

EL DORADO COUNTY

DEPARTMENT OF TRANSPORTATION

http://www.edcgov.us/DOT/

PLACERVILLE OFFICES:

MAIN OFFICE:

2850 Fairlane Court, Placerville, CA 95667 (530) 621-5900 / (530) 626-0387 Fax

CONSTRUCTION & MAINTENANCE:

2441 Headington Road, Placerville, CA 95667

(530) 642-4909 / (530) 642-0508 Fax

LAKE TAHOE OFFICES:

ENGINEERING:

924 B Emerald Bay Road, South Lake Tahoe, CA 96150

(530) 573-7900 / (530) 541-7049 Fax

MAINTENANCE:

1121 Shakori Drive, South Lake Tahoe, CA 96150

(530) 573-3180 / (530) 577-8402 Fax

DATE:

June 27, 2023

TO:

All Prospective Bidders

SUBJECT:

Addendum No. 2

Oak Hill Road at Squaw Hollow Creek Bridge Replacement Project

Submit proposals for this work with the understanding and full consideration of this Addendum No. 2. The revisions declared in this Addendum are essential parts of the Contract.

| ITEM NO. | LOCATION, PAGE, OR DRAWING NO. | DESCRIPTION OF CHANGE |
|----------|---|--|
| 1.01 | Cover Notice to Bidders | Bidders are instructed to replace the bid opening date of "June 28, 2023" with "June 30, 2023" in the following locations: Cover sheet Item F on page 1 of the Notice to Bidders |
| 1.02 | Bidders are instructed to add the following to Section 19-3.04 Provisions: Special Provisions §19-3.04 "Structure excavation (Rock) for the bridge is paid for under Structure excavation (Rock) for the repaid for under Structure Excavation (Retaining Wall)." | |
| 1.03 | Special Provisions §83-2.10 | Bidders are instructed to add the following to Section 83-2.10 of the Special Provisions: Replace "Reserved" in section 83-2.10 with: 83-2.10 STAINING GALVANIZED METAL RAILING 83-2.10A GENERAL 83-2.10A(1) Summary Section 83-2.10 includes specifications for staining galvanized surfaces to achieve a rustic brown color with a matte finish. Apply the stain to all visible galvanized surfaces of: 1. California ST-75 Bridge Rail 2. Transition Railing(s) 3. Alternative In-Line Terminal Systems 4. Crash Cushion(s) 83-2.10A(2) Definitions Not Used 83-2.10A(3) Submittals |

| ITEM NO. | LOCATION, PAGE, OR DRAWING NO. | DESCRIPTION OF CHANGE |
|----------|--------------------------------|--|
| | | Submit the following: |
| | | Product data, including the manufacturer's product sheet, MSDS, and instructions for application of the stain Certificate of compliance for the stain Work plan showing methods to perform job site touch-ups to repair any of the finish damaged during transportation, storage, or installation. Sample of stained guardrail section. |
| | | 83-2.10A(4) Quality Control and Assurance Apply the stain to a minimum 1-foot-long test section. |
| | | The test section must be: |
| | | Prepared and stained using the same materials, equipment, and methods to be used in the staining work Allowed to cure as specified in the manufacturer's instructions Authorized before starting the staining work |
| | | If ordered, prepare and stain additional test sections. If more than 1 additional test section is ordered, this is change order work. |
| | | The Engineer uses the authorized test section to determine the acceptability of the staining work. |
| | | 83-2.10B MATERIALS The stain must be Natina Steel from Natina Products, LLC or an approved equal. |
| | ş. | 83-2.10C CONSTRUCTION |
| | | 83-2.10C(1) General All components to receive the steel stain must be applied per the manufacture's instructions. |
| | 9 | Repair stained surfaces damaged during work activities with materials equal to that of the specified stain. |
| | | 83-2.10D PAYMENT Payment for the Steel Stain is included in the bid item cost for each item requiring the stain. |
| | | Bidders are instructed to replace "ST-10" and "ST-70" in the following locations with "ST-75": |
| 1.04 | Various Locations | 1st paragraph of Section 9-1.16A on page SP-30 Bid Item 70 on page C-16 of the Agreement Bid Item 70 on page P-5 of the Proposal |
| | | Bidders are instructed to replace the quantities for the following bid items in the Agreement and Proposal with: |
| 1.05 | Agreement Proposal | Bid Item 23 Structure Excavation (Bridge): 245 CY Bid Item 24 Structure Excavation (Type D): 200 CY Bid Item 25 Structure Excavation (Retaining Wall): 455 CY Bid Item 26 Structure Backfill (Bridge): 500 CY Bid Item 27 Structure Backfill (Retaining Wall): 210 CY |

Oak Hill Road at Squaw Hollow Creek Bridge Replacement Project Contract No. 7446, CIP No. 36105031 Addendum No. 2 County of El Dorado Page 2 of 3

| ITEM NO. | LOCATION, PAGE, OR DRAWING NO. | DESCRIPTION OF CHANGE |
|----------|-----------------------------------|---|
| | | Bid Item 42 Structural Concrete (Retaining Wall): 300 CY Bid Item 44: Bar Reinforcing Steel (Bridge): 60,000 LB Bid Item 45: Bar Reinforcing Steel (Retaining Wall): 28,000 LB Bid Item 70: California ST-75 Bridge Rail: 133 LF |
| 1.06 | Pian Sheet X-1 | Bidders are instructed to replace "4.85" in the "Oak 13+65.00 to Oak 14+65.09" section on plan sheet X-1with "5.20." |
| 1.07 | Plan Sheets | Bidders are instructed to replace plan sheets "D-1R with the following revised plan sheets: D1-R S1-R S2-R S3-R S4-R S5-R S6-R S7-R S8-R S9-R S10-R S-11R S-12R S-13R RW-1R RW-2R RW-3R |

Indicate receipt of this Addendum No. 2 by filling in the number of this Addendum in the space provided on the signature page of the Proposal. Holders who have already mailed their Proposal can contact Jen Rimoldi at 530-621-7592 (email: Jennifer.rimoldi@edcgov.us) to arrange return of their Proposal. Inform all suppliers and subcontractors as necessary. The Department of Transportation is only sending this Addendum by posting on QuestCDN's website at: https://www.questcdn.com/. You must be a Contract Documents holder on the Quest Plan Holder Report and comply with the requirements of this Addendum No. 1 when submitting your bid.

END OF ADDENDUM NO. 1

| Chandra | G | hi | m | ive | - |
|--|--------------------------------|----|------------------|-----|---|
| The second secon | THE OWNER WHEN PERSON NAMED IN | _ | CAN DESCRIPTION. | - | _ |

Approved by:

John Kahling, Deputy Director

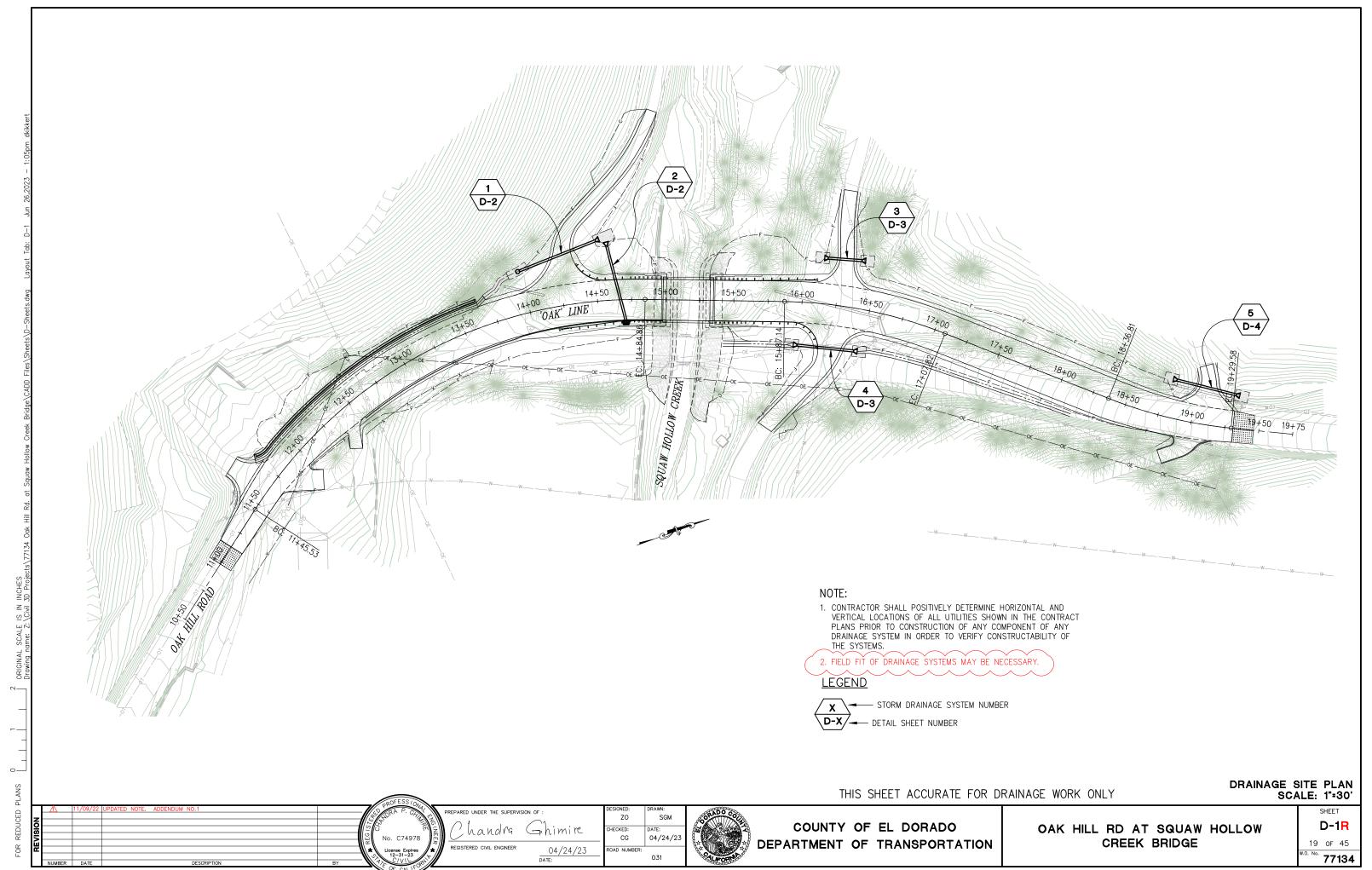
6 27 2023

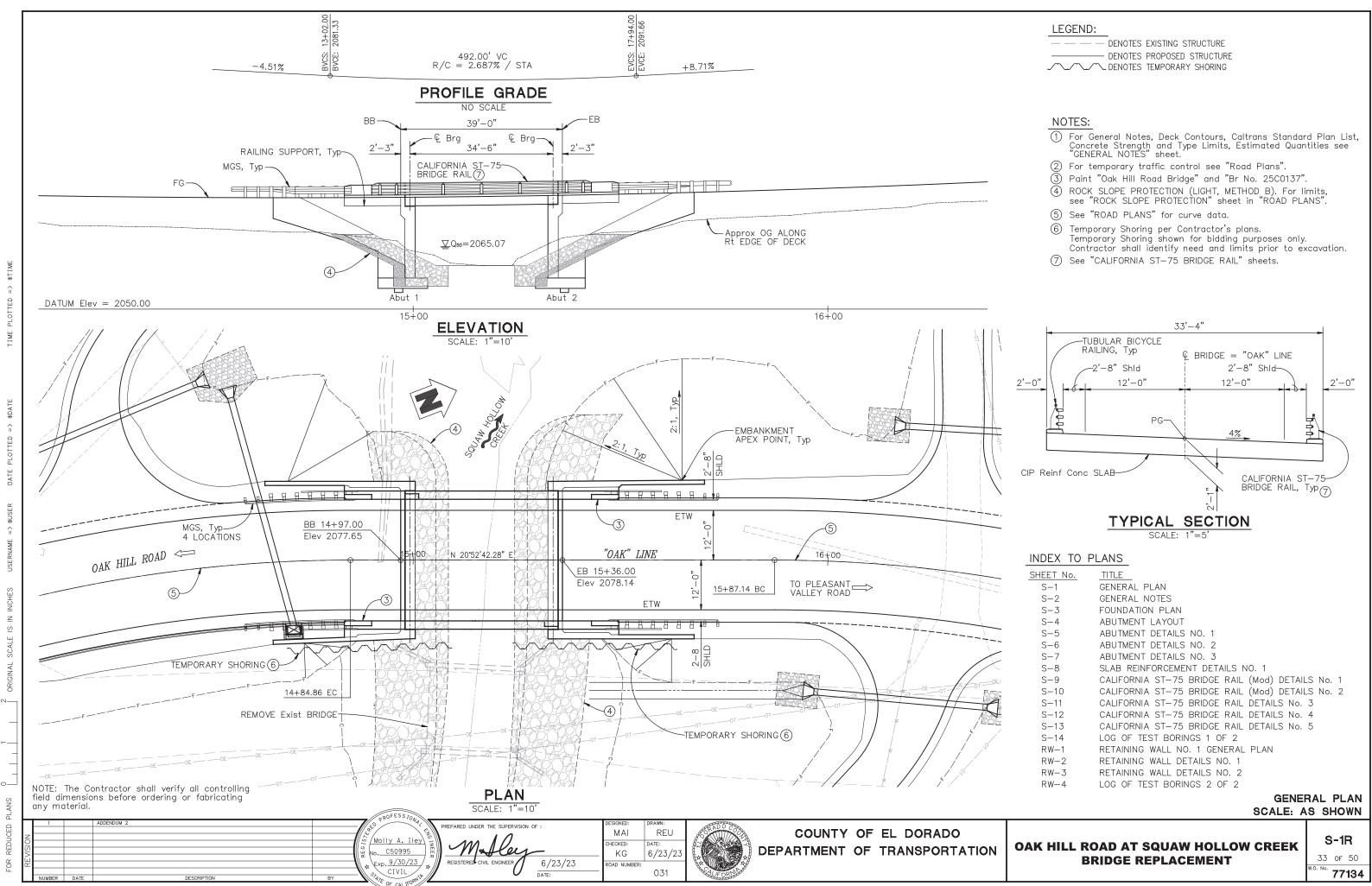
Approved by:

Rafael Martinez, Director Department of Transportation Date

Oak Hill Road at Squaw Hollow Creek Bridge Replacement Project Contract No. 7446, CIP No. 36105031 Addendum No. 2

County of El Dorado Page 3 of 3





16+00

- 1. Contours indicate top of deck elevation.
- 2. □ Indicates even 1.00 foot contours.
- 3. × Indicates 10' intervals measured along & Bridge.
- 4. Contour interval = 0.10'
- 5. Contours do not include allowances for camber or falsework settlement.

GENERAL NOTES LOAD AND RESISTANCE FACTOR DESIGN

AASHTO LRFD Bridge Design Specifications, 6th Edition with California Amendments, preface dated January 2014.

SEISMIC Caltrans Seismic Design Criteria (SDC), Version 1.7

DESIGN: dated April 2013.

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LRFD HL93 and Permit Design with "Low Boy"

LOADING: and Permit Design Vehicle.

Soil Profile: Type "D", VS30=220ms Moment Magnitude: 7.0 SEISMIC LOADING:

Peak Ground Acceleration = 0.223 g

REINFORCED fy = 60 ksi

f'c = 3.6 ksi (Superstructure) CONCRETE:

f'c = 3.6 ksi (Substructure)

STRUCTURAL fy = 50 ksi (ASTM A588)(BRIDGE RAILING)

0.60-0.40 Sa 딩 0.20 2.0 2.5 3.0 3.5 1.0 1.5 PERIOD (SECONDS)

ACCELERATION RESPONSE SPECTRUM CURVE

STRUCTURAL CONCRETE, BRIDGE FOOTING CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

BRIDGE REPLACEMENT

CAMBER LINE PROFILE LINE STRUCTURAL CONCRETE, BRIDGE STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)

CAMBER DIAGRAM

NO SCALE

NOTE: DOES NOT INCLUDE ALLOWANCE FOR FALSEWORK SETTLEMENT.

APPROXIMATE QUANTITIES

LEGEND - ROCK

BRIDGE DETAILS

BRIDGE DETAILS

BRIDGE DETAILS

RSP B11-47 CABLE RAILING

| ITEM DESCRIPTION | QUANTITY | UNIT |
|---|----------|------|
| BRIDGE REMOVAL | 1 | LS |
| STRUCTURE EXCAVATION (TYPE D) | 200 | CY |
| STRUCTURE EXCAVATION (ROCK) | 180 | CY |
| STRUCTURAL EXCAVATION (BRIDGE) | 65 | CY |
| STRUCTURE BACKFILL (BRIDGE) | 500 | CY |
| TEMPORARY SHORING | 1 | LS |
| STRUCTURAL CONCRETE, BRIDGE FOOTING | 96 | CY |
| STRUCTURAL CONCRETE, BRIDGE | 242 | CY |
| STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER) | 95 | CY |
| JOINT SEAL (MR = $1/2$ ") | 68 | LF |
| BAR REINFORCING STEEL (BRIDGE) | 60,000 | LB |
| CALIFORNIA ST-75 BRIDGE RAIL | 133 | LF |
| TUBULAR BICYCLE RAILING | 106 | LF |

CALTRANS STANDARD PLANS, 2018 EDITION

LEGEND - LINES AND SYMBOLS (SHEET 1 OF 5)

LEGEND - LINES AND SYMBOLS (SHEET 2 OF 5)

LEGEND - LINES AND SYMBOLS (SHEET 3 OF 5)

LEGEND - LINES AND SYMBOLS (SHEET 4 OF 5) LEGEND - LINES AND SYMBOLS (SHEET 5 OF 5)

JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL-BRIDGE

LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL-BRIDGE SURCHARGE AND WALL

C50995

Exp. 9/30/23

ABBREVIATIONS (SHEET 1 OF 3)

ABBREVIATIONS (SHEET 2 OF 3)

ABBREVIATIONS (SHEET 3 OF 3)

LEGEND - SOIL (SHEET 1 OF 2)

LEGEND - SOIL (SHEET 2 OF 2)

RETAINING WALL DETAILS NO.2

PREPARED UNDER THE SUPERVISION OF Molly A. Iley HECKED: KG 6/23/23 6/23/23 OAD NUMBER



COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION

SCALE: AS SHOWN OAK HILL ROAD AT SQUAW HOLLOW CREEK

S-2R 34 of 50 77134

GENERAL NOTES

23-1259 B 6 of 20



АЗВ

A3C

A10A

A10C

A10D

A10E

A10F

A10G

A10H

A62C

B0-13

B3 - 6

B6 - 21

RSP A62B

RSP B0-1

RSP B0-3

RSP A10B

WINGWALL LOL

EP=2072.1

TEMPORARY SHORING

186.05

61.01

2055.00

N 18°33'03.08"

EP=2072.0

REMOVE Exist BRIDGE-

14+/99.25-

HYDROLOGIC SUMMARY

| DRAINAGE AREA 5.44 SQ MI | | | | | | | |
|---|-----------------|---------------|----------------------|-----------------|--|--|--|
| | DESIGN FLOOD | BASE FLOOD | OVERTOPPING FLOOD | RECORD FLOOD | | | |
| FREQUENCY, YEARS | 50 | 100 | X | X | | | |
| DISCHARGE CUBIC ft/sec. | 1068 | 1285 | Χ | Χ | | | |
| WATER SURFACE ELEVATION AT BRIDGE | 2065.1 | 2065.6 | X | X | | | |

(Abut) =2071.72

TOP WALL (Abut) = 2071.65

Flood Plain Data is based upon information available when the plans were prepared and are shown to meet Federal requirements. The accuracy of said information is not warranted by the Designer and interested or affected parties should make their own investigation.

SCOUR DATA TABLE

| SUPPORT No. | LONG TERM (DEGRADATION AND CONTRACTION) SCOUR ELEVATION (ft), | SHORT TERM (LOCAL) SCOUR DEPTH (ft) ₂ | | | | |
|-------------|---|---|--|--|--|--|
| ABUTMENT 1 | 1.22 | 17.6 | | | | |
| ABUTMENT 2 | 1.22 | 17.5 | | | | |

Long term aggradation and degradation is at this location is negligible.

N 20°52'42

–15+33.75

SCALE: 1"=10'

·WINGWALL LOL

16+00-

BRIDGE = "OAK" LINE

TEMPORARY SHORING

N 20°52'42.28" E

- WINGWALL / LOL

N 20'52'42.28"

EP=2072.8

Local Scour depth shown is based on the upper layer of soil only. The analysis neglects the resistance of the underlying dense soils and rock layers and does not include the effect of the planned rip—rap protection.

LEGEND

- DENOTES EXISTING STRUCTURE
- DENOTES PROPOSED STRUCTURE

2055.00 DENOTES BOTTOM OF FOOTING ELEVATION



DENOTES ROCK SLOPE PROTECTION. FOR LIMITS SEE "ROCK SLOPE PROTECTION" SHEET IN "ROAD PLANS".

NOTES

1. Utility relocation not shown. Utilities in conflict will be relocated for bridge construction. See "Road Plans" for utility work.

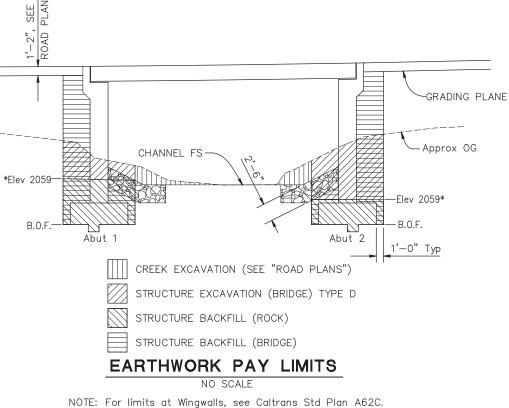
SPREAD FOOTING DATA TABLE

| SUPPORT LOCATION | SERVICE ² PERMISSIBLE CONTACT STRESS (SETTLEMENT) (ksf) | STRENGTH/CONSTRUCTION ³ FACTORED GROSS NOMINAL BEARING RESISTANCE $\phi_{\phi} = 0.45$ (ksf) | EXTREME EVENT 3 FACTORED GROSS NOMINAL BEARING RESISTANCE $\Phi_{\rho} = 1.00$ (ksf) |
|---------------------|--|---|--|
| Abut 1 | 7.4 | 4.8 | N/A |
| Abut 2 | 7.4 | 4.8 | N/A |

- 1. Controlling load combination is the one resulting in the highest ratio of $q_{g,u}/q_R$ for foundations on soil, or $q_{g,max}/q_R$ for foundation on rock.
- 2. Controlling load combination for Service Limit State is the one resulting in the highest ratio of $g_{n,u}/g_{pn}$ for foundations on soil, or $g_{g,max}/g_{R}$ for foundations on
- 3. Controlling load combination for Strength, Construction, and Extreme Event is the one resulting in the highest ratio of $g_{g,u}/q_R$ for foundation on soil, or $g_{g,max}/q_R$ for foundations on rock.

NOTES:

1. See "LOG OF TEST BORINGS" sheet and GEOTECHNICAL Engineering Report regarding expected soil conditions.



PLAN * Approximate Rock Elevation

FOUNDATION PLAN SCALE: AS SHOWN

COUNTY OF EL DORADO HECKED: DEPARTMENT OF TRANSPORTATION C50995 KG 6/23/2 xp. 9/30/23 OAD NUMBER

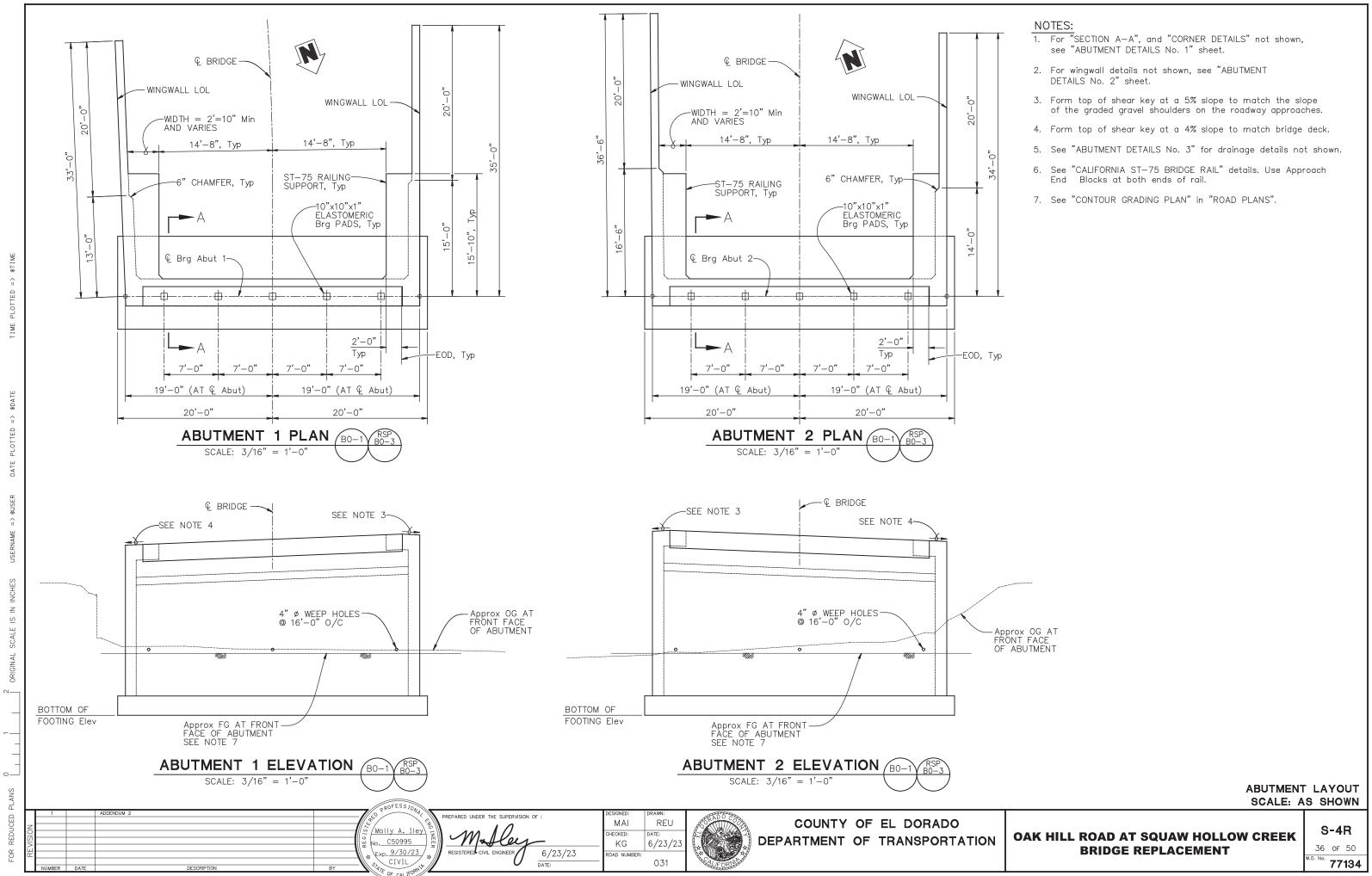
END WWLOL

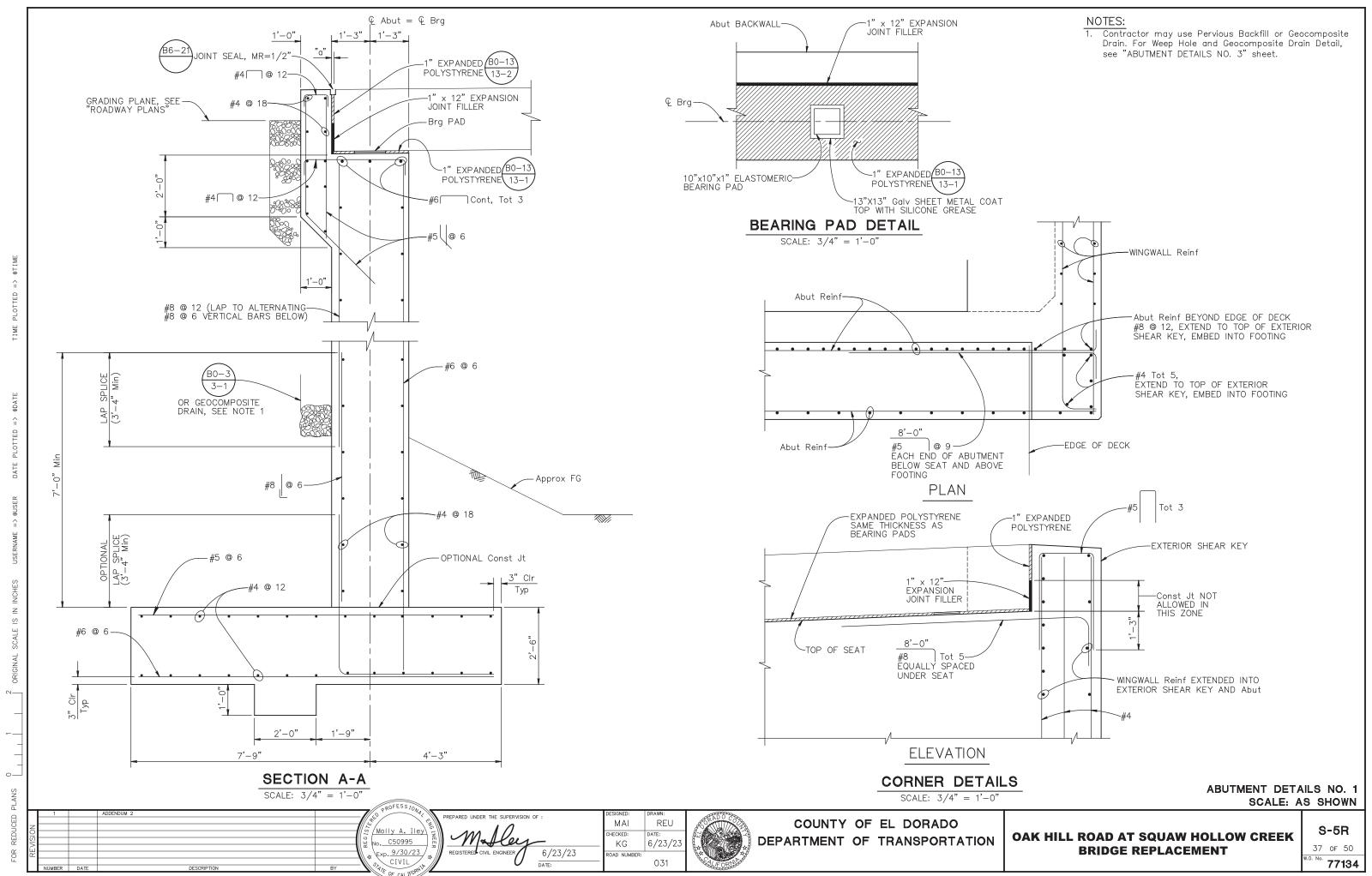
(FACE)

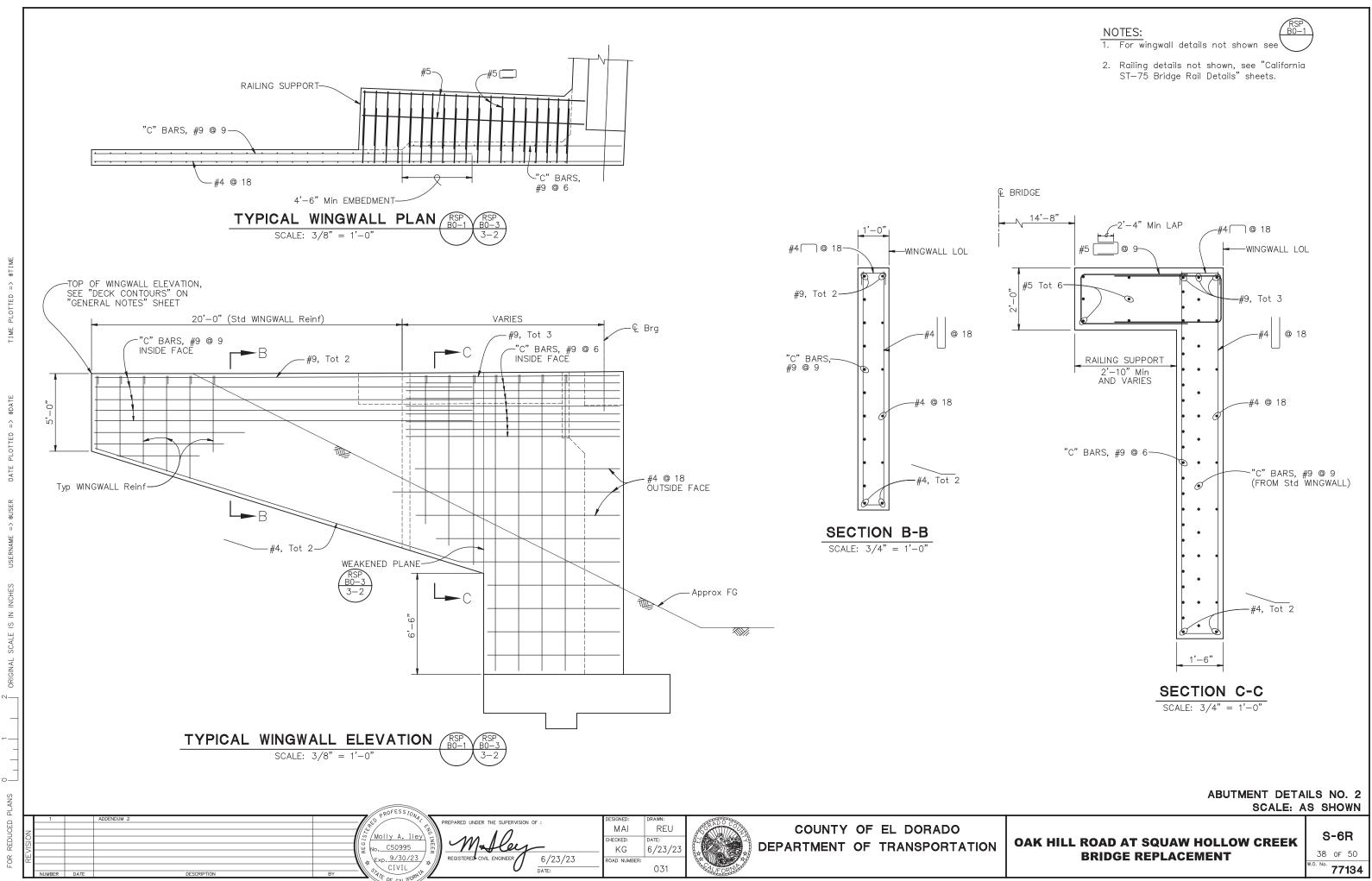
EP=2072.8

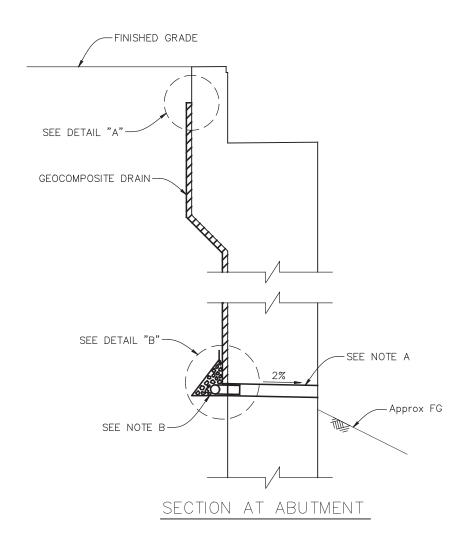
OAK HILL ROAD AT SQUAW HOLLOW CREEK **BRIDGE REPLACEMENT**

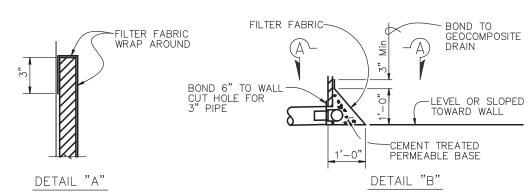
S-3R 35 OF 50 77134









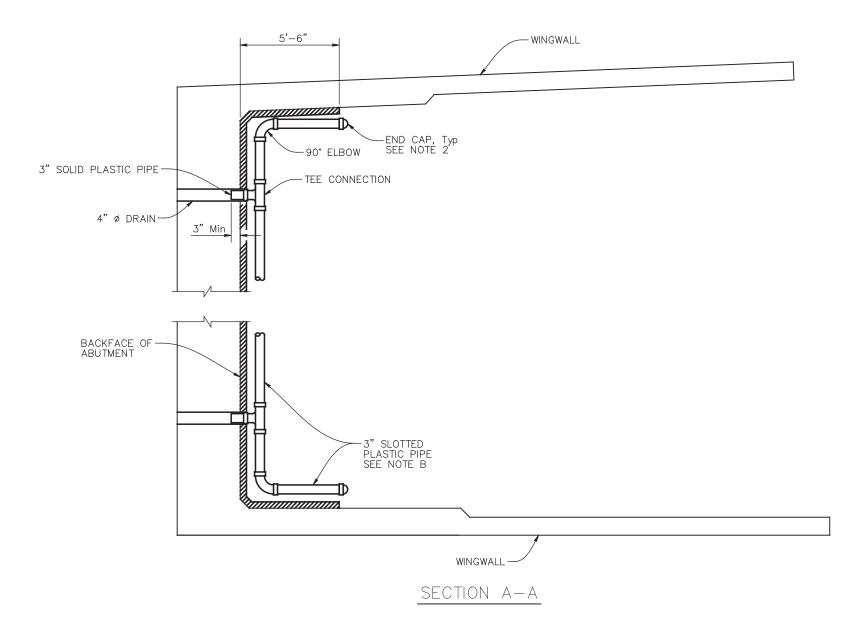


WEEP HOLE AND GEOCOMPOSITE DRAIN DETAIL

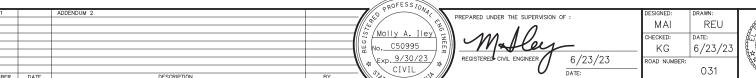
NOTES:

- A. 4" Ø drains at sag points and at 25' Max center to center.

 Exposed wall drains shall be located 3"± above finished grade.
- B. Geocomposite drain, cement treated permeable base, and 3" Ø slotted plastic pipe continuous behind abutment. Cap ends of pipe. Provide "Tee" connection at each 4" Ø drain.
- C. Connect the low end of plastic pipe to the main outlet pipe as applicable.



ABUTMENT DETAILS NO. 3
NO SCALE

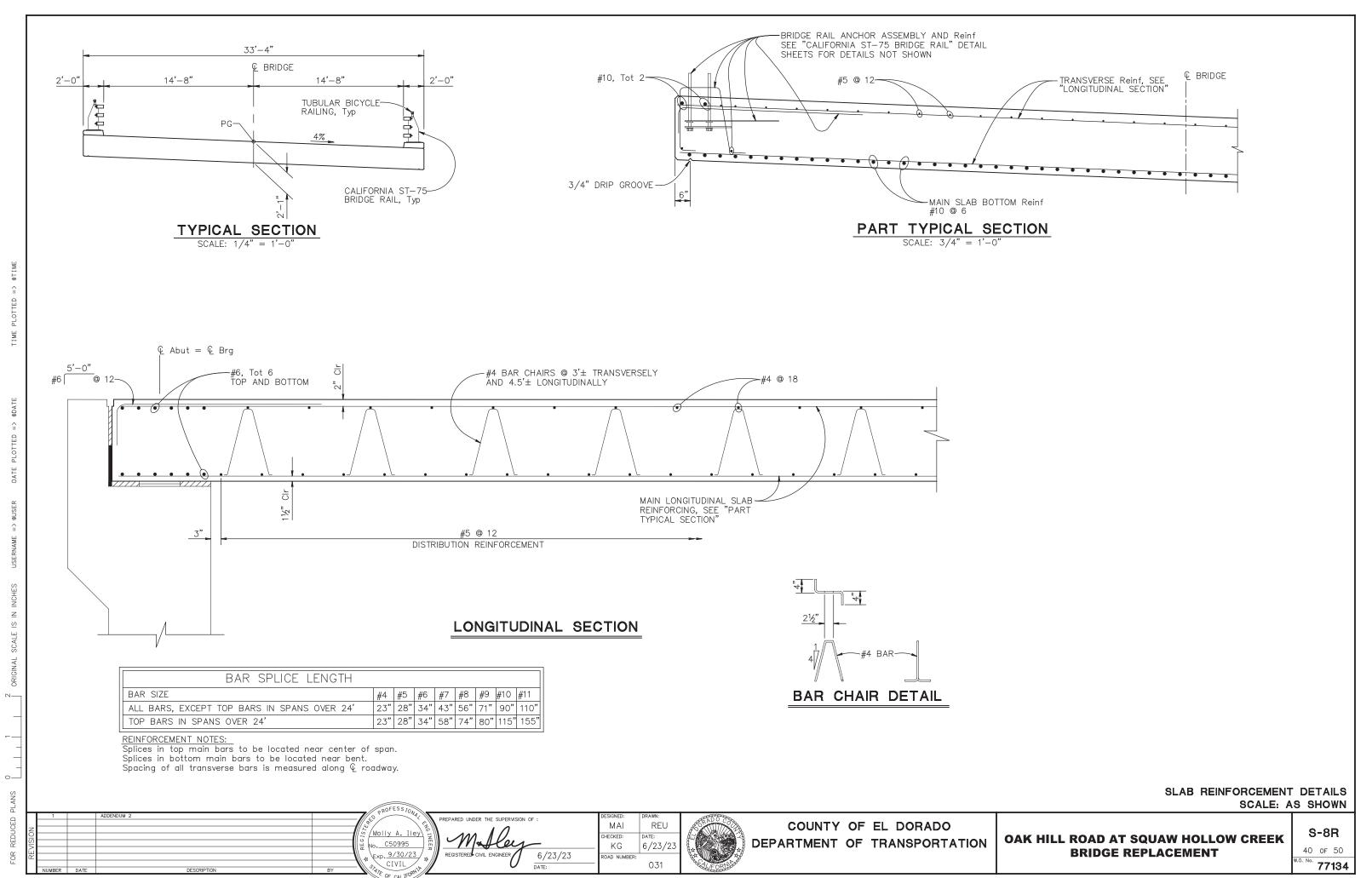


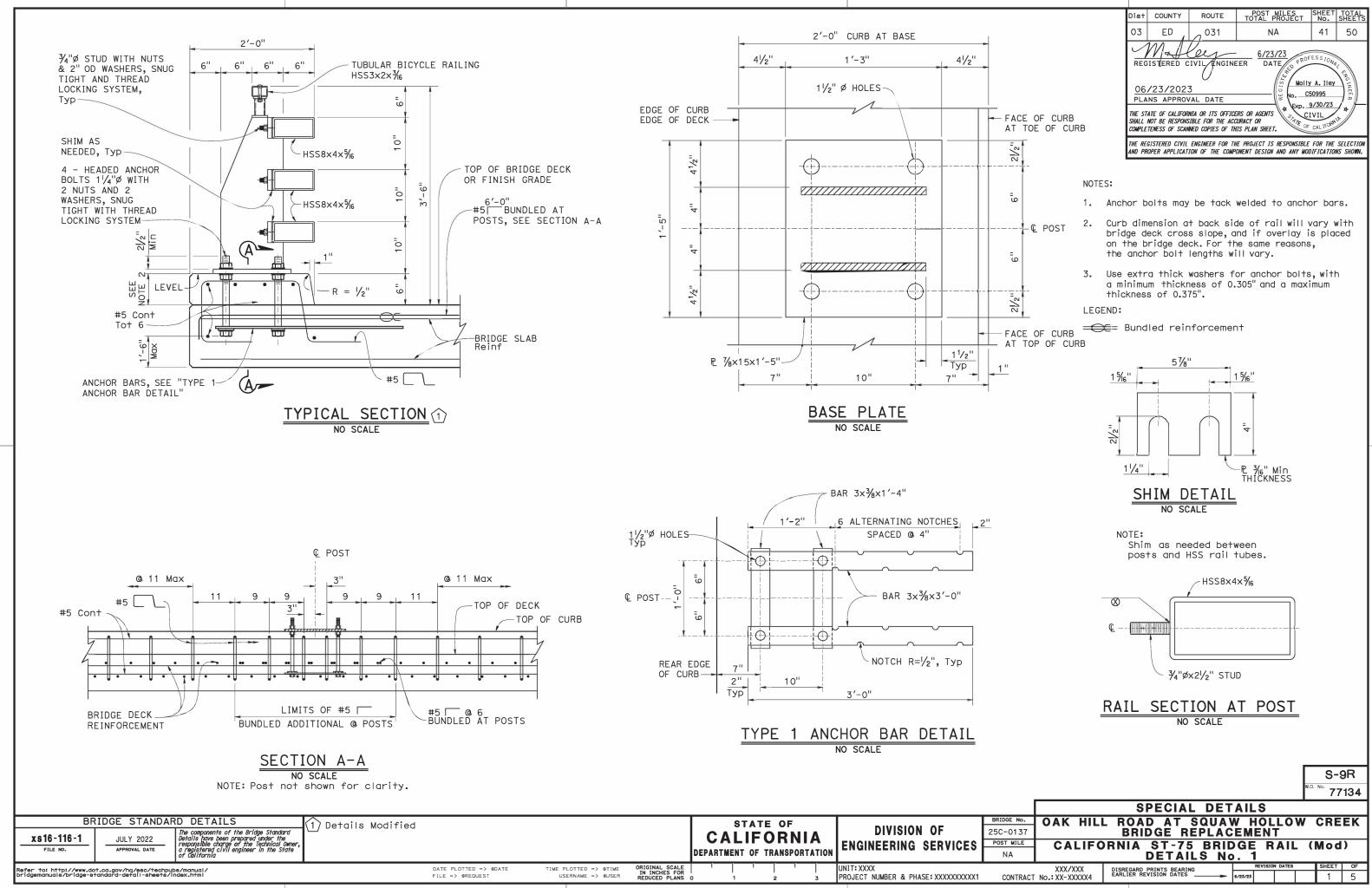


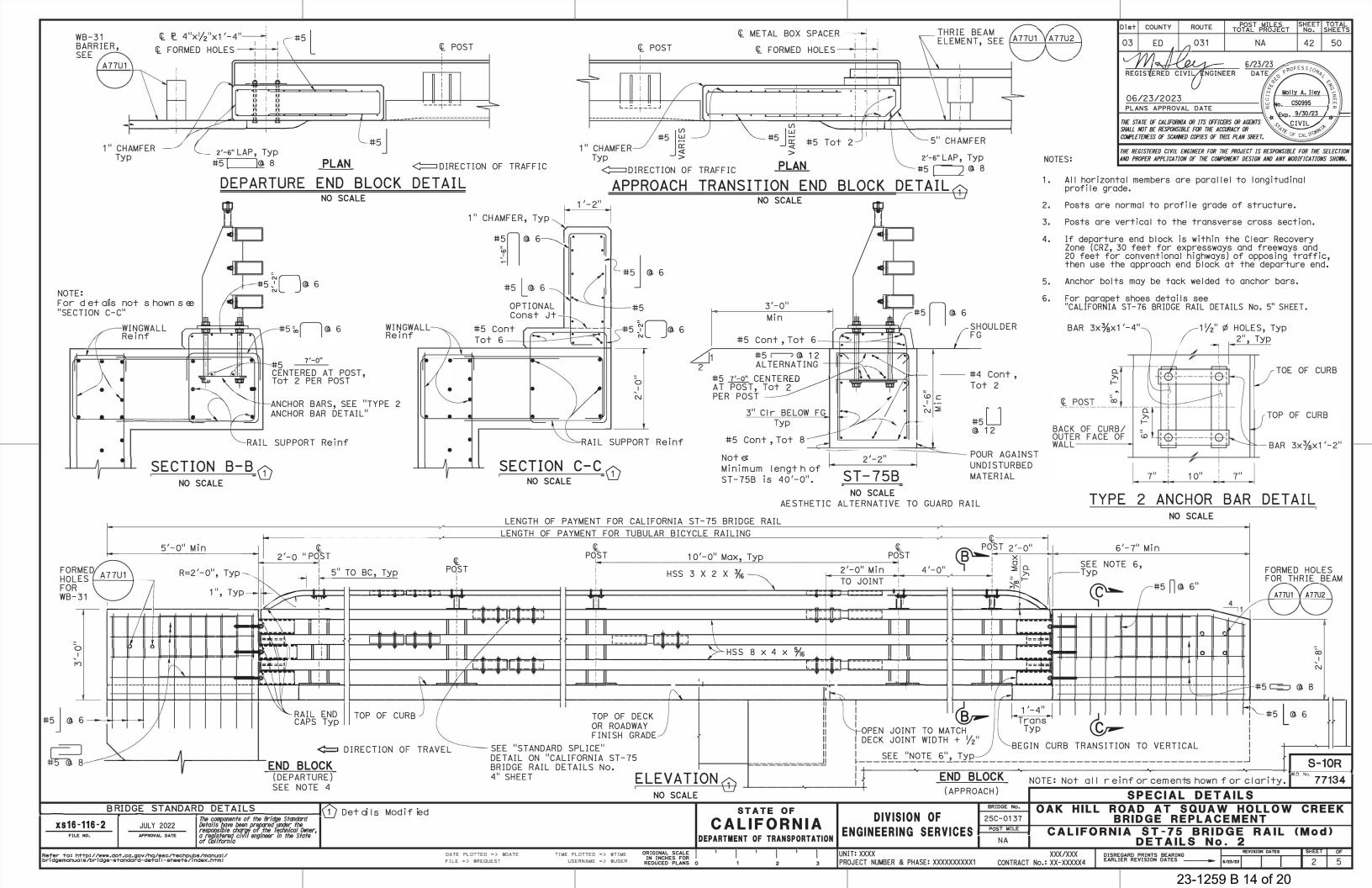
COUNTY OF EL DORADO
DEPARTMENT OF TRANSPORTATION

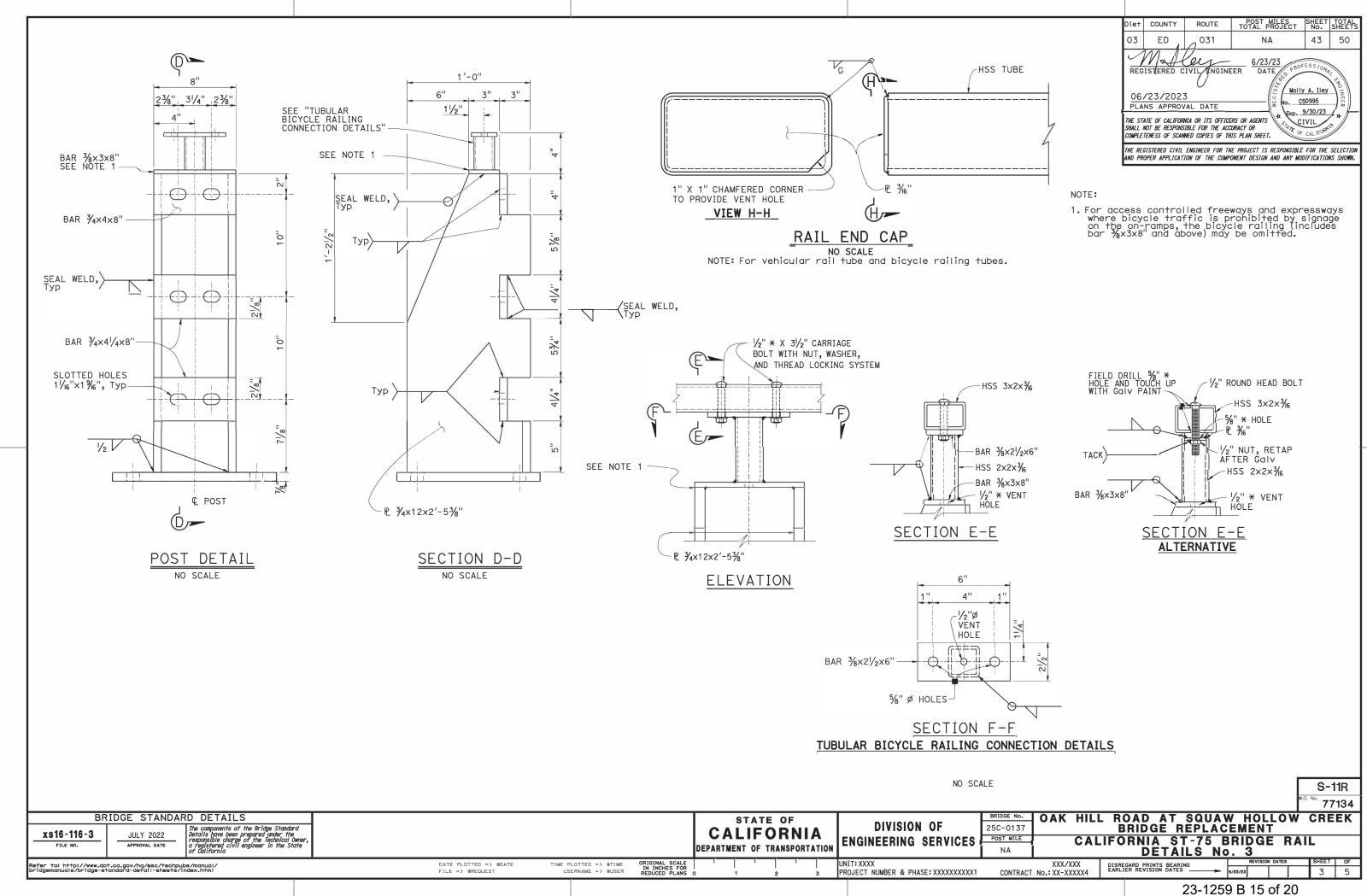
OAK HILL ROAD AT SQUAW HOLLOW CREEK BRIDGE REPLACEMENT

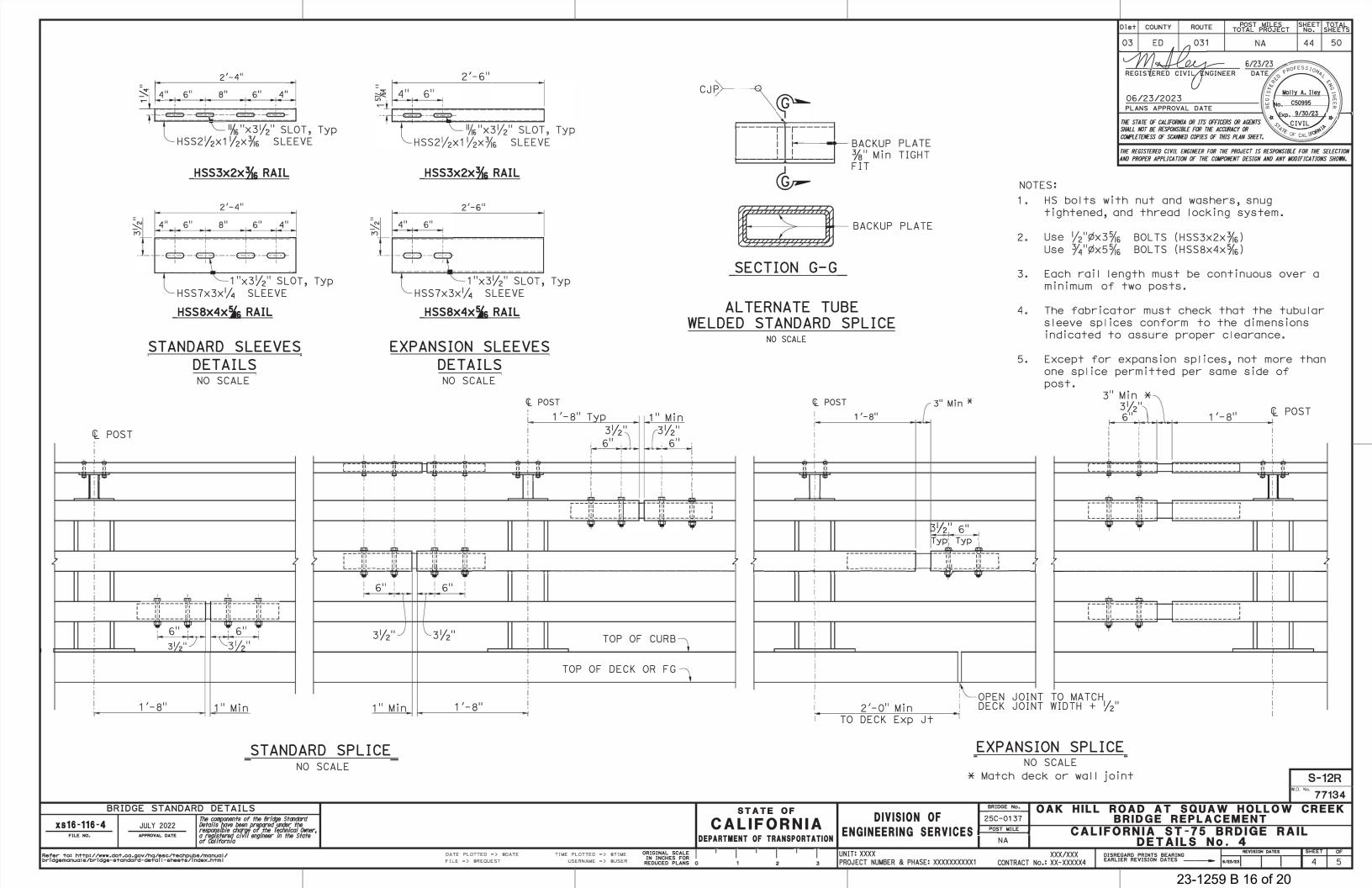
S-7R
39 of 50
W.O. No. 77134

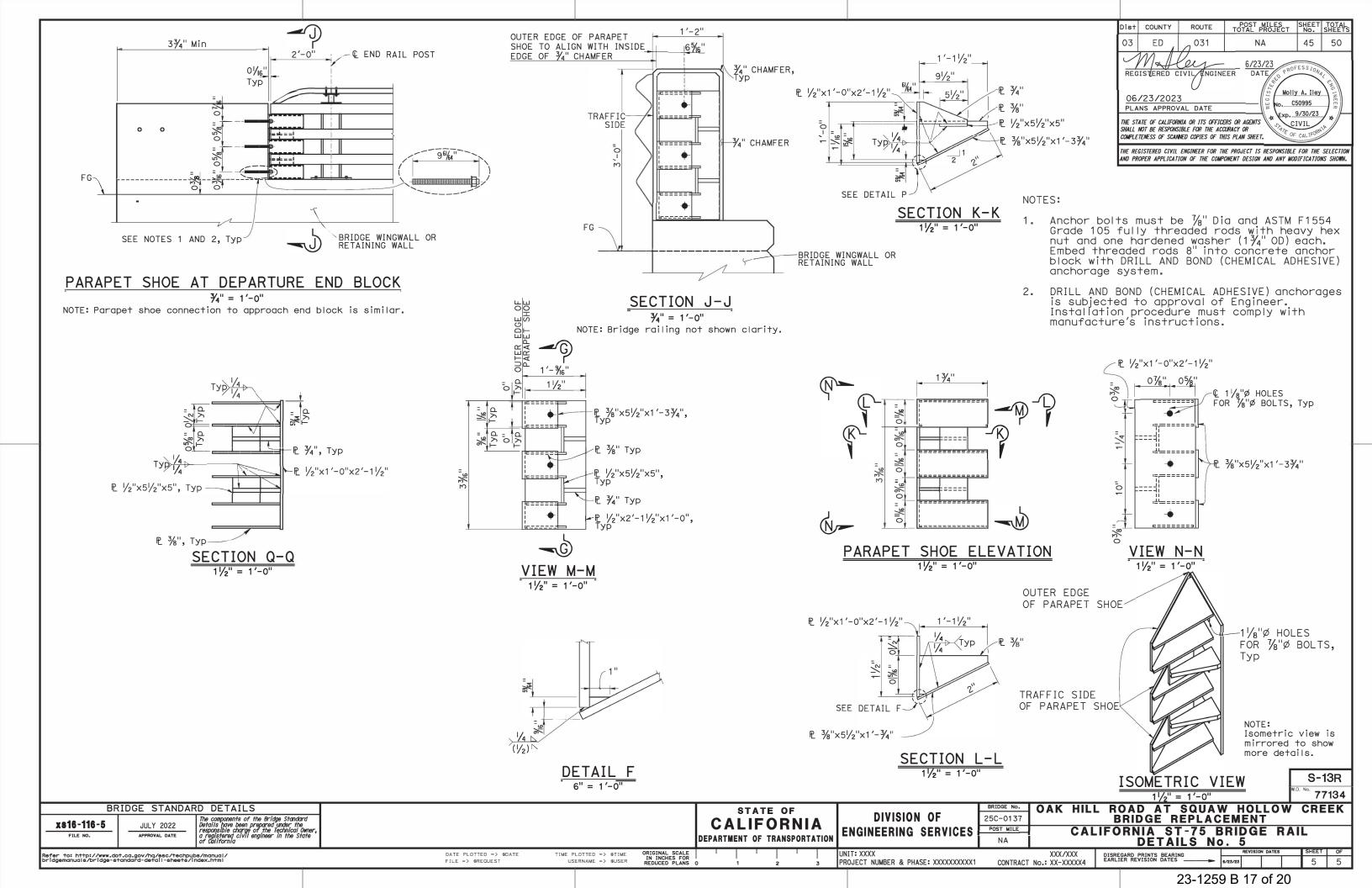


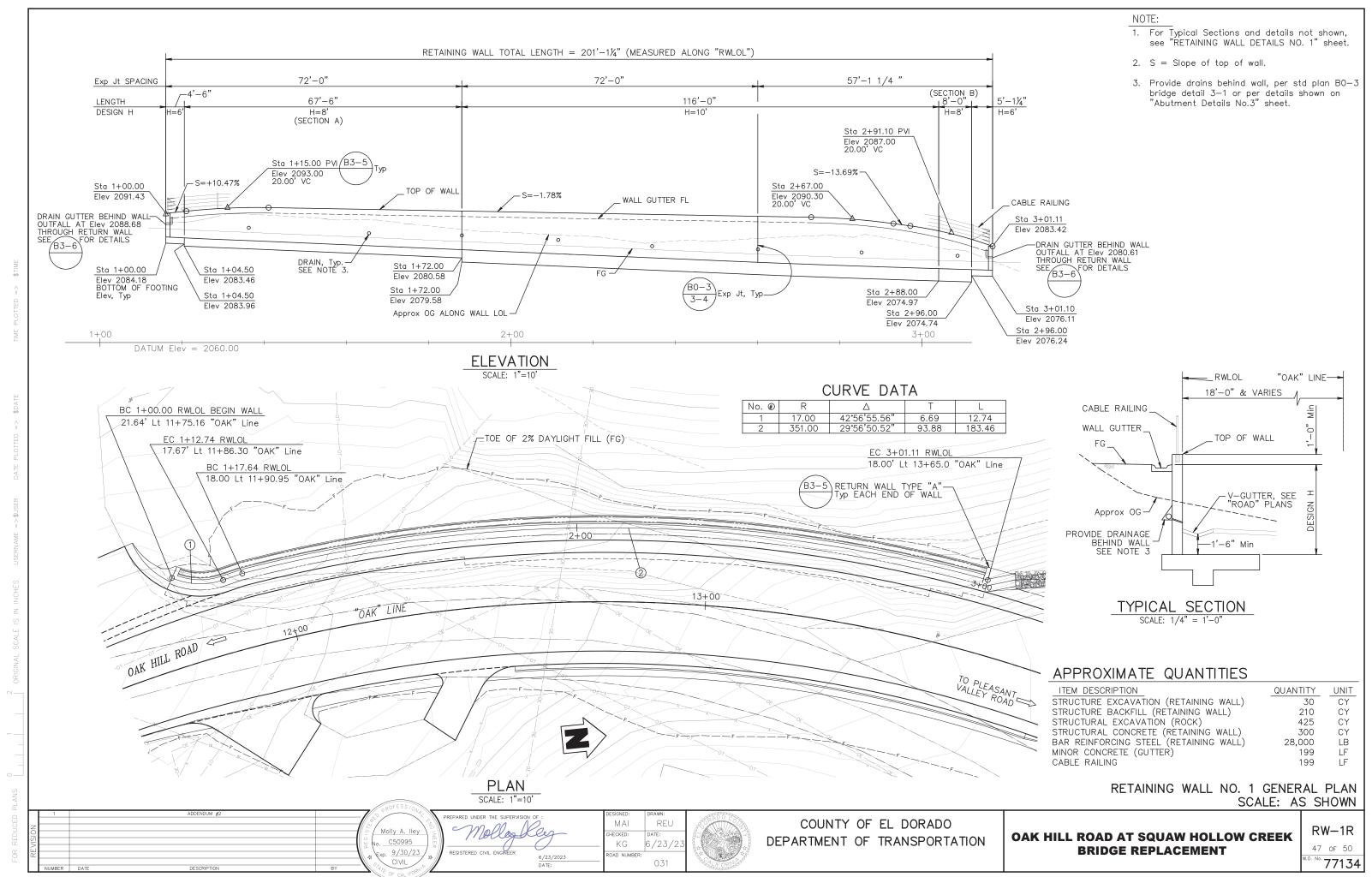












DESIGN CONDITIONS:

Design H may be exceeded by 6" before going

to the next size.

DESIGN NOTES: Design:

AASHTO LRFD Bridge Design Specifications, 6th edition with California Amendments

250 psf

LS: Soil: $\emptyset = 34^{\circ}$ $\gamma = 120 \text{ pcf}$

| EFP | | EARTHQUAKE INCREMENTAL SEISMIC PRESSURE |
|--------|--|--|
| 45 pcf | 50 pcf + 85 psf SURCHARGE BEHIND WALL | 10 pcf |

Reinforced

Strength I

Concrete: = 60,000 psi

Load Combinations and Limit States

Q=1.00DC+1.00EV+1.00EH+1.00LS Service

Q=aDC+BEV+1.50EH+1.75LSExtreme I Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE

Where: Q: Force Effects

> 1.25 or 0.90, Which ever Controls Design 1.35 or 1.00, which ever Controls Design

Dead Load of Structure Components Vertical Earth Fill Pressure

Live Load Surcharge EQE: Seismic Earth Pressure

Soil and Structure Components Inertia. Soil inertia ignored for stem design EQD:

*ELEV. 2087-

B': Effective Footing Width (ft) Net Bearing Stress (ksf)

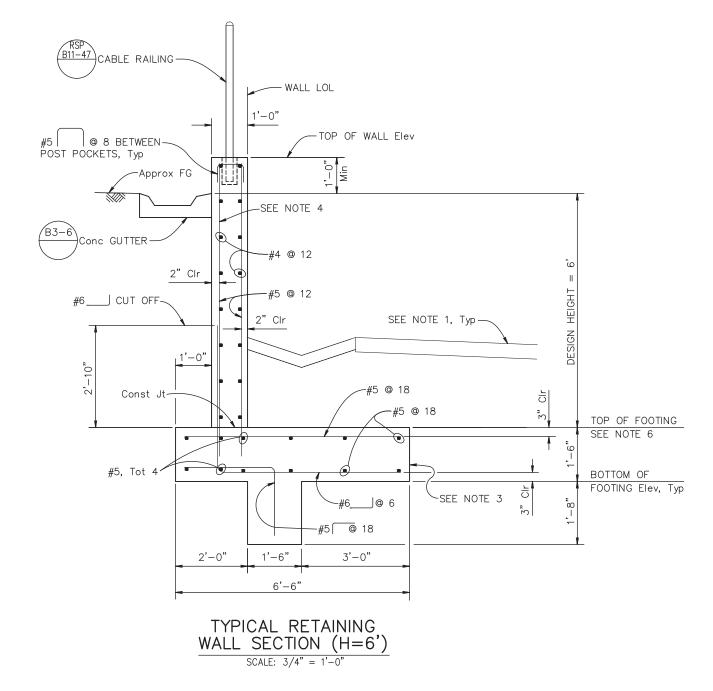
Gross Uniform Bearing Stress (ksf)

TABLE OF BEARING STRESS DATA

| DESIGN H | | 6' | | 8' | | 10' | |
|--|-----|------|-----|-----|-----|-----|--|
| Service limit State I: B' (ft), q' (ksf) | 6.5 | 1.0 | 8.5 | 1.1 | 9.5 | 1.2 | |
| Strength Limit State I: B' (ft), qo (ksf) | 6.5 | 1.0 | 8.5 | 1.2 | 9.5 | 1.5 | |
| Extreme Event Limit State I: B' (ft), q _o (ksf) | 5.6 | 1.79 | 4.2 | 3.1 | 6 | 4.1 | |

NOTES:

- 1. For Roadway details, see "Road Plans".
- 2. Sections shown are looking down-station.
- 3. Place concrete against undisturbed rock material except as permitted by engineer.
- 4. Provide #5 @ 6" (at back face of wall) over a distance of 8'-0" measured from all expansion joints, begin wall and end wall locations.
- 5. For "Typical Retaining Wall Section (H=8')" and "Typical Retaining Wall Section (H=10'), see "RETAINING WALL NO. 2"
- 6. Top of footing elevation must be below top of undisturbed



RETAINING WALL DETAILS NO. 1 SCALE: AS SHOWN

REPARED UNDER THE SUPERVISION OF Molly A. lley HECKED: C50995 KG Exp. 9/30/23 REGISTERED CIVIL ENGINEER OAD NUMBER 6/23/2023 DATE:

STRUCTURE EXCAVATION (RETAINING WALL)

STRUCTURE BACKFILL (RETAINING WALL)

STRUCTURE EXCAVATION (ROCK)

*Approximate top of rock elevation. EARTHWORK PAY LIMITS NO SCALE

RETAINING WALL LOL

-Approx OG

-Rdwy GP

Rdwy FG-



6/23/2

COUNTY OF EL DORADO DEPARTMENT OF TRANSPORTATION

OAK HILL ROAD AT SQUAW HOLLOW CREEK BRIDGE REPLACEMENT

RW-2R 48 OF 50 ^{5. No.} 7<u>7134</u>

23-1259 B 19 of 20

