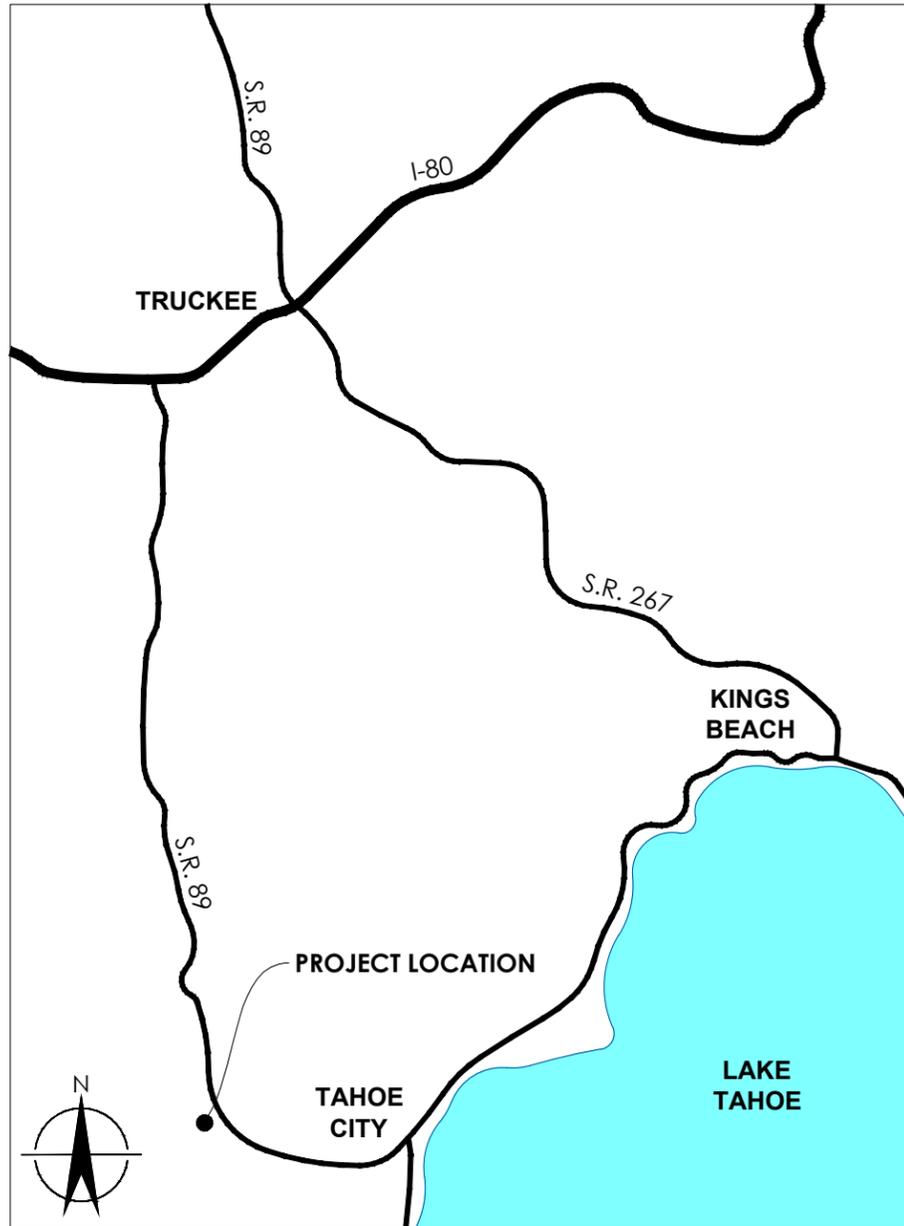


TRUCKEE RIVER FIRST 4-MILE STREAMBANK STABILIZATION AND RESTORATION

PLACER COUNTY, CALIFORNIA

LOCATION MAP



SHEET INDEX

- SHEET 1.0: COVER SHEET
- SHEET 2.0: SYMBOLS AND GENERAL NOTES
- SHEET 3.0: SITE OVERVIEW MAP
- SHEET 3.1: SITE 1: RAMPART
- SHEET 3.2: SITE 2: FOOTBRIDGE
- SHEET 3.3: SITE 3: FIR CRAGS BRIDGE
- SHEET 4.0: LOG AND SIGN DETAILS
- SHEET 4.1: PLANTING DETAILS

PROJECT TEAM

CLIENT / REVEGETATION SPECIALIST
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 JEANNETTE HALDERMAN
 P.O. BOX 8568
 TRUCKEE, CALIFORNIA 96162
 TEL. (530) 550-8760

SITE CIVIL ENGINEER/
 GEOMORPHOLOGIST
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|--------------|------------|----|------------------------|
| P. KULCHAWIK | 2011.04.02 | PK | CONCEPTUAL PLANS |
| P. KULCHAWIK | 2011.06.25 | PK | 90% DESIGN PLANS |
| CHECKED BY | | | |
| D. SHAW | | | |
| IN CHARGE | | | |
| E. BALLMAN | | | |
| DATE | | | |

COVER SHEET
 TRUCKEE RIVER FIRST 4-MILE
 STREAMBANK STABILIZATION AND RESTORATION
 PLACER COUNTY, CALIFORNIA
 TRUCKEE RIVER WATERSHED COUNCIL

PROJECT NUMBER
 213111
 SCALE
 --
 SHEET

1.0

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LEGEND:

| | |
|---|--|
| EXISTING MAJOR CONTOUR - 10 FT | |
| EXISTING MINOR CONTOUR - 1 FT | |
| TOP OF BANK | |
| STAKING LINE | |
| PROPERTY LINE | |
| STAGING AREA | |
| CONSTRUCTION WORK LIMIT | |
| PRESERVATION (ESA) FENCING | |
| TURBIDITY CURTAIN | |
| CONTROL POINT | |
| LOGS | |
| BOULDERS | |
| SIGN | |
| TREE | |
| EXISTING BOULDER-ARMORED BANKS | |
| EXISTING CONCRETE PAVERS | |
| PROPOSED (SALVAGED) CONCRETE PAVERS | |
| PROPOSED DG TRAIL | |
| WELL-GRADED GRAVEL MIXTURE | |
| REBUILD FLOODPLAIN WITH COMPACTED FILL MATERIAL AND REVEGETATE WITH SOD | |
| NATIVE SOIL | |
| REVEGETATE WITH CONTAINER PLANTS AND/OR SEED MIX | |
| SOD HARVEST AND REPLACEMENT | |

ABBREVIATIONS:

| | |
|---------|--------------------------------|
| ' | FEET |
| # | NUMBER |
| APPROX. | APPROXIMATE |
| DIA | DIAMETER |
| DG | DECOMPOSED GRANITE |
| E | EASTING |
| EG | EXISTING GRADE |
| EOP | EDGE OF PAVEMENT |
| ESA | ENVIRONMENTALLY SENSITIVE AREA |
| EX | EXISTING |
| FES | FLARED END SECTION |
| FG | FINISH GRADE |
| FT | FEET |
| INV | INVERT |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| N | NORTHING |
| NTS | NOT TO SCALE |
| PROP | PROPOSED |
| RCP | REINFORCED CONCRETE PIPE |
| S.R. | STATE ROUTE |
| TYP | TYPICAL |
| USACE | US ARMY CORPS OF ENGINEERS |
| USFS | US FOREST SERVICE |
| WSE | WATER SURFACE ELEVATION |

GENERAL NOTES:

1. 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.
2. ALL PARTS OF THIS PROJECT 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 OR OTHER APPROVALS, THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCE NOTICE DIRECTLY TO THE ENGINEER'S REPRESENTATIVE.
3. ALL AREAS OF SOIL PREPARATION, EARTHWORK, AND PLANTING ARE SUBJECT TO IN-FIELD VERIFICATIONS AND ADJUSTMENTS AS DIRECTED BY THE ENGINEER'S REPRESENTATIVE.
4. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING 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.
5. THE CONTRACTOR SHALL INSTALL PRESERVATION FENCING, STAKE AND FLAG THE LIMITS OF GRADING, AND INSTALL PRESERVATION FENCING AS PRESCRIBED IN THE SPECIFICATIONS AT LOCATIONS SHOWN ON THE DRAWINGS BEFORE THE START OF ANY OTHER SITE WORK INCLUDING DEMOLITION, CLEARING AND GRUBBING, AND EARTHWORK. REFER TO THE SPECIFICATIONS FOR ADDITIONAL PRESERVATION REQUIREMENTS AND INFORMATION.
6. 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.
7. 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.
8. ALL LUBRICATION, REFUELING, OR MAINTENANCE OF CONSTRUCTION VEHICLES SHALL BE CONDUCTED WITHIN APPROVED CONSTRUCTION STAGING AREAS AND BE A MINIMUM OF 20 FEET AWAY FROM EXISTING CHANNELS.
9. STAGING AREAS MUST BE CONTAINED BY MEANS DESCRIBED IN THE EROSION CONTROL PLAN TO CONFINE THE AREA AND PREVENT CONTAMINANTS FROM ENTERING NEARBY CHANNELS.
10. ADD 2,190,000 FEET TO ALL NORTHINGS AND 7,070,000 FEET TO ALL EASTINGS TO OBTAIN APPROXIMATE GRID COORDINATES IN CALIFORNIA STATE PLANE ZONE II.
11. PROPERTY BOUNDARIES WERE PROVIDED BY USFS AND ARE APPROXIMATE.
12. WORK DEPICTED DOES NOT REQUIRE DEWATERING. THE CONTRACTOR IS REQUIRED TO PLACE MATERIALS AS DEPICTED INCLUDING PLACEMENT BELOW WATER.
13. THE CONTRACTOR IS REQUIRED TO DEVELOP AN EROSION CONTROL PLAN. THE CONTRACTOR SHALL SUBMIT THE PLAN TO TRWC NO LATER THAN 10 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION FOR APPROVAL.
14. ACCESS TO THE RIVER SHALL BE STRICTLY CONTROLLED. ACCESS TO THE RIVER (I.E. CROSSING A TOP OF BANK LINE IN THE DIRECTION OF THE ACTIVE CHANNEL) SHALL BE LIMITED TO PORTIONS OF THE BANK ENCLOSED BY A TURBIDITY CURTAIN.
15. THE CONTRACTOR SHALL TAKE ALL ACTIONS NECESSARY TO PREVENT INTRODUCTION AND SPREAD OF NON-NATIVE INVASIVE PLANT SPECIES WITHIN THE CONSTRUCTION LIMITS, INCLUDING, BUT NOT LIMITED TO MAINTAINING WEED-FREE EQUIPMENT AND TOOLS, AND USING WEED-FREE MATERIALS. SEE SPECIFICATION APPENDIX A - PREVENTING THE SPREAD OF INVASIVE PLANTS: BEST MANAGEMENT PRACTICES FOR LAND MANAGERS, 3RD EDITION, AND WWW.CAL-IPC.ORG



| DESIGNED BY | DATE | BY | SUBMITTALS / REVISIONS |
|--------------|----------|----|------------------------|
| P. KULCHAWIK | 20140205 | PK | CONCEPTUAL PLANS |
| P. KULCHAWIK | 20140625 | PK | 90% DESIGN PLANS |
| CHECKED BY | | | |
| D. SHAW | | | |
| IN CHARGE | | | |
| E. BALLMAN | | | |
| DATE | | | |

SYMBOLS AND GENERAL NOTES
 TRUCKEE RIVER FIRST 4-MILE
 STREAMBANK STABILIZATION AND RESTORATION
 PLACER COUNTY, CALIFORNIA
 TRUCKEE RIVER WATERSHED COUNCIL

PROJECT NUMBER
213111
 SCALE
--
 SHEET

2.0

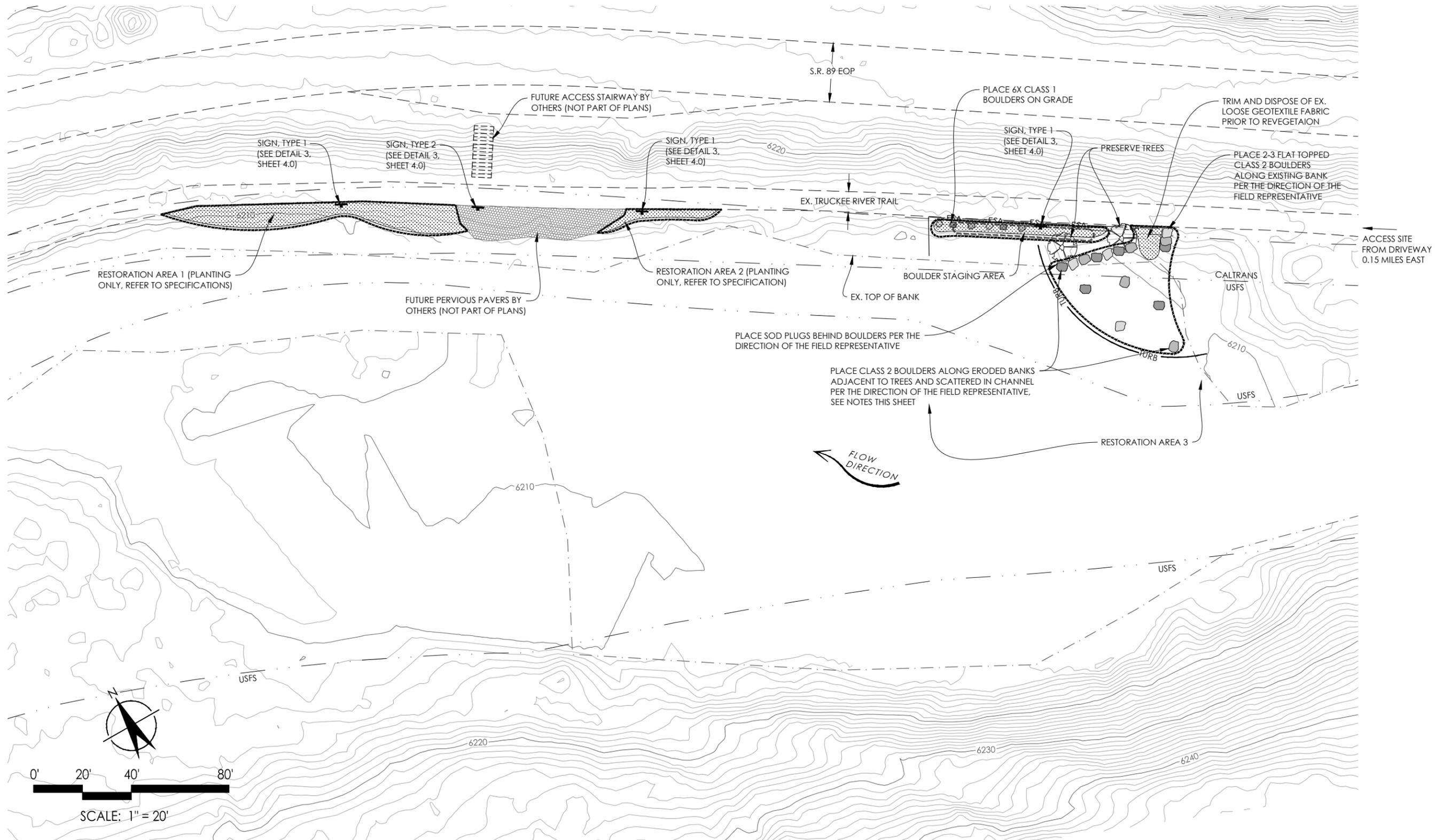
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|--------------|----|------------|------------------------|
| P. KULCHAWIK | PK | 2011.02.05 | CONCEPTUAL PLANS |
| P. KULCHAWIK | PK | 2011.06.25 | 90% DESIGN PLANS |
| CHECKED BY | | | |
| D. SHAW | | | |
| IN CHARGE | | | |
| E. BALLMAN | | | |
| DATE | | | |

SITE OVERVIEW MAP
 TRUCKEE RIVER FIRST 4-MILE
 STREAMBANK STABILIZATION AND RESTORATION
 PLACER COUNTY, CALIFORNIA
 TRUCKEE RIVER WATERSHED COUNCIL

PROJECT NUMBER
213111
 SCALE
1" = 300'
 SHEET



NOTES:

1. ACCESS SITE 1 BY TRUCKEE RIVER TRAIL. ACCESS TRUCKEE RIVER TRAIL FROM DRIVEWAY 0.15 MILES EAST OF RESTORATION AREA 3. SEE SHEET 3.0 FOR SUGGESTED ROUTE.
2. EXISTING TREES ARE SHOWN AS A POINT OF REFERENCE FOR PLACEMENT OF STABILIZATION FEATURES. NOT ALL EXISTING TREES ARE SHOWN, AND ALL TREES SHALL BE PRESERVED.
3. CLASS 2 BOULDER SHOWN ON THIS SHEET SHALL BE MECHANICALLY PRESSED INTO THE GROUND TO A MINIMUM DEPTH OF 6 INCHES.

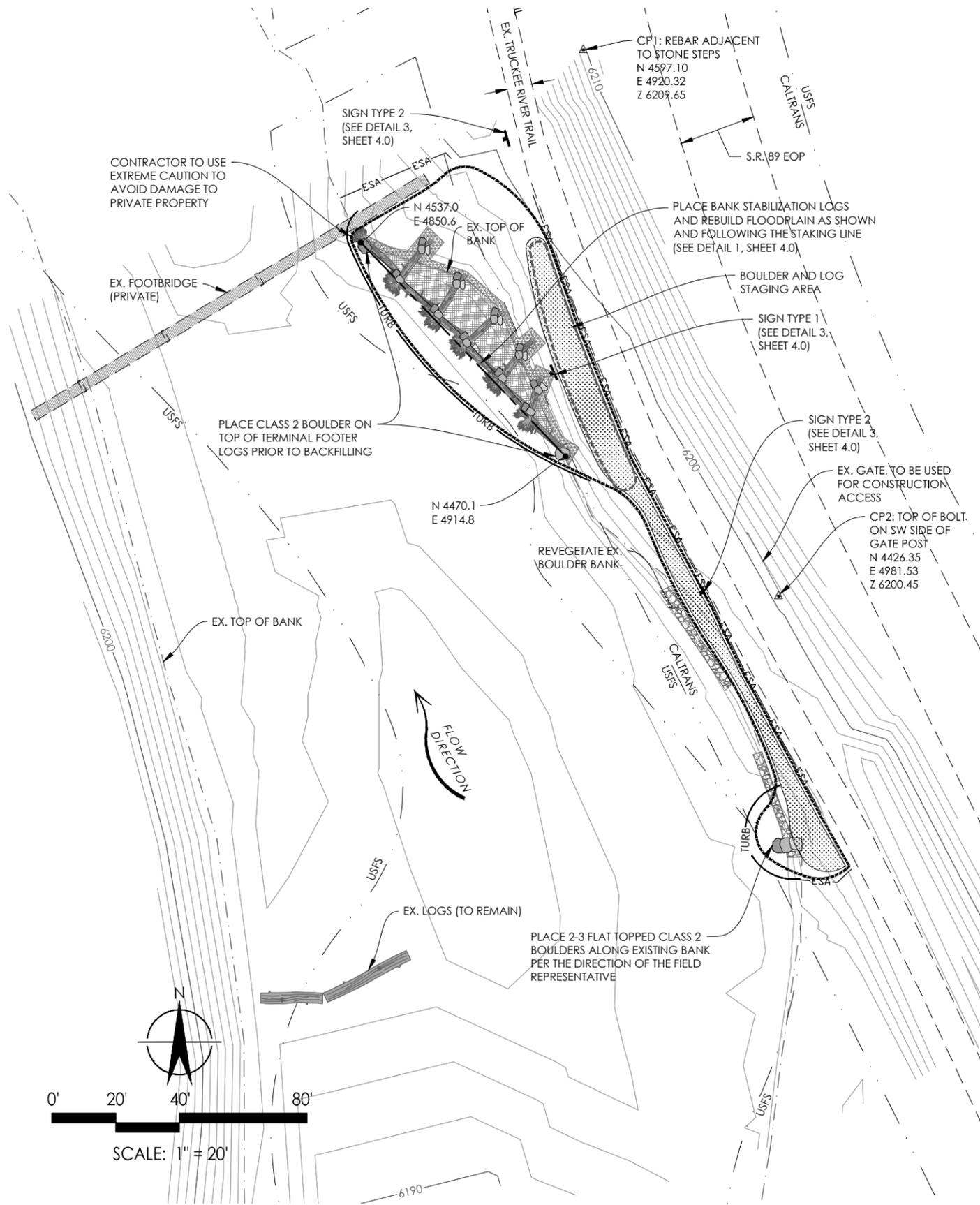
SITE 1: RAMPART

RESTORATION AREAS 1, 2, & 3 SCALE: 1" = 20'

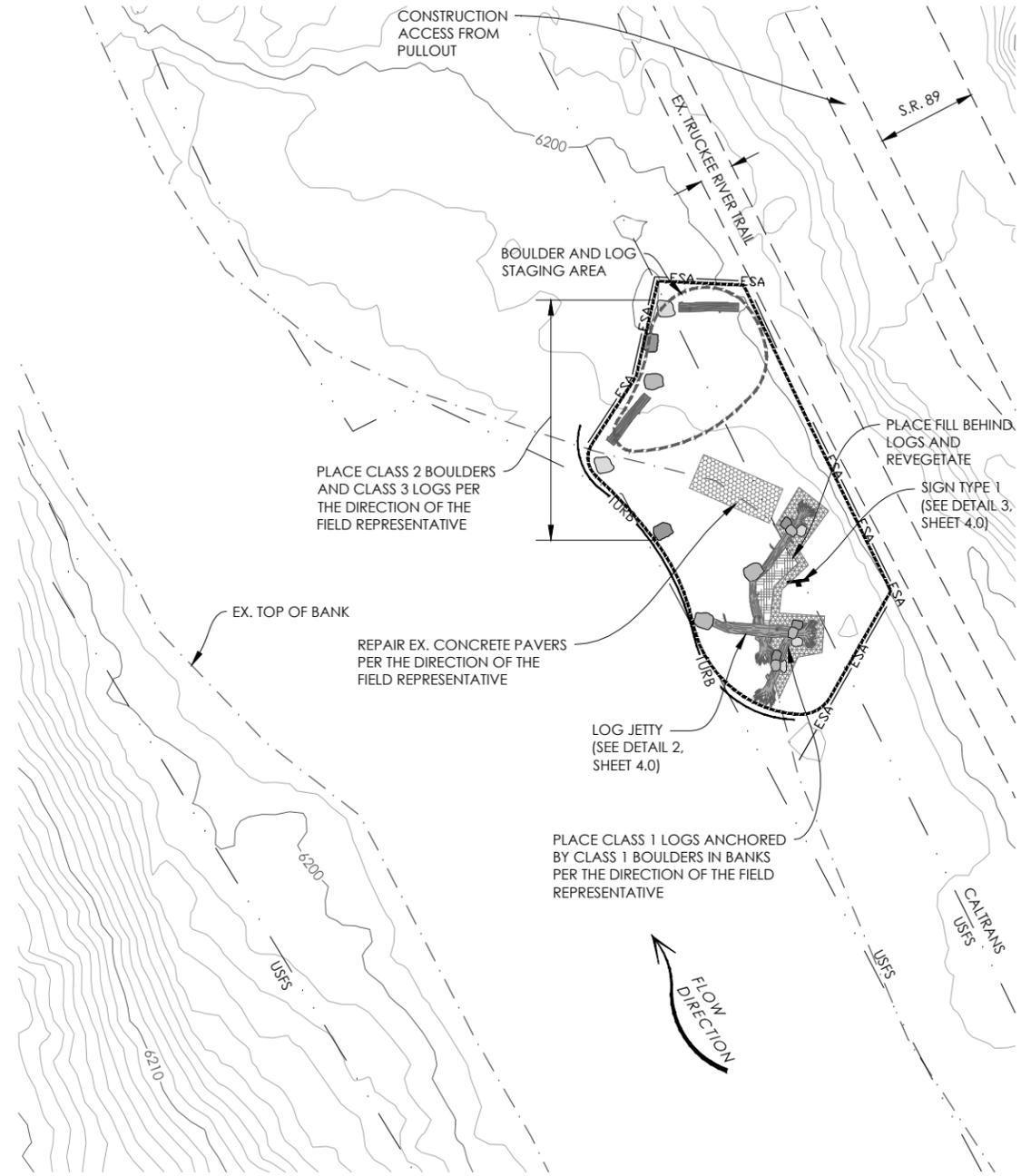
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| P. KULCHAWIK | 20140205 | PK | CONCEPTUAL PLANS |
| DRAWN BY | 20140625 | PK | 90% DESIGN PLANS |
| CHECKED BY | | | |
| IN CHARGE | | | |
| E. BALLMAN | | | |
| DATE | | | |

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CA:\213111\FIRST FOUR MILE\213111_SHEETS\213111-032-SITE2.DWG



SITE 2: FOOTBRIDGE
RESTORATION AREA 5
SCALE: 1" = 20'



SITE 2: FOOTBRIDGE
RESTORATION AREA 4
SCALE: 1" = 20'



Balance Hydrologics, Inc.
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| P. KULCHAWIK | 20140625 | PK | 90% DESIGN PLANS |
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| DATE | | | |

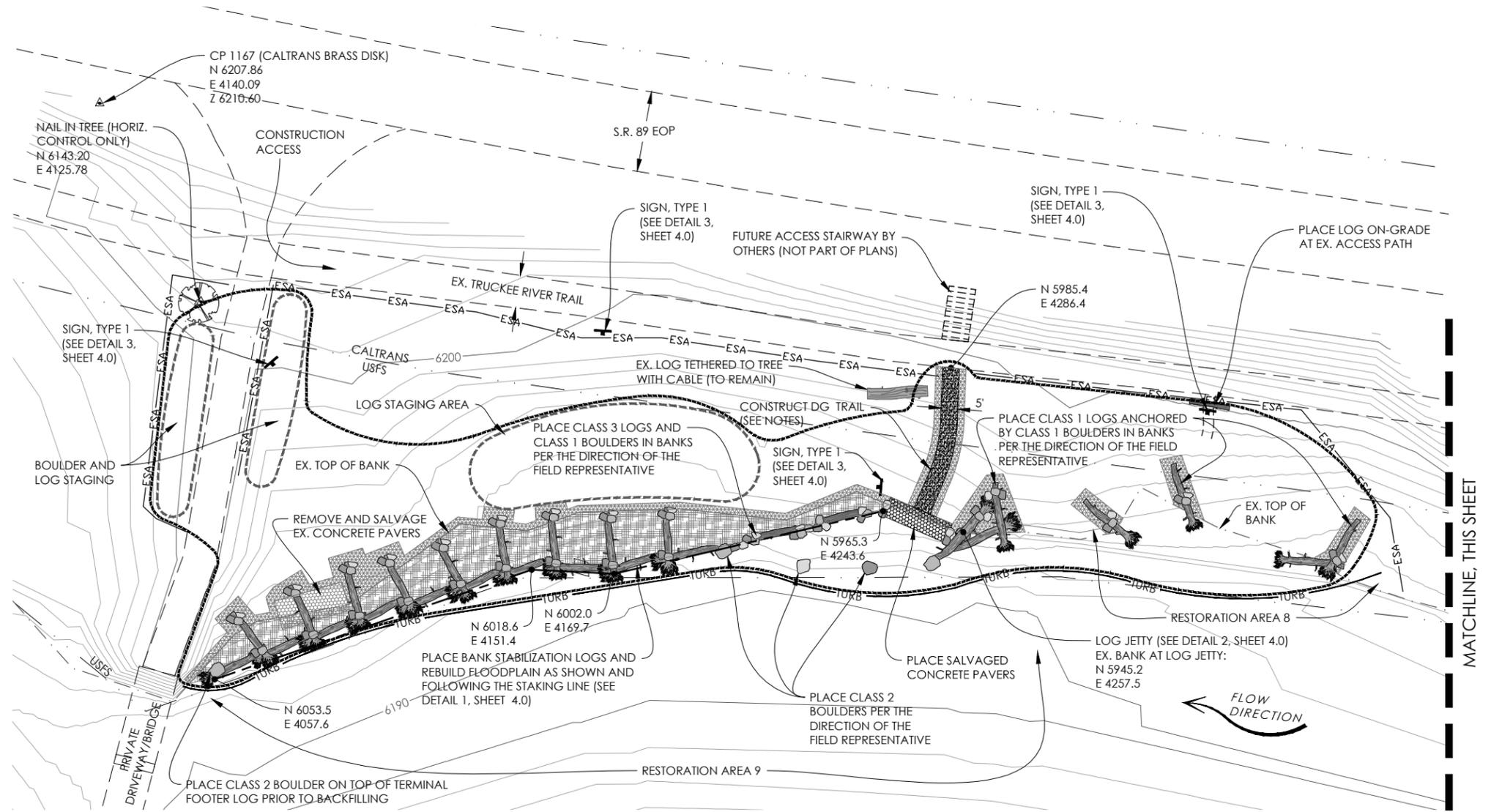
SITE 2: FOOTBRIDGE
TRUCKEE RIVER FIRST 4-MILE
STREAMBANK STABILIZATION AND RESTORATION
PLACER COUNTY, CALIFORNIA
TRUCKEE RIVER WATERSHED COUNCIL

| | |
|----------------|----------|
| PROJECT NUMBER | 213111 |
| SCALE | 1" = 20' |
| SHEET | |

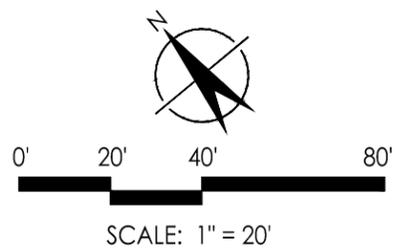
| DESIGNED BY | DATE | BY | SUBMITTALS / REVISIONS |
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| P. KULCHAWIK | 20140205 | PK | CONCEPTUAL PLANS |
| P. KULCHAWIK | 20140625 | PK | 90% DESIGN PLANS |
| D. SHAW | | | |
| E. BALLMAN | | | |
| | | | |

SITE 3: FIR CRAGS BRIDGE
 TRUCKEE RIVER FIRST 4-MILE
 STREAMBANK STABILIZATION AND RESTORATION
 PLACER COUNTY, CALIFORNIA
 TRUCKEE RIVER WATERSHED COUNCIL

| | |
|----------------|----------|
| PROJECT NUMBER | 213111 |
| SCALE | 1" = 20' |
| SHEET | |

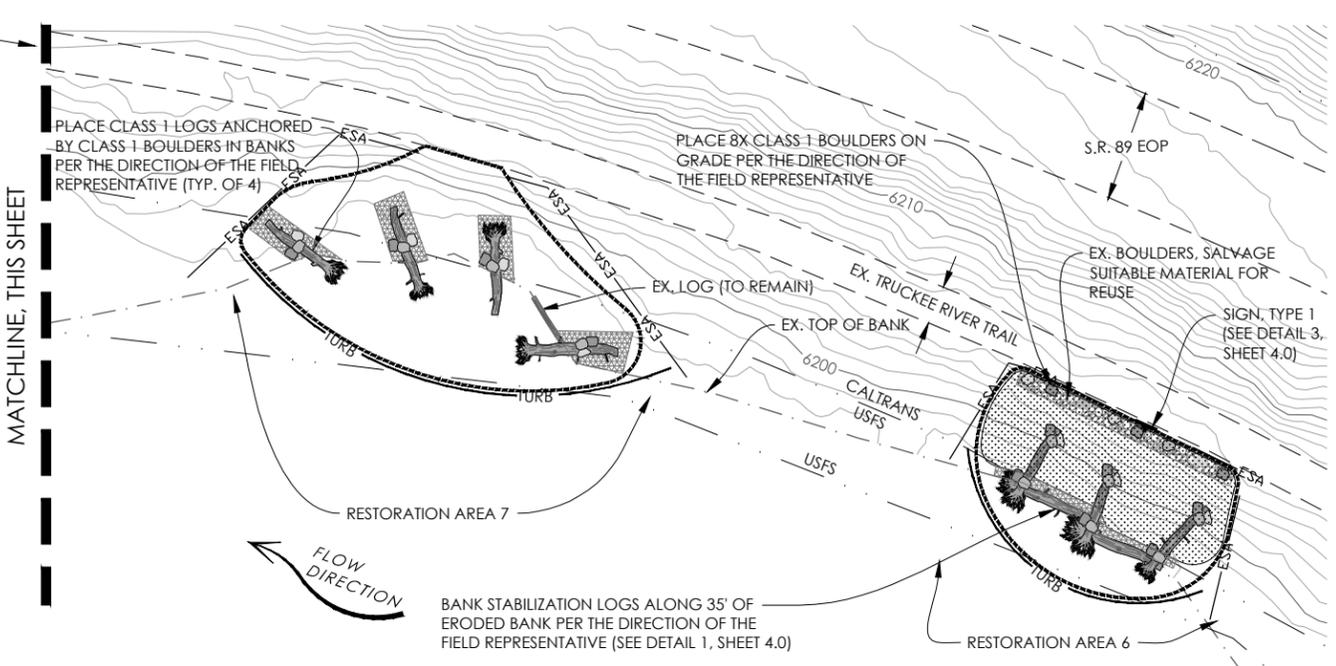


SITE 3: FIR CRAGS BRIDGE
 RESTORATION AREAS 8, & 9
 SCALE: 1" = 20'

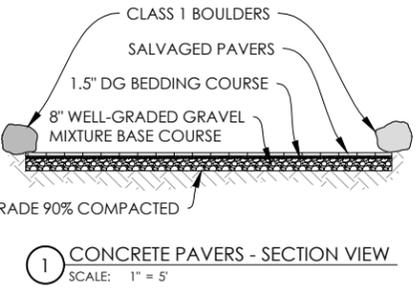


NOTE:
 1. CP 1167 FOR HORIZONTAL AND VERTICAL CONTROL. NAIL IN TREE FOR HORIZONTAL CONTROL ONLY.

DG TRAIL NOTES:
 1. TRENCH THE TRAIL AREA TO A DEPTH OF 6".
 2. COMPACT THE SUBGRADE TO 85%.
 3. BACKFILL THE TRENCH WITH DG AND COMPACT UNTIL FINISHED SURFACE IS UNYIELDING.

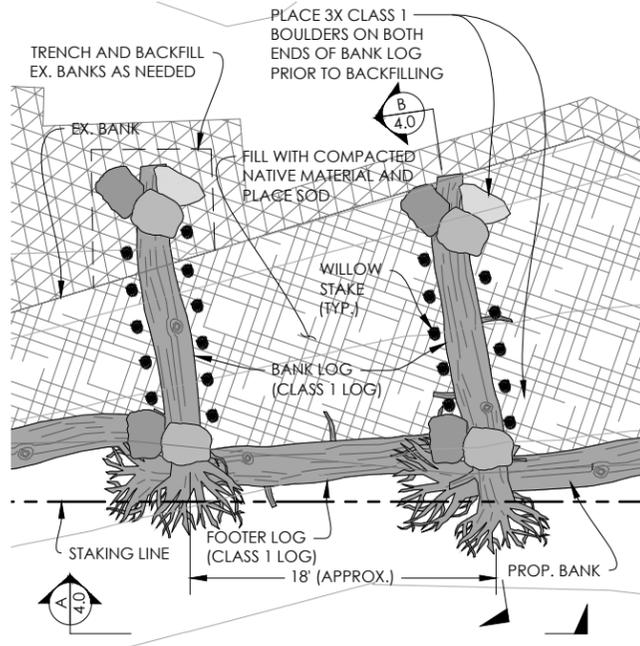


SITE 3: FIR CRAGS BRIDGE
 RESTORATION AREAS 6 & 7
 SCALE: 1" = 20'

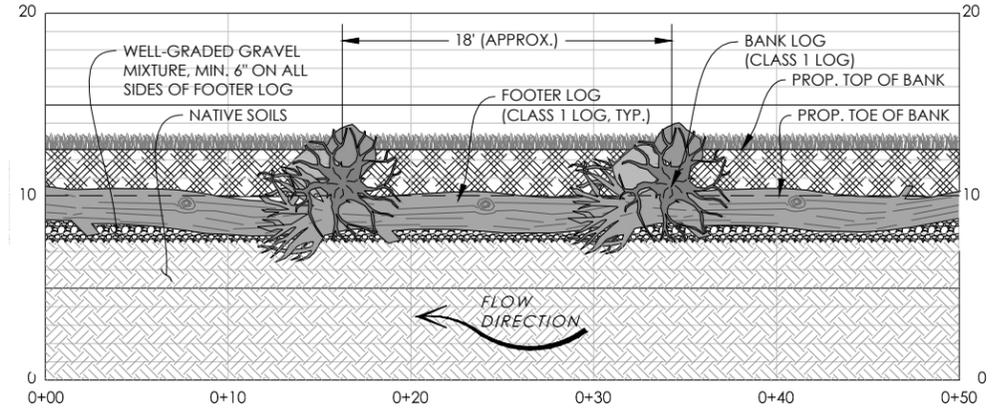


CONCRETE PAVERS NOTES:
 1. THE CONTRACTOR SHALL TAKE CARE IN REMOVING CONCRETE PAVERS TO SALVAGE AS MANY AS POSSIBLE. IF MORE THAN 10% OF PAVERS ARE DAMAGED DURING REMOVAL TO THE POINT OF BEING UNUSABLE, THEY SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
 2. TRENCH AREA FOR PAVERS TO BE INSTALLED TO THE REQUIRED DEPTH
 3. AFTER ALL PAVERS ARE IN PLACE, PLACE TWO CLASS 1 BOULDERS ON BOTH ENDS AS SHOWN. THE BOULDERS SHALL OVERLAP THE OUTER-MOST PAVERS BY HALF THEIR DIAMETER.

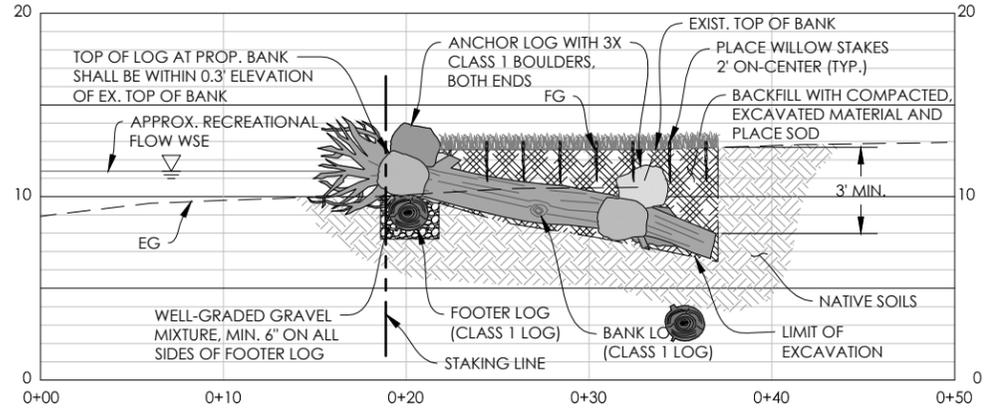
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1 BANK STABILIZATION LOGS
SCALE: 1" = 5'

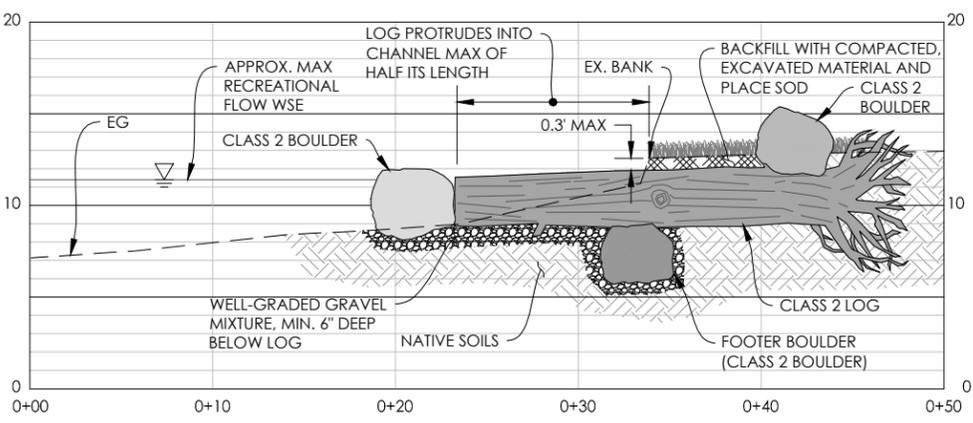


BANK STABILIZATION LOGS
TYPICAL ELEVATION VIEW
SCALE: 1" = 5' (A)

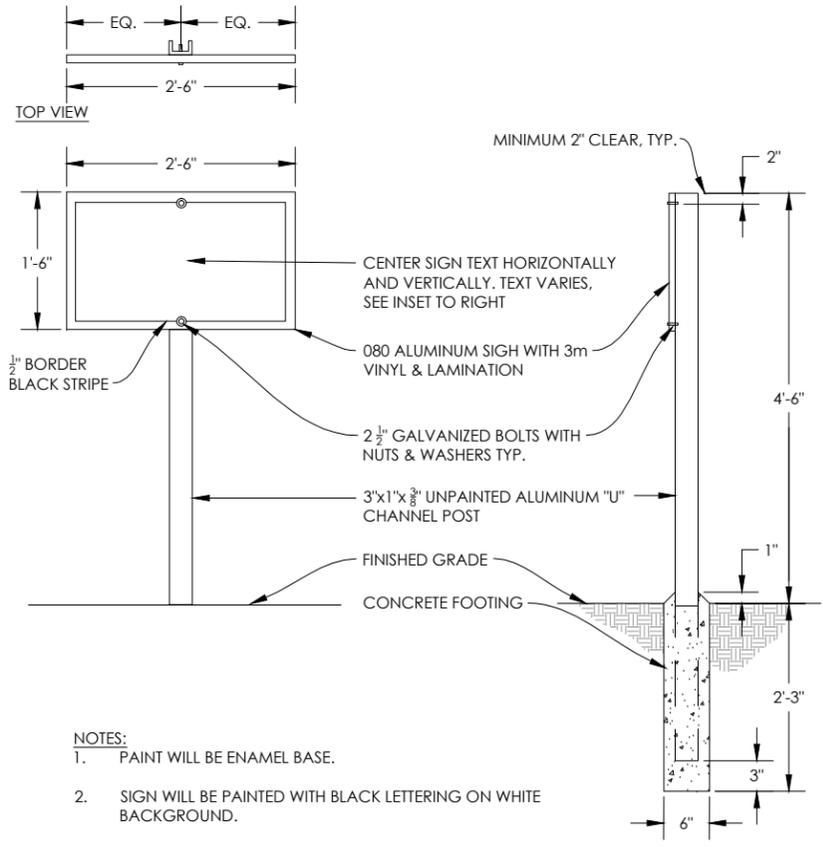


BANK STABILIZATION LOGS
TYPICAL SECTION VIEW
SCALE: 1" = 5' (B)

NOTE:
ELEVATION AND STATION DATUMS ARE ARBITRARY AND ARE SHOWN FOR SCALE ONLY



2 LOG JETTY
SCALE: 1" = 5'



- NOTES:
1. PAINT WILL BE ENAMEL BASE.
 2. SIGN WILL BE PAINTED WITH BLACK LETTERING ON WHITE BACKGROUND.
 3. ALL EXPOSED BOLT THREADS, EXTENDING BEYOND NUT, WILL BE STRIPPED AFTER INSTALLATION.

3 SIGN
SCALE: 1" = 5'

| DESIGNED BY | DATE | BY | SUBMITTALS / REVISIONS |
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| P. KULCHAWIK | 2011.04.02 | PK | CONCEPTUAL PLANS |
| P. KULCHAWIK | 2011.04.06 | PK | 90% DESIGN PLANS |
| CHECKED BY | | | |
| D. SHAW | | | |
| IN CHARGE | | | |
| E. BALLMAN | | | |
| DATE | | | |

LOG AND SIGN DETAILS
TRUCKEE RIVER FIRST 4-MILE
STREAMBANK STABILIZATION AND RESTORATION
PLACER COUNTY, CALIFORNIA
TRUCKEE RIVER WATERSHED COUNCIL

PROJECT NUMBER
213111
SCALE
AS SHOWN
SHEET

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90% DESIGN PLANS - NOT FOR CONSTRUCTION

<IN PROGRESS>

1 CONTAINER PLANT PALETTE
SCALE: NTS

<IN PROGRESS>

3 SOD INSTALLATION
SCALE: NTS

<IN PROGRESS>

2 SEED MIXES
SCALE: NTS

<IN PROGRESS>

4 CONTAINER PLANTS
SCALE: NTS



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| P KULCHAWIK | 20140205 | PK | CONCEPTUAL PLANS |
| DRAWN BY | 20140625 | PK | 90% DESIGN PLANS |
| P KULCHAWIK | | | |
| CHECKED BY | | | |
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| IN CHARGE | | | |
| E BALLMAN | | | |
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PLANTING DETAILS

TRUCKEE RIVER FIRST 4-MILE
STREAMBANK STABILIZATION AND RESTORATION
PLACER COUNTY, CALIFORNIA
TRUCKEE RIVER WATERSHED COUNCIL

PROJECT NUMBER
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AS SHOWN
SHEET

4.1