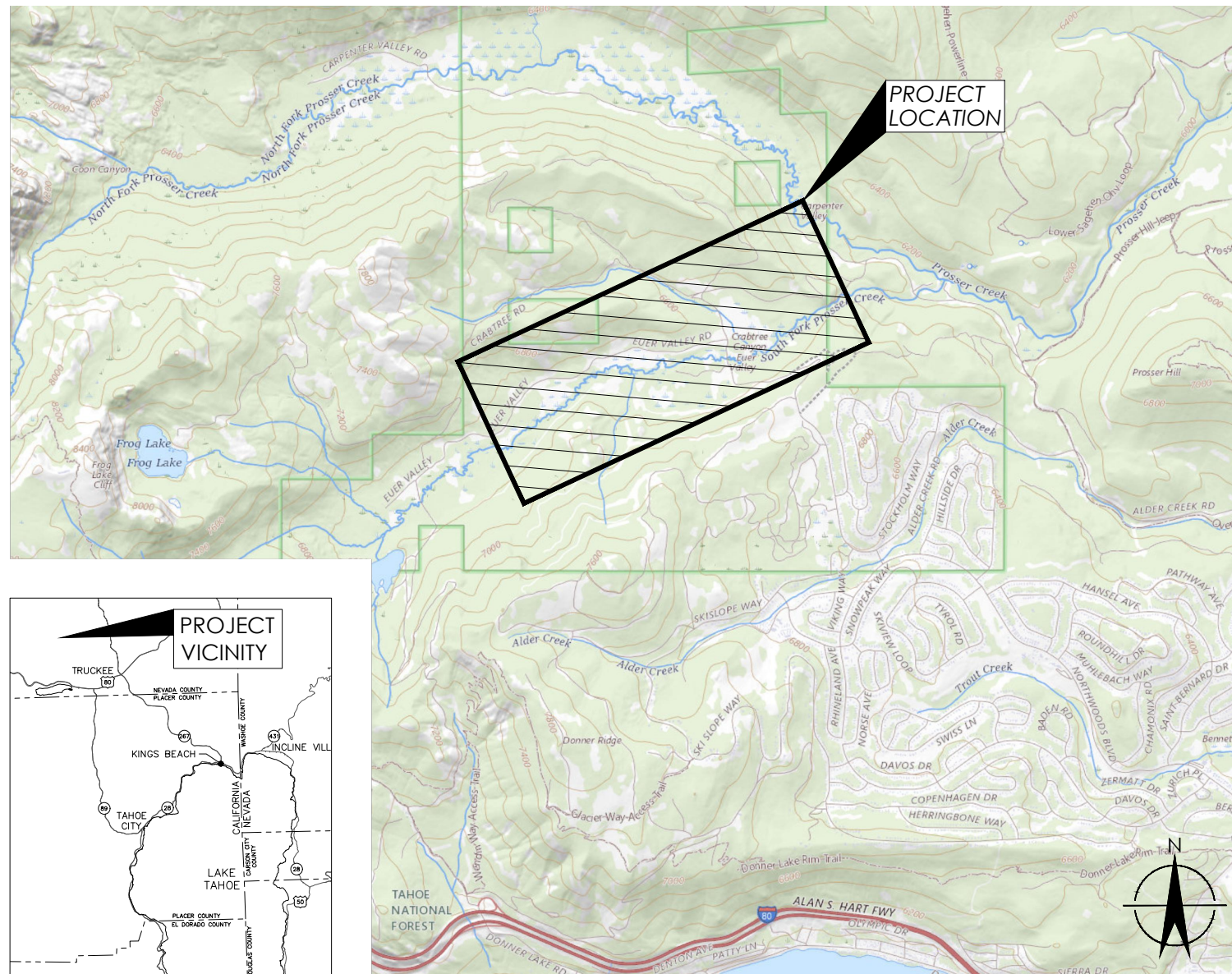


EUER VALLEY PHASE 2 RESTORATION PROJECT

NEVADA COUNTY, CALIFORNIA

LOCATION MAP



SHEET INDEX

- SHEET 1.0: COVER SHEET
- SHEET 1.1: SYMBOLS AND GENERAL NOTES
- SHEET 2.0: DIVERSION AND DEWATERING PLAN
- SHEET 3.0: OVERVIEW, ACCESS, & SHEET INDEX
- SHEET 3.1.1: EUER CROSSING RESTORATION OVERVIEW
- SHEET 3.1.2: EUER CROSSING CREEK DETAIL VIEWS
- SHEET 3.1.3: EUER CROSSING ROAD & DITCH DETAIL VIEWS
- SHEET 3.2.1: COWBOY CROSSING RESTORATION OVERVIEW
- SHEET 3.2.2: SOUTH FORK PROSSER CREEK DETAIL VIEWS
- SHEET 3.2.3: COWBOY CROSSING GRADING AND REALIGNMENT DETAIL VIEWS
- SHEET 3.2.4: COWBOY CRIBWALL DETAIL VIEWS
- SHEET 3.2.5: SIDEWINDER TRAIL DRAINAGE DETAIL VIEWS
- SHEET 3.3.1: CRABTREE CREEK RESTORATION OVERVIEW
- SHEET 3.3.2: CRABTREE CREEK ROAD CROSSING DETAIL VIEWS
- SHEET 3.4.1: QUICKDRAW CROSSING RESTORATION OVERVIEW
- SHEET 3.4.2: QUICKDRAW CROSSING GRADING DETAIL VIEWS 1
- SHEET 3.4.3: QUICKDRAW CROSSING GRADING DETAIL VIEWS 2
- SHEET 3.4.4: QUICKDRAW CROSSING TRAIL DETAILS
- SHEET 3.4.5: QUICKDRAW LOG STRINGER DETAILS
- SHEET 4.0: ROAD TREATMENT TYPICAL DETAILS
- SHEET 4.1: DEBRIS JAM TYPICAL DETAILS
- SHEET 4.2: LOG STRUCTURE TYPICAL DETAILS
- SHEET 4.3: MATERIALS TYPICAL DETAILS
- SHEET 5.0: REVEGETATION NOTES

PROJECT TEAM

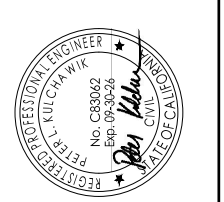
CLIENT
TRUCKEE RIVER WATERSHED COUNCIL
 BETH CHRISTMAN
 PO BOX 8568
 TRUCKEE, CALIFORNIA 96162
 TEL. (530) 550-8760 x1

GEOMORPHOLOGIST / SITE CIVIL ENGINEER
BALANCE HYDROLOGICS
 PETER KULCHAWIK, P.E.
 DAVID SHAW, P.G.
 12020 DONNER PASS ROAD, SUITE B1
 TRUCKEE, CALIFORNIA 96161
 TEL. (530) 550-9776

REVEGETATION SPECIALIST
WESTERN BOTANICAL SERVICES
 JULIE ETRA, CPESC
 5859 MT ROSE HIGHWAY
 RENO, NEVADA 89511
 TEL. (775) 849-3223

LANDOWNER
TAHOE DONNER ASSOCIATION
 11509 NORTHWOODS BLVD
 TRUCKEE, CALIFORNIA 96161

DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
TA & DS	06-11-25	PK	90% DESIGN
IN CHARGE	05-08-26	PK	100% DESIGN
DATE	05-08-2026		



COVER SHEET

EUER VALLEY PHASE 2 RESTORATION

NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER
223095
SCALE (AT 22" X 34")

SHEET
1.0

LEGEND:

EXISTING MAJOR CONTOUR: 5 FT INTERVAL	
EXISTING MINOR CONTOUR: 1 FT INTERVAL	
EXISTING FLOWLINE	
EXISTING OVERHEAD ELECTRIC	
EXISTING FENCE	
EXISTING EDGE OF PAVEMENT	
EXISTING PROPERTY LINE (APPROX)	
FINISH MAJOR CONTOUR	
FINISH MINOR CONTOUR	
GRADING LIMIT	
GRADE BREAK	
LIMIT OF WORK	
DIVERSION PIPE	
LOG WITH ROOTWAD	
BOULDERS	
GRAVEL/CBM	
EXCAVATION	
FILL PLACEMENT	
SOD PLACEMENT	
SUPPLEMENTAL TREE HARVEST AREA	
SALVAGED/TRANSPLANTED WILLOW CLUMP	
REMOVE TREE	
GRAVEL COFFER DAM	
CONTROL POINT	
TEMPORARY CONSTRUCTION ROUTES WITH EQUIPMENT PROHIBITIONS SEE 3.0 (FOOT TRAVEL OR TRACKED EQUIPMENT ONLY)	
TEMPORARY CONSTRUCTION ROUTES WITH NO EQUIPMENT LIMITATIONS	
TEMPORARY CONSTRUCTION ROUTE MEADOW MATS ALONG	
ROUTES WITH NO EQUIPMENT LIMITATIONS (EXISTING ROADS)	
DIRECTION OF LEAD OFF SWALE FOR ROLLING DIPS AND FLOW DISPERSAL LOGS	
NOT IN CONTRACT (TO BE CONSTRUCTED BY TDA)	

ABBREVIATIONS:

'	FEET	CMP	CORRUGATED METAL PIPE	EX	EXISTING	NIC	NOT IN CONTRACT	TDA	TAHOE DONNER ASSOCIATION
"	INCH	DBH	DIAMETER AT BREAST HEIGHT (4' FROM GROUND)	FG	FINISH GRADE	NTS	NOT TO SCALE	TSOM	TOP SOIL/ORGANIC MATTER
#	NUMBER	DIA. Ø	DIAMETER	FT	FEET	OC	ON CENTER	TRWC	TRUCKEE RIVER WATERSHED COUNCIL
AB	AGGREGATE BASE	E	EASTING	H	HORIZONTAL	PROP	PROPOSED	TYP	TYPICAL
AC	ASPHALT CONCRETE	ECB	EROSION CONTROL BLANKET	IN	INCHES	R	RIGHT	USGS	UNITED STATES GEOLOGICAL SURVEY
APPROX	APPROXIMATE	EG	EXISTING GROUND	INV	INVERT	ROW	RIGHT OF WAY	V	VERTICAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	ELEV	ELEVATION	L	LEFT	S	SOUTH	WSE	WATER SURFACE ELEVATION
BGS	BELOW GROUND SURFACE	ESA	ENVIRONMENTALLY SENSITIVE AREA	LF	LINEAR FT	SF	SOUTH FORK		
CBM	CHANNEL BED MATERIAL			MAX	MAXIMUM	STA	STATION		
				MIN	MINIMUM	STR	STRUCTURE		
				N	NORTHING				

GENERAL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE PROJECT SITE TO VERIFY SITE CONDITIONS AND FOR COMPLETELY UNDERSTANDING THE REQUIRED SCOPE OF WORK SHOWN ON THESE DRAWINGS AND CONTAINED IN THE PROJECT SPECIFICATIONS.
- ALL PARTS OF THIS PROJECT - INCLUDING SOIL PREPARATION, EARTHWORK, AND PLANTING - ARE SUBJECT TO FIELD DESIGN BY THE ENGINEER'S REPRESENTATIVE. AT ANY TIME, THE CONTRACTOR'S OPERATIONS AND CONSTRUCTION MAY BE SUBJECT TO OBSERVATION BY THE ENGINEER'S REPRESENTATIVE. WHEN REQUESTING THE PRESENCE OF THE ENGINEER'S REPRESENTATIVE AT THE PROJECT SITE FOR DESIGN CLARIFICATION, STAGE ACCEPTANCE, OR OTHER APPROVALS, THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCE NOTICE DIRECTLY TO THE ENGINEER'S REPRESENTATIVE.
- THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL LABOR AND MATERIALS TO COMPLETE THE WORK DEPICTED HEREIN.
- THE CONTRACTOR SHALL CONFIRM THE LOCATIONS OF UNDERGROUND UTILITIES BEFORE THE START OF ANY CONSTRUCTION OPERATIONS, INCLUDING AND NOT LIMITED TO EXCAVATION OR TRENCHING. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA) AT 811/1-800-227-2600. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS ADVANCE NOTICE FOR LOCATING UTILITIES.
- THE GRADING LIMITS SHALL BE APPROVED BY THE ENGINEER'S REPRESENTATIVE PRIOR TO ANY GROUND DISTURBANCE.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER'S REPRESENTATIVE IMMEDIATELY UPON FINDING ANY FIELD CONDITIONS THAT WOULD CONFLICT WITH THE INFORMATION INDICATED ON THESE DRAWINGS OR THE PROJECT SPECIFICATIONS. ALL FIELD ADJUSTMENTS MUST BE APPROVED BY THE ENGINEER'S REPRESENTATIVE BEFORE CONSTRUCTION OF SAID ADJUSTMENTS; FAILURE TO DO SO SHALL RESULT IN THE CONTRACTOR ASSUMING FULL RESPONSIBILITY FOR ANY REQUIRED REVISIONS OR FIELD MODIFICATIONS, AS DIRECTED BY THE ENGINEER'S REPRESENTATIVE, AT NO ADDITIONAL COST.
- CONFORM TO EXISTING GRADES AND CONDITIONS WHENEVER POSSIBLE. ANY ADJACENT OR OFFSET AREAS DISTURBED BY THE CONTRACTOR'S OPERATION MUST BE RESTORED BY THE CONTRACTOR TO THE PRE-DISTURBANCE CONDITIONS TO THE SATISFACTION OF THE ENGINEER'S REPRESENTATIVE.
- ALL LUBRICATION, REFUELING, OR MAINTENANCE OF CONSTRUCTION VEHICLES SHALL BE CONDUCTED WITHIN APPROVED CONSTRUCTION STAGING AREAS.
- PROPERTY LINES SHOWN HEREIN ARE APPROXIMATE.
- STAGING AREAS MUST BE CONTAINED BY MEANS DESCRIBED IN THE PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO CONFINE THE AREA AND PREVENT CONTAMINANTS FROM ENTERING NEARBY CHANNELS AND WATER BODIES.
- ELEVATIONS ARE RELATIVE TO THE NAVD 88 DATUM, AND ARE BASED ON 2018 USGS LIDAR DATA AND GROUND BASED SURVEY BY BALANCE HYDROLOGICS IN 2023 AND 2024. SUPPLEMENTAL SURVEY DATA MAY BE REQUIRED. COORDINATES ARE PRESENTED IN CALIFORNIA STATE PLANE ZONE 2.
- PRESERVE TREES AND VEGETATION OUTSIDE OF THE LIMITS OF WORK. ANY TREES OR VEGETATION DISTURBED OUTSIDE OF THE LIMITS OF WORK SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY TREES GREATER THAN 6" DBH THAT ARE OUTSIDE OF THE GRADING LIMITS AND INTERFERE WITH THE WORK MAY ONLY BE REMOVED WITH APPROVAL FROM THE ENGINEER'S REPRESENTATIVE.
- SCALE SIZES INDICATED HEREIN ARE INTENDED FOR PLOTTING ON ANSI SIZE D SHEETS (22" BY 34") IN COLOR.

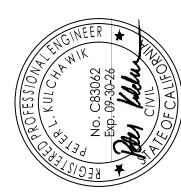
EARTHWORK NOTES:

- EARTHWORK OPERATIONS SHALL BE EXECUTED ACCORDING TO THESE PLANS, THE GEOTECHNICAL ENGINEERING REPORT, AND THE RELEVANT PROJECT PERMITS.
- THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS TO IMPORT MATERIAL, AS NEEDED. SHOULD THERE NOT BE SUFFICIENT AMOUNTS OF SUITABLE MATERIAL ONSITE FOR REUSE, THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS TO OFF HAUL AND DISPOSE OF ALL EXCESS AND UNSUITABLE MATERIAL BY LEGAL MEANS.
- THE CONTRACTOR SHALL CONSTRUCT FINISHED SURFACES TO ±0.1' OF THE ELEVATIONS INDICATED ON THE PLANS. THE ENGINEER'S REPRESENTATIVE SHALL APPROVE ALL FINISHED GRADES.
- EXCAVATING, FILLING, AND GRADING WORK SHALL NOT BE PERFORMED DURING WEATHER CONDITIONS WHICH MIGHT DAMAGE OR BE DETRIMENTAL TO THE CONDITION OF EXISTING GROUND, IN-PROGRESS WORK, OR COMPLETED WORK. WHEN THE WORK IS INTERRUPTED BY RAIN; EXCAVATING, FILLING, AND GRADING WORK SHALL NOT RESUME UNTIL THE SITE AND SOIL CONDITION (MOISTURE CONTENT) ARE SUITABLE FOR COMPACTION.
- AREAS PROPOSED FOR FILL PLACEMENT SHALL BE CLEARED AND GRUBBED. CLEARING AND GRUBBING SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL UNSUITABLE MATERIAL SPECIFIED IN THE EARTHWORK NOTES, INCLUDING TREES (LESS THAN 6 INCHES IN DIAMETER MEASURED 4 FEET FROM THE GROUND), SHRUBS, OTHER VEGETATION, AND DEBRIS AND RUBBISH OF ANY NATURE. MATERIAL GENERATED FROM CLEARING AND GRUBBING MAY NOT BE REUSED AS FILL. MATERIAL GENERATED FROM CLEARING AND GRUBBING SHALL BE REUSED TO THE MAXIMUM EXTENT POSSIBLE AS TSOM, SOD, OR SALVAGED WILLOWS, SEE NOTES ON SHEET 5.0. ALL ROCKS GREATER THAN 8 INCHES DIAMETER SHALL BE REMOVED FROM THE TOP 12 INCHES OF SOIL.
- PRIOR TO PLACEMENT OF FILL, THE NEAR-SURFACE SOIL SHALL BE SCARIFIED TO A DEPTH OF ROUGHLY 12 INCHES AND THEN UNIFORMLY MOISTURE CONDITIONED TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT.
- FILL SHALL CONSIST OF UNCONTAMINATED, PREDOMINANTLY GRANULAR, NON-EXPANSIVE NATIVE SOIL OR APPROVED IMPORT SOIL. FILL SHOULD CONSIST OF GRANULAR MATERIAL, NEARLY FREE OF ORGANIC DEBRIS, WITH A LIQUID LIMIT OF LESS THAN 40, A PLASTICITY INDEX LESS THAN 15, 100 PERCENT PASSING THE 8-INCH SIEVE, AND LESS THAN 30 PERCENT PASSING THE NO. 200 SIEVE. ROCK IN FILL SHOULD BE BROKEN INTO FRAGMENTS NO LARGER THAN 8 INCHES DIAMETER.
- IMPORTED FILL MATERIAL (IF REQUIRED) SHOULD BE PREDOMINANTLY GRANULAR, NON-EXPANSIVE, AND FREE OF DELETERIOUS OR ORGANIC MATERIAL. IMPORTED MATERIAL THAT IS PROPOSED FOR USE ON SITE SHOULD BE SUBMITTED TO THE ENGINEER'S REPRESENTATIVE FOR APPROVAL AND LABORATORY ANALYSIS AT LEAST 72 HOURS PRIOR TO IMPORT.
- SOIL MATERIAL THAT IS TOO WET FOR COMPACTION SHALL BE LEFT TO DRAIN, THEN TO BE AERATED AND DRIED BY DISKING AND HARROWING OR OTHER APPROVED METHODS UNTIL THE ENGINEER'S REPRESENTATIVE APPROVES THE DRIED MATERIAL.
- MATERIAL EXCAVATED FROM THE PROJECT SITE SHALL BE DEEMED UNSUITABLE FOR REUSE IF IT IS: OF SUCH NATURE AS TO BE INCAPABLE OF BEING COMPACTED TO SPECIFIED DENSITY USING ORDINARY METHODS, TOO WET TO BE PROPERLY COMPACTED AND CIRCUMSTANCES PREVENT SUITABLE DRYING PRIOR TO INCORPORATION INTO THE WORK, FOUND TO CONTAIN DEBRIS WASTE, VEGETATION OR OTHER DELETERIOUS MATTER, OR OTHERWISE DEEMED UNSUITABLE BY THE ENGINEER'S REPRESENTATIVE.
- FILL SHALL BE UNIFORMLY MOISTURE CONDITIONED TO WITHIN 2 PERCENT OF THE OPTIMUM MOISTURE CONTENT AND PLACED IN MAXIMUM 8-INCH THICK, LOOSE LIFTS (LAYERS) PRIOR TO COMPACTION. ALL FILL SHALL BE COMPACTED TO AT LEAST 85 PERCENT OF THE MAXIMUM DRY DENSITY (PER ASTM D1557). MOISTURE CONTENT, DRY DENSITY, AND RELATIVE COMPACTION OF FILL SHOULD BE EVALUATED BY THE ENGINEER'S REPRESENTATIVE AT REGULAR INTERVALS DURING FILL PLACEMENT. THE CONTRACTOR IS RESPONSIBLE FOR ACHIEVEMENT OF PROPER COMPACTION DURING FILL AND BACKFILL PLACEMENT, INCLUDING PROVIDING WATER TO ACHIEVE OPTIMUM MOISTURE CONTENT DURING FILL OPERATIONS. THE UPPER 4 TO 8 INCHES OF FILL SLOPES MAY BE SCARIFIED TO PROMOTE REVEGETATION.
- FILL SHALL BE PLACED IN HORIZONTAL LIFTS TO THE LINES AND GRADES SHOWN ON THE PROJECT PLANS. SLOPES SHALL BE CONSTRUCTED BY OVERBUILDING THE SLOPE FACE AND THEN CUTTING IT BACK TO DESIGN SLOPE GRADES. FILL SLOPES SHALL NOT BE CONSTRUCTED OR EXTENDED HORIZONTALLY BY PLACING SOIL ON AN EXISTING SLOPE FACE AND/OR COMPACTED BY TRACK WALKING.
- MAINTAIN SLOPES AND EMBANKMENTS UNTIL SUBSTANTIAL COMPLETION AND ACCEPTANCE OF THE WORK. PROMPTLY REPAIR SLIDES, SLIPOUTS, WASHOUTS, SETTLEMENTS, AND SUBSIDENCES THAT OCCUR FOR ANY REASON, AND REFINISH THE SLOPE OR EMBANKMENT TO THE INDICATED LINES AND GRADES. COMPLY WITH APPLICABLE REQUIREMENTS OF CCR, TITLE 8, TRENCH CONSTRUCTION SAFETY ORDERS.
- THE CONTRACTOR SHALL TAKE ALL MEANS NECESSARY TO PREVENT THE INTRODUCTION AND SPREAD OF NON-NATIVE PLANTS
- ENSURE THAT THE TOP 2" OF SOIL IN PLACED FILL IS FREE OF CONCRETE, RUBBLE, DEBRIS, BRANCHES, ROOTS, STUMPS, WIRE, OR OTHER DELETERIOUS MATTER 1" IN DIAMETER AND LARGER. DISPOSE OF DEBRIS OFFSITE ACCORDING TO STATE AND LOCAL REGULATIONS AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE DUST CONTROL MEASURES DURING EARTHWORK OPERATIONS THAT ARE IN ACCORDANCE WITH LOCAL AND STATE REQUIREMENTS, ALONG WITH PERMIT CONDITIONS.
- THE ENGINEER'S REPRESENTATIVE SHALL APPROVE FINISH GRADE ELEVATIONS.

Balance Hydrologics, Inc.
 12020 Donner Pass Road, Suite B1
 Truckee, CA 96161
 Tel: (530) 550-9776
 www.balancehydro.com



DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		



SYMBOLS AND GENERAL NOTES
EUER VALLEY PHASE 2 RESTORATION
 NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER
223095

SCALE (AT 22" X 34")
--

SHEET
1.1

TEMPORARY CREEK DIVERSION AND DEWATERING NOTES:

1. GENERAL

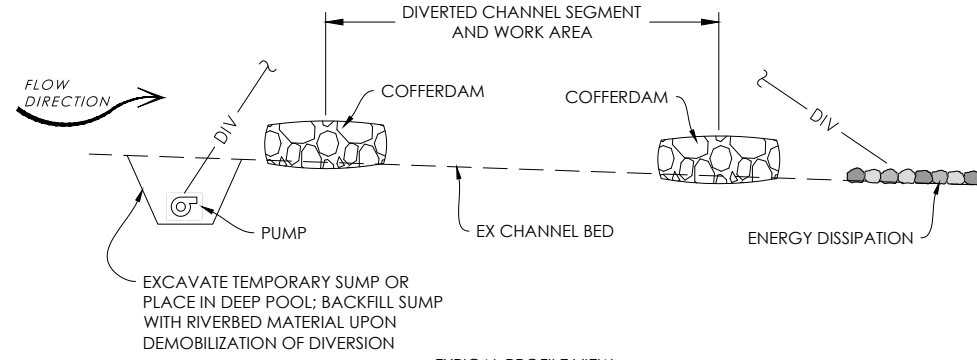
- 1.1. THESE DIVERSION AND DEWATERING NOTES HAVE BEEN PREPARED TO HELP THE CONTRACTOR UNDERSTAND THE SCOPE OF THE DIVERSION AND DEWATERING WORK. THE CONTRACTOR SHALL SUBMIT A DIVERSION AND DEWATERING PLAN FOR APPROVAL BY THE ENGINEER'S REPRESENTATIVE NO LATER THAN 10 DAYS BEFORE MOBILIZATION. THE PLAN MAY INCLUDE ALTERNATE DEWATERING AND DIVERSION METHODS IF, IN THE OPINION OF THE CONTRACTOR, THE WORK WOULD BE BETTER COMPLETED BY OTHER MEANS. ANY ALTERNATE PLAN MUST BE APPROVED BY THE ENGINEER'S REPRESENTATIVE. ULTIMATELY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXECUTE A DIVERSION AND DEWATERING PLAN THAT REASONABLY PREPARES THE SITE TO COMPLETE THE WORK DEPICTED IN THESE DRAWINGS AND IS CONSISTENT WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
- 1.2. LOCATIONS OF TEMPORARY CREEK DIVERSION PIPE ALIGNMENTS SHOWN HEREIN ARE APPROXIMATE AND SHOULD NOT BE CONSIDERED PRESCRIPTIVE. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER'S REPRESENTATIVE PRIOR TO MOBILIZATION TO AGREE ON A FINAL CONFIGURATION FOR THE DIVERSION SYSTEMS BASED ON FIELD CONDITIONS.
- 1.3. THE DIVERSION SYSTEM SHOULD BE DESIGNED TO DIVERT AT LEAST 2 CFS (900 GPM); THIS IS THE ANTICIPATED BASEFLOW RATE DURING LATE SUMMER WHEN THE PROJECT WILL BE IMPLEMENTED. THE CONTRACTOR'S DIVERSION PLAN SHALL INCLUDE MEASURES FOR MANAGING A SUDDEN RISE IN STREAMFLOW FROM A PRECIPITATION EVENT, UP TO AT LEAST 5 CFS.
- 1.4. COFFERDAMS SHALL BE CONSTRUCTED AT THE UPSTREAM AND DOWNSTREAM ENDS OF THE DIVERTED CHANNEL SEGMENT. COFFERDAMS SHALL BE CONSTRUCTED TO MINIMIZE SEEPAGE.
- 1.5. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND SERVICES AS REQUIRED TO INSTALL, OPERATE, AND REMOVE THE TEMPORARY CREEK DIVERSION SYSTEMS, INCLUDING BACK-UP EQUIPMENT AS NECESSARY FOR REPLACEMENT AND FOR UNANTICIPATED EMERGENCIES.

2. MATERIALS

- 2.1. COFFERDAMS: THE CONTRACTOR SHALL SUBMIT A DRAWING AND/OR PRODUCT SHEET TO THE ENGINEER'S REPRESENTATIVE FOR THE PROPOSED COFFERDAM. IF USED, GRAVEL BAG FILL MATERIAL SHALL BE CLEAN AND FREE FROM CLAY BALLS, ORGANIC MATTER, WEEDS, AND OTHER DELETERIOUS MATERIALS. THE OPENING OF GRAVEL-FILLED BAGS SHALL BE SECURED SUCH THAT GRAVEL DOES NOT ESCAPE.
- 2.2. PUMPS: THE PUMPS AND PUMPING APPARATUS USED FOR THE DIVERSION SHALL BE OF THE SUBMERSIBLE TYPE WITH SUFFICIENT CAPACITY TO CONTROL SUMP WATER LEVELS AS DESCRIBED HEREIN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE POWER TO OPERATE THE DIVERSION SYSTEMS, INCLUDING THE PUMPING EQUIPMENT, AS NEEDED TO ASSURE THAT DEWATERING IS EFFECTIVE DURING ALL WORK WITHIN THE BANKS OF THE CREEK. THE CONTRACTOR SHALL PROVIDE BACK-UP POWER AS NEEDED TO ASSURE THAT POWER INTERRUPTIONS DO NOT LEAD TO DAMAGE TO FINISHED OR IN-PROCESS WORK OR DELAYS IN COMPLETING THE WORK. ALL EQUIPMENT, INCLUDING ANY GENERATORS USED FOR PRIMARY OR BACK-UP POWER SUPPLY, SHALL BE OPERATED IN COMPLIANCE WITH ALL PERTINENT NOISE AND AIR POLLUTION REDUCTION REQUIREMENTS.
- 2.3. DIVERSION PIPE: DIVERSION PIPE AND COUPLINGS SHALL BE POLYVINYL CHLORIDE (PVC) OR SDR-35 OR APPROVED EQUIVALENT. THE MATERIAL SHALL BE SELECTED FOR FLEXIBILITY AND DURABILITY TO ALLOW FOR THE OCCASIONAL RELOCATION OF THE DIVERSION PIPING DURING CONSTRUCTION ACTIVITIES. THE SIZE OF DIVERSION PIPE SHALL BE DETERMINED BY THE CONTRACTOR BASED ON THE ANTICIPATED FLOW RATES DESCRIBED HEREIN AND THE PERFORMANCE CHARACTERISTICS OF THE PROPOSED PUMPS.
- 2.4. ENERGY DISSIPATION: THE CONTRACTOR SHALL SUBMIT A PLAN FOR AN ENERGY DISSIPATION FEATURE TO BE INSTALLED AT THE OUTLET END OF EACH CREEK DIVERSION. THE ENERGY DISSIPATION FEATURE SHALL BE CAPABLE OF RETURNING FLOW FROM THE DIVERSION PIPE TO THE NATURAL CHANNEL WITHOUT CAUSING EROSION.

3. EXECUTION

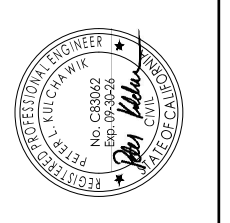
- 3.1. THE CONTRACTOR SHALL COORDINATE WITH PROJECT BIOLOGISTS ON FISH RELOCATION PRIOR TO INSTALLING EACH CREEK DIVERSION SYSTEM.
- 3.2. THE COFFERDAMS SHALL BE CONSTRUCTED IN THE LOCATIONS SHOWN ON THE PLANS. PROVIDE WATER TIGHT SEALS IF THE DIVERSION PIPE PENETRATES THE COFFERDAM.
- 3.3. GRADE A SUMP IN THE CHANNEL UPSTREAM OF THE COFFERDAM TO COLLECT STREAMFLOW FOR PUMPING.
- 3.4. INSTALL THE DIVERSION PIPE TO AVOID DAMAGE TO EXISTING VEGETATION AND STREAM BANKS.
- 3.5. INSPECT THE DIVERSION PIPE AND COFFERDAMS DAILY DURING THE CONSTRUCTION PERIOD TO ENSURE THEY ARE EFFECTIVELY CONVEYING STREAMFLOW. PERFORM CORRECTIVE MAINTENANCE AS NEEDED.
- 3.6. PUMP INCIDENTAL GROUNDWATER ENCOUNTERED DURING EXCAVATION AS NEEDED TO FACILITATE COMPLETION OF THE WORK.
- 3.7. WATER PUMPED FROM WITHIN EXCAVATION AREAS OR THE PORTION OF THE CHANNEL ENCLOSED BY THE COFFERDAMS SHALL BE DISCHARGED ONTO MEADOW SURFACES OR OTHER FEATURES AS NECESSARY TO MEET TURBIDITY REQUIREMENTS. MONITOR PUMPED WATER TO ENSURE IT DOES NOT CAUSE EROSION.
- 3.8. WHEN ALL WORK HAS BEEN COMPLETED, REMOVE THE DIVERSION SYSTEM AND RESTORE ANY EXISTING FEATURES THAT WERE ADVERSELY AFFECTED TO PRE-PROJECT CONDITIONS. BACKFILL THE SUMP WITH RIVERBED MATERIAL.



TYPICAL PROFILE VIEW
1 CREEK DIVERSION
 SCALE: NTS

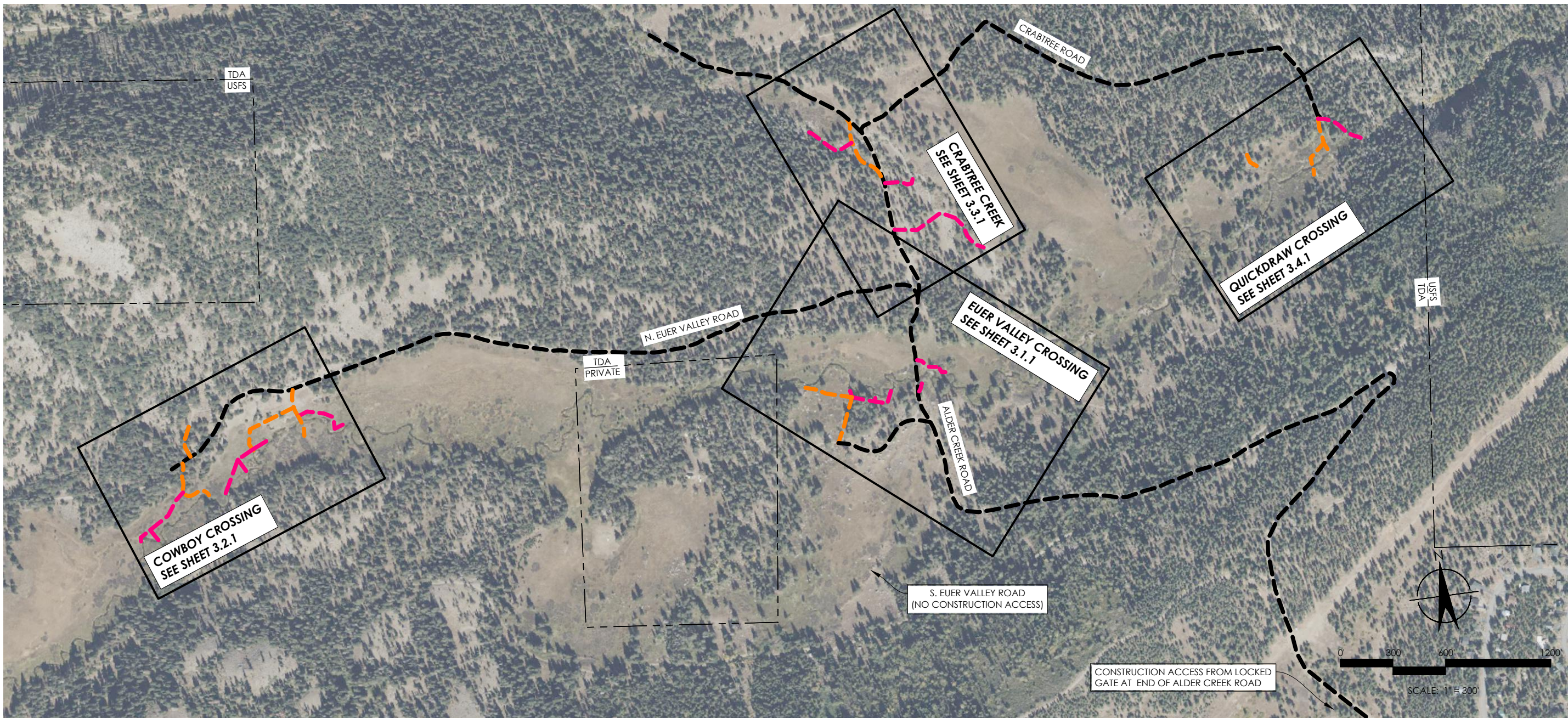
Balance Hydrologics, Inc.
 12020 Donner Pass Road, Suite B1
 Truckee, CA 96161
 Tel: (530) 550-9776
 www.balancehydro.com

DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		



DIVERSION AND DEWATERING PLAN
EUER VALLEY PHASE 2 RESTORATION
 NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER 223095
SCALE (AT 22" X 34") --
SHEET 2.0



SITE PREPARATION GENERAL NOTES:

1. THE SITE IS ACCESSED THROUGH AT GATE AT THE END OF ALDER CREEK ROAD. FROM THE GATE, ACCESS THE FOUR PROJECT AREAS VIA EXISTING GRAVEL ROADS OWNED BY TDA. THE CONTRACTOR SHALL COORDINATE WITH TDA PRIOR TO MOBILIZATION TO GAIN ACCESS THROUGH THE LOCKED GATES AND OTHER OPERATIONAL PROVISIONS.
2. PRESERVE TREES AND VEGETATION OUTSIDE OF THE LIMITS OF WORK. LIMITS OF WORK SHALL BE THE AREA WITHIN THE GRADING LIMITS, CONSTRUCTION ACCESS ROUTES, AND STAGING AREAS. ANY TREES GREATER THAN 6" DBH THAT ARE OUTSIDE OF THE LIMITS OF WORK AND INTERFERE WITH THE WORK MAY ONLY BE REMOVED WITH APPROVAL FROM THE ENGINEER'S REPRESENTATIVE.
3. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN TO MITIGATE FOR ANY ANTICIPATED IMPACTS TO BICYCLE AND PEDESTRIAN TRAFFIC, AND TO PROVIDE ALL SIGNAGE FOR BICYCLE AND PEDESTRIAN SAFETY. THE CONTRACTOR SHALL SUBMIT THE TRAFFIC CONTROL PLAN TO THE ENGINEER'S REPRESENTATIVE NO LATER THAN 48 HOURS PRIOR TO MOBILIZATION.

STAGING AND ACCESS NOTES:

1. AT LEAST 30 DAYS PRIOR TO MOBILIZATION, THE CONTRACTOR SHALL SUBMIT A STAGING AND ACCESS PLAN THAT, AT MINIMUM, INCLUDES THE FOLLOWING INFORMATION:
 - 1.1. PROPOSED DEVIATIONS FROM THE ACCESS ROUTE ALIGNMENTS AND STAGING AREA CONFIGURATIONS THAT ARE SHOWN HEREIN;
 - 1.2. FUELS/CHEMICAL STORAGE AREAS;
 - 1.3. MATERIALS/EQUIPMENT STAGING AREAS; AND
 - 1.4. EMPLOYEE PARKING AREAS.
2. THE CONTRACTOR SHALL FLAG THE LOCATIONS OF THE CONSTRUCTION ACCESS ROUTES AND STAGING AREAS FOR APPROVAL BY THE ENGINEER'S REPRESENTATIVE BEFORE THE ROUTES ARE UTILIZED.
3. CONSTRUCTION ACCESS ROUTES ARE CLASSIFIED AS FOLLOWS:

- 3.2. ROUTES WITH NO EQUIPMENT LIMITATIONS (EXISTING ROADS).
- 3.3. TEMPORARY CONSTRUCTION ROUTES WITH NO EQUIPMENT LIMITATIONS
- 3.4. TEMPORARY CONSTRUCTION ROUTES WITH EQUIPMENT PROHIBITIONS (FOOT TRAVEL OR TRACKED EQUIPMENT ONLY). NO WORK TRUCKS, BUGGIES, ATVs, OR OTHER SMALL RUBBER Tired EQUIPMENT ARE ALLOWED.
- 3.5. ROUTES WITH TEMPORARY MEADOW PROTECTION MATS SHALL INCLUDE MEGADECK MATS OR AN EQUIVALENT PRODUCT APPROVED BY THE ENGINEER'S REPRESENTATIVE (LOCATIONS OF MATS NOT SHOWN ON THIS SHEET).
4. FOR ALL TYPES OF TEMPORARY CONSTRUCTION ROUTES, THE CONTRACTOR SHALL DRIVE IN STRAIGHT LINES TO MINIMIZE GROUND DISTURBANCE TO THE EXTENT PRACTICABLE. INSTALL TEMPORARY MEADOW PROTECTION MATS WHERE SHOWN ON THE PLANS AND AT ADDITIONAL LOCATIONS AS DIRECTED BY THE ENGINEER'S REPRESENTATIVE (UP TO 300 LF TOTAL), IF NEEDED DEPENDING ON FIELD CONDITIONS.
5. CONSTRUCTION ACCESS ROUTES SHALL BE ESTABLISHED BY DRIVING ALONG THE ALIGNMENTS SHOWN HEREIN TO MINIMIZE GROUND DISTURBANCE. NO SCRAPING, BLADING, OR OTHER GRADING OPERATIONS ARE ALLOWED WITHOUT THE APPROVAL OF THE ENGINEER'S REPRESENTATIVE. REMOVAL OF ABOVE-GROUND VEGETATION LESS THAN 6 INCHES DBH, SHRUBS, AND OTHER VEGETATION IS ALLOWED.
6. TEMPORARY REMOVAL OF BOULDERS AND TREES (BOTH ALIVE AND FALLEN DEAD TREES) WILL BE REQUIRED TO ESTABLISH CONSTRUCTION ACCESS ROUTES. MOVE BOULDERS AND SAW FALLEN TREES AS NEEDED; SET ASIDE BOULDERS AND TREE PIECES FOR DECOMMISSIONING. REMOVE LIVE TREES GREATER THAN 6" DBH ONLY IF APPROVED BY THE ENGINEER'S REPRESENTATIVE.
7. PERFORM CORRECTIVE MAINTENANCE TO ACCESS ROUTES THROUGHOUT THE CONSTRUCTION PERIOD TO ADDRESS EROSION AND POTENTIAL SOURCES OF FINE SEDIMENT. ANY RUTS EXCEEDING 3 INCHES IN DEPTH OR 25 FEET IN LENGTH SHALL BE CORRECTED IMMEDIATELY.
8. ACCESS ROUTES SHALL BE DECOMMISSIONED BY APPLYING SEED (EXCEPT FOR ROUTES THAT FOLLOW EXISTING TDA ROADS) AS REQUIRED TO REVEGETATE AREAS THAT HAVE BEEN DISTURBED BY CONSTRUCTION OPERATIONS. THE TYPE OF SEED MIX USED TO REVEGETATE ACCESS ROUTES SHALL VARY DEPENDING ON THE

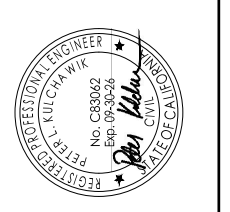
PREVAILING HYDROGEOGRAPHIC ZONE. CONSULT THE PROJECT REVEGETATION SPECIALIST FOR GUIDANCE. DECOMPACTION MEASURES DESCRIBED ON SHEET 5.0 SHALL BE COMPLETED FOR ACCESS ROUTES WHERE SEEDING IS REQUIRED.

9. DAMAGE TO TDA ROADS CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION AND TO THE SATISFACTION OF THE LANDOWNER'S REPRESENTATIVE.
10. AT LEAST 30 DAYS PRIOR TO MOBILIZATION, THE CONTRACTOR SHALL SUBMIT A STAGING AND ACCESS PLAN THAT, AT MINIMUM, INCLUDES THE FOLLOWING INFORMATION:
 - 10.1. PROPOSED DEVIATIONS FROM THE ACCESS ROUTE ALIGNMENTS AND STAGING AREA CONFIGURATIONS THAT ARE SHOWN HEREIN;
 - 10.2. FUELS/CHEMICAL STORAGE AREAS;
 - 10.3. MATERIALS/EQUIPMENT STAGING AREAS; AND
 - 10.4. EMPLOYEE PARKING AREAS.
11. CONTRACTOR SHALL SUBMIT A PLAN TO BE USED FOR TEMPORARY STREAM CROSSINGS (NIC; IF NEEDED) TO THE ENGINEER'S REPRESENTATIVE FOR APPROVAL.

CONSTRUCTION WATER:

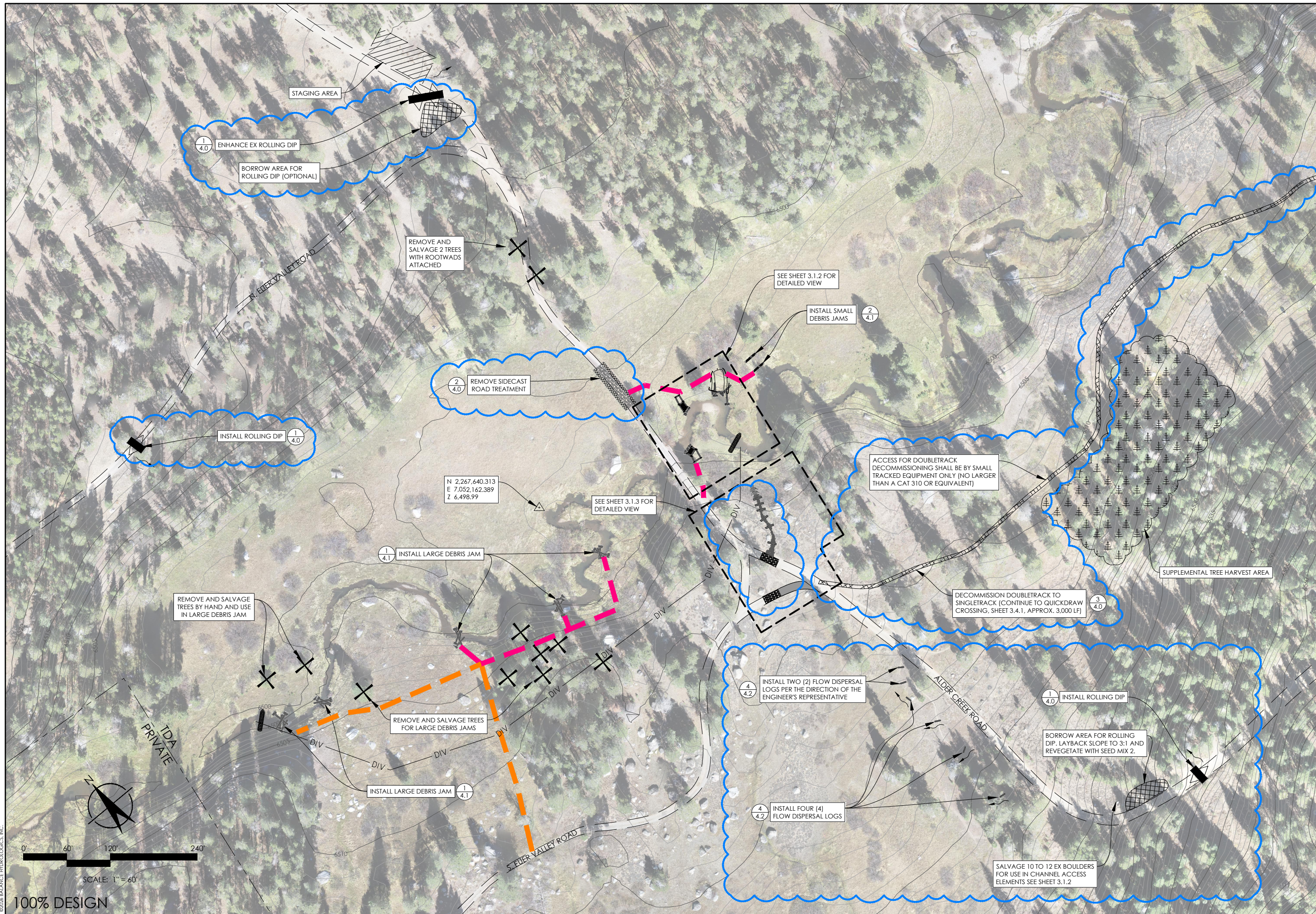
1. A WATER DRAFTING SITE WILL BE PROVIDED WITHIN EUER VALLEY. THE CONTRACTOR SHALL COORDINATE WITH TRWC AND TDA TO IDENTIFY THE DRAFTING SOURCE.
2. THE CONTRACTOR SHALL SUPPLY PUMPS CAPABLE OF PUMPING 400 GPM (MIN) TO FULFILL REQUIREMENTS FOR INSTALLATIONS REQUIRING HYDRAULIC JETTING AND 300 FEET OF HOSE.
3. LEVERAGE TEMPORARY CREEK DIVERSIONS TO SUPPLY CONSTRUCTION WATER, TO THE EXTENT ALLOWED BY THE PROJECT PERMITS.

DESIGNED BY	DATE	BY	REVISIONS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		



OVERVIEW, ACCESS, & SHEET INDEX
EUER VALLEY PHASE 2 RESTORATION
 NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER	223095
SCALE (AT 22" X 34")	1" = 300'
SHEET	3.0

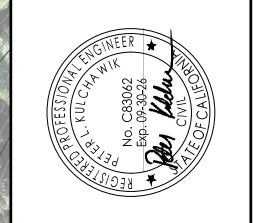


©2024 BALANCE HYDROLOGICS, INC.

SCALE: 1" = 60'

100% DESIGN

DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
TA & DS	06-11-25	PK	90% DESIGN
PK	05-08-26	PK	100% DESIGN
DATE	05-08-2024		



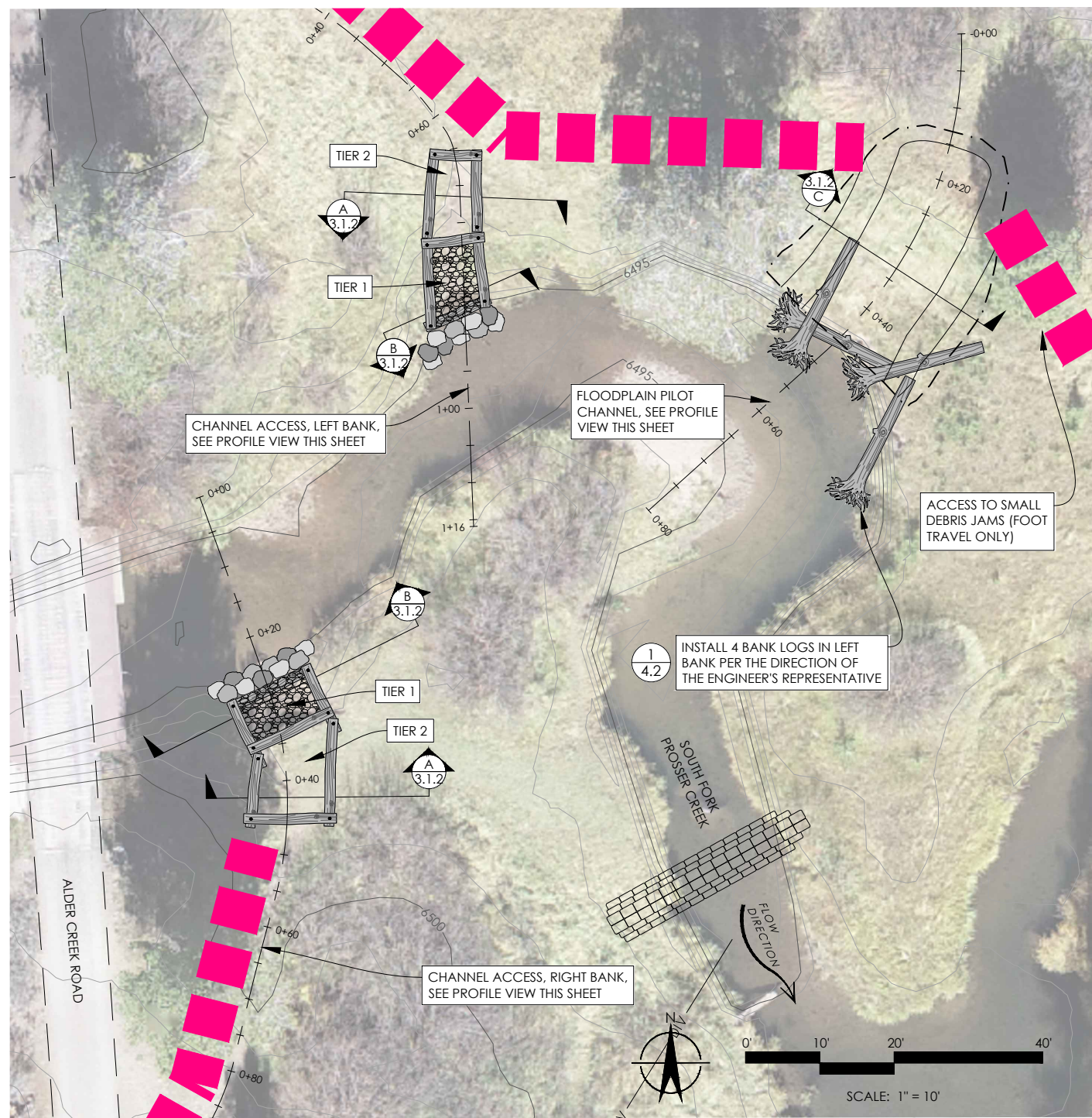
EUER CROSSING RESTORATION OVERVIEW

EUER VALLEY PHASE 2 RESTORATION

NEVADA COUNTY, CALIFORNIA

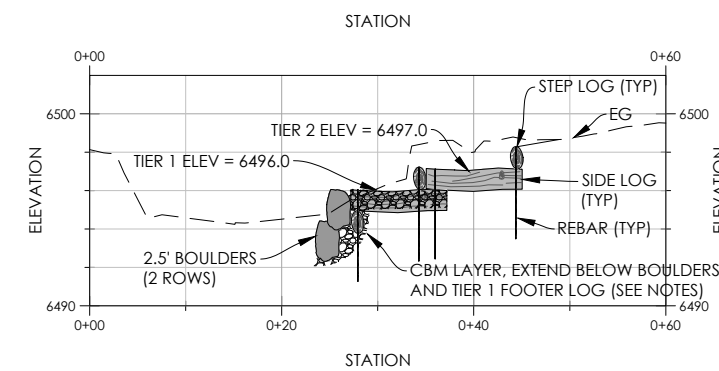
PROJECT NUMBER: 223095
 SCALE (AT 22" X 34")
 1" = 60'
 SHEET

3.1.1



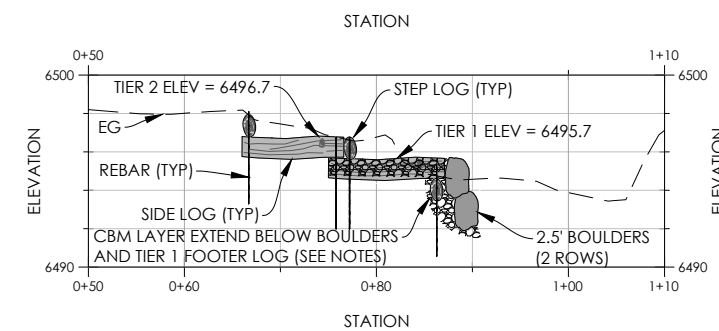
CHANNEL ACCESS NOTES:

- REFER TO SHEET 4.3 FOR GENERAL LOG, BOULDER, REBAR, AND CBM REQUIREMENTS.
- LOGS
 - ALL LOGS FOR CHANNEL ACCESS INSTALLATIONS SHALL HAVE A MINIMUM OF 12" DIAMETER.
 - LOG LENGTHS WILL VARY FROM 6' TO 15' ACCORDING TO THE PLAN VIEWS. THE CONTRACTOR SHALL DELIVER LOGS TO THE INSTALLATION SITES THAT ARE SLIGHTLY LONGER THAN SHOWN ON THE PLAN VIEWS.
 - TRIM LOGS TO CONFORM TO FIELD CONDITIONS PER THE DIRECTION OF THE ENGINEER'S REPRESENTATIVE.
 - ALL LOGS SHALL MAKE FIRM CONTACT WITH ADJACENT LOGS AND BOULDERS TO MINIMIZE GAPS. LOGS THAT ARE CUT TOO SHORT SHALL BE REMOVED AND A NEW LOG PROVIDED. LAPPING LOGS TO ACHIEVE THE DIMENSIONS SHOWN ON THE PLANS IS NOT ALLOWED.
- EXCAVATE TRENCHES FOR THE LOGS AND BOULDERS THAT ARE JUST LARGE ENOUGH TO ACCEPT THE MATERIALS.
- PLACE A 6" BEDDING LAYER OF CBM BELOW THE BOULDERS AND FOOTER LOG FOR TIER 1. THE BEDDING LAYER MAY BE OMITTED IF COMPARABLE NATIVE RIVERBED MATERIAL IS ENCOUNTERED AND IF DIRECTED BY THE ENGINEER'S REPRESENTATIVE.
- REBAR SHALL BE CUT TO 5' LENGTHS. PRE-DRILL HOLES 1/8" TO 1/4" SMALLER THAN THE SPECIFIED REBAR DIAMETER TO PROVIDE FIRM FRICTION CONTACT WITH THE LOGS. POUND REBAR TO BE FLUSH WITH THE TOP OF LOG SUCH THAT NO SHARP EDGES ARE EXPOSED. CONTACT THE ENGINEER'S REPRESENTATIVE IMMEDIATELY IF REBAR ENCOUNTERS REFUSAL DURING INSTALLATION.
- HYDRAULICALLY JET CBM INTO TIERS WHERE CBM IS SHOWN ON THE PLANS. THE FINISHED GRADE OF THE CBM SHALL BE FLUSH WITH THE SPECIFIED TOP OF LOG AND BOULDER ELEVATIONS AND SHALL FILL GAPS TO THE EXTENT PRACTICABLE.



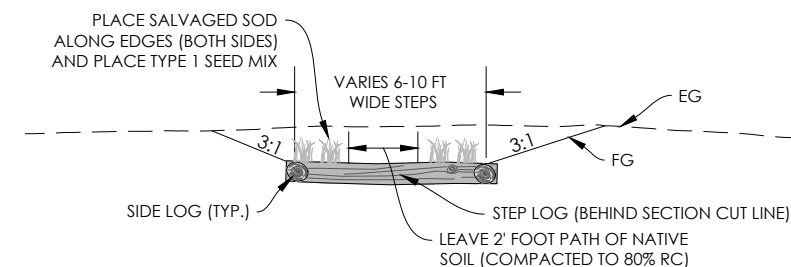
CHANNEL ACCESS, RIGHT BANK

PROFILE VIEW 1" = 10', (VERT 2X)



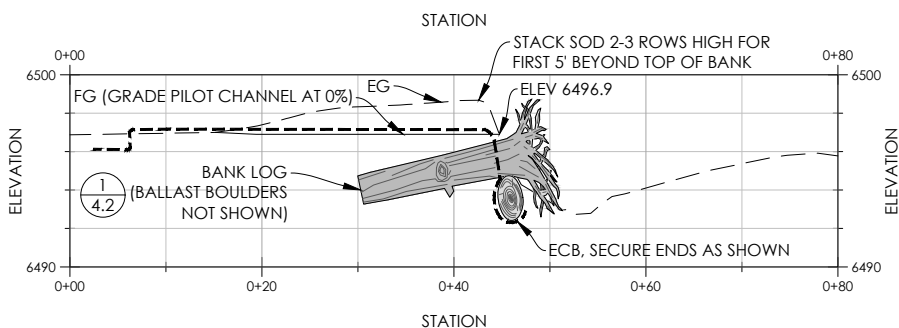
CHANNEL ACCESS, LEFT BANK

PROFILE VIEW 1" = 10', (VERT 2X)



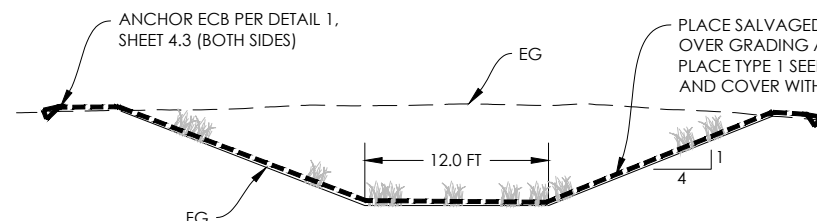
CHANNEL ACCESS - TIER 2

TYPICAL SECTION VIEW N.T.S. (A) 3.1.2



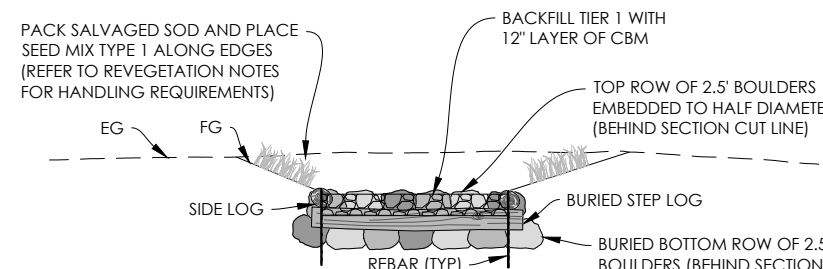
FLOODPLAIN PILOT CHANNEL

PROFILE VIEW 1" = 10', (VERT 2X)



LEFT BANK GRADING

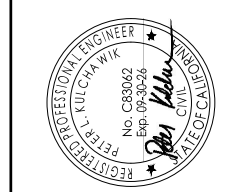
SECTION VIEW N.T.S. (C) 3.1.2



CHANNEL ACCESS - TIER 1

TYPICAL SECTION VIEW N.T.S. (B) 3.1.2

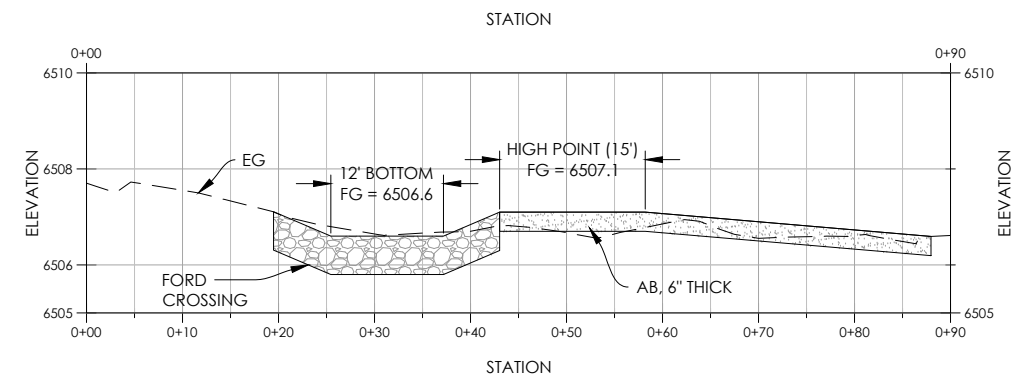
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
TA & DS	06-11-25	PK	90% DESIGN
PK	05-08-26	PK	100% DESIGN
DATE	05-08-2026		



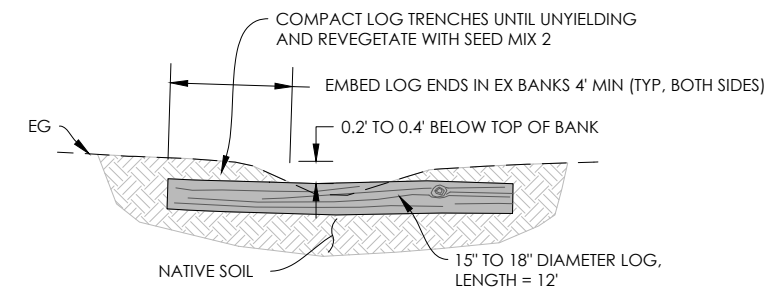
**EUER CROSSING CREEK
 DETAIL VIEWS
 EUER VALLEY PHASE 2 RESTORATION**

NEVADA COUNTY, CALIFORNIA
 PROJECT NUMBER 223095
 SCALE (AT 22" X 34") AS SHOWN
 SHEET

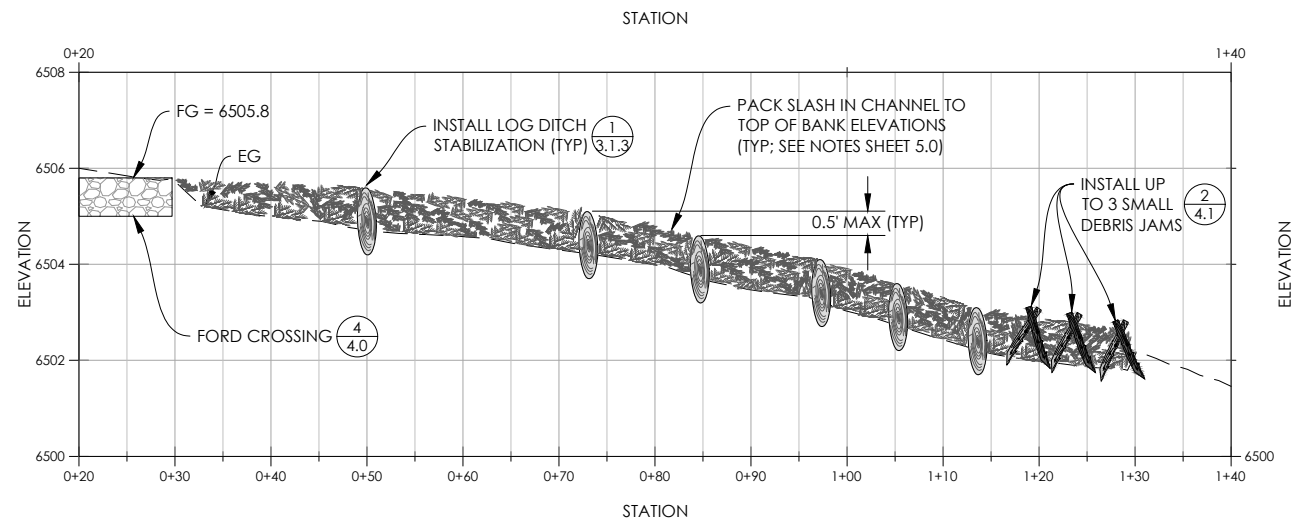
3.1.2



S. EUER VALLEY ROAD
PROFILE VIEW
1" = 10', (VERT 5X)
A
3.1.3



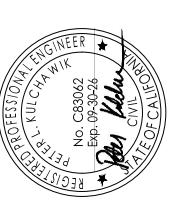
TYPICAL SECTION VIEW
LOG DITCH STABILIZATION
SCALE: NTS



DITCH
PROFILE VIEW
1" = 10', (VERT 5X)



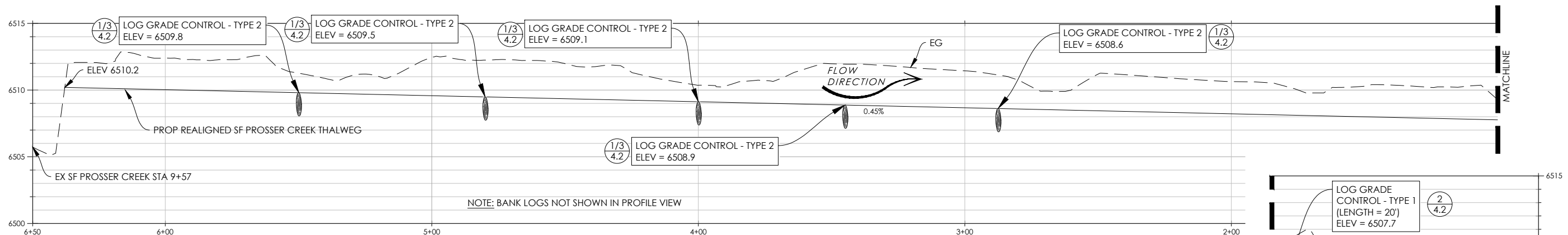
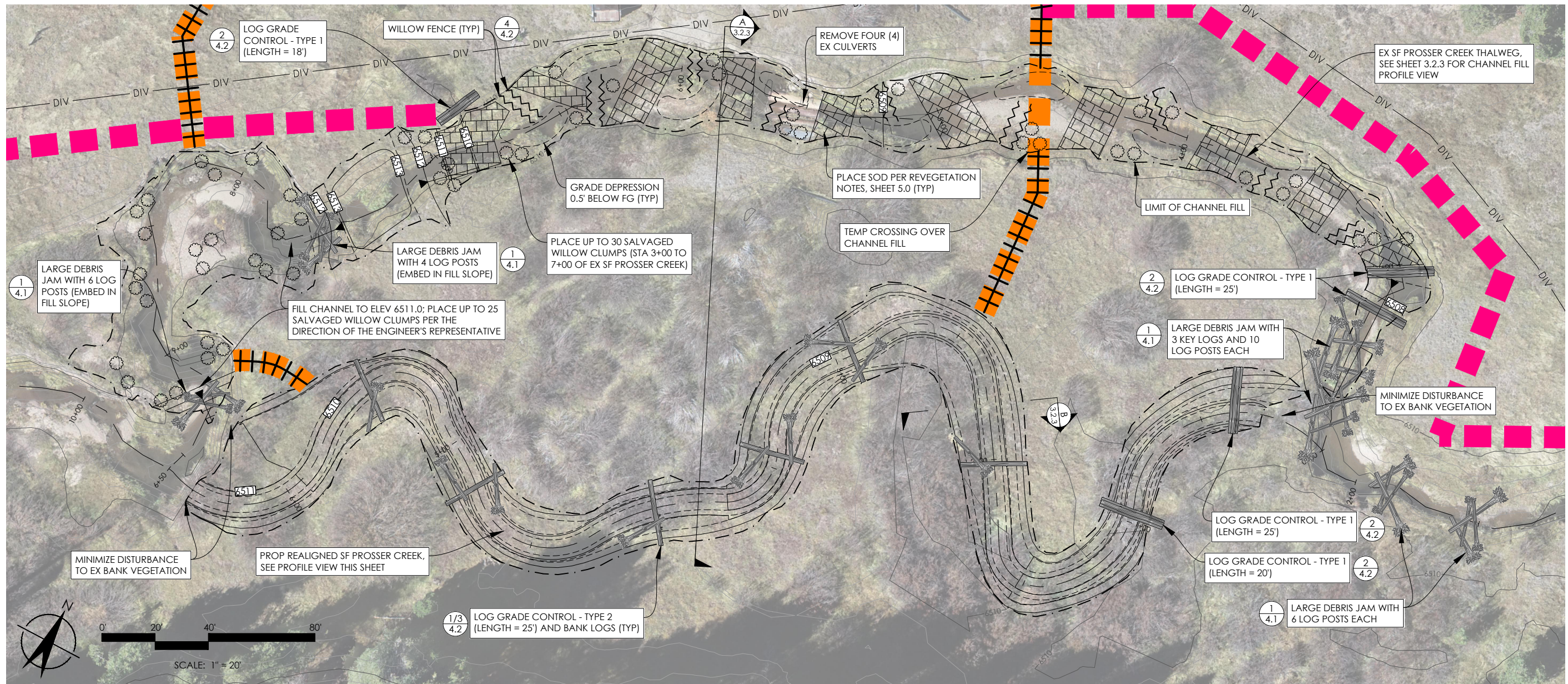
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		



EUER CROSSING ROAD & DITCH DETAIL VIEWS
EUER VALLEY PHASE 2 RESTORATION
NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER 223095
SCALE (AT 22" X 34") AS SHOWN
SHEET

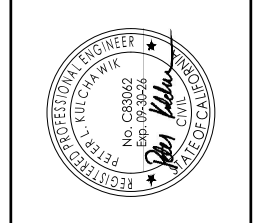
3.1.3



- NOTES:
1. SALVAGE ALL SOD AND TSOM FROM WITHIN THE GRADING LIMITS FOR THE REALIGNED CHANNEL AND EXISTING SF PROSSER CREEK PER THE NOTES ON SHEET 5.0.
 2. THE CONTRACTOR MAY (AT THEIR DISCRETION) SALVAGE RIVERBED MATERIAL FROM WITHIN THE GRADING LIMITS FOR SF PROSSER CREEK FOR REUSE AS CBM (IF APPROVED BY THE ENGINEER'S REPRESENTATIVE).
 3. THE CONTRACTOR SHALL HARVEST ALL WILLOW CLUMPS FROM WITHIN GRADING LIMITS SHOWN ON THIS SHEET FOR TRANSPLANTING WITHIN THE SAME AREAS PER THE DIRECTION OF THE ENGINEER'S REPRESENTATIVE.
 4. PLACE SEED MIX 1 ON ALL FG SURFACES SHOWN ON THIS SHEET (EXCEPT THE 6' BOTTOM OF THE REALIGNED CHANNEL).

REALIGNED CHANNEL
PROFILE VIEW
1" = 20' (VERT 5X)

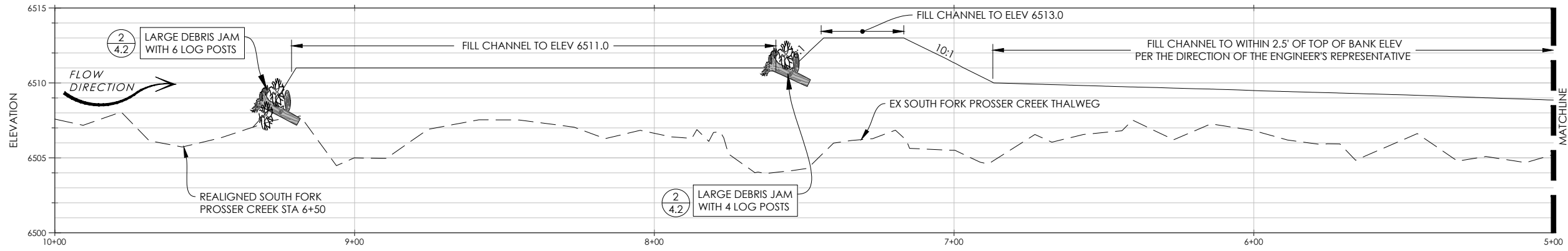
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		



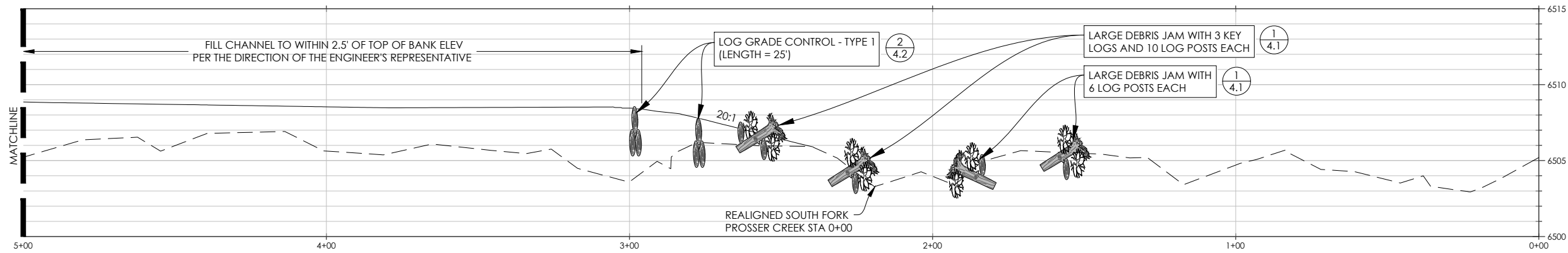
**SOUTH FORK PROSSER CREEK
DETAIL VIEWS**
EUER VALLEY PHASE 2 RESTORATION
NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER
223095
SCALE (AT 22" X 34")
AS SHOWN
SHEET

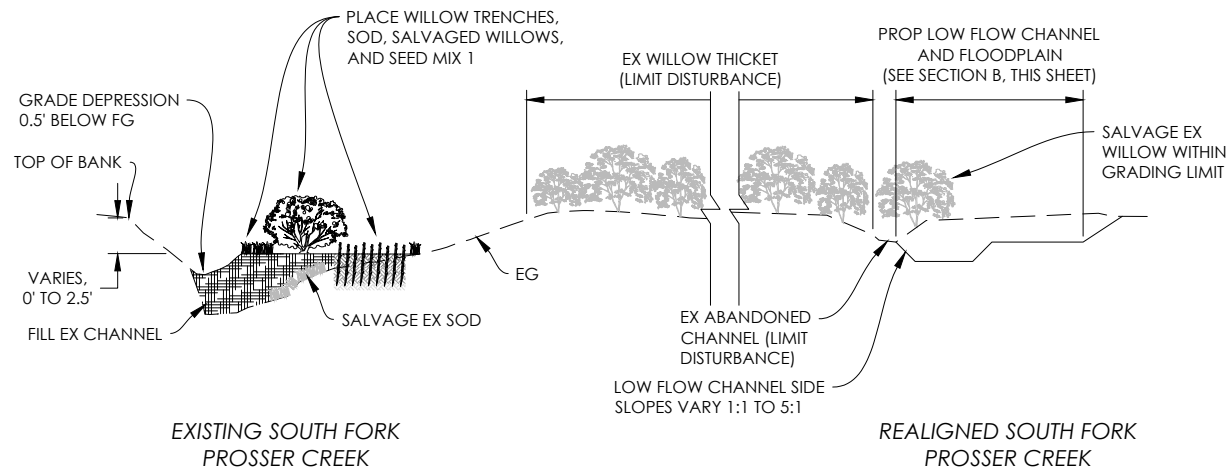
3.2.2



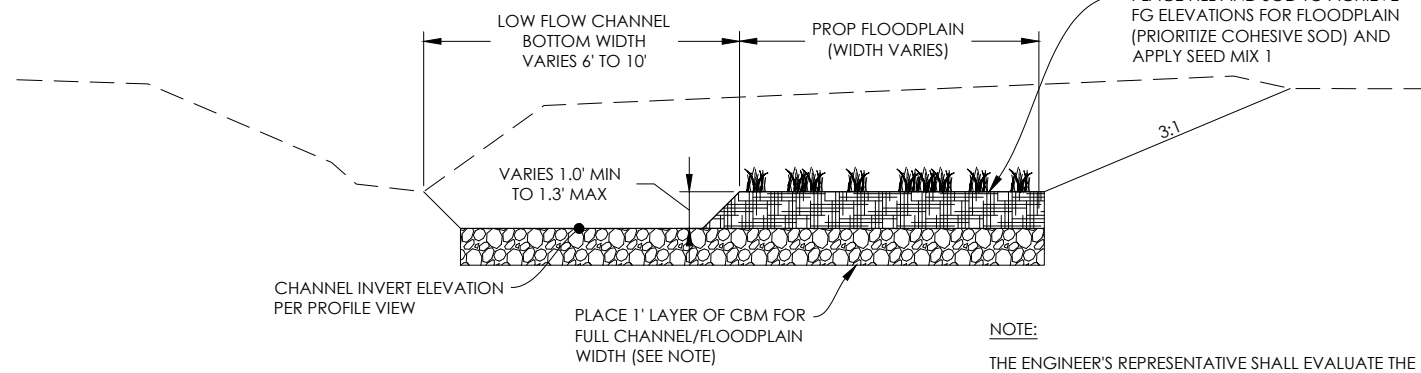
EXISTING SOUTH FORK PROSSER CREEK
PROFILE VIEW
1" = 20' (VERT 5X)



EXISTING SOUTH FORK PROSSER CREEK
PROFILE VIEW
1" = 20' (VERT 5X)

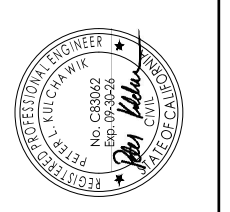


CHANNEL REALIGNMENT
TYPICAL SECTION VIEW
NTS A 3.2.3



REALIGNED S. FORK PROSSER CREEK
TYPICAL SECTION VIEW
NTS B 3.2.3

DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		

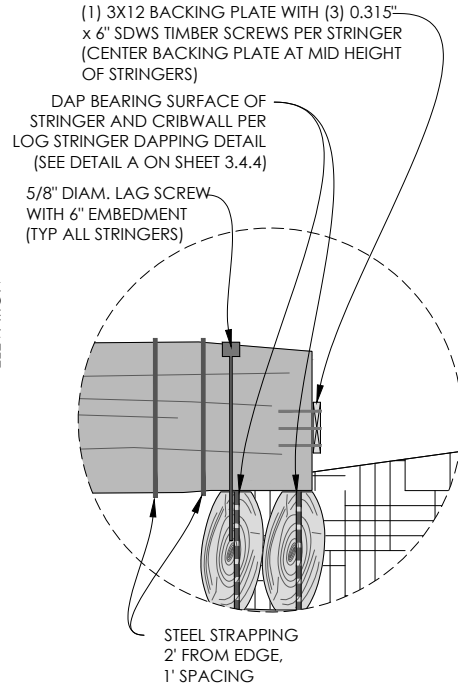
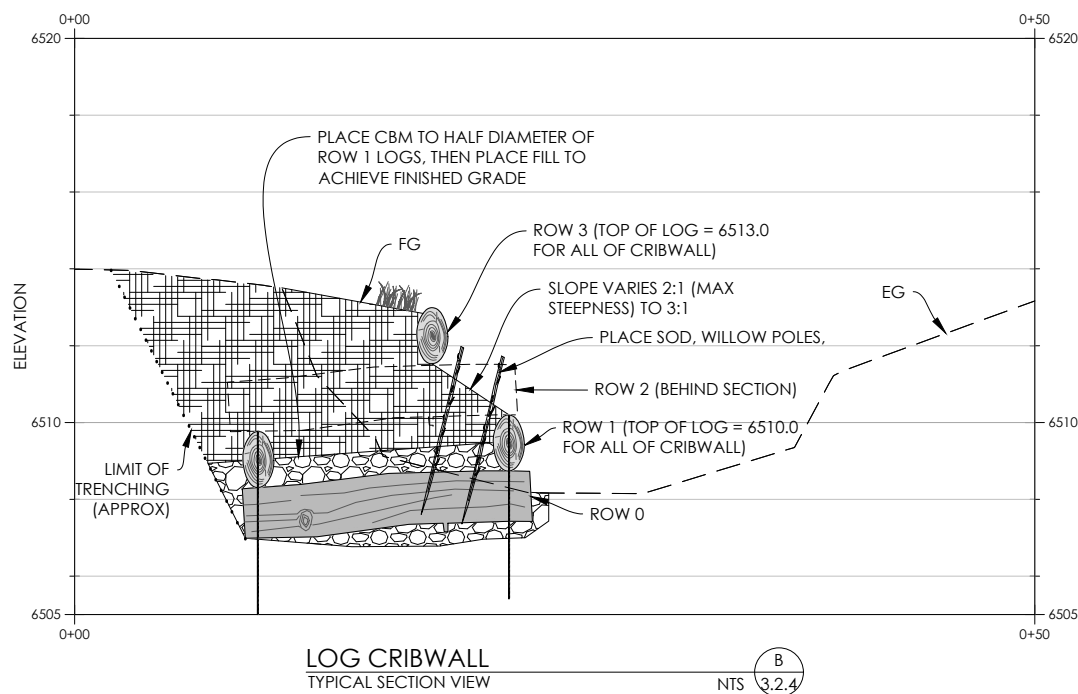
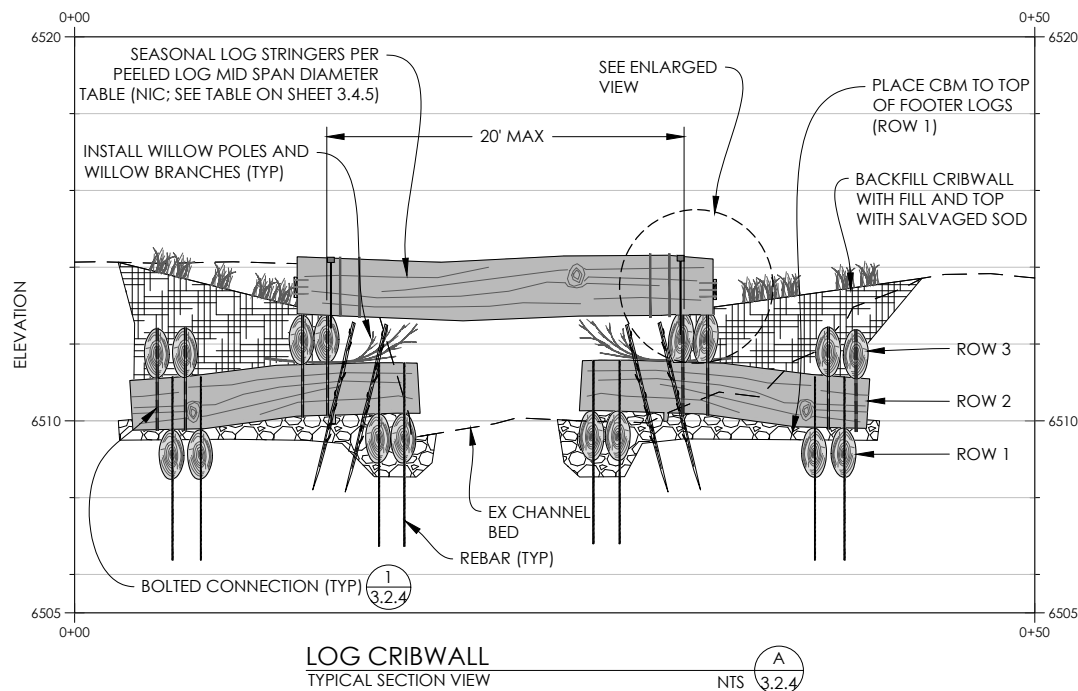
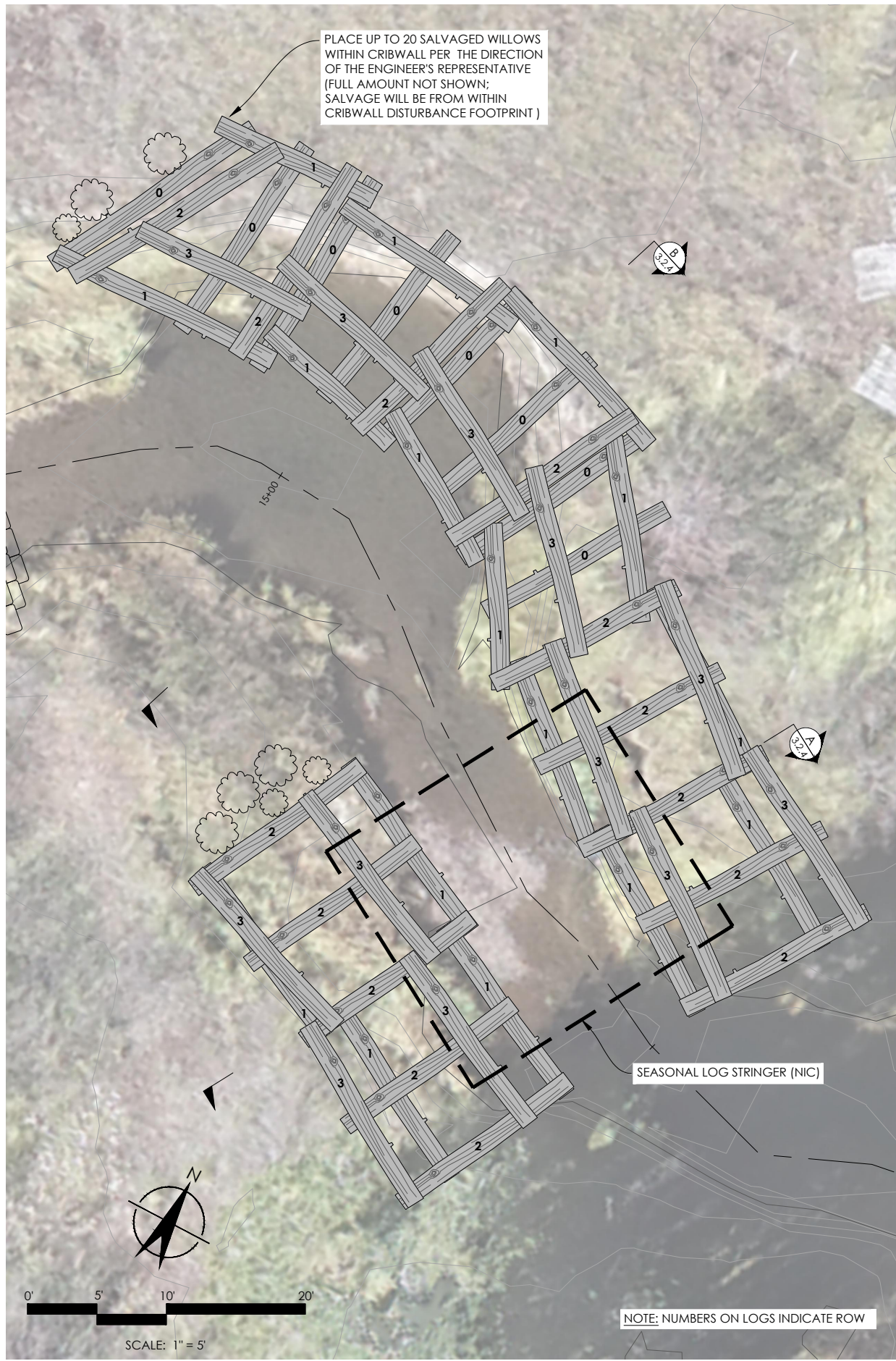


**COWBOY CROSSING
GRADING AND
REALIGNMENT DETAIL VIEWS
EUER VALLEY PHASE 2 RESTORATION**

NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER
223095
SCALE (AT 22" X 34")
AS SHOWN
SHEET

3.2.3



LOG CRIBWALL NOTES:

1. MATERIALS

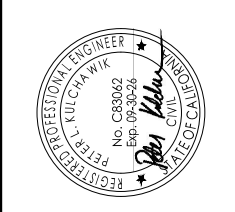
- 1.1. LOGS SHALL BE AS DESCRIBED IN THE MATERIALS GENERAL NOTES (SHEET 4.3). ALL LOGS SHALL BE MINIMUM 12" DIAMETER AND 18" MAXIMUM DIAMETER MEASURED AT BOTH CUT ENDS. LOGS SHALL BE SELECTED AND CUT TO ACHIEVE THE DIMENSIONS AND ELEVATIONS SHOWN ON THE PLANS AND TRIMMED TO CONFORM TO FIELD PER THE DIRECTION OF THE ENGINEER'S REPRESENTATIVE. IN GENERAL, LOGS VARY FROM 8' TO 22' LONG. CBM AND REBAR SHALL BE DESCRIBED IN THE MATERIALS GENERAL NOTES (SHEET 4.3).
- 1.2. BOLTED CONNECTIONS
 - 1.2.1. CRIBWALL LOG BOLTED CONNECTIONS SHALL BE 3/4-INCH HOT-DIPPED GALVANIZED THREADED ROD OR EQUIVALENT APPROVED BY THE ENGINEER'S REPRESENTATIVE.
 - 1.2.2. BOLTED CONNECTIONS SHALL INCLUDE A 3-INCH GALVANIZED WASHER ON EACH SIDE (I.E. TWO PER CONNECTION).
 - 1.2.3. BOLTED CONNECTIONS SHALL INCLUDE HOT-DIPPED GALVANIZED NUTS ON EACH SIDE (I.E. TWO PER CONNECTION)
- 1.3. WILLOW POLES SHALL BE AS DESCRIBED IN THE REVEGETATION NOTES (SHEET 5.0)

2. EXECUTION

- 2.1. THE CONTRACTOR SHALL INVOLVE THE ENGINEER'S REPRESENTATIVE DURING PLACEMENT OF THE FIRST COURSES OF LOGS SUCH THAT SPECIFIC CONSTRUCTION METHODS AND TOLERANCES ARE AGREED UPON.

- 2.2. EXCAVATE TO THE SUBGRADE ACCORDING TO THE GRADES AND DIMENSIONS INDICATED ON THE DRAWINGS. MINIMIZE EXCAVATION DISTURBANCE FOR THE FOOTER LOGS (ROW 0 OR ROW 1) BY DIGGING A TRENCH JUST LARGE ENOUGH TO ACCEPT THE LOGS.
- 2.3. CAREFULLY PLACE EACH LOG SHALL MAKE FIRM CONTACT WITH ADJACENT LOGS OR AS SHOWN IN THE DRAWINGS. STRIP BARK AT ALL CONTACT POINTS BETWEEN LOGS SO THERE IS FIRM WOOD-ON-WOOD CONTACT.
- 2.4. CONNECTIONS BETWEEN LOGS IN ROWS 0 AND 1 OR BETWEEN ROWS 1 AND 2 (WHERE THERE IS NO ROW 0) SHALL BE REBAR PER SHEET 4.3. ALL OTHER CONNECTIONS SHALL BE BOLTED CONNECTIONS.
- 2.5. BACKFILL THE CRIBWALL WITH CBM OR SOIL TO THE DIMENSIONS AND ELEVATIONS SHOWN. BACKFILLING SHALL BE DONE IN 12" COURSES INCLUDING HYDROJETTING FOR CBM LAYERS TO FILL ALL VOIDS TO THE EXTENT PRACTICABLE. PLACE THE MATERIAL CAREFULLY TO AVOID DAMAGING LOG MEMBERS OF THE CRIBWALL. IF IN THE OPINION OF THE ENGINEER'S REPRESENTATIVE LOG MEMBERS OF THE CRIBWALL ARE DAMAGED DURING BACKFILLING, THOSE LOG MEMBERS SHALL BE REPLACED PRIOR TO PROCEEDING AND AT NO ADDITIONAL COST TO THE CLIENT.
- 2.6. INSTALL COURSES OF WILLOW MATERIAL CONCURRENT WITH THE RESPECTIVE ROWS OF LOGS AND BACKFILL. THE CUT ENDS OF THE WILLOW BRANCHES SHALL BE INSTALLED AS DEEP AS PRACTICABLE; THE ELEVATION OF THE EXISTING THALWEG IS AN IDEAL MINIMUM TARGET ELEVATION FOR THE CUT ENDS OF THE WILLOW BRANCHES.
- 2.7. PERFORM FINISH GRADING AS SHOWN ON THE DRAWINGS AND AS DESCRIBED IN THE EARTHWORK NOTES.

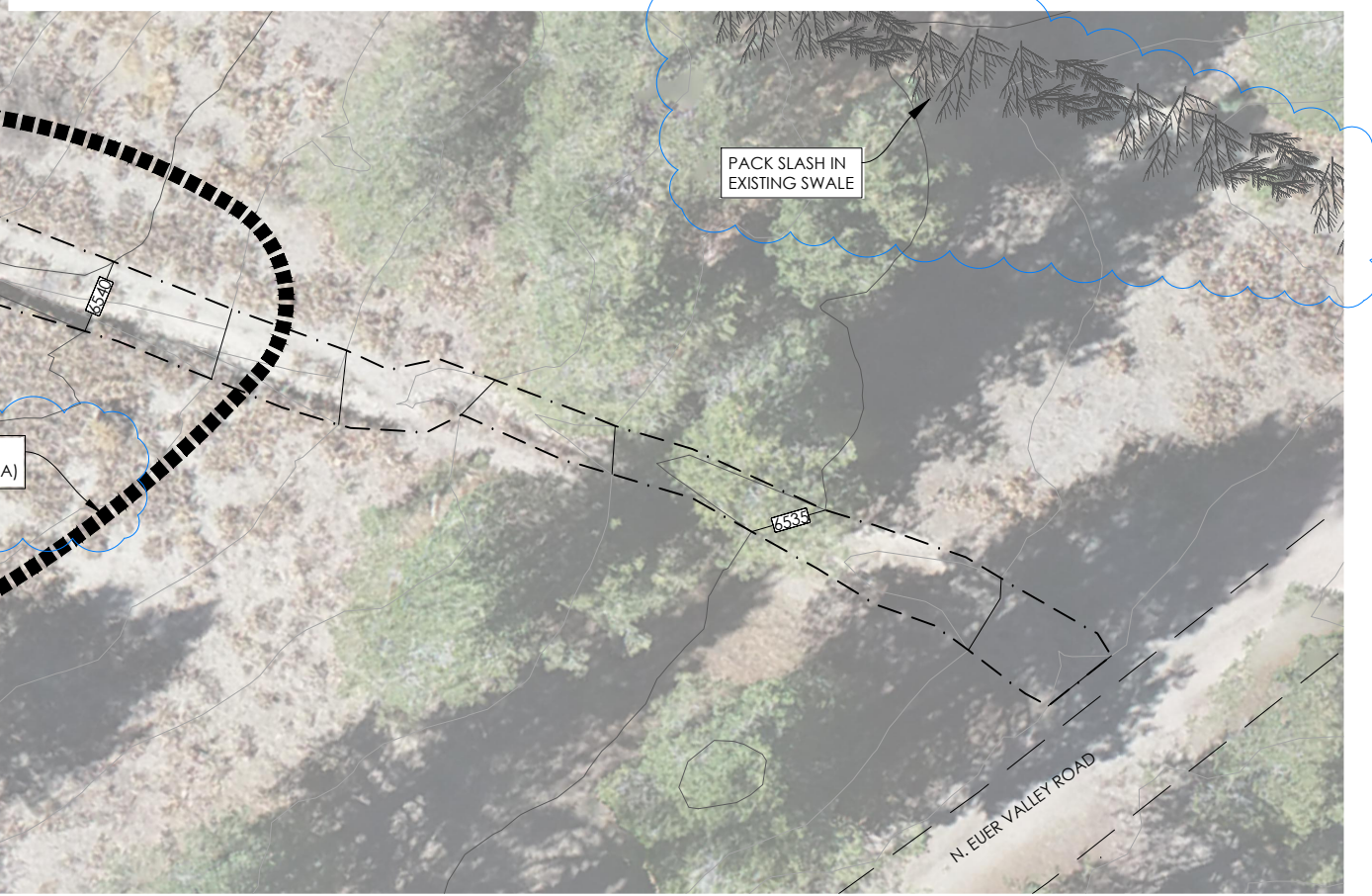
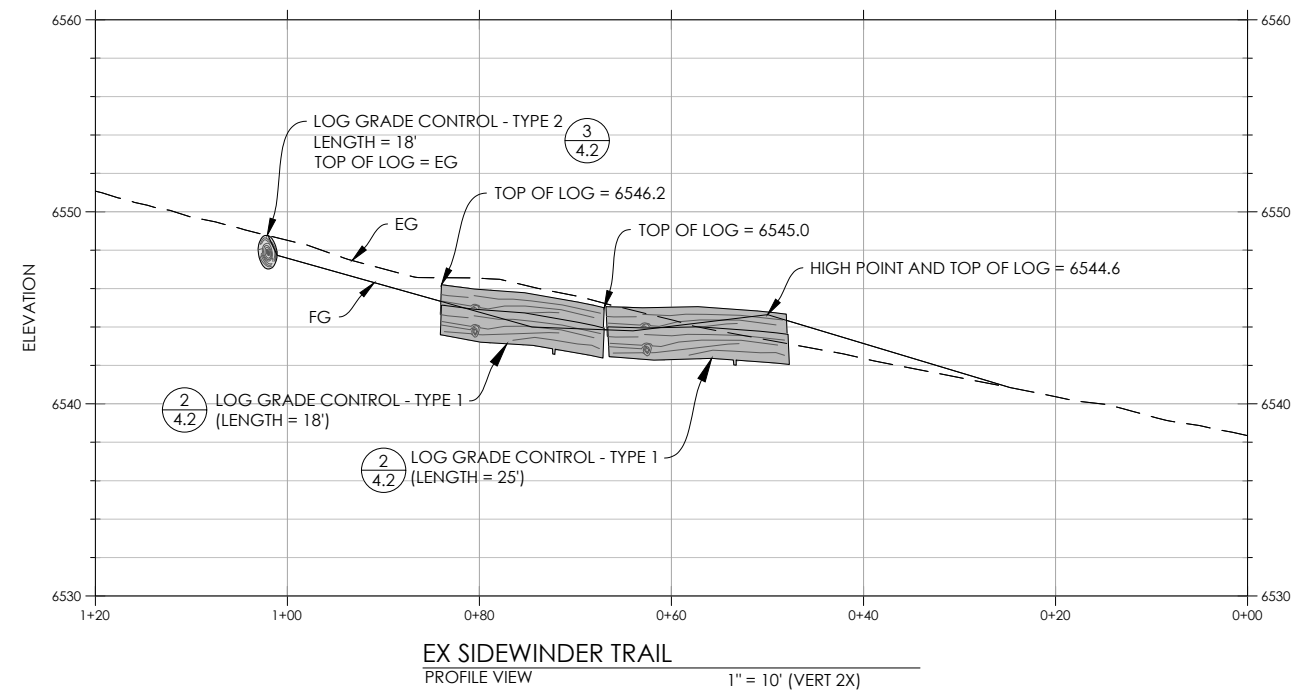
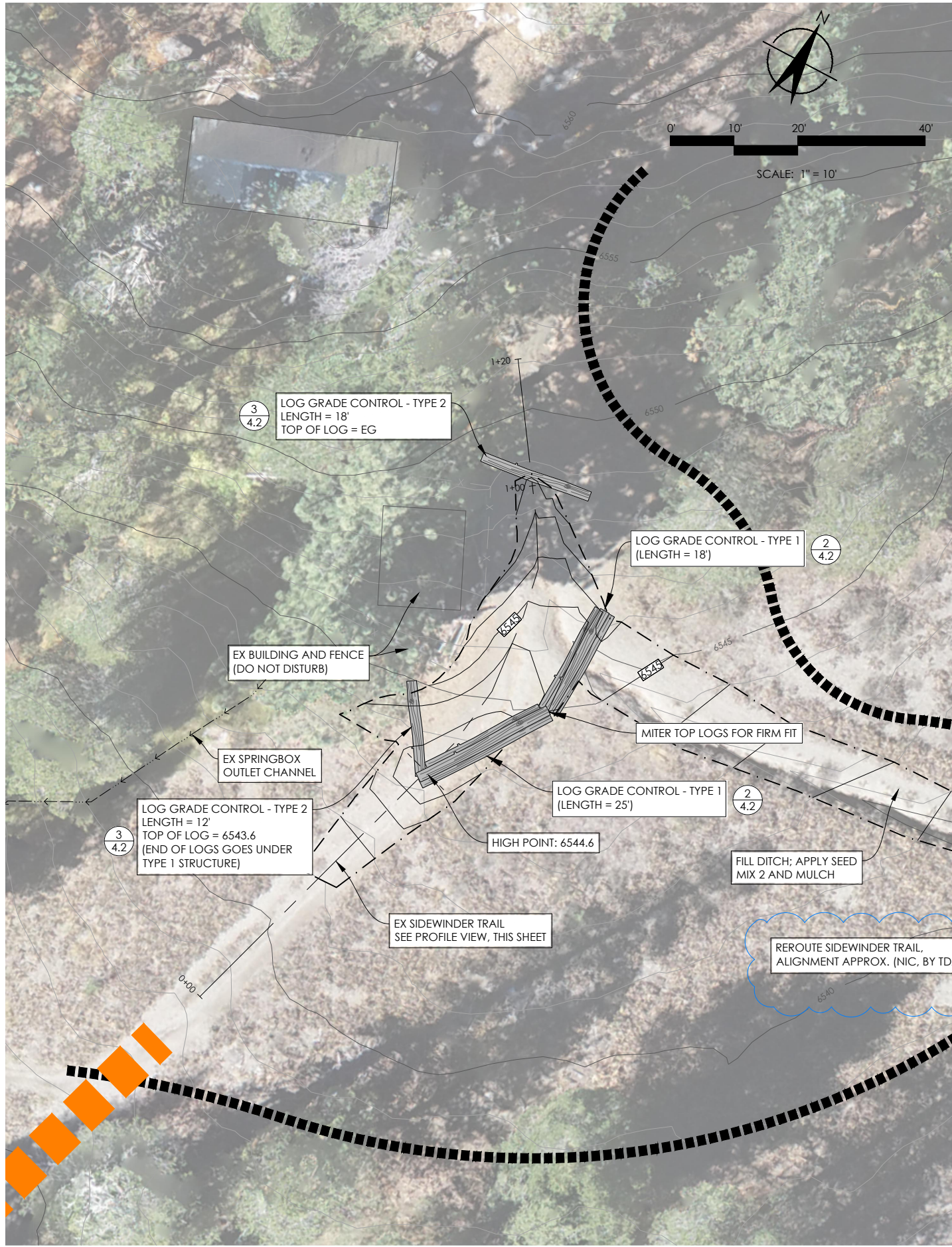
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
TA & DS	06-11-25	PK	90% DESIGN
PK	05-08-26	PK	100% DESIGN
DATE	05-08-2026		



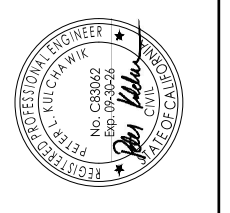
**COWBOY CRIBWALL
DETAIL VIEWS
EUER VALLEY PHASE 2 RESTORATION**
 NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER 223095
SCALE (AT 22" X 34") 1" = 10'
SHEET

3.2.4

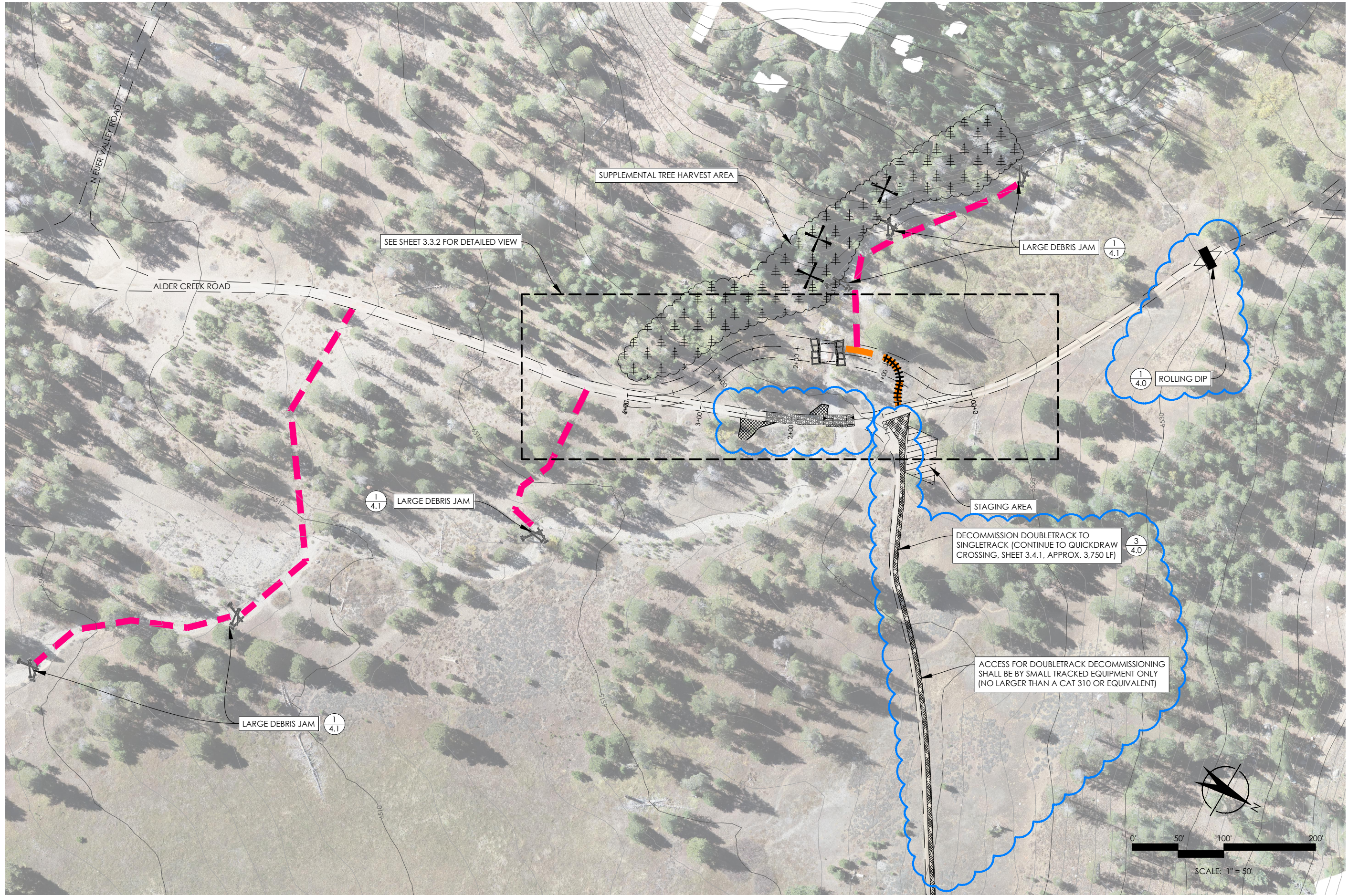


DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		



**SIDEWINDER TRAIL DRAINAGE
 DETAIL VIEWS
 EUER VALLEY PHASE 2 RESTORATION**
 NEVADA COUNTY, CALIFORNIA

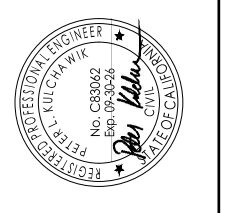
PROJECT NUMBER 223095
SCALE (AT 22" X 34") 1" = 10'
SHEET 3.2.5



©2024 BALANCE HYDROLOGICS, INC.

100% DESIGN

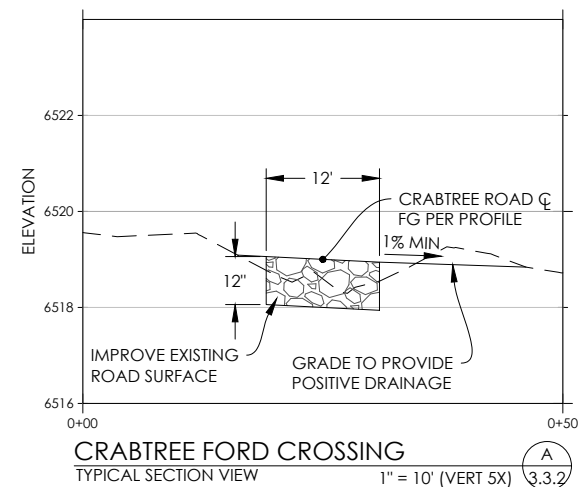
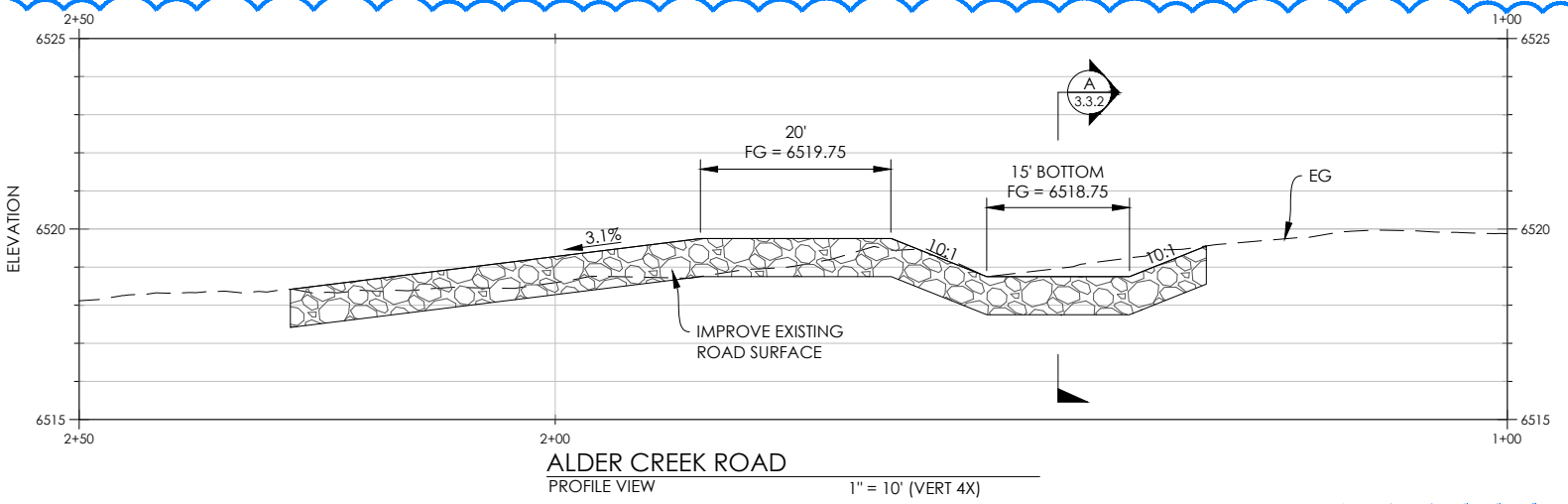
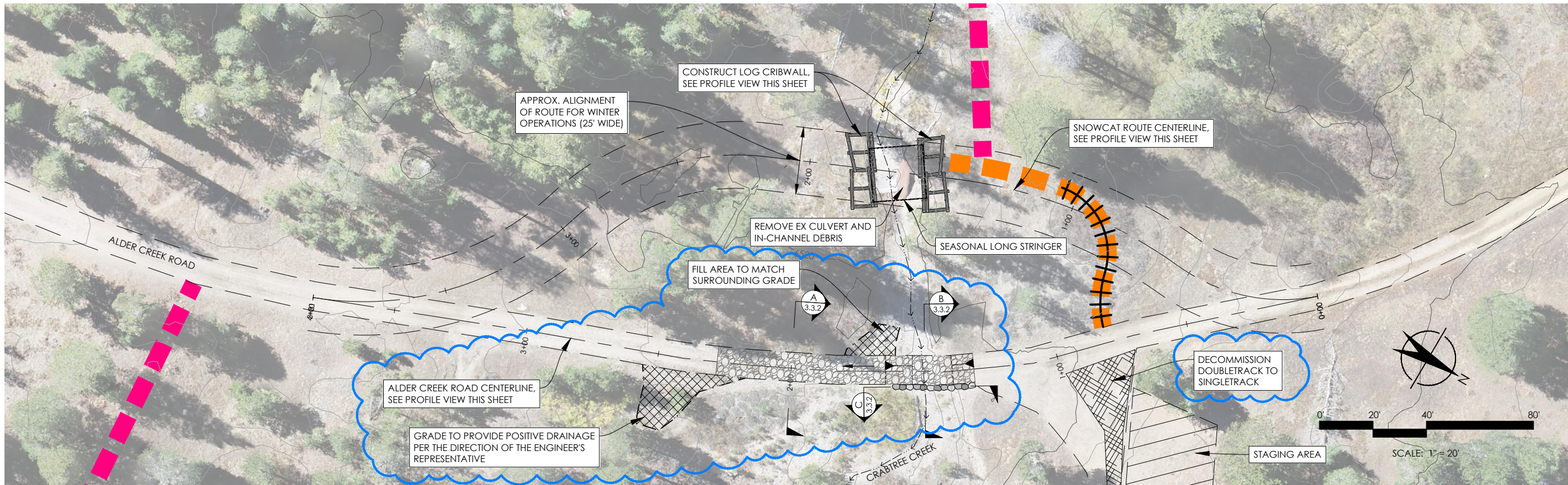
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK			
DRAWN BY	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
CHECKED BY	06-11-25	PK	90% DESIGN
TA & DS	05-08-26	PK	100% DESIGN
IN CHARGE			
PK			
DATE	05-08-2024		



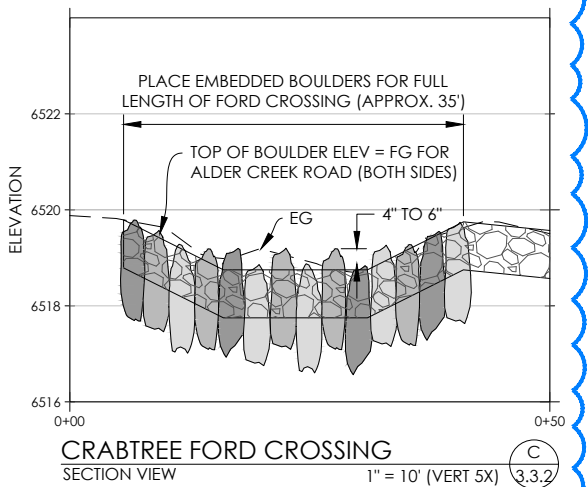
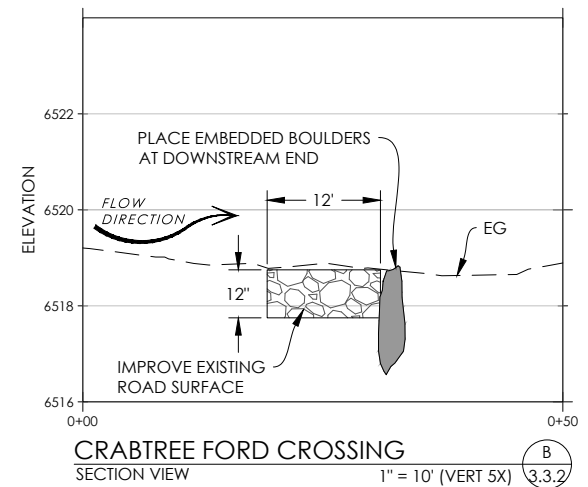
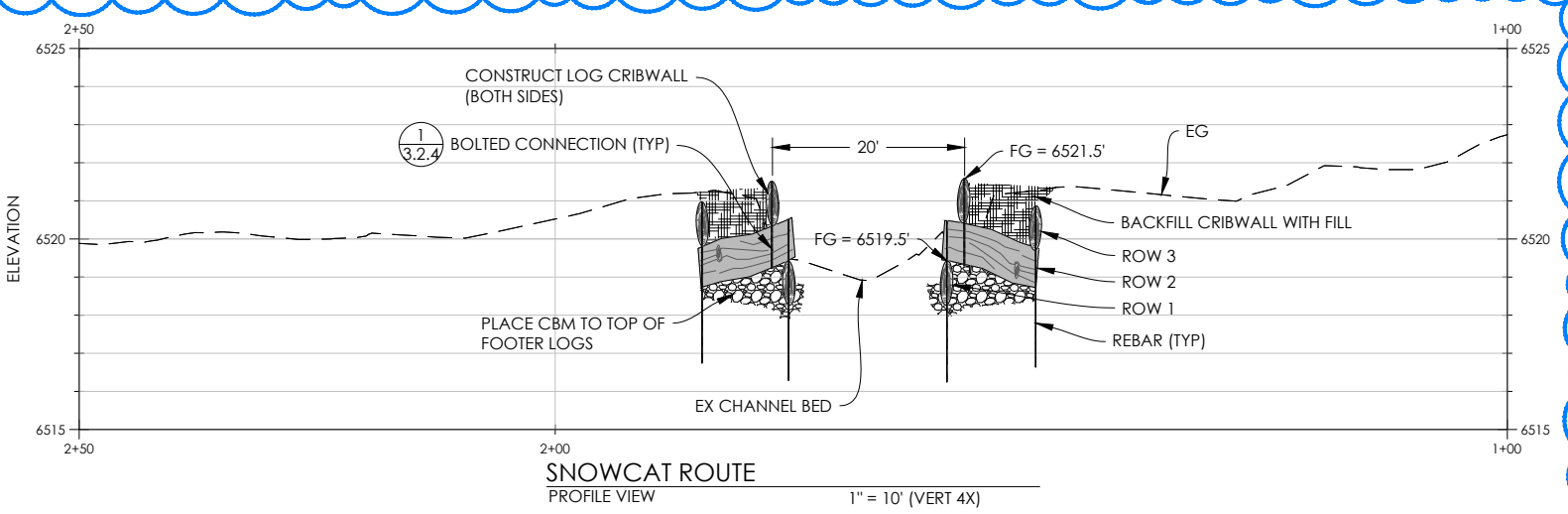
**CRABTREE CREEK
 RESTORATION OVERVIEW
 EUER VALLEY PHASE 2 RESTORATION**
 NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER
 223095
 SCALE (AT 22" X 34")
 1" = 50'

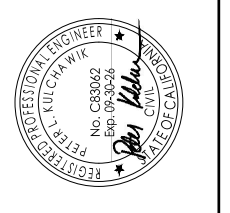
SHEET
3.3.1



- ROAD IMPROVEMENT NOTES:**
- EXCAVATE TO 12" BELOW FG AND STOCKPILE THE EXISTING ROAD MATERIAL.
 - MIX THE EXISTING ROAD MATERIAL WITH AN APPROXIMATELY EQUAL VOLUME OF 3" TO 4" ANGULAR ROCK.
 - PLACE THE MIXTURE TO ACHIEVE THE GRADES SHOWN ON THE PLANS.
 - FILL GAPS TO ELIMINATE SEAMS ALONG THE EDGES OF THE IMPROVED ROAD SURFACE AND TO PROVIDE POSITIVE DRAINAGE.
 - DISPLACED MATERIAL SHALL BE OFF HAULED OR REUSED AS FILL ELSEWHERE BUT MAY NOT BE USED TO ACHIEVE THE TOP 12" BELOW FINISHED GRADE WHERE REVEGETATION IS SPECIFIED.
 - SOIL DISTURBED ALONG THE EDGES OF ROAD IMPROVEMENT AREAS SHALL BE REVEGETATED WITH SEED MIX 2 AND MULCHED.



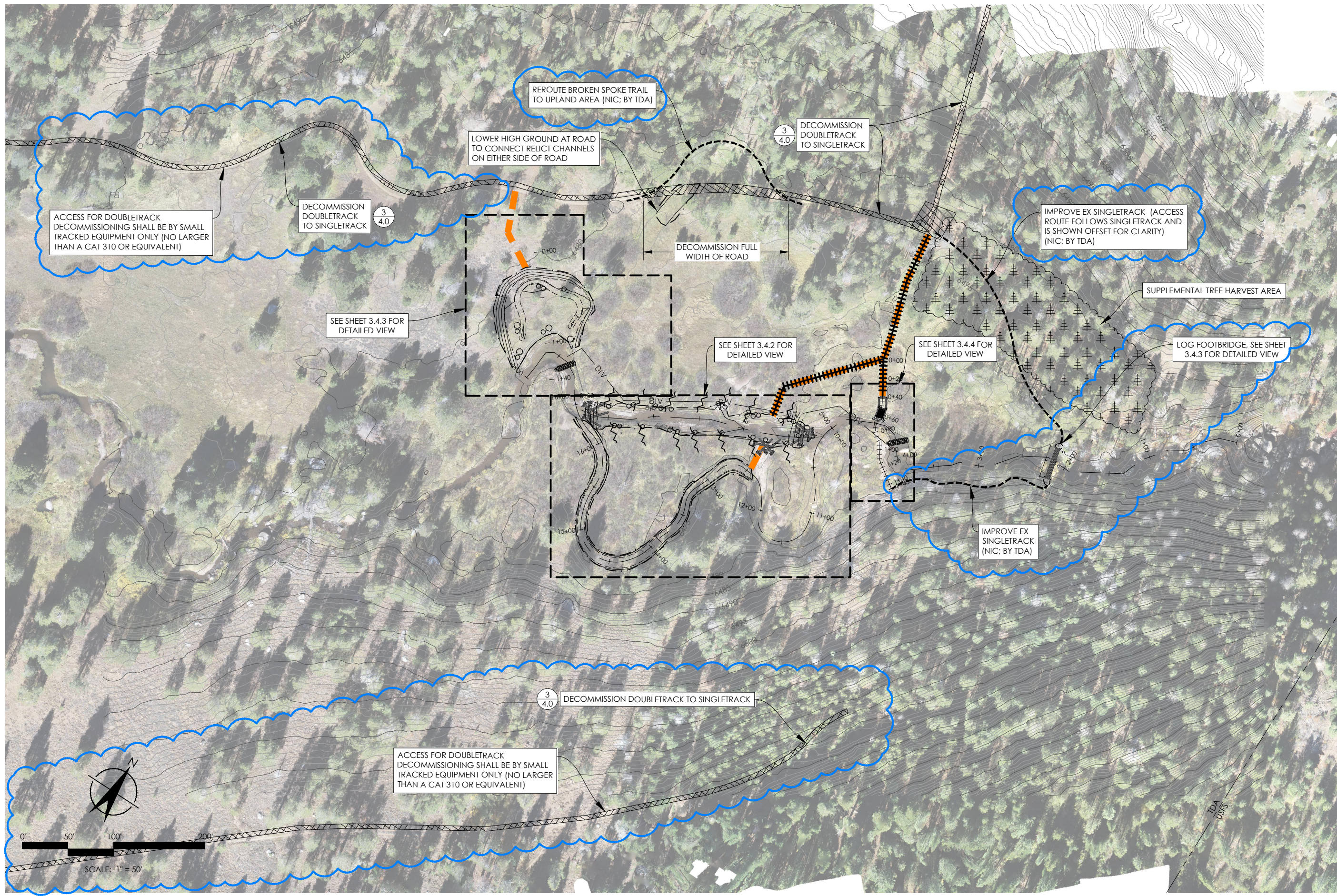
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
TA & DS	06-11-25	PK	90% DESIGN
PK	05-08-26	PK	100% DESIGN
DATE	05-08-2026		



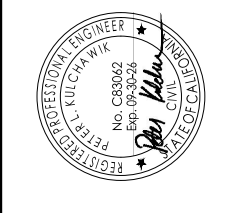
CRABTREE CREEK ROAD CROSSING DETAIL VIEWS
EUER VALLEY PHASE 2 RESTORATION
NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER 223095
SCALE (AT 22" X 34") AS SHOWN
SHEET

3.3.2

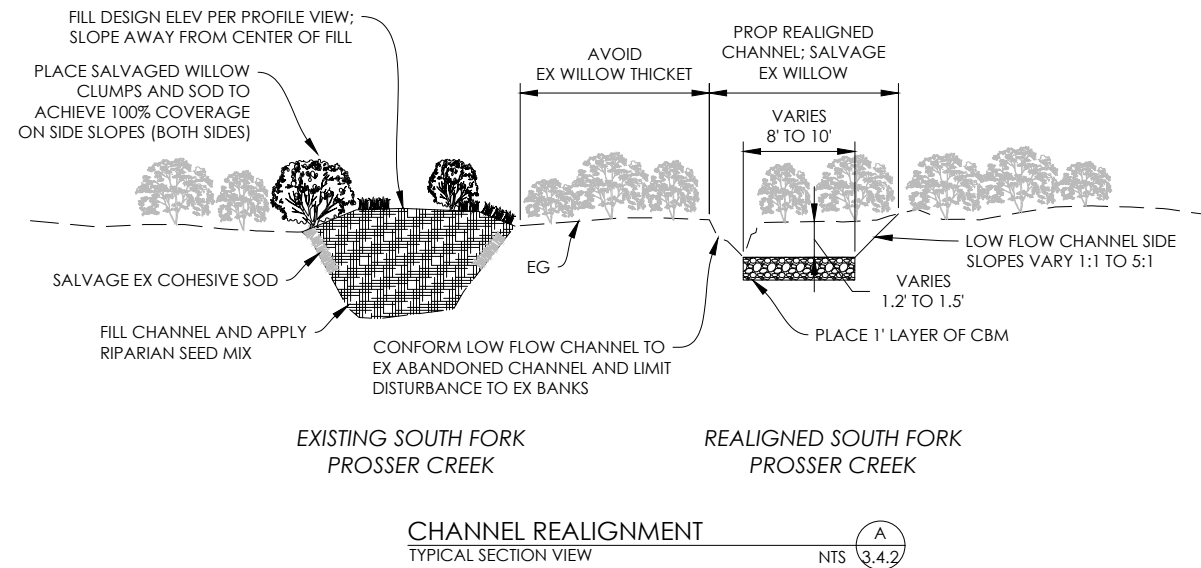
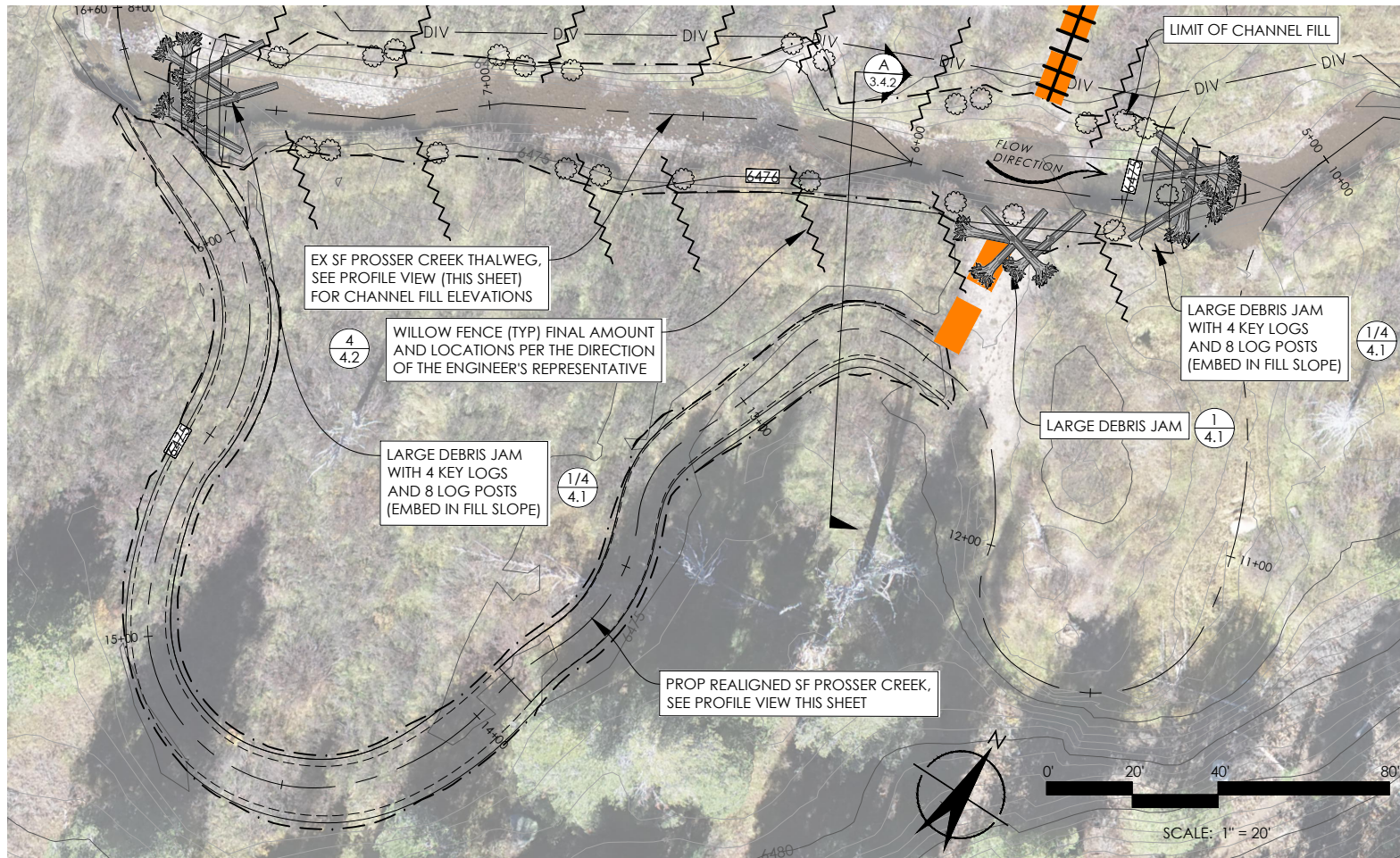


DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
TA & DS	06-11-25	PK	90% DESIGN
IN CHARGE	05-08-26	PK	100% DESIGN
DATE	05-08-2026		



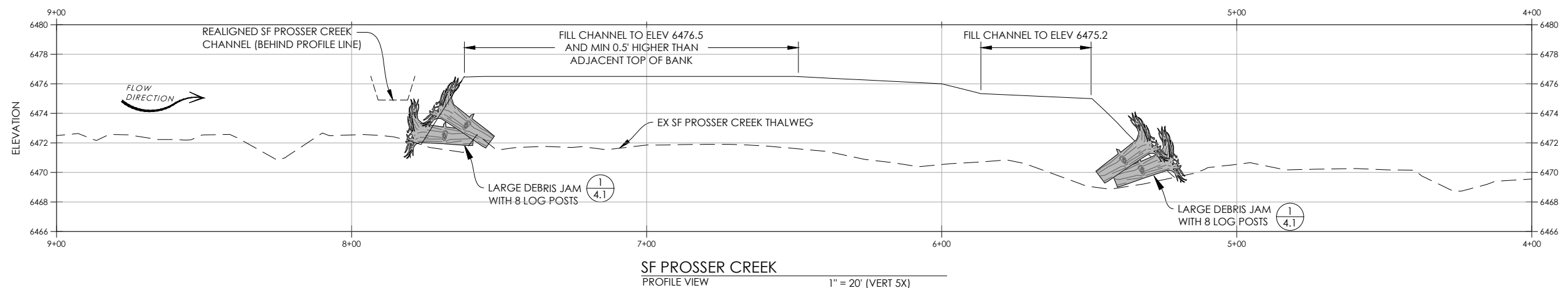
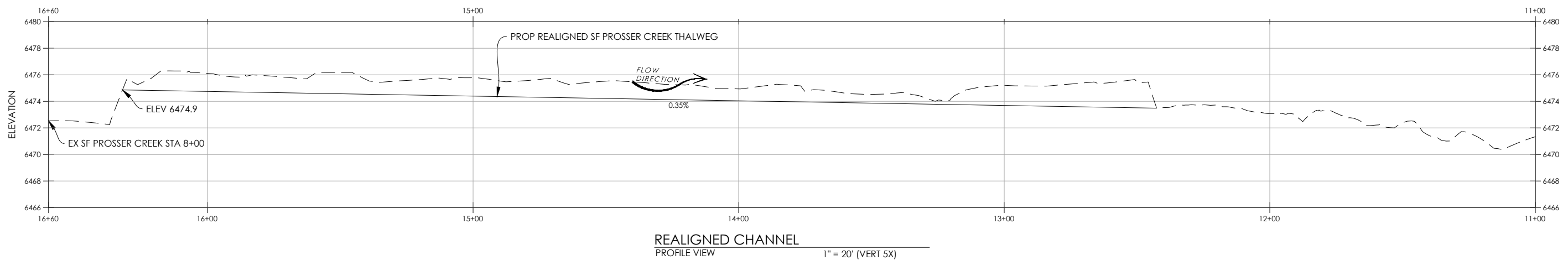
QUICKDRAW CROSSING RESTORATION OVERVIEW
EUER VALLEY PHASE 2 RESTORATION
 NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER: 223095
 SCALE (AT 22" X 34"): 1" = 50'
 SHEET



NOTES:

1. THE ENGINEER'S REPRESENTATIVE SHALL EVALUATE THE NATIVE SOILS AT THE ELEVATION OF THE CHANNEL INVERT PRIOR TO OVEREXCAVATION FOR THE CBM LAYER. IF IN THE OPINION OF THE ENGINEER'S REPRESENTATIVE, THE NATIVE SOILS ARE COMPARABLE TO THE CBM SPECIFICATION, THE CONTRACTOR MAY OMIT THE CBM LAYER.
2. SALVAGE ALL SOD AND TSOM FROM WITHIN THE GRADING LIMITS FOR THE REALIGNED CHANNEL AND EXISTING SF PROSSER CREEK PER THE NOTES ON SHEET 5.0.
3. THE CONTRACTOR MAY (AT THEIR DISCRETION) SALVAGE RIVERBED MATERIAL FROM WITHIN THE GRADING LIMITS FOR SF PROSSER CREEK FOR REUSE AS CBM.
4. THE CONTRACTOR SHALL HARVEST ALL WILLOW CLUMPS FROM WITHIN GRADING LIMITS SHOWN ON THIS SHEET FOR TRANSPLANTING WITHIN THE SAME AREAS PER THE DIRECTION OF THE ENGINEER'S REPRESENTATIVE.
5. PLACE SEED MIX 1 ON ALL FG SURFACES SHOWN ON THIS SHEET (EXCEPT THE 6' BOTTOM OF THE REALIGNED CHANNEL).



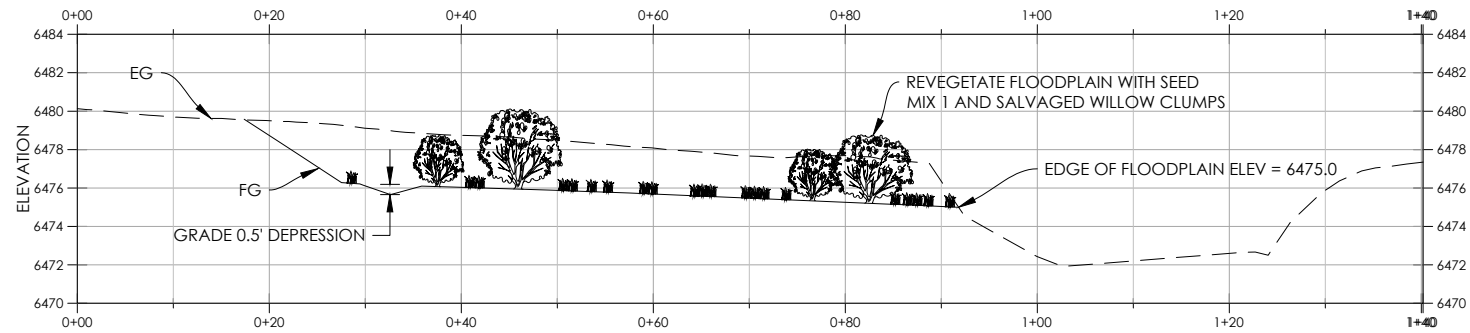
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		



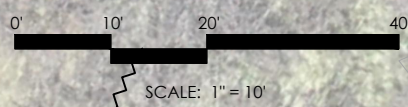
QUICKDRAW CROSSING GRADING DETAIL VIEWS 1
EUER VALLEY PHASE 2 RESTORATION
 NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER 223095
 SCALE (AT 22" X 34") AS SHOWN
 SHEET

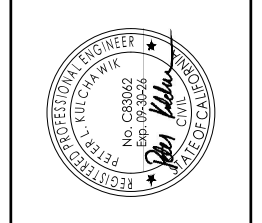
3.4.2



FLOODPLAIN REGRADING
TYPICAL SECTION VIEW 1" = 10' (VERT 2X) A 3.4.3



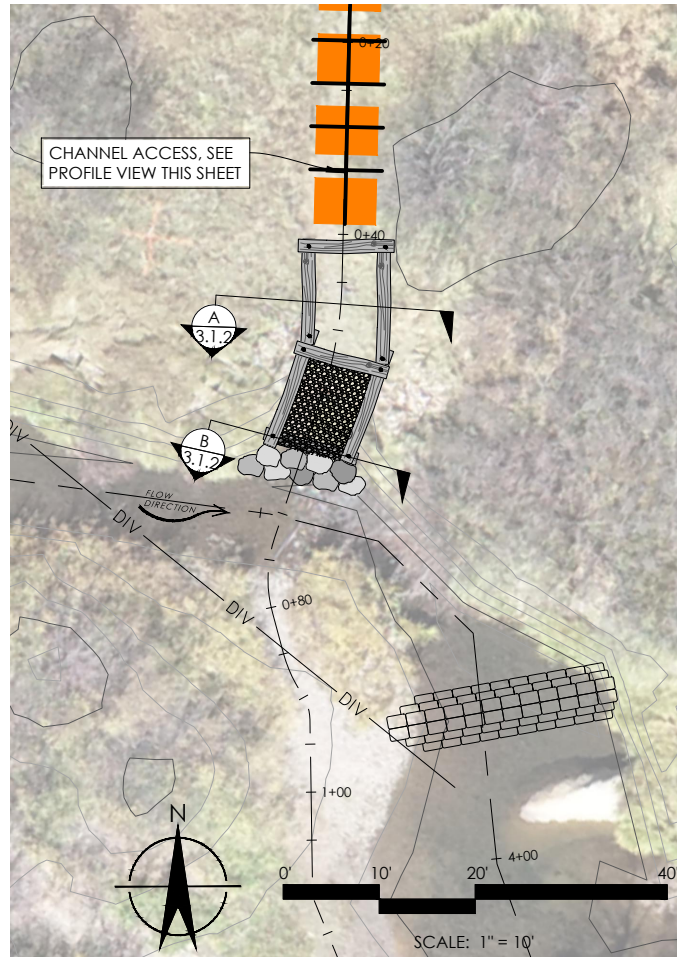
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		



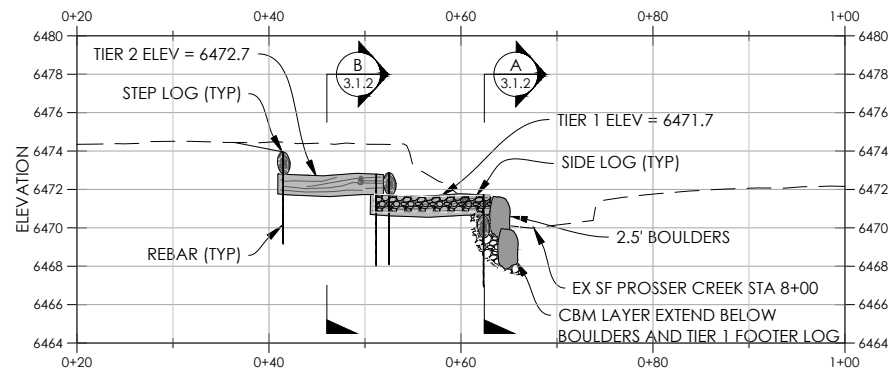
**QUICKDRAW CROSSING
GRADING DETAIL VIEWS 2
EUER VALLEY PHASE 2 RESTORATION**
NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER
223095
SCALE (AT 22" X 34")
AS SHOWN
SHEET

3.4.3

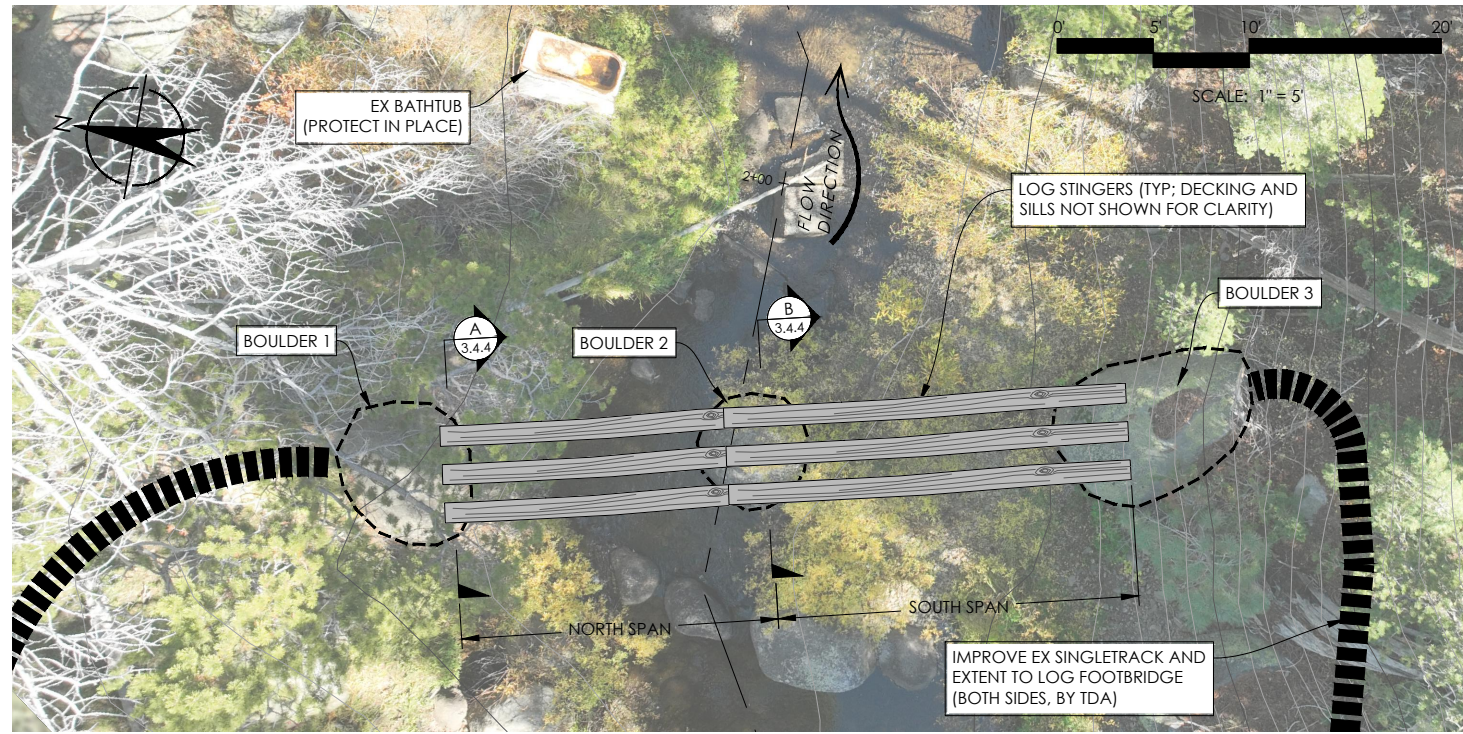


CHANNEL ACCESS
PLAN VIEW

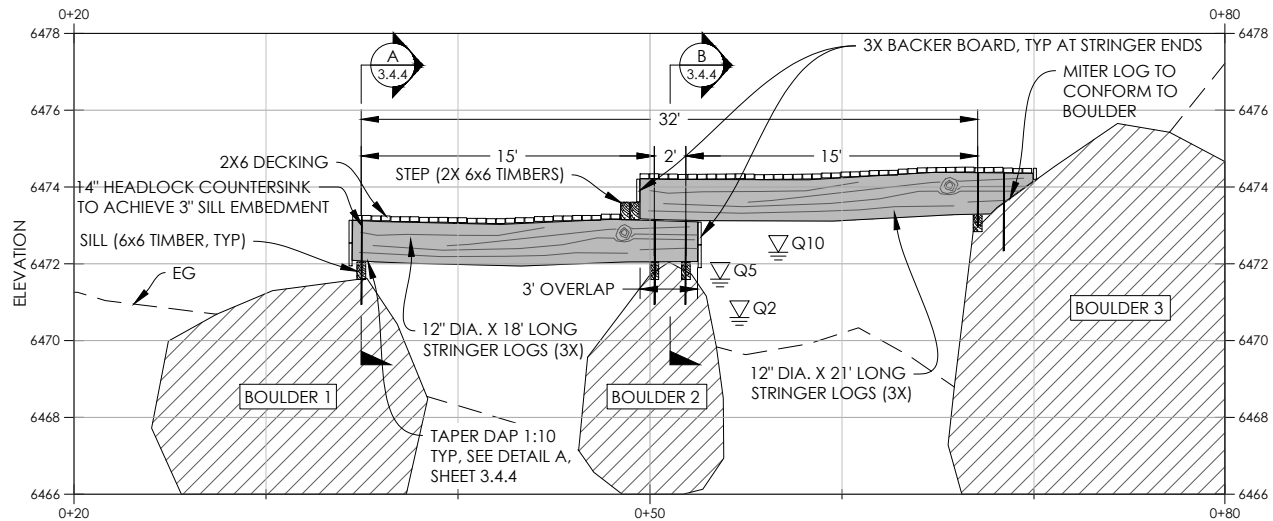


CHANNEL ACCESS
PROFILE VIEW

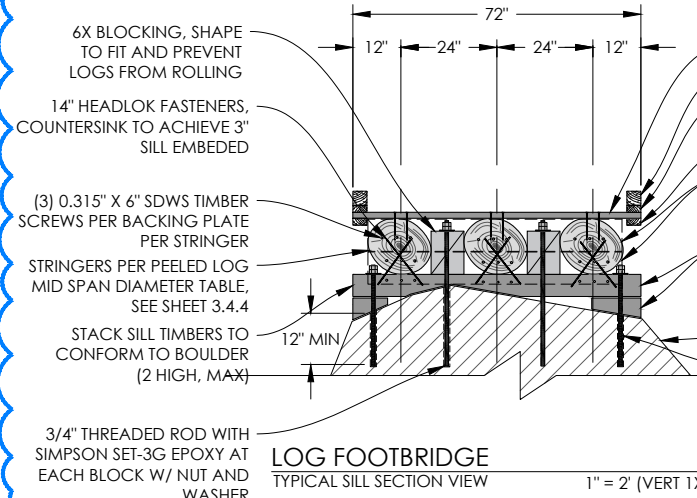
REFER TO NOTES ON SHEET 3.1.2 FOR MATERIALS AND INSTALLATION SPECIFICATIONS



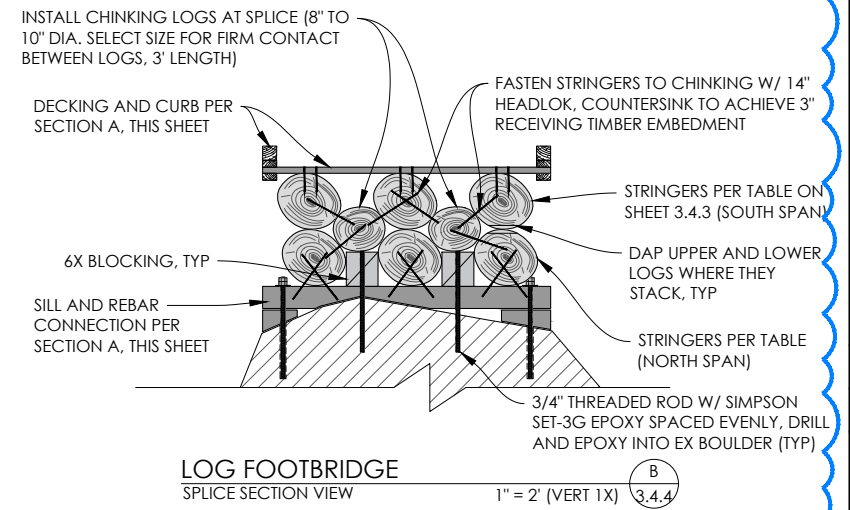
LOG FOOTBRIDGE
PLAN VIEW



LOG FOOTBRIDGE
PROFILE VIEW

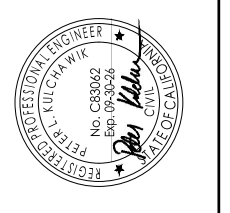


LOG FOOTBRIDGE
TYPICAL SILL SECTION VIEW



LOG FOOTBRIDGE
SPLICE SECTION VIEW

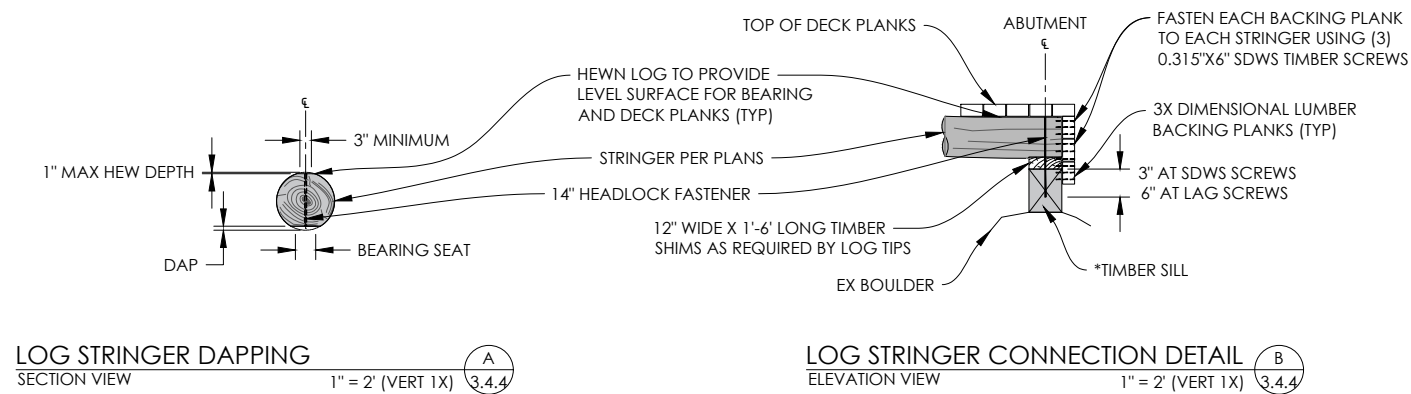
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
TA & DS	06-11-25	PK	90% DESIGN
PK	05-08-26	PK	100% DESIGN
DATE	05-08-2026		



**QUICKDRAW CROSSING
TRAIL DETAILS**
EUER VALLEY PHASE 2 RESTORATION
NEVADA COUNTY, CALIFORNIA

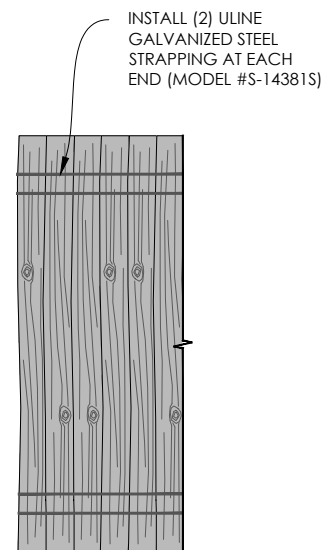
PROJECT NUMBER
223095
SCALE (AT 22" X 34")
AS SHOWN

3.4.4
SHEET



LOG STRINGER BRIDGE ABUTMENT CONNECTION DETAILS

- NOTES:
1. MAXIMUM DEPTH OF DAP SHALL NOT EXCEED 10 PERCENT OF LOG DIAMETER OR 2-INCHES
 2. TIMBER SILL CAN BE EITHER 12" X 12" SOLID SAWN, BUILT-UP 3" X 12", 4" X 12", & 6" X 12" REDWOOD OR ALASKAN YELLOW CEDAR.



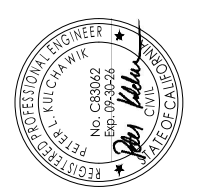
SEASONAL LOG STRINGER DECK
PARTIAL PLAN VIEW
NTS 3.4.4

STRINGERS SPECIFICATIONS:

1. FRAMING LUMBER
 - 1.1. STANDARDS:
 - 1.1.1. 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.
 - 1.1.2. DRESS LUMBER S4S, UNLESS OTHERWISE INDICATED.
 - 1.1.3. ALL NEW FRAMING LUMBER SHALL HAVE 19% MAXIMUM MOISTURE CONTENT AT TIME OF INSTALLATION AND FABRICATION.
 2. SPECIES AND GRADE (BASE DESIGN VALUE)
 - 2.1. 2X DECKING AND CURB USE: "REDWOOD" NO. 2 (Fb= 725 PSI, Fc = 700 PSI)
 - 2.2. 6X SILL AND BLOCKING USE: "REDWOOD" NO. 1 (Fb= 950 PSI, Fc = 800 PSI) OR "ALASKAN YELLOW CEDAR" NO. 1 (Fb= 1150 PSI, Fc = 775 PSI)
 3. FRAMING FASTENERS
 - 3.1. SHALL HAVE ICC APPROVAL AND BE MANUFACTURED BY FASTENMASTER COMPANY (HEADLOK), SIMPSON STRONG-TIE, INC. (SDWS), OR PRE-APPROVED EQUAL. INSTALL PER MANUFACTURER, AND AS INDICATED ON DRAWINGS.
 4. LAG SCREWS
 - 4.1. LAG SCREWS TO BE HOT-DIP GALVANIZED. PROVIDE ADEQUATE LENGTH TO ACHIEVE EMBED LENGTH TO RECEIVING MEMBER SHOWN ON PLANS. PRE-BORE LAG SCREW HOLES USING TWO DIAMETERS, ONE FOR THE SHANK AND ONE FOR THE THREADS. THE LEAD HOLE FOR THE SHANK IS TO BE EQUAL TO THE DIAMETER OF THE SHANK. THE LEAD HOLE FOR THE THREADED PORTION IS TO BE 70% OF THE SCREW DIAMETER SHOWN ON THE PLANS, AND BORED AT LEAST TO THE LENGTH OF THE THREADS. DO NOT DRIVE THE LAG SCREWS WITH A HAMMER.
 5. STEEL STRAPPING
 - 5.1. STEEL STRAPPING SHALL BE 1-1/4" WIDTH AND GALVANIZED. MINIMUM BREAK STRENGTH IS 5,500 LBS. INSTALL PER MANUFACTURER USING HIGH TENSILE STEEL STRAPPING TENSIONER AND HIGH TENSILE STEEL STRAPPING SEALER. SEALERS TO BE GALVANIZED.
 6. STRINGER LOGS DIMENSIONS SHALL FOLLOW THE PEELED LOG MID SPAN DIAMETER TABLE AS FOLLOWS:

Tree Species	Peeled Log Minimum Mid Span Diameter (in)	
	Pedestrian Foot Bridge - 15' Span	Snowcat Bridge - 20' Span
Sugar Pine	13.5	16.5
Ponderosa Pine	13.5	16.5
Jeffrey Pine	13.5	16.5
Incense Cedar	14.0	17.0
Douglas Fir	13.5	16.5
White Fir	13.5	16.5
Red Fir	13.5	16.5
Lodgepole Pine	13.5	16.5

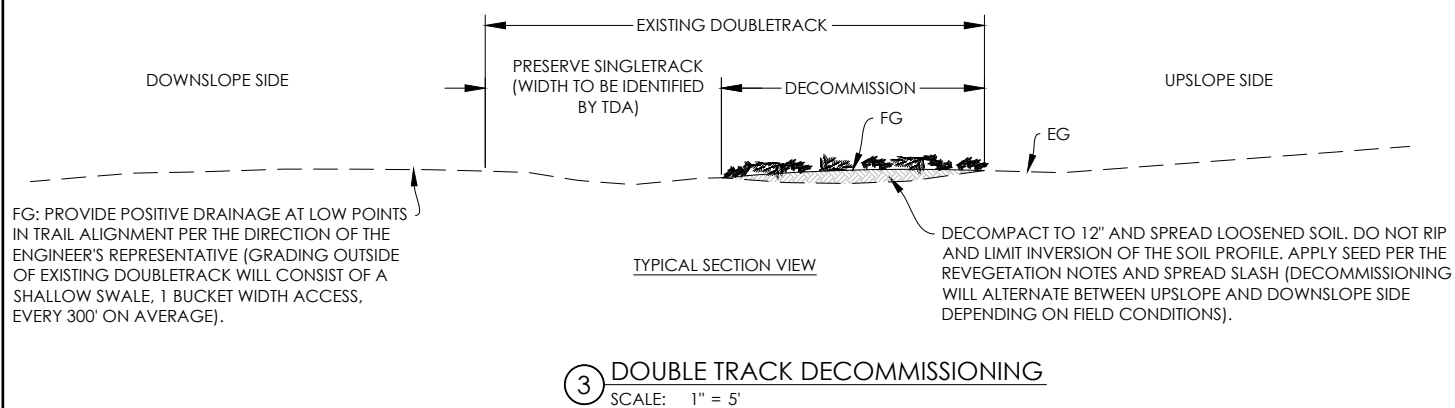
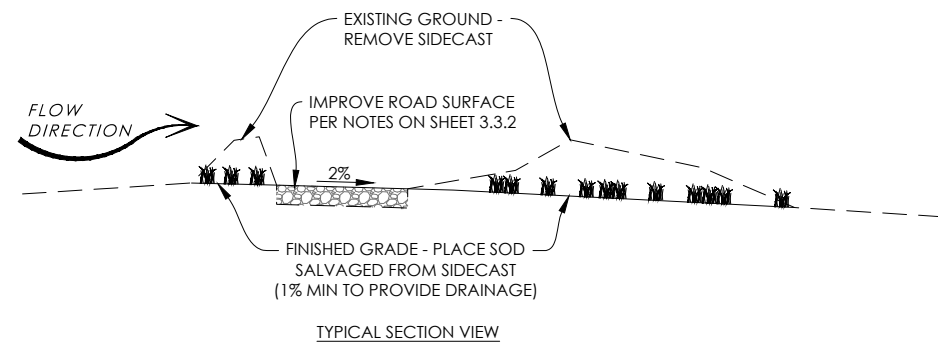
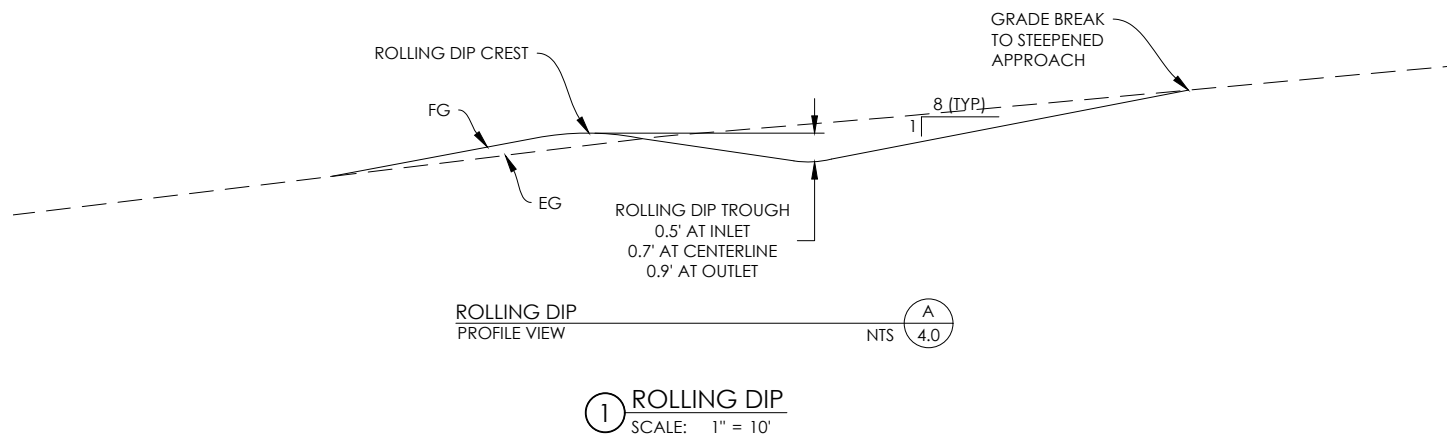
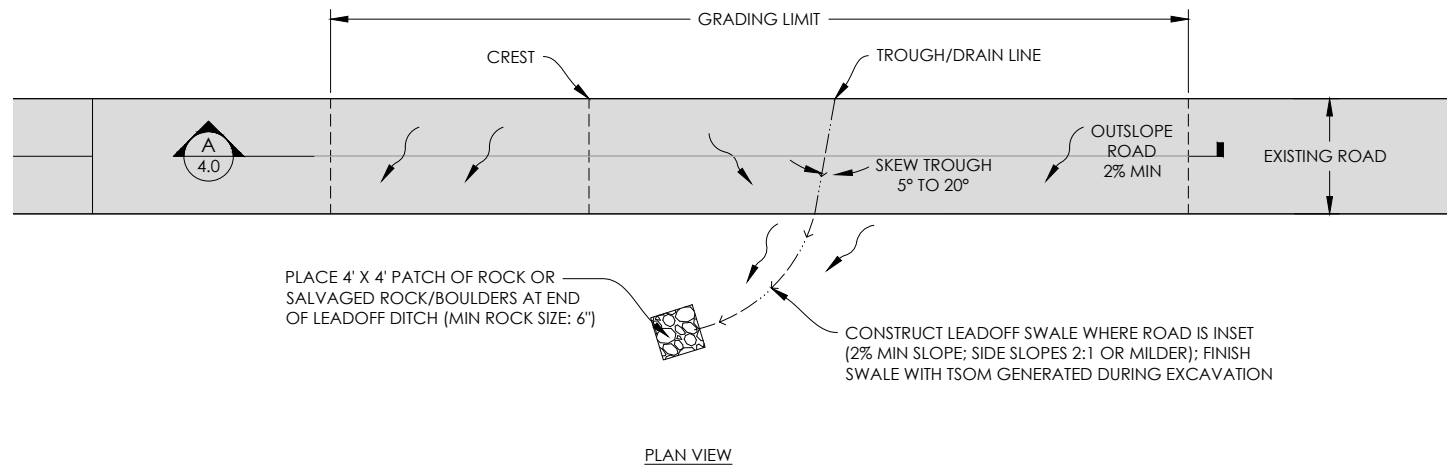
DESIGNED BY	DATE	BY	REVISIONS / REVISIONS
PK	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
TA & DS	06-11-25	PK	90% DESIGN
IN CHARGE	05-08-26	PK	100% DESIGN
DATE	05-08-2026		



**QUICKDRAW CROSSING
LOG STRINGER DETAILS**
EUER VALLEY PHASE 2 RESTORATION
NEVADA COUNTY, CALIFORNIA

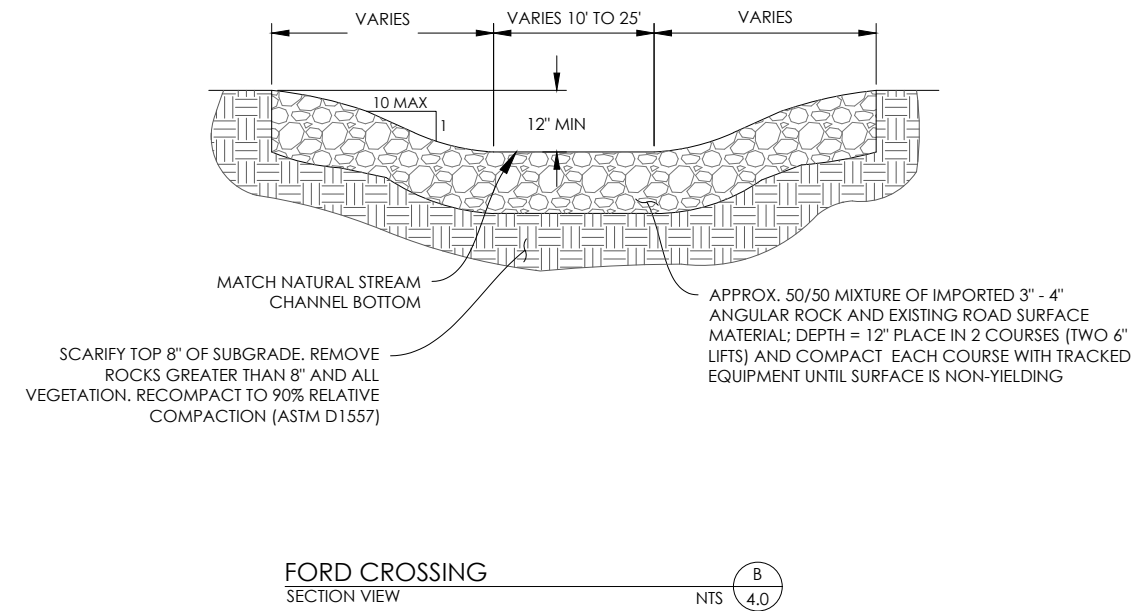
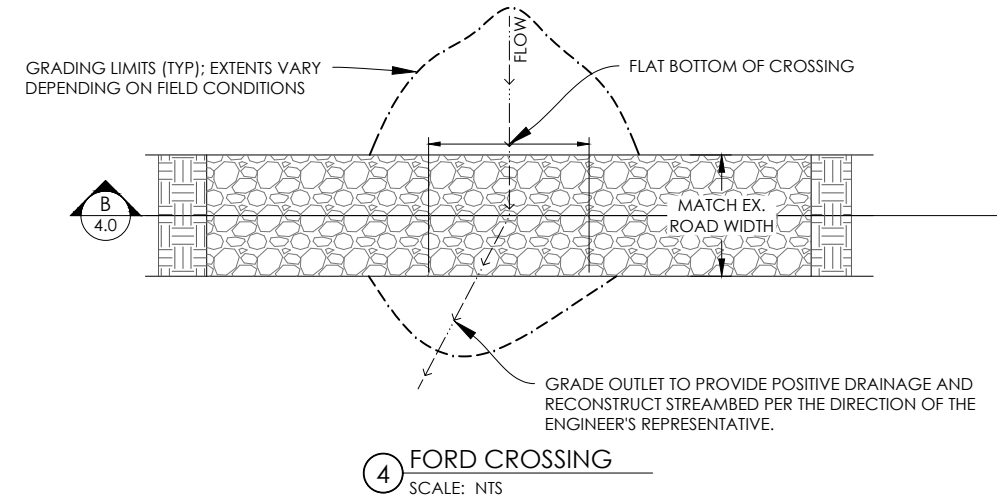
PROJECT NUMBER
223095
SCALE (AT 22" X 34")
AS SHOWN
SHEET

3.4.5



FG: PROVIDE POSITIVE DRAINAGE AT LOW POINTS IN TRAIL ALIGNMENT PER THE DIRECTION OF THE ENGINEER'S REPRESENTATIVE (GRADING OUTSIDE OF EXISTING DOUBLETACK WILL CONSIST OF A SHALLOW SWALE, 1 BUCKET WIDTH ACCESS, EVERY 300' ON AVERAGE).

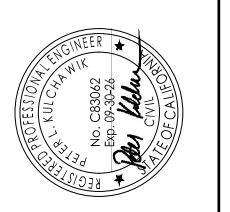
100% DESIGN



FORD CROSSING NOTES:

1. 3" - 4" ANGULAR ROCK
 - 1.1. ROCK SHALL CONSIST OF HARD, DURABLE (DURABILITY INDEX OF 40 OR GREATER), ANGULAR, CLEAN STONE RANGING FROM 3 INCHES TO 4 INCHES IN DIAMETER (MEASURED ON THE INT. AXIS).
 - 1.2. ROCK MUST BE CLEAR FROM ORGANIC MATERIAL, CLAY BALLS, OR OTHER DELETERIOUS SUBSTANCES.
 - 1.3. SPECIFIC GRAVITY SHALL BE AT LEAST 2.5.
 - 1.4. FINES (MATERIAL PASSING THE #200 SIEVE) SHALL ACCOUNT FOR NO MORE THAN 3% OF THE ROCK PRODUCT (BY WEIGHT).

DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
TA & DS	06-11-25	PK	90% DESIGN
PK	05-08-26	PK	100% DESIGN
DATE	05-08-2026		

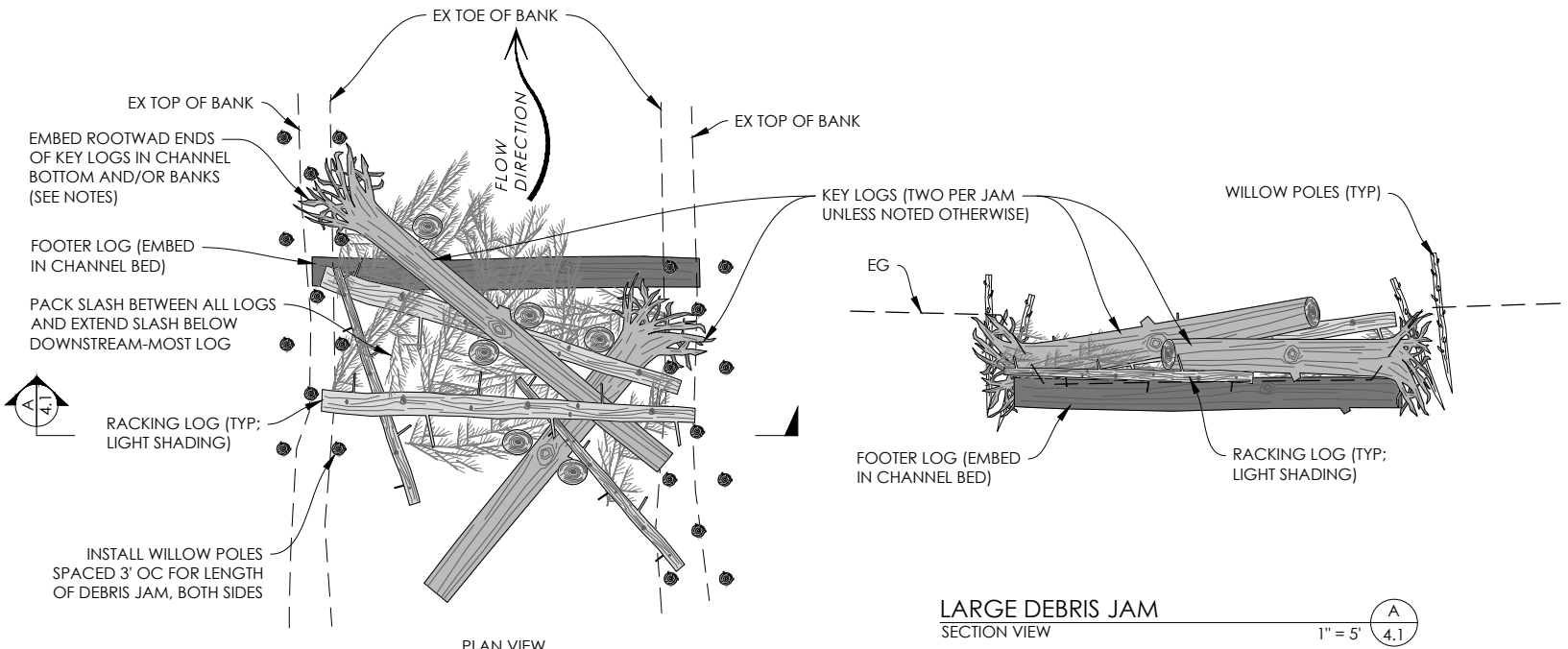


**ROAD TREATMENT
 TYPICAL DETAILS
 EUER VALLEY PHASE 2 RESTORATION**

NEVADA COUNTY, CALIFORNIA

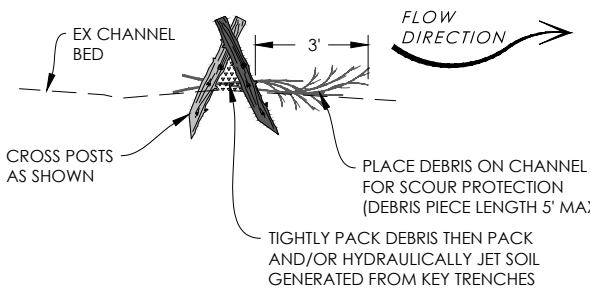
PROJECT NUMBER 223095
SCALE (AT 22" X 34") --
SHEET 4.0

©2026 BALANCE HYDROLOGICS, INC.

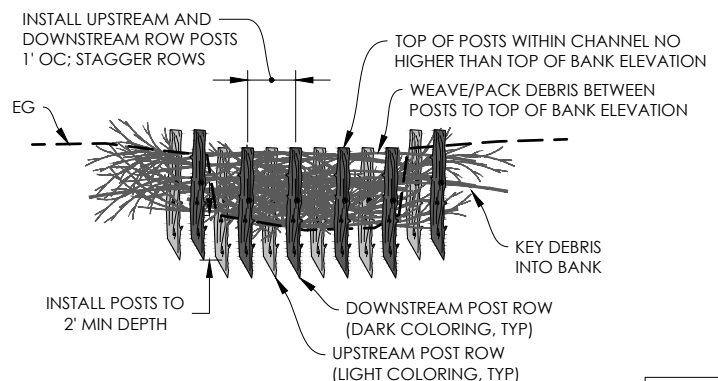


1 LARGE DEBRIS JAM
SCALE: 1" = 5'

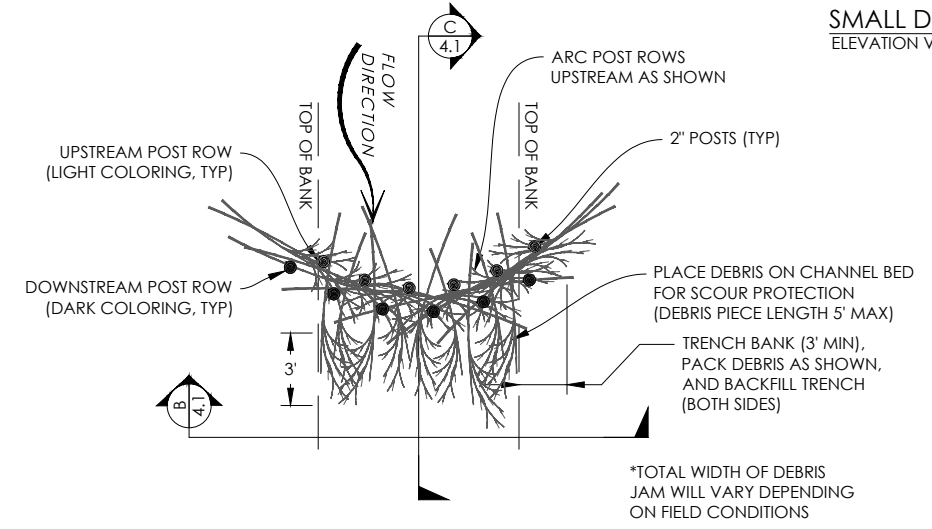
- NOTES:**
- PLACE LOG POSTS (TYPE A AND/OR B) TO SECURE KEY LOGS WHERE INDICATED ON PLANS. LOG POST CONFIGURATION WILL BE PER THE DIRECTION OF THE ENGINEER'S REPRESENTATIVE.
 - PLACE SEED MIX 1 WHERE BANKS DISTURBED BY LOG EMBEDMENT.



SMALL DEBRIS JAM
PROFILE VIEW
NTS



SMALL DEBRIS JAM
ELEVATION VIEW
NTS



2 SMALL DEBRIS JAM
SCALE: NTS

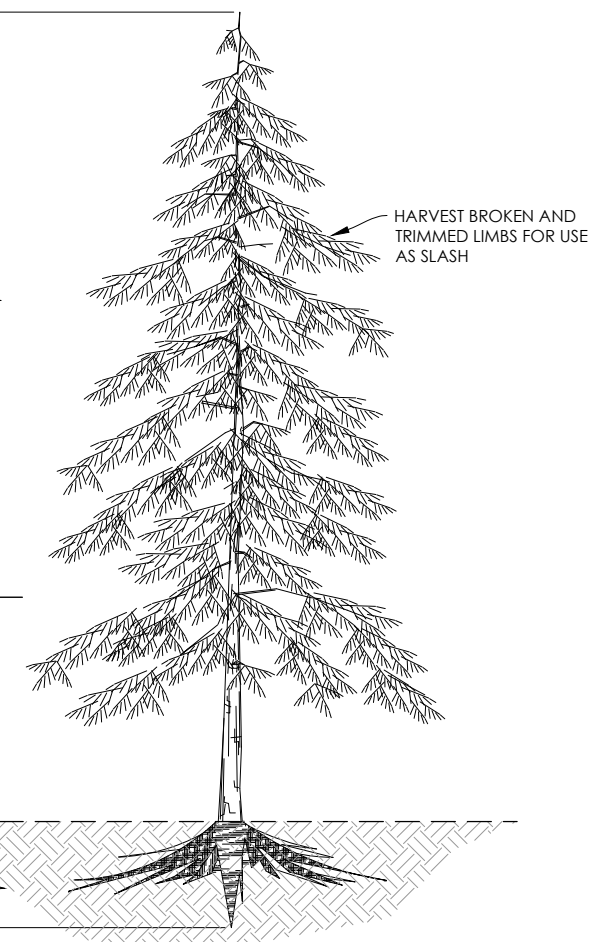
- UPPER SECTION:**
- INCLUDES TRUNK AND ATTACHED LIMBS
 - LENGTH VARIES BY WHATEVER IS LEFTOVER, BUT TRIMMING MAY BE REQUIRED DEPENDING ON INSTALL LOCATION

- MIDDLE SECTION:**
- INCLUDES TRUNK AND ATTACHED LIMBS
 - DEPENDING ON TREE SIZE, IT MAY NOT BE POSSIBLE TO HARVEST A SUITABLE MIDDLE SECTION OR IT MAY BE POSSIBLE TO HARVEST MULTIPLE MIDDLE SECTIONS

- LOWER SECTION:**
- INCLUDES ROOTMASS WITH ATTACHED TRUNK AND LIMBS
 - LENGTHS IN THE BELOW TABLE ARE MEASURED FROM THE BOLE TO CUT END
 - DIAMETERS IN THE BELOW TABLE ARE MEASURED AT BREAST HEIGHT

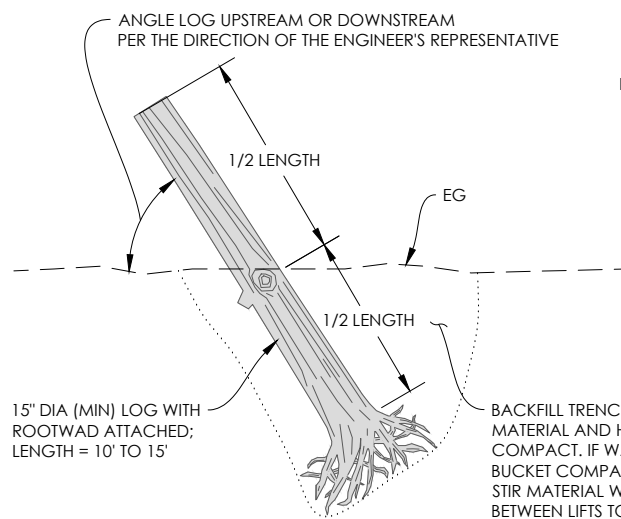
SMOOTH OUT CRATER LEFT BY ROOTMASS REMOVAL (DO NOT IMPORT MATERIAL) AND REVEGETATE WITH SEED MIX 2

- GENERAL:**
- ALL LOGS TO BE USED AS KEY LOGS OR RACKING LOGS SHALL BE SOUND, FREE FROM ROT OR INFESTATION BY INSECTS, AND FREE OF ADHERED DIRT, LITTER, OR OTHER MATERIAL.
 - LOGS SHALL HAVE NO WEAKNESSES SUCH AS CRACKS AND SPLITS THROUGH MORE THAN 25 PERCENT OF THE LOG DIAMETER.
 - LOGS NOT MEETING THE ABOVE CRITERIA MAY BE FURTHER DISSECTED AND USED AS SLASH.
 - ALL TREES HARVESTED FROM WITHIN TREE HARVEST AREAS SHOWN HEREIN SHALL BE FLAGGED BY THE ENGINEER'S REPRESENTATIVE PRIOR TO REMOVAL. THE CONTRACTOR SHALL NOT REMOVE ANY UNMARKED TREES.

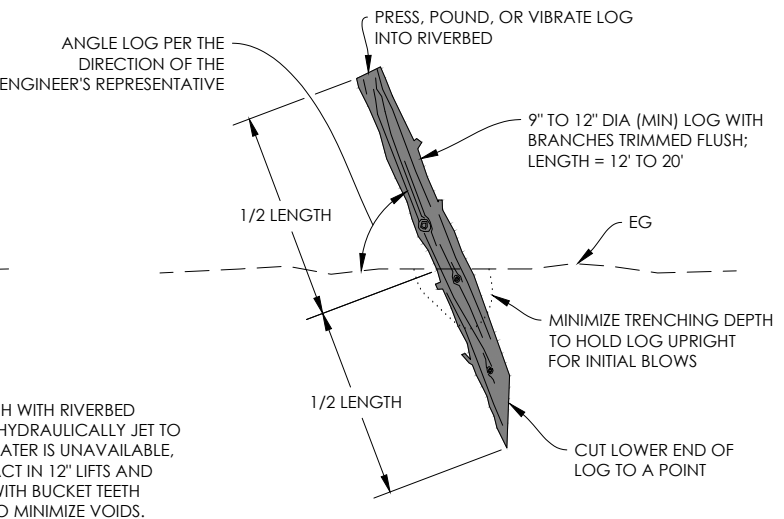


3 TREE DISSECTION FOR DEBRIS JAMS
SCALE: = NTS

NOTE: THERE IS NOT A PRE-DETERMINED NUMBER OF TYPE A VERSUS TYPE B LOG POSTS. THE TYPE OF LOG POST FOR EACH INSTALLATION SHALL BE COORDINATED BETWEEN THE CONTRACTOR AND ENGINEER'S REPRESENTATIVE AND WILL DEPEND ON SIZES AND TYPES OF AVAILABLE LOGS, CHARACTERISTICS OF THE INSTALLATION SITE, AND EQUIPMENT AVAILABILITY. THE TWO TYPES OF LOG POSTS ARE SHOWN TO AFFORD FLEXIBILITY IN THE INSTALLATION.

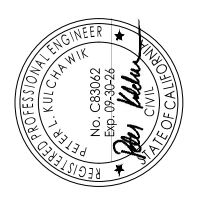


4A LOG POST - TYPE A
SCALE: 1" = 5'



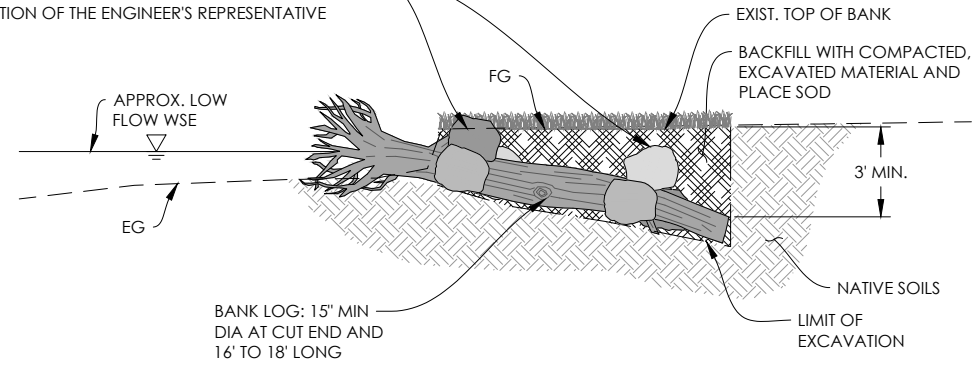
4B LOG POST - TYPE B
SCALE: 1" = 5'

DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
PK & CB	10-11-24	PK	65% DESIGN
TA & DS	06-11-25	PK	90% DESIGN
PK	05-08-26	PK	100% DESIGN
DATE	05-08-2026		

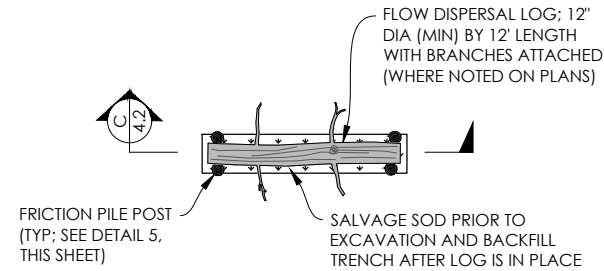


PROJECT NUMBER 223095
SCALE (AT 22" X 34")

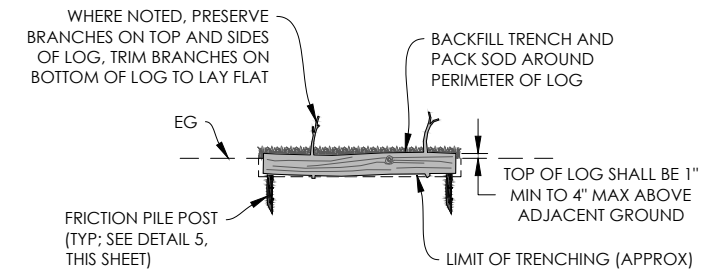
THE CONTRACTOR SHALL PROVIDE UP TO 6 BOULDERS FOR EACH BANK LOG SHOWN ON THE PLANS; PLACE BOULDERS PER THE DIRECTION OF THE ENGINEER'S REPRESENTATIVE



1 BANK LOG
SCALE: 1" = 5'

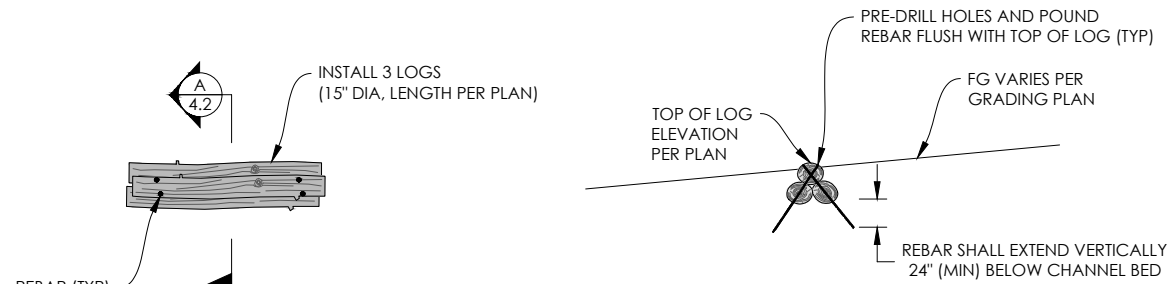


4 FLOW DISPERSAL LOG
SCALE: 1" = 5'

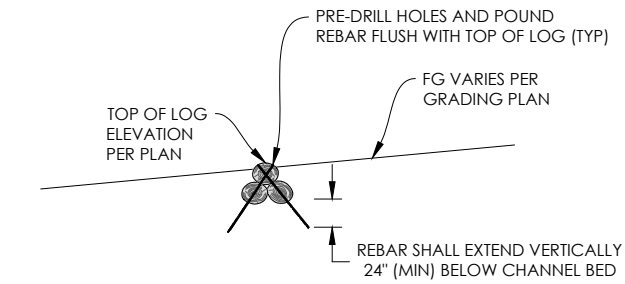


FLOW DISPERSAL LOG
PROFILE VIEW
SCALE: 1" = 5'

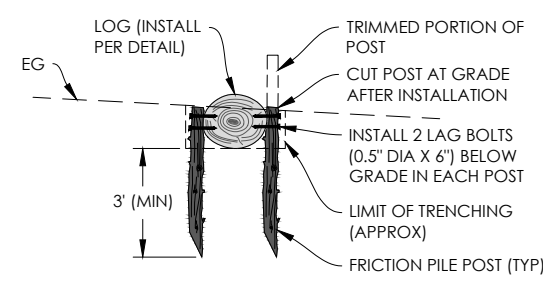
NOTE: FLOW DISPERSAL LOG INSTALLATIONS MAY INCLUDE MULTIPLE ABUTTING LOGS. ARRANGE AND CONSTRUCT THE NUMBER OF FLOW DISPERSAL LOGS SHOWN ON THE RESTORATION PLAN SHEETS. TRIM BRANCHES FROM FLOW DISPERSAL LOGS UNLESS NOTED ON THE PLAN SHEETS TO LEAVE BRANCHES ATTACHED.



2 LOG GRADE CONTROL - TYPE 1
SCALE: 1" = 5'



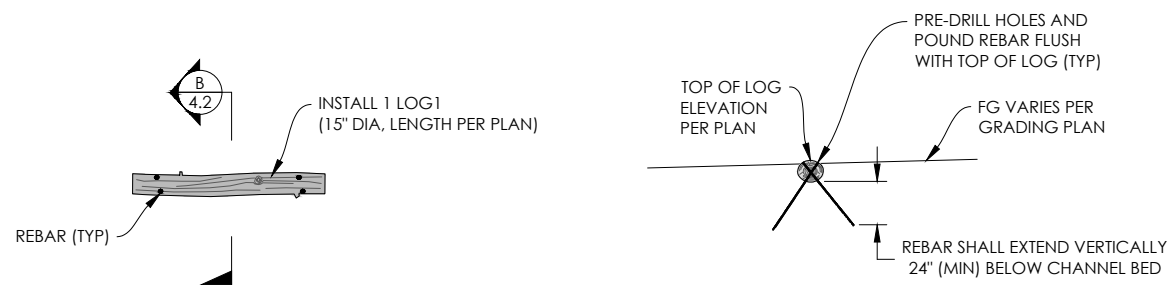
LOG GRADE CONTROL - TYPE 1
PROFILE VIEW
SCALE: 1" = 5'



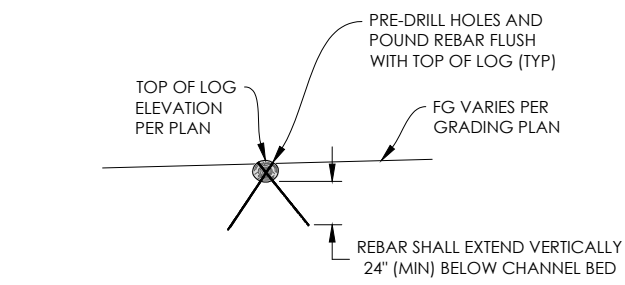
5 FRICTION PILE POST
SCALE: 1" = 2'

FRICTION PILE POST NOTES:

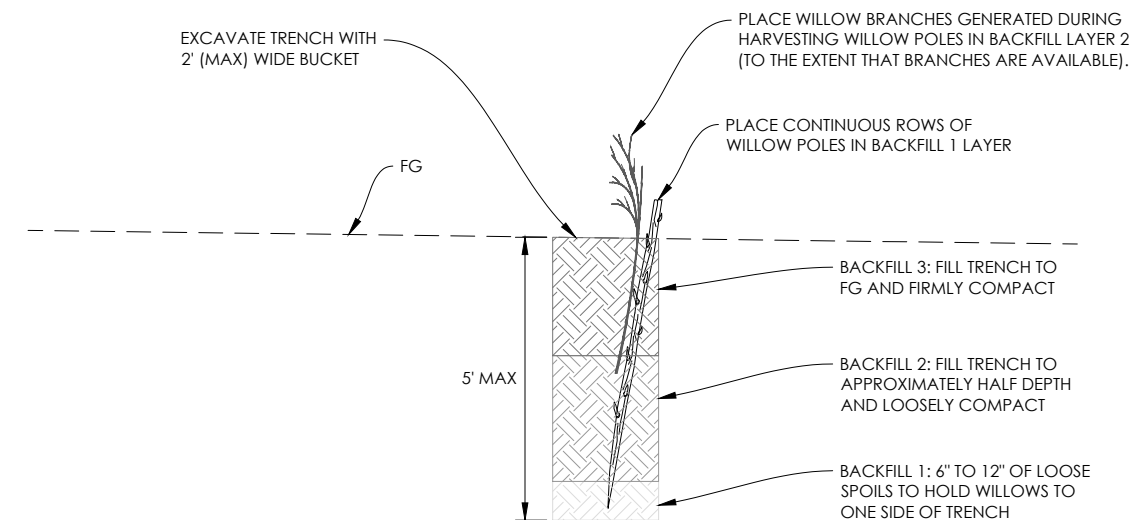
1. GENERAL
 - 1.1. INSTALL FOUR FRICTION PILE POSTS PER EACH LOG, GENERALLY PLACED ON BOTH SIDES OF THE LOG AND AT BOTH ENDS.
 - 1.2. PURPOSE: FRICTION PILE POSTS ARE INTENDED TO COUNTERACT LOG BUOYANCY AND HAVE BEEN DESIGNED SUCH THAT THEY ARE BURIED AND GENERALLY NOT VISIBLE AFTER INSTALLATION.
2. MATERIALS
 - 2.1. FRICTION PILE POSTS SHALL BE UNTREATED WOOD WITH A DIAMETER OF 3 TO 4 INCHES AND LENGTHS OF 5 FEET. ONE END OF EACH POST SHALL BE SHARPENED TO A POINT.
 - 2.2. LAG BOLTS SHALL BE GALVANIZED STEEL SCREWS INTENDED FOR WOOD-TO-WOOD INSTALLATIONS AND HAVING AN ALLOWED SHEAR LOAD NO LESS THAN 500 LBS.
3. EXECUTION
 - 3.1. INSTALL FRICTION PILE POSTS AFTER THE LOG HAS BEEN PLACED WITHIN A TRENCH, BUT BEFORE THE TRENCH HAS BEEN BACKFILLED.
 - 3.2. POUND FRICTION PILE POSTS INTO THE NATIVE SOIL TO ACHIEVE THE DIMENSIONS SHOWN ON THE DRAWINGS. THE POSTS SHALL BE AT LEAST 6 INCHES LONGER THAN REQUIRED TO ACHIEVE THE DIMENSIONS SHOWN ON THE DRAWINGS SUCH THAT THE UPPER PORTION OF THE POST MAY BE TRIMMED IF IT IS DAMAGED BY POUNDING.
 - 3.3. FASTEN THE FRICTION PILE POST TO THE LOG WITH TWO LAG BOLTS PER FRICTION PILE POST.
 - 3.4. TRIM THE POSTS AT OR JUST BELOW FINISHED GRADE ELEVATION AND BACKFILL THE LOG TRENCH ONCE ALL POSTS ARE INSTALLED.



3 LOG GRADE CONTROL - TYPE 2
SCALE: 1" = 5'

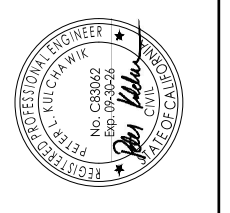


LOG GRADE CONTROL - TYPE 2
PROFILE VIEW
SCALE: 1" = 5'



6 WILLOW FENCE
SCALE: NTS

SUBMITTALS / REVISIONS	
BY	DATE
PK	12-18-23
PK	10-11-24
PK	06-11-25
PK	05-08-26
PK	05-08-2026



LOG STRUCTURE
TYPICAL DETAILS
EUER VALLEY PHASE 2 RESTORATION
NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER
223095
SCALE (AT 22" X 34")
--

SHEET
4.2

MATERIALS GENERAL NOTES:

CONSTRUCTION MATERIALS SHALL COMPLY WITH THE FOLLOWING CRITERIA UNLESS OTHERWISE NOTED IN THESE DRAWINGS.

1. LOGS AND LOGS WITH ROOTWADS

- 1.1. LOGS WILL BE PROVIDED FROM SITES WITHIN EUER VALLEY IDENTIFIED BY TDA STAFF. A PORTION OF THE LOGS WILL BE HARVESTED BY TDA AND STOCKPILED NEAR STAGING AREAS FOR USE BY THE CONTRACTOR.
- 1.2. THE CONTRACTOR IS RESPONSIBLE FOR HARVESTING ADDITIONAL LOGS (BEYOND WHAT IS AVAILABLE IN THE PROVIDED STOCKPILES) AND TRANSPORTING TO INSTALL LOCATIONS. THE CONTRACTOR WILL HAVE AN OPPORTUNITY CONFIRM STOCKPILE QUANTITIES DURING A PRE-BID SITE TOUR.
- 1.3. LOGS SHALL BE SOUND, FREE FROM ROT OR INFESTATION BY INSECTS, AND FREE OF ADHERED DIRT, LITTER, OR OTHER MATERIAL.
- 1.4. LOGS SHALL HAVE NO WEAKNESSES SUCH AS CRACKS AND SPLITS THROUGH MORE THAN 25 PERCENT OF THE LOG DIAMETER.
- 1.5. LOGS SHALL BE GENERALLY STRAIGHT AND SHALL BE TRIMMED SO THAT BRANCHES ARE CUT FLUSH TO THE TRUNK.
- 1.6. CUTS SHALL BE SMOOTH, WITHOUT BREAKS OR JAGGED EDGES.
- 1.7. LOG DIAMETERS AND LENGTHS SHALL BE THE SIZES INDICATED ON THE PLANS. FOR LOGS WITH ROOTWADS, LENGTHS SHALL BE MEASURED FROM THE CUT END TO THE ROOTWAD BOLE.
- 1.8. LOGS WITH ROOTWADS SHALL BE TRIMMED SO THE ROOTWAD FAN IS NO GREATER THAN 8 FEET IN DIAMETER. ROOTWADS SHALL BE THOROUGHLY WASHED AND FREE OF SOIL BEFORE DELIVERY TO THE INSTALLATION SITES.

2. BOULDERS

- 2.1. BOULDERS CAN BE COMPOSED OF A VARIETY OF ROCK TYPES TYPICALLY USED IN CONSTRUCTION SUCH AS IGNEOUS ROCKS (GRANITE, DIORITE, BASALT, ANDESITE). BOULDERS SHALL HAVE NO CRACKS, BEDDING PLANES, OR OTHER WEAKNESSES. BOULDERS SHALL NOT HAVE CRACKS FILLED, OR HEALED, WITH CALCITE.
- 2.2. BOULDERS SHALL BE CLEAN SUBANGULAR TO ROUNDED ROCK. BLASTED OR ANGULAR ROCK WILL NOT BE ACCEPTED.
- 2.3. THE CONTRACTOR SHALL REPLACE BOULDERS NOT MEETING THESE SPECIFICATIONS OR BOULDERS BROKEN DURING DELIVERY OR HANDLING AT NO ADDITIONAL COST.
- 2.4. BOULDERS SHALL HAVE A MINIMUM OF 2.5' DIAMETER IN ALL DIMENSIONS AND SHALL WEIGH A MINIMUM OF 1 TON. BOULDERS NOT MEETING BOTH OF THESE CRITERIA WILL BE REJECTED BY THE ENGINEER'S REPRESENTATIVE.

3. ECB

- 3.1. ECB SHALL BE MADE OF COIR NETTING MADE OF COIR FIBER TWINE.
- 3.2. ECB SHALL A MINIMUM UNIT WEIGHT OF 23 OUNCES PER SQUARE YARD. BE RATED TO WITHSTAND FLOW VELOCITIES OF 8 FEET PER SECOND AND SHEER STRESS OF 3 LB PER SQUARE FOOT, AND HAVE NO MORE THAN 48% OPEN AREA (70 OR 700 PRODUCT EQUIVALENT).
- 3.3. THE CONTRACTOR SHALL SUBMIT A PRODUCT SHEET TO THE ENGINEER'S REPRESENTATIVE FOR APPROVAL.
- 3.4. INSTALL THE ECB PER THE MANUFACTURER'S INSTRUCTIONS. IF A CONFLICT EXISTS BETWEEN THE CRITERIA HEREIN AND THE MANUFACTURER'S INSTRUCTIONS, CONTACT THE ENGINEER'S REPRESENTATIVE IMMEDIATELY.
- 3.5. OVERLAP SEAMS BY A MINIMUM OF 8 INCHES. MATS SHALL BE "SHINGLED" IN THE DOWNSTREAM DIRECTION.
- 3.6. SECURE ALL THE ENDS OF ROLLS (SHORT EDGES) AS SHOWN IN DETAIL 1, THIS SHEET AND BY DETAIL VIEWS WITHIN THE PLAN SHEETS.

4. STAKES

- 4.1. STAKES SHALL BE HARDWOOD STAKES OR AN EQUIVALENT BIODEGRADABLE PRODUCT APPROVED BY THE ENGINEER'S REPRESENTATIVE.
- 4.2. STAKES SHALL BE 12 INCHES IN LENGTH, AND SHARPENED TO A POINT A ONE END.
- 4.3. INSTALL STAKES ON A 3' STAGGERED GRID PATTERN (MINIMUM SPACING, STAKES MAY BE INSTALLED CLOSER IF NEEDED).

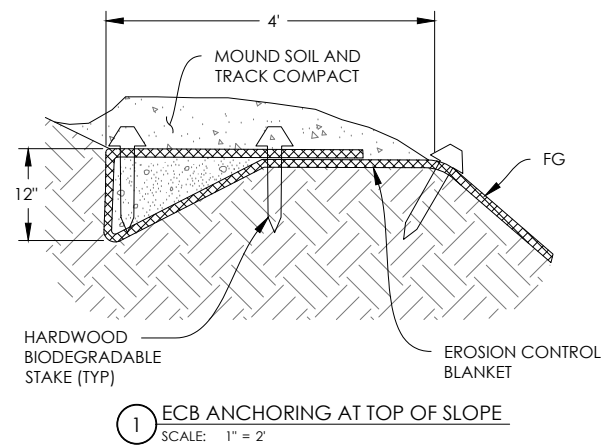
5. CHANNEL BED MATERIAL (CBM):

- 5.1. CBM SHALL BE CLEAN SUBANGULAR TO ROUNDED ROCK GENERALLY CONSISTING OF COBBLES, GRAVELS, AND SAND. THE CBM SHALL BE WELL-MIXED PRIOR TO PLACEMENT.
- 5.2. THE CONTRACTOR SHALL SUBMIT SAMPLE PHOTOS OF THE CBM MIXTURE TO THE ENGINEER'S REPRESENTATIVE FOR APPROVAL PRIOR TO PLACING ANY CBM. THE PHOTOS SHALL SHOW AT LEAST ONE CUBIC YARD OF CBM MIXTURE AND SHALL INCLUDE A YARDSTICK FOR SCALE.
- 5.3. CBM SHALL BE GENERALLY CLEAN PRIOR TO DELIVERY TO THE PROJECT SITE AND WILL BE REJECTED BY THE FIELD REPRESENTATIVE IF THE MIXTURE IS FOUND TO HAVE EXCESSIVE FINES OR ORGANICS.
- 5.4. UNSATISFACTORY CBM SHALL INCLUDE OR BE EQUIVALENT TO ASTM D2487 SOIL CLASSIFICATION GROUPS GM, GC, SW, SP, SM, SC, ML, CL, OL, MH, CH, OH, AND PT. OTHER UNACCEPTABLE SOILS WOULD INCLUDE RIP-RAP UNLESS OTHERWISE SPECIFIED HEREIN.
- 5.5. CBM SHALL HAVE THE FOLLOWING GRADATION:

SIEVE OPENING	% PASSING, BY WEIGHT
12"	100
3"	84
1"	50
3/8"	16
No. 10	5
No. 200	0

6. REBAR

- 6.1. REBAR SHALL BE NO. 6 (MIN) TO NO. 10 (MAX) STEEL REINFORCING BAR CONFORMING TO ASTM A615.
- 6.2. CUT REBAR TO ACHIEVE THE LENGTHS INDICATED ON THE DRAWINGS.
- 6.3. PRE-DRILL A HOLE SLIGHTLY SMALLER THAN THE REBAR TO PROVIDE A FIRM FRICTION CONNECTION WITH THE LOG.
- 6.4. POUND REBAR THROUGH THE PRE-DRILLED HOLES TO EXTEND 30" (MIN) BELOW THE BOTTOM OF THE LOWEST LOG (UNLESS NOTED OTHERWISE).
- 6.5. TRIM EXCESS REBAR TO BE FLUSH WITH THE LOG (BELOW THE BARK) AND FILE SHARP EDGES.



DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		



**MATERIALS
TYPICAL DETAILS**

EUER VALLEY PHASE 2 RESTORATION

NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER
223095

SCALE (AT 22" X 34")
--

SHEET
4.3

REVEGETATION NOTES:

1. GENERAL
 - 1.1. THE REVEGETATION SCOPE OF WORK INCLUDES: SOD, TOPSOIL AND ORGANIC MATTER (TDOM) SALVAGE AND REPLACEMENT, SEED BED PREPARATION, SEEDING, MULCH APPLICATION, WILLOW SALVAGE AND REPLACEMENT, WILLOW POLE, AND MAINTENANCE.
2. SEEDING
 - 2.1. ALL DISTURBED AREAS SHALL BE SEEDED AT THE RATES STATED IN THE TABLE BELOW. PRIOR TO SEEDING ENSURE COMPACTION IS LESS THAN 85%. SEED OVER SALVAGED SOD AND ORGANIC MATTER PRIOR TO PLACEMENT OF MULCH AND AS DIRECTED.
 - 2.2. SEED QUALITY
 - 2.2.1. ALL SEED SHALL CONFORM TO ALL LAWS AND REGULATIONS PERTAINING TO THE SALE AND SHIPMENT OF SEED REQUIRED BY THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE AND THE FEDERAL SEED ACT. TEST ALL SEED TWELVE (12) MONTHS PRIOR TO APPLICATION DATE. SEED TAGS MUST REFLECT THE MOST RECENT TEST DATE. SUBMIT ORIGINAL SEED TESTS BY LOT NUMBER TO ENGINEER'S REPRESENTATIVE A MINIMUM TEN (10) DAYS PRIOR TO APPLICATION FOR APPROVAL. FOLLOWING APPROVAL SEED MAY BE MIXED AND DELIVERED TO THE SITE.
 - 2.2.2. ALL SEED SHALL BE DELIVERED TO THE PROJECT SITE IN SEALED BAGS WITH PROPER LABELING. WEED SEED SHALL NOT EXCEED 0.15% OF THE PURE LIVE SEED SPECIFIED AND SHALL NOT INCLUDE ANY SEED OF CHEATGRASS (*Bromus tectorum*) OR SWEET CLOVER (*Medicago officinalis*, *M. alba*). CROP SEED SHALL NOT EXCEED 0.25%.
 - 2.2.3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER'S REPRESENTATIVE AT LEAST 72 HOURS IN ADVANCE OF ANY SEEDING.
 - 2.2.4. THE OWNER OR THEIR REPRESENTATIVE WILL REMOVE SEED LABELS FROM THE SEED BAGS AT THE TIME OF SEEDING TO VERIFY SPECIES IN THE MIX AND APPLICATION RATE IN ACCORDANCE WITH THESE SPECIAL PROVISIONS.
 - 2.2.5. SEED TAGS SHALL SHOW THE FOLLOWING INFORMATION: (1) SCIENTIFIC NAME, (2) COMMON NAME, (3) LOT NUMBER, (4) PERCENT PURITY, (5) PERCENT GERMINATION, INCLUDING HARD AND DORMANT SEED, (6) PERCENT WEED SEED, (7) PERCENT CROP SEED, AND (8) ORIGIN.
 - 2.3. BROADCAST SEED WITH BELLY GRINDERS OR EQUIVALENT AND INCORPORATE SEED TO A DEPTH OF 1/4"-1/2" WITH HAND RAKES OR APPROVED EQUIVALENT.
 - 2.4. SEED SHALL BE THE FOLLOWING TWO MIXES:
 - 2.4.1. SEED MIX 1. RIPARIAN/WETLAND

Scientific Name	Common Name/Variety	PLS lbs./acre
<i>Bromus carinatus</i>	California brome	3.00
<i>Deschampsia cespitosa</i>	tufted hairgrass	0.25
<i>Elymus glaucus</i>	blue wildrye, "Stanislaus"	3.00
<i>Geum macrophyllum</i>	big-leaved avens	0.50
<i>Elymus trachycaulus</i>	slender wheatgrass, "Revenue"	2.00
<i>Hordeum brachyantherum</i>	meadow barley, from 6,000' and above	2.00
<i>Leymus triticoides</i>	creeping wildrye "Shoshone"	3.00
<i>Lupinus lepidus</i>	Pacific lupine	2.00
<i>Lupinus polyphyllus</i>	Tahoe lupine	3.00
<i>Poa pratensis*</i>	Kentucky bluegrass	2.00
<i>Potentilla gracilis</i>	cinquefoil	0.50
<i>Rosa woodsii</i>	Woods' rose	0.50
<i>Sidalcea oregana</i>	Oregon checker mallow	0.50
TOTAL		22.25

*LOCAL COLLECTIONS ONLY

2.4.2. SEED MIX 2. UPLAND

Scientific Name	Common Name/Variety	PLS lbs./acre
<i>Achillea millefolium</i>	yarrow	0.10
<i>Artemisia tridentata</i> ssp. <i>veseyana</i>	Mtn. sagebrush	0.50
<i>Bromus carinatus</i>	California brome	3.00
<i>Elymus elymoides</i>	squirreltail	4.00
<i>Elymus trachycaulus</i>	slender wheatgrass, 'Pryor'	2.00
<i>Ericameria nauseosa</i>	rabbitbrush	0.50
<i>Eriogonum umbellatum</i>	sulfur buckwheat	1.00
<i>Lupinus lepidus</i>	Pacific lupine	3.00
<i>Poa secunda</i>	Sandberg bluegrass, 'Sherman'	1.00
<i>Purshia tridentata</i>	antelope bitterbrush	2.00
<i>Ribes cereum</i>	wax currant	0.50
<i>Rosa woodsii</i>	Woods' rose	0.50
<i>Wyethia mollis</i>	mule's ears	0.50
TOTAL		18.60

2.4.3. APPLY THE SPECIFIED MIX WHERE INDICATED ON THE PLANS.

3. WILLOW SALVAGE, STORAGE, AND REPLANTING
 - 3.1. SALVAGE NATIVE WILLOW CLUMPS AS STAKED IN THE FIELD BY THE ENGINEERING REPRESENTATIVE. REMOVE AND RE-PLANT SELECTED WILLOWS CONCURRENT WITH CONSTRUCTION AS MUCH AS PRACTICABLE. PRIOR TO REMOVAL, PRUNE WILLOWS SO THAT BRANCHES INCLUDE TWO TO THREE NODES, BUT DO NOT EXCEED SIX (6) INCHES IN LENGTH. CUTS SHALL BE CLEAN, LEAVE NO FRAYED BARK, AND BE MADE 1/2 INCH ABOVE THE NODE. REMOVE PLANTS BY EXCAVATING AROUND THE ROOT ZONE WITH A BACKHOE BUCKET, OR OTHER EQUIPMENT APPROVED BY THE TRWC. AS MUCH OF THE ROOT BALL AS FEASIBLE SHALL BE REMOVED INTACT. PRUNE DAMAGED ROOTS. BURLAP MAY BE USED TO WRAP AND PROTECT THE ROOT ZONE DURING TRANSPORT.
 - 3.2. ONE WILLOW CLUMP SHALL BE DEFINED AS HAVING AN APPROXIMATELY 3'X3'X3' ROOTMASS WITH BRANCHES PREPARED AS DESCRIBED BELOW.
 - 3.3. STORE ALL WILLOW CLUMPS WITH THE ROOTMASS IN A MOIST TRENCH.
 - 3.4. LEAVE SIDE BRANCHES INTACT FOR ALL WILLOW BRANCHES USED FOR FASCINES, AND DEBRIS JAMS. ALL MATERIALS SHALL BE CUT FROM HEALTHY, LIVE, DORMANT BRANCHES OF WILLOW (SALIX LEMMONII) AND SHALL BE TAKEN FROM SUITABLE MATERIALS WITHIN THE PROJECT AREA AS IDENTIFIED BY THE TRWC. THIS WORK SHALL TAKE PLACE LATE IN THE FALL AFTER THE ON-SITE WILLOWS HAVE GONE DORMANT. MATERIAL SHALL NOT BE CUT MORE THAN SEVEN DAYS PRIOR TO INSTALLATION UNLESS APPROVED BY THE ENGINEERING REPRESENTATIVE, AND STORED IN COOL, SHADED, MOIST CONDITIONS.
 - 3.5. RE-USE DEAD MATERIAL AS SLASH. USE LIVE BRANCHES AND POLES FOR THE FASCINES, DEBRIS JAMS, AND FENCES.
 - 3.6. MINIMIZE HANDLING OF LIVE MATERIAL.
 - 3.7. PRECISE LOCATIONS FOR RE-PLANTING WILLOW CLUMPS SHALL BE DETERMINED BY THE ENGINEER'S REPRESENTATIVE. EXCAVATE PLANTING HOLES 12 INCHES BELOW THE ROOT ZONE AND 12 INCHES WIDER ON BOTH SIDES OF THE ROOT MASS. LOOSEN SOILS IN THE BOTTOM AND ALONG THE SIDES OF THE HOLE AND PLACE THE PLANT IN THE HOLE. BACKFILL WITH THE EXCAVATED MOIST SOIL SO THAT THE ROOT BALL IS TWO TO FOUR INCHES BELOW EXISTING GRADE. TAMP SOIL AND THOROUGHLY WATER IMMEDIATELY FOLLOWING PLANTING.
4. WILLOW POLES
 - 4.1. POLES SHALL BE STRAIGHT, WITH ALL LEAVES REMOVED FROM THE STEMS. ALL CUTS SHALL BE CLEAN WITHOUT FRAYED ENDS. CUT BOTTOMS ON A 45° ANGLE. POLES SHALL BE AT MINIMUM FIVE-FT. IN LENGTH OR AS DIRECTED. POLES SHALL BE A MINIMUM OF 0.75 INCH AND NO GREATER THAN 1.5 INCH IN DIAMETER. INSTALL AS SHOWN ON THE PLANS.
 - 4.2. STORE ALL POLES WITH THE THICK ENDS IN WATER.
5. SOD, TOPSOIL, ORGANIC MATTER HARVEST
 - 5.1. SOD
 - 5.1.1. SALVAGE SOD CONSISTS OF ABOVE GROUND AND BELOW GROUND PLANT MATERIALS INCLUDING LEAVES AND ROOTS, AND THE SOIL BOUND BY THE ROOT MASS, SALVAGED TO A DEPTH OF EIGHT TO TEN INCHES IN A COHESIVE BLOCK. MATERIAL MUST BE WATERED BEFORE IT IS MOVED.
 - 5.2. TDOM
 - 5.2.1. MATERIAL THAT CANNOT BE MOVED IN A CONTIGUOUS MANNER AS SOD SHALL BE SALVAGED AND RE-APPLIED AS ORGANIC MATTER. SALVAGED TOPSOIL AND ORGANIC MATTER CONSISTS OF A MIXTURE OF SOIL, VEGETATION, AND OTHER ORGANIC MATTER SALVAGED FROM THE UPPER LAYER OF THE EXISTING SOIL THAT TYPICALLY IS RICH IN ORGANIC MATTER AND VEGETATION AND USUALLY DISTINCT IN COLOR FROM DEEPER LAYERS OF SOIL. FOR THIS PROJECT, AN UNCONSOLIDATED BULK MATERIAL MIXTURE CONSISTING OF ROOTS AND SOIL SHALL BE CONSIDERED TOPSOIL AND ORGANIC MATTER (GENERALLY THE TOP 6" BELOW EXISTING GROUND).
6. MULCH AND MULCH PLACEMENT
 - 6.1. WOOD CHIPS OR TUB GRINDINGS MAY BE PURCHASED OR PROCESSED ON SITE. PARTICLE SIZE SHALL BE BETWEEN 1/2 INCH AND TWO INCHES IN LENGTH AND NOT LESS THAN 1/2 INCH IN WIDTH AND 0.125 INCHES IN THICKNESS, WITH AT LEAST 95% CONFORMING TO SPECIFIED SIZES.
 - 6.2. ALL MATERIAL SHALL BE CLEAN FROM ROCK, GARBAGE, WEEDS, OR OTHER DELETERIOUS MATERIAL. MULCH MAY ALTERNATIVELY BE OBTAINED FROM CONIFEROUS AND WILLOW MATERIAL SALVAGED AND CHIPPED ON SITE TO THE SPECIFIED SIZES.
 - 6.3. APPLY WOOD CHIP MULCH TO ALL BARE SOILS TO A DEPTH OF 0.25 TO 0.5 INCHES, AND TO ACHIEVE 85% COVER AND AS DIRECTED.
7. SLASH
 - 7.1. SLASH SHALL BE SMALL TREES REMOVED DURING CLEARING AND GRUBBING (LESS THAN 6" DBH), TRIMMED BRANCHES OR OTHER UNUSABLE PORTIONS OF TREES REMOVED FROM ONSITE, OR UNUSED WILLOW BRANCHES AND CUTTINGS.
 - 7.2. USE ALL SLASH TO THE MAXIMUM EXTENT PRACTICABLE TO ELIMINATE OFF-HAUL FROM THE PROJECT SITE.
 - 7.3. IF THERE IS NOT ENOUGH SLASH SOURCED FROM ON SITE TO TREAT ALL OF THE AREA SHOWN ON THE DRAWINGS, DO NOT IMPORT ADDITIONAL SLASH AND PRIORITIZE SLASH PLACEMENT PER THE DIRECTION OF THE ENGINEER'S REPRESENTATIVE.
8. PLANT ESTABLISHMENT PERIOD
 - 8.1. MAINTAIN ALL AREAS FOR ONE YEAR SO THAT THERE IS NO EVIDENCE OF SILL OR SHEET EROSION. THE MAINTENANCE PERIOD BEGINS ON THE DATE FOLLOWING THE LAST INSTALLATION. MAINTENANCE MAY INCLUDE RE-APPLICATION OF SEED AND MULCH.
 - 8.2. DURING THE ONE YEAR MAINTENANCE PERIOD, SEEDED AREAS SHALL BE KEPT FREE FROM NOXIOUS AND INVASIVE WEEDS AT ALL TIMES. TRWC WILL IDENTIFY NOXIOUS WEEDS REQUIRING IMMEDIATE REMOVAL. IF AT ANY TIME IT IS DEEMED THAT PROPER MAINTENANCE IS NOT BEING PERFORMED, THE COUNTDOWN FOR THE ONE YEAR MAINTENANCE PERIOD SHALL BE STOPPED AND NOT RESUMED UNTIL THE PROJECT IS BROUGHT UP TO THE SPECIFICATIONS AND PROPER MAINTENANCE IS RESUMED.
9. PERFORMANCE STANDARD AND ACCEPTANCE
 - 9.1. REVEGETATED AREAS WILL BE INSPECTED BY THE ENGINEER'S REPRESENTATIVE AT COMPLETION OF INSTALLATION AND ACCEPTED SUBJECT TO COMPLIANCE WITH SPECIFIED MATERIALS AND INSTALLATION REQUIREMENTS.
 - 9.2. FOLLOWING ONE FULL GROWING SEASON AFTER TREATMENT, CONTRACTOR SHALL BE RESPONSIBLE FOR A 100% SURVIVAL OF WILLOW POLES AND TRANSPLANTED CLUMPS.

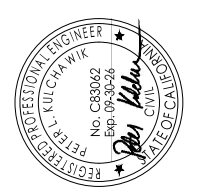
SOD NOTES:

- 1.0 HARVEST
 - 1.1. SOD SHALL BE HARVESTED FROM THE SITE AT THE LOCATIONS SHOWN ON THE DRAWINGS (IN GENERAL, ALL AREAS DOMINATED BY HERBACEOUS VEGETATION WITHIN THE GRADING LIMITS) AND AS STAKED IN THE FIELD BY TRWC.
 - 1.2. THOROUGHLY WET ALL SOD PRIOR TO HARVEST, BUT DO NOT OVERSATURATE.
 - 1.1. HARVESTED SOD SHALL CONSIST OF ABOVE GROUND AND BELOW GROUND PLANT MATERIALS INCLUDING LEAVES AND ROOTS, AND THE SOIL BOUND BY THE ROOT MASS.
 - 1.2. SOILS MUST BE MOIST TO ROOT DEPTH PRIOR TO SALVAGING.
 - 1.3. REMOVE IN PIECES AS LARGE AS PRACTICABLE (NO LESS THAN 2' WIDTH), RESULTING IN CLEAN, VERTICAL EDGES. SOD SHALL BE SCALPED FROM THE ORIGINAL GROUND SURFACE TO A DEPTH OF NO LESS THAN EIGHT (8) INCHES, AS MEASURED FROM THE ROOT CROWN.
 - 1.4. SOD SHALL BE LIFTED FROM THE SUB-GRADE USING HAND TOOLS OR MACHINERY EQUIPPED WITH A FRONT-END BUCKET AS APPROVED.
 - 1.5. WORK SHALL PROGRESS IN SUCH A MANNER AS TO MINIMIZE THE DISTURBANCE OF THE SOIL BOUND BY THE ROOT MASS AND THE CONTIGUOUS INTEGRITY OF THE SOD SECTION.
 - 1.6. NON-COHESIVE MATERIAL THAT CANNOT BE MOVED IN A CONTIGUOUS MANNER SHALL BE SALVAGED AND RE-APPLIED AS ORGANIC MATTER AND MAY BE ANCHORED WITH EROSION CONTROL NETTING (WHERE SPECIFIED ON PLANS).
 - 1.7. STOCKPILE COHESIVE SOD AND TDOM SEPARATELY.
2. STORAGE
 - 2.1. MINIMIZE STORAGE AND HANDLING. THE CONTRACT SHALL ATTEMPT TO SCHEDULE THE WORK SUCH THAT SOD MAY BE PLACED AS SOON AS PRACTICABLE AFTER HARVEST.
 - 2.2. IF STORAGE IS REQUIRED DO NOT STACK; STORE IN A PROTECTED SHADED LOCATION APPROVED BY TRWC OR THE ENGINEER'S REPRESENTATIVE AND WATER REGULARLY TO MAINTAIN THE HEALTH OF THE SOD.
3. PLACEMENT
 - 3.1. INSTALL COHESIVE SOD STRIPS AT THE LOCATIONS AND TO THE DIMENSIONS SHOWN ON THE DRAWINGS. HARVEST AND PLACE SOD IN CONTIGUOUS PIECES TO THE MAXIMUM EXTENT POSSIBLE.
 - 3.2. PRIOR TO SOD PLACEMENT SOIL SHALL BE DECOMPACTED TO A MINIMUM OF 80% AND A MAXIMUM OF 85% AT +/- 2% OF OPTIMUM MOISTURE CONTENT PER ASTM D1557.
 - 3.3. OVER-EXCAVATE AREAS FOR SOD INSTALLATION AS NEEDED SO THAT ALL MATERIAL, INCLUDING CROWNS OF SOD, ARE AT FINISH GRADE, APPROXIMATELY EIGHT INCHES BELOW THE FINAL PLAN GRADE AS STAKED IN THE FIELD.
 - 3.4. PLANT INTO MOIST SOIL SUCH THAT EDGES SNUGLY ADJOIN FOR ALL ADJACENT SECTIONS. CHINK WITH NATIVE TOPSOIL (AND/OR SMALL, BROKEN PIECES OF SOD) SO THAT THE EDGES OF THE SOD ARE WELL COVERED.
 - 3.5. FINAL ELEVATION OF SOD CROWNS SHALL MATCH THE PLAN ELEVATION. THOROUGHLY WATER SOD.
 - 3.6. MAINTAIN SOD IN A MOIST, HEALTHY CONDITION AS DIRECTED BY THE ENGINEER'S REPRESENTATIVE UNTIL ESTABLISHED ACCORDING TO THE ONE-YEAR WARRANTY PERIOD.

Balance Hydrologics, Inc.
 12020 Donner Pass Road, Suite B1
 Truckee, CA 96161
 Tel: (530) 550-9776
 www.balancehydro.com



DESIGNED BY	DATE	BY	SUBMITALS / REVISIONS
PK	12-18-23	PK	35% DESIGN
DRAWN BY	10-11-24	PK	65% DESIGN
PK & CB	06-11-25	PK	90% DESIGN
CHECKED BY	05-08-26	PK	100% DESIGN
TA & DS			
IN CHARGE			
PK			
DATE	05-08-2026		



REVEGETATION NOTES

EUER VALLEY PHASE 2 RESTORATION

NEVADA COUNTY, CALIFORNIA

PROJECT NUMBER
223095
SCALE (AT 22" X 34")

SHEET
5.0