



GREEN VALLEY RD AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

PUBLIC MEETING

PRESENTED BY:

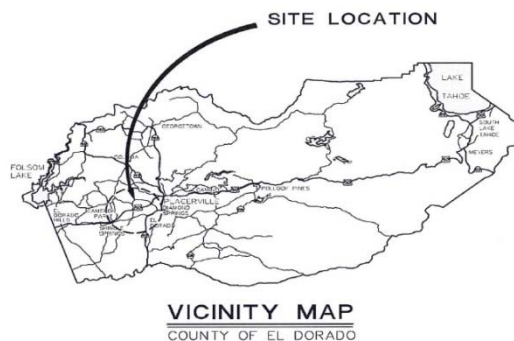
County of El Dorado
Community Development Agency
Transportation Division

Matt Smeltzer, P.E.

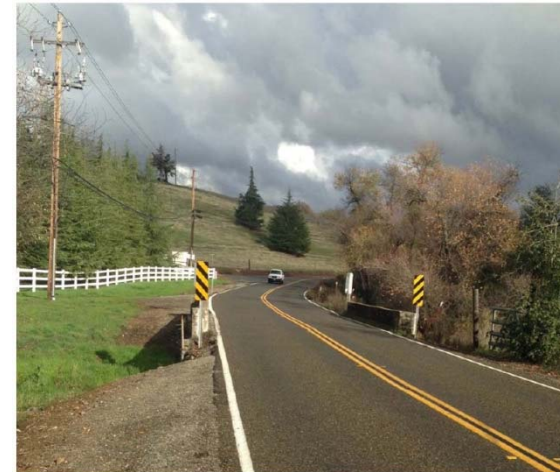
Deputy Director, Engineering

Jon Balzer, P.E.

Senior Civil Engineer



Green Valley Rd
at
Indian Creek
Bridge



Green Valley Rd
at
Mound Springs
Bridge



GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

MEETING OVERVIEW

- 1. Welcome & Introduction**
- 2. FHWA Highway Bridge Program Overview**
- 3. Project Overview**
- 4. Project Features**
- 5. Schedule**
- 6. Open Question & Discussion Period**



GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

HIGHWAY BRIDGE PROGRAM (HBP) OVERVIEW

- Safety program that provides federal-aid to local agencies to replace or rehabilitate deficient locally owned public highway bridges
- Program authorized by Federal Highway Administration (FHWA) & administered by State DOT's (CA – Caltrans)
- Up to 100% reimbursement for reconstruction or replacement of bridges on public roads off federal aid highways
- 11.47% local match required for “on-system” bridges
- Eligible Project Costs - Preliminary Engineering, Right-of Way and Construction



GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

BRIDGE INSPECTIONS / SUFFICIENCY RATINGS

- Each bridge is thoroughly inspected by Caltrans every two years and rated on 140 elements
- Given a Sufficiency Rating (SR) score of 0 to 100
- Rating is overall measure of the bridge condition and sufficiency to remain in service
- Used to determine eligibility for federal funds and prioritization



GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

HBP FUNDING ELIGIBILITY CRITERIA

- $SR \leq 80$ is eligible for **Rehabilitation**
- $SR \leq 50$ is eligible for **Replacement**
- Must be rated either ***Structurally Deficient (SD)*** or ***Functionally Obsolete (FO)***.
- **SD:** Limitations of the structural condition of the bridge, such as weight limits or load capacity.
- **FO:** Built to standards that are not used today, such as inadequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand.

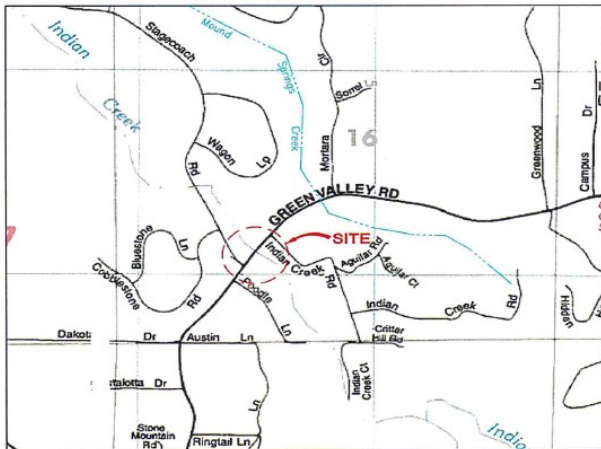


GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

GREEN VALLEY AT INDIAN CREEK BRIDGE

BACKGROUND

- Bridge built in 1935
- Narrow two lane (28.2 feet wide)
- SR = 68.1
- Included in County's Capital Improvement Program



LOCATION MAP

NOT TO SCALE





GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

GREEN VALLEY AT INDIAN CREEK BRIDGE

EXISTING BRIDGE FACTS

- Built in 1935
- Widened in 1975
- Functionally obsolete
- Substandard barriers/railings
- Deficient hydraulics
- Substandard approach roadway & geometrics
- Poor site distance at adjacent roadways
- Concrete is spalling on abutments

✓ **Approved for Bridge Replacement**



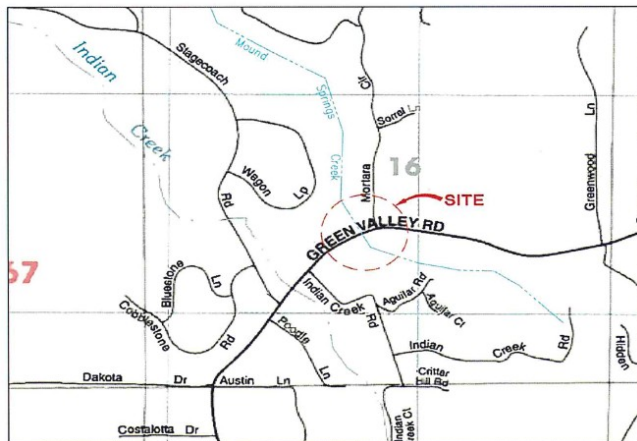


GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

GREEN VALLEY RD AT MOUND SPRINGS BRIDGE

BACKGROUND

- Bridge built in 1935
- Narrow two lane (22.3 feet wide)
- SR = 68.1
- Included in County's Capital Improvement Program



LOCATION MAP

NOT TO SCALE





GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

GREEN VALLEY RD AT MOUND SPRINGS BRIDGE

EXISTING BRIDGE FACTS

- Built in 1935
- Functionally obsolete
- Substandard barriers/railings
- Concrete is spalling in various locations
- Deficient hydraulics
- Substandard approach roadway & geometrics
- Poor site distance at adjacent roadways

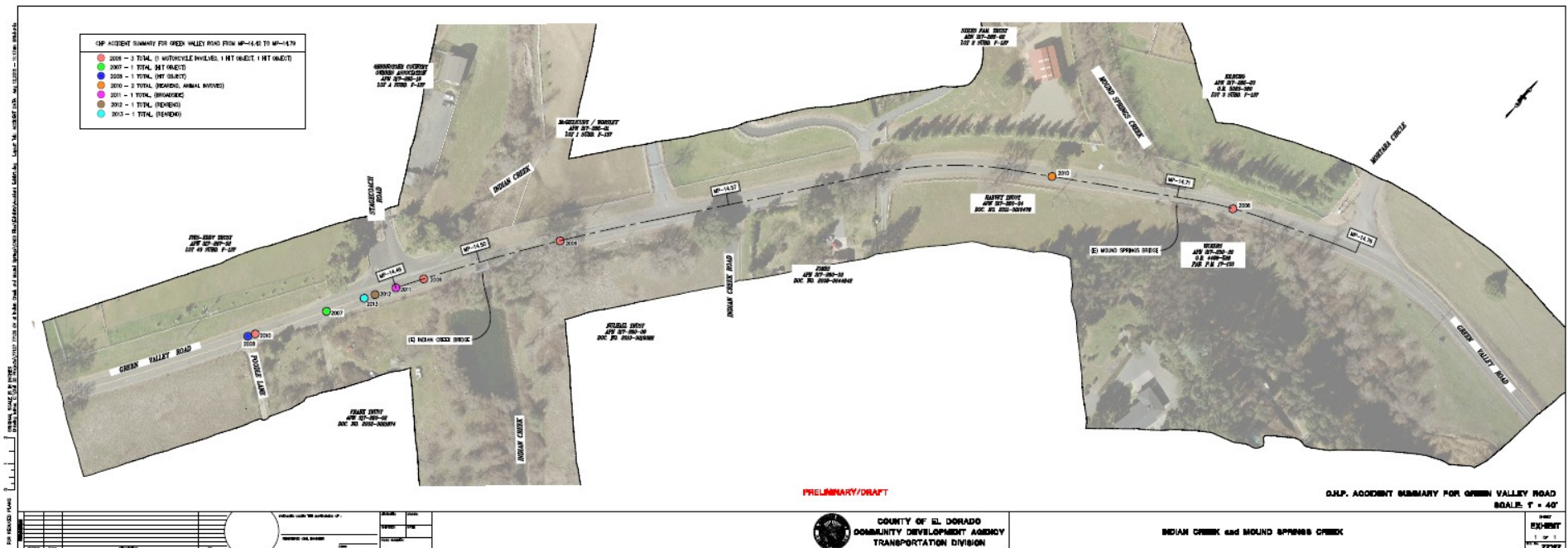
✓ **Approved for Bridge Replacement**





BACKGROUND

- Average Daily Traffic (ADT) = 4200
- Speed range = 40 to 55 mph
- Poor site distance
- Accident Report History (Rear Ends, Broad Sides)

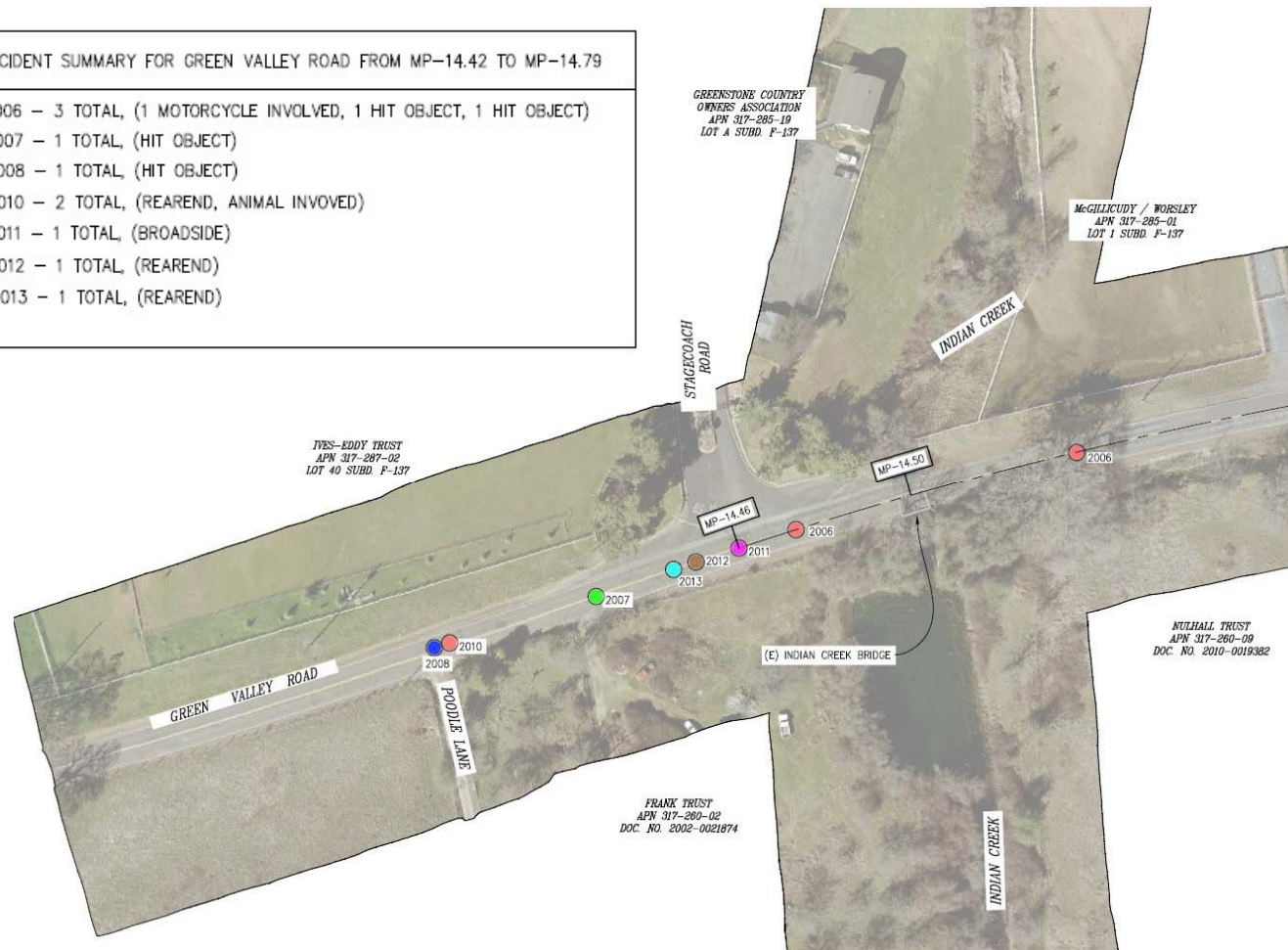




GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

GREEN VALLEY RD - SAFETY CONSIDERATIONS

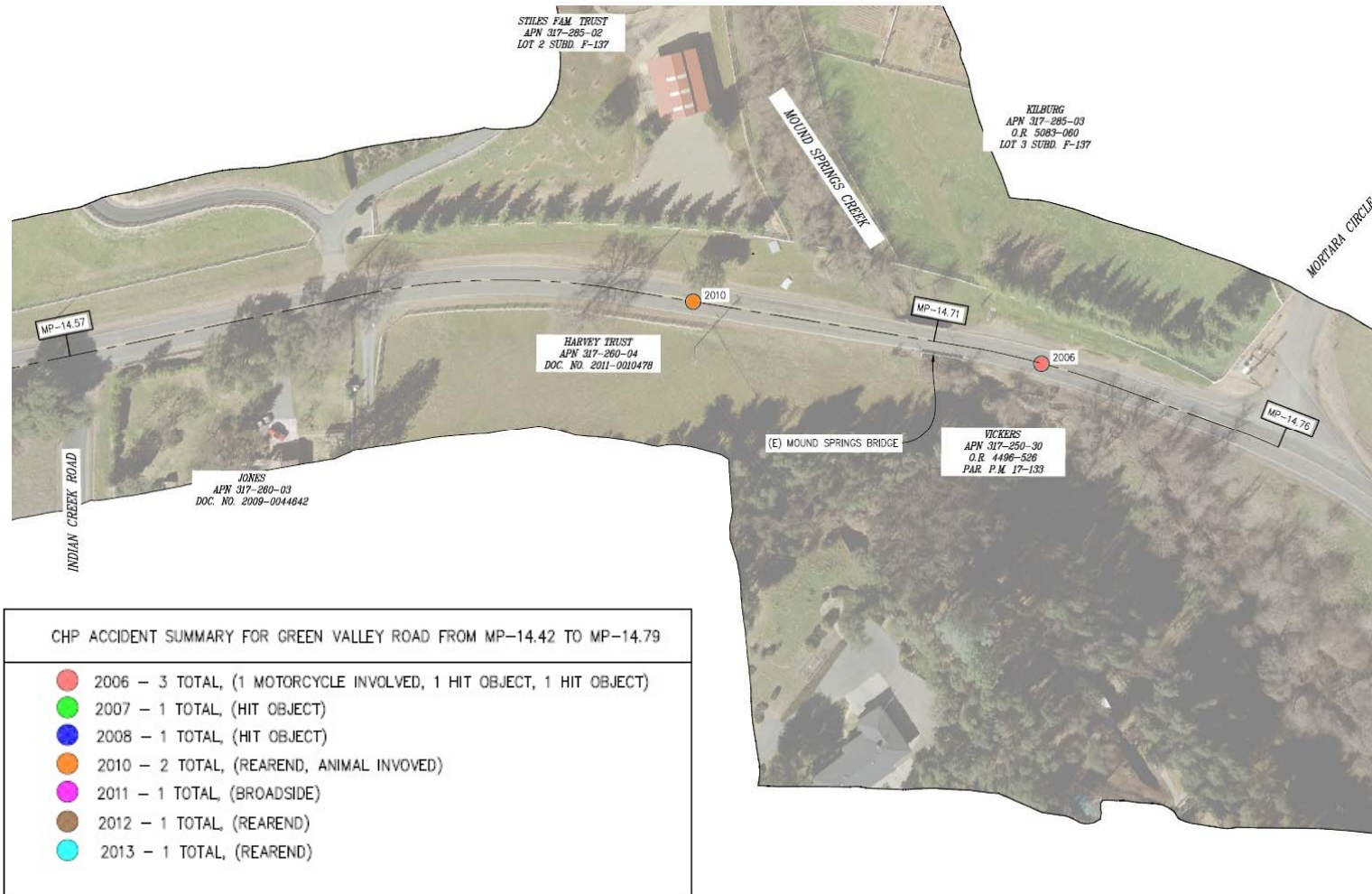
CHP ACCIDENT SUMMARY FOR GREEN VALLEY ROAD FROM MP-14.42 TO MP-14.79	
2006	3 TOTAL, (1 MOTORCYCLE INVOLVED, 1 HIT OBJECT, 1 HIT OBJECT)
2007	1 TOTAL, (HIT OBJECT)
2008	1 TOTAL, (HIT OBJECT)
2010	2 TOTAL, (REAREND, ANIMAL INVOLVED)
2011	1 TOTAL, (BROADSIDE)
2012	1 TOTAL, (REAREND)
2013	1 TOTAL, (REAREND)





GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

GREEN VALLEY RD - SAFETY CONSIDERATIONS



Green Valley Rd at Indian Creek Bridge & Green Valley Rd at Mound Springs Bridge Projects, Public Meeting, 08/27/15

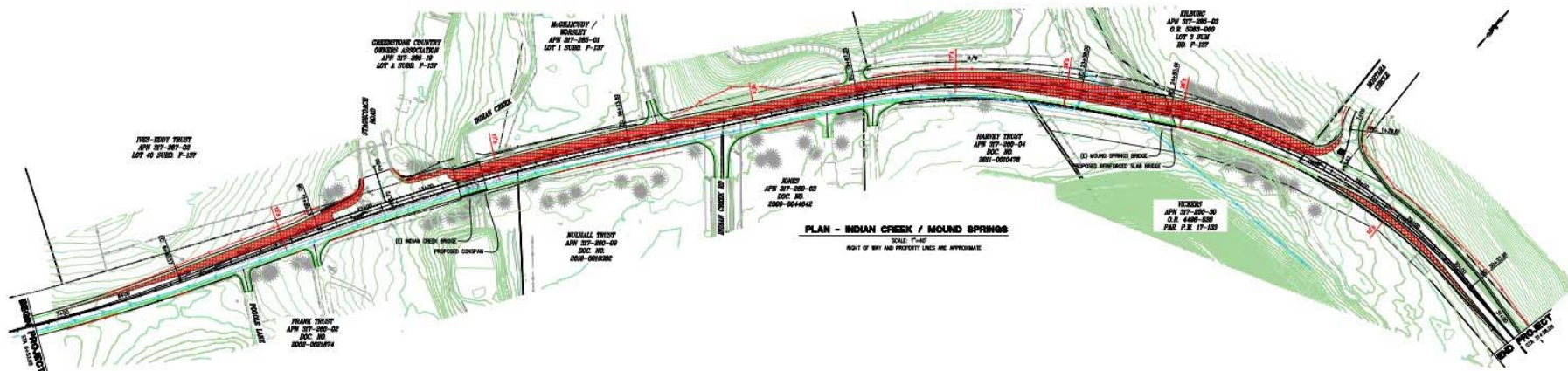


GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

PROJECT OVERVIEW

SUMMARY (GOALS)

- Improved Driver Safety – Turn Pockets, Line of Sight, etc.
- Bridge Improvements – Barrier Rail, Widths, Hydraulics, etc.
- Maintain Traffic (2-lanes) throughout Construction
- Minimum Impacts to Environment & Landscape
- Minimize Public Impacts
- Maintain Rural Integrity of Roadway





GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

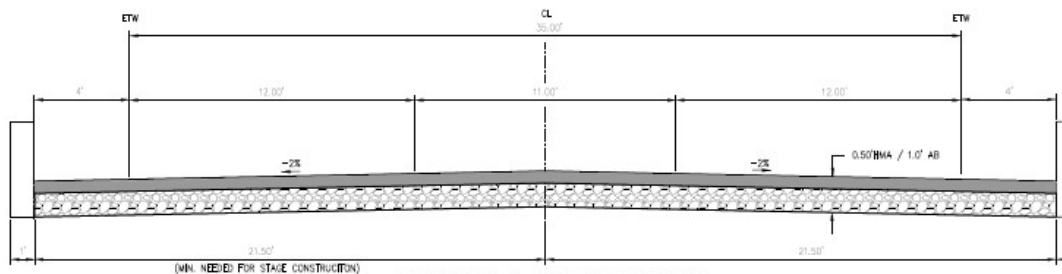
PROJECT OVERVIEW

- Both Bridge Replacements in same project
- Wider Bridges to accommodate 2-Stage Construction
- 2-way Turn Pocket in roadway center
- Minimum Roadway Standards for Lane and Shoulder widths
- Improved Line of Sight
- Minimum tree removals and grading improvements (widening to north)
- Minimize Public Impacts
- Minimum ROW impacts
- Opportunities to incorporate natural landscape (rock wall features, etc.)
- 50 mph Design Speed (maintaining corridor speeds but improving line of sight and refuge areas)



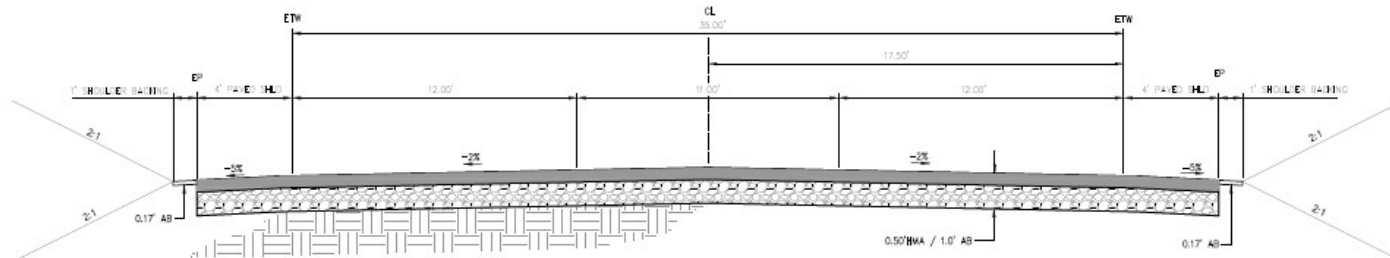
GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

PROJECT OVERVIEW



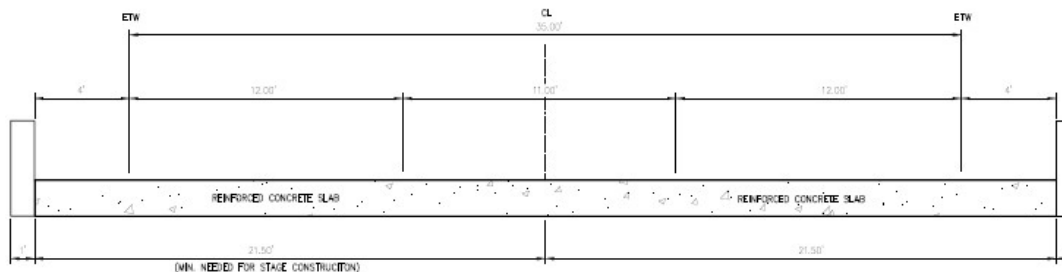
INDIAN CREEK BRIDGE (ONE SPAN)

SCALE: 1"=2'



TYPICAL ROAD SECTION

SCALE: 1"=2'



MOUND SPRINGS BRIDGE SECTION

SCALE: 1"=2'

Green Valley Rd at Indian Creek Bridge & Green Valley Rd at Mound Springs Bridge Projects, Public Meeting, 08/27/15



PLAN - INDIAN CREEK BRIDGE

SCALE: 1"=40'

3 LANE BRIDGE(CONSPAN) - 11' TRAVEL LANES, 11' CENTER LANE, 4' SHOULDERS

SCALE: 1"=40'

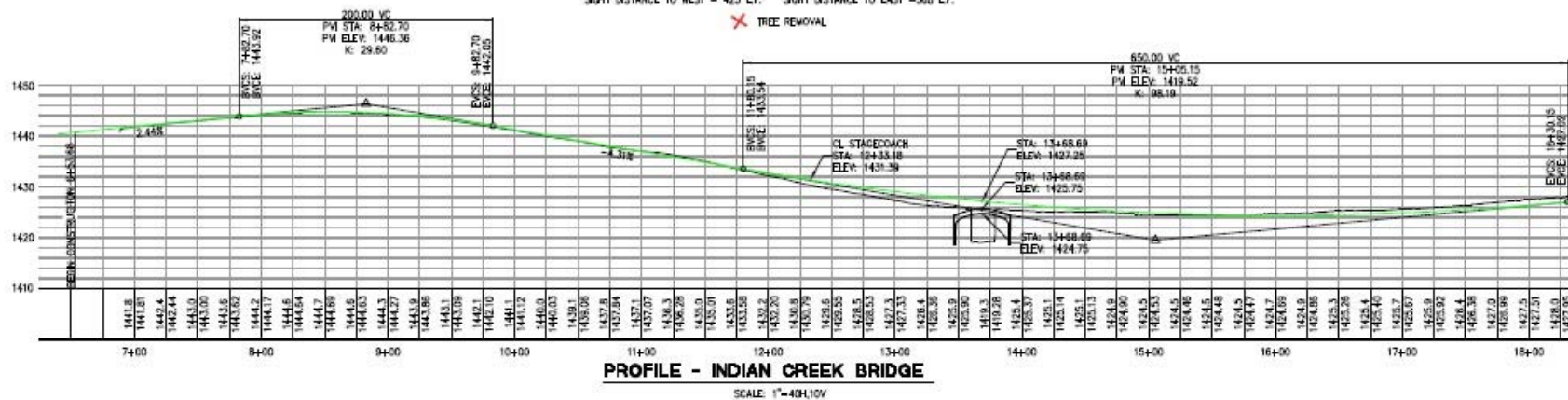
3 LANE BRIDGE (SPAN) - 11' TRAVEL LANES, 11' CENTER LANE, 4' SHOULDERS

DESIGN SPEED - 45 MPH

LANE REDUCTION TAPER PER 405.24=495 LF
DECELERATION LANE PER 405.28=235 LF.
TWIL WIDTH PER 405.2(4)=12 LF.

SIGHT DISTANCE TO WEST - 425 LF. SIGHT DISTANCE TO EAST - 568 LF.

✕ TREE REMOVAL





GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

PROJECT OVERVIEW – GV AT INDIAN CREEK

STAGECOACH ROAD INTERSECTION



EXISTING



PROPOSED



GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

PROJECT OVERVIEW – GV AT INDIAN CREEK

EAST OF INDIAN CREEK BRIDGE



EXISTING



PROPOSED



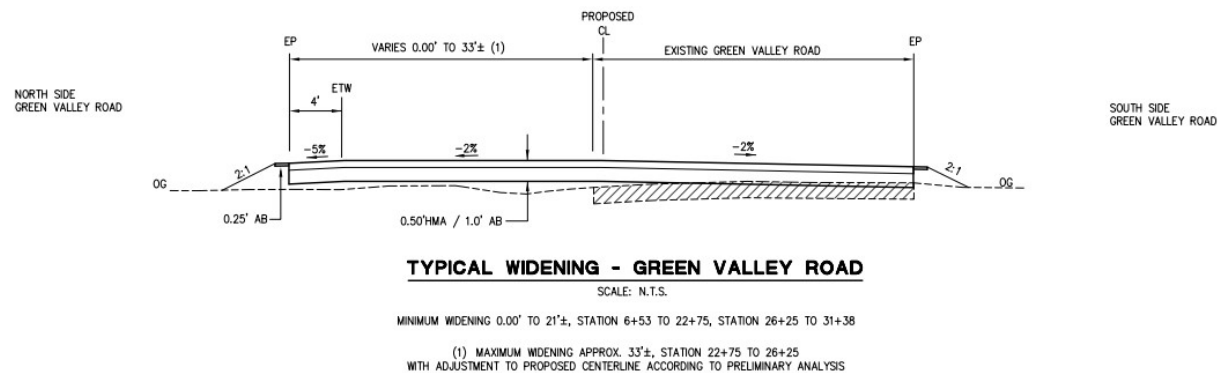
GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

PROJECT OVERVIEW – GV AT MOUND SPRINGS



INCORPORATING THE LANDSCAPE

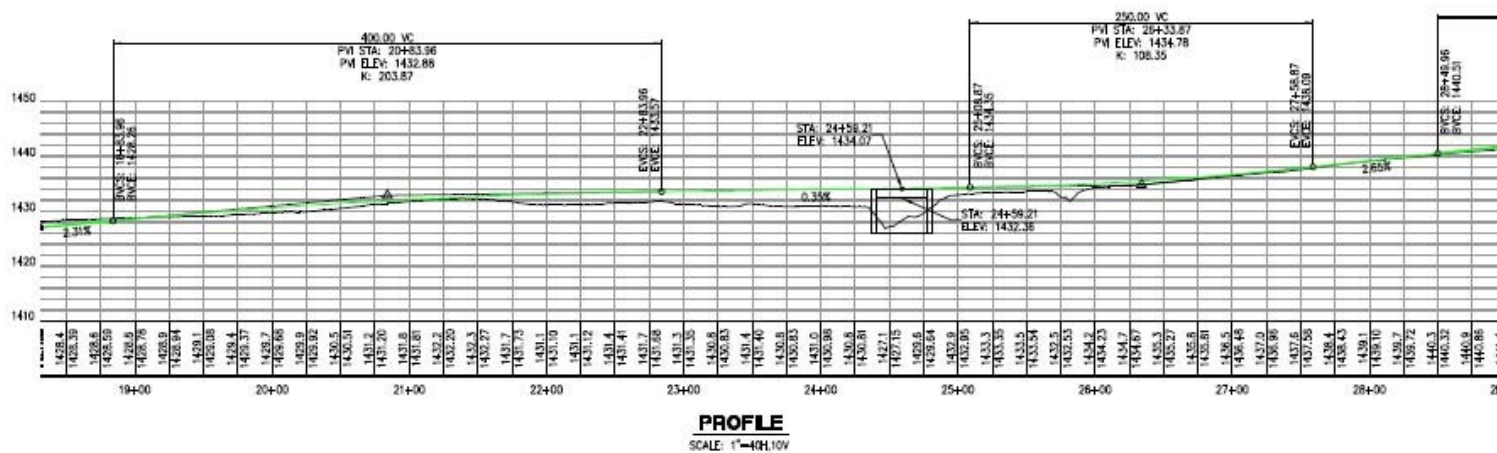
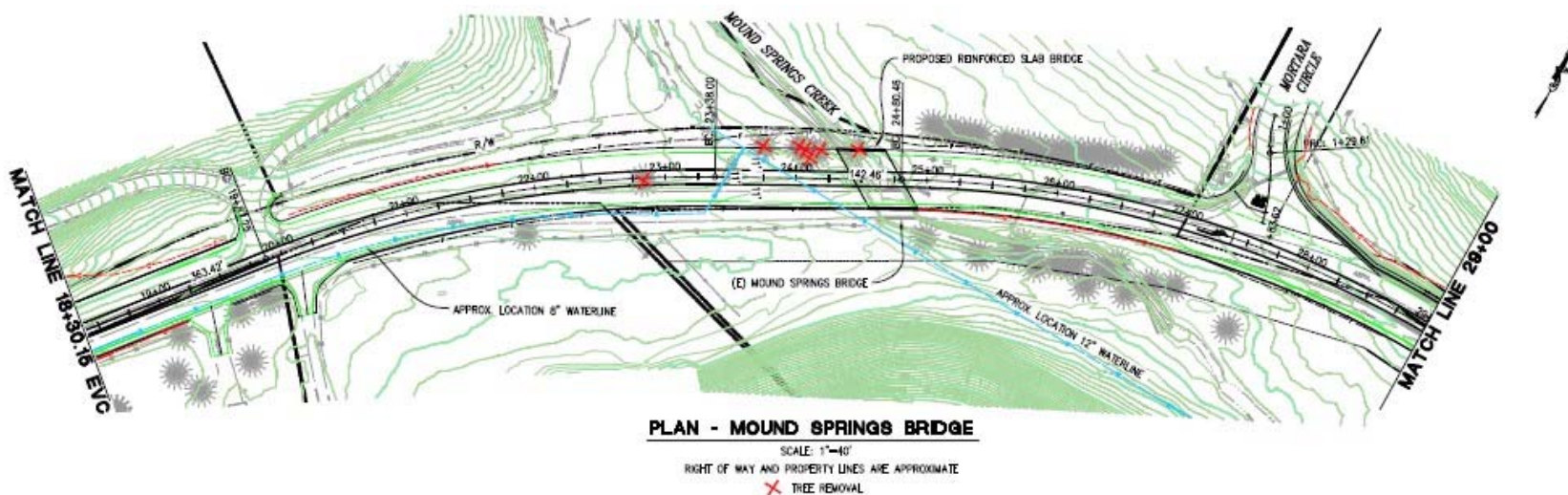
- Opportunities for Rock Walls
- Minimum design standards for roadway widths
- Minimum tree removals
- Minimum ROW impacts





GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

PROJECT OVERVIEW – GV AT MOUND SPRINGS



Green Valley Rd at Indian Creek Bridge & Green Valley Rd at Mound Springs Bridge Projects, Public Meeting, 08/27/15



GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

PROJECT OVERVIEW – GV AT MOUND SPRINGS

MOUND SPRINGS BRIDGE



EXISTING

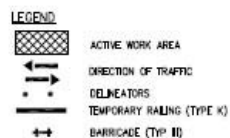
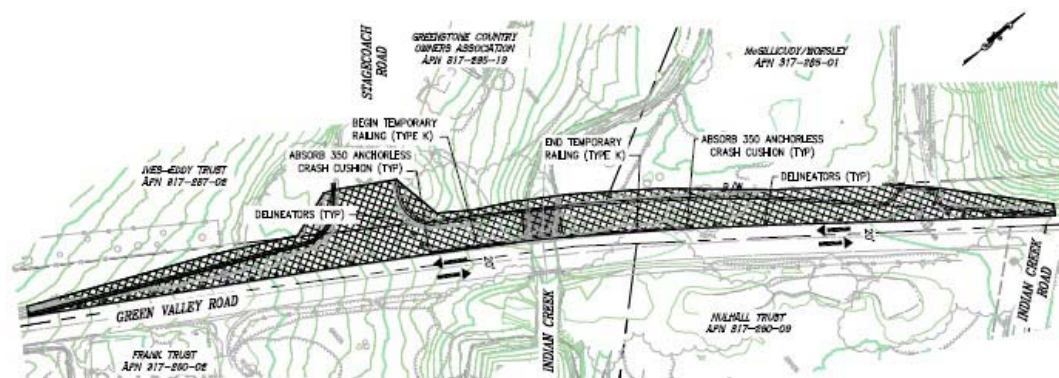


PROPOSED

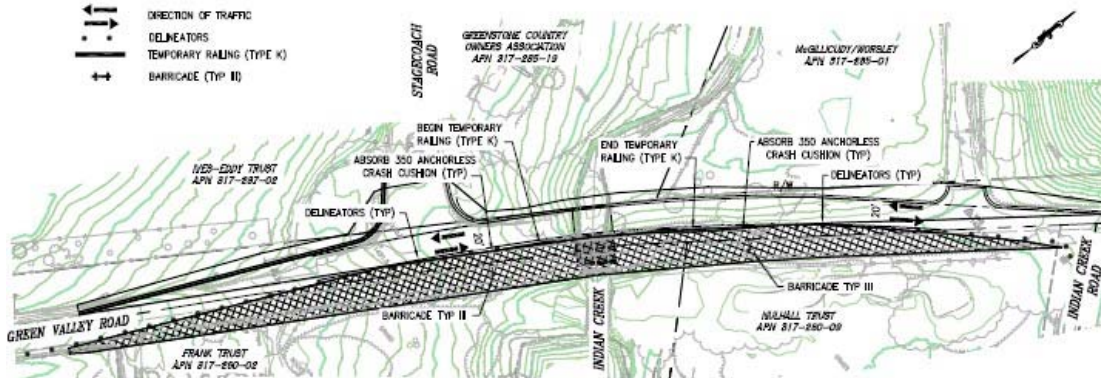


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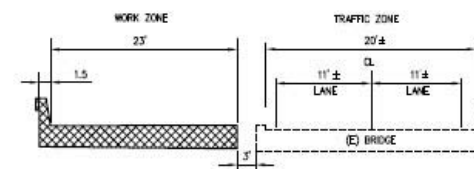
PROJECT OVERVIEW – 2 STAGE CONSTRUCTION



STAGE-1 CONSTRUCTION

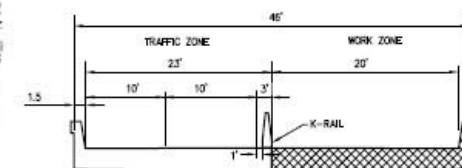


STAGE-2 CONSTRUCTION



TYPICAL SECTION - STAGE 1

N.T.S.



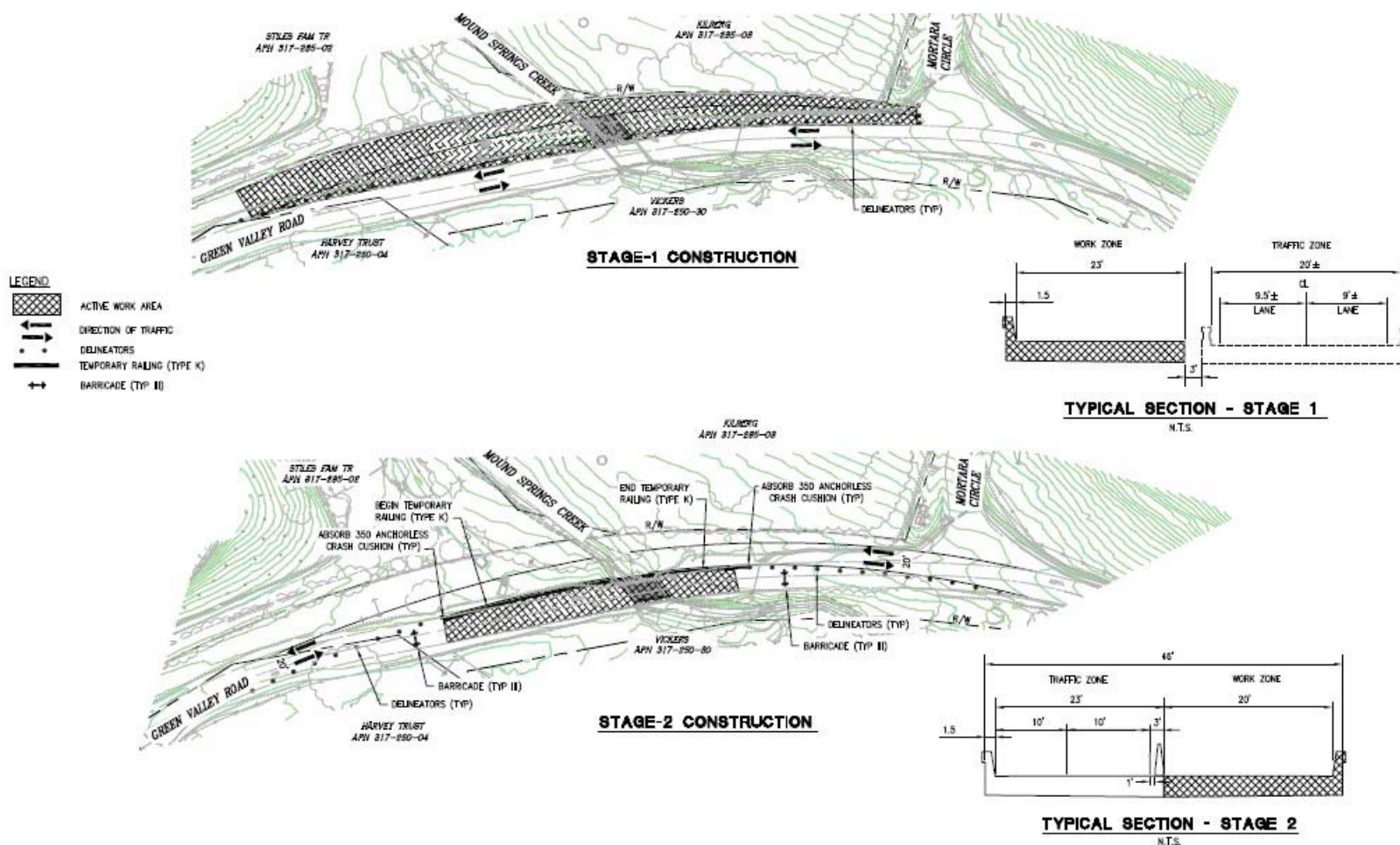
TYPICAL SECTION - STAGE 2

N.T.S.



GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

PROJECT OVERVIEW – 2 STAGE CONSTRUCTION





GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

SCHEDULE

Next Steps:

- Design (2015 – 2019)**
- Environmental (2016 - 2017)**
- Right of Way (2017 - 2018)**
- Utility Relocations (2017 – 2019)**
- Construction (2020)**



GREEN VALLEY AT INDIAN CREEK & MOUND SPRINGS BRIDGE PROJECTS

CLOSING REMARKS

Questions?



Green Valley Rd
at
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Bridge



Green Valley Rd
at
Mound Springs
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