment levels of service for Missouri Flat and Pleasant Valley Roads, using two methods for comparison: SimTraffic microsimulation (best), and simple planning level (least accurate).

Table 4 has two parts or two analyses shown. The first is the sophisticated SimTraffic HCM 2010 microsimulation method which takes into consideration all adjacent intersections, signal timings, delays, turning movements, and medians which may be a two-way left turn lane (TWLTL) or a left turn pocket, or even a stop sign or signal. It also considers the specific speed limits and saturation flow rates determined from field data measurements. The results shown at the top section of

---

<sup>16</sup> From "Peer Review of the Dorado Oaks Transportation Impact Study, 5/1/2019"

Table 4 are summarized as an average vehicle delay for each roadway segment as well as the corresponding level of service (based on HCM 2010), and the resulting speeds of traffic. The level of service is based on the calculated delay, which is based on numerous factors built into the microsimulation model.

The results in the lower half of the table are for the County’s generic planning level analysis, also based on HCM 2010 and a limited cross-section description (such as 4AD which is a 4 lane divided arterial, and 2A which is a two lane arterial). The total segment volume (both directions) is summed and divided by a single capacity to determine a level of service for the segment. This is a quick method, but it has many limitations including any ability to consider directionality of traffic, what kind of median is present or not, or whether there are any turn lanes, etc. or how wide are the lanes or the shoulders of the paved road. Based on comparisons between the two halves of the table, it can be seen that the LOS F conditions calculated using the planning method are actually LOS B or better in the microsimulation method. This is because the microsimulation method is calculating the delay for the segment and not the side streets.

**Table 4. Existing Year 2018 Link Segment Roadway Level of Service Summary**

| COUNTY PLANNING LEVEL SEGMENT ANALYSIS  |   | YEAR 2018 |     |         |     |       |
|---|---|-----------|-----|---------|-----|-------|
| Road Type*  | ARTERIAL SEGMENT LOCATION                   | AM Peak   |     | PM Peak |     | ADT   |
|   |   | VOL       | LOS | VOL     | LOS |       |
| 4AD   | Missouri Flat Plaza to US 50 WB Ramps       | 1440      | B   | 2106    | D   | 23138 |
| 4AD   | Missouri Flat US 50 WB Ramps to EB Ramps    | 1901      | D   | 2434    | D   | 23139 |
| 4AD   | Missouri Flat US 50 EB Ramps to Mother Lode | 2128      | D   | 2513    | D   | 33710 |
| 4AD   | Missouri Flat Mother Lode to Forni          | 1833      | C   | 2365    | D   | 33710 |
| 4AD   | Missouri Flat Forni to Golden Center        | 1682      | C   | 2049    | D   | 23609 |
| 2A  | Missouri Flat Golden Center to China Garden | 1767      | F   | 2020    | F   | 23611 |
| 2A  | Missouri Flat China Garden to Industrial    | 1428      | D   | 1808    | F   | 21011 |
| 2A  | Missouri Flat Industrial to Enterprise      | 1436      | D   | 1680    | F   | 21011 |
| 2A  | Missouri Flat Enterprise to Pleasant Valley | 1355      | D   | 1651    | F   | 17331 |
| 2A  | Pleasant Valley Missouri Flat to Faith      | 1238      | D   | 1597    | E   | 15004 |
| 2A  | Pleasant Valley Faith to China Garden       | 1240      | D   | 1579    | E   | 15000 |
| 2A  | Pleasant Valley China Garden to Fowler      | 1181      | D   | 1585    | E   | 15000 |
| 2A  | Pleasant Valley Missouri Flat to Commerce   | 1131      | D   | 974     | D   | 13500 |
| 2A  | Pleasant Valley Commerce to Patterson       | 1048      | D   | 983     | D   | 13500 |
| 2A  | Pleasant Valley Patterson to Forni          | 1012      | D   | 873     | D   | 9600  |
| 2A  | Pleasant Valley Forni to SR 49 (south)      | 948       | D   | 961     | D   | 9600  |
| *2A HCM 2010 Planning Level Capacity: LOS A=650, LOS B=750, LOS C=850, LOS D=1540, LOS E=1650     |   |           |     |         |     |       |
| *4AD HCM 2010 Planning Level Capacity: LOS A=1390, LOS B=1620, LOS C=1850, LOS D=3220, LOS E=3290 |   |           |     |         |     |       |

ADT Source:

Caltrans Traffic Volumes 2015, and El Dorado County Traffic County Annual Summary 2015

Capacity Source: El Dorado County Peak Hour Roadway Segment LOS Criterion, Table 1.

Source: Year 2018 traffic counts taken by PRISM Engineering, mid-block totals, am, pm peak hour, plus Project

The planning level method gives a quick idea of what the side street level of service would be for similar corresponding volumes. When comparing these planning results to the actual nearby intersection results, the Missouri Flat Road level of service is usually LOS A or LOS B, and the side street approaches at the intersections are LOS F (such as at Missouri Flat Road and Industrial or at Enterprise, see table ES.2).

Table 4 shows 4AD and 2A “planning level” roadway capacities in the table footer. The County has indicated that the 2A designation for Missouri Flat Road from Golden Center to Pleasant Valley Road will eventually upgrade (by CIP) to 4AD by the Year 2035, and this is reflected in relevant analyses in this report. More details on the County’s planning level of service criteria for street segments is shown in Table 5.

**Table 5. El Dorado County's Peak Hour Roadway Segment LOS Criterion<sup>17</sup>**

| CLASS |                                      | HCM 2010 LOS |       |       |       |       | HCM 6th Edition |       |       |       |       |
|-------|--------------------------------------|--------------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|
|       |                                      | A            | B     | C     | D     | E     | A               | B     | C     | D     | E     |
| 2R    | Minor Two-Lane Highway               | -            | 330   | 710   | 1,310 | 2,480 | -               | 330   | 710   | 1,310 | 2,480 |
| 2U    | Major Two-Lane Highway               | -            | 330   | 710   | 1,310 | 2,480 | -               | 330   | 710   | 1,310 | 2,480 |
| 4M    | Multilane Four-Lane Highway          | -            | 1,790 | 2,580 | 3,290 | 3,660 | -               | 1,770 | 2,540 | 3,160 | 3,600 |
| 2A    | Two-Lane Arterial                    | -            | -     | 850   | 1,540 | 1,650 | -               | -     | 640   | 1,310 | 1,510 |
| 4AU   | Four-Lane Arterial, Undivided        | -            | -     | 1,760 | 3,070 | 3,130 | -               | -     | 1,360 | 2,770 | 3,030 |
| 4AD   | Four-Lane Arterial, Divided          | -            | -     | 1,850 | 3,220 | 3,290 | -               | -     | 1,430 | 2,910 | 3,180 |
| 6AD   | Six-Lane Arterial, Divided           | -            | -     | 2,760 | 4,680 | 4,710 | -               | -     | 2,210 | 4,480 | 4,790 |
| 2F    | Two Freeway Lanes                    | -            | 2,070 | 2,880 | 3,590 | 4,150 | -               | 2,150 | 2,960 | 3,610 | 4,100 |
| 2FA   | Two Freeway Lanes + Auxiliary Lane   | -            | 2,610 | 3,630 | 4,520 | 5,230 | -               | 3,150 | 3,960 | 4,610 | 5,100 |
| 3F    | Three Freeway Lanes                  | -            | 3,100 | 4,320 | 5,380 | 6,230 | -               | 3,230 | 4,440 | 5,420 | 6,150 |
| 3FA   | Three Freeway Lanes + Auxiliary Lane | -            | 3,640 | 5,070 | 6,320 | 7,310 | -               | 4,230 | 5,440 | 6,420 | 7,150 |
| 4F    | Four Freeway Lanes                   | -            | 4,140 | 5,760 | 7,180 | 8,310 | -               | 4,300 | 5,930 | 7,220 | 8,200 |
| W22   | Minor Two-Lane Highway               | -            | 330   | 710   | 1,310 | 2,480 | -               | 330   | 710   | 1,310 | 2,480 |
| W20   | Minor Two-Lane Highway               | -            | 330   | 710   | 1,310 | 2,480 | -               | 330   | 710   | 1,310 | 2,480 |
| W18   | Minor Two-Lane Highway               | -            | 330   | 710   | 1,310 | 2,480 | -               | 330   | 710   | 1,310 | 2,480 |

**Notes:**

- (1) Threshold reductions between HCM 2010 and HCM 6<sup>th</sup> Edition are shown in red text and highlighted
- (2) HCM 2010 Freeway LOS based on Exhibit 10-8, Urban Area, Rolling Terrain, K-factor of 0.09, and D-factor of 0.60
- (3) HCM 6th Edition Freeway LOS based on Exhibits 12-39 and 12-40, Urban Area/Rural Area, Rolling Terrain, K-factor of 0.09, and D-factor of 0.60
- (4) HCM 2010 Multilane Highway LOS based on Exhibit 14-19, Urban Area/Rural Area, Rolling Terrain, K-factor of 0.09, and D-factor of 0.60
- (5) HCM 6th Edition Multilane Highway LOS based on Exhibits 12-41 and 12-42, Urban Area/Rural Area, Rolling Terrain, K-factor of 0.09, and D-factor of 0.60
- (6) HCM 2010 2-lane highway LOS based on Exhibit 15-30, Class II Rolling, 0.09 K-factor, and D-factor of 0.60
- (7) HCM 6th Edition 2-lane highway LOS based on Exhibit 15-46, Class II Rolling, 0.09 K-factor, and D-factor of 0.60
- (8) HCM 2010 Arterial LOS based on Exhibit 16-14, K-factor of 0.09, D-factor of 0.60, posted speed 45 mi/h
- (9) HCM 6th Edition Arterial LOS based on Exhibit 16-16, K-factor of 0.09, D-factor of 0.60, posted speed 45 mi/h

**Year 2018 Roadway Segment Analyses Results**

Table 4 shows that all locations for roadway segments calculate to LOS B or better conditions based on the HCM 2010 microsimulation model, SimTraffic, with the exception of the LOS D condition on Missouri Flat Road between Plaza Drive and the US 50 WB Ramps. These are satisfactory levels of service for roadway segments, and correspond to the levels of service calculated for intersections (see Table ES.2). The County has indicated that if it can be demonstrated (with other more reliable software) that the roadway segment (such as Missouri Flat Road or Pleasant Valley Road) does not operate at LOS F using the given service volumes, then an HCM 2010 analysis would override the planning level thresholds and these roadway segments may not be considered to be a significant impact. As a result, PRISM Engineering conducted two analyses for all roadway segments, to illustrate and show the differing results, but also offer an explanation as to why there are differences. All roadway segment analysis tables in this report for existing and future scenarios show the HCM 2010 microsimulation results for all roadway segment locations on the top half of each table, and the planning level results on the lower half. The planning level analyses generically yield a worst-case result for level of service of a segment, but it corresponds primarily to the level of service of side street traffic, and not the main street traffic. The main street traffic LOS can be better calculated with microsimulation tools based on HCM 2010 procedures such as SimTraffic, which was used in this study.

As per Policy TC-Xa (Table TC-2), Missouri Flat Road is allowed to operate at LOS F, provided the V/C ratio does not exceed 1.12 from U.S. Highway 50 to Mother Lode Drive, or 1.20 from Mother Lode Drive to China Garden Road.

<sup>17</sup> Source: See page 11 of El Dorado County's Transportation Impact Study Guidelines.

**Table 10. Year 2018 Scenarios Roadway Segment Level of Service Summary**

| COUNTY PLANNING LEVEL SEGMENT ANALYSIS |   | YEAR 2018 AM Peak |     |        |     | YEAR 2018 PM Peak |     |        |     |       |
|--|---|-------------------|-----|--------|-----|-------------------|-----|--------|-----|-------|
| Road                                   | ARTERIAL SEGMENT LOCATION                   | No PROJ           |     | w/PROJ |     | No PROJ           |     | w/PROJ |     | ADT   |
| Type*                                  |   | VOL               | LOS | VOL    | LOS | VOL               | LOS | VOL    | LOS |       |
| 4AD                                    | Missouri Flat Plaza to US 50 WB Ramps       | 1440              | B   | 1460   | B   | 2106              | D   | 2133   | D   | 23138 |
| 4AD                                    | Missouri Flat US 50 WB Ramps to EB Ramps    | 1901              | D   | 1954   | D   | 2434              | D   | 2507   | D   | 23139 |
| 4AD                                    | Missouri Flat US 50 EB Ramps to Mother Lode | 2128              | D   | 2190   | D   | 2513              | D   | 2614   | D   | 33710 |
| 4AD                                    | Missouri Flat Mother Lode to Forni          | 1833              | C   | 1899   | D   | 2365              | D   | 2472   | D   | 33710 |
| 4AD                                    | Missouri Flat Forni to Golden Center        | 1682              | C   | 1782   | C   | 2049              | D   | 2175   | D   | 23609 |
| 2A                                     | Missouri Flat Golden Center to China Garden | 1767              | F   | 1877   | F   | 2020              | F   | 2167   | F   | 23611 |
| 2A                                     | Missouri Flat China Garden to Industrial    | 1428              | D   | 1545   | E   | 1808              | F   | 1965   | F   | 21011 |
| 2A                                     | Missouri Flat Industrial to Enterprise      | 1436              | D   | 1554   | E   | 1680              | F   | 1836   | F   | 21011 |
| 2A                                     | Missouri Flat Enterprise to Pleasant Valley | 1351              | D   | 1478   | D   | 1651              | F   | 1812   | F   | 17331 |
| 2A                                     | Pleasant Valley Missouri Flat to Faith      | 1238              | D   | 1368   | D   | 1597              | E   | 1767   | F   | 15004 |
| 2A                                     | Pleasant Valley Faith to China Garden       | 1240              | D   | 1235   | D   | 1579              | E   | 1575   | E   | 15000 |
| 2A                                     | Pleasant Valley China Garden to Fowler      | 1181              | D   | 1176   | D   | 1585              | E   | 1580   | E   | 15000 |
| 2A                                     | Pleasant Valley Missouri Flat to Commerce   | 1131              | D   | 1114   | D   | 974               | D   | 952    | D   | 13500 |
| 2A                                     | Pleasant Valley Commerce to Patterson       | 1048              | D   | 1031   | D   | 983               | D   | 961    | D   | 13500 |
| 2A                                     | Pleasant Valley Patterson to Forni          | 1012              | D   | 1012   | D   | 873               | D   | 873    | D   | 9600  |
| 2A                                     | Pleasant Valley Forni to SR 49 (south)      | 948               | D   | 948    | D   | 961               | D   | 961    | D   | 9600  |

\*2A HCM 2010 Planning Level Capacity: LOS A=650, LOS B=750, LOS C=850, LOS D=1540, LOS E=1650

\*4AD HCM 2010 Planning Level Capacity: LOS A=1390, LOS B=1620, LOS C=1850, LOS D=3220, LOS E=3290

ADT Source: Caltrans Traffic Volumes 2015, and El Dorado County Traffic County Annual Summary 2015

Capacity Source: El Dorado County Peak Hour Roadway Segment LOS Criterion, Table 1.

Source: Year 2018 traffic counts taken by PRISM Engineering, mid-block totals, am, pm peak hour, plus Project

The planning level analysis generically yields a worst-case result for level of service of a segment, corresponding primarily to the level of service of nearby side street traffic, and not the main street traffic. Even though the planning level method identifies some segments as LOS F, only the side street traffic along Missouri Flat Road is at LOS F in some locations. The main street traffic level of service for road segments is more accurately calculated using microsimulation tools based on HCM 2010 procedures such as SimTraffic, which was used in this study. The results in Table 10 in the main body of the report indicate that LOS D or better conditions prevails on Missouri Flat Road (far better than LOS F shown here in the appendix), and is LOS B or better conditions on Pleasant Valley Road. The project, therefore, does not create a significant impact to levels of service on the Missouri Flat Road arterial road segments (LOS D is OK), nor does the project create any significant impact to any of the Pleasant Valley Road arterial road segments (all LOS B or better). No roadway segment widening mitigations are recommended for this scenario.

- County Planning Segment Level of Service: Unacceptable at four locations in pm peak hour for Year 2018 without the project at LOS F (see Table 10). When project traffic is added in, one more segment goes to LOS F conditions, Pleasant Valley Road from Missouri Flat Road to Faith Lane.

**Table 16. Year 2027 Scenarios Roadway Segment Level of Service Summary**

| COUNTY PLANNING LEVEL SEGMENT ANALYSIS |   | YEAR 2027 AM Peak |     |        |     | YEAR 2027 PM Peak |     |        |     |       |
|--|---|-------------------|-----|--------|-----|-------------------|-----|--------|-----|-------|
| Road                                   | ARTERIAL SEGMENT LOCATION                   | No PROJ           |     | w/PROJ |     | No PROJ           |     | w/PROJ |     | ADT   |
| Type*                                  |   | VOL               | LOS | VOL    | LOS | VOL               | LOS | VOL    | LOS |       |
| 4AD                                    | Missouri Flat Plaza to US 50 WB Ramps       | 1562              | B   | 1582   | B   | 2285              | D   | 2312   | D   | 25105 |
| 4AD                                    | Missouri Flat US 50 WB Ramps to EB Ramps    | 2063              | D   | 2116   | D   | 2641              | D   | 2714   | D   | 25106 |
| 4AD                                    | Missouri Flat US 50 EB Ramps to Mother Lode | 2309              | D   | 2370   | D   | 2726              | D   | 2828   | D   | 36575 |
| 4AD                                    | Missouri Flat Mother Lode to Forni          | 1989              | D   | 2055   | D   | 2566              | D   | 2673   | D   | 36575 |
| 4AD                                    | Missouri Flat Forni to Golden Center        | 1892              | D   | 1992   | D   | 2305              | D   | 2431   | D   | 26559 |
| 2A                                     | Missouri Flat Golden Center to China Garden | 2014              | F   | 2124   | F   | 2302              | F   | 2449   | F   | 26914 |
| 2A                                     | Missouri Flat China Garden to Industrial    | 1122              | D   | 1239   | D   | 1736              | F   | 1893   | F   | 18560 |
| 2A                                     | Missouri Flat Industrial to Enterprise      | 1107              | D   | 1225   | D   | 1613              | E   | 1769   | F   | 18345 |
| 2A                                     | Missouri Flat Enterprise to Pleasant Valley | 1048              | D   | 1175   | D   | 1569              | E   | 1729   | F   | 15110 |
| 2A                                     | Pleasant Valley Missouri Flat to Faith      | 1085              | D   | 1215   | D   | 1517              | D   | 1687   | F   | 13777 |
| 2A                                     | Pleasant Valley Faith to China Garden       | 1054              | D   | 1049   | D   | 1500              | D   | 1496   | D   | 13590 |
| 2A                                     | Pleasant Valley China Garden to Fowler      | 1018              | D   | 1013   | D   | 1372              | D   | 1367   | D   | 12961 |
| 2A                                     | Pleasant Valley Missouri Flat to Commerce   | 1105              | D   | 1088   | D   | 925               | D   | 904    | D   | 13021 |
| 2A                                     | Pleasant Valley Commerce to Patterson       | 1100              | D   | 1083   | D   | 1032              | D   | 1011   | D   | 14175 |
| 2A                                     | Pleasant Valley Patterson to Forni          | 1063              | D   | 1063   | D   | 917               | D   | 917    | D   | 10080 |
| 2A                                     | Pleasant Valley Forni to SR 49 (south)      | 1010              | D   | 1010   | D   | 1023              | D   | 1024   | D   | 10224 |

\*2A HCM 2010 Planning Level Capacity: LOS A=650, LOS B=750, LOS C=850, LOS D=1540, LOS E=1650

\*4AD HCM 2010 Planning Level Capacity: LOS A=1390, LOS B=1620, LOS C=1850, LOS D=3220, LOS E=3290

ADT Source: Caltrans Traffic Volumes 2015, and El Dorado County Traffic County Annual Summary 2015

Capacity Source: El Dorado County Peak Hour Roadway Segment LOS Criterion, Table 1.

Source: Year 2018 traffic counts taken by PRISM Engineering, mid-block totals, am, pm peak hour, plus Project

This more generic calculation gives some idea of the kind of level of service that would be expected for unsignalized side streets and driveways along these segments. In the Year 2018 scenario, there were four locations at LOS F conditions, but in this Year 2027 scenario it has dropped to just two locations. This improvement is attributable to the slight lowering of volumes on Missouri Flat Road and Pleasant Valley Road on account of the Diamond Springs Parkway diverting some traffic away from these sections of these roads. However, when the project traffic is added in, the level of service becomes LOS F at three more locations. This will improve to LOS D in the future when Missouri Flat Road is widened to 4 lanes as planned in the CIP (goes from 2A to 4AD by Year 2035).

- County Planning Segment Level of Service: Unacceptable at two locations for Year 2027 pm peak hour volumes plus the project (shown as LOS F in Table 16). When project traffic is added in, three more segments go to LOS F conditions under the planning method.



**Table 20. Year 2035 Scenarios Roadway Segment Level of Service Summary**

| COUNTY PLANNING LEVEL SEGMENT ANALYSIS |   | YEAR 2035 AM Peak |     |        |     | YEAR 2035 PM Peak |     |        |     |       |
|--|---|-------------------|-----|--------|-----|-------------------|-----|--------|-----|-------|
| Road                                   | ARTERIAL SEGMENT LOCATION                   | No PROJ           |     | w/PROJ |     | No PROJ           |     | w/PROJ |     | ADT   |
| Type*                                  |   | VOL               | LOS | VOL    | LOS | VOL               | LOS | VOL    | LOS |       |
| 4AD                                    | Missouri Flat Plaza to US 50 WB Ramps       | 1685              | C   | 1705   | C   | 2464              | D   | 2490   | D   | 27071 |
| 4AD                                    | Missouri Flat US 50 WB Ramps to EB Ramps    | 2224              | D   | 2277   | D   | 2847              | D   | 2921   | D   | 27074 |
| 4AD                                    | Missouri Flat US 50 EB Ramps to Mother Lode | 2489              | D   | 2551   | D   | 2940              | D   | 3041   | D   | 39440 |
| 4AD                                    | Missouri Flat Mother Lode to Forni          | 2144              | D   | 2210   | D   | 2767              | D   | 2874   | D   | 39439 |
| 4AD                                    | Missouri Flat Forni to Golden Center        | 2102              | D   | 2202   | D   | 2561              | D   | 2687   | D   | 29509 |
| 4AD                                    | Missouri Flat Golden Center to China Garden | 2261              | D   | 2371   | D   | 2584              | D   | 2732   | D   | 30218 |
| 4AD                                    | Missouri Flat China Garden to Industrial    | 1313              | A   | 1430   | B   | 1664              | C   | 1821   | C   | 19335 |
| 4AD                                    | Missouri Flat Industrial to Enterprise      | 1371              | A   | 1489   | B   | 1546              | B   | 1702   | C   | 19677 |
| 4AD                                    | Missouri Flat Enterprise to Pleasant Valley | 1253              | A   | 1380   | A   | 1486              | B   | 1647   | C   | 15823 |
| 2A                                     | Pleasant Valley Missouri Flat to Faith      | 1176              | D   | 1306   | D   | 1438              | D   | 1608   | E   | 13841 |
| 2A                                     | Pleasant Valley Faith to China Garden       | 1151              | D   | 1146   | D   | 1421              | D   | 1417   | D   | 13686 |
| 2A                                     | Pleasant Valley China Garden to Fowler      | 1153              | D   | 1148   | D   | 1578              | E   | 1573   | E   | 14810 |
| 2A                                     | Pleasant Valley Missouri Flat to Commerce   | 1184              | D   | 1167   | D   | 877               | D   | 855    | D   | 13215 |
| 2A                                     | Pleasant Valley Commerce to Patterson       | 1153              | D   | 1135   | D   | 1081              | D   | 1060   | D   | 14850 |
| 2A                                     | Pleasant Valley Patterson to Forni          | 1113              | D   | 1113   | D   | 960               | D   | 961    | D   | 10560 |
| 2A                                     | Pleasant Valley Forni to SR 49 (south)      | 1071              | D   | 1071   | D   | 1086              | D   | 1086   | D   | 10848 |

\*2A HCM 2010 Planning Level Capacity: LOS A=650, LOS B=750, LOS C=850, LOS D=1540, LOS E=1650  
\*4AD HCM 2010 Planning Level Capacity: LOS A=1390, LOS B=1620, LOS C=1850, LOS D=3220, LOS E=3290

ADT Source: Caltrans Traffic Volumes 2015, and El Dorado County Traffic County Annual Summary 2015

Capacity Source: El Dorado County Peak Hour Roadway Segment LOS Criterion, Table 1.

Source: Year 2018 traffic counts taken by PRISM Engineering, mid-block totals, am, pm peak hour, plus Project

Table 20 shows the Year 2035 capacity analysis results for *link segments* using El Dorado County’s planning method as defined in the first chapter, Table 5. The planning level calculations give a general indication of the level of service that would be expected for side streets of unsignalized intersections along these segments. In the Year 2018 pm scenario, there were four street segment locations at LOS F conditions, but in this Year 2035 pm scenario it has dropped to zero locations in the pm peak hour. This is because the width of Missouri Flat Road was assumed to be widened from 2A to 4AD (four lanes as shown in Table 20) and capacity therefore increased. Also, there was a lowering of volumes on Missouri Flat Road and Pleasant Valley Road on account of the Diamond Springs Parkway diverting some regional through traffic away from these sections of these roads. The Diamond Springs Parkway will connect Missouri Flat Road on the west to SR 49 on the east. In addition, there are some roads which will interface with Diamond Springs Parkway (DSP) between these two intersections (Intersections #18 and #19 in this study), such as Throwita Way on the south side and another street on the north side of DSP at the same location. It was assumed that a small portion of traffic would enter and leave at these locations in the analyses. For this reason, volumes between intersections #18 and #19 will not exactly match up because of this condition.

- County Planning Segment Level of Service: Acceptable at all locations for Year 2035 am and pm peak hour volumes with and without the project are at LOS E or better conditions. No further mitigations necessary.

**Planning Level Impacts: Roadway Street Segment Planning LOS**

The project has planning level road segment impacts to Pleasant Valley Road between Faith Lane and Missouri Flat Road according to Table 10 that show the level of service at LOS F for the existing conditions (on a link segment peak hour volume planning basis). This level of service methodology is conservative and often represents the level of service for drivers on side streets or driveways trying to find a gap in traffic to enter the main roadway. When drivers have difficulty finding gaps, some drivers take chances and cause slowing of traffic flows when cutting in to through traffic. Overall, all drivers are affected by this condition where gaps in traffic are rare, which also affects overall safety of the transportation system. The roadway planning level of service is an analysis method that compliments intersection analyses, and offers

additional insight as to how a roadway will likely operate based on cross section (the number of lanes) between intersections. The roadway level of service corresponds well to levels of service calculated for side streets using standard HCM 2010 methods for intersection calculation. Drivers on a side street or driveway waiting for a safe gap in traffic, are often challenged to do so and must sometimes wait long periods of time. This situation can contribute to drivers taking unsafe chances to get onto the main street.

Although the future Diamond Springs Parkway will help relieve some of the future traffic impact on Missouri Flat Road south of China Garden Road (by diverting traffic on Pleasant Valley Road / Missouri Flat Road to use the new parkway facility), there will still remain LOS F conditions until new traffic signals are installed at various intersections where signal warrants have been met (as identified in this report, Tables 13, 19, and 24). The project will add more than 10 peak hour trips to these affected roadways indicating it will have significant impact. Mitigations are required according to the County's criteria, and although Missouri Flat Road was anticipated in the County's CIP for improvements (from China Garden to Pleasant Valley Road), Pleasant Valley Road from Missouri Flat Road to Faith Lane and beyond was not anticipated for widening, or installation of roundabouts or traffic signals. Because the project will have significant impacts to street segments on Missouri Flat Road in the future, it can mitigate this impact by paying the fair share traffic impact fees as part of the County's CIP. The project's impacts to Pleasant Valley Road are also significant and were unanticipated by the County. These impacts would be mitigated by direct mitigation in the form of local intersection improvements, such as a roundabout or signalization at Faith Lane. It can be argued that although the County did not anticipate improvements being made along Pleasant Valley Road between Missouri Flat Road and Fowler Lane due to future growth, the road segment level of service for existing conditions alone along this segment is currently LOS F conditions and would indicate improvements would be needed (see Table 4 for a summary of this LOS F condition for existing pm peak hour). The current County LOS criteria are summarized in Table 5 for HCM 6<sup>th</sup> edition values.

## **Section A.7 Traffic Counts**

**TRAFFIC COUNTS PLUS**  
mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
FORNI RD. 200' N/O S.R. 49

forni 7  
Site Code: 7

| Start Time | 21-Feb-18<br>Wed | NB        |           | Hour Totals |      | SB        |           | Hour Totals |      | Both Dir.<br>Total |
|------------|------------------|-----------|-----------|-------------|------|-----------|-----------|-------------|------|--------------------|
|            |                  | A.M.      | P.M.      | A.M.        | P.M. | A.M.      | P.M.      | A.M.        | P.M. |                    |
| 12:00      |                  | 0         | 34        |             |      | 0         | 31        |             |      | 65                 |
| 12:15      |                  | 0         | 33        |             |      | 2         | 40        |             |      | 75                 |
| 12:30      |                  | 0         | 31        |             |      | 0         | 24        |             |      | 55                 |
| 12:45      |                  | 3         | 31        | 3           | 129  | 0         | 35        | 2           | 130  | 69                 |
| 01:00      |                  | 0         | 18        |             |      | 1         | 47        |             |      | 66                 |
| 01:15      |                  | 0         | 39        |             |      | 0         | 27        |             |      | 66                 |
| 01:30      |                  | 1         | 32        |             |      | 0         | 25        |             |      | 58                 |
| 01:45      |                  | 0         | 38        | 1           | 127  | 0         | 39        | 1           | 138  | 77                 |
| 02:00      |                  | 0         | 43        |             |      | 0         | 36        |             |      | 79                 |
| 02:15      |                  | 0         | 37        |             |      | 1         | 31        |             |      | 69                 |
| 02:30      |                  | 0         | <b>38</b> |             |      | 1         | 37        |             |      | 76                 |
| 02:45      |                  | 2         | <b>33</b> | 2           | 151  | 1         | <b>69</b> | 3           | 173  | 105                |
| 03:00      |                  | 0         | <b>53</b> |             |      | 0         | <b>37</b> |             |      | 90                 |
| 03:15      |                  | 0         | <b>39</b> |             |      | 0         | <b>46</b> |             |      | 85                 |
| 03:30      |                  | 2         | 34        |             |      | 0         | <b>50</b> |             |      | 86                 |
| 03:45      |                  | 2         | 34        | 4           | 160  | 2         | 45        | 2           | 178  | 83                 |
| 04:00      |                  | 2         | 31        |             |      | 3         | 45        |             |      | 81                 |
| 04:15      |                  | 2         | 30        |             |      | 2         | 40        |             |      | 74                 |
| 04:30      |                  | 1         | 34        |             |      | 2         | 57        |             |      | 94                 |
| 04:45      |                  | 3         | 36        | 8           | 131  | 2         | 39        | 9           | 181  | 80                 |
| 05:00      |                  | 2         | 40        |             |      | 2         | 56        |             |      | 100                |
| 05:15      |                  | 3         | 39        |             |      | 4         | 47        |             |      | 93                 |
| 05:30      |                  | 4         | 40        |             |      | 5         | 42        |             |      | 91                 |
| 05:45      |                  | 2         | 27        | 11          | 146  | 5         | 39        | 16          | 184  | 73                 |
| 06:00      |                  | 4         | 27        |             |      | 6         | 32        |             |      | 69                 |
| 06:15      |                  | 7         | 29        |             |      | 9         | 31        |             |      | 76                 |
| 06:30      |                  | 13        | 24        |             |      | 12        | 23        |             |      | 72                 |
| 06:45      |                  | 25        | 16        | 49          | 96   | 14        | 23        | 41          | 109  | 78                 |
| 07:00      |                  | <b>35</b> | 18        |             |      | <b>20</b> | 20        |             |      | <b>93</b>          |
| 07:15      |                  | <b>52</b> | 11        |             |      | <b>43</b> | 15        |             |      | <b>121</b>         |
| 07:30      |                  | <b>69</b> | 19        |             |      | <b>64</b> | 14        |             |      | <b>166</b>         |
| 07:45      |                  | <b>66</b> | 6         | 222         | 54   | <b>30</b> | 16        | 157         | 65   | <b>118</b>         |
| 08:00      |                  | 28        | 8         |             |      | 16        | 25        |             |      | 77                 |
| 08:15      |                  | 35        | 8         |             |      | 17        | 20        |             |      | 80                 |
| 08:30      |                  | 38        | 9         |             |      | 29        | 17        |             |      | 93                 |
| 08:45      |                  | 32        | 4         | 133         | 29   | 15        | 4         | 77          | 66   | 55                 |
| 09:00      |                  | 22        | 5         |             |      | 17        | 13        |             |      | 57                 |
| 09:15      |                  | 35        | 2         |             |      | 24        | 3         |             |      | 64                 |
| 09:30      |                  | 33        | 4         |             |      | 27        | 3         |             |      | 67                 |
| 09:45      |                  | 27        | 5         | 117         | 16   | 21        | 6         | 89          | 25   | 59                 |
| 10:00      |                  | 30        | 3         |             |      | 21        | 3         |             |      | 57                 |
| 10:15      |                  | 21        | 5         |             |      | 24        | 4         |             |      | 54                 |
| 10:30      |                  | 41        | 2         |             |      | 23        | 1         |             |      | 67                 |
| 10:45      |                  | 31        | 6         | 123         | 16   | 31        | 3         | 99          | 11   | 71                 |
| 11:00      |                  | 21        | 2         |             |      | 29        | 3         |             |      | 55                 |
| 11:15      |                  | 25        | 3         |             |      | 29        | 1         |             |      | 58                 |
| 11:30      |                  | 23        | 1         |             |      | 30        | 2         |             |      | 56                 |
| 11:45      |                  | 33        | 1         | 102         | 7    | 34        | 0         | 122         | 6    | 68                 |
| Total      |                  | 775       | 1062      |             |      | 618       | 1266      |             |      | 3721               |
| Day Total  |                  | 1837      |           |             |      | 1884      |           |             |      |                    |
| Percent    |                  | 42.2%     | 57.8%     |             |      | 32.8%     | 67.2%     |             |      |                    |
| Peak       |                  | 07:00     | 02:30     |             |      | 07:00     | 02:45     |             |      | 07:00              |
| Vol.       |                  | 222       | 163       |             |      | 157       | 202       |             |      | 498                |
| P.H.F.     |                  | 0.804     | 0.769     |             |      | 0.613     | 0.732     |             |      | 0.750              |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
MISSOURI FLAT RD. 100' N/O PLAZA DR.

missouri 1  
Site Code: 1

| Start Time | 21-Feb-18<br>Wed | NB         |            | Hour Totals |      | SB         |            | Hour Totals |      | Both Dir.<br>Total |
|------------|------------------|------------|------------|-------------|------|------------|------------|-------------|------|--------------------|
|            |                  | A.M.       | P.M.       | A.M.        | P.M. | A.M.       | P.M.       | A.M.        | P.M. |                    |
| 12:00      |                  | 3          | 85         |             |      | 3          | 117        |             |      | 208                |
| 12:15      |                  | 4          | 82         |             |      | 2          | 92         |             |      | 180                |
| 12:30      |                  | 5          | 97         |             |      | 2          | 86         |             |      | 190                |
| 12:45      |                  | 0          | 95         | 12          | 359  | 0          | 87         | 7           | 382  | 182                |
| 01:00      |                  | 1          | 70         |             |      | 3          | 80         |             |      | 154                |
| 01:15      |                  | 3          | 81         |             |      | 1          | 91         |             |      | 176                |
| 01:30      |                  | 2          | 84         |             |      | 0          | 81         |             |      | 167                |
| 01:45      |                  | 1          | 78         | 7           | 313  | 0          | 78         | 4           | 330  | 157                |
| 02:00      |                  | 0          | <b>98</b>  |             |      | 3          | 69         |             |      | 170                |
| 02:15      |                  | 1          | <b>114</b> |             |      | 1          | <b>102</b> |             |      | 218                |
| 02:30      |                  | 2          | <b>91</b>  |             |      | 1          | <b>153</b> |             |      | 247                |
| 02:45      |                  | 2          | <b>83</b>  | 5           | 386  | 2          | <b>117</b> | 7           | 441  | 204                |
| 03:00      |                  | 1          | 93         |             |      | 0          | <b>82</b>  |             |      | 176                |
| 03:15      |                  | 0          | 84         |             |      | 0          | 90         |             |      | 174                |
| 03:30      |                  | 2          | 86         |             |      | 2          | 81         |             |      | 171                |
| 03:45      |                  | 4          | 78         | 7           | 341  | 2          | 76         | 4           | 329  | 160                |
| 04:00      |                  | 5          | 76         |             |      | 1          | 85         |             |      | 167                |
| 04:15      |                  | 4          | 81         |             |      | 3          | 74         |             |      | 162                |
| 04:30      |                  | 6          | 61         |             |      | 2          | 67         |             |      | 136                |
| 04:45      |                  | 6          | 88         | 21          | 306  | 7          | 69         | 13          | 295  | 170                |
| 05:00      |                  | 7          | 88         |             |      | 3          | 80         |             |      | 178                |
| 05:15      |                  | 8          | 101        |             |      | 6          | 63         |             |      | 178                |
| 05:30      |                  | 20         | 103        |             |      | 13         | 62         |             |      | 198                |
| 05:45      |                  | 20         | 89         | 55          | 381  | 9          | 56         | 31          | 261  | 174                |
| 06:00      |                  | 17         | 69         |             |      | 11         | 52         |             |      | 149                |
| 06:15      |                  | 22         | 55         |             |      | 15         | 36         |             |      | 128                |
| 06:30      |                  | 28         | 60         |             |      | 18         | 44         |             |      | 150                |
| 06:45      |                  | 36         | 64         | 103         | 248  | 37         | 47         | 81          | 179  | 184                |
| 07:00      |                  | 30         | 40         |             |      | 35         | 35         |             |      | 140                |
| 07:15      |                  | 68         | 29         |             |      | 64         | 39         |             |      | 200                |
| 07:30      |                  | 73         | 26         |             |      | 46         | 16         |             |      | 161                |
| 07:45      |                  | 100        | 26         | 271         | 121  | 57         | 18         | 202         | 108  | 201                |
| 08:00      |                  | <b>87</b>  | 33         |             |      | 73         | 98         |             |      | <b>291</b>         |
| 08:15      |                  | <b>88</b>  | 26         |             |      | <b>87</b>  | 63         |             |      | <b>264</b>         |
| 08:30      |                  | <b>158</b> | 35         |             |      | <b>77</b>  | 37         |             |      | <b>307</b>         |
| 08:45      |                  | <b>141</b> | 17         | 474         | 111  | <b>111</b> | 20         | 348         | 218  | <b>289</b>         |
| 09:00      |                  | 74         | 18         |             |      | <b>79</b>  | 13         |             |      | 184                |
| 09:15      |                  | 84         | 12         |             |      | 56         | 13         |             |      | 165                |
| 09:30      |                  | 66         | 11         |             |      | 73         | 15         |             |      | 165                |
| 09:45      |                  | 77         | 10         | 301         | 51   | 62         | 22         | 270         | 63   | 171                |
| 10:00      |                  | 105        | 9          |             |      | 54         | 7          |             |      | 175                |
| 10:15      |                  | 80         | 5          |             |      | 82         | 8          |             |      | 175                |
| 10:30      |                  | 77         | 4          |             |      | 72         | 5          |             |      | 158                |
| 10:45      |                  | 69         | 4          | 331         | 22   | 71         | 4          | 279         | 24   | 148                |
| 11:00      |                  | 67         | 8          |             |      | 78         | 3          |             |      | 156                |
| 11:15      |                  | 62         | 3          |             |      | 70         | 4          |             |      | 139                |
| 11:30      |                  | 61         | 1          |             |      | 79         | 3          |             |      | 144                |
| 11:45      |                  | 68         | 4          | 258         | 16   | 99         | 4          | 326         | 14   | 175                |
| Total      |                  | 1845       | 2655       |             |      | 1572       | 2644       |             |      | 8716               |
| Day Total  |                  | 4500       |            |             |      | 4216       |            |             |      |                    |
| Percent    |                  | 41.0%      | 59.0%      |             |      | 37.3%      | 62.7%      |             |      |                    |
| Peak       |                  | 08:00      | 02:00      |             |      | 08:15      | 02:15      |             |      | 08:00              |
| Vol.       |                  | 474        | 386        |             |      | 354        | 454        |             |      | 1151               |
| P.H.F.     |                  | 0.750      | 0.846      |             |      | 0.797      | 0.742      |             |      | 0.937              |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
MISSOURI FLAT RD. 100' S/O PLAZA DR.  
NORTHBOUND

missouri 2-n  
Site Code: 2

| Start Time | Wed   | 21-Feb-18 | Hourly Totals |      | Interval Total |
|------------|-------|-----------|---------------|------|----------------|
|            | A.M.  | P.M.      | A.M.          | P.M. |                |
| 12:00      | 8     | 261       |               |      | 269            |
| 12:15      | 9     | 272       |               |      | 281            |
| 12:30      | 9     | 256       |               |      | 265            |
| 12:45      | 2     | 257       | 28            | 1046 | 259            |
| 01:00      | 2     | 247       |               |      | 249            |
| 01:15      | 12    | 244       |               |      | 256            |
| 01:30      | 5     | 244       |               |      | 249            |
| 01:45      | 6     | 247       | 25            | 982  | 253            |
| 02:00      | 2     | 229       |               |      | 231            |
| 02:15      | 1     | 279       |               |      | 280            |
| 02:30      | 4     | 254       |               |      | 258            |
| 02:45      | 11    | 221       | 18            | 983  | 232            |
| 03:00      | 4     | 257       |               |      | 261            |
| 03:15      | 4     | 230       |               |      | 234            |
| 03:30      | 6     | 247       |               |      | 253            |
| 03:45      | 11    | 208       | 25            | 942  | 219            |
| 04:00      | 7     | 220       |               |      | 227            |
| 04:15      | 8     | 226       |               |      | 234            |
| 04:30      | 16    | 221       |               |      | 237            |
| 04:45      | 21    | 193       | 52            | 860  | 214            |
| 05:00      | 21    | 262       |               |      | 283            |
| 05:15      | 32    | 249       |               |      | 281            |
| 05:30      | 35    | 226       |               |      | 261            |
| 05:45      | 45    | 204       | 133           | 941  | 249            |
| 06:00      | 56    | 182       |               |      | 238            |
| 06:15      | 65    | 163       |               |      | 228            |
| 06:30      | 79    | 152       |               |      | 231            |
| 06:45      | 90    | 121       | 290           | 618  | 211            |
| 07:00      | 87    | 119       |               |      | 206            |
| 07:15      | 139   | 79        |               |      | 218            |
| 07:30      | 158   | 81        |               |      | 239            |
| 07:45      | 153   | 65        | 537           | 344  | 218            |
| 08:00      | 178   | 67        |               |      | 245            |
| 08:15      | 189   | 59        |               |      | 248            |
| 08:30      | 238   | 83        |               |      | 321            |
| 08:45      | 226   | 56        | 831           | 265  | 282            |
| 09:00      | 167   | 36        |               |      | 203            |
| 09:15      | 203   | 37        |               |      | 240            |
| 09:30      | 186   | 36        |               |      | 222            |
| 09:45      | 198   | 26        | 754           | 135  | 224            |
| 10:00      | 218   | 30        |               |      | 248            |
| 10:15      | 201   | 19        |               |      | 220            |
| 10:30      | 202   | 22        |               |      | 224            |
| 10:45      | 193   | 19        | 814           | 90   | 212            |
| 11:00      | 196   | 14        |               |      | 210            |
| 11:15      | 222   | 19        |               |      | 241            |
| 11:30      | 218   | 8         |               |      | 226            |
| 11:45      | 217   | 13        | 853           | 54   | 230            |
| Total      | 4360  | 7260      |               |      | 11620          |
| Day Total  | 11620 |           |               |      |                |
| Percent    | 37.5% | 62.5%     |               |      |                |
| Peak       | 11:00 | 12:00     |               |      | 08:00          |
| Vol.       | 853   | 1046      |               |      | 1096           |
| P.H.F.     | 0.944 | 0.961     |               |      | 0.854          |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
MISSOURI FLAT RD. 100' S/O PLAZA DR.  
SOUTHBOUND

missouri 2-s  
Site Code: 2

| Start Time | 21-Feb-18  |            | Hourly Totals |      | Interval Total |
|------------|------------|------------|---------------|------|----------------|
|            | Wed A.M.   | P.M.       | A.M.          | P.M. |                |
| 12:00      | 12         | 284        |               |      | 296            |
| 12:15      | 13         | 265        |               |      | 278            |
| 12:30      | 7          | 295        |               |      | 302            |
| 12:45      | 7          | 246        | 39            | 1090 | 253            |
| 01:00      | 4          | 265        |               |      | 269            |
| 01:15      | 11         | 267        |               |      | 278            |
| 01:30      | 4          | 270        |               |      | 274            |
| 01:45      | 6          | 254        | 25            | 1056 | 260            |
| 02:00      | 4          | 241        |               |      | 245            |
| 02:15      | 8          | <b>256</b> |               |      | <b>264</b>     |
| 02:30      | 1          | <b>295</b> |               |      | <b>296</b>     |
| 02:45      | 6          | <b>301</b> | 19            | 1093 | <b>307</b>     |
| 03:00      | 5          | <b>272</b> |               |      | <b>277</b>     |
| 03:15      | 0          | 252        |               |      | 252            |
| 03:30      | 4          | 243        |               |      | 247            |
| 03:45      | 3          | 227        | 12            | 994  | 230            |
| 04:00      | 4          | 255        |               |      | 259            |
| 04:15      | 9          | 226        |               |      | 235            |
| 04:30      | 6          | 265        |               |      | 271            |
| 04:45      | 17         | 224        | 36            | 970  | 241            |
| 05:00      | 14         | 245        |               |      | 259            |
| 05:15      | 21         | 259        |               |      | 280            |
| 05:30      | 33         | 214        |               |      | 247            |
| 05:45      | 27         | 215        | 95            | 933  | 242            |
| 06:00      | 22         | 193        |               |      | 215            |
| 06:15      | 55         | 182        |               |      | 237            |
| 06:30      | 63         | 172        |               |      | 235            |
| 06:45      | 84         | 155        | 224           | 702  | 239            |
| 07:00      | 79         | 132        |               |      | 211            |
| 07:15      | 122        | 136        |               |      | 258            |
| 07:30      | 122        | 107        |               |      | 229            |
| 07:45      | 123        | 103        | 446           | 478  | 226            |
| 08:00      | 147        | 141        |               |      | 288            |
| 08:15      | 151        | 129        |               |      | 280            |
| 08:30      | 183        | 110        |               |      | 293            |
| 08:45      | 187        | 73         | 668           | 453  | 260            |
| 09:00      | 153        | 62         |               |      | 215            |
| 09:15      | 163        | 52         |               |      | 215            |
| 09:30      | 166        | 46         |               |      | 212            |
| 09:45      | 177        | 61         | 659           | 221  | 238            |
| 10:00      | 200        | 35         |               |      | 235            |
| 10:15      | 192        | 43         |               |      | 235            |
| 10:30      | 205        | 36         |               |      | 241            |
| 10:45      | 196        | 15         | 793           | 129  | 211            |
| 11:00      | <b>198</b> | 17         |               |      | 215            |
| 11:15      | <b>219</b> | 24         |               |      | 243            |
| 11:30      | <b>216</b> | 22         |               |      | 238            |
| 11:45      | <b>291</b> | 12         | 924           | 75   | 303            |
| Total      | 3940       | 8194       |               |      | 12134          |
| Day Total  | 12134      |            |               |      |                |
| Percent    | 32.5%      | 67.5%      |               |      |                |
| Peak Vol.  | 11:00      | 02:15      |               |      | 02:15          |
| P.H.F.     | 924        | 1124       |               |      | 1144           |
|            | 0.794      | 0.934      |               |      | 0.932          |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
MISSOURI FLAT RD. 300' N/O FORNI RD.

missouri 3  
Site Code: 3

| Start Time | 21-Feb-18<br>Wed | NB         |            | Hour Totals |      | SB         |            | Hour Totals |      | Both Dir.<br>Total |
|------------|------------------|------------|------------|-------------|------|------------|------------|-------------|------|--------------------|
|            |                  | A.M.       | P.M.       | A.M.        | P.M. | A.M.       | P.M.       | A.M.        | P.M. |                    |
| 12:00      |                  | 12         | 356        |             |      | 11         | 293        |             |      | 672                |
| 12:15      |                  | 7          | 355        |             |      | 13         | 350        |             |      | 725                |
| 12:30      |                  | 8          | 336        |             |      | 10         | 300        |             |      | 654                |
| 12:45      |                  | 10         | 338        | 37          | 1385 | 9          | 321        | 43          | 1264 | 678                |
| 01:00      |                  | 5          | 347        |             |      | 11         | 349        |             |      | 712                |
| 01:15      |                  | 3          | 333        |             |      | 5          | 343        |             |      | 684                |
| 01:30      |                  | 4          | 358        |             |      | 3          | 298        |             |      | 663                |
| 01:45      |                  | 7          | 323        | 19          | 1361 | 11         | 311        | 30          | 1301 | 652                |
| 02:00      |                  | 6          | 324        |             |      | 10         | 320        |             |      | 660                |
| 02:15      |                  | 6          | 359        |             |      | 3          | 323        |             |      | 691                |
| 02:30      |                  | 5          | 343        |             |      | 10         | 330        |             |      | 688                |
| 02:45      |                  | 7          | 329        | 24          | 1355 | 7          | 420        | 30          | 1393 | 763                |
| 03:00      |                  | 14         | 382        |             |      | 6          | 369        |             |      | 771                |
| 03:15      |                  | 14         | 342        |             |      | 9          | 347        |             |      | 712                |
| 03:30      |                  | 15         | 350        |             |      | 9          | 371        |             |      | 745                |
| 03:45      |                  | 17         | 315        | 60          | 1389 | 6          | 382        | 30          | 1469 | 720                |
| 04:00      |                  | 24         | 348        |             |      | 7          | 372        |             |      | 751                |
| 04:15      |                  | 29         | 315        |             |      | 18         | <b>413</b> |             |      | 775                |
| 04:30      |                  | 28         | <b>347</b> |             |      | 12         | <b>387</b> |             |      | 774                |
| 04:45      |                  | 55         | <b>325</b> | 136         | 1335 | 27         | <b>415</b> | 64          | 1587 | 822                |
| 05:00      |                  | 90         | <b>458</b> |             |      | 34         | <b>373</b> |             |      | 955                |
| 05:15      |                  | 91         | <b>349</b> |             |      | 31         | 407        |             |      | 878                |
| 05:30      |                  | 98         | 319        |             |      | 50         | 330        |             |      | 797                |
| 05:45      |                  | 114        | 257        | 393         | 1383 | 85         | 352        | 200         | 1462 | 808                |
| 06:00      |                  | 171        | 260        |             |      | 73         | 291        |             |      | 795                |
| 06:15      |                  | 178        | 234        |             |      | 91         | 265        |             |      | 768                |
| 06:30      |                  | 201        | 226        |             |      | 104        | 210        |             |      | 741                |
| 06:45      |                  | 190        | 189        | 740         | 909  | 199        | 233        | 467         | 999  | 811                |
| 07:00      |                  | 221        | 210        |             |      | 199        | 181        |             |      | 811                |
| 07:15      |                  | <b>350</b> | 136        |             |      | 323        | 168        |             |      | <b>977</b>         |
| 07:30      |                  | <b>364</b> | 114        |             |      | 241        | 139        |             |      | <b>858</b>         |
| 07:45      |                  | <b>362</b> | 88         | 1297        | 548  | <b>282</b> | 125        | 1045        | 613  | <b>857</b>         |
| 08:00      |                  | <b>293</b> | 113        |             |      | <b>276</b> | 153        |             |      | <b>835</b>         |
| 08:15      |                  | 303        | 117        |             |      | <b>309</b> | 134        |             |      | 863                |
| 08:30      |                  | 356        | 97         |             |      | <b>256</b> | 116        |             |      | 825                |
| 08:45      |                  | 366        | 82         | 1318        | 409  | 256        | 107        | 1097        | 510  | 811                |
| 09:00      |                  | 278        | 86         |             |      | 273        | 109        |             |      | 746                |
| 09:15      |                  | 275        | 59         |             |      | 244        | 77         |             |      | 655                |
| 09:30      |                  | 265        | 38         |             |      | 237        | 79         |             |      | 619                |
| 09:45      |                  | 268        | 40         | 1086        | 223  | 248        | 69         | 1002        | 334  | 625                |
| 10:00      |                  | 331        | 29         |             |      | 259        | 64         |             |      | 683                |
| 10:15      |                  | 297        | 38         |             |      | 242        | 54         |             |      | 631                |
| 10:30      |                  | 317        | 21         |             |      | 290        | 54         |             |      | 682                |
| 10:45      |                  | 305        | 29         | 1250        | 117  | 248        | 43         | 1039        | 215  | 625                |
| 11:00      |                  | 257        | 34         |             |      | 244        | 36         |             |      | 571                |
| 11:15      |                  | 290        | 25         |             |      | 260        | 25         |             |      | 600                |
| 11:30      |                  | 307        | 20         |             |      | 315        | 33         |             |      | 675                |
| 11:45      |                  | 313        | 14         | 1167        | 93   | 293        | 17         | 1112        | 111  | 637                |
| Total      |                  | 7527       | 10507      |             |      | 6159       | 11258      |             |      | 35451              |
| Day Total  |                  | 18034      |            |             |      | 17417      |            |             |      |                    |
| Percent    |                  | 41.7%      | 58.3%      |             |      | 35.4%      | 64.6%      |             |      |                    |
| Peak       |                  | 07:15      | 04:30      |             |      | 07:45      | 04:15      |             |      | 07:15              |
| Vol.       |                  | 1369       | 1479       |             |      | 1123       | 1588       |             |      | 3527               |
| P.H.F.     |                  | 0.940      | 0.807      |             |      | 0.909      | 0.957      |             |      | 0.903              |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
MISSOURI FLAT RD. 300' S/O FORNI RD.  
NORTHBOUND

missouri 4-n  
Site Code: 4

| Start Time       | 21-Feb-18    |              | Hourly Totals |      | Interval Total |
|------------------|--------------|--------------|---------------|------|----------------|
|                  | Wed A.M.     | P.M.         | A.M.          | P.M. |                |
| 12:00            | 5            | 241          |               |      | 246            |
| 12:15            | 5            | 249          |               |      | 254            |
| 12:30            | 6            | 213          |               |      | 219            |
| 12:45            | 7            | 243          | 23            | 946  | 250            |
| 01:00            | 4            | 227          |               |      | 231            |
| 01:15            | 3            | 246          |               |      | 249            |
| 01:30            | 3            | 228          |               |      | 231            |
| 01:45            | 6            | 233          | 16            | 934  | 239            |
| 02:00            | 4            | 209          |               |      | 213            |
| 02:15            | 6            | 239          |               |      | 245            |
| 02:30            | 5            | 213          |               |      | 218            |
| 02:45            | 5            | 203          | 20            | 864  | 208            |
| 03:00            | 13           | 239          |               |      | 252            |
| 03:15            | 13           | 251          |               |      | 264            |
| 03:30            | 12           | 214          |               |      | 226            |
| 03:45            | 18           | 210          | 56            | 914  | 228            |
| 04:00            | 15           | 213          |               |      | 228            |
| 04:15            | 24           | 202          |               |      | 226            |
| 04:30            | 29           | 213          |               |      | 242            |
| 04:45            | 48           | 225          | 116           | 853  | 273            |
| 05:00            | 80           | 274          |               |      | 354            |
| 05:15            | 84           | 206          |               |      | 290            |
| 05:30            | 86           | 202          |               |      | 288            |
| 05:45            | 115          | 171          | 365           | 853  | 286            |
| 06:00            | 150          | 159          |               |      | 309            |
| 06:15            | 158          | 152          |               |      | 310            |
| 06:30            | 175          | 123          |               |      | 298            |
| 06:45            | 158          | 132          | 641           | 566  | 290            |
| 07:00            | 171          | 143          |               |      | 314            |
| 07:15            | 256          | 82           |               |      | 338            |
| 07:30            | 272          | 81           |               |      | 353            |
| 07:45            | 281          | 56           | 980           | 362  | 337            |
| 08:00            | 219          | 69           |               |      | 288            |
| 08:15            | 246          | 63           |               |      | 309            |
| 08:30            | 274          | 61           |               |      | 335            |
| 08:45            | 261          | 55           | 1000          | 248  | 316            |
| 09:00            | 186          | 54           |               |      | 240            |
| 09:15            | 194          | 38           |               |      | 232            |
| 09:30            | 190          | 29           |               |      | 219            |
| 09:45            | 205          | 26           | 775           | 147  | 231            |
| 10:00            | 248          | 17           |               |      | 265            |
| 10:15            | 210          | 28           |               |      | 238            |
| 10:30            | 239          | 13           |               |      | 252            |
| 10:45            | 210          | 14           | 907           | 72   | 224            |
| 11:00            | 190          | 18           |               |      | 208            |
| 11:15            | 208          | 16           |               |      | 224            |
| 11:30            | 212          | 12           |               |      | 224            |
| 11:45            | 210          | 6            | 820           | 52   | 216            |
| <b>Total</b>     | <b>5719</b>  | <b>6811</b>  |               |      | <b>12530</b>   |
| <b>Day Total</b> | <b>12530</b> |              |               |      |                |
| <b>Percent</b>   | <b>45.6%</b> | <b>54.4%</b> |               |      |                |
| <b>Peak</b>      | <b>07:15</b> | <b>12:00</b> |               |      | <b>07:00</b>   |
| <b>Vol.</b>      | <b>1028</b>  | <b>946</b>   |               |      | <b>1342</b>    |
| <b>P.H.F.</b>    | <b>0.915</b> | <b>0.950</b> |               |      | <b>0.950</b>   |



**TRAFFIC COUNTS PLUS**  
mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
MISSOURI FLAT RD. 300' S/O FORNI RD.  
SOUTHBOUND

missouri 4-s  
Site Code: 4

| Start Time       | 21-Feb-18           |                      | Hourly Totals |      | Interval Total       |
|------------------|---------------------|----------------------|---------------|------|----------------------|
|                  | Wed A.M.            | P.M.                 | A.M.          | P.M. |                      |
| 12:00            | 10                  | 198                  |               |      | 208                  |
| 12:15            | 10                  | 206                  |               |      | 216                  |
| 12:30            | 11                  | 203                  |               |      | 214                  |
| 12:45            | 6                   | 173                  | 37            | 780  | 179                  |
| 01:00            | 9                   | 201                  |               |      | 210                  |
| 01:15            | 4                   | 218                  |               |      | 222                  |
| 01:30            | 3                   | 199                  |               |      | 202                  |
| 01:45            | 9                   | 196                  | 25            | 814  | 205                  |
| 02:00            | 5                   | 218                  |               |      | 223                  |
| 02:15            | 3                   | 222                  |               |      | 225                  |
| 02:30            | 7                   | 233                  |               |      | 240                  |
| 02:45            | 6                   | 281                  | 21            | 954  | 287                  |
| 03:00            | 5                   | 279                  |               |      | 284                  |
| 03:15            | 7                   | 267                  |               |      | 274                  |
| 03:30            | 7                   | 252                  |               |      | 259                  |
| 03:45            | 4                   | 288                  | 23            | 1086 | 292                  |
| 04:00            | 7                   | 288                  |               |      | 295                  |
| 04:15            | 11                  | 272                  |               |      | 283                  |
| 04:30            | 12                  | <b>290</b>           |               |      | 302                  |
| 04:45            | 21                  | <b>306</b>           | 51            | 1156 | 327                  |
| 05:00            | 18                  | <b>270</b>           |               |      | <b>288</b>           |
| 05:15            | 25                  | <b>291</b>           |               |      | <b>316</b>           |
| 05:30            | 43                  | 239                  |               |      | <b>282</b>           |
| 05:45            | 64                  | 286                  | 150           | 1086 | <b>350</b>           |
| 06:00            | 49                  | 227                  |               |      | 276                  |
| 06:15            | 68                  | 195                  |               |      | 263                  |
| 06:30            | 70                  | 161                  |               |      | 231                  |
| 06:45            | 131                 | 174                  | 318           | 757  | 305                  |
| 07:00            | 138                 | 151                  |               |      | 289                  |
| 07:15            | <b>218</b>          | 111                  |               |      | 329                  |
| 07:30            | <b>177</b>          | 104                  |               |      | 281                  |
| 07:45            | <b>182</b>          | 108                  | 715           | 474  | 290                  |
| 08:00            | <b>198</b>          | 111                  |               |      | 309                  |
| 08:15            | 201                 | 98                   |               |      | 299                  |
| 08:30            | 177                 | 95                   |               |      | 272                  |
| 08:45            | 156                 | 84                   | 732           | 388  | 240                  |
| 09:00            | 190                 | 85                   |               |      | 275                  |
| 09:15            | 168                 | 60                   |               |      | 228                  |
| 09:30            | 152                 | 75                   |               |      | 227                  |
| 09:45            | 155                 | 47                   | 665           | 267  | 202                  |
| 10:00            | 161                 | 47                   |               |      | 208                  |
| 10:15            | 155                 | 48                   |               |      | 203                  |
| 10:30            | 176                 | 42                   |               |      | 218                  |
| 10:45            | 157                 | 31                   | 649           | 168  | 188                  |
| 11:00            | 182                 | 27                   |               |      | 209                  |
| 11:15            | 142                 | 20                   |               |      | 162                  |
| 11:30            | 204                 | 27                   |               |      | 231                  |
| 11:45            | 200                 | 15                   | 728           | 89   | 215                  |
| <b>Total</b>     | <b>4114</b>         | <b>8019</b>          |               |      | <b>12133</b>         |
| <b>Day Total</b> | <b>12133</b>        |                      |               |      |                      |
| <b>Percent</b>   | <b>33.9%</b>        | <b>66.1%</b>         |               |      |                      |
| <b>Peak Vol.</b> | <b>07:15</b><br>775 | <b>04:30</b><br>1157 |               |      | <b>05:00</b><br>1236 |
| <b>P.H.F.</b>    | <b>0.889</b>        | <b>0.945</b>         |               |      | <b>0.883</b>         |

**TRAFFIC COUNTS PLUS**

EL DORADO COUNTY  
 MISSOURI FLAT RD. 100' S/O CHINA GARDEN RD.

mietekm@comcast.net  
 925.305.4358

missouri 5  
 Site Code: 5

| Start Time | 21-Feb-18<br>Wed | NB         |            | Hour Totals |      | SB         |            | Hour Totals |      | Both Dir.<br>Total |
|------------|------------------|------------|------------|-------------|------|------------|------------|-------------|------|--------------------|
|            |                  | A.M.       | P.M.       | A.M.        | P.M. | A.M.       | P.M.       | A.M.        | P.M. |                    |
| 12:00      |                  | 3          | 208        |             |      | 16         | 164        |             |      | 391                |
| 12:15      |                  | 2          | 221        |             |      | 8          | 174        |             |      | 405                |
| 12:30      |                  | 5          | 184        |             |      | 11         | 176        |             |      | 376                |
| 12:45      |                  | 6          | <b>222</b> | 16          | 835  | 6          | 147        | 41          | 661  | 381                |
| 01:00      |                  | 5          | <b>199</b> |             |      | 10         | 191        |             |      | 405                |
| 01:15      |                  | 1          | <b>226</b> |             |      | 4          | 193        |             |      | 424                |
| 01:30      |                  | 2          | <b>198</b> |             |      | 3          | 187        |             |      | 390                |
| 01:45      |                  | 5          | 186        | 13          | 809  | 8          | 173        | 25          | 744  | 372                |
| 02:00      |                  | 3          | 190        |             |      | 3          | 176        |             |      | 372                |
| 02:15      |                  | 3          | 204        |             |      | 2          | 186        |             |      | 395                |
| 02:30      |                  | 5          | 177        |             |      | 3          | 210        |             |      | 395                |
| 02:45      |                  | 6          | 193        | 17          | 764  | 5          | 231        | 13          | 803  | 435                |
| 03:00      |                  | 11         | 223        |             |      | 6          | 249        |             |      | 489                |
| 03:15      |                  | 12         | 207        |             |      | 5          | 238        |             |      | 462                |
| 03:30      |                  | 9          | 195        |             |      | 2          | 210        |             |      | 416                |
| 03:45      |                  | 19         | 185        | 51          | 810  | 3          | 217        | 16          | 914  | 424                |
| 04:00      |                  | 14         | 169        |             |      | 5          | 235        |             |      | 423                |
| 04:15      |                  | 27         | 157        |             |      | 1          | 248        |             |      | 433                |
| 04:30      |                  | 26         | 191        |             |      | 5          | <b>239</b> |             |      | 461                |
| 04:45      |                  | 49         | 180        | 116         | 697  | 24         | <b>271</b> | 35          | 993  | 524                |
| 05:00      |                  | 71         | 214        |             |      | 13         | <b>241</b> |             |      | 539                |
| 05:15      |                  | 80         | 163        |             |      | 21         | <b>283</b> |             |      | 547                |
| 05:30      |                  | 81         | 186        |             |      | 26         | 213        |             |      | 506                |
| 05:45      |                  | 106        | 137        | 338         | 700  | 50         | 259        | 110         | 996  | 552                |
| 06:00      |                  | 129        | 130        |             |      | 44         | 205        |             |      | 508                |
| 06:15      |                  | 148        | 130        |             |      | 49         | 174        |             |      | 501                |
| 06:30      |                  | 162        | 116        |             |      | 56         | 184        |             |      | 518                |
| 06:45      |                  | 144        | 130        | 583         | 506  | 80         | 172        | 229         | 735  | 526                |
| 07:00      |                  | 164        | 133        |             |      | 101        | 129        |             |      | <b>527</b>         |
| 07:15      |                  | 235        | 63         |             |      | 167        | 117        |             |      | <b>582</b>         |
| 07:30      |                  | 243        | 62         |             |      | 146        | 97         |             |      | <b>548</b>         |
| 07:45      |                  | <b>285</b> | 49         | 927         | 307  | 132        | 91         | 546         | 434  | <b>557</b>         |
| 08:00      |                  | <b>191</b> | 60         |             |      | 161        | 89         |             |      | 501                |
| 08:15      |                  | <b>235</b> | 62         |             |      | 159        | 94         |             |      | 550                |
| 08:30      |                  | <b>260</b> | 56         |             |      | 128        | 84         |             |      | 528                |
| 08:45      |                  | 229        | 48         | 915         | 226  | 104        | 79         | 552         | 346  | 460                |
| 09:00      |                  | 179        | 50         |             |      | 137        | 78         |             |      | 444                |
| 09:15      |                  | 183        | 23         |             |      | 142        | 55         |             |      | 403                |
| 09:30      |                  | 181        | 27         |             |      | 127        | 63         |             |      | 398                |
| 09:45      |                  | 208        | 22         | 751         | 122  | 131        | 42         | 537         | 238  | 403                |
| 10:00      |                  | 201        | 12         |             |      | 133        | 49         |             |      | 395                |
| 10:15      |                  | 202        | 19         |             |      | 123        | 44         |             |      | 388                |
| 10:30      |                  | 215        | 12         |             |      | 138        | 44         |             |      | 409                |
| 10:45      |                  | 191        | 10         | 809         | 53   | 147        | 26         | 541         | 163  | 374                |
| 11:00      |                  | 186        | 20         |             |      | <b>141</b> | 31         |             |      | 378                |
| 11:15      |                  | 190        | 13         |             |      | <b>125</b> | 24         |             |      | 352                |
| 11:30      |                  | 182        | 9          |             |      | <b>171</b> | 25         |             |      | 387                |
| 11:45      |                  | 197        | 4          | 755         | 46   | <b>181</b> | 15         | 618         | 95   | 397                |
| Total      |                  | 5291       | 5875       |             |      | 3263       | 7122       |             |      | 21551              |
| Day Total  |                  | 11666      |            |             |      | 10385      |            |             |      |                    |
| Percent    |                  | 47.4%      | 52.6%      |             |      | 31.4%      | 68.6%      |             |      |                    |
| Peak       |                  | 07:45      | 00:45      |             |      | 11:00      | 04:30      |             |      | 07:00              |
| Vol.       |                  | 971        | 845        |             |      | 618        | 1034       |             |      | 2214               |
| P.H.F.     |                  | 0.852      | 0.935      |             |      | 0.854      | 0.913      |             |      | 0.951              |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
MISSOURI FLAT RD. 300' N/O S.R. 49  
NORTHBOUND

missouri 6-n  
Site Code: 6

| Start Time       | Wed          | 21-Feb-18    | Hourly Totals |      | Interval Total |
|------------------|--------------|--------------|---------------|------|----------------|
|                  | A.M.         | P.M.         | A.M.          | P.M. |                |
| 12:00            | 3            | 157          |               |      | 160            |
| 12:15            | 1            | 161          |               |      | 162            |
| 12:30            | 1            | <b>163</b>   |               |      | 164            |
| 12:45            | 3            | <b>187</b>   | 8             | 668  | 190            |
| 01:00            | 3            | <b>184</b>   |               |      | 187            |
| 01:15            | 0            | <b>188</b>   |               |      | 188            |
| 01:30            | 3            | 147          |               |      | 150            |
| 01:45            | 7            | 156          | 13            | 675  | 163            |
| 02:00            | 1            | 151          |               |      | 152            |
| 02:15            | 4            | 158          |               |      | 162            |
| 02:30            | 5            | 140          |               |      | 145            |
| 02:45            | 6            | 158          | 16            | 607  | 164            |
| 03:00            | 8            | 204          |               |      | 212            |
| 03:15            | 12           | 153          |               |      | 165            |
| 03:30            | 8            | 161          |               |      | 169            |
| 03:45            | 24           | 150          | 52            | 668  | 174            |
| 04:00            | 19           | 132          |               |      | 151            |
| 04:15            | 25           | 133          |               |      | 158            |
| 04:30            | 30           | 144          |               |      | 174            |
| 04:45            | 58           | 141          | 132           | 550  | 199            |
| 05:00            | 75           | 149          |               |      | 224            |
| 05:15            | 90           | 148          |               |      | 238            |
| 05:30            | 88           | 148          |               |      | 236            |
| 05:45            | 101          | 126          | 354           | 571  | 227            |
| 06:00            | 136          | 93           |               |      | 229            |
| 06:15            | 137          | 96           |               |      | 233            |
| 06:30            | 167          | 101          |               |      | 268            |
| 06:45            | 147          | 116          | 587           | 406  | 263            |
| 07:00            | <b>183</b>   | 92           |               |      | <b>275</b>     |
| 07:15            | <b>225</b>   | 53           |               |      | <b>278</b>     |
| 07:30            | <b>253</b>   | 50           |               |      | <b>303</b>     |
| 07:45            | <b>289</b>   | 34           | 950           | 229  | <b>323</b>     |
| 08:00            | 179          | 55           |               |      | 234            |
| 08:15            | 211          | 50           |               |      | 261            |
| 08:30            | 243          | 42           |               |      | 285            |
| 08:45            | 188          | 42           | 821           | 189  | 230            |
| 09:00            | 170          | 38           |               |      | 208            |
| 09:15            | 166          | 24           |               |      | 190            |
| 09:30            | 157          | 26           |               |      | 183            |
| 09:45            | 184          | 17           | 677           | 105  | 201            |
| 10:00            | 175          | 11           |               |      | 186            |
| 10:15            | 171          | 13           |               |      | 184            |
| 10:30            | 174          | 11           |               |      | 185            |
| 10:45            | 159          | 10           | 679           | 45   | 169            |
| 11:00            | 139          | 15           |               |      | 154            |
| 11:15            | 151          | 10           |               |      | 161            |
| 11:30            | 163          | 8            |               |      | 171            |
| 11:45            | 169          | 5            | 622           | 38   | 174            |
| <b>Total</b>     | <b>4911</b>  | <b>4751</b>  |               |      | <b>9662</b>    |
| <b>Day Total</b> | <b>9662</b>  |              |               |      |                |
| <b>Percent</b>   | <b>50.8%</b> | <b>49.2%</b> |               |      |                |
| <b>Peak</b>      | <b>07:00</b> | <b>00:30</b> |               |      | <b>07:00</b>   |
| <b>Vol.</b>      | <b>950</b>   | <b>722</b>   |               |      | <b>1179</b>    |
| <b>P.H.F.</b>    | <b>0.822</b> | <b>0.960</b> |               |      | <b>0.913</b>   |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
MISSOURI FLAT RD. 300' N/O S.R. 49  
SOUTHBOUND

missouri 6-s  
Site Code: 6

| Start Time | Wed        | 21-Feb-18  | Hourly Totals |      | Interval Total |
|------------|------------|------------|---------------|------|----------------|
|            | A.M.       | P.M.       | A.M.          | P.M. |                |
| 12:00      | 12         | 139        |               |      | 151            |
| 12:15      | 8          | 155        |               |      | 163            |
| 12:30      | 11         | 156        |               |      | 167            |
| 12:45      | 8          | 150        | 39            | 600  | 158            |
| 01:00      | 7          | 154        |               |      | 161            |
| 01:15      | 3          | 158        |               |      | 161            |
| 01:30      | 4          | 163        |               |      | 167            |
| 01:45      | 6          | 152        | 20            | 627  | 158            |
| 02:00      | 3          | 160        |               |      | 163            |
| 02:15      | 2          | 177        |               |      | 179            |
| 02:30      | 4          | 195        |               |      | 199            |
| 02:45      | 5          | 213        | 14            | 745  | 218            |
| 03:00      | 6          | 242        |               |      | 248            |
| 03:15      | 4          | 209        |               |      | 213            |
| 03:30      | 2          | 202        |               |      | 204            |
| 03:45      | 1          | 195        | 13            | 848  | 196            |
| 04:00      | 7          | 237        |               |      | 244            |
| 04:15      | 1          | 222        |               |      | 223            |
| 04:30      | 2          | <b>240</b> |               |      | 242            |
| 04:45      | 11         | <b>258</b> | 21            | 957  | 269            |
| 05:00      | 12         | <b>237</b> |               |      | <b>249</b>     |
| 05:15      | 8          | <b>243</b> |               |      | <b>251</b>     |
| 05:30      | 15         | 223        |               |      | <b>238</b>     |
| 05:45      | 33         | 265        | 68            | 968  | <b>298</b>     |
| 06:00      | 37         | 212        |               |      | 249            |
| 06:15      | 29         | 186        |               |      | 215            |
| 06:30      | 37         | 169        |               |      | 206            |
| 06:45      | 55         | 152        | 158           | 719  | 207            |
| 07:00      | 70         | 157        |               |      | 227            |
| 07:15      | 131        | 109        |               |      | 240            |
| 07:30      | 116        | 98         |               |      | 214            |
| 07:45      | 97         | 90         | 414           | 454  | 187            |
| 08:00      | 123        | 94         |               |      | 217            |
| 08:15      | 128        | 100        |               |      | 228            |
| 08:30      | 100        | 79         |               |      | 179            |
| 08:45      | 78         | 82         | 429           | 355  | 160            |
| 09:00      | 102        | 76         |               |      | 178            |
| 09:15      | 119        | 55         |               |      | 174            |
| 09:30      | 104        | 66         |               |      | 170            |
| 09:45      | 114        | 42         | 439           | 239  | 156            |
| 10:00      | 107        | 55         |               |      | 162            |
| 10:15      | 120        | 43         |               |      | 163            |
| 10:30      | 109        | 40         |               |      | 149            |
| 10:45      | 119        | 28         | 455           | 166  | 147            |
| 11:00      | <b>129</b> | 27         |               |      | 156            |
| 11:15      | <b>114</b> | 24         |               |      | 138            |
| 11:30      | <b>134</b> | 23         |               |      | 157            |
| 11:45      | <b>173</b> | 14         | 550           | 88   | 187            |
| Total      | 2620       | 6766       |               |      | 9386           |
| Day Total  | 9386       |            |               |      |                |
| Percent    | 27.9%      | 72.1%      |               |      |                |
| Peak       | 11:00      | 04:30      |               |      | 05:00          |
| Vol.       | 550        | 978        |               |      | 1036           |
| P.H.F.     | 0.795      | 0.948      |               |      | 0.869          |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
S.R. 49 100 W/O FAITH LN.

sr49-8  
Site Code: 8

| Start Time | 21-Feb-18<br>Wed | WB         |            | Hour Totals |      | EB         |            | Hour Totals |      | Both Dir.<br>Total |
|------------|------------------|------------|------------|-------------|------|------------|------------|-------------|------|--------------------|
|            |                  | A.M.       | P.M.       | A.M.        | P.M. | A.M.       | P.M.       | A.M.        | P.M. |                    |
| 12:00      |                  | 3          | 176        |             |      | 13         | 146        |             |      | 338                |
| 12:15      |                  | 3          | 150        |             |      | 8          | 165        |             |      | 326                |
| 12:30      |                  | 2          | <b>157</b> |             |      | 11         | 146        |             |      | 316                |
| 12:45      |                  | 3          | <b>179</b> | 11          | 662  | 7          | 159        | 39          | 616  | 348                |
| 01:00      |                  | 2          | <b>158</b> |             |      | 7          | 179        |             |      | 346                |
| 01:15      |                  | 3          | <b>177</b> |             |      | 2          | 155        |             |      | 337                |
| 01:30      |                  | 3          | 157        |             |      | 7          | 154        |             |      | 321                |
| 01:45      |                  | 9          | 157        | 17          | 649  | 6          | 155        | 22          | 643  | 327                |
| 02:00      |                  | 1          | 146        |             |      | 3          | 158        |             |      | 308                |
| 02:15      |                  | 2          | 168        |             |      | 1          | 135        |             |      | 306                |
| 02:30      |                  | 4          | 153        |             |      | 1          | 173        |             |      | 331                |
| 02:45      |                  | 6          | 146        | 13          | 613  | 2          | 181        | 7           | 647  | 335                |
| 03:00      |                  | 8          | 168        |             |      | 3          | 227        |             |      | 406                |
| 03:15      |                  | 9          | 130        |             |      | 7          | 205        |             |      | 351                |
| 03:30      |                  | 7          | 150        |             |      | 3          | 199        |             |      | 359                |
| 03:45      |                  | 24         | 145        | 48          | 593  | 5          | 185        | 18          | 816  | 359                |
| 04:00      |                  | 14         | 139        |             |      | 9          | 209        |             |      | 371                |
| 04:15      |                  | 30         | 135        |             |      | 6          | 245        |             |      | 416                |
| 04:30      |                  | 32         | 148        |             |      | 1          | <b>230</b> |             |      | 411                |
| 04:45      |                  | 64         | 143        | 140         | 565  | 4          | <b>265</b> | 20          | 949  | 476                |
| 05:00      |                  | 63         | 156        |             |      | 9          | <b>248</b> |             |      | 476                |
| 05:15      |                  | 86         | 153        |             |      | 11         | <b>258</b> |             |      | 508                |
| 05:30      |                  | 97         | 122        |             |      | 7          | 222        |             |      | 448                |
| 05:45      |                  | 96         | 130        | 342         | 561  | 24         | 239        | 51          | 967  | 489                |
| 06:00      |                  | 141        | 97         |             |      | 27         | 189        |             |      | 454                |
| 06:15      |                  | 130        | 109        |             |      | 30         | 177        |             |      | 446                |
| 06:30      |                  | 173        | 86         |             |      | 50         | 154        |             |      | 463                |
| 06:45      |                  | 154        | 97         | 598         | 389  | 41         | 159        | 148         | 679  | 451                |
| 07:00      |                  | <b>203</b> | 67         |             |      | 62         | 169        |             |      | <b>501</b>         |
| 07:15      |                  | <b>256</b> | 53         |             |      | 75         | 111        |             |      | <b>495</b>         |
| 07:30      |                  | <b>264</b> | 52         |             |      | 108        | 93         |             |      | <b>517</b>         |
| 07:45      |                  | <b>247</b> | 41         | 970         | 213  | 117        | 71         | 362         | 444  | <b>476</b>         |
| 08:00      |                  | 191        | 54         |             |      | 89         | 80         |             |      | 414                |
| 08:15      |                  | 212        | 48         |             |      | 112        | 78         |             |      | 450                |
| 08:30      |                  | 236        | 36         |             |      | 111        | 79         |             |      | 462                |
| 08:45      |                  | 181        | 33         | 820         | 171  | 77         | 68         | 389         | 305  | 359                |
| 09:00      |                  | 177        | 40         |             |      | 110        | 71         |             |      | 398                |
| 09:15      |                  | 181        | 25         |             |      | 116        | 61         |             |      | 383                |
| 09:30      |                  | 165        | 23         |             |      | 112        | 57         |             |      | 357                |
| 09:45      |                  | 172        | 12         | 695         | 100  | 112        | 47         | 450         | 236  | 343                |
| 10:00      |                  | 169        | 14         |             |      | 126        | 38         |             |      | 347                |
| 10:15      |                  | 185        | 11         |             |      | 116        | 38         |             |      | 350                |
| 10:30      |                  | 150        | 8          |             |      | 114        | 40         |             |      | 312                |
| 10:45      |                  | 148        | 9          | 652         | 42   | 120        | 25         | 476         | 141  | 302                |
| 11:00      |                  | 129        | 13         |             |      | <b>126</b> | 22         |             |      | 290                |
| 11:15      |                  | 153        | 11         |             |      | <b>125</b> | 26         |             |      | 315                |
| 11:30      |                  | 169        | 11         |             |      | <b>142</b> | 22         |             |      | 344                |
| 11:45      |                  | 166        | 7          | 617         | 42   | <b>184</b> | 14         | 577         | 84   | 371                |
| Total      |                  | 4923       | 4600       |             |      | 2559       | 6527       |             |      | 18609              |
| Day Total  |                  | 9523       |            |             |      | 9086       |            |             |      |                    |
| Percent    |                  | 51.7%      | 48.3%      |             |      | 28.2%      | 71.8%      |             |      |                    |
| Peak       |                  | 07:00      | 00:30      |             |      | 11:00      | 04:30      |             |      | 07:00              |
| Vol.       |                  | 970        | 671        |             |      | 577        | 1001       |             |      | 1989               |
| P.H.F.     |                  | 0.919      | 0.937      |             |      | 0.784      | 0.944      |             |      | 0.962              |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
S.R. 49 100' E/O CHINA GARDEN RD.

sr49-9  
Site Code: 9

| Start Time | 21-Feb-18<br>Wed | EB         |            | Hour Totals |      | WB         |            | Hour Totals |      | Both Dir.<br>Total |
|------------|------------------|------------|------------|-------------|------|------------|------------|-------------|------|--------------------|
|            |                  | A.M.       | P.M.       | A.M.        | P.M. | A.M.       | P.M.       | A.M.        | P.M. |                    |
| 12:00      |                  | 13         | 151        |             |      | 4          | 171        |             |      | 339                |
| 12:15      |                  | 8          | 165        |             |      | 2          | 145        |             |      | 320                |
| 12:30      |                  | 13         | 148        |             |      | 2          | 153        |             |      | 316                |
| 12:45      |                  | 7          | 173        | 41          | 637  | 3          | <b>174</b> | 11          | 643  | 357                |
| 01:00      |                  | 7          | 176        |             |      | 3          | <b>155</b> |             |      | 341                |
| 01:15      |                  | 2          | 162        |             |      | 4          | <b>164</b> |             |      | 332                |
| 01:30      |                  | 6          | 161        |             |      | 2          | <b>158</b> |             |      | 327                |
| 01:45      |                  | 6          | 167        | 21          | 666  | 9          | 157        | 18          | 634  | 339                |
| 02:00      |                  | 3          | 158        |             |      | 2          | 140        |             |      | 303                |
| 02:15      |                  | 1          | 148        |             |      | 2          | 163        |             |      | 314                |
| 02:30      |                  | 2          | 182        |             |      | 4          | 144        |             |      | 332                |
| 02:45      |                  | 2          | 189        | 8           | 677  | 8          | 156        | 16          | 603  | 355                |
| 03:00      |                  | 3          | 236        |             |      | 9          | 153        |             |      | 401                |
| 03:15      |                  | 5          | 222        |             |      | 10         | 130        |             |      | 367                |
| 03:30      |                  | 2          | 205        |             |      | 7          | 137        |             |      | 351                |
| 03:45      |                  | 5          | 193        | 15          | 856  | 24         | 144        | 50          | 564  | 366                |
| 04:00      |                  | 11         | 224        |             |      | 18         | 135        |             |      | 388                |
| 04:15      |                  | 7          | 250        |             |      | 28         | 139        |             |      | 424                |
| 04:30      |                  | 1          | <b>244</b> |             |      | 31         | 136        |             |      | 412                |
| 04:45      |                  | 5          | <b>259</b> | 24          | 977  | 68         | 132        | 145         | 542  | 464                |
| 05:00      |                  | 7          | <b>255</b> |             |      | 64         | 152        |             |      | 478                |
| 05:15      |                  | 12         | <b>264</b> |             |      | 90         | 140        |             |      | 506                |
| 05:30      |                  | 8          | 238        |             |      | 101        | 113        |             |      | 460                |
| 05:45      |                  | 24         | 236        | 51          | 993  | 96         | 118        | 351         | 523  | 474                |
| 06:00      |                  | 29         | 202        |             |      | 139        | 96         |             |      | 466                |
| 06:15      |                  | 32         | 178        |             |      | 131        | 102        |             |      | 443                |
| 06:30      |                  | 53         | 164        |             |      | 177        | 94         |             |      | 488                |
| 06:45      |                  | 39         | 160        | 153         | 704  | 156        | 90         | 603         | 382  | 445                |
| 07:00      |                  | 61         | 173        |             |      | <b>197</b> | 64         |             |      | <b>495</b>         |
| 07:15      |                  | 75         | 114        |             |      | <b>269</b> | 53         |             |      | <b>511</b>         |
| 07:30      |                  | 106        | 92         |             |      | <b>260</b> | 52         |             |      | <b>510</b>         |
| 07:45      |                  | 119        | 79         | 361         | 458  | <b>238</b> | 41         | 964         | 210  | <b>477</b>         |
| 08:00      |                  | 94         | 79         |             |      | 191        | 58         |             |      | 422                |
| 08:15      |                  | 107        | 84         |             |      | 211        | 46         |             |      | 448                |
| 08:30      |                  | 110        | 83         |             |      | 236        | 34         |             |      | 463                |
| 08:45      |                  | 82         | 66         | 393         | 312  | 190        | 31         | 828         | 169  | 369                |
| 09:00      |                  | 112        | 73         |             |      | 176        | 39         |             |      | 400                |
| 09:15      |                  | 122        | 63         |             |      | 180        | 23         |             |      | 388                |
| 09:30      |                  | 106        | 57         |             |      | 175        | 21         |             |      | 359                |
| 09:45      |                  | 112        | 47         | 452         | 240  | 165        | 14         | 696         | 97   | 338                |
| 10:00      |                  | 134        | 39         |             |      | 170        | 12         |             |      | 355                |
| 10:15      |                  | 121        | 39         |             |      | 167        | 11         |             |      | 338                |
| 10:30      |                  | 120        | 41         |             |      | 152        | 8          |             |      | 321                |
| 10:45      |                  | 123        | 28         | 498         | 147  | 147        | 11         | 636         | 42   | 309                |
| 11:00      |                  | <b>139</b> | 21         |             |      | 129        | 14         |             |      | 303                |
| 11:15      |                  | <b>123</b> | 26         |             |      | 145        | 9          |             |      | 303                |
| 11:30      |                  | <b>152</b> | 26         |             |      | 161        | 15         |             |      | 354                |
| 11:45      |                  | <b>190</b> | 14         | 604         | 87   | 156        | 7          | 591         | 45   | 367                |
| Total      |                  | 2621       | 6754       |             |      | 4909       | 4454       |             |      | 18738              |
| Day Total  |                  | 9375       |            |             |      | 9363       |            |             |      |                    |
| Percent    |                  | 28.0%      | 72.0%      |             |      | 52.4%      | 47.6%      |             |      |                    |
| Peak       |                  | 11:00      | 04:30      |             |      | 07:00      | 00:45      |             |      | 07:00              |
| Vol.       |                  | 604        | 1022       |             |      | 964        | 651        |             |      | 1993               |
| P.H.F.     |                  | 0.795      | 0.968      |             |      | 0.896      | 0.935      |             |      | 0.975              |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

EL DORADO COUNTY  
S.R. 49 200' W/O MISSOURI FLAT RD.  
EASTBOUND

sr49-10-e  
Site Code: 10

| Start Time       | 21-Feb-18           |                     | Hourly Totals |      | Interval Total      |
|------------------|---------------------|---------------------|---------------|------|---------------------|
|                  | Wed A.M.            | P.M.                | A.M.          | P.M. |                     |
| 12:00            | 4                   | 117                 |               |      | 121                 |
| 12:15            | 4                   | 115                 |               |      | 119                 |
| 12:30            | 4                   | 109                 |               |      | 113                 |
| 12:45            | 3                   | 140                 | 15            | 481  | 143                 |
| 01:00            | 4                   | 145                 |               |      | 149                 |
| 01:15            | 1                   | 122                 |               |      | 123                 |
| 01:30            | 4                   | 108                 |               |      | 112                 |
| 01:45            | 3                   | 106                 | 12            | 481  | 109                 |
| 02:00            | 1                   | 112                 |               |      | 113                 |
| 02:15            | 2                   | 97                  |               |      | 99                  |
| 02:30            | 3                   | 109                 |               |      | 112                 |
| 02:45            | 3                   | 135                 | 9             | 453  | 138                 |
| 03:00            | 1                   | 194                 |               |      | 195                 |
| 03:15            | 4                   | 158                 |               |      | 162                 |
| 03:30            | 3                   | 137                 |               |      | 140                 |
| 03:45            | 5                   | 127                 | 13            | 616  | 132                 |
| 04:00            | 13                  | 126                 |               |      | 139                 |
| 04:15            | 9                   | 116                 |               |      | 125                 |
| 04:30            | 7                   | 137                 |               |      | 144                 |
| 04:45            | 9                   | 124                 | 38            | 503  | 133                 |
| 05:00            | 23                  | 151                 |               |      | 174                 |
| 05:15            | 29                  | 136                 |               |      | 165                 |
| 05:30            | 14                  | 147                 |               |      | 161                 |
| 05:45            | 27                  | 105                 | 93            | 539  | 132                 |
| 06:00            | 36                  | 87                  |               |      | 123                 |
| 06:15            | 51                  | 82                  |               |      | 133                 |
| 06:30            | 56                  | 75                  |               |      | 131                 |
| 06:45            | 53                  | 87                  | 196           | 331  | 140                 |
| 07:00            | 79                  | 104                 |               |      | 183                 |
| 07:15            | 127                 | 41                  |               |      | 168                 |
| 07:30            | 172                 | 38                  |               |      | 210                 |
| 07:45            | 194                 | 22                  | 572           | 205  | 216                 |
| 08:00            | 98                  | 30                  |               |      | 128                 |
| 08:15            | 126                 | 32                  |               |      | 158                 |
| 08:30            | 125                 | 45                  |               |      | 170                 |
| 08:45            | 97                  | 31                  | 446           | 138  | 128                 |
| 09:00            | 85                  | 29                  |               |      | 114                 |
| 09:15            | 89                  | 24                  |               |      | 113                 |
| 09:30            | 94                  | 19                  |               |      | 113                 |
| 09:45            | 104                 | 21                  | 372           | 93   | 125                 |
| 10:00            | 104                 | 13                  |               |      | 117                 |
| 10:15            | 95                  | 15                  |               |      | 110                 |
| 10:30            | 100                 | 17                  |               |      | 117                 |
| 10:45            | 97                  | 10                  | 396           | 55   | 107                 |
| 11:00            | 99                  | 11                  |               |      | 110                 |
| 11:15            | 113                 | 9                   |               |      | 122                 |
| 11:30            | 114                 | 4                   |               |      | 118                 |
| 11:45            | 105                 | 6                   | 431           | 30   | 111                 |
| <b>Total</b>     | <b>2593</b>         | <b>3925</b>         |               |      | <b>6518</b>         |
| <b>Day Total</b> | <b>6518</b>         |                     |               |      |                     |
| <b>Percent</b>   | <b>39.8%</b>        | <b>60.2%</b>        |               |      |                     |
| <b>Peak Vol.</b> | <b>07:15</b><br>591 | <b>02:45</b><br>624 |               |      | <b>07:00</b><br>777 |
| <b>P.H.F.</b>    | 0.762               | 0.804               |               |      | 0.899               |

**TRAFFIC COUNTS PLUS**

mietekm@comcast.net  
925.305.4358

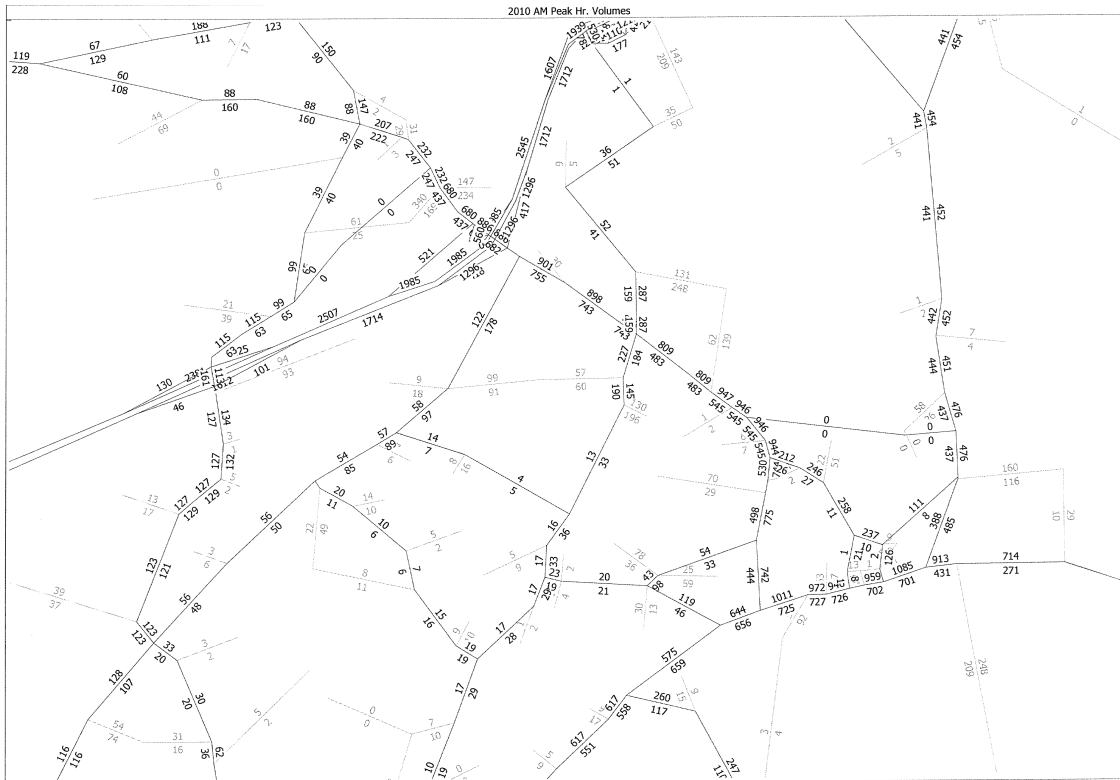
EL DORADO COUNTY  
S.R. 49 200' W/O MISSOURI FLAT RD.  
WESTBOUND

sr49-10-w  
Site Code: 10

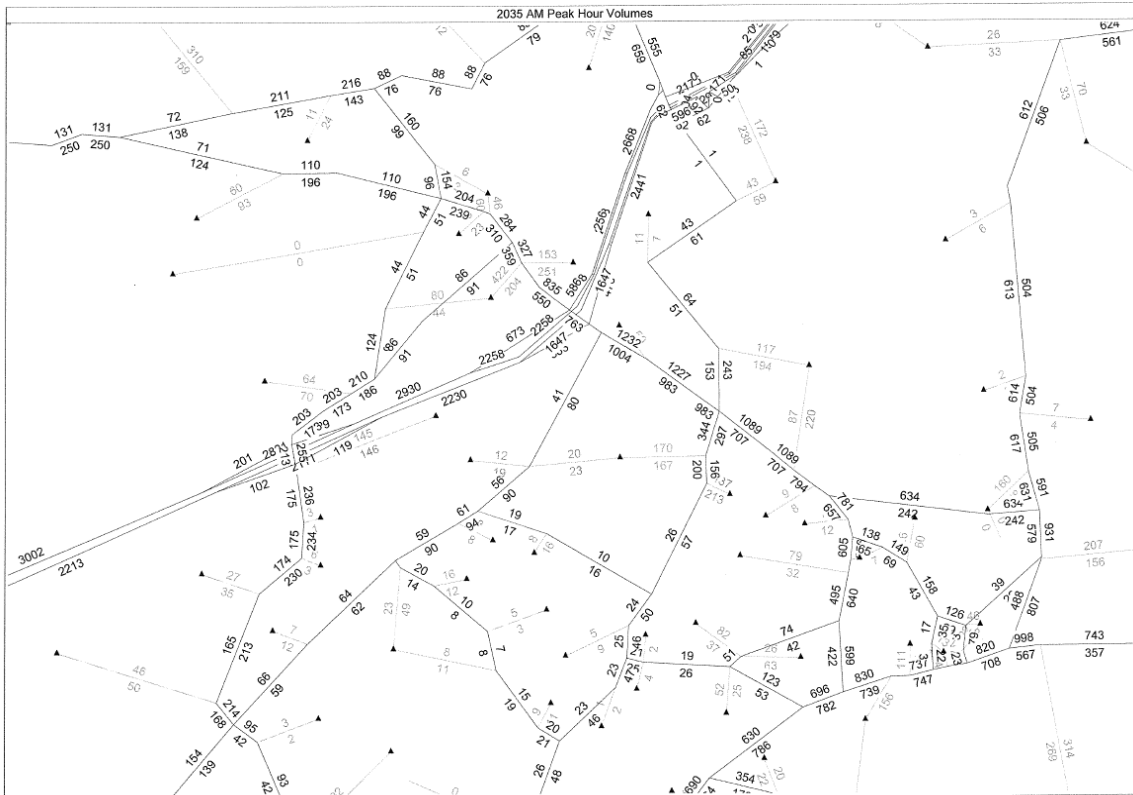
| Start Time       | 21-Feb-18    |              | Hourly Totals |      | Interval Total |
|------------------|--------------|--------------|---------------|------|----------------|
|                  | Wed A.M.     | P.M.         | A.M.          | P.M. |                |
| 12:00            | 2            | 97           |               |      | 99             |
| 12:15            | 4            | 98           |               |      | 102            |
| 12:30            | 5            | 92           |               |      | 97             |
| 12:45            | 3            | 104          | 14            | 391  | 107            |
| 01:00            | 3            | 94           |               |      | 97             |
| 01:15            | 5            | 90           |               |      | 95             |
| 01:30            | 2            | 107          |               |      | 109            |
| 01:45            | 6            | 94           | 16            | 385  | 100            |
| 02:00            | 1            | 93           |               |      | 94             |
| 02:15            | 0            | 123          |               |      | 123            |
| 02:30            | 1            | 125          |               |      | 126            |
| 02:45            | 6            | 142          | 8             | 483  | 148            |
| 03:00            | 4            | 165          |               |      | 169            |
| 03:15            | 0            | 129          |               |      | 129            |
| 03:30            | 0            | 117          |               |      | 117            |
| 03:45            | 3            | 123          | 7             | 534  | 126            |
| 04:00            | 6            | 125          |               |      | 131            |
| 04:15            | 4            | 102          |               |      | 106            |
| 04:30            | 10           | 122          |               |      | 132            |
| 04:45            | 14           | 126          | 34            | 475  | 140            |
| 05:00            | 19           | 135          |               |      | 154            |
| 05:15            | 20           | 127          |               |      | 147            |
| 05:30            | 26           | 113          |               |      | 139            |
| 05:45            | 21           | 126          | 86            | 501  | 147            |
| 06:00            | 38           | 108          |               |      | 146            |
| 06:15            | 43           | 98           |               |      | 141            |
| 06:30            | 38           | 75           |               |      | 113            |
| 06:45            | 61           | 57           | 180           | 338  | 118            |
| 07:00            | 96           | 66           |               |      | 162            |
| 07:15            | 201          | 56           |               |      | 257            |
| 07:30            | 156          | 32           |               |      | 188            |
| 07:45            | 121          | 37           | 574           | 191  | 158            |
| 08:00            | 131          | 41           |               |      | 172            |
| 08:15            | 117          | 50           |               |      | 167            |
| 08:30            | 107          | 41           |               |      | 148            |
| 08:45            | 88           | 33           | 443           | 165  | 121            |
| 09:00            | 77           | 25           |               |      | 102            |
| 09:15            | 94           | 22           |               |      | 116            |
| 09:30            | 83           | 19           |               |      | 102            |
| 09:45            | 70           | 16           | 324           | 82   | 86             |
| 10:00            | 82           | 27           |               |      | 109            |
| 10:15            | 84           | 14           |               |      | 98             |
| 10:30            | 58           | 16           |               |      | 74             |
| 10:45            | 72           | 9            | 296           | 66   | 81             |
| 11:00            | 70           | 16           |               |      | 86             |
| 11:15            | 79           | 7            |               |      | 86             |
| 11:30            | 82           | 8            |               |      | 90             |
| 11:45            | 78           | 8            | 309           | 39   | 86             |
| <b>Total</b>     | <b>2291</b>  | <b>3650</b>  |               |      | <b>5941</b>    |
| <b>Day Total</b> | <b>5941</b>  |              |               |      |                |
| <b>Percent</b>   | <b>38.6%</b> | <b>61.4%</b> |               |      |                |
| <b>Peak</b>      | <b>07:15</b> | <b>02:30</b> |               |      | <b>07:15</b>   |
| <b>Vol.</b>      | <b>609</b>   | <b>561</b>   |               |      | <b>775</b>     |
| <b>P.H.F.</b>    | <b>0.757</b> | <b>0.850</b> |               |      | <b>0.754</b>   |



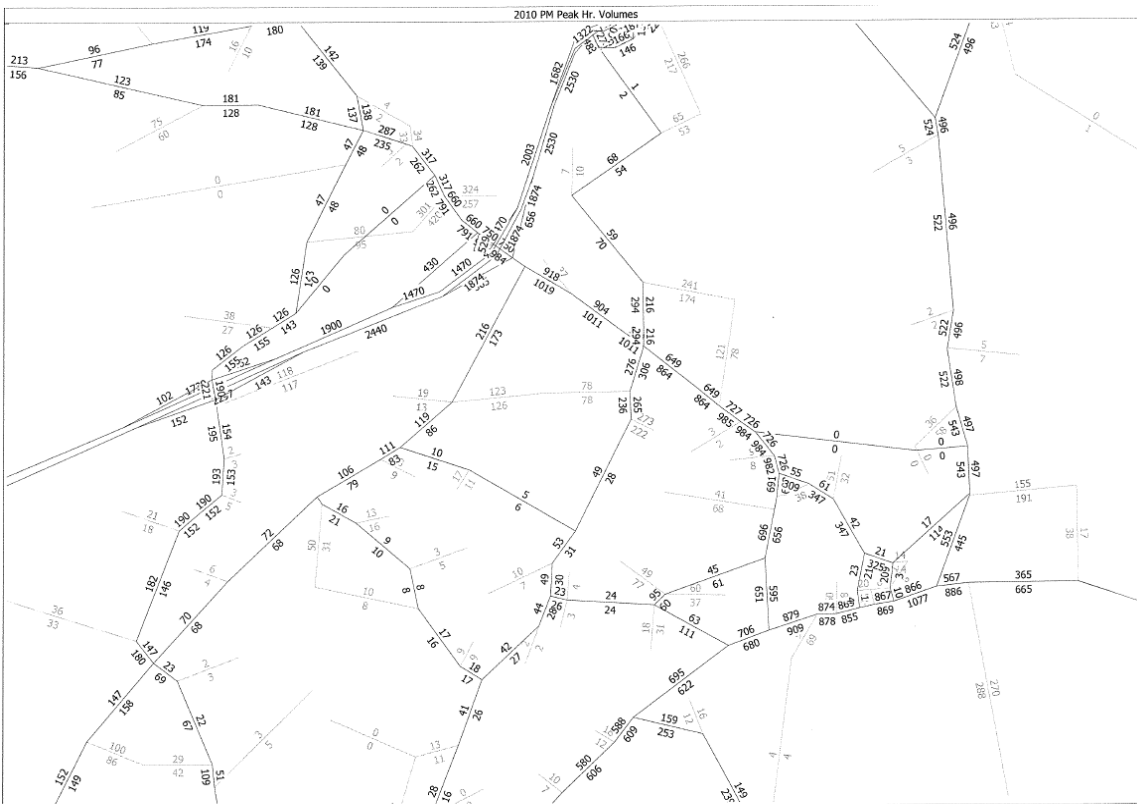
# Section A.8. El Dorado County DOT Travel Demand Model Outputs, AM and PM Peak



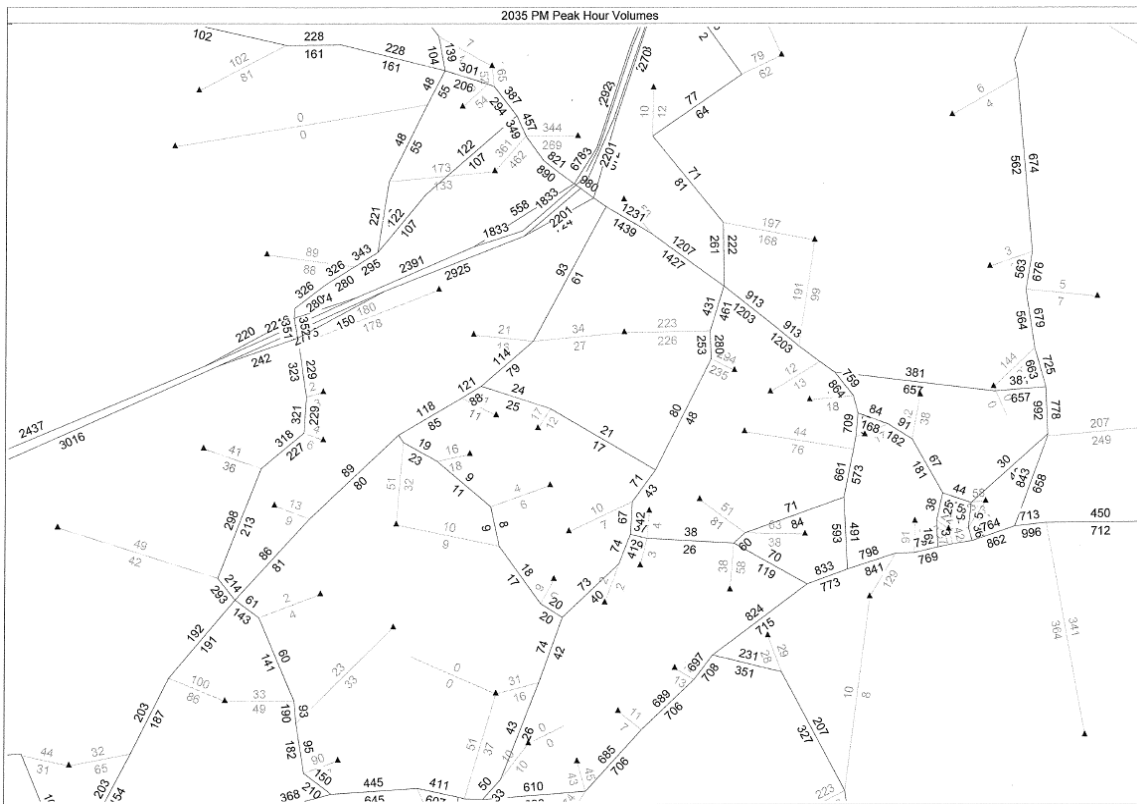
AM Peak Hour Volumes  
2010 Model



AM Peak Hour Volumes  
2035 Model



**PM Peak Hour Volumes  
2010 Model**



**PM Peak Hour Volumes  
2035 Model**

## **Section A.9. Synchro and SimTraffic Microsimulation HCM 2010 Capacity Analyses Output Sheets**

These files are downloaded separately to County DOT Staff from DROPBOX location, and contained in separate and labeled PDF files for each scenario:

AM Peak Hour Year 2018

AM Peak Hour Year 2027

AM Peak Hour Year 2035

AM Peak Hour Year 2018 plus Project

AM Peak Hour Year 2027 plus Project

AM Peak Hour Year 2035 plus Project

PM Peak Hour Year 2018

PM Peak Hour Year 2027

PM Peak Hour Year 2035

PM Peak Hour Year 2018 plus Project

PM Peak Hour Year 2027 plus Project

PM Peak Hour Year 2035 plus Project

## Section A.10 Synchro and SimTraffic Instructions

PRISM Engineering consulted extensively with County DOT Staff concerning the most appropriate traffic analysis methods to be used for this traffic study. The main two corridors of analysis were:

1. Missouri Flat Road from US 50 to Pleasant Valley Road, and
2. Pleasant Valley Road from SR 49 S to SR 49 N/Fowler Road.

The traffic control for Missouri flat Road varies significantly from the US 50 freeway interchange on the north to Pleasant Valley Road on the south. For example, traffic operations are complex at the freeway interchange. Signals are coordinated. Prism engineering conducted extensive field reviews with video for verification, to study signal timings, signal phasings, offset times, as well as vehicle operations in a detailed saturation flow study. All of this information was carefully edited into the Synchro and SimTraffic models developed for the study.

Other intersections along Missouri flat Road such as at Forni Road, are typical signalized intersections. Further to the south there are several intersections that are not signalized, but have side street stop control (TWSC). Another section of Missouri flat Road has a two way left turn lane in the median, but this is not consistent throughout the length of an signalized intersection, as there is a left turn pocket at the end signalized intersection at China Garden Road. For this reason, several different types of traffic models were developed and utilized in the study. For example, the traffic analysis option within the Synchro microsimulation traffic model is several fold, including:

1. HCM 2000, Signalized and Unsignalized
2. **HCM 2010 Signalized Summary, Detail, Pedestrians, Bicycles**
3. **HCM 2010 Roundabout, Detail**
4. **HCM AWSC, Detail**
5. **HCM 2010 TWSC, Detail, Pedestrians**
6. **HCM 2010 SimTraffic Arterial Analysis and**
7. **HCM 2010 SimTraffic Intersection Analysis**

In this study option 2, 3, 4, 5, 6, and option 7 were considered to calculate the appropriate level of service depending on the specific traffic control in place at each intersection. Option one, HCM 2000 was not utilized because the methodology is outdated. In the appendix output sheets for each scenario, there are two different files, one for the signalized intersections, and one for the unsignalized intersections (which were calculated using different appropriate methods). In each file there are typically several different kinds of reports based on different analysis options. Care should be taken when reviewing these files that the analysis method utilized is understood, and this can be seen specifically in the header of each page as a title (such as HCM 2010 TWSC, etc).

PRISM Engineering generally used the SimTraffic model output for signalized intersections, since the SimTraffic model encompassed the entire study area intersections, and used the HCM 2010 unsignalized methods for the remaining intersections (labeled as ZONE B in the appendix file names). ZONE B calculation summary sheets refer to intersections that had Two-Way Stop control (TWSC using HCM 2010 methodology), Roundabouts (using HCM 2010 methodology), All Way Stop Control (AWSC using HCM 2010 methodology).

There are many ways to calculate levels of service, different methods, and PRISM Engineering on consultation with the County Staff agreed that the microsimulation methods were most appropriate because of their ability to best match field conditions. The operations and animations in the SimTraffic models were able to replicate actual existing conditions, as verified by video of traffic in the field.

## Synchro versus SimTraffic

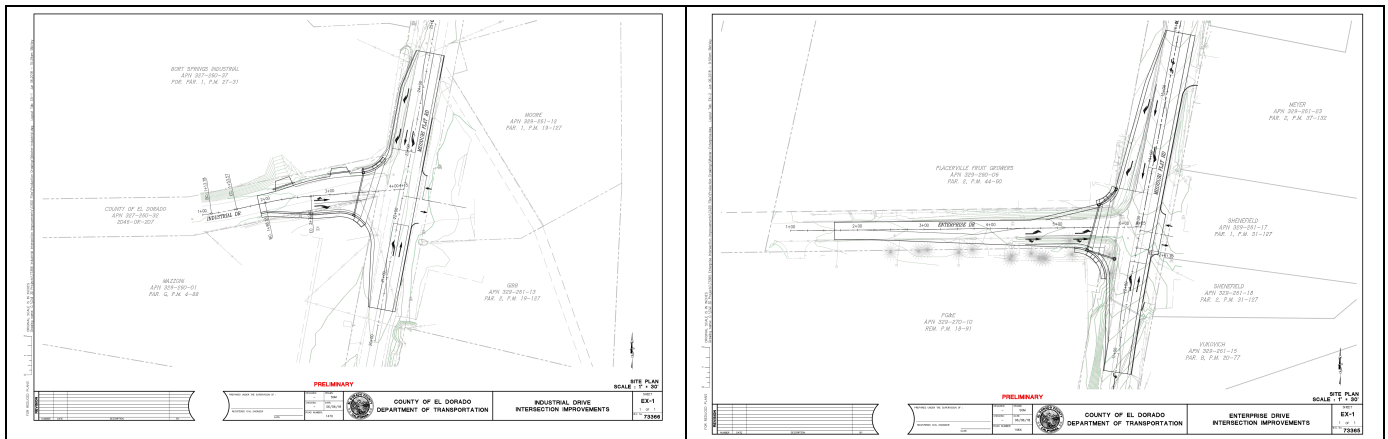
The County has instructed in their TIS Guidelines that both Synchro and SimTraffic use HCM methodology to analyze intersection operations. We utilized HCM 2010 methods in all cases. The County further states that “SimTraffic should be used to analyze traffic operations when the following conditions exist (or could exist in the future):

- Closely spaced intersections
- Over-capacity conditions (queues spill out of storage pockets)
- Uneven lane utilization
- Unusual lane configurations or alignment
- Unusual platoon dispersion or compression

For example, SimTraffic should be used at interchanges, such as Missouri Flat Road and El Dorado Hills Boulevard. If upstream or downstream intersections affect the traffic operations of a study intersection, SimTraffic should be used for analysis. Synchro should be used to analyze isolated intersections without unusual lane configurations or constraints.”

The PRISM Engineering analysis followed these guidelines, as well as all procedures outlines in the TIS Guidelines document pertaining to Synchro Procedures and SimTraffic procedures.

## Missouri Flat Road New Signal Installation Plan Sheets



These are the lane configurations used in the calculation of level of service at the intersections of Enterprise Dr and Industrial Dr along Missouri Flat Rd

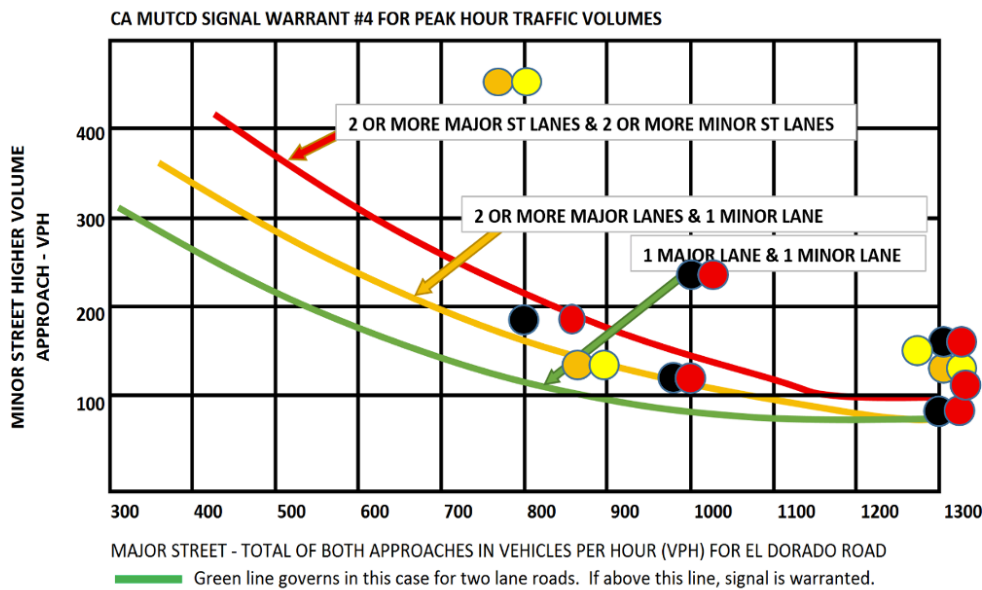
## Section A.11 Signal Warrant Analysis Worksheets

### Signal Warrants for Year 2018 AM & PM Peak Hour Scenarios (supports Table 12 in report)

|                                       | AM 2018                             | AM+PROJ               | PM 2018               | PM+PROJ               | MINOR STREET HIGHER VOLUME |         |     |         |
|---------------------------------------|-------------------------------------|-----------------------|-----------------------|-----------------------|----------------------------|---------|-----|---------|
|                                       | TOTAL BOTH APPR MAJOR               | TOTAL BOTH APPR MAJOR | TOTAL BOTH APPR MAJOR | TOTAL BOTH APPR MAJOR | AM                         | AM+PROJ | PM  | PM+PROJ |
|                                       | Missouri Flat Rd at China Garden Rd | 1526                  | 1662                  | 1900                  | 2079                       | 133     | 135 | 157     |
| Pleasant Valley Rd at Faith Ln        | 1234                                | 1269                  | 1586                  | 1725                  | 5                          | 137     | 14  | 95      |
| Pleasant Valley Rd at China Garden Rd | 1256                                | 1272                  | 1576                  | 1599                  | 19                         | 19      | 40  | 40      |
| Pleasant Valley Rd at Commerce Way    | 1098                                | 1102                  | 980                   | 985                   | 60                         | 60      | 118 | 118     |
| Pleasant Valley at Forni Rd           | 877                                 | 898                   | 813                   | 840                   | 133                        | 133     | 190 | 190     |
| Pleasant Valley Rd at SR 49 S         | 775                                 | 794                   | 1017                  | 1036                  | 445                        | 447     | 235 | 243     |

**Legend:**

|                         |                                     |
|-------------------------|-------------------------------------|
| Signal is NOT Warranted | ● AM 2018, Dot corresponds to Chart |
| Signal IS Warranted     | ● AM+PROJ, Dot corresponds to Chart |
|                         | ● PM 2018, Dot corresponds to Chart |
|                         | ● PM+PROJ, Dot corresponds to Chart |



Source: PRISM Engineering traffic counts and CA MUTCD Warrants analysis

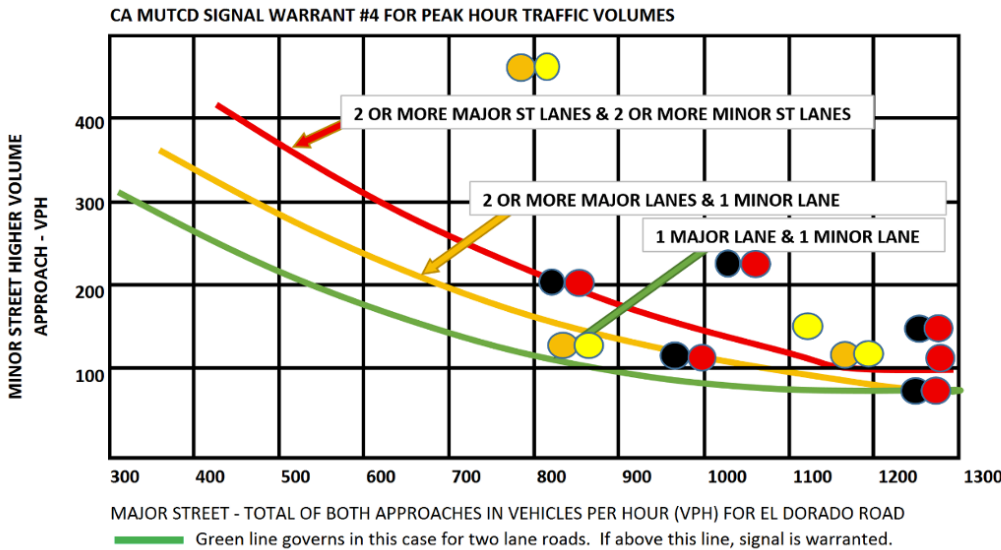
The color-coded dots in the chart correlate with the dots in table above, and are placed above the green line representing that the side street volume is high enough to meet the established warrant. The dots are placed vertically directly over the corresponding main street total of both approaches volume on Missouri Flat Road and Pleasant Valley Road at the specific intersection listed in the table above.

Signal Warrants for Year 2027 AM & PM Peak Hour Scenarios (supports Table 18 in report)

|                                       | AM 2027                             | AM+PROJ               | PM 2027               | PM+PROJ               | MINOR STREET HIGHER VOLUME |         |     |         |
|---------------------------------------|-------------------------------------|-----------------------|-----------------------|-----------------------|----------------------------|---------|-----|---------|
|                                       | TOTAL BOTH APPR MAJOR               | TOTAL BOTH APPR MAJOR | TOTAL BOTH APPR MAJOR | TOTAL BOTH APPR MAJOR | AM                         | AM+PROJ | PM  | PM+PROJ |
|                                       | Missouri Flat Rd at China Garden Rd | 1236                  | 1372                  | 1824                  | 2003                       | 122     | 124 | 151     |
| Pleasant Valley Rd at Faith Ln        | 1081                                | 1116                  | 1507                  | 1646                  | 5                          | 137     | 13  | 94      |
| Pleasant Valley Rd at China Garden Rd | 1068                                | 1084                  | 1497                  | 1520                  | 18                         | 18      | 38  | 38      |
| Pleasant Valley Rd at Commerce Way    | 1153                                | 1157                  | 1029                  | 1034                  | 63                         | 63      | 124 | 124     |
| Pleasant Valley at Forni Rd           | 934                                 | 955                   | 866                   | 893                   | 142                        | 142     | 202 | 202     |
| Pleasant Valley Rd at SR 49 S         | 825                                 | 844                   | 1083                  | 1102                  | 474                        | 476     | 250 | 258     |

Legend:

|                         |                                     |
|-------------------------|-------------------------------------|
| Signal is NOT Warranted | ● AM 2027, Dot corresponds to Chart |
| Signal IS Warranted     | ● AM+PROJ, Dot corresponds to Chart |
|                         | ● PM 2027, Dot corresponds to Chart |
|                         | ● PM+PROJ, Dot corresponds to Chart |



Source: PRISM Engineering traffic counts and CA MUTCD Warrants analysis

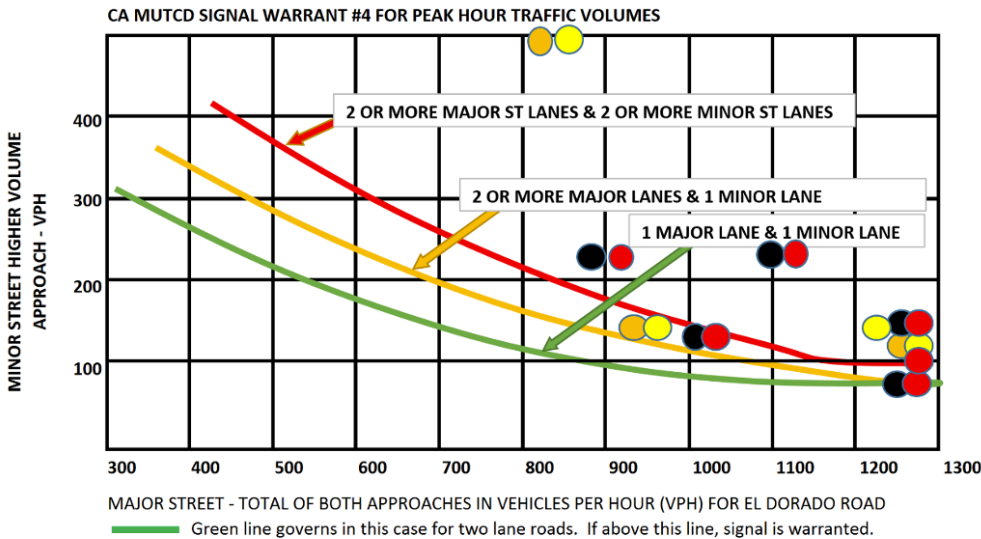
The color-coded dots in the chart correlate with the dots in table above, and are placed above the green line representing that the side street volume is high enough to meet the established warrant. The dots are placed vertically directly over the corresponding main street total of both approaches volume on Missouri Flat Road and Pleasant Valley Road at the specific intersection listed in the table above.

Signal Warrants for Year 2035 AM & PM Peak Hour Scenarios (supports Table 22 in report)

|                                       | AM 2035                             | AM+PROJ                        | PM 2035                        | PM+PROJ                        | MINOR STREET HIGHER VOLUME |         |     |         |
|---------------------------------------|-------------------------------------|--------------------------------|--------------------------------|--------------------------------|----------------------------|---------|-----|---------|
|                                       | TOTAL<br>BOTH<br>APPR<br>MAJOR      | TOTAL<br>BOTH<br>APPR<br>MAJOR | TOTAL<br>BOTH<br>APPR<br>MAJOR | TOTAL<br>BOTH<br>APPR<br>MAJOR | AM                         | AM+PROJ | PM  | PM+PROJ |
|                                       | Missouri Flat Rd at China Garden Rd | 1427                           | 1563                           | 1748                           | 1927                       | 122     | 124 | 144     |
| Pleasant Valley Rd at Faith Ln        | 1172                                | 1207                           | 1427                           | 1566                           | 5                          | 137     | 13  | 94      |
| Pleasant Valley Rd at China Garden Rd | 1165                                | 1181                           | 1418                           | 1441                           | 18                         | 18      | 36  | 36      |
| Pleasant Valley Rd at Commerce Way    | 1208                                | 1211                           | 1078                           | 1083                           | 66                         | 66      | 130 | 130     |
| Pleasant Valley at Forni Rd           | 991                                 | 1012                           | 919                            | 946                            | 150                        | 150     | 215 | 215     |
| Pleasant Valley Rd at SR 49 S         | 876                                 | 895                            | 1149                           | 1168                           | 503                        | 505     | 266 | 274     |

Legend:

|                         |                                     |
|-------------------------|-------------------------------------|
| Signal is NOT Warranted | ● AM 2035, Dot corresponds to Chart |
| Signal IS Warranted     | ● AM+PROJ, Dot corresponds to Chart |
|                         | ● PM 2035, Dot corresponds to Chart |
|                         | ● PM+PROJ, Dot corresponds to Chart |



Source: PRISM Engineering traffic counts and CA MUTCD Warrants analysis

The color-coded dots in the chart correlate with the dots in table above, and are placed above the green line representing that the side street volume is high enough to meet the established warrant. The dots are placed vertically directly over the corresponding main street total of both approaches volume on Missouri Flat Road and Pleasant Valley Road at the specific intersection listed in the table above.



**DORADO OAKS TENTATIVE SUBDIVISION MAP  
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)  
(STATE CLEARINGHOUSE #2019071041)**

**APPENDIX I**

**UTILITIES AND SERVICE SYSTEMS**



## El Dorado Irrigation District

Letter No.: DS0618-113

June 12, 2018

VIA E-MAIL

Kevin Sweeney  
2700 S. Azusa Avenue  
West Covina, CA 91792  
Via Email: [sweeneyko@aol.com](mailto:sweeneyko@aol.com)

Subject: Facility Improvement Letter (FIL), 2905FIL, Stonehenge Springs (revised)  
Assessor's Parcel No. 329-310-10,11,12 + 054-402-18+  
329-301-15 &20 (Diamond Springs)

Dear Mr. Sweeney:

This letter is in response to your request dated May 4, 2018 and is valid for a period of three years. This letter supersedes the FIL issued June 6, 2018. If s Facility Plan Report (FPR) for your project is not submitted to El Dorado Irrigation District (EID or District) within three years of the date of this letter, a new Facility Improvement Letter will be required.

Design drawings for your project must be in conformance with the District's *Water, Sewer and Recycled Water Design and Construction Standards*.

This proposed project is an approximately 370-lot residential subdivision on 143.72 acres. Water service, sewer service and fire hydrants are requested. The property is within the District boundary.

This letter is not a commitment to serve, but does address the location and approximate capacity of existing facilities that may be available to serve your project.

### **Water Supply**

As of January 1, 2017, there were 12,630 equivalent dwelling units (EDUs) of water supply available in the Western/Eastern Water Supply Region. Your project as proposed on this date would require 315 EDUs of water supply.

### **Water Facilities**

An 18-inch water line exists in Highway 49 and a 10-inch water line is located in Fowler Lane. Several water lines of various sizes are located around the project perimeter (see enclosed System Map). The Diamond Springs/El Dorado Fire Protection District has determined that the

minimum fire flow for this project is 1500 GPM for a 2-hour duration while maintaining a 20-psi residual pressure. According to the District's hydraulic model, the existing system can deliver the required fire flow. In order to provide this fire flow and receive service, you must construct a water line extension connecting to the previously identified water lines in Highway 49 and Fowler Lane. This project will also be required to connect to a water main from the Deer Park Estates Subdivision located west of the property to be developed. These facilities have a lower operating hydraulic grade line and as a result the FPR will need to evaluate pressure zone separation in the proposed design. The hydraulic grade line for the existing water distribution facilities (Hwy 49/Fowler Ln) is 2,030 feet above mean sea level at static conditions and 1,956 feet above mean sea level during fire flow and maximum day demands.

The flow predicted above was developed using a computer model and is not an actual field flow test.

### **Sewer Facilities**

A 24-inch gravity sewer main is located in Highway 49 near the intersection of Tullis Mine Road. This gravity line has adequate capacity to serve the project. A sewer lift station will be required to pump waste water to this gravity line. There is an existing District lift station (Deb's Frosty Lift Station) and force main/gravity lines located on the property to be developed. This existing lift station does not have adequate capacity to serve any of the proposed project. It is preferred by the District that in lieu of two stations on the property, the project should make an attempt to grade in such a way as to allow for a single new lift station that would serve both the proposed project and existing demands. If this is not feasible, the project will be required to construct odor control at the existing lift station, in addition to constructing a new lift station to serve the project. The FPR shall address the lift station options and evaluation. In order to receive service from this line, an extension of facilities of adequate size must be constructed. Cost sharing between the District and the Developer shall be discussed during the tentative map /FRP process.

Your project as proposed on this date would require 315 EDUs of sewer service.

### **Facility Plan Report**

A Facility Plan Report (FPR) will be required for this project. The FPR shall address the expansion of the water and sewer facilities and the specific fire flow requirements for all phases of the project. A meeting to discuss the content of the report will be required. Please contact this office to arrange the meeting. A preliminary utility plan, prepared by your engineer, must be brought to the meeting.

Two copies of the FPR will be required along with a \$3,000.00 deposit. You will be billed for actual time spent in review and processing of your FPR. Please submit the FPR and fee to our

Customer Service Department. Enclosed is the FPR description and transmittal form for your use. The items listed under content in the description and the completed transmittal form must be bound in each copy of the FPR.

### **Easement Requirements**

Proposed water lines, sewer lines and related facilities must be located within an easement accessible by conventional maintenance vehicles. When the water lines or sewer lines are within streets, they shall be located within the paved section of the roadway. No structures will be permitted within the easements of any existing or proposed facilities. The District must have unobstructed access to these easements at all times, and generally does not allow water or sewer facilities along lot lines.

Easements for any new District facilities constructed by this project must be granted to the District prior to District approval of water and/or sewer improvement plans, whether onsite or offsite. In addition, due to either nonexistent or prescriptive easements for some older facilities, any existing onsite District facilities that will remain in place after the development of this property must also have an easement granted to the District.

### **Environmental**

The County is the lead agency for environmental review of this project per Section 15051 of the California Environmental Quality Act Guidelines (CEQA). The County's environmental document should include a review of both offsite and onsite water and sewer facilities that may be constructed by this project. You may be requested to submit a copy of the County's environmental document to the District if your project involves significant off-site facilities. If the County's environmental document does not address all water and sewer facilities and they are not exempt from environmental review, a supplemental environmental document will be required. This document would be prepared by a consultant. It could require several months to prepare and you would be responsible for its cost.

### **Summary**

Service to this proposed development is contingent upon the following:

- The availability of uncommitted water supplies at the time service is requested;
- Approval of the County's environmental document by the District (if requested);
- Approval of a Facility Plan Report by the District;
- Executed grant documents for all required easements;
- Approval of an extension of facilities application by the District;
- Approval of facility improvement plans by the District;
- Construction by the developer of all onsite and offsite proposed water and sewer facilities
- Acceptance of these facilities by the District; and
- Payment of all District connection costs.

Letter No.: DS0618-113  
To: Kevin Sweeney



June 11, 2018

Services shall be provided in accordance with El Dorado Irrigation District Board Policies and Administrative Regulations, as amended from time-to-time. As they relate to conditions of and fees for extension of service, District Administrative Regulations will apply as of the date of a fully executed Extension of Facilities Agreement.

If you have any questions, please contact me at (530) 642-4054.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Michael J. Brink', is written over a horizontal line.

Michael J. Brink, P.E.  
Supervising Civil Engineer

MB/MM:gp

Enclosures: System Map  
FPR Guidelines and transmittal

cc w/ System Map:

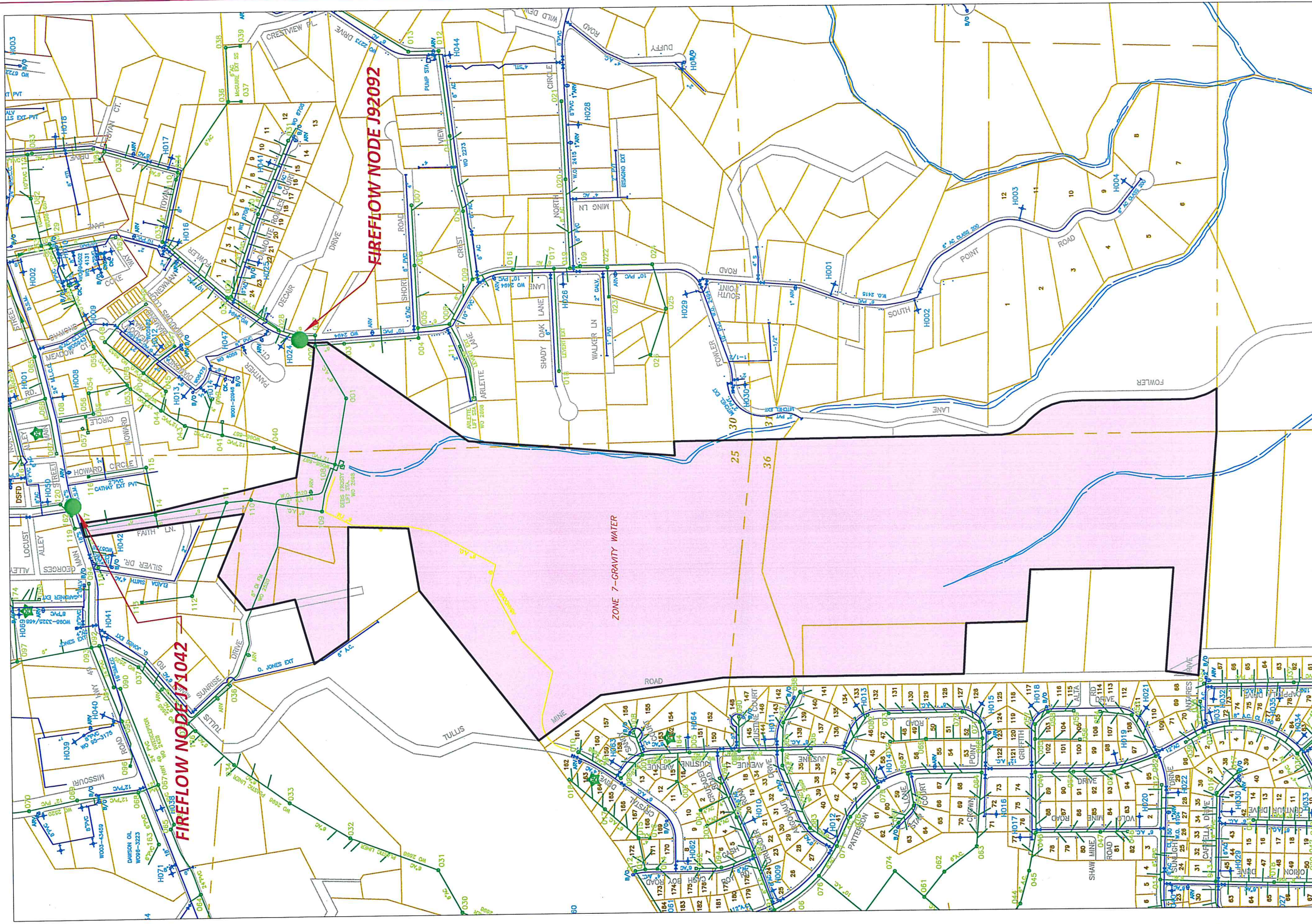
Rommel Pabalinas – Principal Planner  
El Dorado County Development Services Department  
Via email - [rommel.pabalinas@edcgov.us](mailto:rommel.pabalinas@edcgov.us)

Mike Nihan – Principal Planner  
El Dorado County Development Services Department  
Via email – [michael.nihan@edcgov.us](mailto:michael.nihan@edcgov.us)

Roger Trout, Director  
El Dorado County Development Services Department  
Via email - [roger.trout@edcgov.us](mailto:roger.trout@edcgov.us)

Brian Allen, PE  
CTA Engineering & Surveying  
Via email-[ballen@ctaes.net](mailto:ballen@ctaes.net)

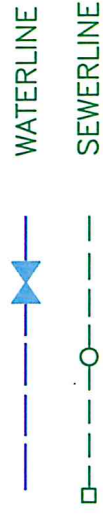
Kenneth Earle – Deputy Chief / Fire Marshal  
Diamond Springs / El Dorado Fire Department  
Via email - [kearle@diamondfire.org](mailto:kearle@diamondfire.org)



DATE: June 5, 2018

El Dorado Irrigation District  
System Map

WARNING: For schematic purposes only.  
Exact pipe location must be  
field verified.



Scale: 1" = 500'

Stonehenge Springs

APN: 329-310-10,11,12+329-301-15,20

APN: 054-402-18