AGENDA

TRI-COUNTY TECHNICAL ADVISORY COMMITTEE

Friday, February 12, 2021

10:00 A.M.

Join Zoom Meeting:

https://zoom.us/j/97829904437?pwd=cmpBb21VbWg0VlBVdjZra0RQdzBWZz09

Dial by phone: 669 900 9128

Meeting ID: 978 2990 4437

Passcode: 925748

For further information on any of the agenda items, please contact El Dorado County Planning and Building Department at (530) 573-7905. Off-agenda items must be approved by the Tri-County Technical Advisory Committee pursuant to Section 5496.5 of the Government Code.

A. Call to Order
B. Approve Agenda
C. Correspondence
D. Minutes: November 13, 2020
E. Public Matters: Informational items and persons wishing to address the Committee regarding non-agenda items
F. Agenda Items:

ITEM 1: Review and possible approval of the Whatford Fire Hazard Reduction Project; Lot 65 of KMA 1, 34080 Danburg Rd., Kirkwood, CA, APN 026-171-011; Applicant: Foothill Resource Management

ITEM 2: Review and possible approval of a Variance request for an attached garage/living space; 33838 Hawkweed Way, Kirkwood, CA, APN 026-202-006; Applicant: Preston and Catherine Roper

G. Adjourn

MINUTES
TRI-COUNTY TECHNICAL ADVISORY COMMITTEE
Friday, November 13, 2020
10:00 A.M.
VIRTUAL MEETING

Meeting link: https://zoom.us/j/94171617000
Meeting ID: 941 7161 7000
Call in phone number: +1 669 900 9128

A. Call to Order:
The meeting was called to order by Zach Wood at 10:05am. Members present were: Alpine County: Zach Wood; Amador County, Chuck Beatty; El Dorado County, Brendan Ferry.

B. Approval of Agenda:
On a motion by Chuck Beatty and second by Brenden Ferry, the agenda was approved with two revisions: correction of the meeting date, and addition of a tree removal request for 33838 Hawkweed Way.
Roll call vote: Brendan Ferry: Aye; Chuck Beatty, Aye; Zach Wood, Aye.

C. Correspondence: None.

D. Minutes: February 14, September 11, 2020
On a motion by Brendan Ferry and a second by Chuck Beatty, the minutes from February 14 were continued and the minutes from September 11 were approved.
Roll call vote: Brendan Ferry: Aye; Chuck Beatty, Aye; Zach Wood, Aye.

E. Public Matters not on the Agenda: None.

F. Agenda Items:

ITEM 1: Review and possible acceptance of Mitigation Measure 4.2 (v) for street sweeping. Applicant: Kirkwood Mountain Resort

The Committee reviewed the October street sweeping mitigation report from Kirkwood Mountain Resort; approval of the mitigation measure was held over from the spring street sweeping report.

KMPUD General Manager Erik Christeson, KMPUD Board of Directors member Bertrand Perroud, and KMR General Manager Matt Jones offered comments related to the timing and announcement of street sweeping events in conjunction with ongoing construction and maintenance activities in the valley.

On a motion by Brendan Ferry and a second by Zach Wood, the Committee approved acceptance of Mitigation Measure 4.2(v) for 2020.

Roll call vote: Brendan Ferry: Aye; Chuck Beatty, Nay; Zach Wood, Aye.

ITEM 2: Review and possible approval of tree removal permits for hazardous trees.

Lower Timber Creek parking lots. Applicant: Kirkwood Mountain Resort APN: 006-020-019

Lot 27 - Palisades Dr. Applicant: Engle. APN: 006-231-022

955 Columbine Cr. Applicant: Gard. APN: 006-143-011

Lot 65 – Danburg Dr. Applicant: Watford, APN: 026-171-011

310 Palisades Dr. Applicant: Beckel, APN: 026-290-007

33819 Fremont Rd. Applicant: Forbes/Bilbro, APN: 026-174-004

33810 Danburg Rd. Applicant: Reuter, APN: 0026-174-002

ADDED: 33838 Hawkweed Way. Applicant: Roper, APN: 026-202-006

KMPUD General Manager Erik Christeson, KMPUD Board of Directors member Bertrand Perroud, KMPUD Assistant General Manager Rick Ansel offered comments on the application process for hazard trees versus general maintenance for compliance with Fire Safe Regulations. The Committee discussed possible revisions to the Specific Plan Tree Ordinance that would exempt removal of samplings.

On a motion by Zach Wood and a second by Chuck Beatty, the Committee approved acceptance of Mitigation Measure 4.2(v) for 2020.
Roll call vote: Brendan Ferry: Aye; Chuck Beatty, Aye; Zach Wood, Aye.

ITEM 3: Discussion of existing and proposed short term rental regulations by County. Applicant: TC-TAC

The Committee reviewed the proposed Alpine County short term rental ordinance and potential impacts in the Kirkwood valley and current status of similar ordinances for El Dorado and Amador counties. No action was taken.

G. Adjournment: The meeting was adjourned at 11:05. The next regularly scheduled meeting is December 11, 2020, at 10:00 am.

Foothill Resource Management
Steve Q. Cannon, RPF #2316
P.O. Box 818, Pine Grove, CA 95665
(209)419-1569

15 December 2020

Mr. Zack Wood
Alpine County Planning Department
50 Diamond View Road
Markleeville, CA 96120

Dear Mr. Wood,

I am a Registered Professional Forester representing Mr. Frank Whatford who owns a property in Kirkwood, CA. The location of the property is lot 65 of KMA 1, 34080 Danburg Rd. The APN is 026-171-011. I inspected the property on October 21 and December 11 and my findings are as follows.

Mr. Whatford owns the adjacent lot (#66) and is interested in being proactive in doing work to reduce the fire hazard and also releasing favorable trees from competition from other trees that are damaged or suppressed and affecting the growth of the desirable trees. To be clear, these are not trees that are dead or dying and neither are they representing an imminent danger to the Roper's house. They are simply red fir saplings that are growing too close to each other and as such, will never thrive due to the inter-tree competition. There is also an issue of fire hazard because of the dense stocking of the trees and the fact that the competition they are suffering from is not allowing the best trees to grow in height, therefore raising the crown above the level where a ground fire would result in the loss of all the trees.

The trees range in diameter from 2 inches to 6 inches. The current spacing of the saplings is from 2 to 4 feet. This results in each tree having to compete for moisture and nutrients and not one of them benefits. The trees that will be left are the trees that have demonstrated some measure of dominance. The residual spacing will be from 12-14 feet, allowing those trees to thrive. At some time in the future, those trees should need to be thinned again, but that will be 20-30 years down the line.

The purpose of this letter is to give the Tri-Tac professional information and recommendation from a Registered Professional Forester so your committee can give Mr. Whatford the approval to conduct the thinning.

There is another tree on Lot 65 that presents a hazard to the cars that park on Danburg Road in front of Lot 65. The tree is a 38" diameter red fir that has multiple tops, probably as a result of snow and wind damage. Those tops are fading and one is dead. The tree is also infested with dwarf mistletoe and large branches have fallen due to that disease girdling the branches causing them to die. I have no doubt that the tree also is infested with Annosus root rot, since that disease is endemic in red fir forests in this region. I don't like the idea that all large red fir should be removed, but this one presents a hazard to the neighbor's house and automobile. I have marked the tree with a "1" and I recommend that Mr. Whatford remove it to reduce any liability for him.

Please place the question of the thinning on the agenda of the January or February Tri-Tac meeting and if you have any questions, please feel free to call me.

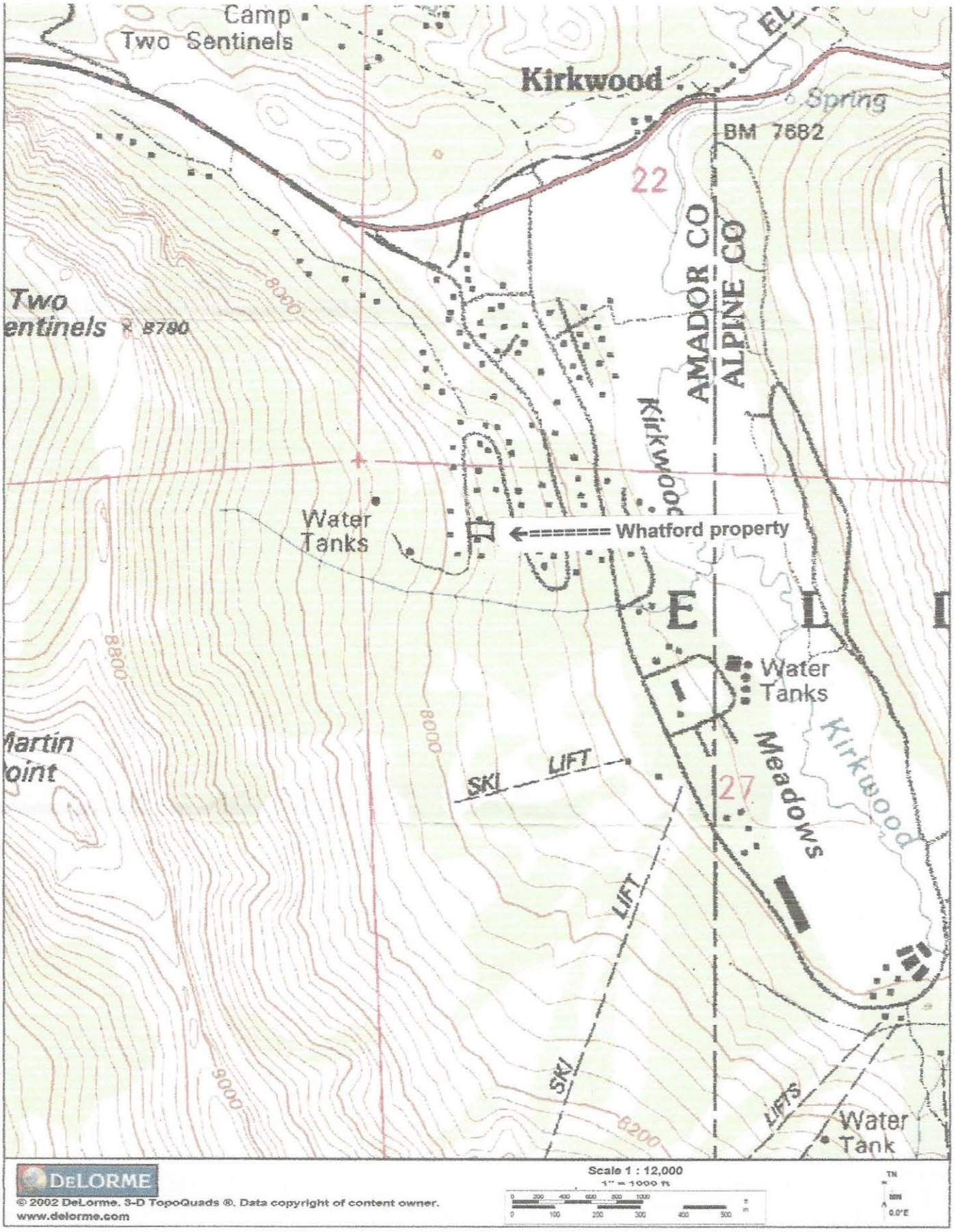
Sincerely,

Steve Q. Cannon, RPF #2316

attachments

Whatford Fire Hazard Reduction Project

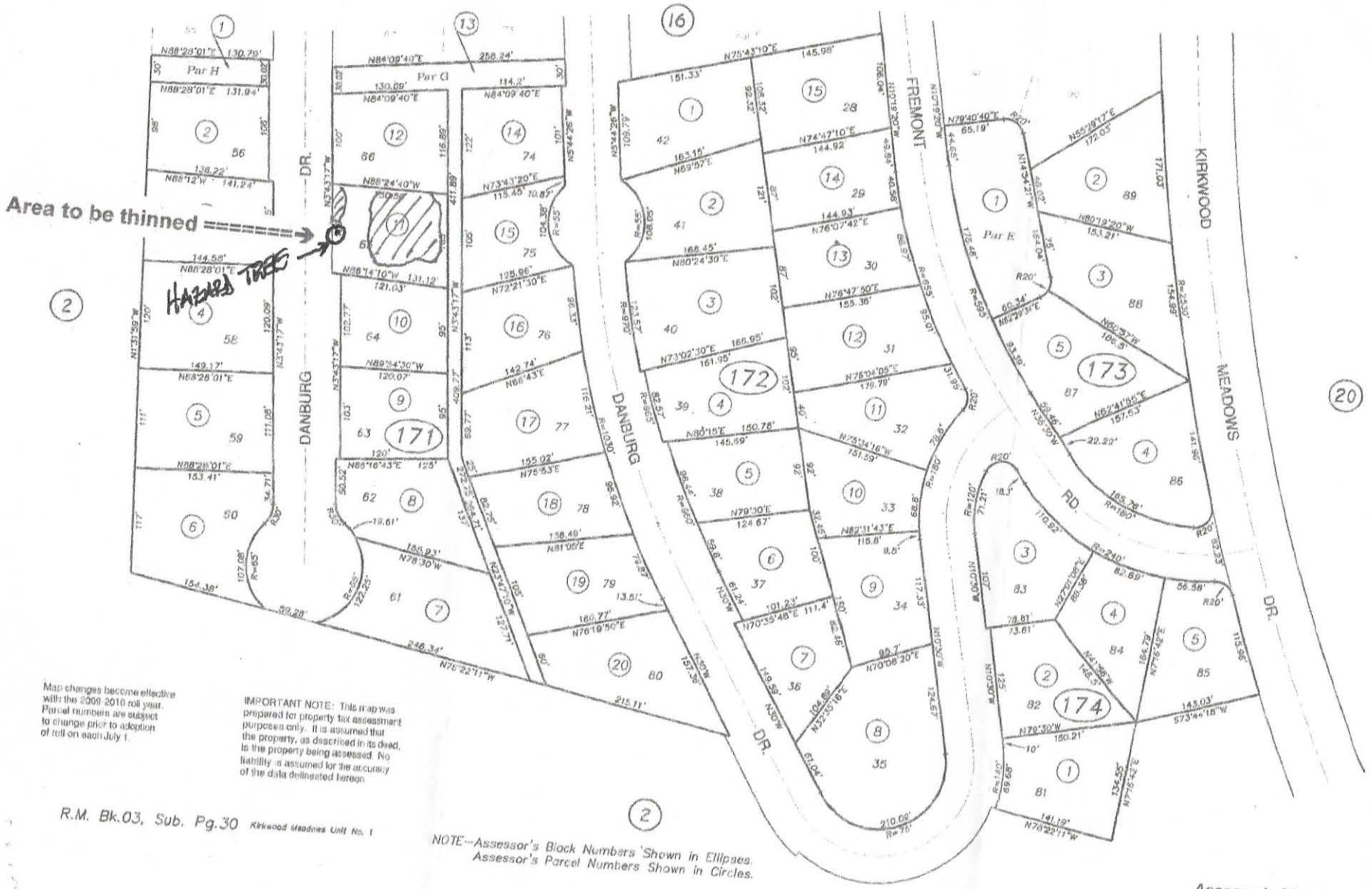
Township 10 North, Range 12 East, Section 27, MDB&M
Caples Lake 7.5' Quadrangle
Amador County



Whatford Fire Hazard Reduction Project

Township 10 North, Range 12 East, Section 27, MDB&M
Caples Lake 7.5' Quadrangle
Amador County

-6-17
FROM: 26-02



Map changes become effective with the 2009-2010 roll year. Parcel numbers are subject to change prior to adoption of roll on each July 1.

IMPORTANT NOTE: This map was prepared for property tax assessment purposes only. It is assumed that the property, as described in its deed, is the property being assessed. No liability is assumed for the accuracy of the data delineated hereon.

R.M. Bk.03, Sub. Pg.30 Kirkwood Meadows Unit No. 1

NOTE--Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.

Assessor's Map Bk. 26, Pg. 17
County of Amador, Calif.


TREES
TO BE THINNED

AMADOR COUNTY COMMUNITY DEVELOPMENT AGENCY
PLANNING DEPARTMENT

PHONE: (209) 223-6380
FAX: (209) 257-5002
WEBSITE: www.amadorgov.org
E-MAIL: planning@amadorgov.org

COUNTY ADMINISTRATION CENTER • 810 COURT STREET • JACKSON, CA 95642-2132

PRE-APPLICATION INFORMATION AND CHECKLIST FOR A VARIANCE REQUEST

Application for a Variance request shall include the following:

X 1. Letter of application explaining purpose of request, description of variance, and other pertinent information.

____ 2. Letter of authorization if landowner is being represented by another party.

X 3. Submit a plot plan (max 11"x17") of parcel showing location of project in relation to property lines and any other structures that are on the property. NOTE: An Assessor Plat Map can be obtained from the Surveying and Engineering Department for the purpose of aiding in drawing of the plot plan; ***see plot plan guidelines attached*.**

X 4. Copy of deed(s) to property.

X 5. Completed Environmental Assessment Form.

X 6. Filing fee of $ 746.00 ($696.00 for application and $50 for recording fee)

X 7. Application Form to be signed at the time of project presentation in the Planning Department.

X NOTICE OF DETERMINATION, KMA Variance and Easement Approval letter

NOTE: IT IS TO YOUR BENEFIT TO BE AS SPECIFIC AS POSSIBLE WITH YOUR APPLICATION INFORMATION.

NOTE: ***Pursuant to County Code Section 19.52.060 B., "In any case, where a variance has not been used within one year after a date of granting thereof, then without further action by the planning commission or board of supervisors, the variance granted shall be null and void."***

ENVIRONMENTAL INFORMATION FORM

To be completed by applicant; use additional sheets as necessary.
Attach plans, diagrams, etc. as appropriate.

GENERAL INFORMATION

Project Name: 2-car garage addition with living space above; Roper; APN 026-202-006

Date Filed: 2 February 2021 File No. V-21;2-1

Applicant/
Developer Preston & Catherine Roper Landowner Preston & Catherine Roper

Address _____ Address 33838 Hawkweed Way, Kirkwood CA, 95646

Phone No. _____ Phone No. 650.787.4474

Assessor Parcel Number(s) 026-202-006

Existing Zoning District PD-R1, Planned Development-Single Family Residential

Existing General Plan SPA, Special Planning Area

List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state, and federal agencies Kirkwood Meadows Association Variance and Driveway Easement Agreement - both completed.

WRITTEN PROJECT DESCRIPTION (Include the following information where applicable, as well as any other pertinent information to describe the proposed project):

1. Site Size
2. Square Footage of Existing/Proposed Structures
3. Number of Floors of Construction
4. Amount of Off-street Parking Provided (provide accurate detailed parking plan)
5. Source of Water
6. Method of Sewage Disposal
7. Attach Plans
8. Proposed Scheduling of Project Construction
9. If project to be developed in phases, describe anticipated incremental development.
10. Associated Projects
11. Subdivision/Land Division Projects: Tentative map will be sufficient unless you feel additional information is needed or the County requests further details.
12. Residential Projects: Include the number of units, schedule of unit sizes, range of sale prices or rents and type of household size expected.
13. Commercial Projects: Indicate the type of business, number of employees, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities.
14. Industrial Projects: Indicate type, estimated employment per shift, and loading facilities.
15. Institutional Projects: Indicate the major function, estimated employment per shift, estimated occupancy, loading facilities, and community benefits to be derived from the project.
16. If the project involves a variance, conditional use permit, or rezoning application, state this and indicate clearly why the application is required.

ADDITIONAL INFORMATION: Are the following items applicable to the project or its effects? Discuss below all items checked "yes" (attach additional sheets as necessary).

YES	NO		
❑	☒	17.	Change in existing features or any lakes or hills, or substantial alteration of ground contours.
❑	☒	18.	Change in scenic views or vistas from existing residential areas, public lands, or roads.
❑	☒	19.	Change in pattern, scale, or character of general area of project.
❑	☒	20.	Significant amounts of solid waste or litter.
❑	☒	21.	Change in dust, ash, smoke, fumes, or odors in the vicinity.
❑	☒	22.	Change in lake, stream, or ground water quality or quantity, or alteration of existing drainage patterns.
❑	☒	23.	Substantial change in existing noise or vibration levels in the vicinity.
❑	☒	24.	Site on filled land or has slopes of 10 percent or more.
❑	☒	25.	Use or disposal of potentially hazardous materials, such as toxic substances, flammables, or explosives.
❑	☒	26.	Substantial change in demand for municipal services (police, fire, water, sewage, etc.).
❑	☒	27.	Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.).
❑	☒	28.	Does this project have a relationship to a larger project or series of projects?

ENVIRONMENTAL SETTING

29. Describe the project site as it exists before the project, including information on topography, soil stability, plants and animals, and any cultural, historical or scenic aspects. Describe any existing structures on the site, and the use of the structures. Attach photographs of the site (cannot be returned).
30. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.), intensity of land use (one family, apartment houses, shops, department stores, etc.), and scale of development (height, frontage, setback, rear yard, etc.). Attach photographs of the vicinity (cannot be returned).
31. Describe any known mine shafts, tunnels, air shafts, open hazardous excavations, etc. Attach photographs of any of these known features (cannot be returned).

Certification: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date 2 February 2021

(Signature)

For Preston Roper

INDEMNIFICATION

Project: 2-car garage addition with living space; Roper; APN 026-202-006

In consideration of the County's processing and consideration of the application for the discretionary land use approval identified above (the "Project") the Owner and Applicant, jointly and severally, agree to defend, indemnify, and hold harmless the County of Amador from any claim, action, or proceeding against the County to attack, set aside, void or annul the Project approval, or any action relating related to the Project approvals as follows:

1. Owner and Applicant shall defend, indemnify, and hold harmless the County and its agents, officers or employees from any claim, action, or proceeding against the County or its agents, officers or employees (the "County") to attack, set aside, void or annul the Project approval, or any prior or subsequent determination regarding the Project, including but not limited to determinations related to the California Environmental Quality Act, or Project condition imposed by the County. The Indemnification includes, but is not limited to, damages, fees, and or costs, including attorneys' fees, awarded against County. The obligations under this Indemnification shall apply regardless of whether any permits or entitlements are issued.

2. The County may, within its unlimited discretion, participate in the defense of any such claim, action, or proceeding if the County defends the claim, action, or proceeding in good faith.

3. The Owner and Applicant shall not be required to pay or perform any settlement by the County of such claim, action, or proceeding unless the settlement is approved in writing by Owner and Applicant, which approval shall not be unreasonably withheld.

IN WITNESS WHEREOF, by their signature below, Owner and Applicant hereby acknowledge that they have read, understand, and agree to perform the obligations under this Indemnification.

Applicant:

Signature

Owner (if different than Applicant):

_____

Signature

AMADOR COUNTY COMMUNITY DEVELOPMENT AGENCY
PLANNING DEPARTMENT

PHONE: (209) 223-6380
FAX: (209) 257-5002
WEBSITE: www.amadorgov.org
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COUNTY ADMINISTRATION CENTER • 810 COURT STREET • JACKSON, CA 95642-2132

Chapter 19.52
VARIANCES

Sections:

19.52.010 When permitted.

Where practical difficulties, unnecessary hardships or results inconsistent with the purpose and intent of this title may result from the strict application of certain provisions thereof, variance may be granted as provided in this chapter, but in no case shall a variance be approved to allow a change in the use of land or buildings. (Ord. 351 §13(part), 1962).

19.52.020 Application.

Application for variance shall be made in writing on a form prescribed by the planning commission and shall be accompanied by the required fee, no part of which shall be returnable to the applicant and by statement, plans and other evidence showing:

A. That any variance granted shall be subject to such conditions as will assure that the adjustment thereof authorized shall not constitute a grant of special privilege inconsistent with the limitations upon other properties in the vicinity and zone in which subject property is situate;

B. That because of special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of the zoning ordinance is found to deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classification. (Ord. 898 §3, 1982).

19.52.030 Public hearings.

A public hearing shall be held on any application for a variance. The planning commission shall give notice thereof as required by California Government Code Section 65090 et seq., as may be amended or renumbered. (Ord. 1701 §2, 2010: Ord. 351 §13.2, 1962).

19.52.040 Action by planning commission.

After conclusion of the public hearing, the planning commission shall make a written finding of facts whether the qualifications under Section19.52.020 apply to the land, building or use for which variance is sought and whether such variance shall be in harmony with the general purposes of this title. Such written finding of facts shall be submitted to the board of supervisors. (Ord. 351 §13.3, 1962).

19.52.050 Action by board of supervisors.

The board of supervisors shall consider the variance application within sixty days after receipt of the planning commission report and if the board of supervisors finds that the qualifications under Section19.52.020 apply to the land, building or use for which variance is sought, and that such variance is in harmony with the general purposes of this title, said board shall grant such variance. The board may designate such conditions in connection with the variance as it may deem necessary to secure the purposes of this title and may require guarantees and evidence. (Ord. 351 §13.4, 1962).

19.52.060 Revocation.

A. In any case, where the conditions of granting of a variance have not or are not complied with, the planning commission shall give notice to the permittee (of intention to revoke such variance) at least ten days prior to a hearing thereon. After conclusion of the hearing, the planning commission may revoke such variance. Such revocation shall be subject to confirmation by the board of supervisors.

B. In any case, where a variance has not been used within one year after a date of granting thereof, then without further action by the planning commission or board of supervisors, the variance granted shall be null and void. (Ord. 351 §13.5, 1962).

19.52.070 Effect.

No building or zoning permit shall be issued unless in accordance with the conditions and terms of the variance granted. (Ord. 351 §13.6, 1962).

2 February 2021

Amador County Community Development Agency
Planning Department
c/o Ruslan Bratan
810 Court Street
Jackson, CA 95642-2132

Subject: Letter of Application for a Setback Variance for Lot 157, KMA
Roper Residence - 33838 Hawkweed Way, Kirkwood, CA 95646

To Whom It May Concern:

Please accept this letter of justification for a variance to the 25-foot front setback requirement for Lot 157, 33838 Hawkweed Way, Kirkwood, CA 95646, APN 026-202-006. The proposed project would add a 2-car garage and living space above it.

We have owned our house at Kirkwood since 1999 and recently moved here full time and would like to be able to host our children and their families comfortably. In addition, as we get older, we are finding it more difficult to shovel out our cars after every snowfall, so to continue to enjoy living in these beautiful mountains we need a way to decrease that workload.

The current proposal requests coverage of ~358 square feet within the 25-foot front setback, with the closest point of the building at approximately 12 feet from the front property line. The standard garage setback variance approval at Kirkwood is 5 feet, meaning our project is well within those requirements. Both the setback variance and easement across KMA common property have been approved by the homeowners' association here, the Kirkwood Meadows Association (KMA), as evidenced by the attached NOTICE OF DETERMINATION dated December 9, 2020.

Prior to KMA's approval we explored alternative placements for the building on the property to avoid encroaching on the setback, however, all such layouts brought difficulties:

- Building to the South: not possible due to a KMPUD easement
- Building to the North:
    - Compromises snow storage;
    - Causes snow shedding and ice dam problems given the existing roofline;

- Requires a much longer driveway and higher cost construction envelop; and
- Precludes adding solar panels, which is important to us to minimize our high energy costs (KMPUD) and environmental impact.

The Kirkwood Meadows Association has approved the driveway easement and variance and we respectfully request such approval also from the County. Thank you for your consideration.

Preston and Catherine Roper
preston@roper.org, c. 650.787.4474
katie@roper.org

ENVIRONMENTAL INFORMATION FORM – Roper, APN 026-202-006
Written Project Description to Setback Variance Application

1. Site Size: .274 acres

2. Square Footage of Existing/Proposed Structures: 2,104 SF existing, 975 SF addition, 798 garage addition

3. Number of Floors of Construction: 2

4. Amount of Off-street Parking Provided (provide accurate detailed parking plan): 2-car garage addition with driveway

5. Source of Water: existing connection to Kirkwood Meadows Public Utility District (KMPUD)

6. Method of Sewage Disposal: existing connection to Kirkwood Meadows Public Utility District (KMPUD)

7. Attach Plans

8. Proposed Scheduling of Project Construction: ASAP - Spring / Summer of 2021

9. If project to be developed in phases, describe anticipated incremental development: N/A - project goal is to complete construction during summer of 2021

10. Associated Projects: N/A

11. Subdivision/Land Division Projects: Tentative map will be sufficient unless you feel additional information is needed or the County requests further details. N/A

12. Residential Projects: Include the number of units, schedule of unit sizes, range of sale prices or rents and type of household size expected. This project is an addition to an existing home.

13. Commercial Projects: Indicate the type of business, number of employees, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities. N/A

14. Industrial Projects: Indicate type, estimated employment per shift, and loading facilities. N/A

15. Institutional Projects: Indicate the major function, estimated employment per shift, estimated occupancy, loading facilities, and community benefits to be derived from the project. N/A

16. If the project involves a variance, conditional use permit, or rezoning application, state this and indicate clearly why the application is required. Project entails a front setback variance as described in the Letter of Application attached.

ENVIRONMENTAL SETTING

29. Describe the project site as it exists before the project, including information on topography, soil stability, plants and animals, and any cultural, historical or scenic aspects. Describe any existing structures on the site, and the use of the structures. Attach photographs of the site (cannot be returned).

    The home addition is located within the Kirkwood Meadows Association residential area and is flat property with mostly small lodgepole pines and larger pines on adjacent lots. The soil is stable and there are no distinct historical or scenic elements, nor unusual plant or animal life other than is typical in the Kirkwood Valley.

    South-facing view of home (garage addition to right of home as pictured):

    View to east from home:

: 

View to west from home:

View to north:

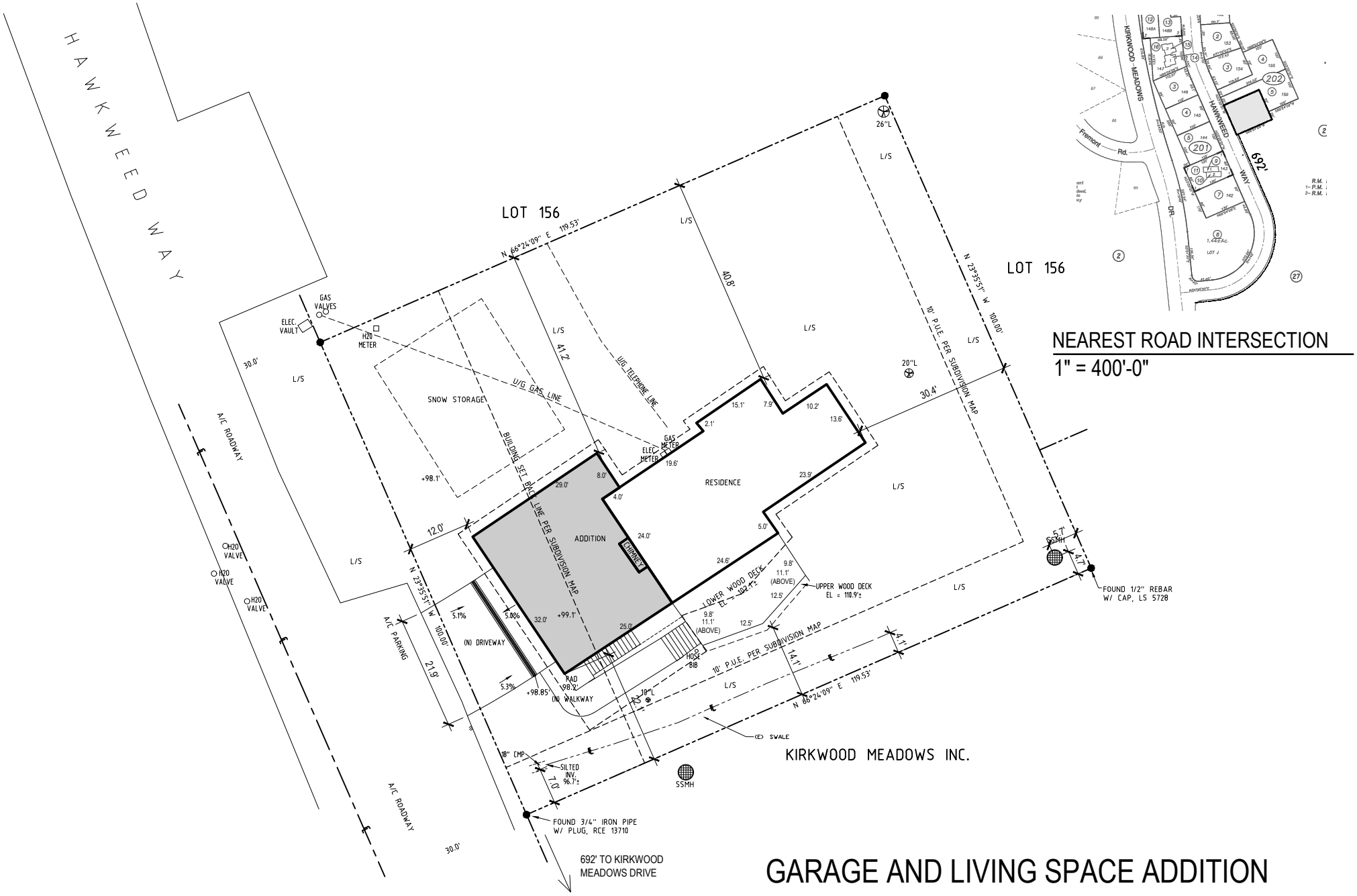
View to south:

30. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.), intensity of land use (one family, apartment houses, shops, department stores, etc.), and scale of development (height, frontage, setback, rear yard, etc.). Attach photographs of the vicinity (cannot be returned).

    The neighborhood includes both single-family (east side of Hawkweed Way) and duplex homes (west side between Hawkweed and Kirkwood Meadows Drive) in a residential setting. Lot sizes are of similar size, approximately ¼ acre and construction fits within guidelines established by KMA.

31. Describe any known mine shafts, tunnels, air shafts, open hazardous excavations, etc. Attach photographs of any of these known features (cannot be returned).

    None known.



NEAREST ROAD INTERSECTION
1" = 400'-0"

GARAGE AND LIVING SPACE ADDITION

PRESTON ROPER
ASSESOR PLAT MAP NO. 26-20
PARCEL SIZE: 12,591 SF (0.289 AC)
1" = 25'-0"

NORTH

ROPER RESIDENCE

COLLABORATIVE
DESIGN
STUDIO architecture of experience and place

9444 DOUBLE R BLVD | SUITE B | RENO NV 89521 | T 775.348.7777 | F 775.348.0904

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

PERMIT SET
15 JANUARY, 2021

LICENSED ARCHITECT
TODD BENSON LANKENAU
C-32925
RENEWAL 09/30/2021
STATE OF CALIFORNIA

1/25/2021

Owner
Preston Roper

33838 Hawkweed Way
Kirkwood, CA 95646
Tel. (650) 787-4474
Fax
Cont. - Preston Roper
E-mail preston@roper.org

Architect
Collaborative Design Studio

9444 Double R. Blvd., Suite B
Reno, NV 89521
Tel. (775) 348-7777
Fax (775) 348-0904
Cont. - Todd Lankenau

Structural Engineers
Forbes - Linchpin

530 California Ave
Reno, NV 89509
Tel. (775) 857-3744
Fax
Cont. - Lisa Hartley

APPROVED
Kirkwood Meadows Association
Planning Committee
DATE January 30, 2021

Bruce [signature]
Monte Ilemire
Libby Culver
Gary Sargent
via KMA PC online Zoom Meeting

© 2021 COLLABORATIVE DESIGN STUDIO

ABBREVIATIONS

ABV.	ABOVE	JT.	JOINT
A.C.	ASPHALT CONCRETE	JTS.	JOINTS
ACOUS.	ACOUSTIC(AL)		
ADDTN.	ADDITION	L	LONG
ADJ.	ADJUSTABLE	LAM.	LAMINATED
A.F.F.	ABOVE FINISH FLOOR	LAV.	LAVATORY
AGG.	AGGREGATE	LB.	POUND
ALT.	ALTERNATE		
ALUM.	ALUMINUM	MAT'L	MATERIAL
APPROX.	APPROXIMATELY	MAT.	MATERIAL
ASB.	ASBESTOS	MAX.	MAXIMUM
A.H.J.	AUTHORITY HAVING JURISDICTION	MECH.	MECHANICAL
AUTO	AUTOMATIC	MACH.	MACHINE
@	AT	MFG'S	MANUFACTURER'S
		MH.	MANHOLE
BD.	BOARD	MISC.	MISCELLANEOUS
BLDG.	BUILDING	MIN.	MINIMUM
BLKG.	BLOCKING	MNT.	MOUNTED
BM.	BEAM	M.O.	MASONRY OPENING
B.O.	BY OTHERS	MTL.	METAL
BOTT.	BOTTOM		
BR.	BRONZE	(N)	NEW
BRG.	BEARING	N.I.C.	NOT IN CONTRACT
BTWN.	BETWEEN	NO.	NUMBER
		NOM.	NOMINAL
CAB.	CABINET	N.T.S.	NOT TO SCALE
C.B.	CONCRETE BLOCK	N.F.C.	NOT FOR CONSTRUCTION
CEM	CEMENT		
CER.	CERAMIC	O.C.	ON CENTER
C.F.M.	CUBIC FT./MINUTE	O.C.E.W.	ON CENTER EACH WAY
C.I.	CAST IRON	O.D.	OUTSIDE DIAMETER
CLG.	CEILING	O.H.	OPPOSITE HAND
CLR.	CLEAR	OPNG	OPENING
CMU	CONC. MASONRY UNIT	OPP.	OPPOSITE
COL.	COLUMN	O/	OVER
COMB.	COMBUSTION		
CONC.	CONCRETE	PART.	PARTITION
CONN.	CONNECTION	PKT.	POCKET
CONST.	CONSTRUCTION	PL	PLATE
C.J.	CONTROL JOINT	PLAS.	PLASTIC
CONT.	CONTINUOUS	P.LAM.	PLASTIC LAMINATE
COOL'G	COOLING	PLB'G	PLUMBING
CSMT.	CASEMENT	PLY. WD.	PLYWOOD
C.T.	CERAMIC TILE	P.O.C.	POINT OF CONNECTION
CTR.	COUNTER	PROP.	PROPERTY
CTSK.	COUNTERSUNK	PR.	PAIR
CL	CENTERLINE	PT.	POINT
		PNL.	PANEL
D.	DEEP	PTD.	PAINTED
DBL.	DOUBLE		
DET.	DETAIL	R.	RISER
D.F.	DRINKING FOUNTAIN	RAD.	RADIUS
D.F.	DOUGLAS FIR	R.D.	ROOF DRAIN
DIA.	DIAMETER	REC.	RECESSED
DIM.	DIMENSION	RDWD.	REDWOOD
DIR.	DIRECTIONAL	REF.	REFRIGERATOR
DISP	DISPENSER	REFL.	REFLECTED
DN	DOWN	REINF.	REINFORCING
DR.	DOOR	REQ'D	REQUIRED
DS.	DOWNSPOUT	RM.	ROOM
D.W.	DISHWASHER	R.O.	ROUGH OPENING
DWGS.	DRAWINGS	R.S.	ROUGH SAWN / RESAWN
(E)	EXISTING	S.A.R.	SUPPLY AIR REGISTER
EA.	EACH	S.C.	SOLID CORE DOOR
EL.	ELEVATION	SECT.	SECTION
ELEC.	ELECTRIC	SEP.	SEPERATION
EQ.	EQUAL	SHT.	SHEET
EQPT.	EQUIPMENT	S & P	SHELF AND POLE
E.W.	EACH WAY	SIM.	SIMILAR
E.W.C.	ELECT. WATER COOLER	SL.	SLIDING
E.W.H.	ELECT. WATER HEATER	SPEC.	SPECIFICATION
EXH.	EXHAUST	SPL.	SPLASH
EXP.	EXPOSED	S.S.	STAINLESS STEEL
EXP. JT.	EXPANSION JOINT	STD.	STANDARD
EXT.	EXTERIOR	STL.	STEEL
F.D.	FLOOR DRAIN	STOR.	STORAGE
F.E.C.	FIRE EXTINGUISHER CABINET	STR.	STAIR
FIN. FLR.	FINISH FLOOR	STRUCT.	STRUCTURAL
F.E.	FIRE EXTINGUISHER	SURF.	SURFACE
FFHB.	FROST FREE HOSE BIB		
FIN.	FINISH	T.	TREAD
FL.	FLOURESCENT	T.G.	TEMPERED GALSS
FLR.	FLOOR	T.O. ()	TOP OF (ITEM)
FMD.	FORMED	T.C.	TRASH COMPACTOR
F.O.	FLOOR OPENING	TEL.	TELEPHONE
F.O.S.	FACE OF STUD	T & G	TONGUE AND GROOVE
F.S.	FLOOR SINK	THK.	THICK
FTG.	FOOTING	TH.	THICK
FOUND.	FOUNDATION	T.O.C.	TOP OF CONCRETE
FRMG.	FRAMING	T.O.S.	TOP OF STEEL
		TR.	TREAD
GA.	GAUGE/GAGE	T.S.	TUBE STEEL
GAL.	GALLON	T.W.	TOP OF WALL
GALV.	GALVENIZED	TYP.	TYPICAL
G.I.	GALVENIZED IRON		
GL.	GLASS	U.C.	UNDER COUNTER
GLB.	GLULAM BEAM	U.N.O.	UNLESS NOTED OTHERWISE
GYP. DB.	GYPSUM BOARD		
		VAC.	VACUUM
HARDBD.	HARDBOARD	VAR.	VARIES
H.B.	HOSEBIB	V.B.	VINYL BASE
H.C.	HOLLOW CORE DOOR	VCT	VINYL COMPOSITION TILE
HM	HOLLOW METAL	V.T.O.	VENT TO OUTSIDE
HORIZ.	HORIZONTAL	VERT.	VERTICAL
HR.	HOUR	V.W.C.	VINYL WALL COVERING
HT.	HEIGHT		
HTR.	HEATER	W/	WITH
HVAC	HEATING, VENTILATING & AIR CONDITIONING	W/O	WITHOUT
		WD.	WOOD
		W.H.	WATER HEATER
I.D.	INSIDE DIAMETER	WIN.	WINDOW
I.E.	INVERT ELEVATION	W.	WIDE
INSUL.	INSULATION	WHSE.	WAREHOUSE
INT.	INTERIOR	WTR.	WATER
INV.	INVERT		

MATERIAL SYMBOLS (SECTION)

EARTH
SAND
GRAVEL
CMU
CONCRETE
BRICK/ STONE
GYPSUM BOARD
ALUMINUM
WOOD (FIN)
WOOD (ROUGH)
WOOD (BLOCKING)
PLYWOOD
INSULATION (BATT)
INSULATION (RIGID)
STEEL
INSULATION (MINERAL WOOL)

DRAFTING SYMBOLS

BUILDING SECTION — 1 / A101 — SIM — REFERENCE NO. SHEET NO.

WALL SECTION — 1 / A101 — SIM — REFERENCE NO. SHEET NO.

ELEVATION (EXTERIOR) — 1 / A101 — REFERENCE NO. SHEET NO.

ELEVATION (INTERIOR) — 1A / A101 / 1B — REFERENCE NOS. (4) SHEET NO.

DETAIL — 1 / A101 — SIM — REFERENCE NO. SHEET NO.

GRID LINE — 0 — GRID LETTER/ NUMBER

EXISTING GRID LINE — 0 — GRID LETTER/ NUMBER

DATUM/ ELEVATION — 1ST FLOOR 8'-0" — LEVEL I.D. ELEVATION

SHEET NOTE — 1 — REFERENCE NUMBER

WALL DESIGNATION — 1i — PARTITION TYPE

WINDOW DESIGNATION — A — WINDOW TYPE

DOOR DESIGNATION — 100 — DOOR TYPE

ROOM DESIGNATION — ROOM NAME 101, 150 SF, 30/SF= OCC. — ROOM NAME & NUMBER AREA OCCUPANCY

REVISION MARKER — 1 — REVISION NUMBER

TOILET ACCESSORIES DESIGNATION — A00 — TOILET ACCESSORY TYPE

FINISH DESIGNATION — ? — FINISH

ROOM FINISH DESIGNATION — WF / FLR / B — WALL / FLOOR / BASE

NORTH ARROW

PROPERTY LINE
CENTER LINE
BREAKLINE
MATCH LINE

1 HR WALL CONSTRUCTION
2 HR WALL CONSTRUCTION
3 HR WALL CONSTRUCTION
4 HR WALL CONSTRUCTION

GENERAL NOTES

1. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS TO INCLUDE ALL LABOR, MATERIALS, AND SERVICES NECESSARY FOR THE COMPLETION OF ALL WORK SHOWN, PRESCRIBED, OR REASONABLY IMPLIED BUT NOT LIMITED TO THAT EXPLICITLY INDICATED IN THE CONTRACT DOCUMENTS.

2. THE TERM 'CONTRACTOR' OR 'GENERAL CONTRACTOR' SHALL ALSO BE DEFINED AS 'CONSTRUCTION MANAGER' OR OTHER TERMINOLOGY USED TO REFERENCE THE PRIME CONTRACTOR. THE TERM 'CONTRACTOR' IS ALSO USED TO DEFINE SUBCONTRACTORS WHERE APPROPRIATE.

3. NOT USED

4. ALL WORK SHOWN SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS AS ADOPTED AND ENFORCED BY LOCAL AUTHORITIES HAVING JURISDICTION.

5. THE GENERAL CONTRACTOR, HIS SUBCONTRACTORS AND SUPPLIERS SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER, ARCHITECT, AND ANY OF HIS CONSULTANTS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.

6. THE GENERAL CONTRACTOR, HIS SUBCONTRACTORS AND SUPPLIERS SHALL NOT BE ENTITLED TO ANY CLAIMS FOR ADDITIONAL COSTS DUE TO INEFFICIENCIES BASED ON THEIR INTENTION TO COMPLETE THE PROJECT, OR A PORTION THEREOF, EARLIER THAN THE SPECIFIED DATE OF SUBSTANTIAL COMPLETION. EXTENDED OVERHEAD COSTS SHALL ONLY APPLY AFTER THE SPECIFIED DATE OF SUBSTANTIAL COMPLETION, AND ONLY IF SATISFACTORILY DEMONSTRATED THAT THE REQUESTED COSTS ARE A DIRECT RESULT OF A DELAY WHICH WAS ENTIRELY OUTSIDE OF THE CONTROL OF THE GENERAL CONTRACTOR AND THAT THE DELAY IMPACTED THE CRITICAL PATH AND THE SUBSTANTIATION OF SAME HAS BEEN APPROVED BY THE ARCHITECT.

7. ALL DRAWINGS AND SPECIFICATIONS ARE TO BE CONSIDERED COMPLIMENTARY TO ONE ANOTHER, AS WHAT IS PART OF ONE DRAWING SHALL BE CONSIDERED TO BE A PART OF ALL DRAWINGS. THE DRAWINGS AND SPECIFICATIONS TOGETHER SHALL BE REFERRED TO AS THE CONTRACT DOCUMENTS.

8. DO NOT SCALE DRAWINGS. DIMENSIONS SHALL TAKE PRECEDENCE, AND LARGER SCALE DETAILS SHALL TAKE PRECEDENCE OVER SMALLER SCALE DETAILS.

9. CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, AND ELECTRICAL DRAWINGS, AS WELL AS DRAWINGS PREPARED BY ANY OTHER SPECIALTY CONSULTANT, ARE SUPPLEMENTAL TO THE ARCHITECTURAL DRAWINGS. THE CONTRACTOR SHALL THOROUGHLY REVIEW ALL DRAWINGS AND SPECIFICATIONS (CONTRACT DOCUMENTS), AND IN THE EVENT OF CONFLICTING STATEMENTS, INSUFFICIENT INFORMATION, OR ERRORS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING. WORK SHALL BE DIVERTED FROM THE AREA IN QUESTION, AT NO EXPENSE TO THE OWNER, UNTIL THE ARCHITECT HAS HAD A REASONABLE AMOUNT OF TIME TO RESEARCH AND RESPOND TO THE CONTRACTOR. WORK INSTALLED WHERE CONFLICTING INFORMATION EXISTS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.

10. DIMENSIONS, NOTES, DETAILS, AND/OR SYMBOLS THAT APPLY TO ONE UNIT OR CONDITION, APPLY TO ALL UNITS OR CONDITIONS WHICH ARE IDENTICAL OR SIMILAR IN NATURE, WHETHER THEY ARE NOTED ON THE PLANS OR NOT.

11. DETAILS NOTED AS TYPICAL SHALL APPLY IN ALL LIKE CONDITIONS UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. WHERE NO SPECIFIC DETAIL IS SHOWN, THE FRAMING OR CONSTRUCTION SHALL BE IDENTICAL OR SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION ON THIS PROJECT.

12. WHENEVER AN ARTICLE, DEVICE, OR PIECE OF EQUIPMENT IS SHOWN, INDICATED, OR REFERRED TO ON THE DRAWINGS OR THESE NOTES IN THE SINGULAR NUMBER, SUCH REFERENCES APPLY TO AS MANY SUCH ARTICLES AS ARE REQUIRED TO COMPLETE THE INSTALLATION.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL MANUFACTURED COMPONENTS IN STRICT ACCORDANCE WITH THE INSTALLATION RECOMMENDATIONS AND REQUIREMENTS OF THE MANUFACTURER.

14. THE GENERAL CONTRACTOR AND ALL HIS SUB-CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB SITE PRIOR TO BEGINNING CONSTRUCTION, AND SHALL REPORT ANY DISCREPANCIES OR UNIDENTIFIED CONDITIONS TO THE ARCHITECT FOR RESOLUTION BEFORE ANY WORK IS STARTED.

15. THE GENERAL CONTRACTOR AND ALL HIS SUBCONTRACTORS SHALL BE RESPONSIBLE FOR THE TIMELY SUBMITTAL OF ALL SHOP DRAWINGS AND PRODUCT DATA, AND SHALL COORDINATE, VERIFY, AND CORRELATE ALL DIMENSIONS AND ELEVATIONS IN SUFFICIENT TIME TO AVOID IMPACTING THE FABRICATION OR CONSTRUCTION OF BUILDING COMPONENTS. IF A PERCEIVED CONFLICT EXISTS DURING THE CONTRACTORS REVIEW OF THE ABOVE, HE SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING. WORK SHALL BE DIVERTED FROM THE AREA IN QUESTION, AT NO EXPENSE TO THE OWNER, UNTIL THE ARCHITECT HAS HAD A REASONABLE AMOUNT OF TIME TO RESEARCH AND RESPOND TO THE CONTRACTOR. WORK INSTALLED WHERE CONFLICTING INFORMATION EXISTS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, AND PROCEDURES EMPLOYED IN THE PERFORMANCE OF WORK IN, ON, OR ABOUT THE JOB SITE. THE CONTRACTOR SHALL CONDUCT PERIODIC SAFETY MEETINGS AND COORDINATE AND VERIFY ALL WORK PERFORMED BY SUB-CONTRACTORS.

17. ALL CONTRACTORS AND SUB-CONTRACTORS PERFORMING WORK ON, OR RELATED TO THIS PROJECT SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED WITH A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL ENTITIES PERFORMING WORK ON THIS PROJECT SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR, AND ANY APPLICABLE STATE AND/OR LOCAL REGULATIONS. THE CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE SAFETY DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, THAT THIS REQUIREMENT SHALL APPLY CONTINUALLY, AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER, ARCHITECT, AND ANY OF HIS CONSULTANTS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF HIS WORK ON THIS PROJECT.

18. THE STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENTS ARE IN PLACE. THE CONTRACTOR SHALL DESIGN AND PROVIDE ALL SHORING AND BRACING NECESSARY TO INSURE THE STABILITY OF ANY AND ALL PARTS OF THE BUILDING DURING CONSTRUCTION.

19. UNLESS SPECIFICALLY SHOWN OR NOTED ON THE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED, BORED, WELDED, OR OTHERWISE MODIFIED WITHOUT WRITTEN PERMISSION OF THE ARCHITECT.

20. WHETHER OR NOT DETAILED ON THE DRAWINGS, THE CONTRACTOR SHALL FURNISH AND INSTALL STIFFENERS, BRACING, BACK UP PLATES, BLOCKING, AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK, HANDRAILS, RAILINGS, MISCELLANEOUS ACCESSORIES, AND WALL OR CEILING MOUNTED MECHANICAL, ELECTRICAL, OR MISCELLANEOUS EQUIPMENT, INCLUDING PLYWOOD BACKBOARDS FOR TELEPHONE AND ELECTRICAL EQUIPMENT ROOMS.

21. THE ARCHITECTS REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS IS PERFORMED ONLY AS A CONVENIENCE TO THE CONTRACTOR. THE ARCHITECTS REVIEW OF THESE DOCUMENTS IN NO WAY DIMINISHES THE CONTRACTORS RESPONSIBILITY FOR COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS, INCLUDING VERIFICATION AND CORRELATION OF ALL DIMENSIONS, AND COORDINATION OF THE WORK OF ALL OTHER TRADES. THE ARCHITECT AND HIS CONSULTANTS ASSUME NO ADDITIONAL LIABILITY FOR THE REVIEW OF SUBMITTALS OR SHOP DRAWINGS OVER AND ABOVE THAT WHICH WOULD BE PRESENT AS A RESULT OF THE PREPARATION OF THE ORIGINAL CONTRACT DOCUMENTS. THE CONTRACTOR AGREES TO DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER, ARCHITECT, AND ANY OF HIS/HER CONSULTANTS, FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, ARISING OUT OF THE ARCHITECTS AND/OR CONSULTANTS REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS.

22. REFER TO THE SURVEYORS AND CIVIL ENGINEERS DRAWINGS FOR THE APPROXIMATE LOCATION OF ALL EXISTING UTILITY LINES. LOCATION OF ALL UTILITIES SHOWN IS BASED ON THE BEST AVAILABLE INFORMATION, AND IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES AND THE CONTRACTOR SHALL USE EXTREME CAUTION IN EXCAVATION AND TRENCHING TO AVOID INTERCEPTING EXISTING PIPING OR CONDUITS.

23. WHERE NON-COMBUSTIBLE CONDUIT OR PIPES PENETRATE FIRE RATED ASSEMBLIES, THE CONTRACTOR SHALL INSTALL FIRE SAFING MATERIAL AND SEAL AROUND THE PENETRATIONS WITH AN APPROVED F OR T RATED ASSEMBLY TO MAINTAIN THE FIRE RESISTIVE INTEGRITY OF THE ASSEMBLY.

24. THE CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS (AMEREX 10 LB. OR APPROVED EQUAL) IN LOCATIONS SHOWN AND VERIFIED BY THE AHJ. CONTRACTOR SHALL SUBMIT CUT SHEETS TO THE ARCHITECT PRIOR TO INSTALLATION.

25. FURNISH AND INSTALL OUTSIDE GAS SHUT-OFF VALVE AND SIGNAGE IDENTIFYING LOCATIONS OF GAS AND ELECTRICAL SHUT-OFFS PER THE AHJ.

26. PROVIDE AND INSTALL SMOKE DETECTORS, HEAT DETECTORS, DUCT DETECTORS, AND OTHER SUCH DETECTION DEVICES AS REQUIRED BY APPLICABLE CODES AND THE AHJ.

27. PROVIDE BUILDING ADDRESS AS REQUIRED BY THE AHJ.

28. PROVIDE ACCESS DOORS AND PANELS, FIRE RATED AS REQUIRED, IN WALLS, CEILINGS, AND FLOORS AS REQUIRED BY MECHANICAL, PLUMBING, FIRE PROTECTION, AND ELECTRICAL SYSTEMS IN ADDITION TO THOSE SHOWN ON THE DRAWINGS. CONTRACTOR SHALL SUBMIT PROPOSED LOCATIONS AND CUT SHEETS INDICATING SIZES, TYPES, AND FINISHES TO THE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

29. SCREEN ALL EXTERIOR HVAC EQUIPMENT FROM VIEW WITH A SCREEN WALL OF THE SAME MATERIALS AS THE EXTERIOR. VERIFY FINAL LOCATION WITH OWNER AND ARCHITECT.

BUILDING DEPARTMENT INFORMATION

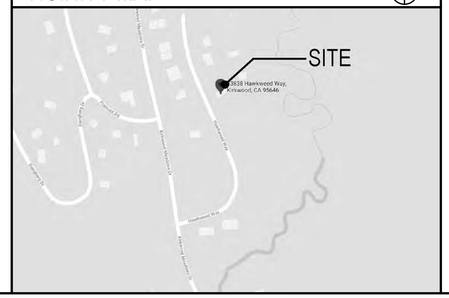
OWNER'S NAME:	PRESTON ROPER
MAILING ADDRESS:	33838 HAWKWEED WAY, KIRKWOOD, CA 95646
PROJECT PROPERTY ADDRESS:	33838 HAWKWEED WAY, KIRKWOOD, CA 95646
ASSESOR PARCEL NUMBER:	026-202-006
SQUARE FOOTAGE:	2,104 SF EXISTING 1,773 SF ADDITION
TYPE/CLASS OF BUILDING:	VB - WOOD FRAME WITH HEAVY TIMBER
PRINCIPAL IN CHARGE:	TODD LANKENAU
PROJECT MANAGER:	KEVIN MERKLING PHONE: (775) 348-7777 FAX: (775) 348-0904

LIST OF DRAWINGS

15 JANUARY, 2021 - PERMIT SET

GENERAL							
A0.00	COVER	•					
A0.01	SHEET INDEX, GENERAL NOTES, SYMBOLS AND ABBREVIATIONS	•					
A0.02	WALL ASSEMBLIES, TYPICAL DETAILS	•					
A0.03	COMPLIANCE DOCUMENTATION	•					
A0.04	COMPLIANCE DOCUMENTATION AND MANDATORY MEASURES	•					
SURVEY							
-	EXISTING BOUNDARY AND TOPOGRAPHIC SURVEY	•					
ARCHITECTURAL							
A1.01	SITE PLAN	•					
A2.00	DEMOLITION PLANS	•					
A2.01	FIRST FLOOR PLAN	•					
A2.02	SECOND FLOOR PLAN	•					
A2.03	ROOF PLAN	•					
A3.01	ELEVATIONS	•					
A3.02	ELEVATIONS AND WINDOW TYPES	•					
A4.01	BUILDING SECTIONS	•					
A5.01	ENLARGED PLANS, INTERIOR ELEVATIONS	•					
A7.01	FIRST / SECOND FLOOR RCP'S	•					
STRUCTURAL							
S-000	COVER PAGE	•					
S-001	SPECIFICATIONS	•					
S-100	FOUNDATION PLAN	•					
S-200	FLOOR FRAMING PLAN	•					
S-201	ROOF FRAMING PLAN	•					
S-300	LOWER LEVEL SHEAR PLAN	•					
S-301	UPPER LEVEL SHEAR PLAN	•					
S-410	FOUNDATION DETAILS	•					
S-411	FOUNDATION DETAILS, CONT.	•					
S-420	FRAMING DETAILS	•					
S-421	FRAMING DETAILS, CONT.	•					
S-430	SHEAR DETAILS	•					
S-431	SHEAR DETAILS, CONT.	•					
S-440	STEEL DETAILS	•					
S-500	STRUCTURAL SECTION	•					

VICINITY MAP



CODE INFORMATION

PROJECT LOCATION

33838 HAWKWEER WAY
KIRKWOOD, CA 95646

AUTHORITIES HAVING JUSIDICTION

BUILDING DEPARTMENT: AMADOR COUNTY BUILDING DEPARTMENT
STREET 810 COURT ST
CITY JACKSON, CA 95642
PHONE 209-223-6422

APPLICABLE ADOPTED CODES:

2019 CALIFORNIA RESIDENTIAL CODE
2019 CALIFORNIA ENERGY CODE
2019 CALIFORNIA PLUMBING CODE
2019 CALIFORNIA MECHANICAL CODE
2019 CALIFORNIA FUEL GAS CODE
2019 CALIFORNIA ELECTRICAL CODE
2019 CALIFORNIA GREEN BUILDING CODE

CODE ANALYSIS

DESCRIPTION OF WORK

ADDITION TO EXISTING HOM,E COMPRISING OF AN ATTACHED GARAGE WITH LIVING SPACE ABOVE. MINOR ALTERATIONS TO COMMON WALL AND LOWER LEVEL FOR ENTRY.

CONSTRUCTION TYPE:

V-B, WOOD FRAMED WITH HEAVY TIMBER.

FIRE SPRINKLER AND ALARM SYSTEM

NO EXISTING SPRINKLER SYSTEM. NO NEW SYSTEM REQUIRED. (R313.2 - EXC. 1)

BUILDING HEIGHT:

NUMBER OF STORIES: 2
AVERAGE GRADE TO ROOF RIDGE: 33' - 5"

ENERGY EFFICIENCY

CLIMATE ZONE: 16

ASSEMBLY	ASSEMBLY DESCRIPTION	VALUES	U-MAX
ROOF - CEILING CATHEDRAL	VENTED NAILABLE BASE w/ RIGID INSULATION o/ 2X6 T&G SHEATHING o/ ROOF BEAMS	R-40 CI	0.023
WALLS - ABOVE GRADE WOOD FRAMED	2x6 @ 16" O.C.	R-21 BATT w/ R10 CI	0.036
SLAB ON GRADE UNHEATED	MIN R-10 RIGID INSUL AT SLAB EDGE	R-10 CI	
FLOOR ABOVE GARAGE	PLYWOOD o/ 11-7/8" LVL @ 16" OC. GYPSUM CEILING	R-38	
WINDOWS (OPERABLE)	ALUMINUM CLAD WOOD w/ INSULATED GLAZING	SHGC: 0.18	0.25
WINDOWS (FIXED)	ALUMINUM CLAD WOOD w/ INSULATED GLAZING	SHGC: 0.18	0.25
GLAZED DOORS (>50%)	ALUMINUM CLAD WOOD w/ INSULATED GLAZING	SHGC: 0.19	0.30
OPAQUE DOORS (SWING)	WOOD		0.37

LIGHTING

ALL LIGHTING TO BE HIGH-EFFICIENCY LED FIXTURES, OR PROVIDED WITH LED LAMPS.

HVAC

HVAC SYSTEM TO BE ULTRA-HIGH EFFICIENCY COMPOSED OF A HYDRONIC UNIT WITH A TANKLESS WATER HEATER.
PROVIDE BATHROOM EXHAUST FAN

PLUMBING FIXTURES

FIXTURE	LOCATION	MAX FLOWRATE	BOD
UTILITY SINK FAUCET	GARAGE - 01	1.8 GPM	
LAVATORY	BATH - 29	1.2 GPM	
WATER CLOSET	BATH - 29	1.28 GAL PER FLUSH	
SHOWER	BATH - 29	1.8 GPM	
SINK FAUCET	LIVING - 27 (WET BAR)	1.8 GPM	

GREEN BUILDING

SECTION	DESCRIPTION
4.406.1	ANNULAR SPACE AT OPENINGS IN EXTERIOR WALLS CLOSED TO PREVENT PASSAGE OF RODENTS
4.408.1	RECYCLE OR SALVAGE FOR REUSE 65% NON-HAZARDOUS CONSTRUCTION AND DEMOLITION WASTE
4.408.2	PROVIDE CONSTRUCTION WASTE MANAGEMENT PLAN TO AHJ COMPLYING WITH THIS SECTION
4.410.1	PROVIDE OPERATION AND MAINTENANCE MANUAL
4.504.1	PROTECT DUCT OPENINGS DURING STORAGE AND INSTALLATION UNTIL FINAL START-UP
4.504	PRODUCTS SHALL COMPLY WITH THE VOC LIMITS IN TABLE 4.504.1-5

COLLABORATIVE DESIGN STUDIO architecture of experience and place
9444 DOUBLE R BLVD | SUITE B | RENO NV 89521
WWW.COLLABORATIVEDESIGNSTUDIO.COM
T 775.348.7777 | F 775.348.0904

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LICENSED ARCHITECT — TODD BENSON — No. 12925 — RENEWAL: 09/30/2021 — STATE OF CALIFORNIA

1/25/2021

ROPER RESIDENCE

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
REVISIONS:

PERMIT SET

SHEET INDEX, GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

A0.01

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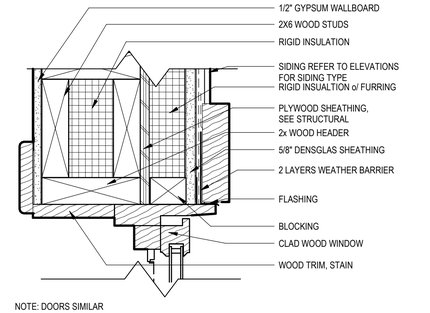
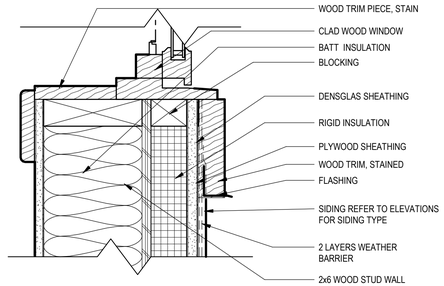


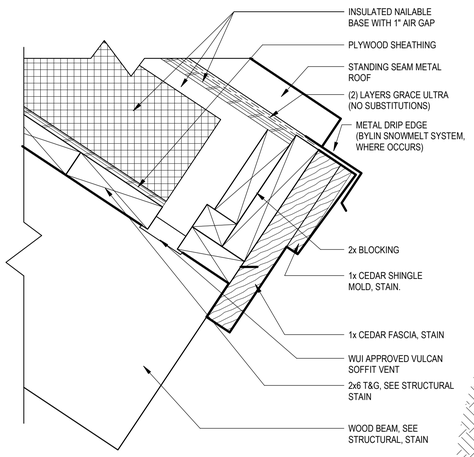
NOTE: DOORS SIMILAR

DETAIL - WINDOW HEAD 4
3" = 1'-0"



NOTE: DOORS SIMILAR

DETAIL - WINDOW SILL 3
3" = 1'-0"

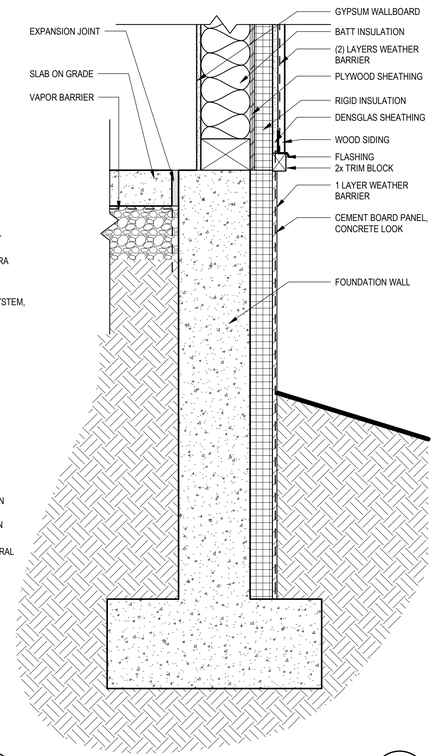


NOTES:

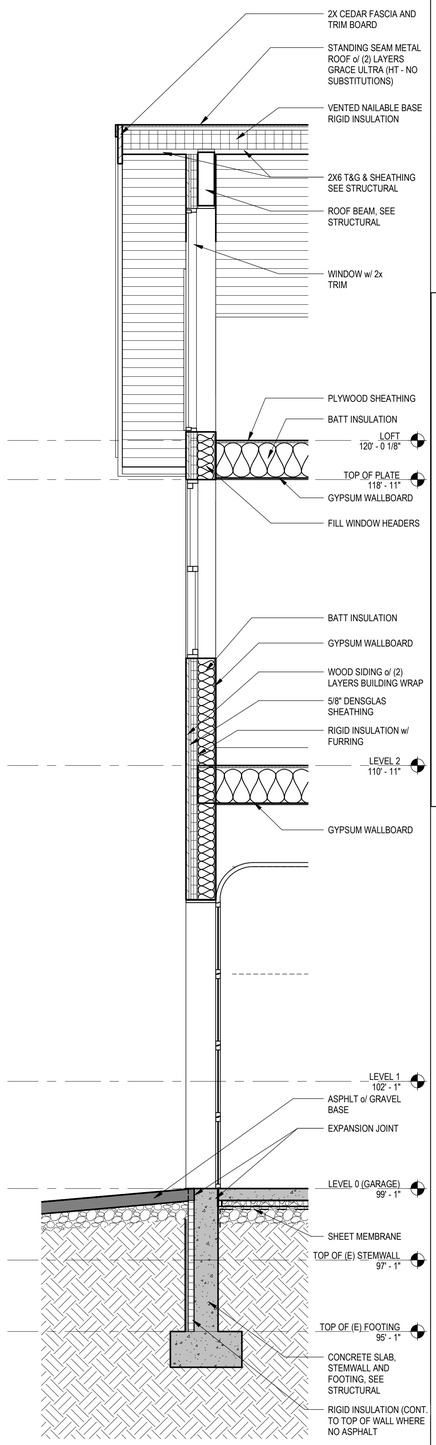
A. AT WALK OVERHANG, TERMINATE RIGID INSULATION 12" PAST EXTERIOR WALL. PROVIDE 2x SLEEPERS AND MIN 1/2" PLYWOOD SHEATHING TO MAINTAIN ROOF LINE OVER WALKWAY AREA.
B. PROVIDE ADDITIONAL RIGID INSULATION UNDER NAILABLE BASE AS REQUIRED FOR DESIGNATED R VALUE

ALTERNATE: UNVENTED ROOF

DETAIL - ROOF EAVE 5
3" = 1'-0"



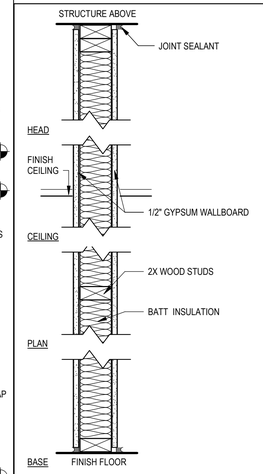
DETAIL FOUNDATION 2
1 1/2" = 1'-0"



EXTERIOR WALL SECTION 1
1/2" = 1'-0"

PARTITION NOTES

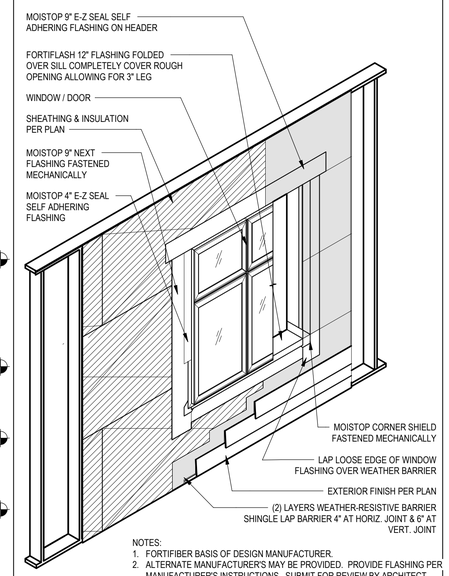
1. PARTITIONS ON THIS SHEET ARE DIMENSIONED ON PLANS TO FACE OF CORE UNLESS OTHERWISE NOTED.
2. WHERE FIRE TESTS ARE INDICATED IN PARTITION DESCRIPTION, CONFIGURE AND INSTALL PARTITION PER TESTING AGENCY CRITERIA. TESTING AGENCY CRITERIA MAY INCLUDE ADDITIONAL COMPONENTS NOT INDICATED ON THIS SCHEDULE. USE TYPE 'X' GYPSUM WALLBOARD ON ALL FIRE RATED PARTITIONS. NO GAPS OR VOIDS ARE PERMITTED.
3. ALL DRYWALL PARTITIONS SURROUNDING RESTROOMS, CORRIDORS, SHAFTS BETWEEN RESTROOMS AND WHEREVER ACOUSTIC INSULATION IS CALLED FOR, TO BE PERIMETER SEALED: AT THE HEAD AND SILL ONE CONTINUOUS CAULK BEAD ON EACH SIDE TO FILL THE GAP BETWEEN THE GYPSUM BOARD AND THE FLOOR AND CEILING. AT VERTICAL INTERSECTIONS, ONE CAULK BEAD SHALL BE RUN UNDER THE VERTICAL STUD AND ONE CAULK BEAD ON EACH SIDE TO FILL THE GAP WHERE THE GYPSUM BOARD MEETS A COLUMN OR PARTITION ELEMENT. NO GAPS OR VOIDS PERMITTED.
4. GYPSUM BOARD SURFACES OR DRYWALL PARTITIONS ADJACENT TO WET OR HUMID AREAS, I.E., PUBLIC TOILETS, EMPLOYEE TOILETS, TOILETS, SHOWERS, SINKS AND KITCHENS SHALL BE CONSTRUCTED WITH WATER-RESISTANT (W.R.) GYPSUM WALLBOARD ON ALL DRYWALL SURFACES.
5. USE CALIFORNIA FRAMING AT CORNERS



ASSEMBLY DESCRIPTION
ONE LAYER 1/2" TYPE GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED PARRALLEL OR AT RIGHT ANGLES TO EACH SIDE OF 2x WOOD STUDS 24" O.C. WITH 1 1/4" TYPE W DRYWALL SCREWS 12" O.C. JOINTS STAGGERED 16" ON OPPOSITE SIDES. AT TILE AND STONE FINISHED WALLS, REPLACE GYPSUM WALLBOARD ON TILE/STONE SIDE WITH 1/2" TILE BACKER BOARD. PROVIDE INSULATION AT ALL WALLS SEPERATING ROOMS PROVIDE SHEATHING WHERE REQUIRED BY STRUCTURAL
FIRE TEST

MAX. SPACING	FIRE RATING
16" O.C.	

CORE WIDTHS	TAG
W350: 2X4	A
W550: 2X6	B



NOTES:
1. FORTIFIBER BASIS OF DESIGN MANUFACTURER.
2. ALTERNATE MANUFACTURER'S MAY BE PROVIDED. PROVIDE FLASHING PER MANUFACTURER'S INSTRUCTIONS. SUBMIT FOR REVIEW BY ARCHITECT.
3. REFER TO WINDOW DETAILS FOR ADDITIONAL INFORMATION
4. APPLY MOISTOP SEALANT OVER ALL FASTENER POINTS

WINDOW / DOOR OPENING WATERPROOFING DETAIL W
3" = 1'-0"

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LICENSED ARCHITECT
TODD BENSON
RENEWAL
C-12925
RENEWAL: 09/30/2021
STATE OF CALIFORNIA

1/25/2021

ROPER RESIDENCE

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
REVISIONS:

PERMIT SET

WALL ASSEMBLIES, TYPICAL DETAILS

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CERTIFICATE OF COMPLIANCE **CF1R-PRF-01E**

Project Name: 2017-Roper Residence_V2 **Calculation Date/Time:** 2021-01-15T10:48:24-08:00 **(Page 1 of 10)**

Calculation Description: Permit **Input File Name:** 2017-Roper Residence.ribd19

GENERAL INFORMATION

01	Project Name	2017-Roper Residence_V2			
02	Run Title	Permit			
03	Project Location	33838 Hawkweed Way			
04	City	Kirkwood, CA	05	Standards Version	2019
06	Zip code	95646	07	Software Version	CBECC-Res 2019.1.3
08	Climate Zone	16	09	Front Orientation (deg/ Cardinal)	147
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	AdditionOnly	13	Number of Bedrooms	4
14	Addition Cond. Floor Area (ft²)	1596	15	Number of Stories	1
16	Existing Cond. Floor Area (ft²)	1965	17	Fenestration Average U-factor	0.24
18	Total Cond. Floor Area (ft²)	3561	19	Glazing Percentage (%)	20.54%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Is Natural Gas Available?	Yes			

Addition Alone Project Analysis Parameters

01	02	03	04	05	06
Existing Area (excl. new addition) (ft2)	Addition Area (excl. existing) (ft2)	Total Area (ft2)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms
1965	1596	3561	3	1	4

COMPLIANCE RESULTS

01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	This building incorporates one or more Special Features shown below

Registration Number: Registration Date/Time: HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.1.300 Schema Version: rev 20200901 Report Generated: 2021-01-15 10:49:00

CERTIFICATE OF COMPLIANCE **CF1R-PRF-01E**

Project Name: 2017-Roper Residence_V2 **Calculation Date/Time:** 2021-01-15T10:48:24-08:00 **(Page 2 of 10)**

Calculation Description: Permit **Input File Name:** 2017-Roper Residence.ribd19

ENERGY USE SUMMARY

Energy Use (kTDV/ft²-yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement
Space Heating	19.44	18.86	0.58	3
Space Cooling	13.61	13.06	0.55	4
IAQ Ventilation	0	0	0	
Water Heating	26.66	26.66	0	0
Self Utilization/Flexibility Credit	n/a	0	0	n/a
Compliance Energy Total	**59.71**	**58.58**	**1.13**	**1.9**

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

- Window overhangs and/or fins
- No cooling system included
- Non-standard duct location (any location other than attic)

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

Building-level Verifications:
- -- None --

Cooling System Verifications:
- -- None --

Heating System Verifications:
- -- None --

HVAC Distribution System Verifications:
- Duct leakage testing

Domestic Hot Water System Verifications:
- -- None --

Registration Number: Registration Date/Time: HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.1.300 Schema Version: rev 20200901 Report Generated: 2021-01-15 10:49:00

CERTIFICATE OF COMPLIANCE **CF1R-PRF-01E**

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Calculation Description: Permit **Input File Name:** 2017-Roper Residence.ribd19

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Water Heating System 2
Living Area - Addition	Conditioned	HVAC System - Addition	798	13	DHW System - Addition	N/A

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status
Exterior Wall - South	Living Area - Addition	Wall - CI	147	Front	282	19.98	90	none	New
Exterior Wall - West	Living Area - Addition	Wall - CI	237	Left	462	139.4	90	none	New
Exterior Wall - North	Living Area - Addition	Wall - CI	327	Back	272	4.5	90	none	New
Exterior Wall - East	Living Area - Addition	Wall - CI	57	Right	86	0	90	none	New
Existing - G East	Garage	Existing Wall	n/a	n/a	344	0	n/a		New
Existing - G South	Garage	Existing Wall	n/a	n/a	42	0	n/a		New
Existing - East	Living Area - Addition	Existing Wall	n/a	n/a	426	0	n/a		New
Existing - South	Living Area - Addition	Existing Wall	n/a	n/a	32	0	n/a		New
Interior Floor - Living	Living Area - Addition	Floor	n/a	n/a	798	n/a	n/a		New
Exterior Wall - G South	Garage	Wall - CI	147	Front	297	20	90	none	New
Exterior Wall - G West	Garage	Wall - CI	237	Left	344	144	90	none	New
Exterior Wall - G North	Garage	Wall - CI	327	Back	339	18	90	none	New

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CERTIFICATE OF COMPLIANCE **CF1R-PRF-01E**

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Calculation Description: Permit **Input File Name:** 2017-Roper Residence.ribd19

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status
Exterior Wall - G East	Garage	Wall - CI	57	Right	95	0	90	none	New

OPAQUE SURFACES - CATHEDRAL CEILINGS

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Area (ft²)	Skylight Area (ft²)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof
Cathedral Ceiling - North	Living Area - Addition	Cathedral Ceiling	327	Back	456	0	7	0.1	0.85	No
Cathedral Ceiling - South	Living Area - Addition	Cathedral Ceiling	147	Front	342	0	7	0.1	0.85	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft²)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading
10 - L	Window	Exterior Wall - G North	Back	327	6	3	1	18	0.25	NFRC	0.18	NFRC	Bug Screen
X23 - B	Window	Exterior Wall - South	Front	147	3	6.66	1	19.98	0.2	NFRC	0.22	NFRC	Bug Screen
32 - M	Window	Exterior Wall - West	Left	237	2.5	5	1	12.5	0.25	NFRC	0.18	NFRC	Bug Screen
33 - M	Window	Exterior Wall - West	Left	237	2.5	5	1	12.5	0.25	NFRC	0.18	NFRC	Bug Screen
34 - M	Window	Exterior Wall - West	Left	237	2.5	5	1	12.5	0.25	NFRC	0.18	NFRC	Bug Screen
35 - M	Window	Exterior Wall - West	Left	237	2.5	5	1	12.5	0.25	NFRC	0.18	NFRC	Bug Screen
36 - M	Window	Exterior Wall - West	Left	237	2.5	5	1	12.5	0.25	NFRC	0.18	NFRC	Bug Screen
37 - M	Window	Exterior Wall - West	Left	237	2.5	5	1	12.5	0.25	NFRC	0.18	NFRC	Bug Screen
41 - N	Window	Exterior Wall - West	Left	237			1	32.2	0.25	NFRC	0.18	NFRC	Bug Screen
42 - N	Window	Exterior Wall - West	Left	237			1	32.2	0.25	NFRC	0.18	NFRC	Bug Screen
31 - O	Window	Exterior Wall - North	Back	327	3	1.5	1	4.5	0.25	NFRC	0.18	NFRC	Bug Screen

Registration Number: Registration Date/Time: HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.1.300 Schema Version: rev 20200901 Report Generated: 2021-01-15 10:49:00

CERTIFICATE OF COMPLIANCE **CF1R-PRF-01E**

Project Name: 2017-Roper Residence_V2 **Calculation Date/Time:** 2021-01-15T10:48:24-08:00 **(Page 5 of 10)**

Calculation Description: Permit **Input File Name:** 2017-Roper Residence.ribd19

OPAQUE DOORS

01	02	03	04
Name	Side of Building	Area (ft²)	U-factor
X03 - B	Exterior Wall - G South	20	0.2
G1 - 108x96	Exterior Wall - G West	72	1
G2 - 108x96	Exterior Wall - G West	72	1

OVERHANGS AND FINS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Window	Overhang					Left Fin				Right Fin			
	Depth	Dist Up	Left Extent	Right Extent	Flap Ht.	Depth	Top Up	Dist L	Bot Up	Depth	Top Up	Dist R	Bot Up
31 - O	2	0.75	5	5	0	0	0	0	0	0	0	0	0

SLAB FLOORS

01	02	03	04	05	06	07	08
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated
Slab On Grade 1	Garage	798	92	R-10	16	0%	No

Registration Number: Registration Date/Time: HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.1.300 Schema Version: rev 20200901 Report Generated: 2021-01-15 10:49:00

CERTIFICATE OF COMPLIANCE **CF1R-PRF-01E**

Project Name: 2017-Roper Residence_V2 **Calculation Date/Time:** 2021-01-15T10:48:24-08:00 **(Page 6 of 10)**

Calculation Description: Permit **Input File Name:** 2017-Roper Residence.ribd19

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
Wall - CI	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / R-10	0.036	Inside Finish: Gypsum Board Sheathing / Insulation: Gypsum Board Cavity / Frame: R-21 / 2x6 Sheathing / Insulation: R-10 Sheathing Exterior Finish: Wood Siding/sheathing/decking
Cathedral Ceiling	Cathedral Ceilings	Built-up Roof	2x12 @ 24 in. O. C.	R-0	None / R-40	0.023	Roofing: Light Roof (Asphalt Shingle) Above Deck Insulation: R-40 Sheathing Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12 Sheathing / Insulation: Wood Siding/sheathing/decking
Existing Wall	Interior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-19	None / None	0.061	Inside Finish: Gypsum Board Sheathing / Insulation: Gypsum Board Cavity / Frame: R-19 / 2x6 Sheathing / Insulation: Wood Siding/sheathing/decking Other Side Finish: Gypsum Board
Floor	Interior Floors	Wood Framed Floor	2x12 @ 16 in. O. C.	R-38	None / None	0.027	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-38 in 11-1/4 in. (R-37) / 2x12 Sheathing / Insulation: Gypsum Board Ceiling Below Finish: Gypsum Board

Registration Number: Registration Date/Time: HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.1.300 Schema Version: rev 20200901 Report Generated: 2021-01-15 10:49:00

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Calculation Description: Permit **Input File Name:** 2017-Roper Residence.ribd19

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50
Not Required	Not Required	Not Required	n/a

WATER HEATING SYSTEMS

01	02	03	04	05	06	07
Name	System Type	Distribution Type	Water Heater Name (#)	Solar Heating System	Compact Distribution	HERS Verification
DHW System - Addition		Standard Distribution System	Water Heater - Addition (1)	n/a	None	n/a

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Energy Factor or Efficiency	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	NEEA Heat Pump Brand or Model	Tank Location or Ambient Condition	Status	Verified Existing Condition
Water Heater - Addition	Gas	Consumer Instantaneous	1	0	0.81-UEF	<=200 kBtu/hr	0	n/a	n/a	n/a	n/a	New	n/a

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07	08
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Central DHW Distribution	Shower Drain Water Heat Recovery
DHW System - Addition - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required	Not Required

Registration Number: Registration Date/Time: HERS Provider:

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Calculation Description: Permit **Input File Name:** 2017-Roper Residence.ribd19

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Heating Equipment Count	Cooling Equipment Count
HVAC System - Addition	Heating and cooling system other	Heating System 1	Cooling System 1	HVAC Fan System 1	Distribution System 1	Setback	New	NA	1	1

HVAC - HEATING UNIT TYPES

01	02	03	04
Name	System Type	Number of Units	Heating Efficiency
Heating System 1	Combined hydronic	1	AFUE-83.37

HVAC - COOLING UNIT TYPES

01	02	03	04	05	06	07	08
Name	System Type	Number of Units	Efficiency EER/CEER	Efficiency SEER	Zonally Controlled	Multi-speed Compressor	HERS Verification
Cooling System 1	No Cooling	1	n/a	n/a	Not Zonal	Single Speed	n/a

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
			Duct Ins. R-value		Duct Location		Surface Area								
Name	Type	Design Type	Supply	Return	Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts 40 ft
Distribution System 1	Ducts located in multiple places	Non-Verified	R-8	R-8	Garage	Garage	n/a	n/a	No Bypass Duct	Sealed and Tested	Distribution System 1-hers-dist	New	n/a	n/a	n/a

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Calculation Description: Permit **Input File Name:** 2017-Roper Residence.ribd19

HVAC DISTRIBUTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Distribution System 1-hers-dist	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan System 1	HVAC Fan	0.58	n/a

Registration Number: Registration Date/Time: HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.1.300 Schema Version: rev 20200901 Report Generated: 2021-01-15 10:49:00

This Certificate of Compliance is not registered

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LICENSED ARCHITECT TODD BENSON RENEWAL C-32925 RENEWAL: 09/30/2021 STATE OF CALIFORNIA

1/25/2021

ROPER RESIDENCE

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
REVISIONS:

PERMIT SET

COMPLIANCE DOCUMENTATION

A0.03

1/25/2021 4:35:08 PM BIM 360://Roper Residence/Roper Residence.rvt

CERTIFICATE OF COMPLIANCE **CF1R-PRF-01E**

Project Name: 2017-Roper Residence_V2 **Calculation Date/Time:** 2021-01-15T10:48:24-08:00 **(Page 10 of 10)**

Calculation Description: Permit **Input File Name:** 2017-Roper Residence.ribd19

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name:	Documentation Author Signature:
Company:	Signature Date:
Address:	CEA/ HERS Certification Identification (If applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California: 1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance. 2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 3. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.	
Responsible Designer Name:	Responsible Designer Signature:
Company:	Date Signed:
Address:	License:
City/State/Zip:	Phone:

This Certificate of Compliance is not registered

Registration Number: Registration Date/Time: HERS Provider:

CA Building Energy Efficiency Standards - 2019 Residential Compliance Report Version: 2019.1.300 Schema Version: rev 20200901 Report Generated: 2021-01-15 10:49:00

2019 Low-Rise Residential Mandatory Measures Summary

NOTE: Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. "Exceptions may apply.
(01/2020)

Building Envelope Measures:	
§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.*
§ 110.6(a)5:	**Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped.*
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	**Ceiling and Rafter Roof Insulation.** Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043, Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.*
§ 150.0(b):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B.*
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.*
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Fireplaces, Decorative Gas Appliances, and Gas Log Measures:	
§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device.*
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
Space Conditioning, Water Heating, and Plumbing System Measures:	
§ 110.0-§ 110.3:	**Certification.** Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.*
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.*
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.*
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.*
§ 110.3(c)4:	**Water Heating Recirculation Loops Serving Multiple Dwelling Units.** Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)4.
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.
§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters.*
§ 150.0(h)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.

2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(h)3A:	**Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.
§ 150.0(h)3B:	**Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	**Storage Tank Insulation.** Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of one inch or a minimum insulation R-value of 7.7: the first five feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than one inch; all hot water piping with a nominal diameter less than 3/4 inch that is; associated with a domestic hot water recirculation system, from the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures.*
§ 150.0(j)3:	**Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	**Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125 volt, 20 amp electrical receptacle connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within three feet of the water heater without obstruction. Both ends of the unused conductor must be labeled with the word "spare" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than two inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu per hour.
§ 150.0(n)2:	**Recirculating Loops.** Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fans Measures:	
§ 110.8(d)3:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance.** All air-distribution system ducts and plenums must meet the requirements of the CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-6.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area.*
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage, sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11 and Reference Residential Appendix RA3.
§ 150.0(m)12:	**Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Pressure drops and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service.*
§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.*

2019 Low-Rise Residential Mandatory Measures Summary

Requirements for Ventilation and Indoor Air Quality:	
§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality** All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.
§ 150.0(o)1C:	**Single Family Detached Dwelling Units.** Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.
§ 150.0(o)1E:	**Multifamily Attached Dwelling Units.** Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be ≤ 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
§ 150.0(o)1F:	**Multifamily Building Central Ventilation Systems.** Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflows must be within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required airflow rate needed for compliance.
§ 150.0(o)1G:	**Kitchen Range Hoods.** Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
Pool and Spa Systems and Equipment Measures:	
§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.*
§ 110.4(b)1:	**Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.*
Lighting Measures:	
§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.*
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A.
§ 150.0(k)1B:	**Blank Electrical Boxes.** The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor control, or fan speed control.
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and socket and light source as described in § 150.0(k)1C.
§ 150.0(k)1D:	**Electronic Ballasts for Fluorescent Lamps.** Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 150.0(k)1E:	**Night Lights, Step Lights, and Path Lights.** Night lights, step lights and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).*
§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems.*
§ 150.0(k)2C:	**Interior Switches and Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.*
§ 150.0(k)2D:	**Interior Switches and Controls.** Controls and equipment must be installed in accordance with manufacturer's instructions.
§ 150.0(k)2E:	**Interior Switches and Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the control is installed to comply with § 150.0(k).
§ 150.0(k)2F:	**Interior Switches and Controls.** Lighting controls must comply with the applicable requirements of § 110.9.

2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(k)2G:	**Interior Switches and Controls.** An energy management control system (EMCS) may be used to comply with control requirements if it: provides functionality of the specified control according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.0(e); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	**Interior Switches and Controls.** A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2.
§ 150.0(k)2I:	**Interior Switches and Controls.** In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must be controlled by an occupant sensor or a vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it must be initially configured to manual-on operation using the manual control required under Section 150.0(k)2C.
§ 150.0(k)2J:	**Interior Switches and Controls.** Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for dimming, and that are not controlled by occupancy or vacancy sensors, must have dimming controls.*
§ 150.0(k)2K:	**Interior Switches and Controls.** Under cabinet lighting must be controlled separately from ceiling-installed lighting systems.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either § 150.0(k)3Aii (photocell and either a motion sensor or automatic time switch control) or § 150.0(k)3Aiii (astronomical time clock), or an EMCS.
§ 150.0(k)3B:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, entrances, balconies, and porches, and residential parking lots and carports with less than eight vehicles per site must comply with either § 150.0(k)3A or with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3C:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, any outdoor lighting for residential parking lots or carports with a total of eight or more vehicles per site and any outdoor lighting not regulated by § 150.0(k)3B or § 150.0(k)3D must comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must comply with § 140.8; or must consume no more than 5 watts of power as determined according to § 130.0(c).
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	**Interior Common Areas of Low-rise Multifamily Residential Buildings.** In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building must be comply with Table 150.0-A and be controlled by an occupant sensor.
§ 150.0(k)6B:	**Interior Common Areas of Low-rise Multifamily Residential Buildings.** In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting for the interior common areas in that building must: i. Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and ii. Lighting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors must be capable of turning the light fully on and off from all designed paths of ingress and egress.
Solar Ready Buildings:	
§ 110.10(a)1:	**Single Family Residences.** Single family residences located in subdivisions with 10 or more single family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e).
§ 110.10(a)2:	**Low-rise Multifamily Buildings.** Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total area no less than 15 percent of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy.*
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.*
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.*
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through § 110.10(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric".

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LICENSED ARCHITECT TODD BENSON RENEWAL C-12925 RENEWAL: 09/30/2021 STATE OF CALIFORNIA

1/25/2021

ROPER RESIDENCE

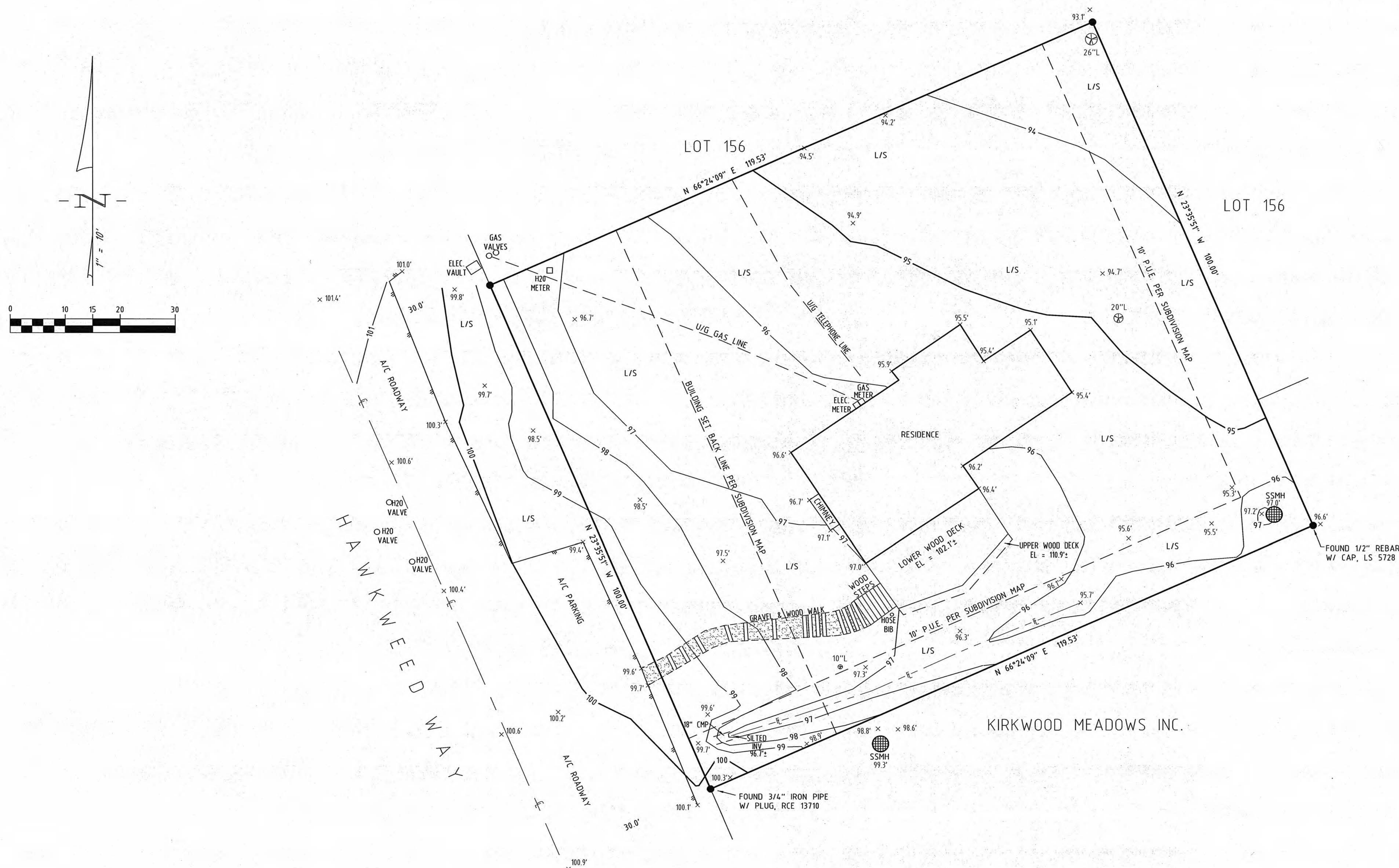
APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
REVISIONS:

PERMIT SET

COMPLIANCE DOCUMENTATION AND MANDATORY MEASURES

A0.04



LEGEND

A/C	ASPHALTIC CONCRETE
CMP	CORRUGATED METAL PIPE
℄	FLOW LINE
INV	INVERT
L	LODGEPOLE PINE
L/S	LANDSCAPE/NATURAL GROUND
PP	POWER POLE
P.U.E.	PUBLIC UTILITY EASEMENT
U/G	UNDERGROUND
SSMH	SANITARY SEWER MANHOLE
x77.7	SPOT ELEVATION
⫫	EDGE OF PAVEMENT
●	FOUND 1/2" REBAR, NO REF; SET CAP, PLS 7946 OR AS NOTED

EASEMENTS PER SUBDIVISION MAP

A) Rights-of-way and Easements for light, air, water, gas, sewer, drainage pipes and ditches, underground wires and conduits for electric, telephone and television services, together with all appurtenances thereto on, over, across and under street rights-of-way, those strips of land designated "Public Utility Easements"; and those strips of land lying within five(5) feet of the rear and side lines of all lots and parcels shown hereon.

B) Rights-of-way and Easements for drainage purposes on, over, across and under Lot "J" and those strips of land designated "Drainage Easements".

C) Easements for public utilities, light, air snow storage, parking bays including grading slopes, drainage ditches, underground wires and conduits and all appurtenances thereto within those strips of land lying between the front lot line and the lines shown hereon and designated "Building Set Back Lines"; said strips to remain open and free from buildings.

D) A General Easement for road purposes that extends to five (5) feet beyond the catch point of the top of cuts and toe of fills of the roadway section, as shown hereon, is hereby reserved for the County of Amador by the Developer on all roads within this Subdivision where the dedicated right-of-way is not sufficient to provide a minimum of five (5) feet from the catch point to the dedicated right-of-way line.

E) Restricted Access to and from the east side of Kirkwood Meadows Drive shown thus: ııııııııı

OWNER & MAILING ADDRESS

PRESTON ROPER
24660 NICOLE LN.
LOS ALTOS HILLS, CA 94024

LAND AREA

11,953 SQUARE FEET

TURNER & ASSOCIATES, INC.
LAND SURVEYING
(775) 588-5658
FAX (775) 588-9296
308 DORLA COURT, SUITE 203 - ROUND HILL, NEVADA 89448
P.O. BOX 5067 - STATELINE, NEVADA 89449

NOTES

---THIS SURVEY HAS BEEN PREPARED WITHOUT USE OF A TITLE REPORT UNLESS REFERENCED HEREON, TURNER AND ASSOCIATES INC. ASSUMES NO RESPONSIBILITY FOR ANY EASEMENTS WHICH MAY AFFECT THIS PROPERTY
---PROPERTY OWNER AND/OR DESIGNER MUST VERIFY BUILDING SETBACKS AND ANY OTHER BUILDING RESTRICTIONS BEFORE ANY DESIGN OR CONSTRUCTION.
---ONLY VISIBLE UTILITIES AND FEATURES HAVE BEEN LOCATED.
---THIS DRAWING OR MAP IS THE PROPERTY OF TURNER & ASSOCIATES INC., AND MAY NOT BE USED OR REPRODUCED WITHOUT THE CONSENT OF TURNER & ASSOCIATES INC.

BENCH MARK

NUMBER	
ELEVATION	100.00'
DATUM	ASSUMED
DESCRIPTION	SET MAG NAIL IN A/C PARKING

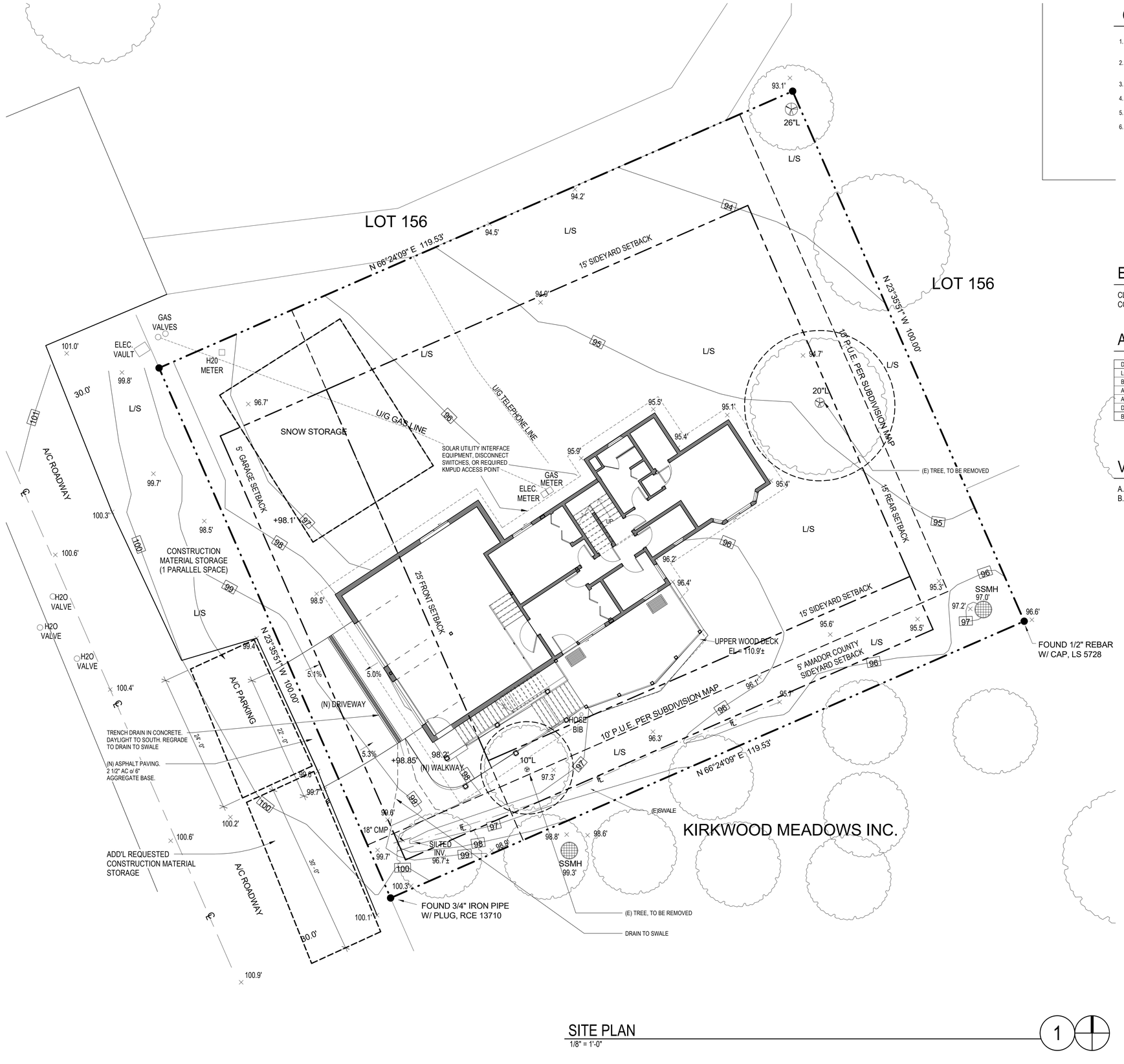
BOUNDARY & TOPOGRAPHIC SURVEY
LOT 157, KIRKWOOD MEADOWS UNIT NO. 2
APN: 026-202-006, 33838 HAWKWEED WAY
AMADOR CO., CA

PROFESSIONAL LAND SURVEYOR No. 7946 STATE OF CALIFORNIA 31 DEC 21

DATE	SHEET	JOB NO.
JUN 2020	1 OF 1	20088

SCALE	HORIZ.	VERT.	FIELD	DRAWN	FILE NAME	CHECKED
	1"=10'	1' C.I.	JWT-JF	JF	20088.DWG	JWT

REVISION NO.	DATE	DESCRIPTION	BY	CHKD



SITE PLAN
1/8" = 1'-0"

1

GENERAL SHEET NOTES

1. SEE GENERAL NOTES APPLICABLE TO ENTIRE PROJECT IN THE A.0 SERIES OF DRAWINGS AT THE FRONT OF THIS SET
2. DO NOT SCALE DRAWINGS. DIMENSIONS TAKE PRECEDENCE, AND LARGER SCALE DETAILS TAKE PRECEDENCE OVER SMALLER SCALE DETAILS.
3. SEE SHEET A0.2 FOR ALL INTERIOR WALL TYPES.
4. ALL INTERIOR WALLS TO EXTEND TO UNDERSIDE OF STRUCTURE ABOVE U.N.O.
5. NOTES ARE TYPICAL. NOT ALL ELEMENTS IN DRAWINGS ARE NOTED.
6. DIMENSIONS OF (E) STRUCTURE ARE BASED UPON PROVIDED DRAWINGS. CONTRACTOR TO CONFIRM ALL DIMENSIONS PRIOR TO WORK.

ENERGY CODE

CLIMATE ZONE: 16
COMPLIANCE METHOD: PERFORMANCE

AREAS

DESIGNATION	AREA
LOT	12,591 SF
BUILDING - EXISTING	2,104 SF
ADDITION - GARAGE	798 SF
ADDITION - LIVING AREA	975 SF
DECKS	550 SSF
BUILDING - TOTAL	3,913 SF

VEGETATION NOTES

A. EXISTING TREES TO BE PROTECTED UNLES NOTED TO BE REMOVED.
B. ALL DISTURBED AREAS TO BE RESEEDED WITH A KIRKWOOD SPECIFIC MIXTURE, E.G. FROM COMSTOCK SEED, GARDNERVILLE, NV.

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9444 DOUBLE R BLVD | SUITE B | RENO NV 89521
WWW.COLLABORATIVEDESIGNSTUDIO.COM
T 775.348.7777 | F 775.348.0904

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LICENSED ARCHITECT
TODD BENSON
ORIGINAL
C-12925
RENEWAL: 09/30/2021
STATE OF CALIFORNIA

1/25/2021

ROPER RESIDENCE

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
REVISIONS:

PERMIT SET

SITE PLAN

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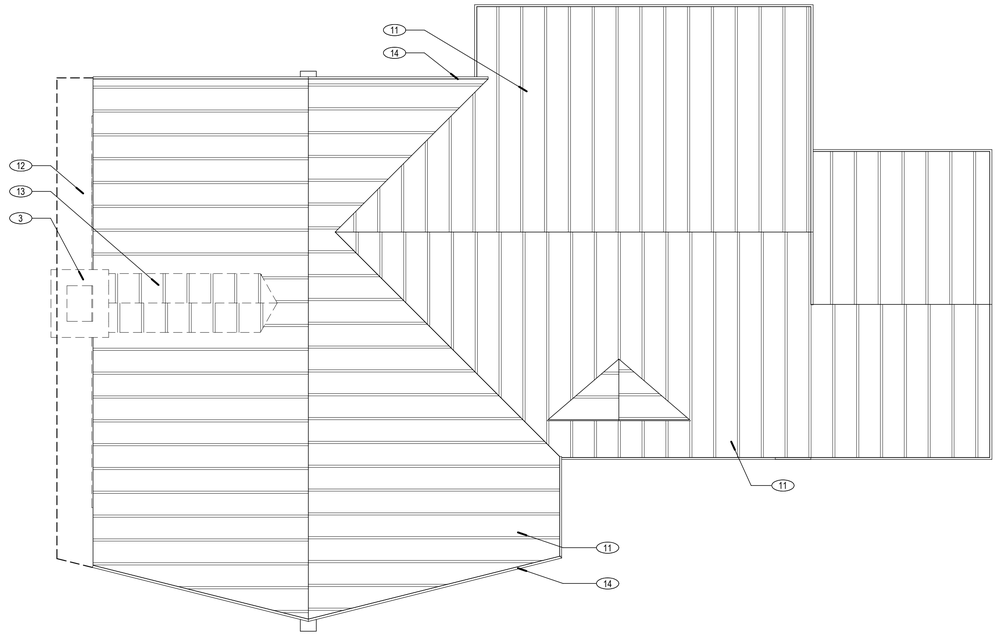
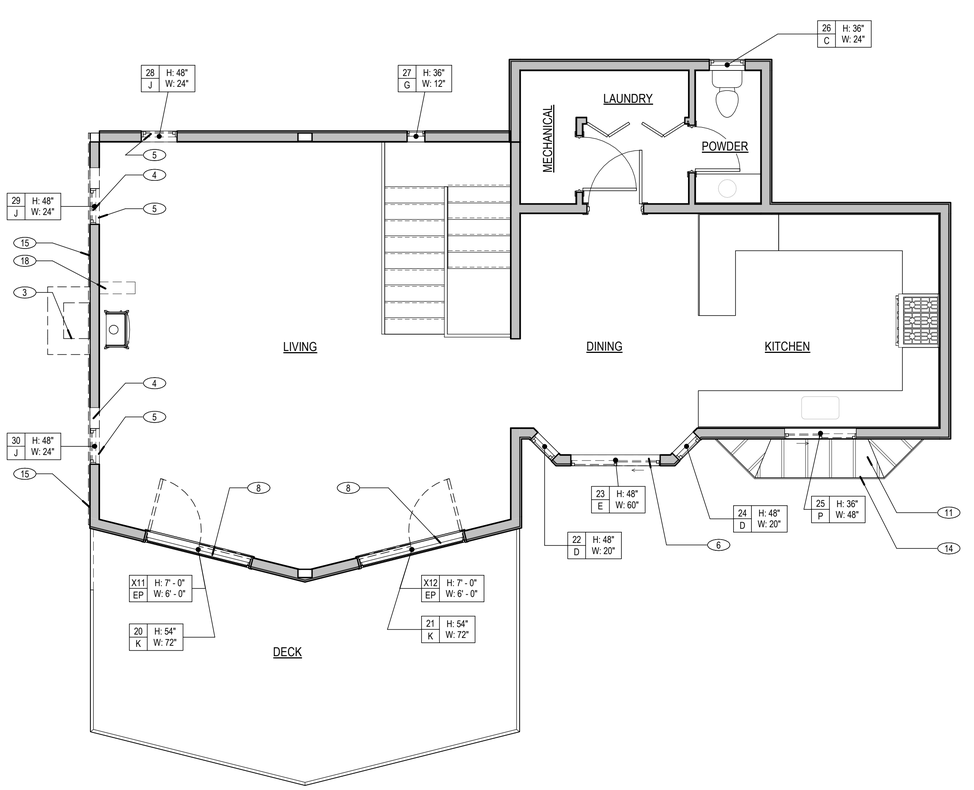


ROOF DEMOLITION PLAN

1/4" = 1'-0"

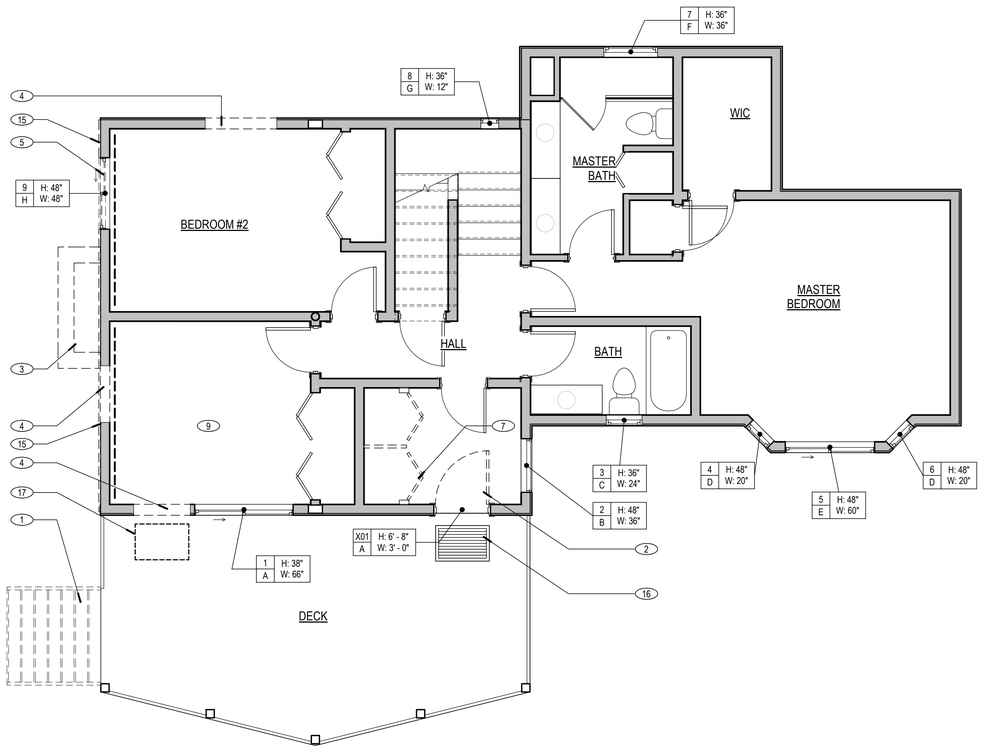
3



UPPER FLOOR DEMOLITION PLAN

1/4" = 1'-0"

2



LOWER FLOOR DEMOLITION PLAN

1/4" = 1'-0"

1

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6. DIMENSIONS OF (E) STRUCTURE ARE BASED UPON PROVIDED DRAWINGS. CONTRACTOR TO CONFIRM ALL DIMENSIONS PRIOR TO WORK.

SHEET NOTES

GENERAL DEMOLITION NOTES:

A. BUILDING ELEMENTS TO REMAIN UNO.
B. PROTECT (E) FINISHES AND BUILDING ELEMENTS INPLACE UNO.
C. REPAIR ANY DAMAGE TO EXISTING DINISHES AND BUILDING ELEMENTS.
D. SALVAGE ANY REMOVED SIDING FOR REUSE ON (E) STRUCTURE.

DEMOLITION NOTES:

1. (E) WOOD STAIRS, STRINGERS, AND SUPPORTS, TO BE REMOVED AND REPLACED.
2. (E) DOOR AND FRAME, TO BE REMOVED & SALVAGED FOR REUSE. INFILL WALL FOR (N) WINDOW. FINISH WITH SALVAGED SIDING FROM (N) OPENINGS.
3. (E) WALL / CHIMNEY w/ STONE FINISH, TO BE REMOVED. PROTECT (E) STOVE VENT IN PLACE.
4. (N) OPENING IN (E) WALL. REFER TO PROPOSED PLANS. SALVAGE SIDING FOR INFILL.
5. (E) WINDOW, TO BE REMOVED. SALVAGE FOR REUSE.
6. (E) WINDOW, TO BE REMOVED AND REPLACED. (ALTERNATE: REPLACE (E) GLAZING)
7. (E) WALL & DOOR, TO BE REMOVED. PATCH (E) WALL, TEXTURE & PAINT TO MATCH (E). SALVAGE BASE FOR USE AT (N) OPENING. REINSTALL BASE TO MERGE WITH (E) BASE. PATCH (E) TILE WHERE OCCURS.
8. (E) PATIO DOOR, TO BE REMOVED. (ALTERNATE: REPLACE (E) GLAZING)
9. (E) CARPET AND PAD, TO BE REMOVED. PREPARE SUBSTRATE FOR (N) TILE FLOORING. SALVAGE CARPET AND PAD FOR RESUE IN STORAGE 30.
10. NOT USED
11. (E) ROOF, TO BE REMOVED. REMOVE ANY UNDERLAYMENT AND INSPECT SHEATHING. REPLACE ANY DAMAGED PANELS. PREPARE SHEATHING FOR NEW METAL ROOF AND UNDERLAYMENT.
12. REMOVE (E) ROOF STRUCTURE TO STRUCTURAL WALL.
13. (E) ROOF OVERFRAMING, TO BE REMOVED.
14. (E) FASCIA, TO BE PRESERVED IN PLACE.
15. (E) WALL. REMOVE SIDING AND WEATHERBARRIER TO SUBSTRATE. REMOVE WOOD SIDING ON INTERIOR AND SALVAGE FOR REUSE IN OFFICE 04. REFER TO STRUCTURAL FOR ADDITIONAL WORK.
16. (E) WALK-OFF GRATE, TO REMAIN.
17. AREA OF (E) DECKING TO BE REMOVED FOR (N) WALK-OFF GRATE.
18. (E) STONE WALL (~18" HIGH), TO BE REMOVED. PATCH WITH TILE.

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TODD BENSON
ARCHITECT
C-32925
RENEWAL: 09/30/2021
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JOB NO.: 202017
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PERMIT SET

DEMOLITION PLANS

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ROOM FINISH SCHEDULE

RM. NO.	ROOM NAME	FLOOR PRIMARY MAT.	FLOOR PRIMARY TYPE	BASE MAT.	BASE TYPE	BASE HT.	WALLS NORTH FIN.	NORTH TYPE	EAST FIN.	EAST TYPE	SOUTH FIN.	SOUTH TYPE	WEST FIN.	WEST TYPE	ACC.	CEILING PRIMARY MAT.	CEILING FIN.	CEILING TYPE	NOTES
01	GARAGE	SC		RB	1	4"	PT	1	PT	1	PT	1	PT	1		G	PT	2	
02	ENTRY / MUDROOM	CT	1	WD	1	4"	PT	1	PT	1	PT	1	PT	1		G	PT	2	
04	OFFICE	CT	1	WD	1	4"	WD	1	WD	1	WD	1	WD	2		G	PT	2	A
27	LIVING	CPT	1	WD	1	4"	PT	1	PT	1	PT	1	PT	1		WD/EX	ST	1	
28	BEDROOM	CPT	1	WD	1	4"	PT	1	PT	1	PT	1	PT	1		G	PT	2	
29	BATH	CT	1	WD	1	4"	PT/CT	1/2	PT/CT	1/2	PT/CT	1/2	PT/CT	1/2		G	PT	2	D
30	STORAGE	CPT	1	RB	1	4"	PT	1	PT	1	PT	1	PT	1		G	PT	1	B, C
32	LOFT	CPT	1	WD	1	4"	PT	1	PT	1			PT	1		WD/EX	ST	1	

FINISH NOTES:

GENERAL

A. ALL FINISHES TO MATCH EXISTING UNLESS NOTED OTHERWISE.
B. REVIEW ALL FINISH SELECTIONS WITH OWNER

FLOOR

SC: SEALED CONCRETE
CT1: CERAMIC TILE, TO MATCH EXISTING
CPT1: CARPET, TO MATCH EXISTING

BASE

WD1: WOOD BASE, STAINED. STYLE TO MATCH EXISTING
RB1: RUBBER BASE (ALTERNATE: WOOD)

WALLS

PT1: EGGSHELLL FINISH, COLOR SHERWIN-WILLIAMS KILIM BEIGE
CT2: CERAMIC TILE AS SELECTED BY OWNER

FINISH NOTES (CONT.):

CEILING MATERIALS

G: GYPSUM WALLBOARD
WD: 2X6 T&G
EX: EXPOSED TO STRUCTURE

CEILING FINISH

PT2: EGGSHELL FINISH, COLOR SHERWIN-WILLIAMS DIVINE WHITE
ST1: CLEAR STAIN TO MATCH EXISTING

SCHEDULE NOTES:

A. REUSED SALVAGED WOOD WALL FINISH TO PATCH (E) WALLS, AND PROVIDE (N).
B. REUSE SALVAGED CARPET
C. WALLS MAY BE LEFT UNPAINTED AT OWNER'S DISCRETION
D. TILE SHOWER ENCLOSURE WITH WATERPROOF MEMBRANE o/ TILE BACKERBOARD. SCHLUTER KERDI SYSTEM BASIS OF DESIGN

DOOR SCHEDULE

NO.	H	W	THK	PANEL TYPE	PANEL MAT	PANEL FIN	PANEL GL	FRAME TYPE	FRAME MAT	FRAME FIN	HDW	NOTES
LEVEL 0 (GARAGE)												
G1	96"	108"	1 1/2"	G			T					A
G2	96"	108"	1 1/2"	G			T					A
X03	80"	36"	1 3/4"	A	WD	ST		A	WD	ST		
LEVEL 1												
02	80"	36"	1 3/4"	A	WD	ST		A	WD	ST	2	
X02	80"	36"	1 3/8"	B	WD	ST		A	WD	ST	1	B
LEVEL 2												
27	80"	36"	1 3/4"	A	WD	ST		A	WD	ST	2	
27A	80"	20"	1 3/4"	A	WD	ST		A	WD	ST		
28	80"	36"	1 3/4"	A	WD	ST		A	WD	ST		
28B	80"	60"	1 1/2"	C	WD	ST		A	WD	ST		
29A	80"	30"	1 3/4"	A	WD	ST		A	WD	ST		
29B	80"	30"	1 3/4"	A	WD	ST		A	WD	ST		
30	80"	36"	1 3/4"	A	WD	ST		A	WD	ST		
S1	80"	30"	3/4"	A	WD	ST		A	WD	ST		
X21	80"	72"	1 3/8"	D	WD	ST	T	A	WD	ST		D
X22	80"	72"	1 3/8"	D	WD	ST	T	A	WD	ST		D
X23	80"	36"	1 3/8"	B	WD	ST	T	A	WD	ST		C

SCHEDULE NOTES:

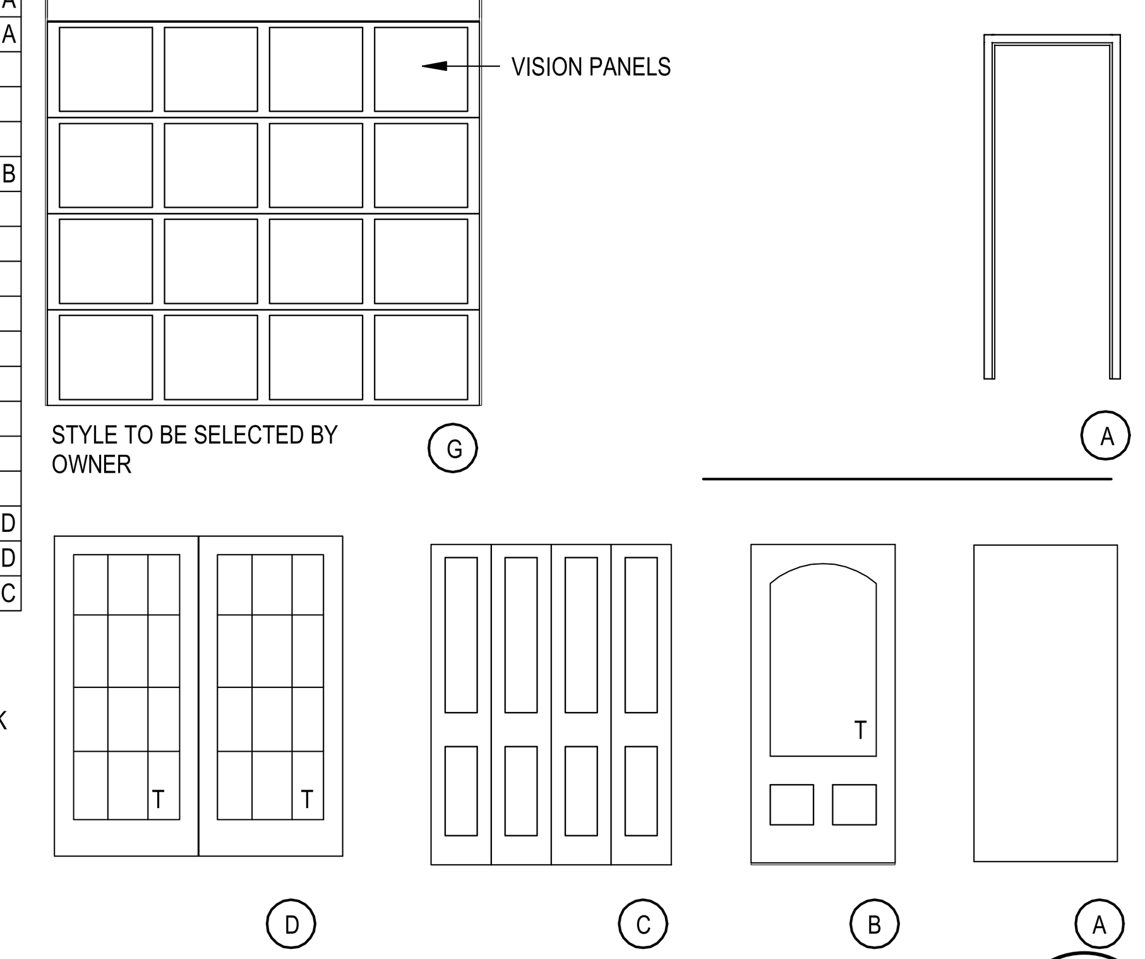
A. OVERHEAD SECTIONAL ROLL-UP DOOR, AS SELECTED BY OWNER, WITH TOP SECTION COMPRISED OF VISION PANELS. PAINT TO MATCH (E) BUILDING.
B. GLAZED DOOR (MIN 33% GLAZING) AS SELECTED BY OWNER
C. RELOCATED ENTRY DOOR
D. FULL LITE. MUNTINS AND GLAZING STYLE TO BE SELECTED BY OWNER.

HARDWARE NOTES:

1. REMOTE CONTROLLABLE ENTRY LOCK
2. 180 DEGREE FULL SWING HINGES.

GENERAL NOTES:

A. INTERIOR DOOR PANELS FLUSH TO MATCH EXISTING UNLESS NOTED OTHERWISE
B. DOOR HARDWARE TO MATCH EXISTING
C. FINISH TRIM TO MATCH EXISTING
D. REVIEW DOOR PANELS WITH OWNER



PANEL AND FRAME TYPES

1/4" = 1'-0"

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SHEET NOTES

1. (N) WOOD STAIRS, STRINGERS, AND SUPPORTS TO MATCH (E) DECK AND RAIL.
2. (N) ENTRY DOOR AND FRAME.
3. (N) WINDOW. INTERIOR AND EXTERIOR TRIM TO MATCH (E).
4. ROOF LINE / STRUCTURE ABOVE.
5. (N) INFILL @ WALL OPENING.
6. (E) OVERHEAD LIGHT, TO REMAIN.
7. (N) OVERHEAD LIGHT.
8. (N) PATIO LIGHT / WALL SCONCE.
9. (N) WINDOW. TRIM TO MATCH (E). TYPICAL (N) WINDOWS.
10. RELOCATED (E) WINDOW.
11. (N) WOOD STUD WALL.
12. (N) STRUCTURAL COLUMN.
13. (N) WOOD STEPS, PLATFORM AND RAIL. 36" TO TOP OF RAIL.
14. SKI RACKS
15. (N) CONCRETE STOOP AND STEP. 2% MAX SLOPE AWAY FROM HOUSE TO TRAIN.
16. (N) DG WALK.
17. (N) ASPHALT DRIVEWAY.
18. (N) TENCH DRAIN SET IN CONCRETE. DAYLIGHT TO SOUTH OF DRIVEWAY.
19. (N) CRAWL SPACE DOOR. 24"X36".
20. (N) UTILITY SINK. CONNECT TO (E) PLUMBING.
21. TANDEM BIKE RACK
22. MOUNTAIN / ROAD BIKE RACK (4 BIKES)
23. BOAT STORAGE RACK (CEILING MOUNT).
24. (N) COUNTER WITH BASE CABINETS., SUPPLIED BY OWNER
25. (N) INSTANT HOT WATER HEATER AND FURNACE. COORDINATE ELECTRICAL IN THIS AREA WITH EQUIPMENT REQUIREMENTS.
26. (E) WALL, TO BE OPENED FOR STRUCTURAL WORK. REPLACE INSULATION. (N) GYPSUM WALLBOARD BOTH SIDES. TEXTURE AND PAINT. REPLACE BASE.
27. (E) TILE FLOOR, TO REMAIN.
28. (N) TILE FLOOR.
29. (N) FRENCH DOORS IN (E) OPENING.
30. (N) DOOR WITH WOOD TRIM, TO MATCH EXISTING. TYPICAL (N) DOORS.
31. GLASS SHOWER ENCLOSURE.
32. WOOD OR METAL SHIP LADDER.
33. WOOD RAIL. TOP RAIL @ 42" AFF, PICKETS AT 4" MAX O.C.
34. BUILT IN BOOT STORAGE, SUPPLIED BY OWNER.
35. (N) METAL ROOF o/ (2) LAYERS GRACE ULTRA HT UNDERLAYMENT (NO SUBSTITUTIONS).
36. (N) STRUCTURAL BEAM w/ PREFINISHED OR COPPER END CAP.
37. (N) WOOD FRAMED CHIMNEY. REUSE (E) VENT CAP.
38. (E) WINDOW, TO REMAIN.
39. (E) DOOR, TO REMAIN.
40. 240V NEMA 14-50 (ELECTRIC VEHICLE OUTLETS)
41. ALTERNATE: 2' DEEP BUILT IN CABINETS
42. (E) LIGHTING, TO REMAIN.
43. (N) FASCIA. FINISH TO MATCH EXISTING. TYP ALL ROOF EAVES.
44. (E) GAS STOVE. PROVIDE (N) SHAFT FOR (E) DUCT. MAINTAIN MIN 1" CLEAR FROM (E) DUCT.
45. (N) 4X4 WOOD COLUMN.
46. (N) SHELVES ABOVE W / D.
47. RELOCATED DOOR FROM (E) ENTRY.
48. (N) WALK OFF GRATE. SIZE AND STYLE TO MATCH (E).
49. (N) BYLIN SMOWMELT SYSTEM (NORTH EAVES).
50. PV SYSTEM PER KMA SOLAR DESIGN REQUIREMENTS. SOLAR AREA (525 SF). PROVIDE CONDUIT FOR CONNECTION.
51. SHOWER NICHE. CONFIRM SIZE AND LOCATION WITH OWNER.
52. SHOWER BENCH: 12" DEEP BY 18" HIGH
53. PARTIAL HEIGHT WALL (36"), TILE ALL SIDES.
54. RIDGE VENT
55. PATH OF DUCTWORK. PROVIDE SIDEWALL AND FLOOR REGISTERS. INSULATE DUCT IN GARAGE AREA. FINAL LAYOUT TO BE DETERMINED BY CONTRACTOR.
56. SHAFT OPENING. CLOSE AND SEAL AROUND DUCTS.
57. GAS AND ELECTRIC METERS. SOLAR UTILITY INTERFACE EQUIPMENT, DISCONNECT SWITCHES, OR REQUIRED KMPUD ACCESS POINT
58. 6x6 WOOD TRIM
59. WORKBENCH. FOR REFERENCE ONLY
60. (E) WINDOW. REPLACE GLAZING

ELECTRICAL POWER NOTES

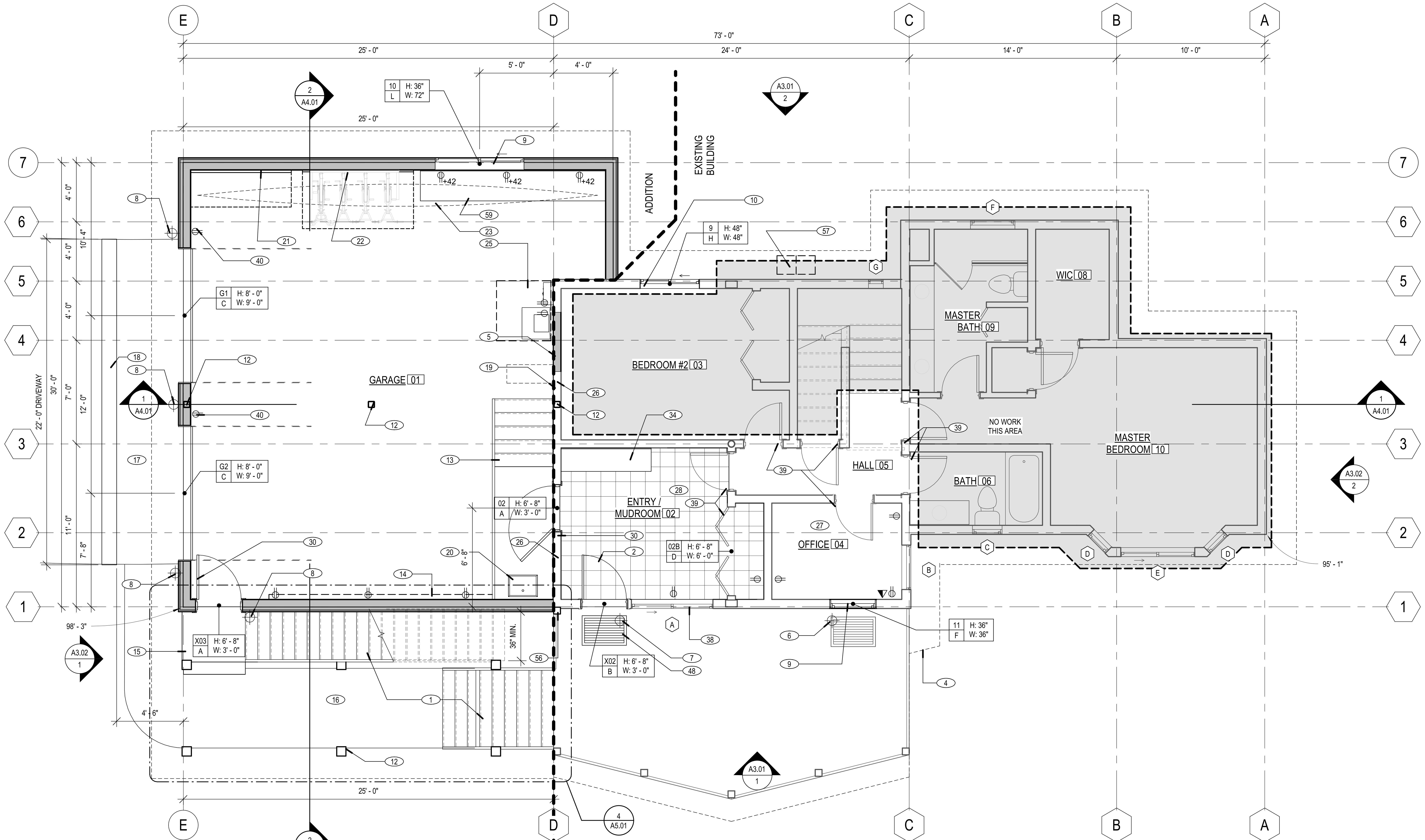
A. SEE RCP'S FOR TYPE AND LOCATION OF ALL LIGHT FIXTURES AND SWITCHES.
B. PROVIDE POWER FOR ALL APPLIANCES AND EQUIPMENT PER MANUFACTURER'S SPECS.
C. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST ADDITION OF THE CALIFORNIA ELECTRICAL CODE (CEC) AS WELL AS ALL APPLICABLE STATE & LOCAL CODES & ORDINANCES.
D. ALL ELECTRICAL PANELS SHALL BE LOCATED PER OWNER'S APPROVAL.
E. HEIGHTS AFF. ARE TO THE CENTERLINE OF ELECTRICAL BOX.
F. ALL OUTLETS IN BATHROOMS, LAUNDRY ROOMS AND OTHER WET AREAS TO BE GFCI. ALL OUTLETS TO BE AFCI. EXTERIOR OUTLETS TO BE GFCI WITH WP COVER.
G. OUTLET LOCATIONS TO BE REVIEWED WITH OWNER PRIOR TO INSTALLATION.
H. IDENTIFY (E) OUTLET LOCATIONS IN ENTRY / MUDROOM 02 AND COORDINATE LOCATIONS FOR (N) OUTLETS w/ OWNER.
I. PROVIDE CONDUIT FOR CONNECTION TO SOLAR PV SYSTEM.
J. VERIFYING EXISTING LOAD AND CONFIRM EXISTING SERVICE IS ADEQUATELY SIZED FOR NEW LOADS AND COMPATABLE WITH PV SYSTEM. INFORM OWNER OF ANY REQUIRED CHANGES TO EXISTING SERVICE AND PANELS.
K. PROVIDE (N) SUBPANEL FOR NEW LIVING AREA, BEDROOM, AND BATH LOCATED IN BATH 29

HVAC NOTES

A. HVAC SYSTEM TO BE ULTRA HIGH EFFICEINCY.
B. PROVIDE HYDRONIC AIR HANDLER SYSTEM POWERD BY TANKLESS WATER HEATER.
   A. ALTERNATE: ELECTRIC WATER HEATER AND AIR HANDLER WITH COLD-CLIMATE HEAT PUMP.
C. PROVIDE DUCTING TO WORK AREA IN GARAGE WITH SWITCH OPERATED DAMPER
D. PROVIDE AIR CIRCULATION FAN AND DUCT FROM EXISTING LIVING AREA TO LOWER FLOOR.

LEGEND

$	SWITCH	(T)	THERMOSTAT
$3	3-WAY SWITCH	(J)	JUNCTION BOX
$D	SWITCH w/ DIMMER	▼	TELEPHONE / DATA PORT
	110 V DUPLEX OUTLET	TV	CATV
	110 V DUPLEX OUTLET, GFCI	(P)	PASS THROUGH BOX
+42	110 V DUPLEX OUTLET @ 42" AFF	(S)	SPEAKER WIRE BOX
+42	110 V DUPLEX OUTLET, GFCI @ 42" AFF		
220V	220 V DUPLEX OUTLET		



LOWER FLOOR PLAN

1/4" = 1'-0"

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LICENSED ARCHITECT STATE OF CALIFORNIA C-32925

1/25/2021

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APN 026-202-006
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KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
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FIRST FLOOR PLAN

A2.01

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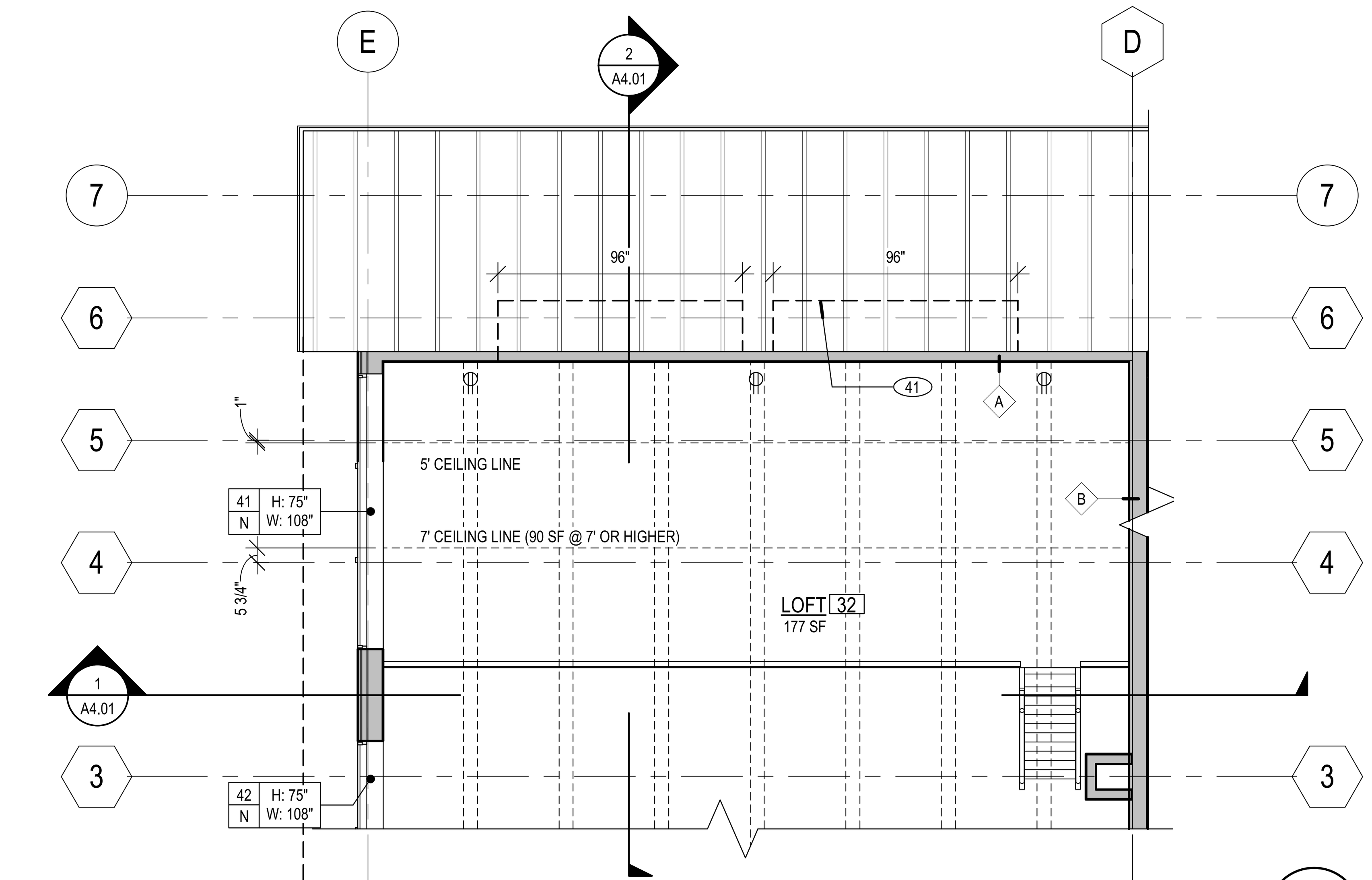
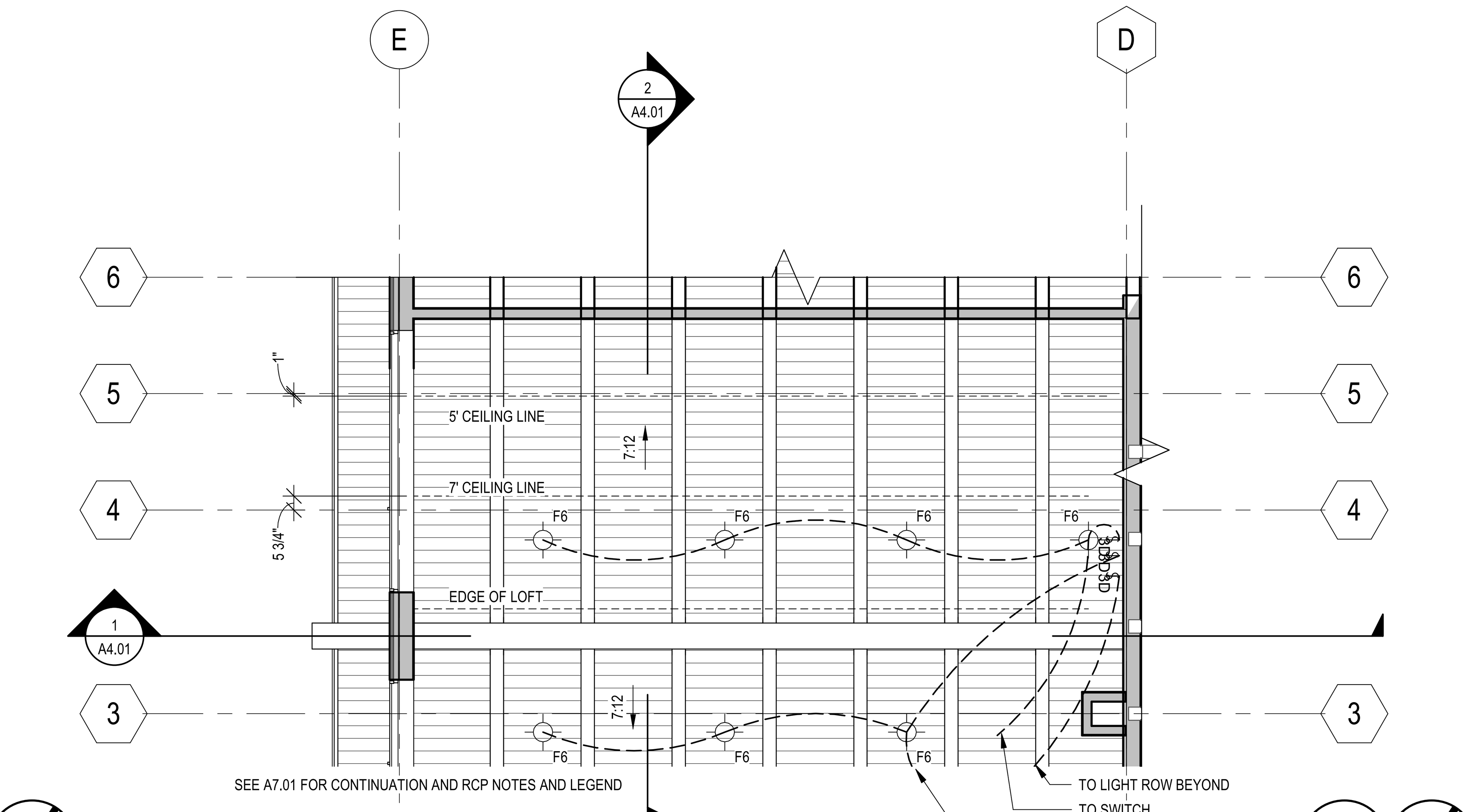
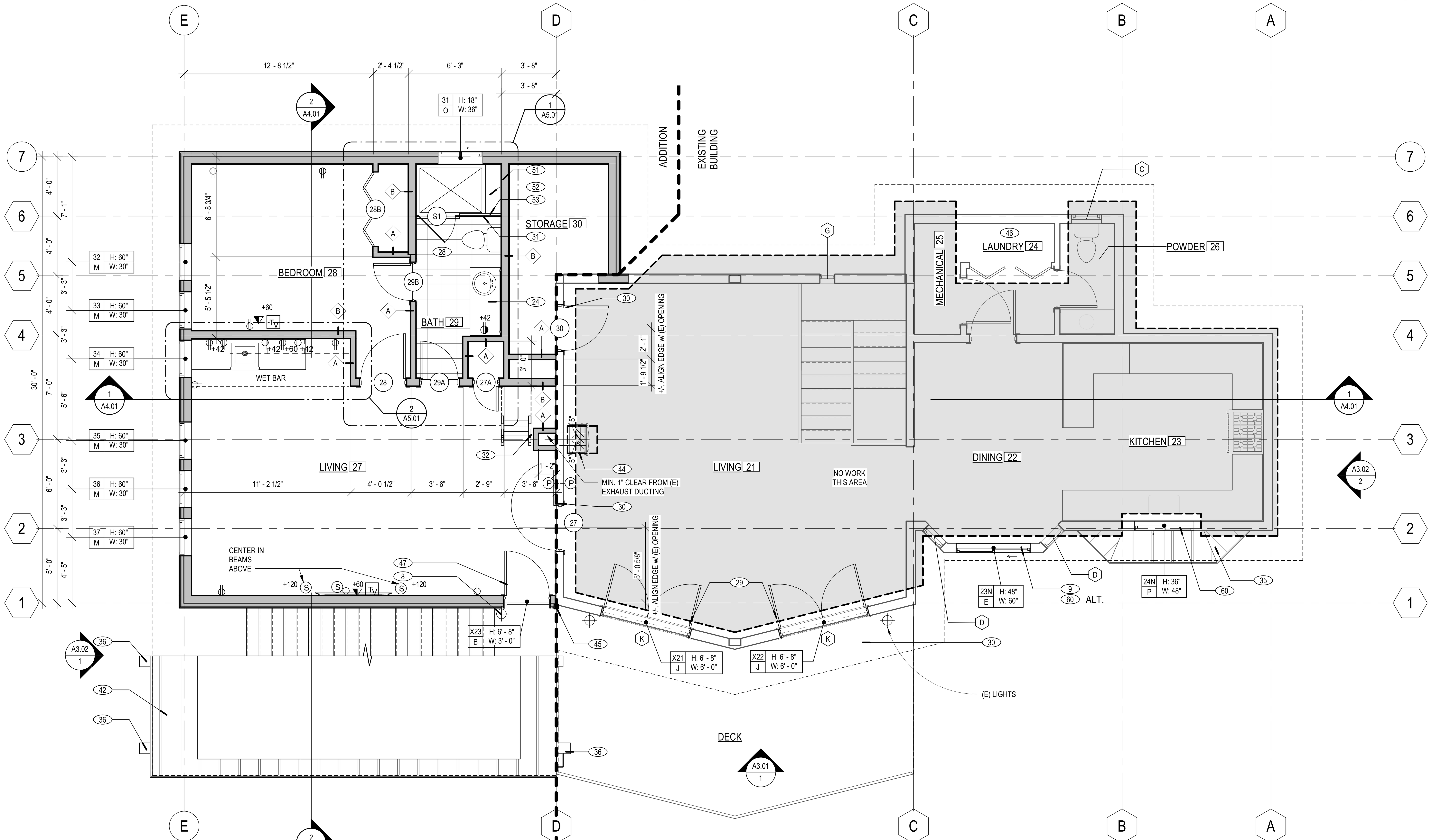


LOFT AREA - PLAN
1/4" = 1'-0"



LOFT AREA - RCP
1/4" = 1'-0"



UPPER FLOOR PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES

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3. SEE SHEET A0.2 FOR ALL INTERIOR WALL TYPES.
4. ALL INTERIOR WALLS TO EXTEND TO UNDERSIDE OF STRUCTURE ABOVE U.N.O.
5. NOTES ARE TYPICAL. NOT ALL ELEMENTS IN DRAWINGS ARE NOTED.
6. DIMENSIONS OF (E) STRUCTURE ARE BASED UPON PROVIDED DRAWINGS. CONTRACTOR TO CONFIRM ALL DIMENSIONS PRIOR TO WORK.

SHEET NOTES

1. (N) WOOD STAIRS, STRINGERS, AND SUPPORTS TO MATCH (E) DECK AND RAIL.
2. (N) ENTRY DOOR AND FRAME.
3. (N) WINDOW. INTERIOR AND EXTERIOR TRIM TO MATCH (E).
4. ROOF LINE / STRUCTURE ABOVE.
5. (N) INFILL @ WALL OPENING.
6. (E) OVERHEAD LIGHT, TO REMAIN.
7. (N) OVERHEAD LIGHT.
8. (N) PATIO LIGHT / WALL SCONCE.
9. (N) WINDOW. TRIM TO MATCH (E). TYPICAL (N) WINDOWS.
10. RELOCATED (E) WINDOW.
11. (N) WOOD STUD WALL.
12. (N) STRUCTURAL COLUMN.
13. (N) WOOD STEPS, PLATFORM AND RAIL. 36" TO TOP OF RAIL.
14. SKI RACKS
15. (N) CONCRETE STOOP AND STEP. 2% MAX SLOPE AWAY FROM HOUSE TO TRAIN.
16. (N) DG WALK.
17. (N) ASPHALT DRIVEWAY.
18. (N) TENCH DRAIN SET IN CONCRETE. DAYLIGHT TO SOUTH OF DRIVEWAY.
19. (N) CRAWL SPACE DOOR. 24"X36".
20. (N) UTILITY SINK. CONNECT TO (E) PLUMBING.
21. TANDEM BIKE RACK
22. MOUNTAIN / ROAD BIKE RACK (4 BIKES)
23. BOAT STORAGE RACK (CEILING MOUNT).
24. (N) COUNTER WITH BASE CABINETS., SUPPLIED BY OWNER
25. (N) INSTANT HOT WATER HEATER AND FURNACE. COORDINATE ELECTRICAL IN THIS AREA WITH EQUIPMENT REQUIREMENTS.
26. (E) WALL, TO BE OPENED FOR STRUCTURAL WORK. REPLACE INSULATION. (N) GYPSUM WALLBOARD BOTH SIDES. TEXTURE AND PAINT. REPLACE BASE.
27. (E) TILE FLOOR, TO REMAIN.
28. (N) TILE FLOOR.
29. (N) FRENCH DOORS IN (E) OPENING.
30. (N) DOOR WITH WOOD TRIM, TO MATCH EXISTING. TYPICAL (N) DOORS.
31. GLASS SHOWER ENCLOSURE.
32. WOOD OR METAL SHIP LADDER.
33. WOOD RAIL. TOP RAIL @ 42" AFF, PICKETS AT 4" MAX O.C.
34. BUILT IN BOOT STORAGE, SUPPLIED BY OWNER.
35. (N) METAL ROOF o/ (2) LAYERS GRACE ULTRA HT UNDERLAYMENT (NO SUBSTITUTIONS).
36. (N) STRUCTURAL BEAM w/ PREFINISHED OR COPPER END CAP.
37. (N) WOOD FRAMED CHIMNEY. REUSE (E) VENT CAP.
38. (E) WINDOW, TO REMAIN.
39. (E) DOOR, TO REMAIN.
40. 240V NEMA 14-50 (ELECTRIC VEHICLE OUTLETS)
41. ALTERNATE: 2' DEEP BUILT IN CABINETS
42. (E) LIGHTING, TO REMAIN.
43. (N) FASCIA. FINISH TO MATCH EXISTING. TYP ALL ROOF EAVES.
44. (E) GAS STOVE. PROVIDE (N) SHAFT FOR (E) DUCT. MAINTAIN MIN 1" CLEAR FROM (E) DUCT.
45. (N) 4X4 WOOD COLUMN.
46. (N) SHELVES ABOVE W / D.
47. RELOCATED DOOR FROM (E) ENTRY.
48. (N) WALK OFF GRATE. SIZE AND STYLE TO MATCH (E).
49. (N) BYLIN SMOWMELT SYSTEM (NORTH EAVES).
50. PV SYSTEM PER KMA SOLAR DESIGN REQUIREMENTS. SOLAR AREA (525 SF). PROVIDE CONDUIT FOR CONNECTION.
51. SHOWER NICHE. CONFIRM SIZE AND LOCATION WITH OWNER.
52. SHOWER BENCH: 12" DEEP BY 18" HIGH
53. PARTIAL HEIGHT WALL (36"), TILE ALL SIDES.
54. RIDGE VENT
55. PATH OF DUCTWORK. PROVIDE SIDEWALL AND FLOOR REGISTERS. INSULATE DUCT IN GARAGE AREA. FINAL LAYOUT TO BE DETERMINED BY CONTRACTOR.
56. SHAFT OPENING. CLOSE AND SEAL AROUND DUCTS.
57. GAS AND ELECTRIC METERS. SOLAR UTILITY INTERFACE EQUIPMENT, DISCONNECT SWITCHES, OR REQUIRED KMPUD ACCESS POINT
58. 6x6 WOOD TRIM
59. WORKBENCH. FOR REFERENCE ONLY
60. (E) WINDOW. REPLACE GLAZING

ELECTRICAL POWER NOTES

A. SEE RCP'S FOR TYPE AND LOCATION OF ALL LIGHT FIXTURES AND SWITCHES.
B. PROVIDE POWER FOR ALL APPLIANCES AND EQUIPMENT PER MANUFACTURER'S SPECS.
C. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST ADDITION OF THE CALIFORNIA ELECTRICAL CODE (CEC) AS WELL AS ALL APPLICABLE STATE & LOCAL CODES & ORDINANCES.
D. ALL ELECTRICAL PANELS SHALL BE LOCATED PER OWNER'S APPROVAL.
E. HEIGHTS AFF. ARE TO THE CENTERLINE OF ELECTRICAL BOX.
F. ALL OUTLETS IN BATHROOMS, LAUNDRY ROOMS AND OTHER WET AREAS TO BE GFCI. ALL OUTLETS TO BE AFCI. EXTERIOR OUTLETS TO BE GFCI WITH WP COVER.
G. OUTLET LOCATIONS TO BE REVIEWED WITH OWNER PRIOR TO INSTALLATION.
H. IDENTIFY (E) OUTLET LOCATIONS IN ENTRY / MUDROOM 02 AND COORDINATE LOCATIONS FOR (N) OUTLETS w/ OWNER.
I. PROVIDE CONDUIT FOR CONNECTION TO SOLAR PV SYSTEM.
J. VERIFYING EXISTING LOAD AND CONFIRM EXISTING SERVICE IS ADEQUATELY SIZED FOR NEW LOADS AND COMPATABLE WITH PV SYSTEM. INFORM OWNER OF ANY REQUIRED CHANGES TO EXISTING SERVICE AND PANELS.
K. PROVIDE (N) SUBPANEL FOR NEW LIVING AREA, BEDROOM, AND BATH LOCATED IN BATH 29

HVAC NOTES

A. HVAC SYSTEM TO BE ULTRA HIGH EFFICEINCY.
B. PROVIDE HYDRONIC AIR HANDLER SYSTEM POWERD BY TANKLESS WATER HEATER.
   A. ALTERNATE: ELECTRIC WATER HEATER AND AIR HANDLER WITH COLD-CLIMATE HEAT PUMP.
C. PROVIDE DUCTING TO WORK AREA IN GARAGE WITH SWITCH OPERATED DAMPER
D. PROVIDE AIR CIRCULATION FAN AND DUCT FROM EXISTING LIVING AREA TO LOWER FLOOR.

LEGEND

$	SWITCH	(T)	THERMOSTAT
$3	3-WAY SWITCH	(J)	JUNCTION BOX
$D	SWITCH w/ DIMMER	▼	TELEPHONE / DATA PORT
	110 V DUPLEX OUTLET	Tv	CATV
	110 V DUPLEX OUTLET, GFCI	(P)	PASS THROUGH BOX
+42	110 V DUPLEX OUTLET @ 42" AFF	(S)	SPEAKER WIRE BOX
+42	110 V DUPLEX OUTLET, GFCI @ 42" AFF		
220V	220 V DUPLEX OUTLET		

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1/25/2021

ROPER RESIDENCE

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
REVISIONS:

PERMIT SET

SECOND FLOOR PLAN

A2.02

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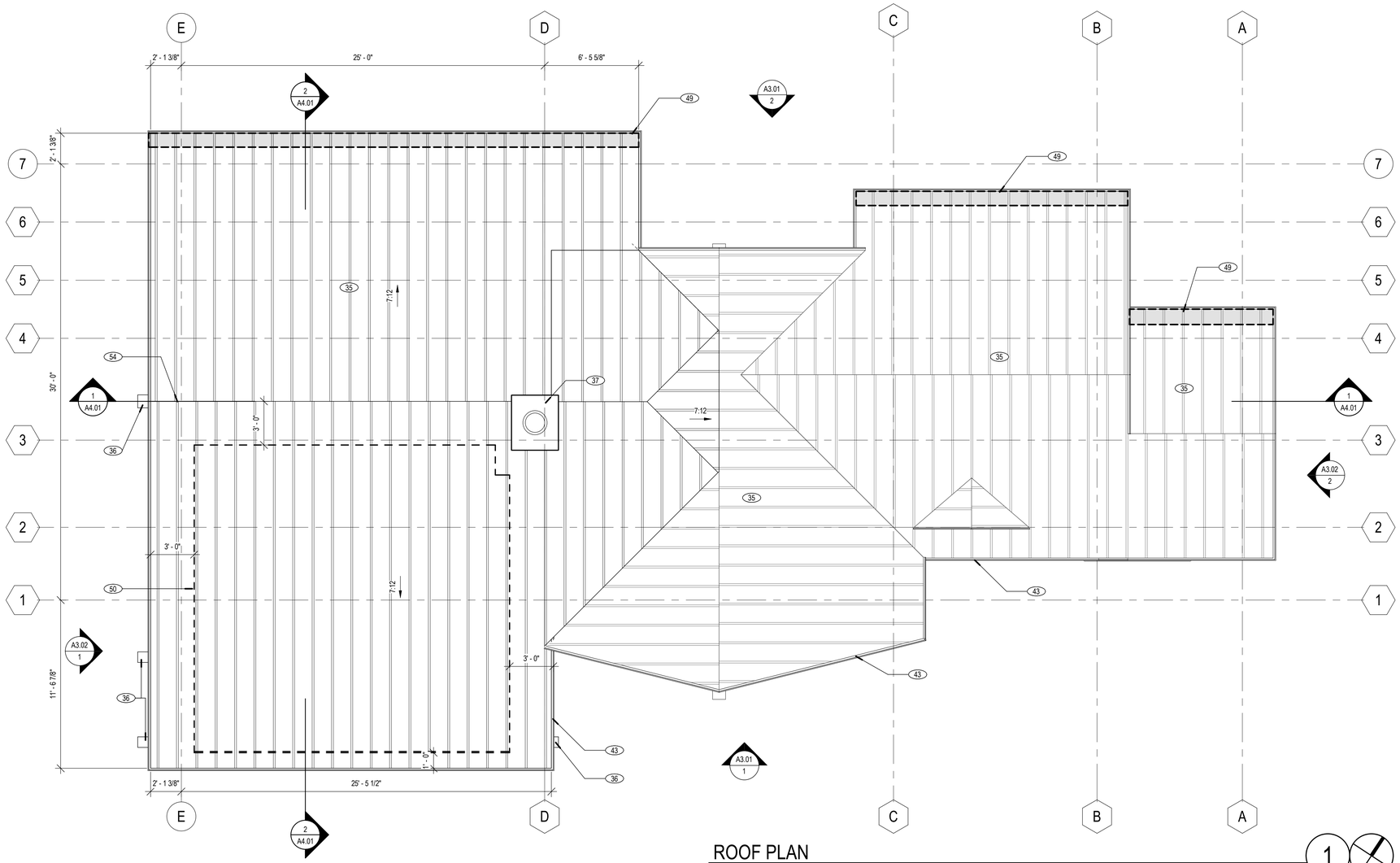

ROOF PLAN

1/4" = 1'-0"

1

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4. ROOF LINE / STRUCTURE ABOVE.
5. (N) INFILL @ WALL OPENING.
6. (E) OVERHEAD LIGHT, TO REMAIN.
7. (N) OVERHEAD LIGHT.
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58. 6x6 WOOD TRIM
59. WORKBENCH. FOR REFERENCE ONLY
60. (E) WINDOW. REPLACE GLAZING

SOLAR POWER (PV) NOTES

A. SYSTEM TO BE RATED FOR HEAVY SNOW AND ICE ENVIRONMENT.
B. PROVIDE UTILITY INTERFACE EQUIPMENT, DISCONNECT SWITCHES OR REQUIRED KMPUD ACCESS POINT. LOCATION OF EQUIPMENT TO BE CONFIRMED WITH KMPUD.
C. ALL GLASS SURFACES TO BE COVERED WITH ANTI-REFLECTIVE COATING.

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LICENSED ARCHITECT
TODD BENSON
RENEWAL
C-32925
RENEWAL: 09/30/2021
STATE OF CALIFORNIA

1/25/2021

ROPER RESIDENCE

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
REVISIONS:

PERMIT SET

ROOF PLAN

A2.03

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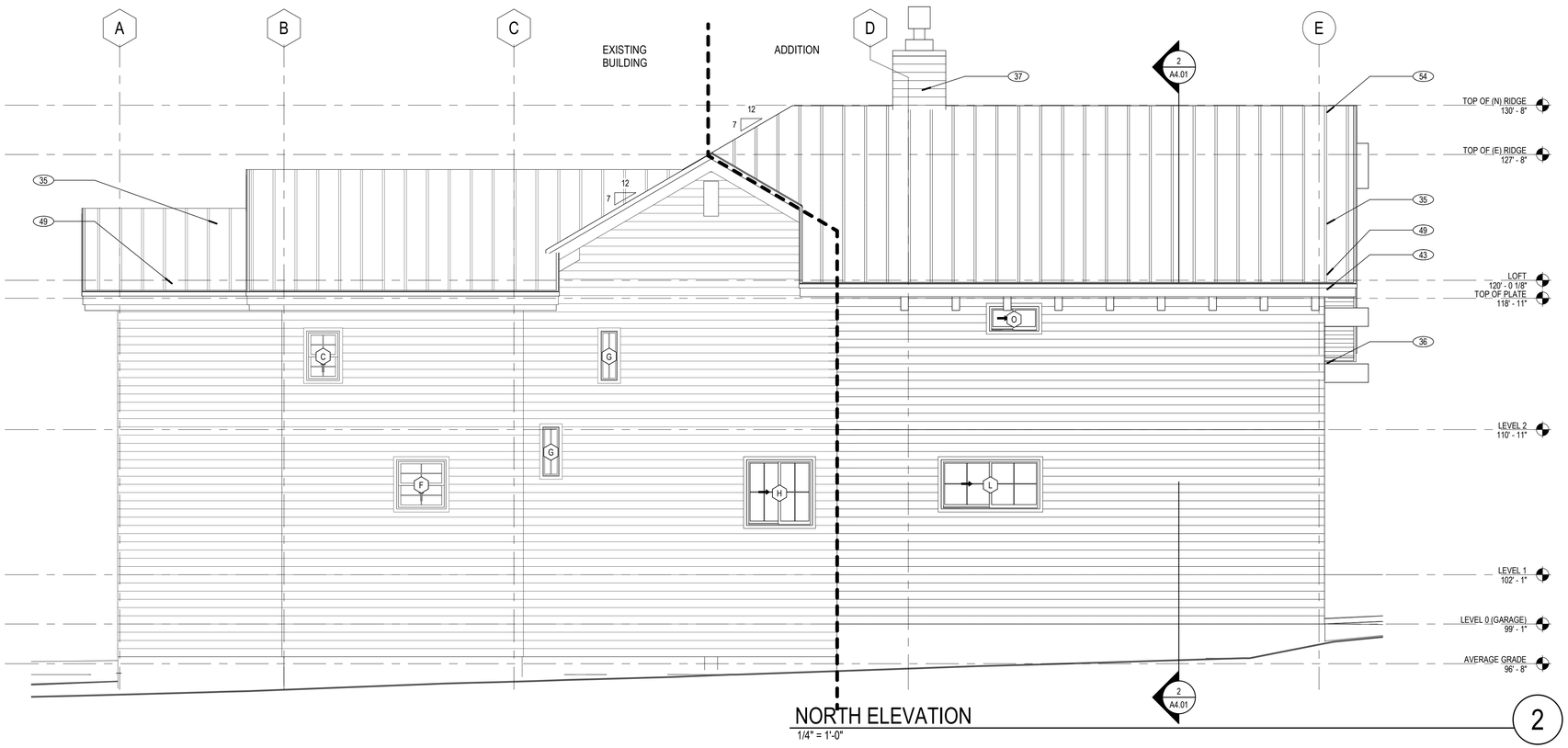
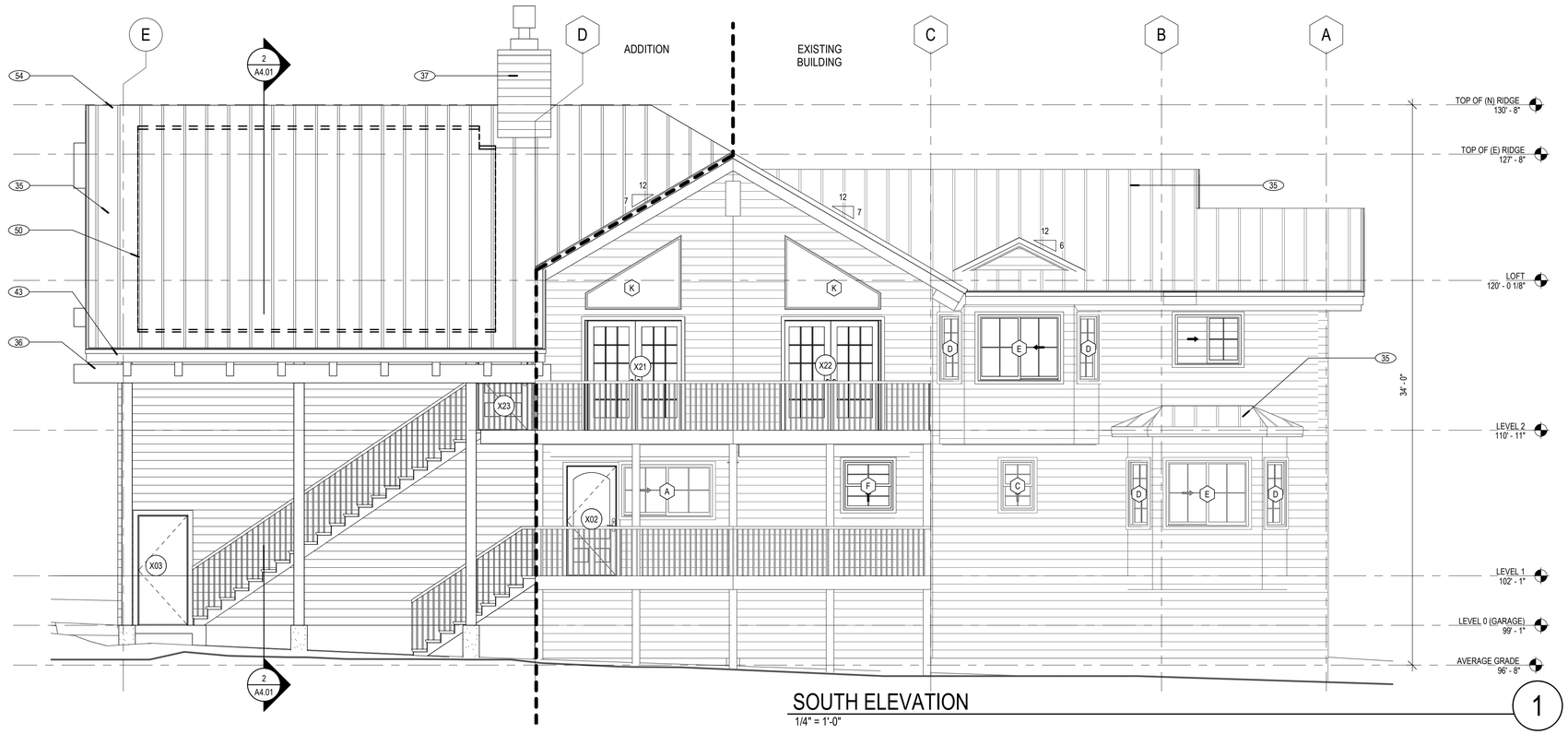


NORTH ELEVATION

1/4" = 1'-0"

2



SOUTH ELEVATION

1/4" = 1'-0"

1

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3. (N) WINDOW. INTERIOR AND EXTERIOR TRIM TO MATCH (E).
4. ROOF LINE / STRUCTURE ABOVE.
5. (N) INFILL @ WALL OPENING.
6. (E) OVERHEAD LIGHT, TO REMAIN.
7. (N) OVERHEAD LIGHT.
8. (N) PATIO LIGHT / WALL SCONCE.
9. (N) WINDOW. TRIM TO MATCH (E). TYPICAL (N) WINDOWS.
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15. (N) CONCRETE STOOP AND STEP. 2% MAX SLOPE AWAY FROM HOUSE TO TRAIN.
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47. RELOCATED DOOR FROM (E) ENTRY.
48. (N) WALK OFF GRATE. SIZE AND STYLE TO MATCH (E).
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58. 6x6 WOOD TRIM
59. WORKBENCH. FOR REFERENCE ONLY
60. (E) WINDOW. REPLACE GLAZING

TYPICAL MATERIAL NOTES

1. SIDING: SHIPLAP TO MATCH EXISTING. STAIN.
2. FASCIA: 2x12 PLAIN, SELECT TIGHT KNOT (STK), ROUGH SAWN FACE. STAIN.
3. SHINGLE MOLD: 1x6 PLAIN, SELECT TIGHT KNOT (STK), ROUGH SAWN FACE WESTERN RED CEDAR. STAIN.
4. MISC. TRIM: TO MATCH OTHER GRADES FOR SIMILAR WORK. STAIN
5. ROOF: STANDING SEAM, METAL SALES MAGNA-LOC 180. COLOR: HEMLOCK GREEN. PVDF FLOUROCARBON PAINT w/ 45 YEAR FINISH WARRANTY (35 YEAR FADE). 25 YEAR PERFORATION WARRANTY.
6. SOFFITS: 2x6 T&G, STAINED
7. EXPOSED STRUCTURE: STAINED
8. RAILS AND STAIRS: STAIN
9. WINDOWS: ANDERSON SERIES 400 BOD. EXTERIOR COLOR: TERRATONE
10. GLAZED DOORS: ANDERSON SERIES 400 BOD. EXTERIOR COLOR: TERRATONE
11. FLUSH DOORS: WOOD. STAIN.

STAIN COLOR: STAIN TO MATCH EXISTING COLOR. CABOT SEMI-SOLID, REDWOOD

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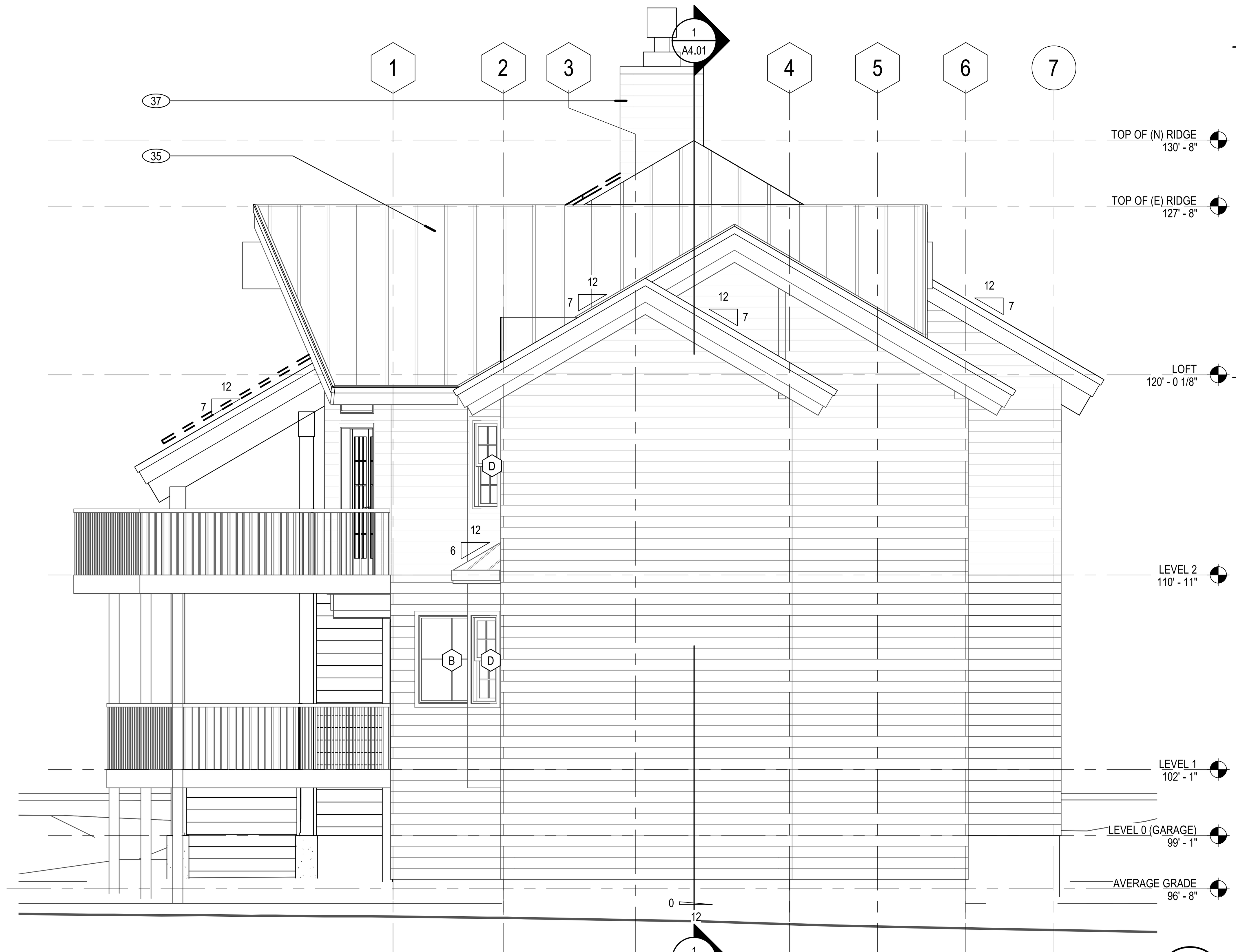
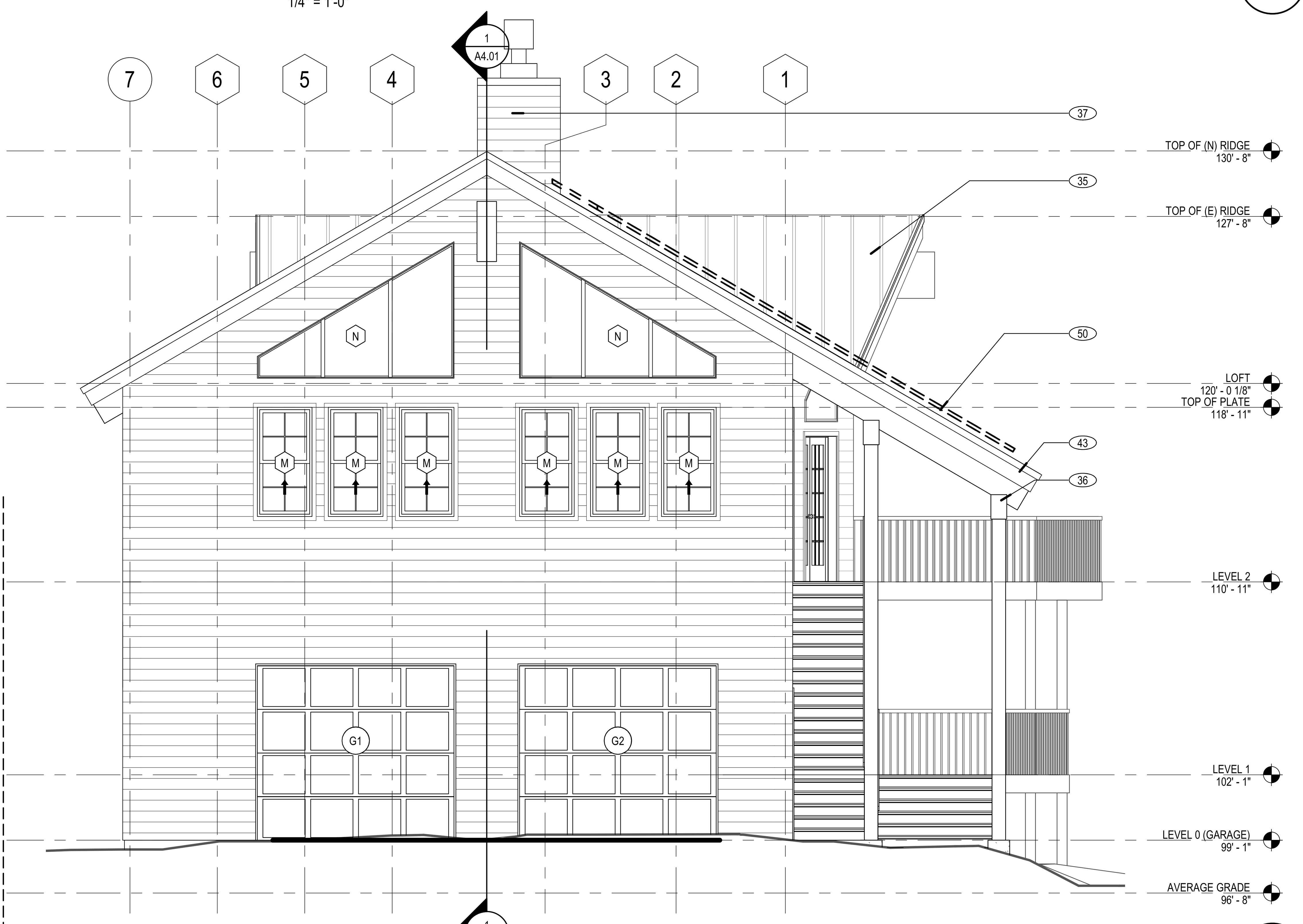
ELEVATIONS

A3.01

1/25/2021 4:35:21 PM BIM 360://Roper Residence/Roper Residence.rvt



EAST ELEVATION
1/4" = 1'-0"
2



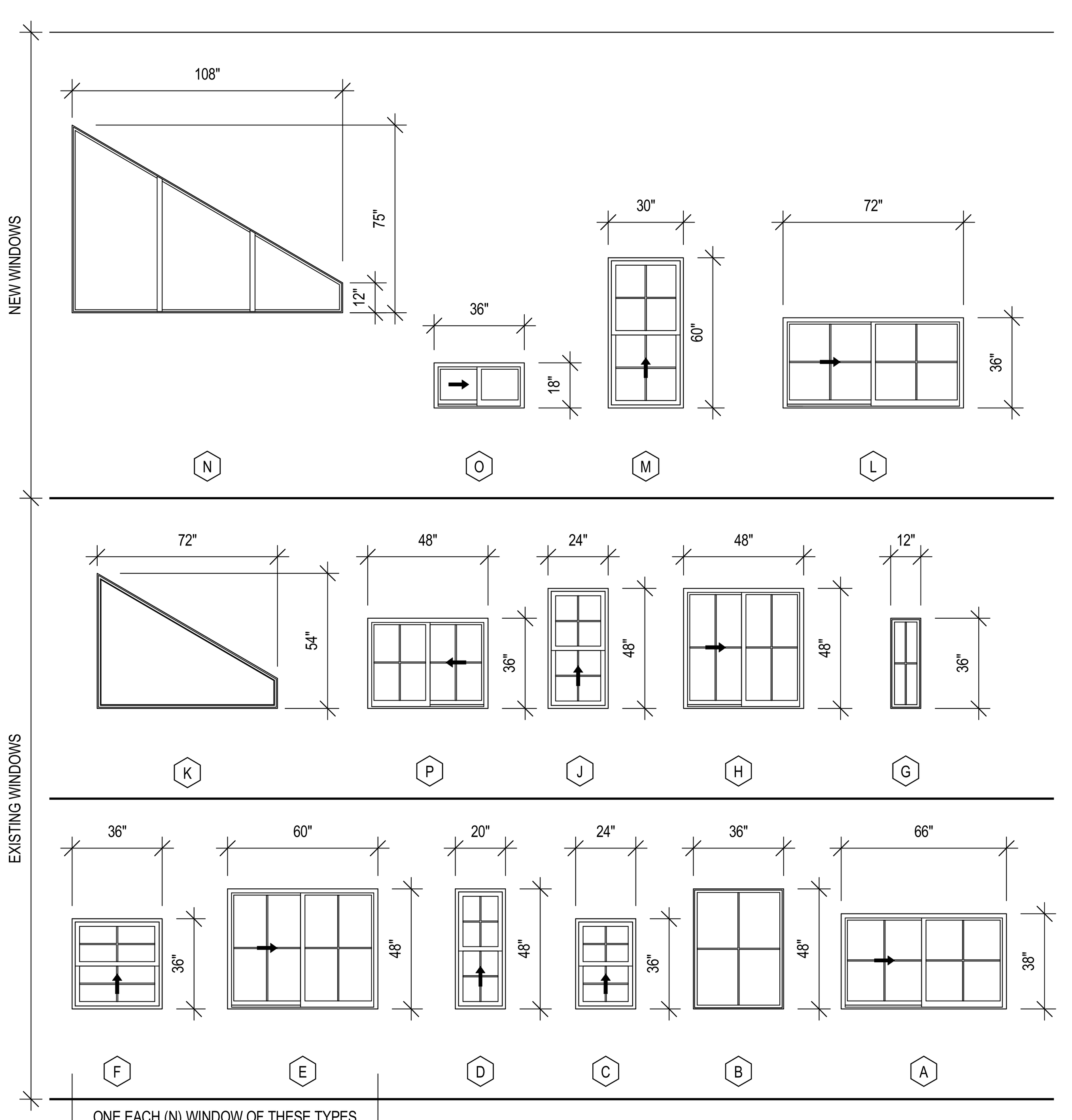
WEST ELEVATION
1/4" = 1'-0"
1

WINDOW SCHEDULE (NEW)

NO.	TYPE	H	W	SILL HT	NOTES
LEVEL 0 (GARAGE)					
10	L	36"	72"	84"	
LEVEL 1					
9	H	48"	48"	36"	RELOCATED (E) WINDOW
11	F	36"	36"	48"	
LEVEL 2					
23N	E	48"	60"	36"	REPLACE (E) WINDOW (ALTERNATE - GLAZING ONLY)
24N	P	36"	48"	48"	REPLACE (E) WINDOW (ALTERNATE - GLAZING ONLY)
31	O	18"	36"	72"	
32	M	60"	30"	36"	
33	M	60"	30"	36"	
34	M	60"	30"	36"	
35	M	60"	30"	36"	
36	M	60"	30"	36"	
37	M	60"	30"	36"	
41	N	75"	108"	112"	
42	N	75"	108"	112"	

WINDOW NOTES:

A. ALL WINDOWS TO BE HIGH-EFFICIENCY WITH LOW-E GLAZING
B. ALUMINUM OR VINYL CLAD WOOD WINDOWS. COLORS AS SELECTED BY OWNER FROM MANUFACTURER'S FULL RANGE.



WINDOW TYPES
1/4" = 1'-0"
3

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GENERAL SHEET NOTES

1. SEE GENERAL NOTES APPLICABLE TO ENTIRE PROJECT IN THE A.0 SERIES OF DRAWINGS AT THE FRONT OF THIS SET
2. DO NOT SCALE DRAWINGS. DIMENSIONS TAKE PRECEDENCE, AND LARGER SCALE DETAILS TAKE PRECEDENCE OVER SMALLER SCALE DETAILS.
3. SEE SHEET A0.2 FOR ALL INTERIOR WALL TYPES.
4. ALL INTERIOR WALLS TO EXTEND TO UNDERSIDE OF STRUCTURE ABOVE U.N.O.
5. NOTES ARE TYPICAL. NOT ALL ELEMENTS IN DRAWINGS ARE NOTED.
6. DIMENSIONS OF (E) STRUCTURE ARE BASED UPON PROVIDED DRAWINGS. CONTRACTOR TO CONFIRM ALL DIMENSIONS PRIOR TO WORK.

SHEET NOTES

1. (N) WOOD STAIRS, STRINGERS, AND SUPPORTS TO MATCH (E) DECK AND RAIL.
2. (N) ENTRY DOOR AND FRAME.
3. (N) WINDOW. INTERIOR AND EXTERIOR TRIM TO MATCH (E).
4. ROOF LINE / STRUCTURE ABOVE.
5. (N) INFILL @ WALL OPENING.
6. (E) OVERHEAD LIGHT, TO REMAIN.
7. (N) OVERHEAD LIGHT.
8. (N) PATIO LIGHT / WALL SCONCE.
9. (N) WINDOW. TRIM TO MATCH (E). TYPICAL (N) WINDOWS.
10. RELOCATED (E) WINDOW.
11. (N) WOOD STUD WALL.
12. (N) STRUCTURAL COLUMN.
13. (N) WOOD STEPS, PLATFORM AND RAIL. 36" TO TOP OF RAIL.
14. SKI RACKS
15. (N) CONCRETE STOOP AND STEP. 2% MAX SLOPE AWAY FROM HOUSE TO TRAIN.
16. (N) DG WALK.
17. (N) ASPHALT DRIVEWAY.
18. (N) TENCH DRAIN SET IN CONCRETE. DAYLIGHT TO SOUTH OF DRIVEWAY.
19. (N) CRAWL SPACE DOOR. 24"X36".
20. (N) UTILITY SINK. CONNECT TO (E) PLUMBING.
21. TANDEM BIKE RACK
22. MOUNTAIN / ROAD BIKE RACK (4 BIKES)
23. BOAT STORAGE RACK (CEILING MOUNT).
24. (N) COUNTER WITH BASE CABINETS., SUPPLIED BY OWNER
25. (N) INSTANT HOT WATER HEATER AND FURNACE. COORDINATE ELECTRICAL IN THIS AREA WITH EQUIPMENT REQUIREMENTS.
26. (E) WALL, TO BE OPENED FOR STRUCTURAL WORK. REPLACE INSULATION. (N) GYPSUM WALLBOARD BOTH SIDES. TEXTURE AND PAINT. REPLACE BASE.
27. (E) TILE FLOOR, TO REMAIN.
28. (N) TILE FLOOR.
29. (N) FRENCH DOORS IN (E) OPENING.
30. (N) DOOR WITH WOOD TRIM, TO MATCH EXISTING. TYPICAL (N) DOORS.
31. GLASS SHOWER ENCLOSURE.
32. WOOD OR METAL SHIP LADDER.
33. WOOD RAIL. TOP RAIL @ 42" AFF, PICKETS AT 4" MAX O.C.
34. BUILT IN BOOT STORAGE, SUPPLIED BY OWNER.
35. (N) METAL ROOF o/ (2) LAYERS GRACE ULTRA HT UNDERLAYMENT (NO SUBSTITUTIONS).
36. (N) STRUCTURAL BEAM w/ PREFINISHED OR COPPER END CAP.
37. (N) WOOD FRAMED CHIMNEY. REUSE (E) VENT CAP.
38. (E) WINDOW, TO REMAIN.
39. (E) DOOR, TO REMAIN.
40. 240V NEMA 14-50 (ELECTRIC VEHICLE OUTLETS)
41. ALTERNATE: 2' DEEP BUILT IN CABINETS
42. (E) LIGHTING, TO REMAIN.
43. (N) FASCIA. FINISH TO MATCH EXISTING. TYP ALL ROOF EAVES.
44. (E) GAS STOVE. PROVIDE (N) SHAFT FOR (E) DUCT. MAINTAIN MIN 1" CLEAR FROM (E) DUCT.
45. (N) 4X4 WOOD COLUMN.
46. (N) SHELVES ABOVE W / D.
47. RELOCATED DOOR FROM (E) ENTRY.
48. (N) WALK OFF GRATE. SIZE AND STYLE TO MATCH (E).
49. (N) BYLIN SMOWMELT SYSTEM (NORTH EAVES).
50. PV SYSTEM PER KMA SOLAR DESIGN REQUIREMENTS. SOLAR AREA (525 SF). PROVIDE CONDUIT FOR CONNECTION.
51. SHOWER NICHE. CONFIRM SIZE AND LOCATION WITH OWNER.
52. SHOWER BENCH: 12" DEEP BY 18" HIGH
53. PARTIAL HEIGHT WALL (36"), TILE ALL SIDES.
54. RIDGE VENT
55. PATH OF DUCTWORK. PROVIDE SIDEWALL AND FLOOR REGISTERS. INSULATE DUCT IN GARAGE AREA. FINAL LAYOUT TO BE DETERMINED BY CONTRACTOR.
56. SHAFT OPENING. CLOSE AND SEAL AROUND DUCTS.
57. GAS AND ELECTRIC METERS. SOLAR UTILITY INTERFACE EQUIPMENT, DISCONNECT SWITCHES, OR REQUIRED KMPUD ACCESS POINT
58. 6x6 WOOD TRIM
59. WORKBENCH. FOR REFERENCE ONLY
60. (E) WINDOW. REPLACE GLAZING

TYPICAL MATERIAL NOTES

1. SIDING: SHIPLAP TO MATCH EXISTING. STAIN.
2. FASCIA: 2x12 PLAIN, SELECT TIGHT KNOT (STK), ROUGH SAWN FACE. STAIN.
3. SHINGLE MOLD: 1x6 PLAIN, SELECT TIGHT KNOT (STK), ROUGH SAWN FACE WESTERN RED CEDAR. STAIN.
4. MISC. TRIM: TO MATCH OTHER GRADES FOR SIMILAR WORK. STAIN
5. ROOF: STANDING SEAM, METAL SALES MAGNA-LOC 180. COLOR: HEMLOCK GREEN. PVDF FLOUROCARBON PAINT w/ 45 YEAR FINISH WARRANTY (35 YEAR FADE). 25 YEAR PERFORATION WARRANTY.
6. SOFFITS: 2x6 T&G, STAINED
7. EXPOSED STRUCTURE: STAINED
8. RAILS AND STAIRS: STAIN
9. WINDOWS: ANDERSON SERIES 400 BOD. EXTERIOR COLOR: TERRATONE
10. GLAZED DOORS: ANDERSON SERIES 400 BOD. EXTERIOR COLOR: TERRATONE
11. FLUSH DOORS: WOOD. STAIN.

STAIN COLOR: STAIN TO MATCH EXISTING COLOR. CABOT SEMI-SOLID, REDWOOD

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1/25/2021

ROPER RESIDENCE

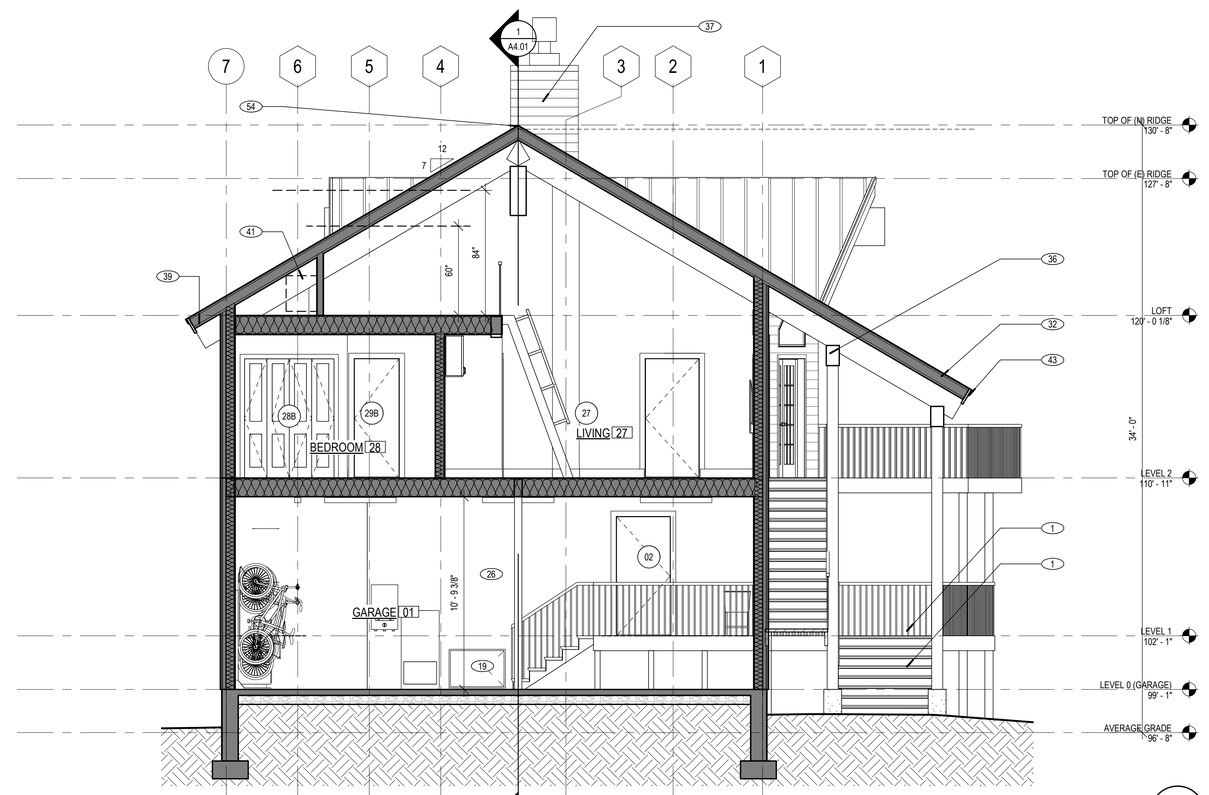
APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
REVISIONS:

PERMIT SET

ELEVATIONS AND WINDOW TYPES

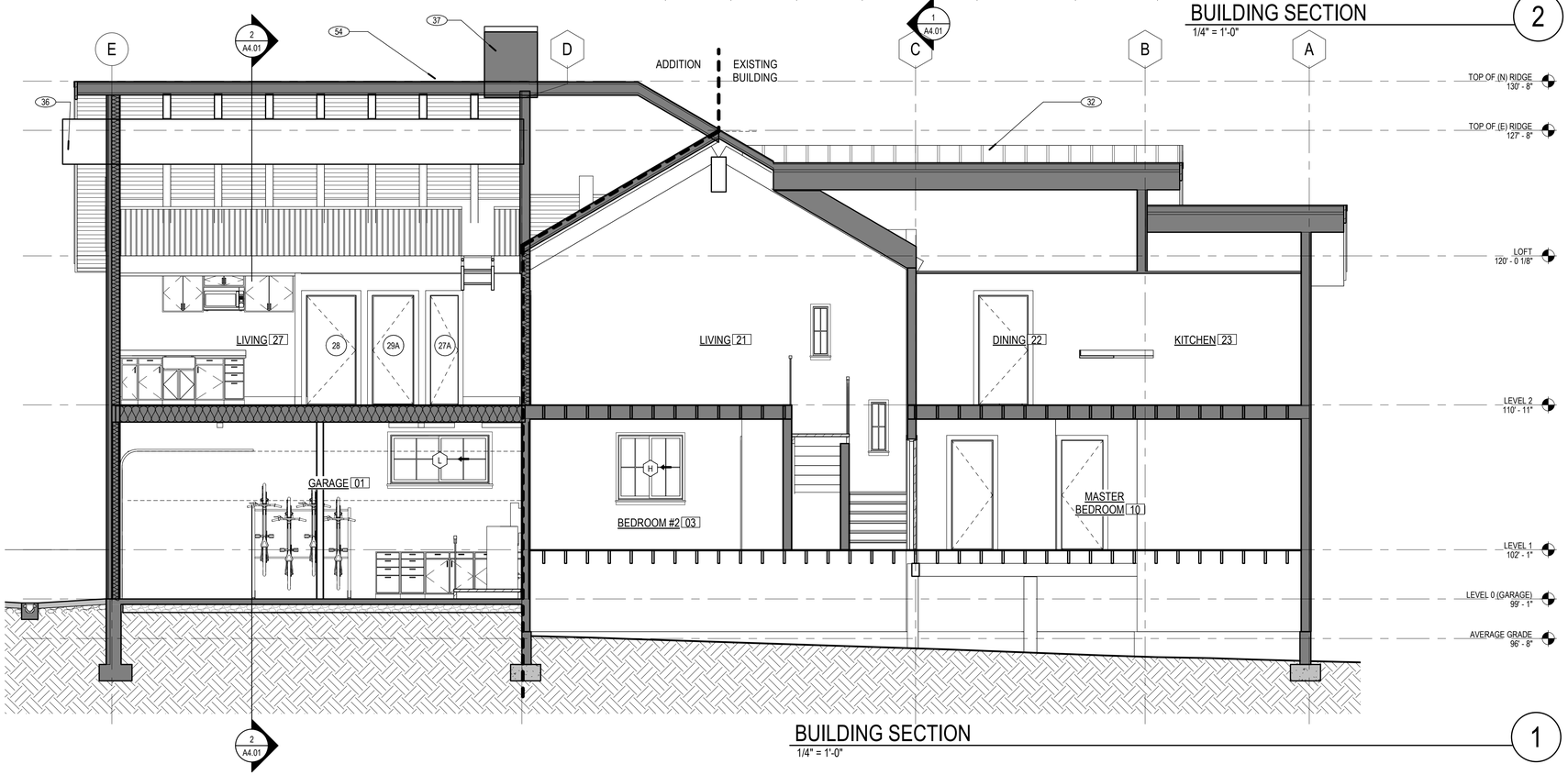
A3.02



BUILDING SECTION

1/4" = 1'-0"

2



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LICENSED ARCHITECT
TODD BENSON
RENEWAL
C-12925
RENEWAL: 09/30/2021
STATE OF CALIFORNIA

1/25/2021

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33838 HAWKWEED WAY
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KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
REVISIONS:

PERMIT SET

BUILDING SECTIONS

A4.01

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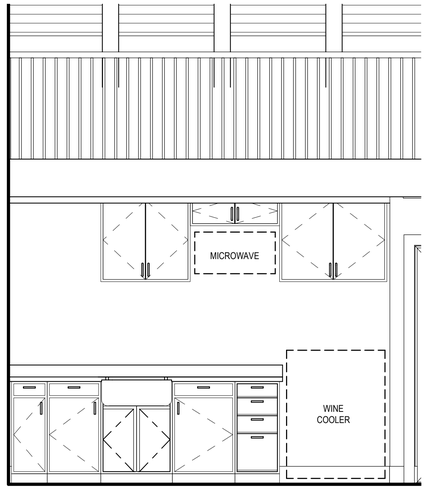
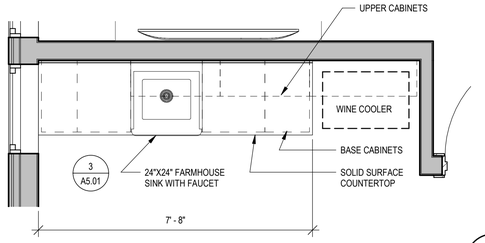


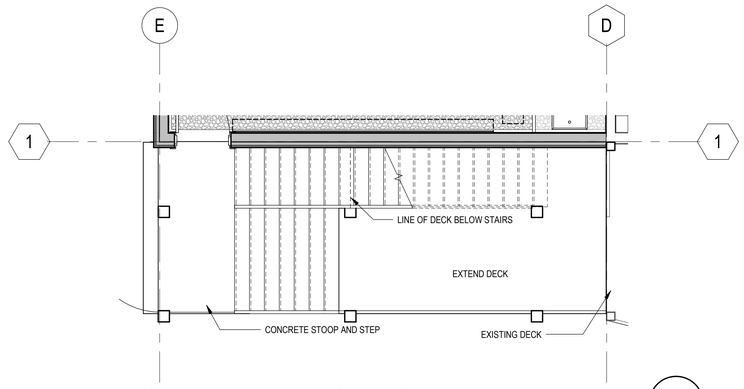
WET BAR ELEVATION 3

1/2" = 1'-0"



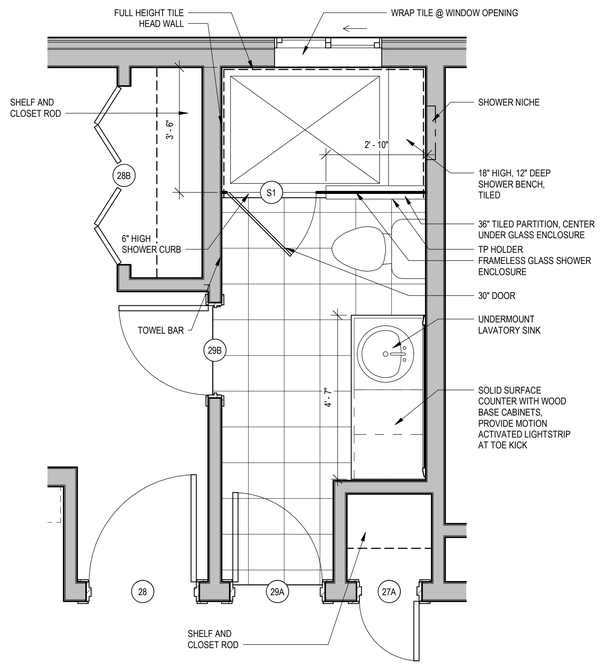
WET BAR 2

1/2" = 1'-0"



ALTERNATE ENTRY STAIRS AND DECK 4

1/4" = 1'-0"



BATHROOM 29 PLAN 1

1/2" = 1'-0"

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ENLARGED PLANS, INTERIOR ELEVATIONS

A5.01

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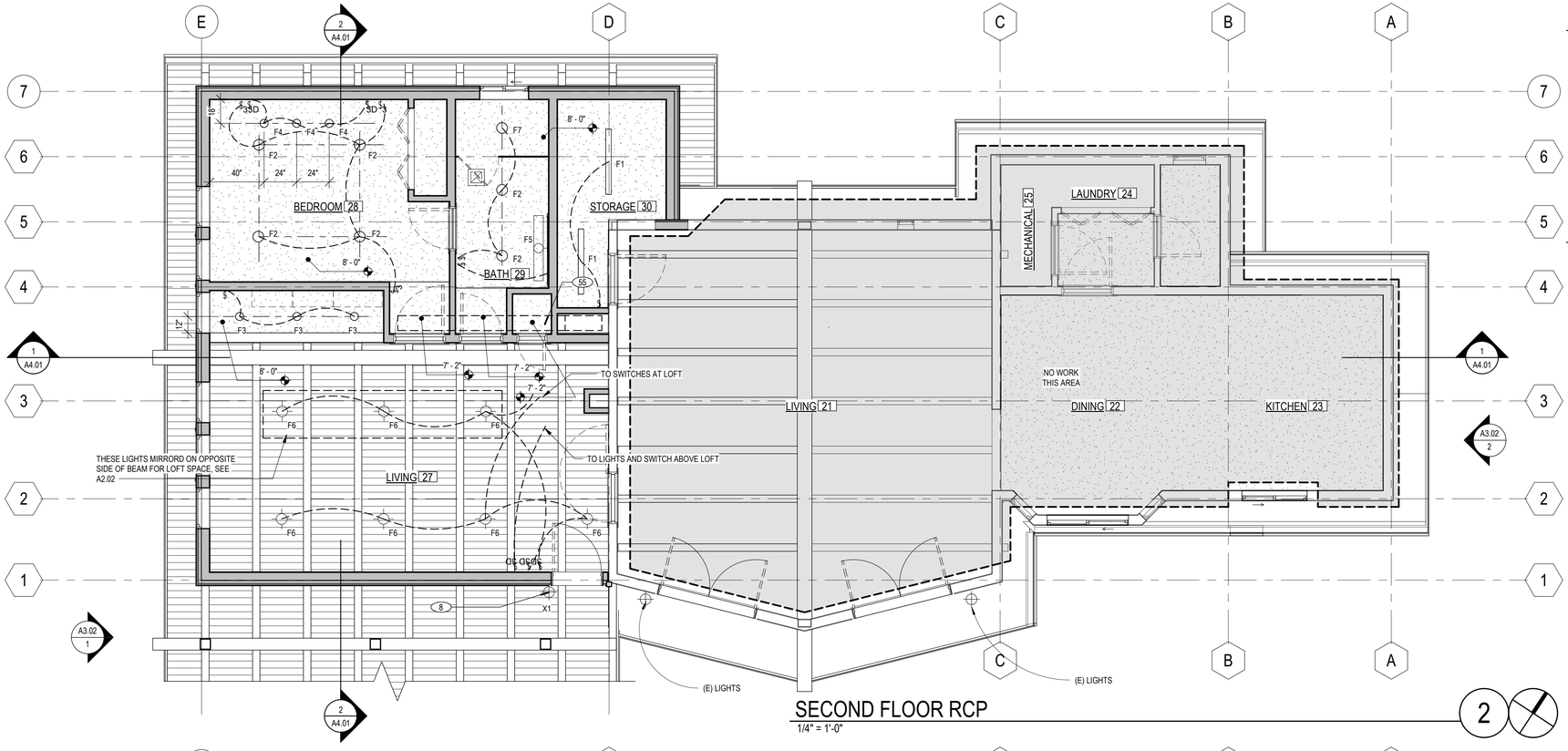
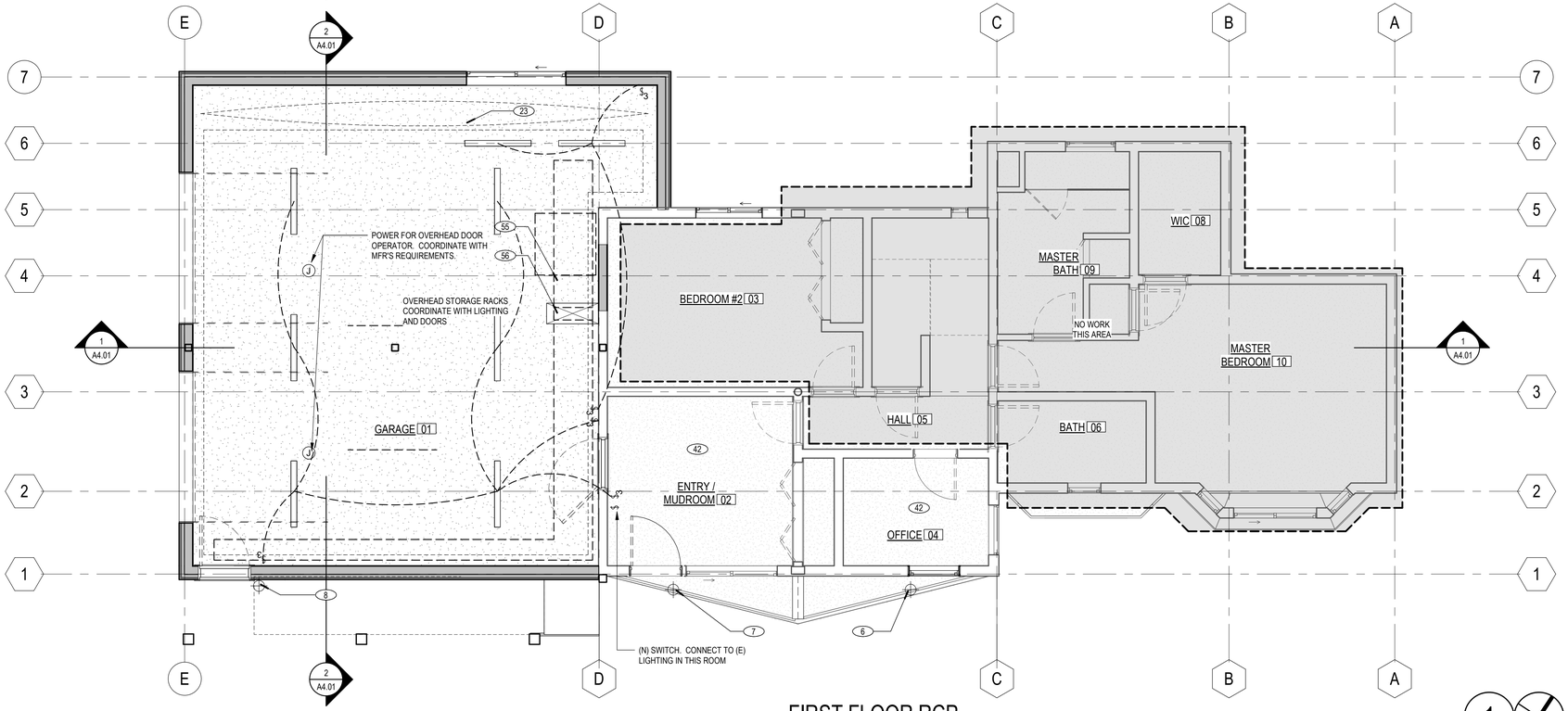


SECOND FLOOR RCP

1/4" = 1'-0"



FIRST FLOOR RCP

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LEGEND

GENERIC SYMBOLS

- X'-XX" — HEIGHT ABOVE FINISHED FLOOR

CEILINGS

- GYPSUM BOARD

MECHANICAL

- SUPPLY DIFFUSER
- RETURN REGISTER
- EXHAUST REGISTER

LIGHTING FIXTURES

- RECESSED DOWNLIGHT
- SURFACE MOUNTED DOWNLIGHT
- STRIP/UTILITY LIGHT
- WALL SCONCE
- WALL MOUNT / VANITY

DEVICES

- (S) SMOKE DETECTOR
- (C) CARBON MONOXIDE ALARM

SWITCHES

- $3 THREE-WAY
- $D THREE-WAY DIMMER

LIGHTING FIXTURE SCHEDULE

MARK	TYPE	DESCRIPTION	ALTERNATE
F1	STRIP	48"	8" ROUND (PROVIDE 2 PER FIXTURE)
F2	DOWNLIGHT	8" ROUND	
F3	DOWNLIGHT	4" ROUND	2" ROUND (PROVIDE 4)
F4	DOWNLIGHT	DIRECTIONAL, 2" ROUND	
F5	WALL MOUNT	36", VANITY	
F6	DOWNLIGHT	CEILING MOUNT, 8"	PENDANT
F7	DOWNLIGHT	8" ROUND, WET LOCATION	
F8	LED STRIP	MOTION ACTIVATED TOE KICK LIGHT	
X1	WALL SCONCE	MATCH EXISTING, LED LAMPS DAYLIGHT SENSOR	

LIGHTING NOTES

A. ALL LIGHTING TO BE LED
B. LIGHT SWITCHES TO MATCH EXISTING (LUTRON MAESTRO SERIES)
C. FINAL FIXTURE SELECTIONS BY OWNER
D. PROVIDE MOTION ACTIVATED TOE-KICK LIGHT (F8) AT BATHROOM VANITY

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LICENSED ARCHITECT
TODD BENSON
No. RENEWAL
C-32925
RENEWAL: 09/30/2021
STATE OF CALIFORNIA

1/25/2021

ROPER RESIDENCE

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 202017
DATE: 15 JANUARY, 2021
REVISIONS:

PERMIT SET

FIRST / SECOND FLOOR RCP'S

A7.01

1/25/2021 4:33:26 PM BIM 360://Roper Residence/Roper Residence.rvt

SPECIAL INSPECTION SCHEDULE

AREAS REQUIRING SPECIAL INSPECTION:	FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
CONCRETE CONSTRUCTION (CBC 1705.3)			
REINFORCING STEEL PLACEMENT			VERIFY SIZE, CLEARANCES, SPLICES, AND PROPER TIES
EMBEDDED BOLTS OR PLATES			
VERIFY REQUIRED DESIGN MIX			VERIFY MIX DESIGN MEETS STREGTH AND EXPOSURE REQUIREMENTS LISTED ON APPROVED PLANS
CONCRETE PLACEMENT/SAMPLING			INCLUDES SAMPLING FOR AIR, SLUMP, STRENGTH, AND TEMPERATURE TECHNIQUES
INSPECT FORMWORK			VERIFY SHAPE, LOCATION, AND MEMBER DIMENSIONS
POST-INSTALLED ANCHORS	X		IN ACCORDANCE WITH APPROVED ICC-ES REPORT. PERIODIC INSPECTIONS ALLOWED IF STATED IN ES REPORT
STRUCTURAL STEEL CONSTRUCTION (CBC 1705.2, 1705.11, AND 1705.12)			
PRIOR TO WELDING (TABLE N5.4-1, AISC 360-10):			
VERIFY WELDING PROCEDURES	X		
MATERIAL IDENTIFICATION		X	VERIFY TYPE AND GRADE OF MATERIAL
WELDER IDENTIFICATION		X	VERIFY THERE IS A SYSTEM IN PLACE TO IDENTIFY THE WELDER WHO HAS WELDED A JOINT OR MEMBER.
FIT-UP GROOVE WELDS		X	VERIFY JOINT PREPARATION, DIMENSIONS, CLEANLINESS, TACKING, AND BACKING
ACCESS HOLES		X	VERIFY CONFIGURATION AND FINISH
FIT-UP FILLET WELDS		X	VERIFY ALIGNMENT, GAPS AT ROOT, CLEANLINESS OR STEEL SURFACES, TACK WELD QUALITY, AND LOCATION
DURING WELDING (TABLE N5.4-2, AISC 360-10):			
USE OF QUALIFIED INSPECTORS		X	VERIFY THAT WELDERS ARE APPROPRIATELY QUALIFIED
CONTROL AND HANDLING OF WELDING CONSUMABLES		X	VERIFY PACKAGING AND EXPOSURE CONTROL
CRACKED TACK WELDS		X	VERIFY WELDING IS NOT OVER A CRACKED TACK WELD
ENVIRONMENTAL CONDITIONS		X	VERIFY WIND SPEED IS WITHIN LIMITS AS WELL AS PRECIPITATION AND TEMPERATURE
WPS FOLLOWED		X	VERIFY ITEMS SUCH AS WELDING EQUIPMENT SETTINGS, TRAVEL SPEED, WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED, AND PROPER POSITION
WELDING TECHNIQUES		X	VERIFY INTERPASS AND FINAL CLEANING; EACH PASS IS WITHIN PROFILE LIMITATIONS, AND QUALITY OF EACH PASS
AFTER WELDING (TABLE N5.4-3, AISC 360-10):			
WELDS CLEANED		X	VERIFY THAT WELDS HAVE BEEN PROPERLY CLEANED
SIZE, LENGTH, AND LOCATION OF WELDS	X		
WELDS MEET VISUAL ACCPETANCE CRITERIA	X		
ARC STRIKES	X		
K-AREA	X		
BACKING AND WELDING TABS REMOVED	X		
REPAIR ACTIVITIES	X		
DOCUMENT ACCEPTANCE/REJECTION OF WELD	X		
NONDESTRUCTIVE TESTING (SECTION N5.5, AISC 360-10):			
CJP WELDS (RISK CATEGORY II)		X	ULTRASONIC TESTING SHALL BE PERFORMED ON 10% OF CJP GROOVE WELDS IN BUTT, T- AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING IN MATERIALS 5/16' THICK OR GREATER. TESTING RATE MUST BE INCREASED IF >5% OF WELDS HAVE UNACCEPTABLE DEFECTS.
ACCESS HOLES (FLANGE > 2")	X		
WELDED JOINTS SUBJECT TO FATIGUE	X		
INSPECTION OF HIGH-STRENGTH BOLTING (SECTION N5.6, AISC 360-10)			
VERIFY MATERIAL CERTIFICATION FOR FASTENERS	X		PRIOR TO BOLTING
INSTALLATION OF BOLTS		X	
DOCUMENT ACCEPTANCE/REJECTION OF BOLTS	X		
OTHER STEEL INSPECTIONS (SECTION N5.7, AISC 360-10, TABLES J8-1 AND J10-1, AISC 341-10):			
STRUCTURAL STEEL DETAILS		X	ALL FABRICATED STEEL AND THEIR CONNECTIONS SHALL BE INSPECTED TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN IN THE APPROVED PLANS
ANCHOR RODS/EMBEDS SUPPORTING STRUCTURAL STEEL		X	SHALL BE ON THE PREMISES DURING THE PLACEMENT OF ANCHOR RODS/EMBEDMENTS. VERIFY DIAMETER, GRADE, TYPE, AND LENGTH OF ELEMENT AND THE EXTENT OR DEPTH OF EMBEDMENT PRIOR TO PLACEMENT OF CONCRETE.
REDUCED BEAM SECTIONS (RBS)		X	VERIFY CONTOUR AND FINISH AS WELL AS DIMENSIONAL TOLERANCES (SEE TABLE J8-1 OF AISC 341)
PROTECTED ZONES		X	VERIFY THAT NO HOLES OR UNAPPROVED ATTACHMENTS ARE MADE WITHIN THE PROTECTED ZONE (SEE TABLE J8-1 OF AISC 341)
WOOD CONSTRUCTION (CBC 1705.5.1, 1705.5.2, 1705.12.2)			
HIGH LOAD DIAPHRAGMS			VERIFY GRADE AND THICKNESS OF STRUCTURAL SHEATHING, VERIFY NOMINAL SIZE OF FRAMING MEMBERS AT ADJOINING PANEL EDGES
METAL-PLATE- CONNECTED TRUSSES W/ SPAN ≥ 60'-0" AND/OR HEIGHT ≥ 60"			VERIFY TRUSS MEMBER BRACING PER CBC 1705.5.2
SHEARWALLS, DIAPHRAGMS, COLLECTORS AND HOLDOWNS			VERIFY NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF THE SEISMIC FORCE-RESISTING SYSTEM, INCLUDING SHEAR WALLS, DIAPHRAGMS, DRAG STRUTS, BRACES, SHEAR PANELS AND HOLDOWNS.

STATEMENT OF SPECIAL INSPECTIONS

SPECIAL INSPECTIONS AND STRUCTURAL TESTING SHALL BE PROVIDED BY AN INDEPENDENT AGENCY EMPLOYED BY THE OWNER FOR THE ITEMS IDENTIFIED IN THIS SECTION AND IN OTHER AREAS OF THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS, UNLESS WAIVED BY THE BUILDING OFFICIAL (SEE CBC CHAPTER 17).

THE NAMES AND CREDENTIALS OF THE SPECIAL INSPECTORS TO BE USED SHALL BE SUBMITTED TO THE BUILDING OFFICIAL FOR APPROVAL.

DUTIES OF THE SPECIAL INSPECTOR:

a. THE SPECIAL INSPECTOR SHALL REVIEW ALL WORK LISTED BELOW FOR CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS AND THE 2019 CBC.
b. THE SPECIAL INSPECTOR SHALL FURNISH SPECIAL INSPECTION REPORTS TO THE EOR, CONTRACTOR, OWNER AND BUILDING OFFICIAL ON A WEEKLY BASIS, OR MORE FREQUENTLY AS REQUIRED BY THE BUILDING OFFICIAL. ALL ITEMS NOT IN COMPLIANCE SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, AND IF UNCORRECTED, TO THE EOR AND THE BUILDING OFFICIAL.
c. ONCE CORRECTIONS HAVE BEEN MADE BY THE CONTRACTOR, THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT TO THE BUILDING OFFICIAL STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS AS WELL AS THE APPLICABLE WORKMANSHIP PROVISIONS OF THE 2019 CBC.

DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR:

a. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE OWNER AND THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF WORK. IN ACCORDANCE WITH CBC 1704.4, THE STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF THE SPECIAL INSPECTION REQUIREMENTS CONTAINED WITHIN THIS "STATEMENT OF SPECIAL INSPECTIONS".
b. THE CONTRACTOR SHALL NOTIFY THE RESPONSIBLE SPECIAL INSPECTOR THAT WORK IS READY FOR INSPECTION AT LEAST ONE WORKING DAY (24 HOURS MINIMUM) BEFORE SUCH INSPECTION IS REQUIRED.
c. ALL WORK REQUIRING SPECIAL INSPECTION SHALL REMAIN ACCESSIBLE AND EXPOSED UNTIL IT HAS BEEN OBSERVED BY THE SPECIAL INSPECTOR.

PLEASE SEE THE "SPECIAL INSPECTION SCHEDULE" FOR THE TYPES, EXTENTS AND FREQUENCY OF SPECIFIC ITEMS REQUIRING SPECIAL INSPECTIONS AND STRUCTURAL TESTS AS PART OF THIS PROJECT.

DESIGN CRITERIA

RISK CATEGORY: II - TABLE 1604.5

VERTICAL LOADS

AREA	DESIGN DEAD LOAD	LIVE LOAD
ROOF	15 PSF	20 PSF
FLOOR	15 PSF	40 PSF

SNOW: FOR SITES OVER 25 PSF.

P_g = 350 PSF (GROUND SNOW LOAD)
$P_f = .7P_gC_eC_tI$ = 270 PSF (FLAT ROOF SNOW LOAD)
I_s = 1.0, C_e = 1.0, C_t = 1.1, C_s = 1.0

LATERAL FORCES
WIND:
- EXPOSURE CATEGORY = C
- RISK CATEGORY = II
- BASIC WIND SPEED, V = 110 MPH

SEISMIC:
$V = C_sW$
$C_s = S_{DI}/(R/I)$; $0.044\ S_{DS}*I_e < C_s < S_{D1}/((R/I_e)*T)$
- SEISMIC IMPORTANCE FACTOR, I_e = 1
- SPECTRAL RESPONSE ACCELERATION S_s = 0.946, S_1 = 0.326
- SITE CLASS PER TABLE 20-3.1 OF ASCE 7-16 = D-DEFAULT
- SPECTRAL RESPONSE COEFFICIENTS: S_{DS} = 0.757, S_{D1} = 0.429
- SEISMIC DESIGN CATEGORY = D
- ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE ANALYSIS
- RESPONSE MODIFICATION FACTOR PER TABLE 12.2-1 (ASCE 7-16) R = 6.5
- C_s = 0.116
- DESIGN BASE SHEAR, V = 22.2 KIPS (ULTIMATE)

PLANS & DETAILS LEGEND

SHEET NUMBER DESCRIPTION

S-XXX

- SHEET SEQUENCE NUMBER
  SUB-GROUP OF DESIGNATORS USED WHEN MORE THAN ONE SHEET OF SAME TYPE IS REQUIRED
- DETAIL TYPE DESIGNATOR
  0 - TYPICAL DETAILS
  1 - FOUNDATION DETAILS
  2 - FRAMING DETAILS
  3 - SHEAR DETAILS
  4 - STEEL DETAILS
  5 - MASONRY DETAILS
  6 - CUSTOM DETAILS
- SHEET TYPE DESIGNATOR
  0 - SPECIFICATIONS
  1 - FOUNDATION PLANS
  2 - FRAMING PLANS
  3 - SHEAR PLANS
  4 - DETAILS
  5 - STRUCTURAL ELEVATIONS
  6 - SK DETAILS / CONSTRUCTION ADMIN
- STRUCTURAL SHEETS

DETAIL CALL OUT DESCRIPTION

XXX
S-XXX

- DETAIL BUBBLE
  LOCATION OF STRUCTURAL DETAIL OR SECTION
- DETAIL CUT LINE
  DETAIL CUT LOOKING IN THE DIRECTION OF THE SECTION CUT. THE SECTION IS CONTINUOUS UNO.
- DETAIL NUMBER
  SPECIFIC TO EACH DETAIL.
- DETAIL LOCATION NUMBER
  SHEET LOCATION. SEE SHEET NUMBER DESCRIPTION

ABBREVIATIONS

AB	- ANCHOR BOLT
ABV	- ABOVE
ADDL	- ADDITIONAL
ADJ	- ADJACENT
ARCH	- ARCHITECTURAL
AYC	- ALASKAN YELLOW CEDAR
BLKG	- BLOCKING
BLW	- BELOW
BN	- BOUNDARY NAILS
BOS	- BOTTOM OF SHEATHING
BTWN	- BETWEEN
CBC	- CALIFORNIA BUILDING CODE
CJ	- CONSTRUCTION JOINT
CL	- CENTERLINE
COL	- COLUMN
CONC	- CONCRETE
CONT	- CONTINUOUS
CVG	- CONTINUOUS VERTICAL GRAIN
DIAM	- DIAMETER
DF	- DOUGLAS FIR
DFPT	- DOUGLAS FIR PRESSURE TREATED
DL	- DEAD LOAD
DN	- DOWN
E	- EXISTING
EA	- EACH
ELECT	- ELECTRICAL
EN	- EDGE NAIL
ENGR	- ENGINEER
ES	- EACH SIDE
EW	- EACH WAY
FDN	- FOUNDATION
FF	- FINISH FLOOR
FOHC	- FREE OF HEART CORE
FOS	- FACE OF STUD
FRMG	- FRAMING
FS	- FAR SIDE
GA	- GAGE
GALV	- GALVANIZED
GC	- GENERAL CONTRACTOR
GLB	- GLUED LAMINATED BEAM
GYP	- GYPSUM BOARD
HD	- HOLDOWN
HORIZ	- HORIZONTAL
HSS	- HOLLOW STRUCTURAL SECTION
IBC	- INTERNATIONAL BUILDING CODE
INTR	- INTERMEDIATE
INV	- INVERTED
K	- KIPS
KP	- KING POST
KS	- KING STUD
LL	- LIVE LOAD
LLV	- LONG LEG VERTICAL
LLH	- LONG LEG HORIZONTAL
LSL	- LAMINATED STRAND LUMBER
LVL	- LAMINATED VENEER LUMBER
LWT	- LIGHTWEIGHT
MAX	- MAXIMUM
MECH	- MECHANICAL
MFR	- MANUFACTURER
MIN	- MINIMUM
MISC	- MISCELLANEOUS
N	- NEW
NS	- NEAR SIDE
OC	- ON CENTER
OCEW	- ON CENTER EACH WAY
OF	- OUTER FACE
OH	- OPPOSITE HAND
OPNG	- OPENING
PARA	- PARALLEL
PERP	- PERPENDICULAR
PL	- PLATE
PLF	- POUNDS PER LINEAR FOOT
PSF	- POUNDS PER SQUARE FOOT
PSL	- PARALLEL STRAND LUMBER
PT	- PRESSURE TREATED
PW	- PLYWOOD
REINF	- REINFORCEMENT
REQ	- REQUIRED
SCHED	- SCHEDULE
SHTG	- SHEATHING
SIM	- SIMILAR
SMS	- SHEET METAL SCREW
SOG	- SLAB ON GRADE
STAG	- STAGGERED
STD HK	- STANDARD HOOK
STIFF	- STIFFENER
STL	- STEEL
SW	- SHEARWALL
SYM	- SYMMETRICAL
T&B	- TOP & BOTTOM
T&G	- TONGUE AND GROOVED
THRU	- THROUGH
TN	- TOE NAIL
TS	- TUBE STEEL
TYP	- TYPICAL
UNO	- UNLESS NOTED OTHERWISE
VERT	- VERTICAL
VIF	- VERIFY IN FIELD
w/	- WITH
WWF	- WELDED WIRE FABRIC

GENERAL NOTES

1. UNLESS EXPLICITLY STATED IN THESE CONSTRUCTION DOCUMENTS, BY NOTE OR CLARIFICATION LETTER, THE ENTIRE SCOPE OF WORK REPRESENTED BY THESE DOCUMENTS SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

2. THESE CONSTRUCTION DOCUMENTS REPRESENT THE DESIGN INTENT OF THE DESIGN TEAM BASED ON DIMENSIONS OF EXISTING SITE AND/OR FIELD CONDITIONS. ACTUAL CONDITIONS MAY REQUIRE MODIFICATIONS OF THE CONSTRUCTION DETAILS TO ACHIEVE THE DESIGN INTENT. CONTRACTOR SHALL NOTIFY DESIGN TEAM IN WRITING OF ANY DISCREPANCIES RELATED TO EXISTING SITE AND/OR FIELD CONDITIONS PRIOR TO CONTINUING ANY WORK.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RECORD ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONSTRUCTION DOCUMENTS AND TO BRING THEM TO THE ATTENTION OF THE DESIGN TEAM PRIOR TO COMMENCING ANY WORK. ANY DEVIATION FROM THE CONDITIONS SHOWN IN THESE CONSTRUCTION DOCUMENTS SHALL REQUIRE WRITTEN APPROVAL FROM THE DESIGN TEAM.

4. DO NOT SCALE THE DRAWINGS. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM PRIOR TO COMMENCING ANY WORK.

5. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY. WORK REQUIRED TO BE DONE BY ONE DOCUMENT AND NOT BY OTHERS SHALL BE DONE AS IF REQUIRED BY ALL.

6. THE CONTRACTOR AND SUBCONTRACTOR SHALL MAKE NO STRUCTURAL SUBSTITUTIONS, CHANGES, OR MODIFICATIONS WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

7. CONTRACTORS AND SUBCONTRACTORS SHALL ENSURE THAT ALL WORK IS PERFORMED IN A PROFESSIONAL AND WORKMANLIKE MANNER BY SKILLED MECHANICS OF THE TRADE. SUBCONTRACTORS AND SUPPLIERS ARE HEREBY NOTIFIED THAT THEY ARE TO CONFER AND COOPERATE FULLY WITH EACH OTHER DURING THE COURSE OF CONSTRUCTION TO DETERMINE THE EXACT EXTENT AND OVERLAP OF EACH OTHER'S WORK AND TO SUCCESSFULLY COMPLETE THE EXECUTION OF THE WORK IN A TIMELY MANNER.

8. UNLESS SPECIFICALLY SHOWN OR NOTED ON THE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED, BORED, OR OTHERWISE WEAKENED WITHOUT THE PERMISSION OF THE STRUCTURAL ENGINEER.

COORDINATION NOTES

ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THESE GENERAL NOTES, AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ENGINEER, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK. THE GENERAL CONTRACTOR SHALL VERIFY AND COORDINATE DIMENSIONS AMONG ALL DRAWINGS PRIOR TO PROCEEDING WITH ANY WORK OR FABRICATION. THE STRUCTURE HAS BEEN DESIGNED TO RESIST CODE REQUIRED VERTICAL AND LATERAL FORCES AFTER THE CONSTRUCTION OF ALL STRUCTURAL ELEMENTS HAS BEEN COMPLETED. STABILITY OF THE STRUCTURE PRIOR TO COMPLETION IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THIS RESPONSIBILITY INCLUDES BUT IS NOT LIMITED TO JOB SITE SAFETY; ERECTION MEANS, METHODS, AND SEQUENCES; TEMPORARY SHORING, FORMWORK, AND BRACING; USE OF EQUIPMENT AND CONSTRUCTION PROCEDURES. PROVIDE ADEQUATE RESISTANCE TO LOADS ON THE STRUCTURES DURING CONSTRUCTION PER SEI/ASCE STANDARD NO. 37 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION." CONSTRUCTION OBSERVATION BY THE STRUCTURAL ENGINEER IS FOR GENERAL CONFORMANCE WITH DESIGN ASPECTS ONLY AND IS NOT INTENDED IN ANY WAY TO REVIEW THE CONTRACTOR'S CONSTRUCTION PROCEDURES.

STANDARDS
ALL METHODS, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE 2019 CALIFORNIA BUILDING CODE (CBC) AS AMENDED AND ADOPTED BY THE LOCAL BUILDING OFFICIAL OR APPLICABLE JURISDICTION.

CONTRACT DRAWINGS / DIMENSIONS

ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. CONSULTANT DRAWINGS BY OTHER DISCIPLINES ARE SUPPLEMENTARY TO ARCHITECTURAL DRAWINGS. REPORT DIMENSIONAL OMISSIONS OR DISCREPANCIES BETWEEN ARCHITECTURAL DRAWINGS AND STRUCTURAL, MECHANICAL, ELECTRICAL OR CIVIL DRAWINGS TO ARCHITECT PRIOR TO PROCEEDING WITH WORK.

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS. PRIMARY STRUCTURAL ELEMENTS ARE DIMENSIONED ON STRUCTURAL PLANS AND DETAILS AND OVERALL LAYOUT OF STRUCTURAL PORTION OF WORK. SOME SECONDARY ELEMENTS ARE NOT DIMENSIONED SUCH AS: WALL CONFIGURATIONS (INCLUDING EXACT DOOR AND WINDOW LOCATIONS), ALCOVES, SLAB SLOPES AND DEPRESSIONS, CURBS, ETC. VERTICAL DIMENSIONAL CONTROL IS DEFINED BY ARCHITECTURAL WALL SECTIONS AND BUILDING SECTIONS. STRUCTURAL DETAILS SHOW DIMENSIONAL RELATIONSHIPS TO CONTROL DIMENSIONS DEFINED BY ARCHITECTURAL DRAWINGS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.

STRUCTURAL OBSERVATION

ENGINEER OF RECORD SHALL PERIODICALLY OBSERVE CONSTRUCTION AT THE FOLLOWING SIGNIFICANT STAGES OF CONSTRUCTION. THESE OBSERVATIONS ARE IN ADDITION TO REQUIRED SPECIAL INSPECTION.

FOUNDATION
TO BE MADE AFTER EXCAVATIONS FOR FOOTINGS ARE COMPLETE AND ANY REQUIRED REINFORCING STEEL IS IN PLACE. FOR FORMED CONCRETE FOUNDATIONS, ALL FORMWORK SHALL BE IN PLACE. ALL CAST-IN ANCHORS SHALL BE INSTALLED TO THE FORMWORK. ALL MATERIALS FOR THE FOUNDATION SHALL BE ON THE JOB SITE, EXCEPT CONCRETE WHERE IT IS READY MIXED IN ACCORDANCE WITH THE CODE.

FRAMING
OBSERVATION OF THE VERTICAL (STRUCTURAL FRAMING AND SHEATHING) AND LATERAL (WIND AND SEISMIC) FORCE RESISTING SYSTEMS.

INTERMEDIATE OBSERVATION IS REQUIRED PRIOR TO CONCEALING ANY WORK REQUIRING OBSERVATION.

FINAL OBSERVATION TO BE MADE AFTER THE ROOF, ALL STRUCTURAL FRAMING, SHEAR WALLS, LATERAL BRACING, TIES, COLLECTORS, DRAGS, AND SHEAR DIAPHRAGMS ARE CONSTRUCTED.

NOTIFICATION
NOTIFY THE ENGINEER AT LEAST THREE BUSINESS DAYS PRIOR TO THE DATE UPON WHICH OBSERVATION IS REQUIRED.

REPORT
AT CONCLUSION OF WORK, ENGINEER SHALL PREPARE A STATEMENT DESCRIBING SITE VISITS, REPORTING WORK OBSERVED, IDENTIFYING KNOWN REMAINING DEFICIENCIES AND STATING APPARENT CONFORMANCE TO INTENT OF PLANS.

SHEET INDEX

APPLICABLE CODES

2019 CALIFORNIA BUILDING CODE	(2019 CBC)
2018 NATIONAL DESIGN STANDARD	(2018 NDS)
STEEL CONSTRUCTION MANUAL, 15 ED.	(AISC 15 ED.)

GOVERNING AGENCY

AMADOR COUNTY BUILDING DEPARTMENT

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JACKSON, CA 95642

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STATE OF CALIFORNIA
1-15-2021

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33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 20-356
DATE: 15 JANUARY 2021
REVISIONS:

PERMIT SET

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WOOD

WOOD SHEATHING (STRUCTURAL): SHEATHING ON ROOF SURFACES SHALL BE PLYWOOD ONLY. SHEATHING ON FLOOR AND WALLS SHALL BE PLYWOOD OR ORIENTED STRAND BOARD (OSB). PLYWOOD SHEATHING SHALL BE 5-PLY MINIMUM WHERE INDICATED AS 3/4" OR THICKER. WOOD SHEATHING SHALL BE "STRUCTURAL I" CONFORMING TO PS1-95 AND/OR PS2-92. ALL PANELS SHALL BEAR THE STAMP OF AN APPROVED GRADING AGENCY.

GLUE-LAMINATED MEMBERS: CONFORM TO ANSI/AITC A190.1. MEMBERS SHALL BE 24F-V4 DF/DF FOR SIMPLE SPANS AND 24F-V8 DF/DF FOR CANTILEVERED SPANS WITH E=1.8x10^6 PSI AND EWS3 DF FOR COLUMNS, ALL WITH EXTERIOR GLUE. ARCHITECTURAL APPEARANCE GRADE WHERE EXPOSED TO VIEW; INDUSTRIAL APPEARANCE WHERE NOT EXPOSED TO VIEW. ALL MEMBERS TO HAVE AITC OR APA-EWS STAMP.

FRAMING LUMBER: STANDARDS: EACH PIECE SHALL BEAR THE GRADE TRADEMARK OF AN AGENCY ACCREDITED BY THE AMERICAN LUMBER STANDARD COMMITTEE (ALSC) TO GRADE UNDER ALSC CERTIFIED GRADING RULES. ALL NEW FRAMING LUMBER SHALL HAVE 19% MAXIMUM MOISTURE CONTENT AT TIME OF INSTALLATION AND FABRICATION.

SPECIES AND GRADE (BASE DESIGN VALUE)
1) 6x BEAMS AND HEADERS: "DOUG FIR-LARCH" NO. 1 (F_b = 1350 PSI, F_v = 170 PSI)

2) 2x to 4x JOISTS, PURLINS AND HEADERS: "DOUG FIR-LARCH" NO. 2 (F_b = 900 PSI, F_v= 180 PSI)

3) INTERIOR NON-BEARING STUD WALLS: "DOUG FIR-LARCH" CONSTRUCTION GRADE (F_b = 1000 PSI, F_c = 1650 PSI)

4) 2x & 3x T&G DECKING: "DOUG FIR-LARCH" SELECT (F_b = 1750 PSI, F_c = 1150 PSI)

5) 2x DECKING FOR EXTERIOR USE: "REDWOOD" NO. 2 (F_b= 925 PSI, F_c = 950 PSI)

6) THE MINIMUM GRADE OF ALL OTHER STRUCTURAL FRAMING: "DOUG FIR-LARCH" CONSTRUCTION GRADE (F_b = 1000 PSI, F_c = 1650 PSI)

7) UTILITY AND STANDARD GRADES NOT PERMITTED.

FRAMING LUMBER (MANUFACTURED): SHALL BE MANUFACTURED BY TRUS JOIST CORPORATION OR PRE-APPROVED EQUAL, IN ACCORDANCE WITH APPROVED SHOP AND INSTALLATION DRAWINGS.

MICROLAM LVL:	F_b = 2600 PSI	E = 2000 KSI
PARALLAM PSL:	F_b = 2900 PSI	E = 2200 KSI **
PARALLAM PSL POST:	F_b = 2400 PSI	E = 1800 KSI
TIMBERSTRAND LSL:	F_b = 2325 PSI	E = 1550 KSI

RIM MATERIAL: TIMBERSTRAND LSL
**FOR 5.25 x 7.25 OK TO USE LP SOLID START LVL IN LIEU OF PSL

MEMBERS HAVE BEEN DESIGNED TO SERVICEABILITY AND OTHER PERFORMANCE-BASED REQUIREMENTS, WHICH MAY EXCEED MINIMUM DESIGN LOADS AND CODE REQUIREMENTS. SUBSTITUTIONS MUST MEET OR EXCEED MOMENT, SHEAR, AND STIFFNESS OF THOSE MEMBERS SPECIFIED AT THE SAME DEPTH AND SPACING.

PRESERVATIVE TREATED WOOD REQUIREMENTS:
TREATMENTS OTHER THAN THOSE LISTED BELOW ARE NOT PERMITTED.

		APPLICATION	SPECIFIED MATERIAL	PRESERVATIVE TREATMENT (1)	CONNECTORS & FASTENERS (2)(3)
EXPOSURE	DRY	FOUNDATION SILL PLATES, TOP PLATES & LEDGERS ON CONCRETE OR MASONRY WALLS (4)	2x, 4x, 6x, OR GLU-LAM (FIR) , LSL	CCA, SBX	GALV (G60)
				ACQ, CBA, CA	GALV (G185)
	WET	FRAMING, DECKING, POSTS & LEDGERS	2x, & 4x (FIR)	CCA	GALV (G90)
				ACQ, CBA, CA	GALV (G185)
			2x, & 4x (CEDAR)	NONE	GALV (G90)
		BEAMS & COLUMNS	6x OR GLU-LAM (FIR)	CCA	GALV (G90)
				ACQ, CBA, CA	GALV (G185)
			6x OR GLU-LAM (CEDAR)	NONE	GALV (G90)

1. CCA: CHROMATED COPPER ARSENATE
   SBX: DOT SODIUM BORATE
   ACQ: ALKALINE COPPER QUAT
   CBA & CA: COPPER AZOLE

2. CONNECTORS: JOIST HANGERS, STRAPS, FRAMING CONNECTORS, COLUMN CAPS AND BASES, ETC.
   FASTENERS: MACHINE BOLTS, ANCHOR BOLTS AND LAG SCREWS WITH ASSOCIATED PLATE WASHERS AND NUTS. NAILS, SPIKES, WOOD SCREWS, ETC.

3. G60, G90 & G185 PER ASTM A653 BATCH/POST HOT-DIP GALVANIZED PER ASTM A123 FOR CONNECTORS, AND ASTM A153 FOR FASTENERS. MECHANICALLY GALVANIZED FASTENERS PER ASTM B695, CLASS 55 OR GREATER.

4. AT CONTRACTOR'S OPTION, LEDGERS AND TOP PLATES A MINIMUM OF 8 FEET ABOVE GRADE ON CONCRETE OR MASONRY WALLS MAY BE UN-TREATED IF COMPLETELY SEPARATED FROM THE WALL BY A SELF ADHERING ICE & WATER SHIELD BARRIER (40 MIL MINIMUM).

GENERAL REQUIREMENTS: PROVIDE MINIMUM NAILING PER IBC (CBC) TABLE 2304.10.1 OR MORE, AS OTHERWISE SHOWN. STAGGER ALL NAILING TO PREVENT SPLITTING OF WOOD MEMBERS. PRESSURE TREAT ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY, WITH THE EXCEPTION OF INTERIOR CONCRETE TOPPING ON WOOD FLOOR SYSTEMS. HOLES AND CUTS IN 3X OR 4X PLATES SHOULD BE TREATED WITH A 20% SOLUTION OF COPPER NAPHTHENATE. BOLT HOLES IN WOOD MEMBERS SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. PROVIDE CUT WASHERS WHERE BOLT HEADS, NUTS, AND LAG SCREW HEADS BEAR ON WOOD. PROVIDE A MINIMUM 3X3X1/4 PLATE WASHER ON ALL ANCHOR BOLTS WHICH CONNECT MUD SILLS TO FOUNDATION. DO NOT NOTCH OR DRILL STRUCTURAL MEMBERS, EXCEPT AS ALLOWED BY IBC SECTION 2308.5.9-10 OR AS RESTRICTED BY PLANS OR DETAILS, OR AS APPROVED PRIOR TO INSTALLATION. ALL JOIST WITHIN 18" AND GIRDERS WITHIN 12" OF FINNISH GRADE SHALL BE PRESERVATIVE TREATED WOOD. REFER TO PRESERVATIVE TREATED WOOD REQUIREMENTS IN THESE GENERAL NOTES FOR GALVANIZING REQUIREMENTS FOR CONNECTORS AND FASTENERS.

FRAMING CONNECTORS: SHALL HAVE ICC APPROVAL AND BE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, SAN LEANDRO, CA, OR PRE-APPROVED EQUAL. PROVIDE MAXIMUM SIZE AND QUANTITY OF NAILS OR BOLTS PER MANUFACTURER, EXCEPT AS NOTED OTHERWISE. PROVIDE LEAD HOLES AS REQUIRED TO PREVENT SPLITTING OF WOOD MEMBERS. REFER TO PRESERVATIVE TREATED WOOD REQUIREMENTS IN THESE GENERAL NOTES FOR GALVANIZING REQUIREMENTS FOR CONNECTORS AND FASTENERS.

CARPENTRY

NAILS: CONNECTION DESIGNS ARE BASED ON "COMMON WIRE" NAILS WITH THE FOLLOWING PROPERTIES:

PENNYWEIGHT	DIAMETER (INCHES)	LENGTH (INCHES)
8d	0.131	2-1/2
10d	0.148	3
16d	0.162	3-1/2
20d	0.192	4

EPOXY GROUT

EPOXY GROUT FOR POST INSTALLED AND REINFORCING BAR ANCHORS SHALL BE:

- SET XP FOR TEMPERATURES ABOVE 50º FAHRENHEIT
- AT-XP FOR ALL TEMPERATURES
- SET-3G FOR ALL RETROFIT HOLDOWN ANCHORS
- OTHER APPROVED EQUAL

INSTALL PER MANUFACTURER'S ICC REPORT AND RECOMMENDATIONS.

SPECIAL INSPECTION

SPECIAL INSPECTION IS REQUIRED UNLESS ANCHORAGE IS NOT DESIGNED FOR STRUCTURAL LOADING, AS NOTED (NSIR).

WHEN SPECIAL INSPECTION IS REQUIRED, IT INCLUDES:
1. ADHESIVE PRODUCT DESCRIPTION, INCLUDING THE ADHESIVE PRODUCT NAME AND EXP. DATE, ADHESIVE MIXING PROCEDURE FOR THE SET-PAC CARTRIDGE (IF USED), AND USE OF PROPER NOZZLES FOR ALL CARTRIDGES DESCRIBED IN ESR REPORT.
2. ANCHOR BOLT OR REBAR MATERIAL GRADE, DIAMETER, LENGTH, AND CLEANLINESS.
3. REQUIRED DRILL BIT DIAMETER AND COMPLIANCE WITH ANSI B212.15-1994 OR APPROVED SUBSTITUTE PER ER REPORT.
4. HOLE DEPTH AND CLEANLINESS.
5. VERIFICATION OF OF PHYSICAL PROPERTIES OF THE CONCRETE, CONCRETE MASONRY WALL CONSTRUCTION, SUBSTRATE TEMPATURE AT THE TIME OF INSTALLATION, ACTUAL GEL TIME WHEN ANCHORS ARE INSTALLED NOT DISTURBED; AND VERIFICATION OF ANCHOR INSTALLATION AND LOCATION

CONCRETE

CAST-IN-PLACE CONCRETE

CODES, SPECIFICATIONS, AND STANDARDS; CONCRETE WORK SHALL CONFORM TO THE FOLLOWING CODES, SPECIFICATIONS, AND STANDARDS, AND THE STANDARDS AND SPECIFICATIONS THEY REFERENCE. THE CONTRACTOR SHALL OBTAIN AND HAVE READILY AVAILABLE ON SITE THE LATEST VERSION OF THE "ACI MANUAL OF CONCRETE PRACTICE":

ACI:
1. ACI 116 'CEMENT AND CONCRETE TERMINOLOGY'.
2. ACI 301 'STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE'.
3. ACI 302.1R-15 'GUIDE TO CONCRETE FLOOR AND SLAB CONSTRUCTION'.
4. ACI 304R-00 'GUIDE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE'.
5. ACI 305.1R-14 'HOT WEATHER CONCRETING'.
6. ACI 306.1-90 'COLD WEATHER CONCRETING'.
7. ACI 308.1-11 'STANDARD SPECIFICATION FOR CURING CONCRETE'.
8. ACI 309R-05 'STANDARD PRACTICE FOR CONSOLIDATION OF CONCRETE'.
9. ACI 311.4R-05 'GUIDE FOR CONCRETE INSPECTION'.
10. ACI 315R-18 'DETAILS AND DETAILING OF CONCRETE REINFORCEMENT'.
11. ACI 318 'BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE'.
12. ACI 506R 'GUIDE FOR SHOTCRETING'.

ASTM:
1. ASTM C33 'STANDARD SPECIFICATION FOR CONCRETE AGGREGATES'.
2. ASTM C94 'STANDARD SPECIFICATION FOR READY-MIX CONCRETE'.
3. ASTM C150 'STANDARD SPECIFICATION FOR PORTLAND CEMENT'.
4. ASTM C260 'STANDARD SPECIFICATION FOR AIR-ENTRAINED ADMIXTURES FOR CONCRETE'.
5. ASTM C309 'STANDARD SPECIFICATION FOR LIQUID MEMBRANE-FORMING COMPOUNDS FOR CURING CONCRETE'
6. ASTM C494 'STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR CONCRETE'.
7. ASTM C595 'STANDARD SPECIFICATION FOR BLENDED HYDRAULIC CEMENTS'.
8. ASTM C618 'STANDARD SPECIFICATION FOR ... FLY-ASH...', MAXIMUM LOSS ON IGNITION SHALL BE 1.0%.
9. ASTM C1017 'STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR USE IN PRODUCING FLOWING CONCRETE'.
10. ASTM C1116 'SYNTHETIC FIBER REINFORCED CONCRETE AND SHOTCRETE'.
11. ASTM C1218 'STANDARD TEST METHOD FOR WATER-SOLUBLE CHLORIDE IN MORTAR AND CONCRETE'.

MIX DESIGNS: THE CONTRACTOR SHALL DESIGN CONCRETE MIXES THAT MEET OR EXCEED THE REQUIREMENTS OF THE CONCRETE MIX TABLE. THE MIX DESIGNS SHALL FACILITATE ANTICIPATED PLACEMENT METHODS, WEATHER, REBAR CONGESTION, ARCHITECTURAL FINISHES, CONSTRUCTION SEQUENCING, STRUCTURAL DETAILS, AND ALL OTHER FACTORS REQUIRED TO PROVIDE A STRUCTURALLY SOUND, AESTHETICALLY ACCEPTABLE FINISHED PRODUCT. WATER-REDUCING ADMIXTURES WILL LIKELY BE REQUIRED TO MEET THESE REQUIREMENTS. CONCRETE MIX DESIGNS SHALL CLEARLY INDICATE THE TARGET SLUMP. SLUMP TOLERANCE SHALL BE ± 1-1/2 INCHES.

AGGREGATE: COARSE AND FINE AGGREGATE SHALL CONFORM TO ASTM C 33

CEMENT: CEMENT SHALL CONFORM TO ASTM C 150 TYPE II PORTLAND CEMENT, UNLESS NOTED OTHERWISE.

ALTERNATE MIX DESIGNS: VARIATIONS TO THE MIX DESIGN PROPORTIONS MAY BE ACCEPTED IF SUBSTANTIATED IN ACCORDANCE WITH ACI 318, CHAPTER 26. PROVIDE SUBMITTALS A MINIMUM OF TWO WEEKS PRIOR TO BID FOR DETERMINATION OF ACCEPTABILITY.

ADMIXTURES: ADMIXTURES SHALL BE BY MASTER BUILDERS, W.R. GRACE, OR PRE-APPROVED EQUAL. ALL MANUFACTURERS RECOMMENDATIONS SHALL BE FOLLOWED.

WATER: SHALL BE CLEAN AND POTABLE.

MAXIMUM CHLORIDE CONTENT: THE MAXIMUM WATER SOLUBLE CHLORIDE CONTENT SHALL NOT EXCEED 0.15% BY WEIGHT OF CEMENTITIOUS MATERIAL UNLESS NOTED OTHERWISE.

CONCRETE EXPOSED TO WEATHER: PROVIDE 5.0% TOTAL AIR CONTENT FOR ALL CONCRETE EXPOSED TO WEATHER AFTER COMPLETION OF CONSTRUCTION. TOTAL AIR CONTENT IS THE SUM OF ENTRAINED AIR PROVIDED BY ADMIXTURES AND NATURALLY OCCURRING ENTRAPPED AIR. AIR CONTENT SHALL BE TESTED PRIOR TO BEING PLACED IN THE PUMP HOPPER OR BUCKET; IT IS NOT REQUIRED TO BE TESTED AT THE DISCHARGE END OF THE PUMP HOSE. THE TOLERANCE ON TOTAL AIR SHALL BE +2.0% AND -1.5% WITH THE AVERAGE OF ALL TESTS NOT LESS THAN THE SPECIFIED AMOUNT.

ITEM	f'c (PSI) DESIGN 2500 f'c (PSI)	MAX. W/C RATIO	MIN. (2) FLYASH (PCY)	MAX. AGG. SIZE (IN)	NOTES	MIN. CEMENTITOUS (1) MATERIAL (SACKS/YARD)
BASEMENT, RETAINING, AND STEM WALLS	4500 at 28 DAYS	0.45	100	1		5-1/2
FOUNDATIONS	4500 at 28 DAYS	0.45	--	1		5
SLAB ON GRADE	3500 at 28 DAYS	0.45	100	1	3	5-1/2
COLUMNS AND SHEAR WALLS U.N.O.	4000 at 28 DAYS	0.50	--	3/8		5-1/2
ELEVATED BEAMS & SLABS	4000 at 28 DAYS	0.45	100	1		5-1/2
ALL OTHER CONCRETE	4000 at 28 DAYS	0.50	--	1		5-1/2

CONCRETE MIX NOTES:

1. TOTAL CEMENTITOUS MATERIAL IS THE SUM OF ALL CEMENT PLUS FLYASH.

2. AT THE CONTRACTORS OPTION, FLYASH MAY BE SUBSTITUTED FOR CEMENT BUT SHALL NOT EXCEED 25% BY WEIGHT OF TOTAL CEMENTITIOUS MATERIAL.

3. FIBROUS CONCRETE REINFORCEMENT SHALL BE "FIBERMESH" MANUFACTURED BY SI CONCRETE SYSTEMS OR PRE-APPROVED EQUAL AND SHALL CONFORM TO ASTM C-1116 TYPE III 4.1.3, PERFORMANCE LEVEL 1, AND SHALL BE 100 PERCENT VIRGIN POLYPROPYLENE, FIBRILLATED FIBERS CONTAINING NO REPROCESSED OLEFIN MATERIALS AND SPECIFICALLY MANUFACTURED FOR USE AS CONCRETE SECONDARY REINFORCEMENT. DOSAGE SHALL FOLLOW MANUFACTURER'S RECOMMENDATION BUT NOT BE LESS THAN 1.5 LB/CU. YD.

CONCRETE PLACEMENT

PLACE CONCRETE FOLLOWING ALL APPLICABLE ACI RECOMMENDATIONS. CONCRETE SHALL BE PROPERLY CONSOLIDATED PER ACI 309 USING INTERIOR MECHANICAL VIBRATORS; DO NOT OVER-VIBRATE. CONCRETE SHALL BE POURED MONOLITHICALLY BETWEEN CONSTRUCTION OR EXPANSION JOINTS. IF CONCRETE IS PLACED BY THE PUMP METHOD, HORSES SHALL BE PROVIDED TO SUPPORT THE HOSE. WEATHER FORECASTS SHALL BE MONITORED AND ACI RECOMMENDATIONS FOR HOT AND COLD WEATHER CONCRETING SHALL BE FOLLOWED AS REQUIRED. CONCRETE SHALL NOT FREE FALL MORE THAN 5 FEET DURING PLACEMENT WITHOUT WRITTEN APPROVAL OF ENGINEER.

FORMWORK STRIPPING

1) COLUMNS & WALLS - COLUMNS AND WALLS NOT SUPPORTING FRAMING WEIGHT MAY BE STRIPPED AS SOON AS FORMS CAN BE REMOVED WITHOUT DAMAGING THE CONCRETE AND THE CONCRETE HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 500 PSI.

2) BEAMS & SLABS - BEAMS AND SLABS MAY BE STRIPPED AND BECOME SELF-SUPPORTING AS SOON AS THEIR COMPRESSIVE STRENGTH REACHES 75% OF THE SPECIFIED DESIGN STRENGTH. RESHORING SHALL BE PROVIDED FOR ALL CONSTRUCTION LOADS THEREAFTER PER THE GENERAL CONTRACTOR.

COLD WEATHER PLACEMENT

1) COLD WEATHER IS DEFINED BY ACI 306 AS "A PERIOD WHEN FOR MORE THAN 3 SUCCESSIVE DAYS THE MEAN DAILY TEMPERATURE DROPS BELOW 40° F."
2) NO CONCRETE SHALL BE PLACED ON FROZEN OR PARTIALLY FROZEN GROUND. THAWING WITH HEATERS AND SUBSEQUENTLY COMPACTING THE GROUND IS PERMISSIBLE.
3) CONCRETE MIX TEMPERATURES SHALL BE AS SHOWN BELOW. HEATING OF WATER AND/OR AGGREGATES MAY BE REQUIRED TO ATTAIN THESE TEMPERATURES.
4) THE CONCRETE MAY REQUIRE PROTECTION FOR 4-7 DAYS AFTER PLACING. IF TEMPERATURES REMAIN BELOW FREEZING, INSULATING BLANKET COVERAGE IS REQUIRED. IF TEMPERATURES ARE SLIGHTLY BELOW FREEZING (30° F MIN.) AT NIGHT AND ABOVE FREEZING DURING THE DAY, KRAFT PAPER WITH COMPLETE COVERAGE MAY BE USED IN LIEU OF INSULATED BLANKETS.
5) NO ADDITIVES CONTAINING CHLORIDES SHALL BE USED. USE "POZZUTEC 20" BY MASTER BUILDERS OR "POLARSET" BY W.R. GRACE OR PRE-APPROVED EQUAL.

CONDITION OF PLACEMENT AND CURING		WALLS & SLABS	FOOTINGS
MIN. TEMP. FRESH CONCRETE AS MIXED FOR WEATHER INDICATED, DEGREES F.	ABOVE 30° F.	60	55
	0 TO 30° F.	65	60
	BELOW 0° F.	70	65
MIN. TEMP. FRESH CONCRETE AS PLACED AND MAINTAINED, DEGREES F.		55	50
MAX. ALLOWABLE GRADUAL DROP IN TEMP. THROUGHOUT FIRST 24 HOURS AFTER END OF PROTECTION, DEGREES F.		50	40

CONTROL AND CONSTRUCTION JOINTS

CONSTRUCTION JOINTS SHALL MEET THE REQUIREMENTS OF ACI 301 SECTIONS 2.2.2.5 AND 5.3.2.6. KEYWAYS PER SECTION 2.2.2.5B ARE NOT REQUIRED UNLESS DETAILED ON THE STRUCTURAL DRAWINGS. SPECIAL BONDING METHODS PER SECTION 5.3.2.6 SHALL BE SATISFIED BY ITEM 3 BELOW UNLESS OTHERWISE DETAILED ON THE STRUCTURAL DRAWINGS. WHERE CONSTRUCTION JOINTS ARE NOT SHOWN ON PLAN OR ADDITIONAL CONSTRUCTION JOINTS ARE REQUIRED, SUBMIT PROPOSED JOINTING FOR ENGINEER'S APPROVAL. PROVIDE CONSTRUCTION JOINTS AS INDICATED BELOW UNLESS NOTED OTHERWISE ON THE PLANS:

1. SLABS ON GRADE: PROVIDE CONSTRUCTION AND/OR CONTROL JOINTS AT 13 FEET OC FOR SLABS ON GRADE. PERPENDICULAR SPACING RATIO SHALL NOT EXCEED 1.5.

2. WALLS AND COLUMNS: COORDINATE CONSTRUCTION JOINTS WITH ARCHITECTURAL REVEALS.

3. BONDING AGENT: WHERE BONDING AGENT IS SPECIFICALLY CALLED OUT ON THE STRUCTURAL DRAWINGS, USE "WELD CRETE" BY LARSON PRODUCTS CORPORATION OR PRE-APPROVED EQUAL. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS.

EMBEDDED ITEMS

EMBEDDED CONDUIT IS NOT PERMITTED IN SLAB EXCEPT WHERE SPECIFICALLY SHOWN. IT SHALL BE PLACED AND REINFORCED PER THE TYPICAL CONCRETE DETAILS. NO ALUMINUM ITEMS SHALL BE EMBEDDED IN ANY CONCRETE. ALL EMBED PLATES SHALL BE SECURELY FASTENED IN PLACE.

CONCRETE CURING AND SEALING

CURING PROCEDURES SHALL COMMENCE IMMEDIATELY AFTER FINISHING CONCRETE TO MAINTAIN CONCRETE IN A MOIST CONDITION. VERIFY CURING AND/OR SEALING PRODUCTS ARE COMPATIBLE WITH FLOOR COVERINGS SHOWN ON THE ARCHITECTURAL DRAWINGS. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS.

ITEM	CURING METHOD
ALL SLABS ON GRADE	2,3, & 5
BASEMENT WALLS	4
ELEVATED SLABS NOT EXPOSED TO EARTH OR WEATHER	2,3, & 5
ALL OTHER CONCRETE	NONE

CONCRETE CURING NOTES:

1. PROVIDE PRE-APPROVED MOIST CURE METHOD FOR A MINIMUM OF 7 DAYS.

2. WHEN THE ESTIMATED EVAPORATION RATE IS GREATER THAN 0.2 PSF/HOUR, PROVIDE A SPRAY APPLIED EVAPORATION RETARDER IMMEDIATELY AFTER CONCRETE PLACEMENT. THE EVAPORATION RATE MAY BE CALCULATED PER ACI 305 FIGURE 2.1.5.

3. APPLY A LIQUID MEMBRANE FORMING CURING COMPOUND PER MANUFACTURER'S RECOMMENDATIONS TO ALL EXPOSED SURFACES IMMEDIATELY AFTER FINAL FINISHING.

4. APPLY A LIQUID MEMBRANE FORMING CURING COMPOUND PER MANUFACTURER'S RECOMMENDATIONS TO ALL FORMED SURFACES IMMEDIATELY AFTER FORM REMOVAL. NOT REQUIRED IF FORMWORK REMAINS IN PLACE FOR MORE THAN 7 DAYS.

5. APPLY A SILANE SEALER WITH A MINIMUM SOLIDS CONTENT OF 40% PER MANUFACTURER'S RECOMMENDATIONS.

GROUT

NON-SHRINK GROUT: MASTER BUILDERS "MASTERFLOW 555" OR PRE-APPROVED EQUAL. GROUT SHALL CONFORM TO CRD-C621 AND ASTM C1107 GRADE B WHEN TESTED AT A FLUID CONSISTENCY PER CRD- C611-85 FOR 30 MINUTES. GROUT MAY BE PLACED FROM A 25 SECOND FLOW TO A STIFF PACKING CONSISTENCY. FILL OR PACK ENTIRE SPACE UNDER PLATES OR FLOW TO A STIFF PACKING CONSISTENCY. FILL OR PACK ENTIRE SPACE UNDER PLATES OR SHAPES. NO GROUTING SHALL BE DONE BELOW 40° F.

EPOXY: USE TWO-PART LOW-SAG EPOXY. GROUT MAY CONTAIN QUARTZ SAND AGGREGATE AS PROPORTIONED BY THE MANUFACTURER. USE EQUIPMENT WHICH WILL ACCURATELY MIX AND DISPENSE THE COMPONENTS. HOLE SHALL BE DRY AND CLEANED WITH WIRE BRUSH AND PRESSURIZED AIR JUST PRIOR TO INSTALLING GROUT. THE REBAR OR ROD SHALL BE CLEAN AND INSTALLED SLOWLY, AND SHALL BE ROTATED AS IT IS PUSHED INTO THE HOLE. COLD WEATHER GROUTING SHALL BE DONE WITH PROPER GROUT FORMULA. FIRST STAGES OF THE GROUTING OPERATION SHALL BE INSPECTED.

REINFORCING STEEL
REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60 (GRADE A706 FOR WELDED BARS UNLESS OTHERWISE NOTED, GRADE 40 FOR BEND OUT BARS). DETAIL, FABRICATE AND PLACE PER ACI 315 AND ACI 318. HORIZONTAL BEAM BARS, VERTICAL COLUMN BARS AND VERTICAL SHEAR WALL BARS SHALL MEET THE REQUIREMENTS OF ACI 318 SECTION 21.2.5. REINFORCEMENT SHALL COMPLY WITH ASTM A706 FOR LOW-ALLOY STEEL. BILLET STEEL A615 GRADE 60 REINFORCEMENT MAY BE USED IF THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED STRENGTH BY MORE THAN 18,000 PSI AND THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRESS TO THE ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25.

WELDED WIRE FABRIC REINFORCEMENT SHALL CONFORM TO ASTM A-1064. LAP ONE FULL MESH ON SIDES AND ENDS.

REINFORCING SPLICE AND DEVELOPMENT LENGTH SCHEDULE

	MINIMUM LAP SPLICE LENGTHS ("Ls")		MINIMUM DEVELOPMENT LENGTHS ("Ld")		MINIMUM EMBEDMENT LENGTH FOR STANDARD END HOOKS ("Ldh") (3)
BAR SIZE	TOP BARS(1)(2)	OTHER BARS (2)	TOP BARS(1)(2)	OTHER BARS (2)	
#3	1'-7"	1'-4"	1'-3"	1'-0"	0'-9"
#4	2'-1"	1'-7"	1'-7"	1'-3"	1'-0"
#5	2'-8"	2'-1"	2'-1"	1-7"	1'-3"
#6	3'-10"	3'-0"	3'-0"	2'-3"	1'-6"
#7	5'-3"	4'-0"	4'-0"	3'-1"	1'-9"
#8	6'-10"	5'-3"	5'-3"	4'-0"	2'-0"
#9	8'-8"	6'-8"	6'-8"	5'-2"	2'-4"
#10	10'-11"	8'-5"	8'-5"	6'-6"	2'-7"

SPLICE TABLE NOTES:
1. "TOP BARS" ARE HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THEM.
2. LENGTHS SHALL BE INCREASED BY 50% FOR EPOXY COATED BARS WITH COVER LESS THAN THREE TIMES THE BAR DIAMETER OR CLEAR SPACING IS LESS THAN SIX TIMES THE BAR DIAMETER. LENGTHS SHALL BE INCREASED BY 20% FOR ALL OTHER EPOXY COATED BARS.
3. LENGTHS MAY BE REDUCED BY 30% WHEN A MINIMUM 2 1/2" COVER IS PROVIDED.

REINFORCING COUPLERS: "CADWELD" OR "LENTON" BY ERICO PRODUCTS, INC., MBT BAR-LOCK, "NO-SLIP" BY FOX-HOWLETT INDUSTRIES, INC., OR PRE-APPROVED EQUAL. COUPLER MUST DEVELOP THE TENSILE STRENGTH OF THE BAR UNO.

REINFORCING STEEL COVER
PROVIDE CONCRETE COVER OVER REINFORCEMENT AS FOLLOWS, UNLESS NOTED OTHERWISE.

CONCRETE CAST AGAINST EARTH ------------ 3"
EXPOSED TO WEATHER OR EARTH ------------ 2"
TIES ON BEAMS AND COLUMNS ------------- 1-1/2"
WALLS AND SLABS NOT EXPOSED TO WEATHER---- 3/4"

STRUCTURAL STEEL

DETAILING, FABRICATION AND ERECTION

ALL WORKMANSHIP SHALL CONFORM TO THE CURRENT AISC MANUAL OF STEEL CONSTRUCTION AND AISC 360 CURRENT EDITION.

STEEL MEMBERS ARE EQUALLY SPACED BETWEEN DIMENSION POINTS UNLESS NOTED OTHERWISE.

ALL FABRICATION SHALL BE PERFORMED BY A FABRICATOR CERTIFIED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION AIDS AND JOINT PREPARATIONS THAT INCLUDE BUT ARE NOT LIMITED TO, ERECTION ANGLES, LIFT HOLES, AND OTHER AIDES, WELDING PROCEDURES, REQUIRED ROOT OPENINGS, ROOT FACE DIMENSIONS, GROOVE ANGLES, BACKING BARS, WELD EXTENSION TABS, COPES, SURFACE ROUGHNESS VALUES AND TAPERS OF UNEQUAL PARTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLIANCE WITH ALL CURRENT OSHA REQUIREMENTS.

HOLES, COPES, OR OTHER CUTS OR MODIFICATIONS OF THE STRUCTURAL STEEL MEMBERS SHALL NOT BE MADE IN THE FIELD WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.

ALL STRUCTURAL STEEL SURFACES SHALL BE SHOP PAINTED. ALL STEEL EXPOSED TO WEATHER SHALL HAVE TWO COATS OF PAINT. ALL EXPOSED STRUCTURAL STEEL SHALL SATISFY AISC REQUIREMENTS FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) UNLESS WAIVED IN WRITING BY ARCHITECT.

MATERIAL PROPERTIES

WIDE FLANGE SECTIONS:	ASTM A992 (F_y = 50 KSI)
OTHER SHAPES AND PLATES:	ASTM A36 (F_y = 36 KSI)
STRUCTURAL STEEL PIPES:	ASTM A53, GRADE B, TYPE E OR S (F_y = 35 KSI)
STEEL STRUCTURAL TUBING:	ASTM A500, GRADE C, (F_y =50 KSI).
MACHINE BOLTS (M.B.):	ASTM A307, GRADE A
HIGH-STRENGTH BOLTS:	A325-ASTM F1852, A490-ASTM A490
ANCHOR BOLTS (A.B.):	ASTM F1554, GRADE 36, CLASS 2A

STUDS

STUDS SHALL BE AS SPECIFIED IN AWS D1.1 CLAUSE 7, WITH MATERIAL AS REQUIRED IN CLAUSE 7.2.6.
TYPE A (F_y = 49 ksi, F_u = 61 ksi) ARE ALLOWED FOR STEEL TO WOOD CONNECTIONS.
TYPE B (F_y = 51 ksi, F_u = 65 ksi) SHALL BE USED IN ALL OTHER CONNECTIONS AND ARE ACCEPTABLE FOR WOOD CONNECTIONS.

ALL STUDS SHALL BE DRAWN ARC WELDED

WELDING:

STRUCTURAL STEEL: WELD IN ACCORDANCE WITH "STRUCTURAL WELDING CODE" AWS D-1.1. 70 KSI MINIMUM WELD MATERIAL.

CERTIFICATION: ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS. WELDERS SHALL BE PREQUALIFIED FOR EACH POSITION AND WELD TYPE WHICH THE WELDER WILL BE PERFORMING. IF WELDERS ARE NOT CERTIFIED, CONTRACTOR SHALL PAY FOR ANY INSPECTIONS BY TESTING AGENCY THAT WOULD NOT HAVE BEEN REQUIRED IF SHOP WAS CERTIFIED. WITHOUT CERTIFICATION, ALL WELDS SHALL BE CONSIDERED FIELD WELDS.

WELD TABS (ALSO KNOWN AS WELD "EXTENSION" TABS OR "RUN OFF" TABS SHALL BE USED. AFTER THE WELD HAS BEEN COMPLETED THE WELD TABS SHALL BE REMOVED AND THE WELD END GROUND TO A SMOOTH CONTOUR. WELD "DAMS" OR "END DAMS" SHALL NOT BE USED.

THE PROCESS CONSUMABLES FOR ALL WELD FILLER METAL INCLUDING TACK WELDS, ROOT PASS, AND SUBSEQUENT PASSES DEPOSITED IN A JOINT SHALL BE COMPATIBLE.

ALL WELD FILLER METAL AND WELD PROCESS SHALL PROVIDE CHARPY V-NOTCH TOUGHNESS RATING PER LATEST EDITION OF AISC 341.

FOUNDATION DESIGN CRITERIA

DESIGN SOIL BEARING CAPACITY 1500 PSF ASSUMED FOR DEAD PLUS LONG TERM LIVE LOADS.

ALL FOUNDATION EXCAVATION TO BE CARRIED TO UNDISTURBED NATIVE MATERIAL OR PLACED IN AN APPROVED ENGINEERING FILL.

OVER-EXCAVATION OF SOILS TO BE BACKFILLED WITH CONCRETE.

UNUSUAL SITE CONDITIONS (LOOSE FILL, SUB-SURFACE WATER, ORGANICS, ETC.) TO BE REPORTED TO ENGINEER. DO NOT PROCEED WITH THE WORK UNTIL ISSUE IS RESOLVED.

BACKFILL AROUND FOOTINGS, BEHIND WALLS, & UNDER SLABS TO BE COMPACTED TO 95% RELATIVE DENSITY IN ACCORDANCE WITH ASTM D 1557 UNO IN THE SPECIFICATIONS OF A GEOTECHNICAL REPORT.

DO NOT BACKFILL AGAINST WALLS UNTIL CONCRETE OR MASONRY HAS REACHED ITS FULL 28 DAY DESIGN STRENGTH, SUPPORTING STRUCTURE (FLOORS) ARE CONSTRUCTED, AND FOR 7 DAYS MIN.

THE BOTTOM OF ALL EXTERIOR BEARING WALL FOOTINGS SHALL BE A MIN. OF 24" BELOW FINISH GRADE.

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REGISTERED PROFESSIONAL ENGINEER
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STATE OF CALIFORNIA
1-15-2021

ROPER
RESIDENCE

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.:	20-356
DATE:	15 JANUARY 2021
REVISIONS:	

PERMIT SET

SPECIFICATIONS

S-001

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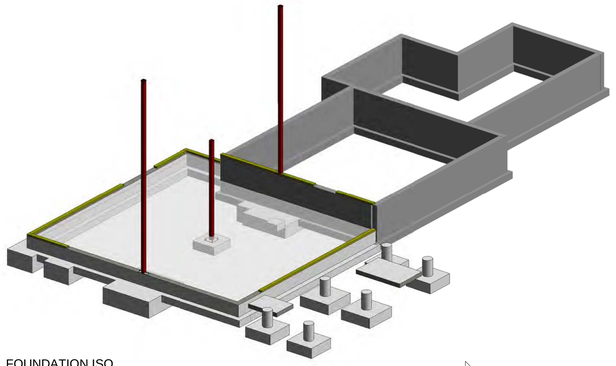

FOUNDATION ISO

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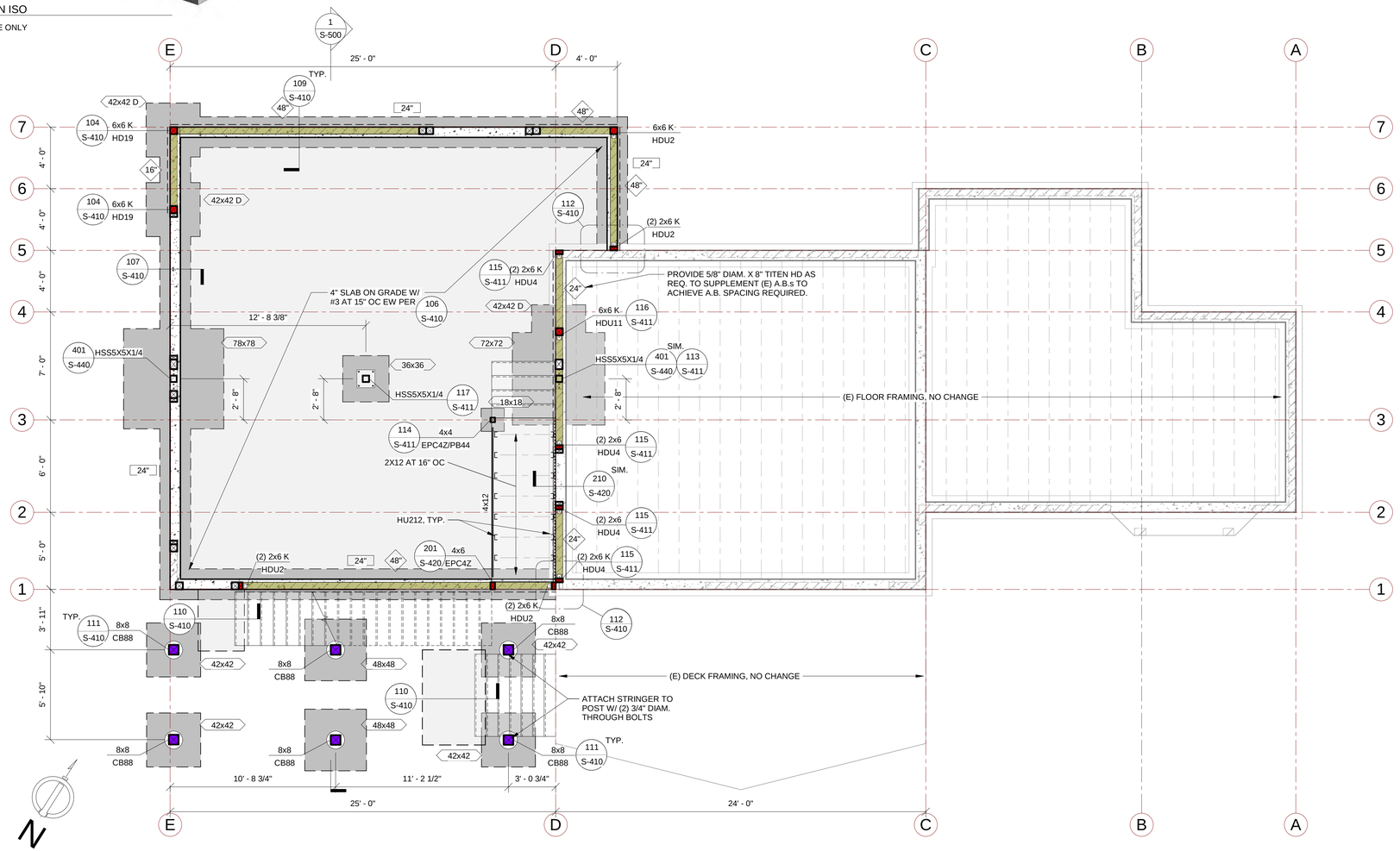

FOUNDATION PLAN

1/4" = 1'-0"

FLOOR FRAMING NOTES

1) FLOOR SHEATHING TO BE 3/4" T&G APA RATED STURD-I FLR GLUE AND NAIL W/ 10d (0.148 SHANK DIAMETER) at 6" O.C. BOUNDARY & EDGES AND 10" O.C. FIELD (UNO). SEE DIAPHRAGM NAILING DETAIL ON S-430 FOR MORE INFO.

2) SEE SHEARWALL AND DIAPHRAGM PLANS SHEET S-300 FOR ADDITIONAL DIAPHRAGM AND STRAPPING REQUIREMENTS.

3) ALL BEARING/PERIMETER WALLS - UPPER TOP PLATES TO BE SPLICED 48" MINIMUM AWAY FROM LOWER TOP PLATE SPLICES W/ (12) 16d AT LAP PROVIDE MST37 AT ANY PLATE DISCONTINUITIES (UNO).

4) SEE ADDITIONAL REQUIREMENTS IN STRUCTURAL SPECIFICATIONS SHEET S-001.

5) SEE SHEET S-430 FOR SHEARWALL NOTES, SCHEDULES, & DETAILS.

FOUNDATION NOTES

1) SEE TYP NOTES AND DETAILS ON SHEET S-001 FOR ADDITIONAL INFORMATION.

2) SECURE ALL HOLDOWN ANCHORS WITHIN FORMWORK PRIOR TO POUR.

3) BUILDER SHALL CHECK AND VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

4) WIDEN/EXTEND FOOTINGS AS REQUIRED TO PROVIDE SUPPORT FOR ANY VENEER SHOWN ON ARCHITECTURAL DRAWINGS.

5) INSTALL ALL HOLDOWN ANCHORS PER MANUFACTURER SPECS & EDGE DISTANCE REQUIREMENTS.

FOUNDATION & FLOOR FRAMING LEGEND

- ##x### — PAD FOOTING PER SCHEDULE
- ## — CONTINUOUS FOOTING PER SCHEDULE
- NEW FOOTING
- EXISTING FOOTING
- WALLS ABOVE FRAMING
- CONCEALED BEAM OR HEADER
- FLOOR JOIST

POST , TRIMMER OR COLUMN

MEMBER SIZE
6x6
PC / PB
HARDWARE AT BOTTOM
HARDWARE AT TOP (WHERE OCCURS)

ANCHOR BOLT SCHEDULE

SYMBOL	ANCHOR SIZE AND SPACING	3x MUDSILL REQ.
48"	5/8" x 12" J BOLTS at 48" O.C.	NO
32"	5/8" x 12" J BOLTS at 32" O.C.	NO
24"	5/8" x 12" J BOLTS at 24" O.C.	NO
16"	5/8" x 12" J BOLTS at 16" O.C.	YES
12"	5/8" x 12" J BOLTS at 12" O.C.	YES

1) PROVIDE ANCHORS AT 48" O.C. UNDER ALL WINDOWS UNO

2) ANCHOR BOLT SPACING SPECIFIED IS AT SHEARWALLS ONLY. AT OTHER LOCATIONS PROVIDE ANCHOR BOLTS AT 48" O.C. TYP UNO.

3) ANCHORS SHALL HAVE 7" EMBEDMENT AND AMPLE THREADS TO ACCOMMODATE A 3X PLATE. WHERE STEMWALL CURB CONDITIONS OCCUR, EMBEDMENT SHALL BE MEASURED FROM THE TOP OF THE FULL WIDTH STEMWALL. EMBEDMENT IN THE CURB PORTION SHALL NOT COUNT TOWARD TOTAL EMBEDMENT.

4) ANCHOR BOLTS SHALL HAVE A MINIMUM .229"x3"x3" WASHER OR APPROVED EQUAL. THE PLATE WASHER SHALL EXTEND WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE(S) WITH SHEATHING

5) ALL SILL PLATES TO BE BORATE PRESSURE TREATED

HOLDOWN HARDWARE SCHEDULE

HOLDOWN	ANCHOR	ALT. EMBED	EMBED INTO FTG
HDU2	SB 5/8x24	5/8" ROD 18" EMBED	N.A.
HDU4	SB 5/8x24	5/8" ROD 18" EMBED	N.A.
HDU5	SB 5/8x24	5/8" ROD 18" EMBED	N.A.
HDU8	SB 7/8x24	7/8" ROD 18" EMBED	N.A.
HDU11	N.A.	N.A.	1" ROD 18" EMBED
HDU14	N.A.	N.A.	1" ROD 18" EMBED
HD19	N.A.	N.A.	1 1/4" ROD 18" EMBED

1) THE ROD IS TO BE A307 ALL-THREAD WITH DOUBLE NUT AND 3/8x2-1/2x2 1/2 PLATE WASHER (1/2x3x3 AT HD19). SIMPSON PAB8 AND PAB10 CAN BE SUBSTITUTED.

2) REFERENCE TO HEAVY DUTY HOLDOWN DETAIL FOR HDU11 HOLDOWNS AND LARGER.

CONT. FOOTING SCHEDULE

TYPE	WIDTH	THICKNESS	LINEAL FEET	REBAR
(E) 18"	18"	0' - 10"	160' - 6 3/4"	
24"	24"	0' - 10"	90' - 0"	(3) #4 CONT.

PAD FOOTING SCHEDULE

TYPE	W	L	THICKNESS	REBAR	COUNT
18x18	18"	18"	10"	(3) #3 EW	1
36x36	36"	36"	12"	(4) #4 EW	1
42x42	42"	42"	15"	(4) #5 EW	4
42x42 D	42"	42"	24"	(4) #5 EW T&B	3
48x48	48"	48"	15"	(4) #5 EW	2
72x72	72"	72"	18"	(6) #5 EW	1
78x78	78"	78"	24"	(7) #5 EW	1

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FOUNDATION PLAN

S-100

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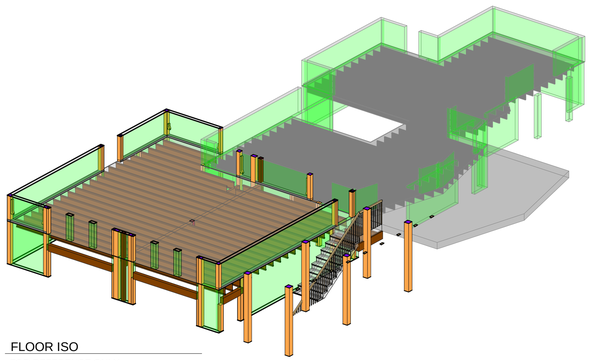

FLOOR ISO

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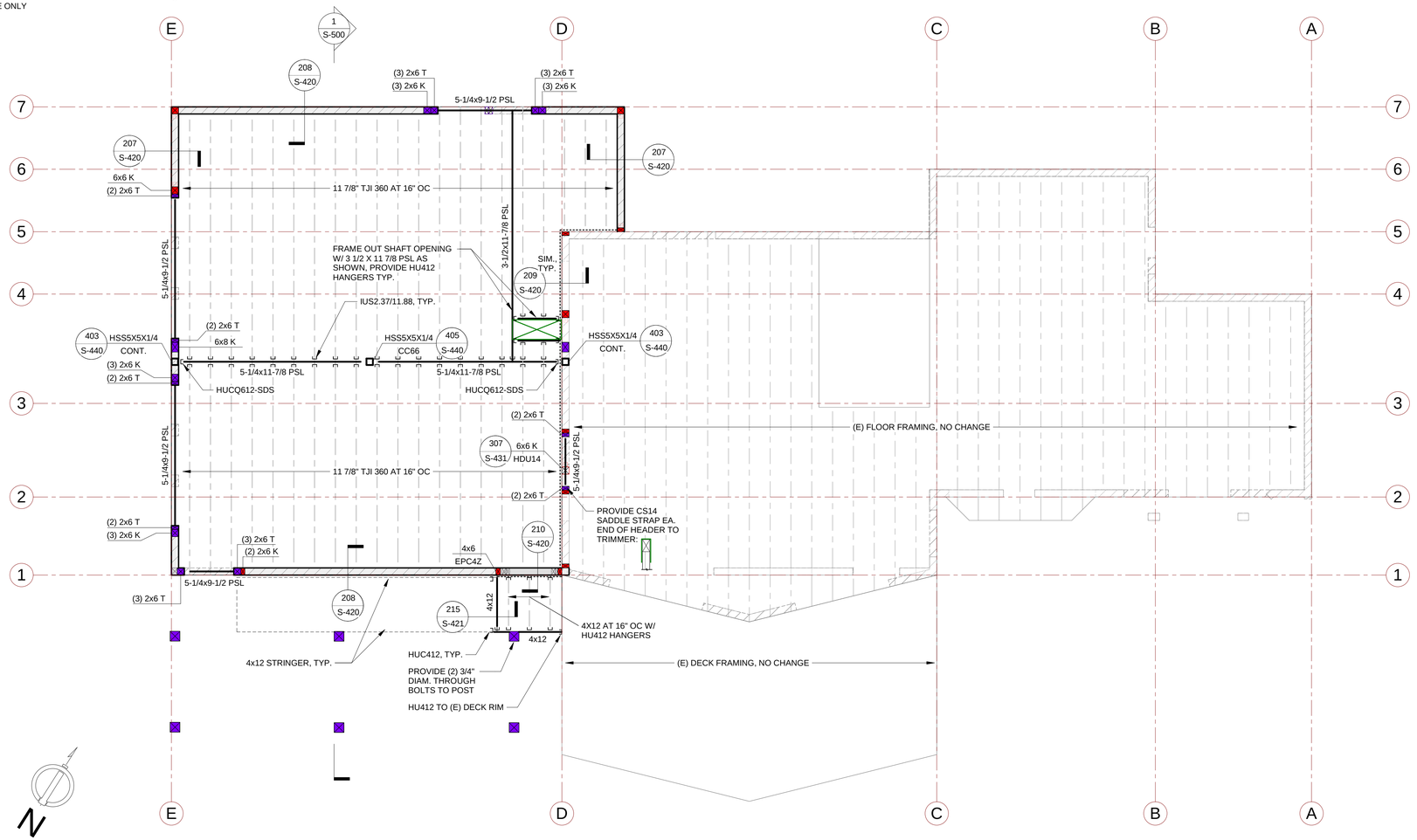

UPPER FLOOR FRAMING PLAN

1/4" = 1'-0"

FLOOR FRAMING NOTES

1) FLOOR SHEATHING TO BE 3/4" T&G APA RATED STURD-I FLR GLUE AND NAIL W/ 10d (0.148 SHANK DIAMETER) at 6" O.C. BOUNDARY & EDGES AND 10" O.C. FIELD (UNO). SEE DIAPHRAGM NAILING DETAIL ON S-430 FOR MORE INFO.

2) SEE SHEARWALL AND DIAPHRAGM PLANS SHEET S-300 FOR ADDITIONAL DIAPHRAGM AND STRAPPING REQUIREMENTS.

3) ALL BEARING/PERIMETER WALLS - UPPER TOP PLATES TO BE SPLICED 48" MINIMUM AWAY FROM LOWER TOP PLATE SPLICES W/ (12) 16d AT LAP PROVIDE MST37 AT ANY PLATE DISCONTINUITIES (UNO).

4) SEE ADDITIONAL REQUIREMENTS IN STRUCTURAL SPECIFICATIONS SHEET S-001.

5) SEE SHEET S-430 FOR SHEARWALL NOTES, SCHEDULES, & DETAILS.

6) PROVIDE SINGLE TRIMMERS AT ALL HEADERS MIN. UNO ON PLAN.

7) PROVIDE KINGSTUDS PER TYPICAL HEADER/KINGSTUD DETAIL UNO ON PLAN. (202 / S-420)

FRAMING LEGEND

- WALLS BELOW FRAMING
- WALLS ABOVE FRAMING
- EXPOSED BEAM OR RAFTER
- CONCEALED BEAM OR HEADER
- FLOOR JOIST
- RAFTER

POST , TRIMMER OR COLUMN

- MEMBER SIZE
- MEMBER TYPE: T - TRIMMER, K - KINGSTUD, P - POST
- 6x6 T/K/P CC / -
- ADDITIONAL HARDWARE AT BOTTOM WHERE OCCURS (AT BCO ATTACH TO SILL)
- HARDWARE AT TOP
- DISCONTINUOUS POST ABV
- POST BELOW FRAMING

WALL STUD SCHEDULE		
H=HEIGHT	TYPE	SPACING
H<12 FT	2x6 DF	16" O.C.
12FT>H<17FT	1-1/2x5-1/2 LSL	16" O.C.

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FLOOR FRAMING PLAN

S-200

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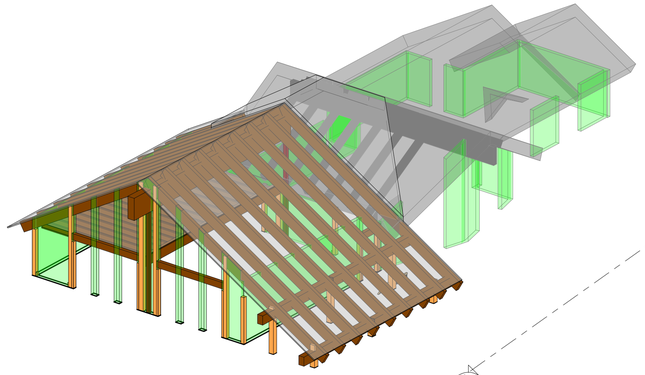

ROOF ISO

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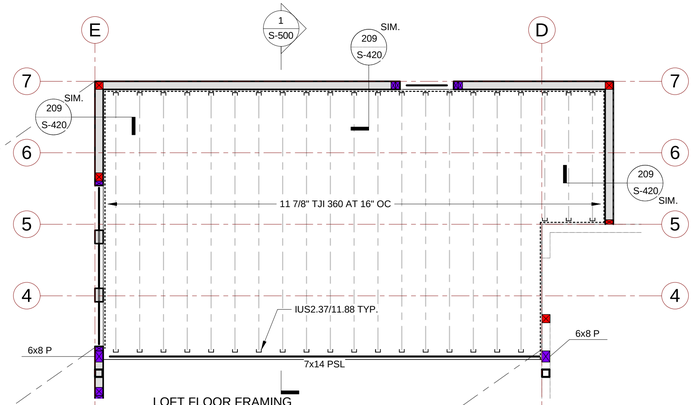
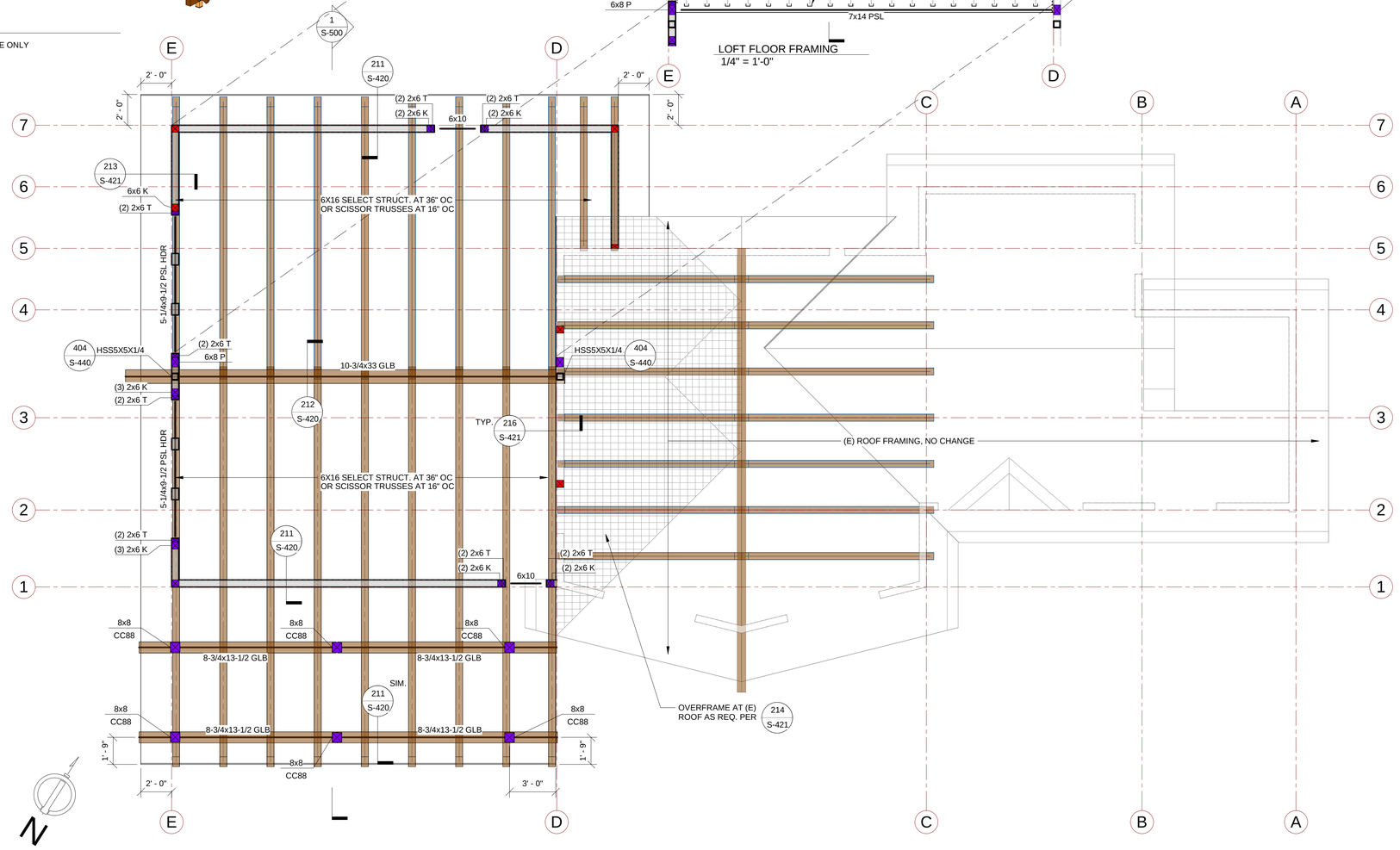


LOFT FLOOR FRAMING

1/4" = 1'-0"



ROOF FRAMING

1/4" = 1'-0"

FLOOR FRAMING NOTES

1) FLOOR SHEATHING TO BE 3/4" T&G APA RATED STURD-I FLR GLUE AND NAIL W/ 10d (0.148 SHANK DIAMETER) at 6" O.C. BOUNDARY & EDGES AND 10" O.C. FIELD (UNO). SEE DIAPHRAGM NAILING DETAIL ON S-430 FOR MORE INFO.

2) SEE SHEARWALL AND DIAPHRAGM PLANS SHEET S-300 FOR ADDITIONAL DIAPHRAGM AND STRAPPING REQUIREMENTS.

3) ALL BEARING/PERIMETER WALLS - UPPER TOP PLATES TO BE SPLICED 48" MINIMUM AWAY FROM LOWER TOP PLATE SPLICES W/ (12) 16d AT LAP PROVIDE MST37 AT ANY PLATE DISCONTINUITIES (UNO).

4) SEE ADDITIONAL REQUIREMENTS IN STRUCTURAL SPECIFICATIONS SHEET S-001.

5) SEE SHEET S-430 FOR SHEARWALL NOTES, SCHEDULES, & DETAILS.

6) PROVIDE SINGLE TRIMMERS AT ALL HEADERS MIN. UNO ON PLAN.

7) PROVIDE KINGSTUDS PER TYPICAL HEADER/KINGSTUD DETAIL UNO ON PLAN. (202 S-420)

ROOF FRAMING NOTES

1) ROOF SHEATHING TO BE 5/8" APA RATED 40/20 W/ 10d (0.148 SHANK DIAMETER) at 6" O.C. BOUNDARY & EDGES AND 12" O.C. FIELD (UNO). PROVIDE 4" O.C. NAILING INTO ALL BLOCKING, OUTRIGGERS AND GABLE TRUSSES. SEE DIAPHRAGM NAILING DETAIL ON S-430 FOR MORE INFO.

2) SEE SHEARWALL AND DIAPHRAGM PLANS SHEET S-300 FOR ADDITIONAL DIAPHRAGM AND STRAPPING REQUIREMENTS.

3) ALL BEARING/PERIMETER WALLS - UPPER TOP PLATES TO BE SPLICED 48" MINIMUM AWAY FROM LOWER TOP PLATE SPLICES W/ (12) 16d AT LAP PROVIDE MST37 AT ANY PLATE DISCONTINUITIES (UNO).

4) SEE ADDITIONAL REQUIREMENTS IN STRUCTURAL SPECIFICATIONS SHEET S-001.

5) SEE SHEET S-430 FOR SHEARWALL NOTES, SCHEDULES, & DETAILS.

6) ROOF SHEATHING: IN ADDITION TO THE NAILING REQUIREMENTS IN THE WOOD FRAMING SECTION ON SHEET S-001, AND THE SHEAR PLAN, PROVIDE 4" O.C. EDGE NAILING & 6" O.C. FIELD NAILING WHEN WITHIN 5' OF GABLE FASCIA LINES, AND PROVIDE 6" O.C. FIELD NAILING WHEN WITHIN 4' OF RIDGES OR EAVES.

7) PROVIDE MIN. OF ONE STUD UNDER EVERY TRUSS OR RAFTER.

8) PROVIDE SINGLE TRIMMERS AT ALL HEADERS MIN. UNO ON PLAN.

9) PROVIDE KINGSTUDS PER TYPICAL HEADER/KINGSTUD DETAIL UNO ON PLAN.

FRAMING LEGEND

- WALLS BELOW FRAMING
- WALLS ABOVE FRAMING
- EXPOSED BEAM OR RAFTER
- CONCEALED BEAM OR HEADER
- FLOOR JOIST
- RAFTER

POST , TRIMMER OR COLUMN

- MEMBER SIZE
- MEMBER TYPE: T - TRIMMER, K - KINGSTUD, P - POST
- 6x6 T/K/P_ CC / -
- ADDITIONAL HARDWARE AT BOTTOM WHERE OCCURS(AT BCO ATTACH TO SILL)
- HARDWARE AT TOP
- POST BELOW FRAMING
- DISCONTINUOUS POST ABV FRAMING

WALL STUD SCHEDULE		
H=HEIGHT	TYPE	SPACING
H<12 FT	2x6 DF	16" O.C.
12FT>H<17FT	1-1/2x5-1/2 LSL	16" O.C.

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ROOF FRAMING PLAN

S-201

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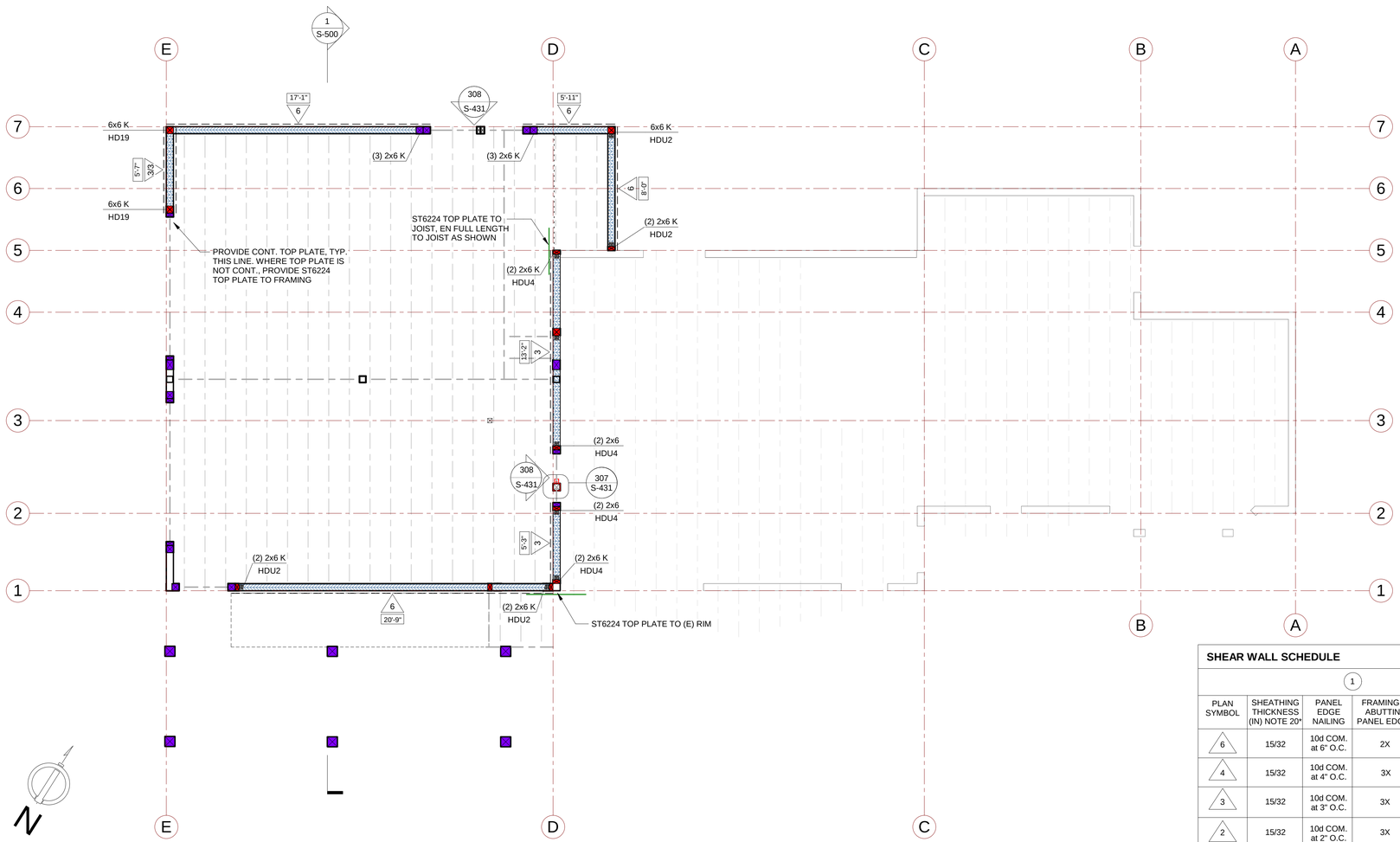


LOWER LEVEL SHEAR PLAN
1/4" = 1'-0"

HOLDOWN HARDWARE SCHEDULE

HOLDOWN	ANCHOR	ALT. EMBED	EMBED INTO FTG
HDU2	SB 5/8x24	5/8" ROD 18" EMBED	N.A.
HDU4	SB 5/8x24	5/8" ROD 18" EMBED	N.A.
HDU5	SB 5/8x24	5/8" ROD 18" EMBED	N.A.
HDU8	SB 7/8x24	7/8" ROD 18" EMBED	N.A.
HDU11	N.A.	N.A.	1" ROD 18" EMBED
HDU14	N.A.	N.A.	1" ROD 18" EMBED
HD19	N.A.	N.A.	1 1/4" ROD 18" EMBED

1) THE ROD IS TO BE A307 ALL-THREAD WITH DOUBLE NUT AND 3/8x2-1/2x2 1/2 PLATE WASHER (1/2x3x3 AT HD19). SIMPSON PAB8 AND PAB10 CAN BE SUBSTITUTED.

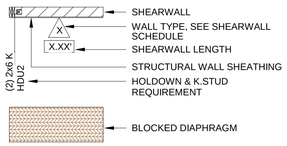
2) REFERENCE TO HEAVY DUTY HOLDOWN DETAIL FOR HDU11 HOLDOWNS AND LARGER.

SHEAR WALL SCHEDULE

		(1)			(2)	(3)	(4)	(5)	(6)
PLAN SYMBOL	SHEATHING THICKNESS (IN) NOTE 20*	PANEL EDGE NAILING	FRAMING AT ABUTTING PANEL EDGES	ALLOWABLE SHEAR (PLF)	SILL PLATE AGAINST CONC. OR MASONRY	SOLE PLATE ON SUBFLOOR FRAMING	SOLE PLATE NAILING	FRAMING CLIPS, TYPE PER DETAIL	ANCHOR BOLTS, TYPE PER DETAIL
6	15/32	10d COM. at 6" O.C.	2X	310 (SEISMIC) 435 (WIND)	2X	2X	16d at 6" O.C.	at 16" O.C. NOTE 15 & 17*	at 48" O.C.
4	15/32	10d COM. at 4" O.C.	3X	460 (SEISMIC) 645 (WIND)	2X	2X	16d at 4" O.C. NOTE 16*	at 12" O.C. NOTE 15 & 17*	at 32" O.C.
3	15/32	10d COM. at 3" O.C.	3X	600 (SEISMIC) 840 (WIND)	2X	2X	16d at 3" O.C. NOTE 16*	at 8" O.C. NOTE 15 & 17*	at 24" O.C.
2	15/32	10d COM. at 2" O.C.	3X	770 (SEISMIC) 1077 (WIND)	3X	3X NOTE 16	0.22" x 6" SDWS @ 6" O.C. NOTE 16*	at 8" O.C. NOTE 15 & 17*	at 24" O.C.
4/4	15/32 BOTH SIDES	10d COM. at 4" O.C.	3X	920 (SEISMIC) 1290 (WIND)	3X	3X	(2) ROWS 0.22" x 6" SDWS @ 10" O.C.	at 12" O.C.	at 16" O.C.
3/3	15/32 BOTH SIDES	10d COM. at 3" O.C.	3X	1200 (SEISMIC) 1680 (WIND)	3X	3X	(2) ROWS 0.22" x 6" SDWS @ 8" O.C.	at 8" O.C.	at 16" O.C.
2/2	15/32 BOTH SIDES	10d COM. at 2" O.C.	4X	1540 (SEISMIC) 2155 (WIND)	3X	3X	(2) ROWS 0.22" x 6" SDWS @ 6" O.C.	at 8" O.C.	at 12" O.C.

* SEE SHEARWALL SCHEDULE NOTES ON SHEET S-430

PLAN LEGEND



SHEAR PLAN NOTES

1) SEE SHEET S-430 FOR SHEARWALL NOTES, SCHEDULES, & DETAILS.

2) SEE SHEET S-001 FOR SPECIFICATIONS AND GENERAL NOTES.

3) SEE ROOF AND FLOOR FRAMING PLANS FOR ROOF AND FLOOR SHEATHING REQUIREMENTS.

4) HATCHED AREAS PER LEGEND INDICATE BLOCKED DIAPHRAGMS; AT THESE AREAS, PROVIDE 10d AT 2" O.C. BOUNDARY NAILING / 2" O.C. EDGE NAILING AT ALL PANELS.

5) EDGE NAIL TO ALL MEMBERS INDICATED COLLECTORS OR WHERE NOTED PER PLAN

6) PROVIDE 10d AND 6" O.C. BOUNDARY NAILING / 6" O.C. EDGE NAILING / 10" O.C. FIELD NAILING, U.N.O.

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LOWER LEVEL SHEAR PLAN

S-300

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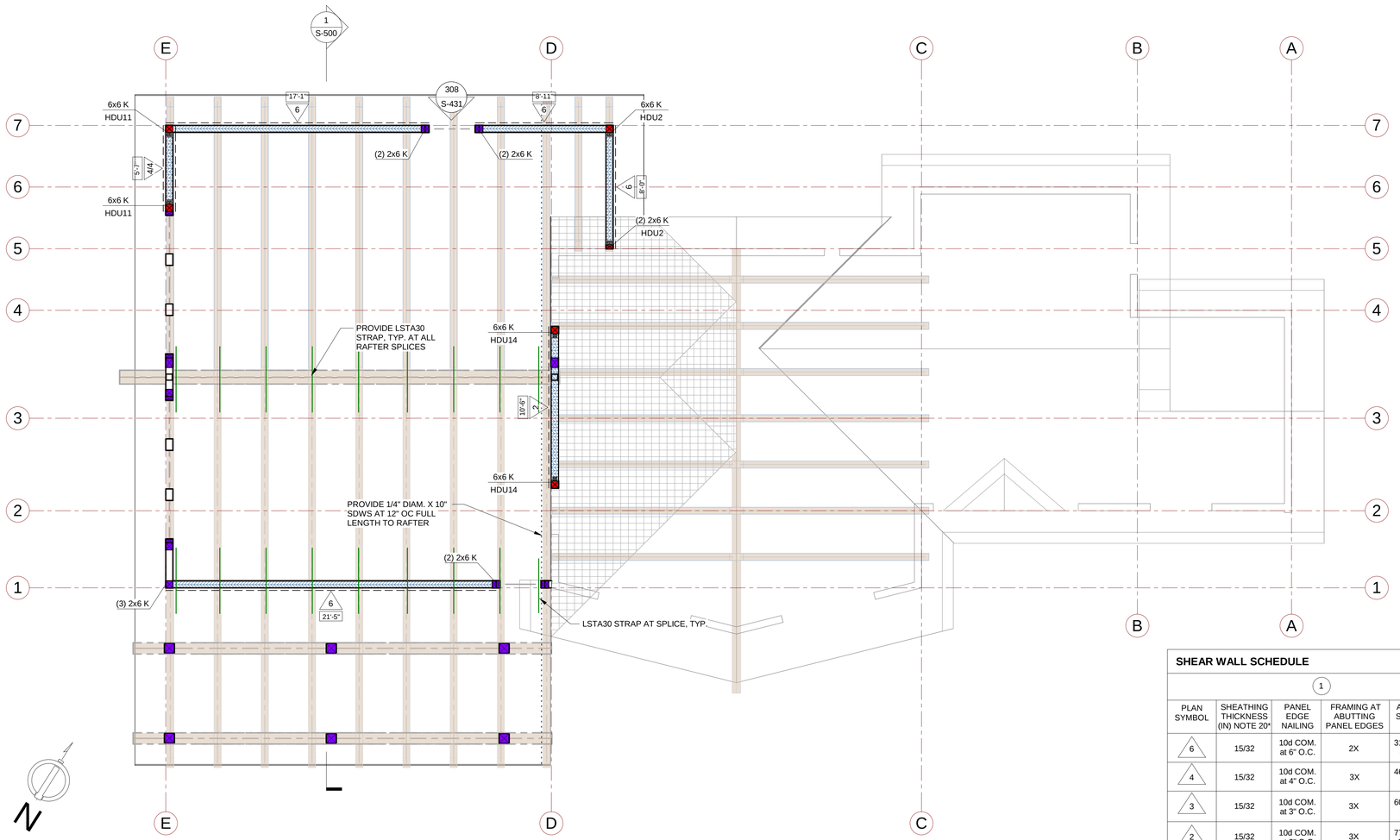


UPPER LEVEL SHEAR PLAN
1/4" = 1'-0"

HOLDOWN HARDWARE SCHEDULE

HOLDOWN	ANCHOR	ALT. EMBED	EMBED INTO FTG
HDU2	SB 5/8x24	5/8" ROD 18" EMBED	N.A.
HDU4	SB 5/8x24	5/8" ROD 18" EMBED	N.A.
HDU5	SB 5/8x24	5/8" ROD 18" EMBED	N.A.
HDU8	SB 7/8x24	7/8" ROD 18" EMBED	N.A.
HDU11	N.A.	N.A.	1" ROD 18" EMBED
HDU14	N.A.	N.A.	1" ROD 18" EMBED
HD19	N.A.	N.A.	1 1/4" ROD 18" EMBED

1) THE ROD IS TO BE A307 ALL-THREAD WITH DOUBLE NUT AND 3/8x2-1/2x2 1/2 PLATE WASHER (1/2x3x3 AT HD19). SIMPSON PAB8 AND PAB10 CAN BE SUBSTITUTED.

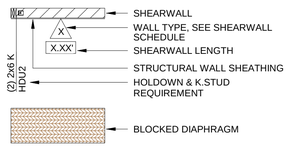
2) REFERENCE TO HEAVY DUTY HOLDOWN DETAIL FOR HDU11 HOLDOWNS AND LARGER.

SHEAR WALL SCHEDULE

		1			2	3	4	5	6
PLAN SYMBOL	SHEATHING THICKNESS (IN) NOTE 20*	PANEL EDGE NAILING	FRAMING AT ABUTTING PANEL EDGES	ALLOWABLE SHEAR (PLF)	SILL PLATE AGAINST CONC. OR MASONRY	SOLE PLATE ON SUBFLOOR FRAMING	SOLE PLATE NAILING	FRAMING CLIPS, TYPE PER DETAIL	ANCHOR BOLTS, TYPE PER DETAIL
6	15/32	10d COM. at 6" O.C.	2X	310 (SEISMIC) 435 (WIND)	2X	2X	16d at 6" O.C.	at 16" O.C. NOTE 15 & 17*	at 48" O.C.
4	15/32	10d COM. at 4" O.C.	3X	460 (SEISMIC) 645 (WIND)	2X	2X	16d at 4" O.C. NOTE 16*	at 12" O.C. NOTE 15 & 17*	at 32" O.C.
3	15/32	10d COM. at 3" O.C.	3X	600 (SEISMIC) 840 (WIND)	2X	2X	16d at 3" O.C. NOTE 16*	at 8" O.C. NOTE 15 & 17*	at 24" O.C.
2	15/32	10d COM. at 2" O.C.	3X	770 (SEISMIC) 1077 (WIND)	3X	3X NOTE 16	0.22" x 6" SDWS @ 6" O.C. NOTE 16*	at 8" O.C. NOTE 15 & 17*	at 24" O.C.
4/4	15/32 BOTH SIDES	10d COM. at 4" O.C.	3X	920 (SEISMIC) 1290 (WIND)	3X	3X	(2) ROWS 0.22" x 6" SDWS @ 10" O.C.	at 12" O.C.	at 16" O.C.
3/3	15/32 BOTH SIDES	10d COM. at 3" O.C.	3X	1200 (SEISMIC) 1680 (WIND)	3X	3X	(2) ROWS 0.22" x 6" SDWS @ 8" O.C.	at 8" O.C.	at 16" O.C.
2/2	15/32 BOTH SIDES	10d COM. at 2" O.C.	4X	1540 (SEISMIC) 2155 (WIND)	3X	3X	(2) ROWS 0.22" x 6" SDWS @ 6" O.C.	at 8" O.C.	at 12" O.C.

* SEE SHEARWALL SCHEDULE NOTES ON SHEET S-430

PLAN LEGEND



SHEAR PLAN NOTES

1) SEE SHEET S-430 FOR SHEARWALL NOTES, SCHEDULES, & DETAILS.

2) SEE SHEET S-001 FOR SPECIFICATIONS AND GENERAL NOTES.

3) SEE ROOF AND FLOOR FRAMING PLANS FOR ROOF AND FLOOR SHEATHING REQUIREMENTS.

4) HATCHED AREAS PER LEGEND INDICATE BLOCKED DIAPHRAGMS; AT THESE AREAS, PROVIDE 10d AT 2" O.C. BOUNDARY NAILING / 2" O.C. EDGE NAILING AT ALL PANELS.

5) EDGE NAIL TO ALL MEMBERS INDICATED COLLECTORS OR WHERE NOTED PER PLAN

6) PROVIDE 10d AND 6" O.C. BOUNDARY NAILING / 6" O.C. EDGE NAILING / 10" O.C. FIELD NAILING, U.N.O.

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1-15-2021

ROPER RESIDENCE

APN 026-202-006
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AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 20-356
DATE: 15 JANUARY 2021
REVISIONS:

PERMIT SET

UPPER LEVEL SHEAR PLAN

S-301

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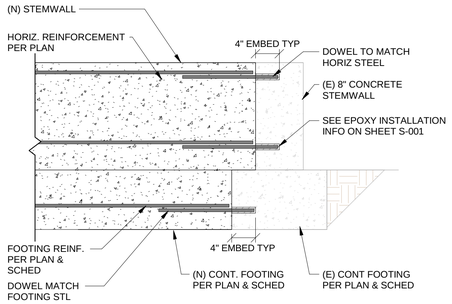
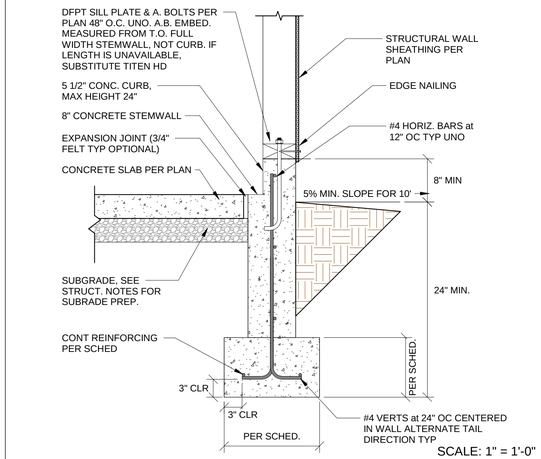


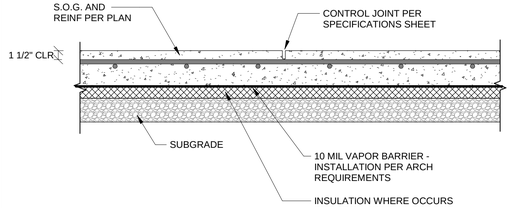
SCALE: 1" = 1'-0"

NEW FOOTING DOWEL INTO (E) FOOTING 112



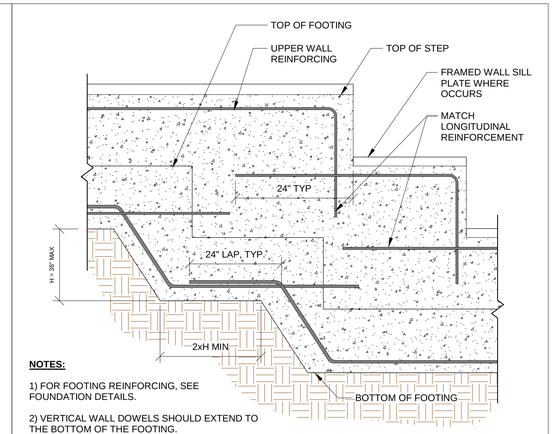
SCALE: 1" = 1'-0"

CONTINUOUS FOOTING AT S.O.G. w/ CURB 109



SCALE: 1" = 1'-0"

GARAGE SLAB ON GRADE 106



NOTES:

1) FOR FOOTING REINFORCING, SEE FOUNDATION DETAILS.

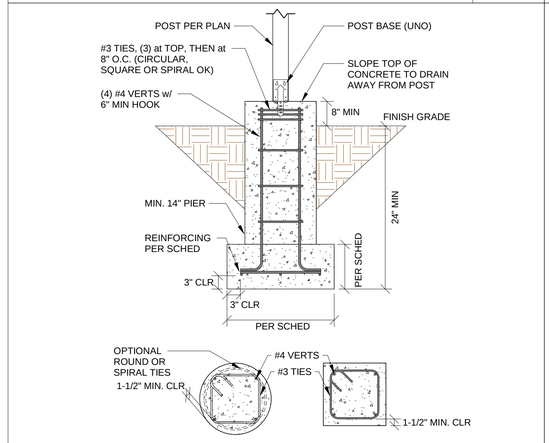
2) VERTICAL WALL DOWELS SHOULD EXTEND TO THE BOTTOM OF THE FOOTING.

3) WALL REINFORCING NOT SHOWN.

4) SPLICE AND DEVELOPMENT LENGTHS FOR #5 AND SMALLER. LARGER BARS PER ACI.

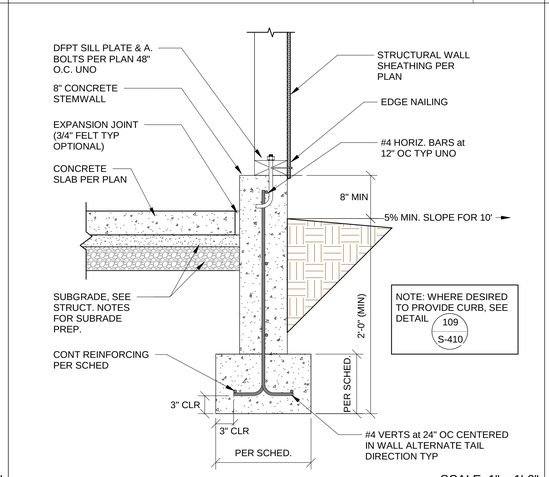
SCALE:N.T.S.

STEP WALL AND FOOTING 103



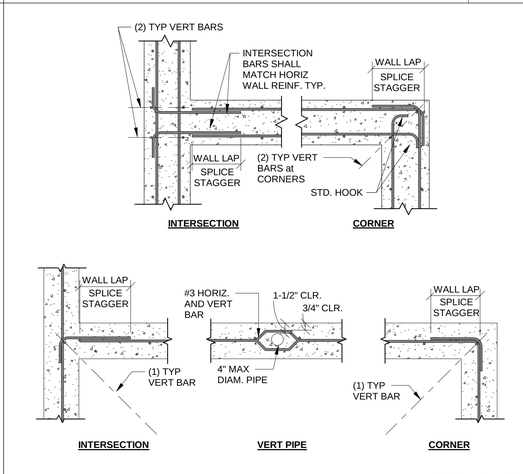
SCALE: 3/4" = 1'-0"

EXTERIOR PIER FOOTING 111



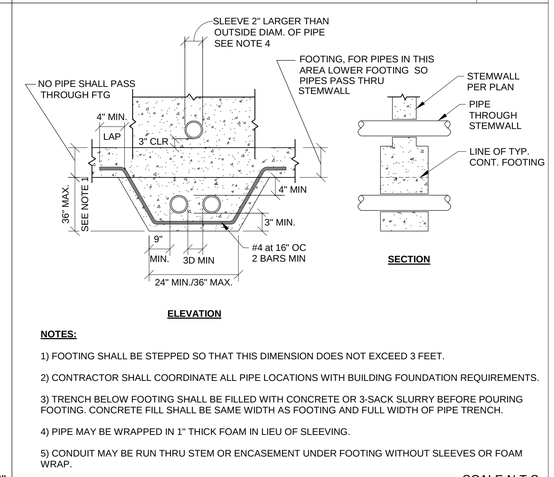
SCALE: 1" = 1'-0"

CONTINUOUS FOOTING AT SLAB ON GRADE 108



SCALE: 1" = 1'-0"

STEMWALL AND WALL STEEL 105



NOTES:

1) FOOTING SHALL BE STEPPED SO THAT THIS DIMENSION DOES NOT EXCEED 3 FEET.

2) CONTRACTOR SHALL COORDINATE ALL PIPE LOCATIONS WITH BUILDING FOUNDATION REQUIREMENTS.

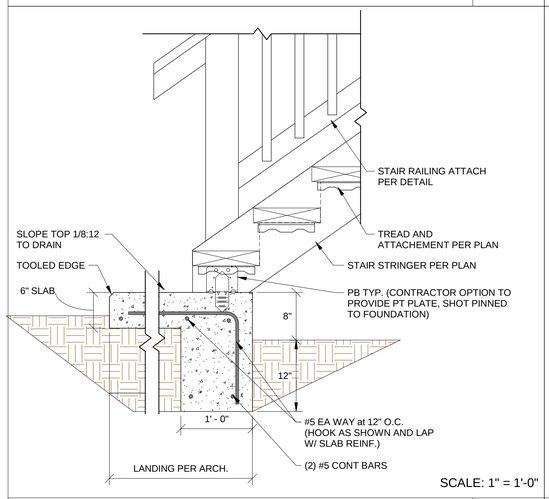
3) TRENCH BELOW FOOTING SHALL BE FILLED WITH CONCRETE OR 3-SACK SLURRY BEFORE POURING FOOTING. CONCRETE FILL SHALL BE SAME WIDTH AS FOOTING AND FULL WIDTH OF PIPE TRENCH.

4) PIPE MAY BE WRAPPED IN 1" THICK FOAM IN LIEU OF SLEEVING.

5) CONDUIT MAY BE RUN THRU STEM OR ENCASEMENT UNDER FOOTING WITHOUT SLEEVES OR FOAM WRAP.

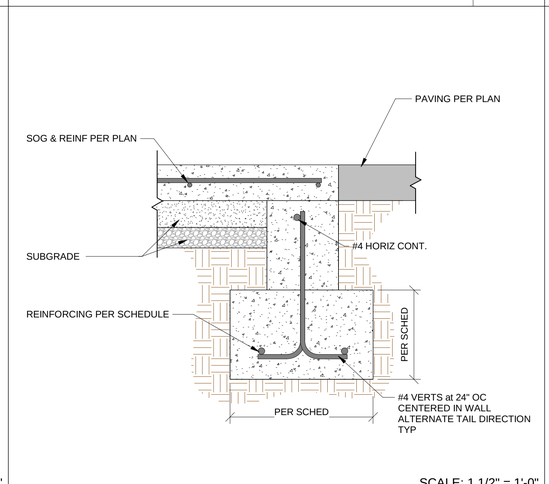
SCALE:N.T.S.

PIPES PERPENDICULAR TO FOOTING 102



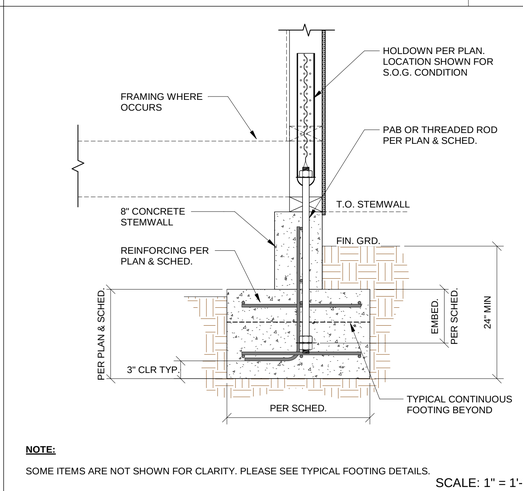
SCALE: 1" = 1'-0"

EXTERIOR STAIR LANDING 110



SCALE: 1 1/2" = 1'-0"

GARAGE FRONT CONT. FOOTING 107

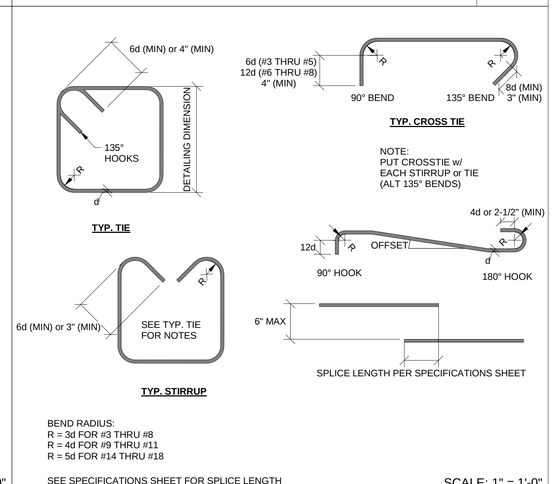


NOTE:

SOME ITEMS ARE NOT SHOWN FOR CLARITY. PLEASE SEE TYPICAL FOOTING DETAILS.

SCALE: 1" = 1'-0"

HEAVY DUTY HOLDOWN ANCHOR 104



BEND RADIUS:
R = 3d FOR #3 THRU #8
R = 4d FOR #9 THRU #11
R = 5d FOR #14 THRU #18

SEE SPECIFICATIONS SHEET FOR SPLICE LENGTH

SCALE: 1" = 1'-0"

BENDS AND HOOKS 101

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1-15-2021

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JOB NO.: 20-356
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REVISIONS:

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FOUNDATION DETAILS

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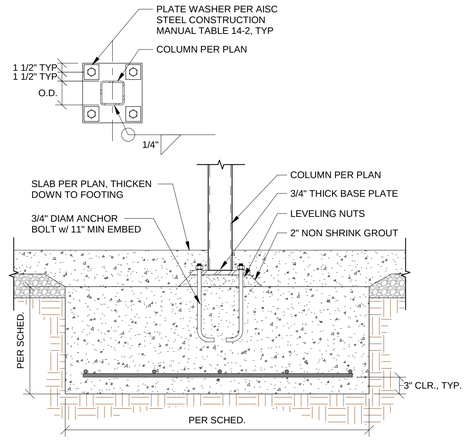
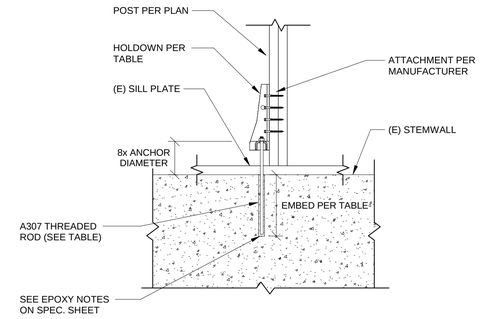


SCALE: 1" = 1'-0"

COLUMN BASE PLATE DETAIL 117



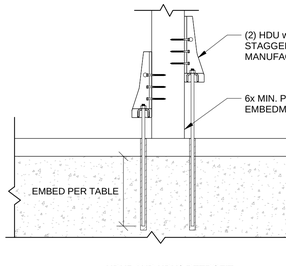
HOLDOWN	EMBEDMENT	SIZE	CAPACITY	HOLE
HDU2	10"	5/8" DIAM.	3,075 lbs.	3/4" DIAM.
HDU4	10"	5/8" DIAM.	3,701 lbs.	3/4" DIAM.

NOTES:

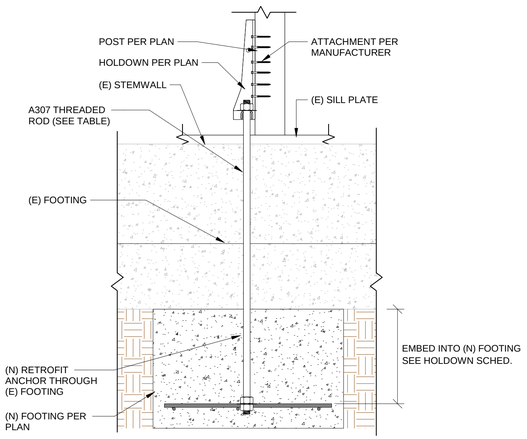
1) EPOXY MUST BE SET-3G TO ACHIEVE LOADS

SCALE: 1" = 1'-0"

RETROFIT HOLDOWN 115



HDU5 AND HDU8 RETROFIT



HDU8 AND HIGHER RETROFIT

HOLDOWN	EMBEDMENT	SIZE	CAPACITY	HOLE
HDU5	(2) AT 12-1/2"	5/8" DIAM.	5645 lbs.	3/4" DIAM.
HDU8 (see note 1)	(2) AT12-1/2"	7/8" DIAM.	6250 lbs.	1" DIAM.
HDU8 (see note 1)	(N) FTG REQ'D	7/8" DIAM.	---	1" DIAM.
HDU11	(N) FTG REQ'D	1" DIAM.	---	1-1/8" DIAM.
HDU14	(N) FTG REQ'D	1" DIAM.	---	1-1/8" DIAM.

NOTES:

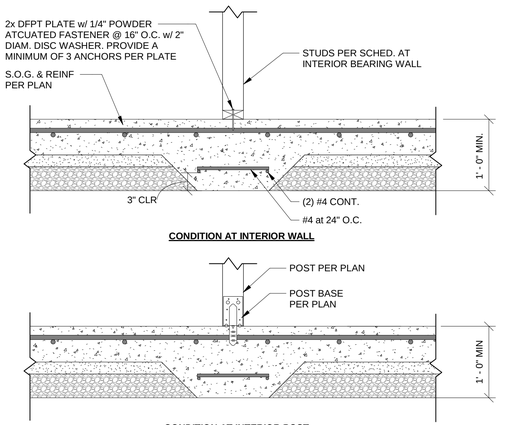
1) *FOR HDU 8 RETROFIT, THE DRILLED AND EPOXIED RETROFIT ONLY ACHIEVES THE LISTED TABLE VALUE. TO ACHIEVE FULL HDU8 CAPACITY, THE RETROFIT WITH THE NEW FOUNDATION IS REQUIRED.

2) DRILLED AND EPOXIED RETROFITS REQUIRE **SET-3G** EPOXY TO ACHIEVE LISTED LOADS. SEE SPECIFICATIONS SHEET FOR EPOXY INFORMATION.

3) FOR FOOTING REQUIREMENTS AT NEW FOOTING RETROFITS, SEE HOLDOWN REQUIREMENTS AND SCHEDULE ON PLAN.

SCALE: 1" = 1'-0"

RETROFIT HEAVY DUTY HOLDOWN 116



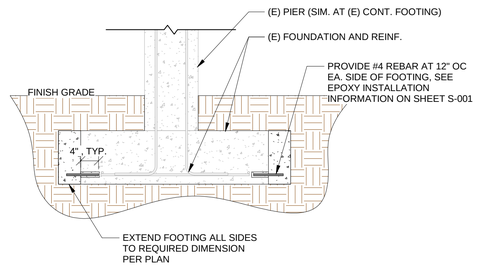
CONDITION AT INTERIOR WALL

CONDITION AT INTERIOR POST

SEE ABOVE FOR MORE INFO

SCALE: 1" = 1'-0"

THICKENED SLAB FOOTING 114



SCALE: 3/4" = 1'-0"

RETROFIT (E) PIER FOOTING 113

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FOUNDATION DETAILS, CONT.

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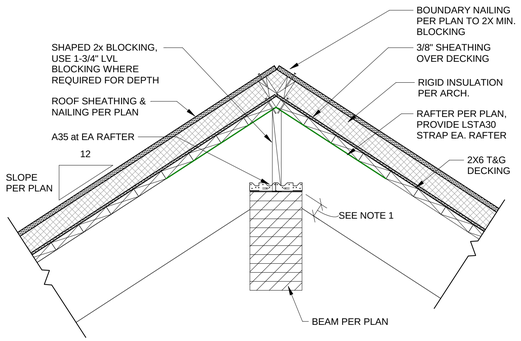
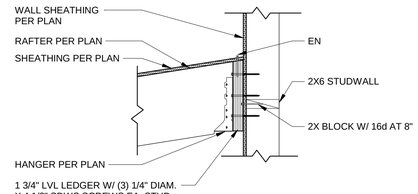


NOTES:

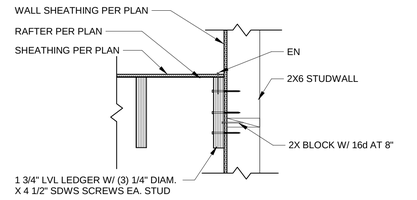
1) NOTCH AT RAFTER NOT TO EXCEED 25% OF THE DEPTH OF THE RAFTER.

SCALE: 1" = 1'-0"

RIDGE FRAMING 212



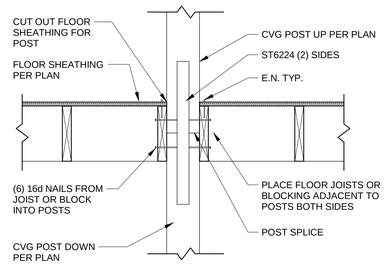
PERPENDICULAR TO WALL CONDITION



PARALLEL TO WALL CONDITION

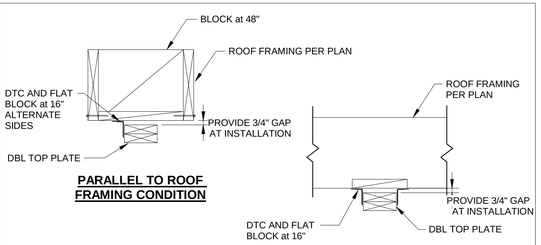
SCALE: 1" = 1'-0"

RAFTER LEDGER 209



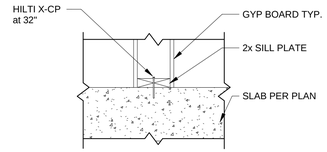
SCALE: 1" = 1'-0"

CVG POST SPLICE 206



PARALLEL TO ROOF FRAMING CONDITION

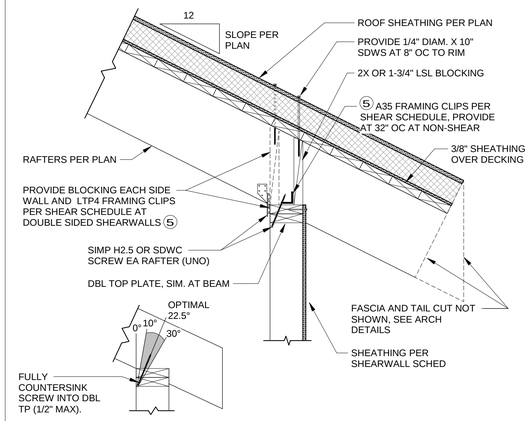
PERPENDICULAR TO ROOF FRAMING CONDITION



BASE OF WALL CONNECTION

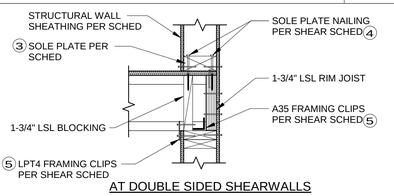
SCALE: 1" = 1'-0"

NON BEARING WALL CONNECTIONS 203

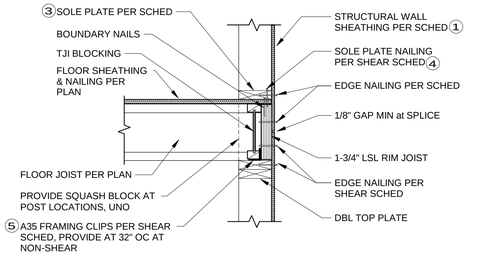


SCALE: 1" = 1'-0"

LOW SIDE ROOF EAVE 211



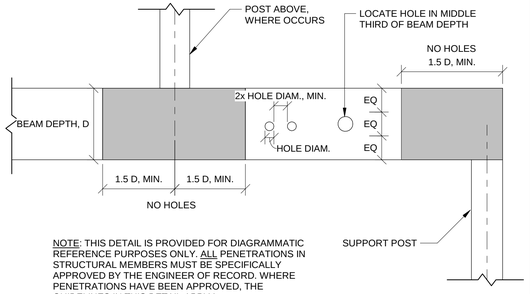
AT DOUBLE SIDED SHEARWALLS



NOTE: SEE SHEARWALL DETAIL AND SCHEDULE FOR SHEARWALL INFORMATION.

SCALE: 1" = 1'-0"

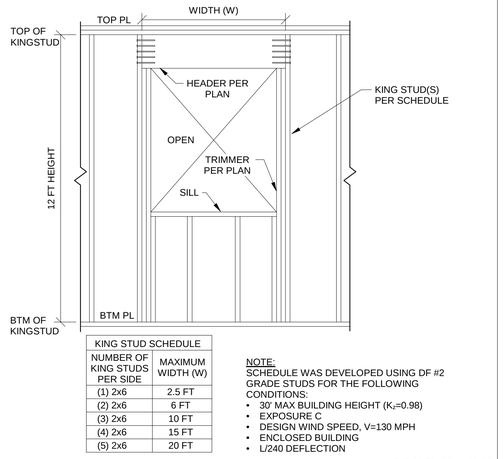
EXTERIOR WALL PERPENDICULAR TO JOIST 208



NOTE: THIS DETAIL IS PROVIDED FOR DIAGRAMMATIC REFERENCE PURPOSES ONLY. ALL PENETRATIONS IN STRUCTURAL MEMBERS MUST BE SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD. WHERE PENETRATIONS HAVE BEEN APPROVED, THE GUIDELINES IN THIS DETAIL APPLY.

SCALE: 1" = 1'-0"

PENETRATIONS IN WOOD BEAMS 205

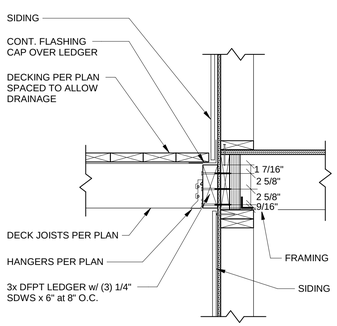


KING STUD SCHEDULE	
NUMBER OF KING STUDS PER SIDE	MAXIMUM WIDTH (W)
(1) 2x6	2.5 FT
(2) 2x6	6 FT
(3) 2x6	10 FT
(4) 2x6	15 FT
(5) 2x6	20 FT

NOTE:
SCHEDULE WAS DEVELOPED USING DF #2 GRADE STUDS FOR THE FOLLOWING CONDITIONS:
- 30' MAX BUILDING HEIGHT (K_z=0.98)
- EXPOSURE C
- DESIGN WIND SPEED, V=130 MPH
- ENCLOSED BUILDING
- L/240 DEFLECTION

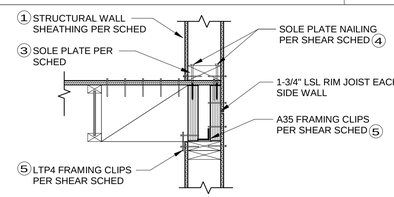
SCALE: 1" = 1'-0"

HEADER AND KING STUD 202

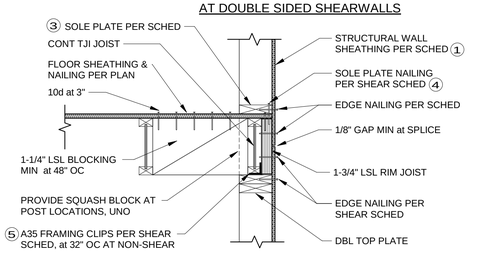


SCALE: 1" = 1'-0"

DECK LEDGER TO EXISTING FRAMING 210



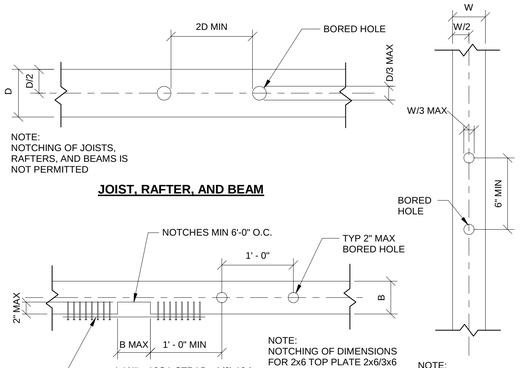
AT DOUBLE SIDED SHEARWALLS



NOTE: SEE SHEARWALL DETAIL AND SCHEDULE FOR SHEARWALL INFORMATION.

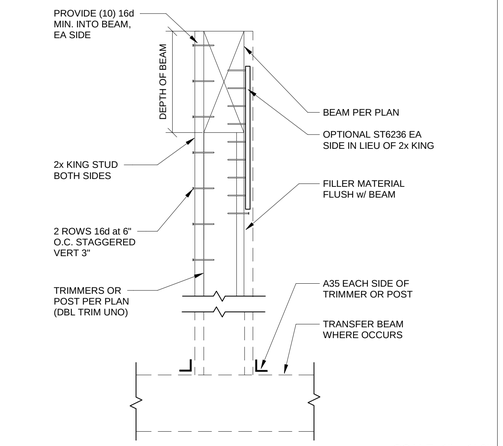
SCALE: 1" = 1'-0"

EXTERIOR WALL PARALLEL TO JOIST 207



SCALE: 1" = 1'-0"

NOTCHES IN FRAMING 204



SCALE: 1" = 1'-0"

BEAM POCKET 201

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REGISTERED PROFESSIONAL ENGINEER MICHAEL JAMES MCKLIN 69936 CIVIL STATE OF CALIFORNIA
1-15-2021

ROPER RESIDENCE

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 20-356
DATE: 15 JANUARY 2021
REVISIONS:

PERMIT SET

FRAMING DETAILS

S-420

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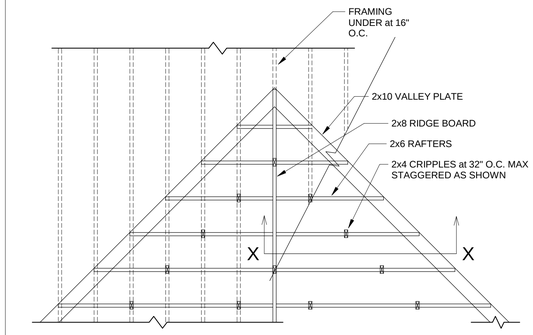
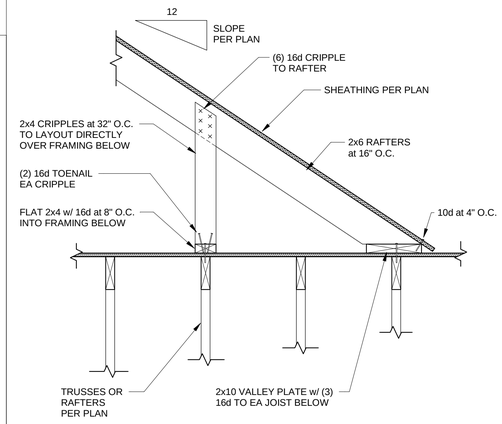


PLAN

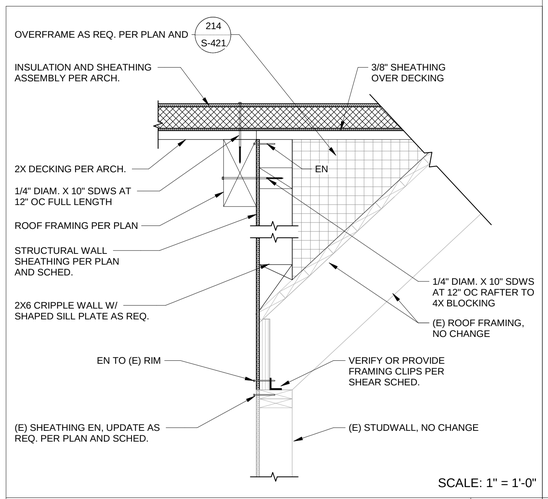
SCALE: 1" = 1'-0"

CALIFORNIA OVERFRAMING 214



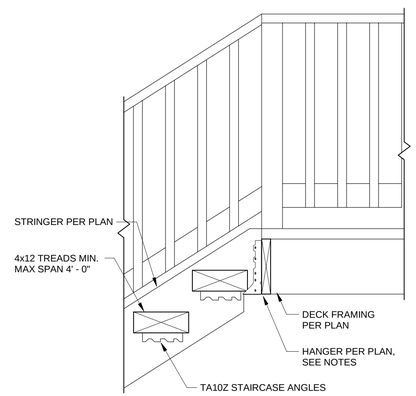
SECTION X-X

SCALE: 1" = 1'-0"



SCALE: 1" = 1'-0"

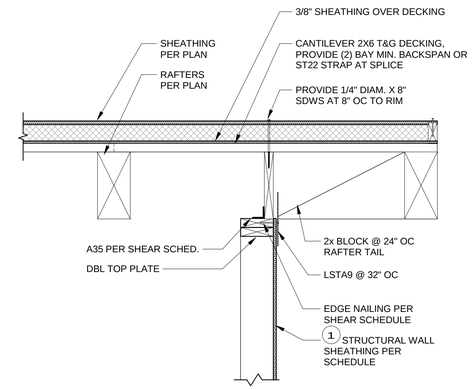
(N) ROOF SHEAR TRANSFER AT OVERFRAMING 216



NOTE:
1. DROP/RAISE HANGER AS REQ'D. PROVIDE NAILS REQ'D PER HANGER MFR.
2. NOTCH IN STAIR STRINGER NOT TO EXCEED 25% OF DEPTH OF STRINGER.

SCALE: 1" = 1'-0"

UNCUT STAIR STRINGER TO DECK 215



SCALE: 1" = 1'-0"

GABLE END FRAMING AT RAFTER 213

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FRAMING DETAILS, CONT.

S-421

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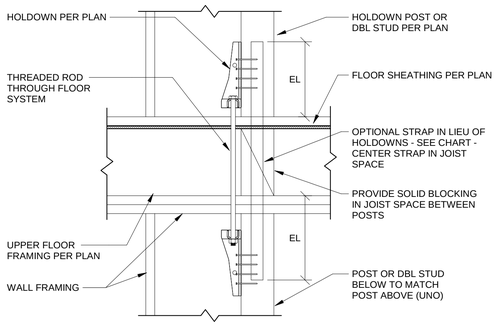
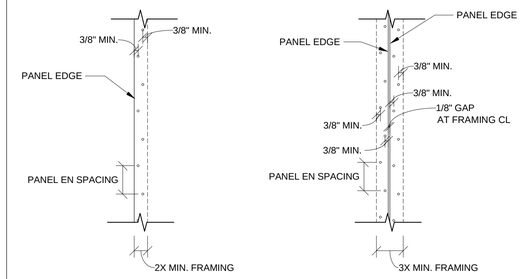


HOLDOWN TO STRAP CONVERSION

HOLDOWN	CAPACITY (LBS)	STRAP	CAPACITY (LBS)
HDU2	3075	CMST14 18" EL	3894
HDU4	4565	CMST14 24" EL	4720
HDU5	5645	CMST14 34" EL	6490
HDU8	7855	(2) CMST14 34" EL	9440
HDU11	9355	(2) CMST14 34" EL	12980
HDU14	14445	N/A	N/A

SCALE: 1" = 1'-0"

OPTIONAL STRAP AT HOLDDOWN — 306



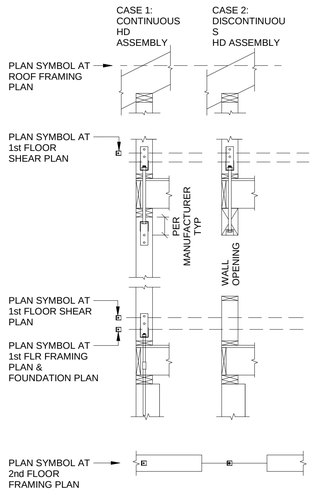
STAGGERED FASTENERS AT PANEL EDGE

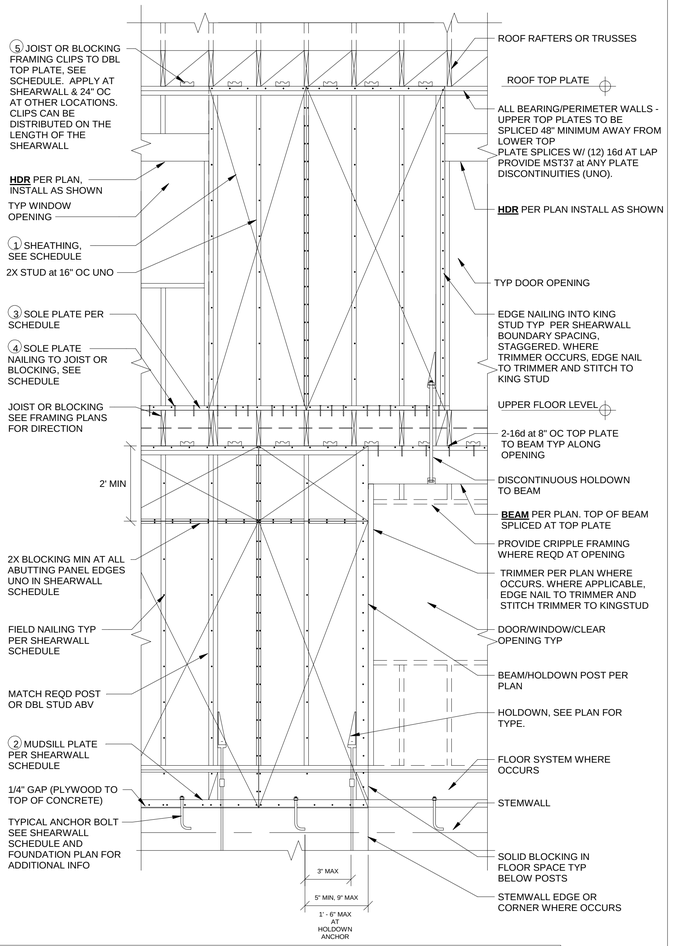
STAGGERED FASTENERS AT ADJOINING PANEL EDGES

NOTES:
1) THIS DETAIL APPLIES AT ALL DIAPHRAGM AND SHEARWALL NAILING PATTERNS.

SCALE: 1 1/2" = 1'-0"

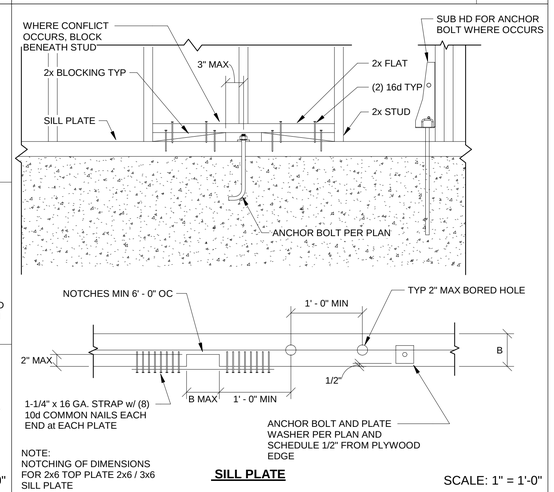
TYPICAL STAGGERED NAILING — 304





SCALE: 1" = 1'-0"

HOLDOWN AT CORNER AND INTERSECTION — 305

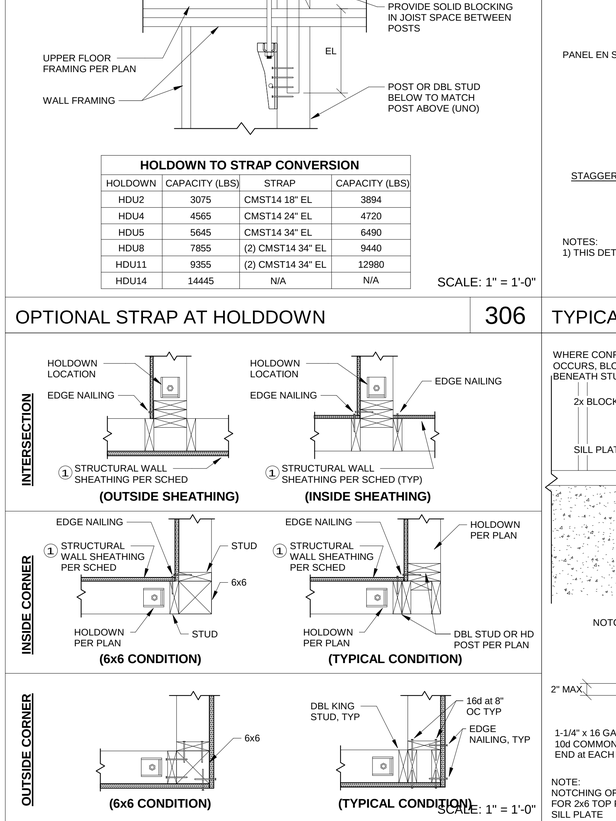


NOTE:
NOTCHING OF DIMENSIONS FOR 2x6 TOP PLATE 2x6 / 3x6 SILL PLATE

SILL PLATE

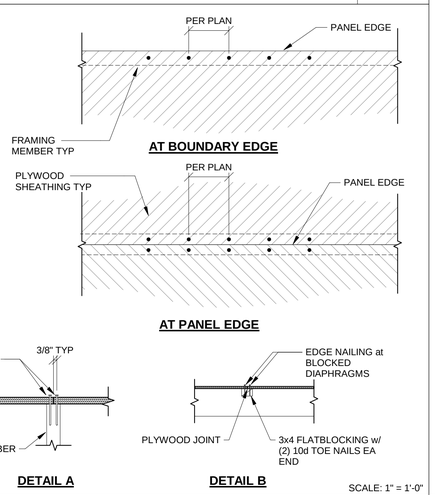
SCALE: 1" = 1'-0"

MUDSILL DETAIL — 303



DIAPHRAGM ISOMETRIC

NOTES:
1. RUN LONG DIMENSION OF PLYWOOD PERPENDICULAR TO JOIST.
2. NAILING SIZE AND SPACING NOTED ON PLAN.
3. NAILS SHALL HAVE A MINIMUM 3/8" EDGE DISTANCE, SEE **DETAIL A**.
4. USE TONGUE AND GROOVE PLYWOOD AT UNBLOCKED FLOORS.
5. USE BOUNDARY NAILING AT ALL NAILING ZONE BOUNDARIES.
6. MINIMUM PANEL DIMENSION IS 2' - 0" WIDE.
7. SEE SHEARWALL SCHEDULE FOR ADDITIONAL NAILING REQUIREMENTS.



SCALE: 1" = 1'-0"

DIAPHRAGM NAILING — 302

NOTE: STRUCTURAL COMPOSITE LUMBER COLUMNS HAVE SIDES THAT SHOW EITHER THE WIDE FACE OR THE EDGES OF THE LUMBER STRANDSVENEERS. ALL DESIGN VALUES REFLECT INSTALLATION INTO THE WIDE FACE.

SHEAR WALL SCHEDULE

	1				2	3	4	5	6
PLAN SYMBOL	SHEATHING THICKNESS (IN)	PANEL EDGE NAILING	FRAMING AT ABUTTING PANEL EDGES	ALLOWABLE SHEAR (PLF)	SILL PLATE AGAINST CONC. OR MASONRY	SOLE PLATE ON SUBFLOOR FRAMING	SOLE PLATE NAILING	FRAMING CLIPS, TYPE PER DETAIL	ANCHOR BOLTS, TYPE PER DETAIL
6	15/32	10d COM. at 6" O.C.	2X	310 (SEISMIC) 435 (WIND)	2X	2X	16d at 6" O.C.	at 16" O.C. NOTE 15 & 17	at 48" O.C.
4	15/32	10d COM. at 4" O.C.	3X	460 (SEISMIC) 645 (WIND)	2X	2X	16d at 4" O.C. NOTE 16	at 12" O.C. NOTE 15 &17	at 32" O.C.
3	15/32	10d COM. at 3" O.C.	3X	600 (SEISMIC) 840 (WIND)	2X	2X	16d at 3" O.C. NOTE 16	at 8" O.C. NOTE 15 &17	at 24" O.C.
2	15/32	10d COM. at 2" O.C.	3X	770 (SEISMIC) 1077 (WIND)	3X	3X NOTE 16	0.22" x 6" SDWS @ 6" O.C. NOTE 16	at 8" O.C. NOTE 15 &17	at 24" O.C.
4/4	15/32 BOTH SIDES	10d COM. at 4" O.C.	3X	920 (SEISMIC) 1290 (WIND)	3X	3X	(2) ROWS 0.22" x 6" SDWS @ 10" O.C.	at 12" O.C.	at 16" O.C.
3/3	15/32 BOTH SIDES	10d COM. at 3" O.C.	3X	1200 (SEISMIC) 1680 (WIND)	3X	3X	(2) ROWS 0.22" x 6" SDWS @ 8" O.C.	at 8" O.C.	at 16" O.C.
2/2	15/32 BOTH SIDES	10d COM. at 2" O.C.	4X	1540 (SEISMIC) 2155 (WIND)	3X	3X	(2) ROWS 0.22" x 6" SDWS @ 6" O.C.	at 8" O.C.	at 12" O.C.

1. THERE SHALL BE A MINIMUM OF TWO ANCHORS PER PLATE, WITH AN ANCHOR LOCATED WITHIN 12" OF EACH END.
2. ANCHORS SHALL BE EMBEDDED IN CONCRETE A MINIMUM OF 7".
3. ANCHOR BOLTS SHALL COMPLY WITH CBC SECTION 2304.9.5.
4. ALL ANCHORS SHALL BE INSTALLED WITH SIMPSON BP PLATE OR 3"x3" x0.299" PLATE WASHER. THE PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE OF THE SHEATHING.
5. AT 3X SILL PLATES, USE 12" LONG AB's FOR EXTRA THREAD LENGTH ABOVE CONCRETE.
6. WHERE 3X FRAMING AT PANEL EDGE NAILING IS REQUIRED, NAILS SHALL BE STAGGERED.
7. WHERE SHEATHING IS APPLIED TO BOTH FACES OF A WALL, PANEL JOINTS ARE TO BE OFFSET TO FALL ON DIFFERENT STUDS.
8. SHEATHING IS TO EXTEND FROM TOP PLATE TO SILL PLATE WITH NO GAPS UNO.
9. WHERE SHEAR WALLS DO NOT OCCUR, USE MIN 15/32" SHEATHING W/ 10d at 6"/12" OC
10. SHEATHING SHALL BE ATTACHED TO STUDS at 16" OC
11. FIELD NAILING TO BE at 12" OC TYPICAL.
12. SHEATHING SHALL BE WOOD STRUCTURAL PANELS- C-D, C-C EXTERIOR SHEATHING OR OTHER GRADES COVERED IN PS1 AND PS2.
13. THIS SCHEDULE IS BASED ON ICBO REPORT ESR-2403 WHICH DEFINES 8d COMMON NAILS AS HAVING A SHANK DIAMETER OF 0.131" AND 10d COMMON HAVING A 0.148" DIAMETER.
14. WHERE PANEL EDGES DO NOT OCCUR ON HOLDOWN POSTS, PROVIDE EDGE NAILING INTO POSTS.
15. FRAMING CLIPS SPACING ARE AT THE SHEARWALLS ONLY. AT ALL OTHER LOCATIONS PROVIDE CLIPS at 32" O.C. MAX.
16. IF SHEARWALL WOOD SHEATHING IS SPLICED AT THE RIM BOARD, THE PLATE AND PLATE NAILING CAN BE REDUCED TO 2X PLATE WITH 16d at 6" O.C.
17. IF SHEARWALL WOOD SHEATHING IS SPLICED AT THE FLOOR RIM JOIST, PROVIDE FRAMING CLIPS AT 32" O.C. MAX.
18. AT BUILT UP HOLDOWN POSTS, SPLICE MEMBERS W/ 16d NAILS at SHEARWALL BOUNDARY SPACING, STAGGERED.
19. WHERE HOLDOWN IS ATTACHED THROUGH STUD NAILER TO HOLDOWN POST, LENGTHEN SCREWS ACCORDINGLY AND EDGE/BOUNDARY NAIL BOTH NAILER AND POST.

SCALE: 1" = 1'-0"

SHEARWALL SCHEDULE, LEGEND, & CONTINUOUS LOAD PATH — 301

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KIRKWOOD, CA 95646

JOB NO.: 20-356
DATE: 15 JANUARY 2021
REVISIONS:
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SHEAR DETAILS

S-430

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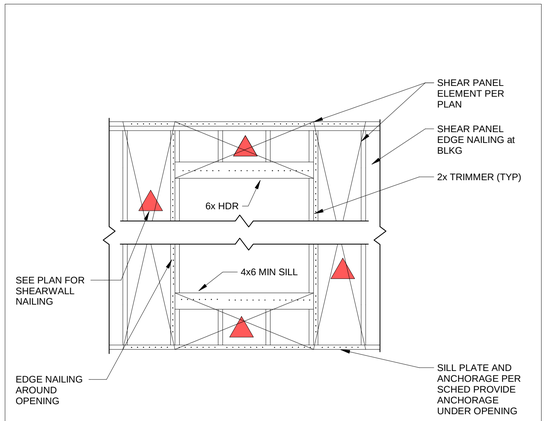
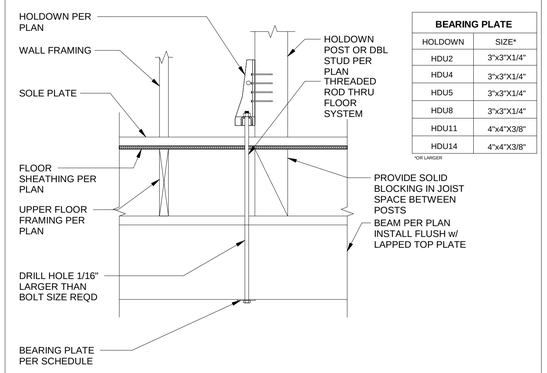


SCALE: 1" = 1'-0"

PERFORATED SHEARWALL 308



BEARING PLATE	
HOLDOWN	SIZE*
HDU2	3"x3"X1/4"
HDU4	3"x3"X1/4"
HDU5	3"x3"X1/4"
HDU8	3"x3"X1/4"
HDU11	4"x4"X3/8"
HDU14	4"x4"X3/8"

*OR LARGER

SCALE: 1" = 1'-0"

DISCONTINUOUS HOLDDOWN TO BEAM 307

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SHEAR DETAILS, CONT.

S-431

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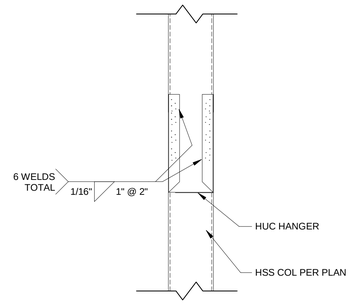
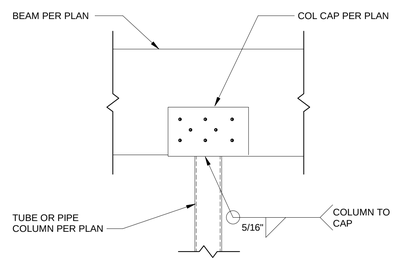


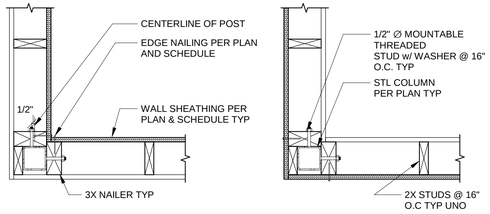
SCALE: 1 1/2" = 1'-0"

HANGER TO STEEL COLUMN | 403



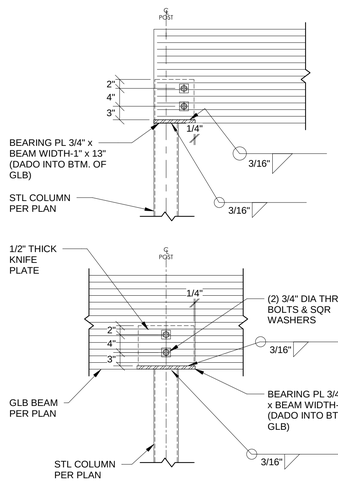
SCALE: 1" = 1'-0"

WOOD BEAM CAP TO STEEL POST DETAIL | 405



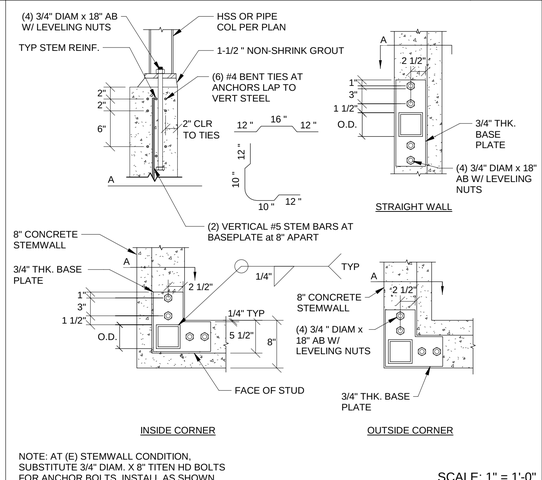
SCALE: 1" = 1'-0"

STEEL COLUMN TO WALL CONNECTION | 402



SCALE: 3/4" = 1'-0"

COLUMN POST CAP - GLB TO STEEL COL. | 404



NOTE: AT (E) STEMWALL CONDITION, SUBSTITUTE 3/4" DIAM. X 8" TITEN HD BOLTS FOR ANCHOR BOLTS, INSTALL AS SHOWN

SCALE: 1" = 1'-0"

BASE PLATE TO STEMWALL DETAIL | 401

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STEEL DETAILS

S-440

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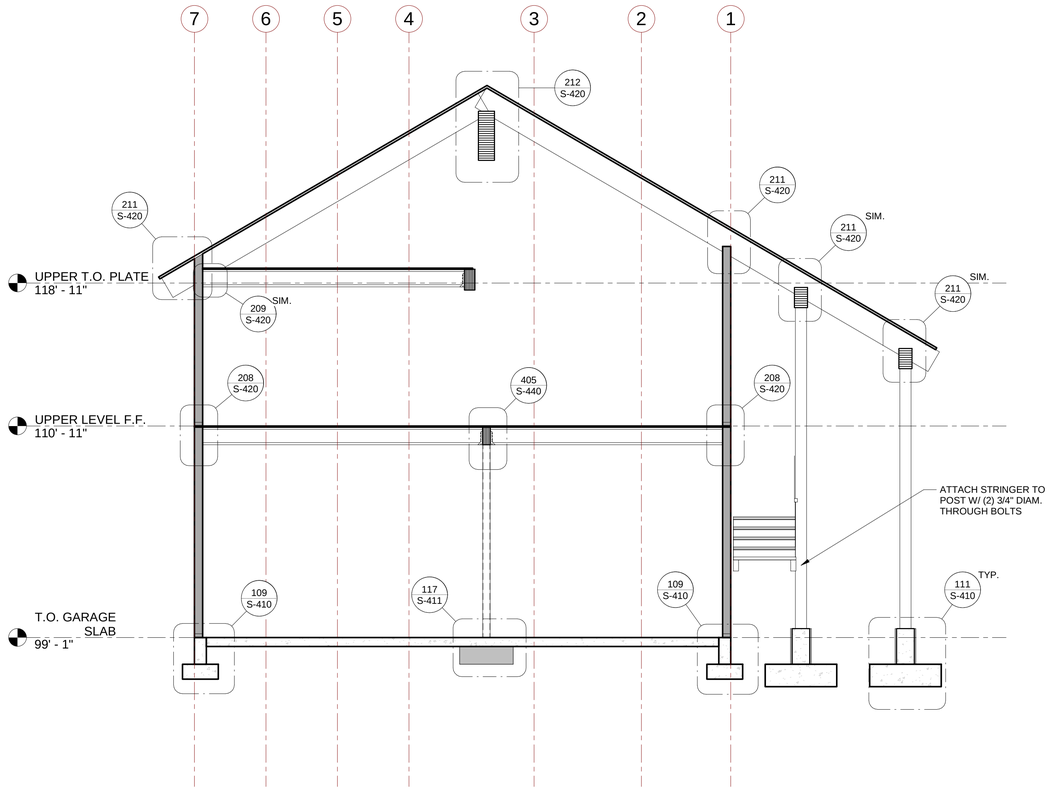

1 ADDITION SECTION
1/4" = 1'-0"

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STRUCTURAL ENGINEERING
530 California Ave, Reno, NV 89509
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REGISTERED PROFESSIONAL ENGINEER
MICHAEL JAMES NICKLIN
69936
CIVIL
STATE OF CALIFORNIA
1-15-2021

ROPER RESIDENCE

APN 026-202-006
33838 HAWKWEED WAY
AMADOR COUNTY
KIRKWOOD, CA 95646

JOB NO.: 20-356
DATE: 15 JANUARY 2021
REVISIONS:

PERMIT SET

STRUCTURAL SECTION

S-500

11/2/2021 12:07:18 PM
BIM 360://Roper Residence/20-356 Roper Residence Remodel Structural.rvt

KRONICK
MOSKOVITZ TIEDEMANN & GIRARD

400 Capitol Mall, 27th Floor
Sacramento, CA 95814

T 916.321.4500
F 916.321.4555

Rebecca L. Harms
rharms@kmtg.com

December 9, 2020

VIA E-MAIL AND U.S. MAIL

Preston and Katie Roper
P.O. Box 265
Kirkwood, CA 95646

Email: preston@roper.org; katie@roper.org

Lot 157

NOTICE OF DETERMINATION

Dear Mr. and Mrs. Roper:

This letter is sent on behalf of Kirkwood Meadows Association ("KMA"). On December 5, 2020, the KMA Board of Directors held a variance hearing to consider your request for a variance from the 25-foot front setback requirement for a proposed construction project on Lot 157. Thank you for submitting the plans for the proposed project and written justification for the variance request to the Board prior to the hearing and for attending the hearing. This letter confirms that at the hearing the Board approved your variance request for the proposed construction project on Lot 157 as depicted in the plans and other materials you submitted to the Board prior to the hearing.

In addition, on December 5, 2020, the Board held an easement hearing to consider your request for a non-exclusive easement across KMA common property for a driveway on Lot 157. Thank you for submitting the plans for the proposed driveway and written justification for the easement request to the Board prior to the hearing and for attending the hearing. This letter confirms that at the hearing the Board approved your easement request for the proposed driveway as depicted in the plans and other materials you submitted to the Board prior to the hearing.

As a reminder, the Board's approval of your variance and easement request does not encompass approvals from other entities that may be required including but not limited to the KMA Planning Committee, Amador County, and TC-TAC. If you have any questions do not hesitate to contact me or KMA Board President Nancy Trevett.

Regards,

REBECCA L. HARMS
KRONICK, MOSKOVITZ, TIEDEMANN & GIRARD

RECORDING REQUESTED BY
PILIBOS WHITE & PILIBOS

WHEN RECORDED MAIL TO

NAME MARY PILIBOS WHITE
STREET ADDRESS PILIBOS WHITE & PILIBOS
2882 SAND HILL ROAD
CITY & STATE SUITE 121
MENLO PARK, CA 94025

Amador County Recorder
Sheldon D. Johnson
DOC- 2000-0008051-00
Check Number 3437
REQD BY ATTORNEY
Tuesday, SEP 12, 2000 11:59:15
Ttl Pd $9.00 Nbr-0000004576
EML/R1/1-2

SPACE ABOVE THIS LINE FOR RECORDER'S USE

INDIVIDUAL GRANT DEED
TRUST TRANSFER

A.P.N. 26-202-006

(Excluded from reappraisal under Proposition 13)

The undersigned Grantor(s) declare(s):
Documentary transfer tax is $ -0-
THERE IS NO CONSIDERATION FOR THIS TRANSFER. TRANSFER IS NOT PURSUANT TO A SALE.
This is a transfer to a REVOCABLE TRUST excluded from a change in ownership under §62(d) of the Revenue & Taxation Code and State Board of Equalization Property Tax Rule 462(i)(2)(B).

GRANTOR: PRESTON ROPER and CATHERINE ROPER, husband and wife, as community property

hereby GRANTS to: PRESTON ROPER and CATHERINE S. ROPER, as trustees of the Roper Living Trust, to be held as community property

the following described real property in the unincorporated area of the County of Amador, State of California:

See Exhibit A attached hereto and made a part hereof.

Mail Tax Statements to Mr. and Mrs. Preston Roper, 656 Palm Avenue, Los Altos, California 94022

Dated: AUGUST 29, 2000

Preston Roper

Catherine Roper

STATE OF CALIFORNIA
COUNTY OF SAN MATEO

On AUGUST 29, 2000, before me, CATHERINE PILIBOS, the undersigned, a Notary Public in and for the State of California, personally appeared PRESTON ROPER and CATHERINE ROPER, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

WITNESS my hand and official seal.

Signature

CATHERINE PILIBOS
Commission # 1157636
Notary Public — California
San Mateo County
My Comm. Expires Oct 31, 2001

MAIL TAX STATEMENTS AS DIRECTED ABOVE.

2000 008051

A.P.N. 26-202-006

EXHIBIT A

Lot 157 of Kirkwood Meadows, Unit No. 2, according to the official map thereof filed for record October 13, 1972 in Book 3 of Subdivision Maps, at Page 91, Amador County Records.

EXCEPTING THEREFROM the title and exclusive right to all mineral and mineral ores of every kind and character now known to exist or hereafter discovered within or underlying said lot, together with the exclusive right to remove the same, provided that Grantor shall not be entitled to enter upon or make use of the surface of said lot or any portion thereof above a depth of five hundred (500) feet below the surface in the exercise of the foregoing rights.

"END OF DOCUMENT"