

ADDENDUM NO. 1
July 10, 2023

Project: **2023 145 Canyon Road Restabilization Project (51-813)**
Town of Fairfax and Miller Pacific
Engineering Group

From: Loren Umbertis
Public Works Director
Fairfax, CA 94930

This Addendum forms a part of the Contract Documents and modifies the original bidding documents as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

Enclosed herein is Addendum Number 1 for the above referenced project. Addendum Number 1 forms a part of the Contract Documents and modifies OR clarifies the original plans and specifications and shall be acknowledged in the Addendum Acknowledgement page. **All other conditions remain the same.**

ADDENDUM NUMBER 1

1. Sheet 2 (Site Plans – Existing & Proposed), Sheet 3 (Wall Profile & Details) and Sheet 4 (Tieback & Waler Details) have been revised as part of the response to Bidders’ questions and the updated sheets are included herein.
2. Sheet L-1.0 (Demolition Plan) has been added to show the extents of vegetation and tree removal.
3. Sheet L-3.0 (Revegetation Details) has been added to show details for new plantings.
4. Copy of Streambed Alteration Agreement (EPIMS-MAN 27091-R3) between Town of Fairfax and California Department of Fish and Wildlife now added. Conditions contained within permit must be included in Bid Cost and Scope of Work to be performed.

Response to Bidders Questions:

1. What is the load capacity on the Canyon Road bridge?
The bridge load as posted is 11T for single unit truck (SUT), 18T for Type 3S2 and 22T for Combination Type 3-2
2. Is there access for equipment to reach the creek channel?
Access to the creek channel can occur on the bank at the west end of the wall. Contractor may perform minor grading to construct temporary access as needed for excavation and drilling equipment. Minor tree pruning/limbing may also be performed with prior approval from Town. All temporary access routes are to be restored to their current condition upon completion of the work as stipulated in the project Specifications.
3. Can equipment and materials be stored within the creek channel or on the bank?
Materials and equipment may be staged in the creek or on the bank to the extent allowed by the project’s CDFW permit (included as part of this Addendum and Project). Contractor is specifically directed to sections

2.55 through 2.57 of the permit document for specific requirements regarding equipment staging. **The Contractor is solely responsible for compliance with all permit conditions at all times.** Note that equipment may be stored/staged overnight within the temporary access area at the west end of the wall.

4. Please provide detail for waler splices.

The waler design assumes a simply-supported condition with max span length of 6-feet. It can be installed as a series of 6-foot long segments in between each pile.

Because the moment/structural demand for a continuous waler is less than for the simply-supported condition, the Contractor may utilize a continuous waler if desired. If a continuous waler is utilized, the waler may be terminated with the end centered on and welded to the steel angle/soldier pile, and no splice with adjacent waler segments is required.

5. Please provide information on intended waler installation process.

Anticipated construction sequence would include (1) install soldier piles and lagging, (2) backfill to tieback elevation, (3) install tiebacks, (4) install waler, (5) load test and lock off tiebacks, then (6) backfill to top of wall. Refer to response to question #4 regarding splicing.

6. Tieback #11 may have a vertical batter of up to 45-degrees. How is waler to be installed here?

If steepening of the tieback is required, beveled washers could be installed between the tieback bearing plate and nut and/or shims can be placed between the waler and steel angle to facilitate the steeper inclination. Note that Detail 4 on Sheet 4 has been modified to provide a larger steel angle to provide for more contact area between the waler and steel angle to accommodate adjusting the positioning of the waler if needed.

7. What diameter hole in waler steel plate at tieback location?

Waler plate holes should be 1-1/4-inch diameter.

8. Can the wall be backfilled prior to tieback installation?

Backfill should not be placed above the tieback elevation until after tiebacks are installed, load tested and locked off.

END ADDENDUM NUMBER 1

Please complete the Addendum Acknowledgement in the Proposal Form acknowledging receipt of this addendum.

Thank you for your interest in this project. If you have any questions regarding this addendum, please contact Mike Jewett (mjewett@millerpac.com), before 12 PM July 14, 2023 at Miller Pacific Engineering Group, 707-765-6140.

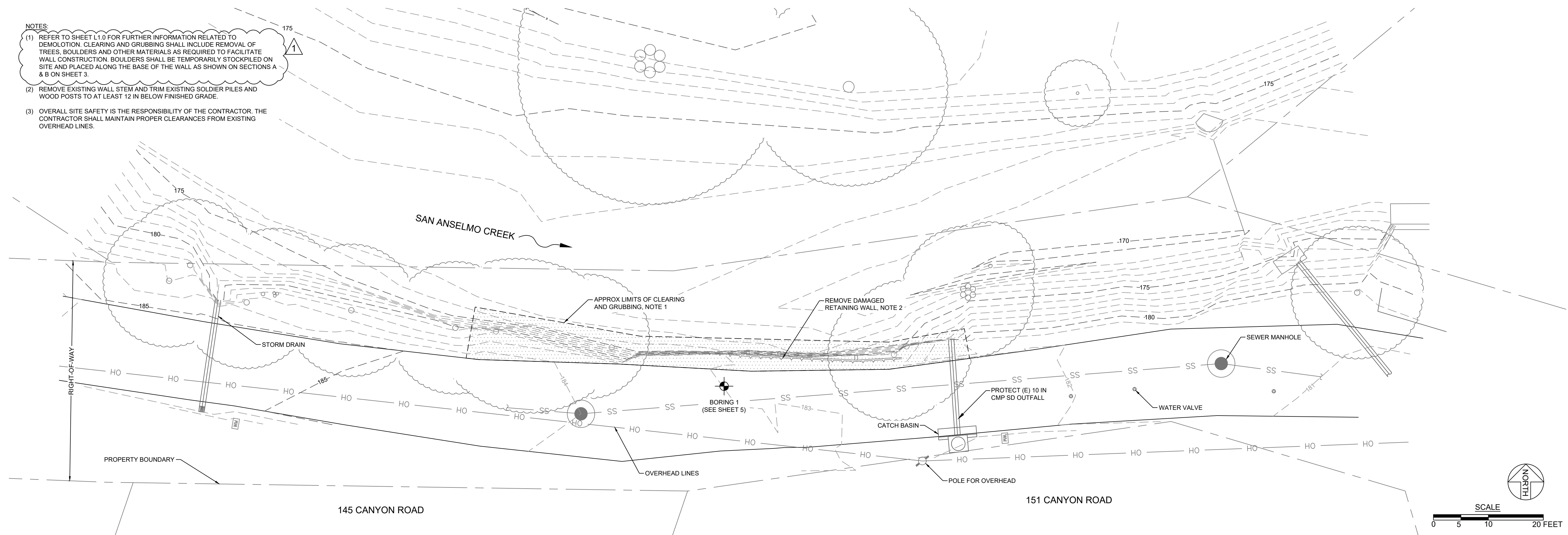
Sincerely Yours,
LOREN UMBERTIS
Director of Public Works



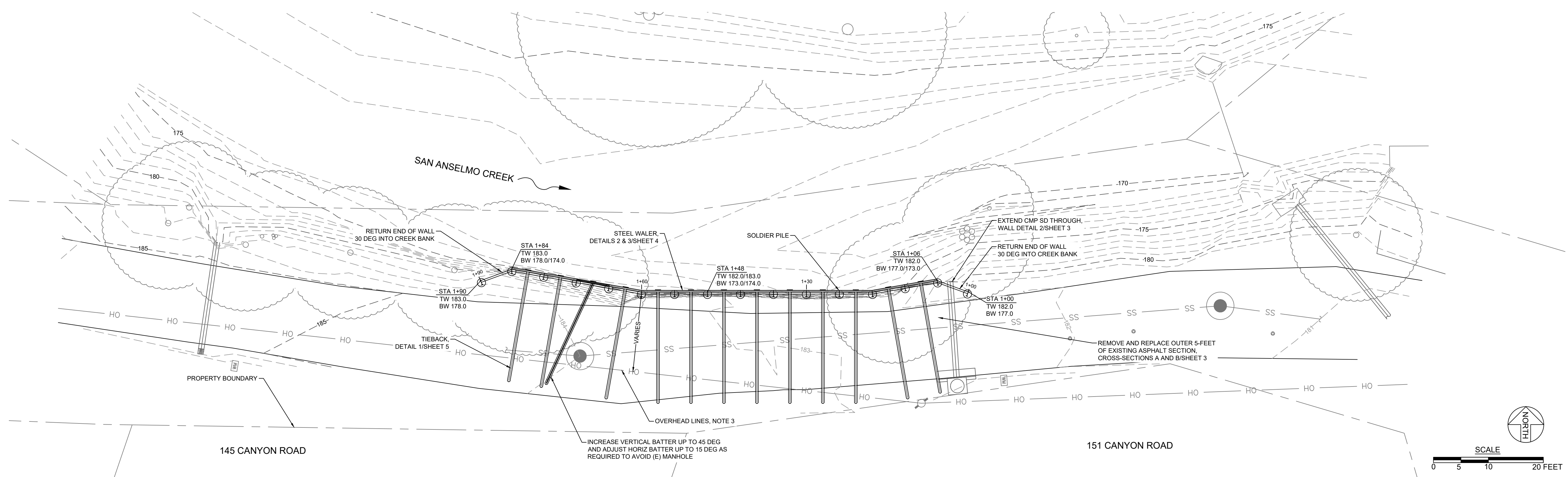
ADDENDUM NO. 1

By:
Mike Jewett, C.E.G. and Scott Stephens, G.E. Miller
Pacific Engineering Group
Interim Town Engineer

- NOTES:
- REFER TO SHEET L1.0 FOR FURTHER INFORMATION RELATED TO DEMOLITION. CLEARING AND GRUBBING SHALL INCLUDE REMOVAL OF TREES, BOULDERS AND OTHER MATERIALS AS REQUIRED TO FACILITATE WALL CONSTRUCTION. BOULDERS SHALL BE TEMPORARILY STOCKPILED ON SITE AND PLACED ALONG THE BASE OF THE WALL AS SHOWN ON SECTIONS A & B ON SHEET 3.
 - REMOVE EXISTING WALL STEM AND TRIM EXISTING SOLDIER PILES AND WOOD POSTS TO AT LEAST 12 IN BELOW FINISHED GRADE.
 - OVERALL SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN PROPER CLEARANCES FROM EXISTING OVERHEAD LINES.



SITE PLAN - EXISTING CONDITIONS
(SCALE: 1" = 10'-0")



SITE PLAN - PROPOSED
(SCALE: 1" = 10'-0")

ISSUED FOR CONSTRUCTION	DATE	BY
ADDENDUM NO. 1	7/11/2023	RCA

504 Redwood Blvd.
Suite 220
Novato, CA 94947
T 415 / 382-3444
F 415 / 382-3450
www.millerpac.com

MILLER PACIFIC ENGINEERING GROUP

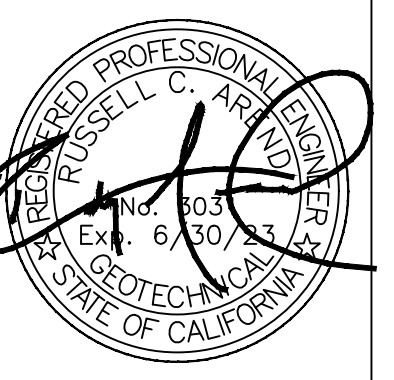
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FILE: 201.143 Drawings, Addendum 1.dwg

SITE PLANS - EXISTING & PROPOSED

Canyon Road Wall Replacement
145 Canyon Road
Fairfax, California

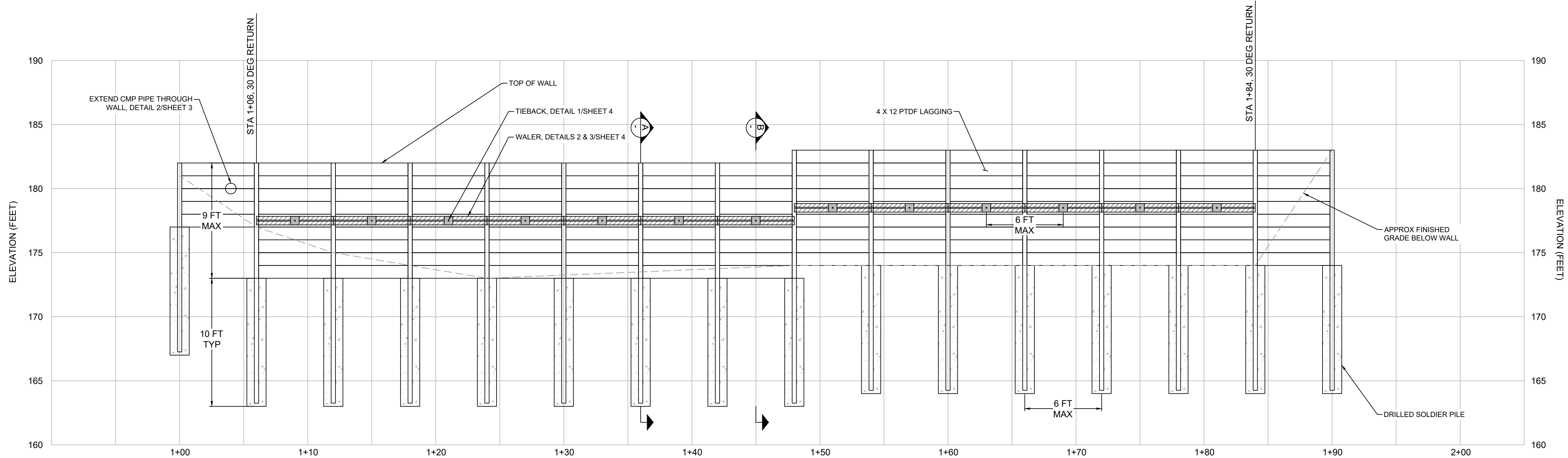
Project No. 201.143 Date: 5/3/2023

Designed	RCA
Drawn	RCA
Checked	SAS

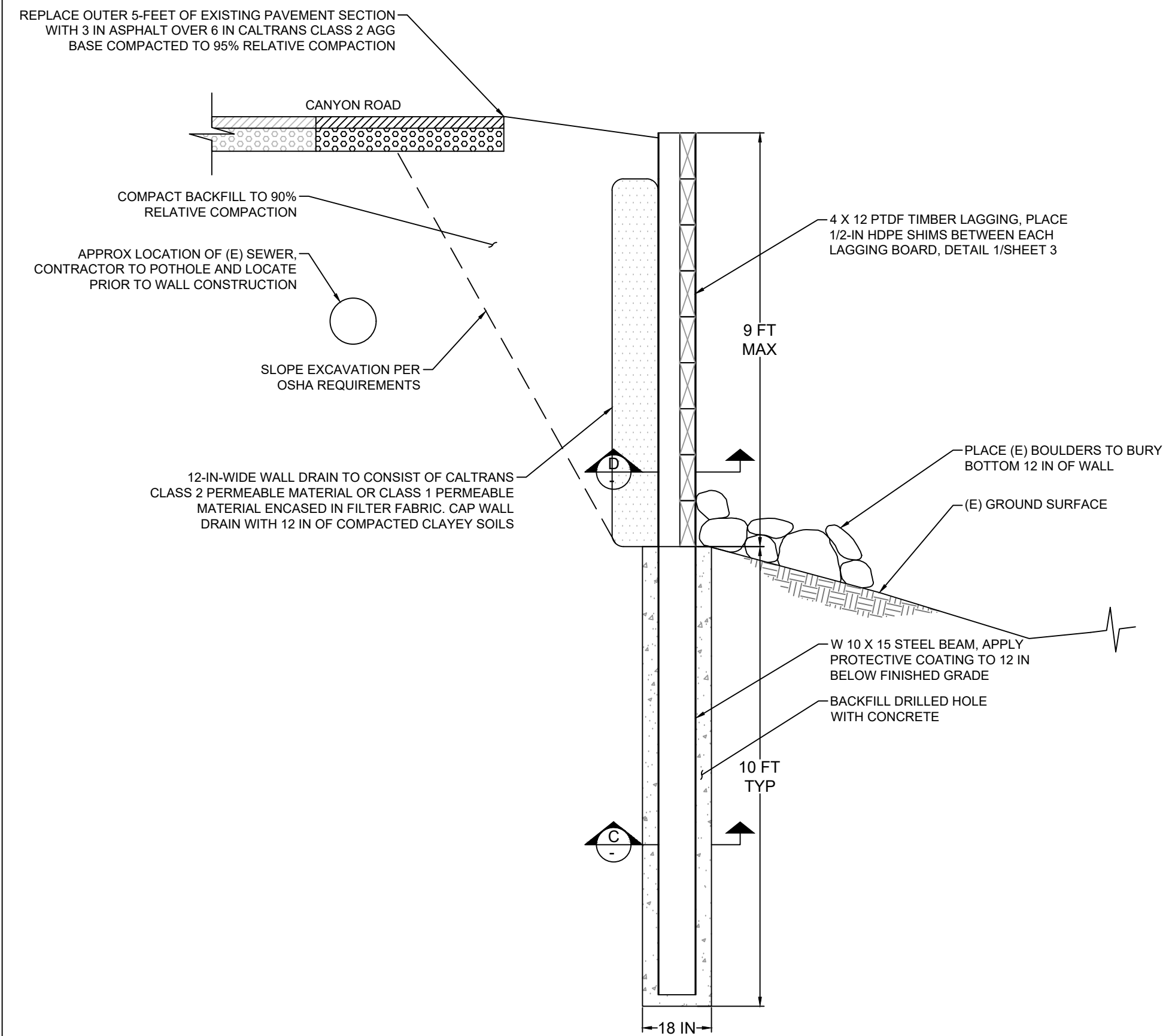


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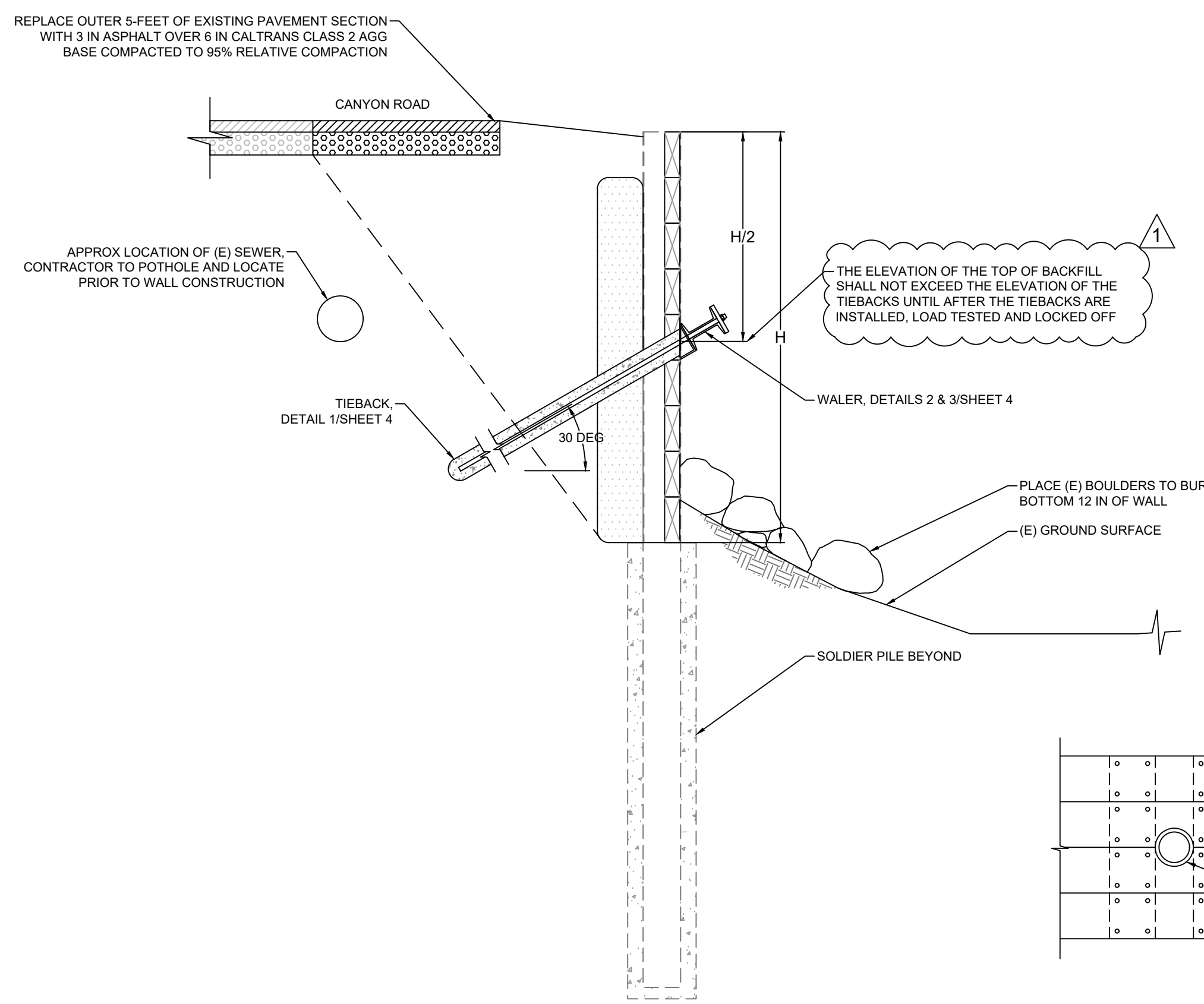
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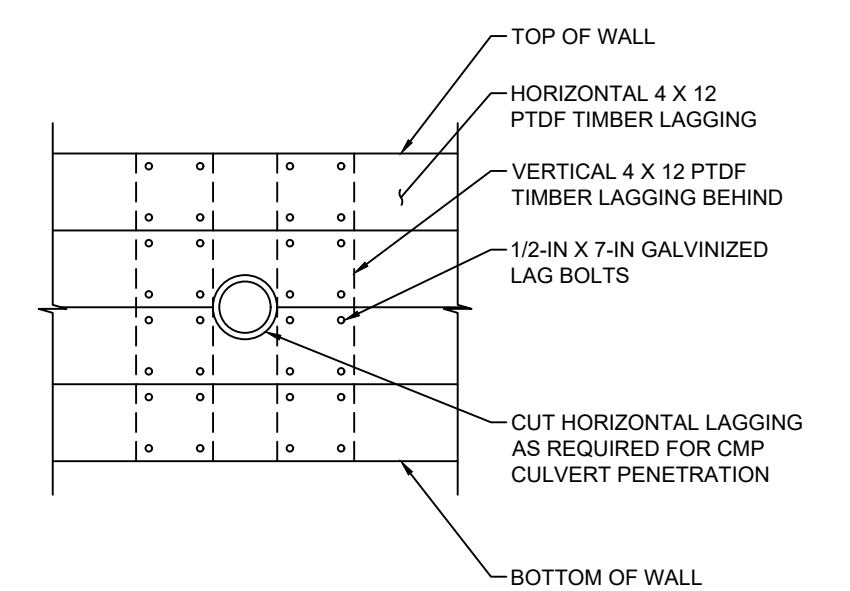
SOLDIER PILE WALL PROFILE
(SCALE: 1" = 5'-0")



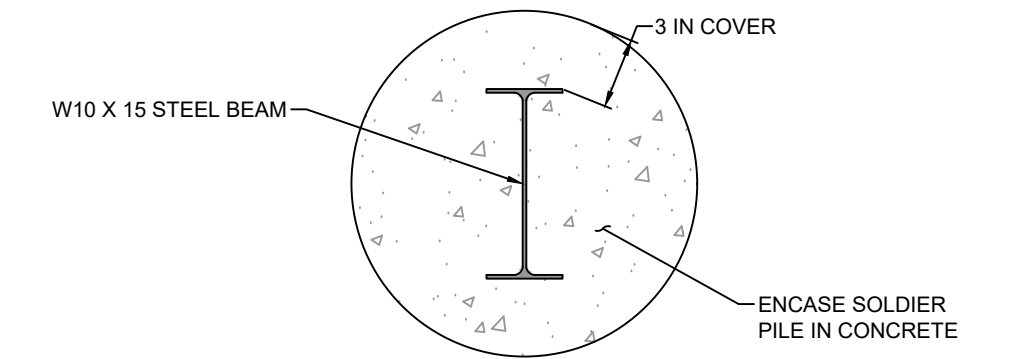
A RETAINING WALL AT SOLDIER PILE
(NO SCALE)



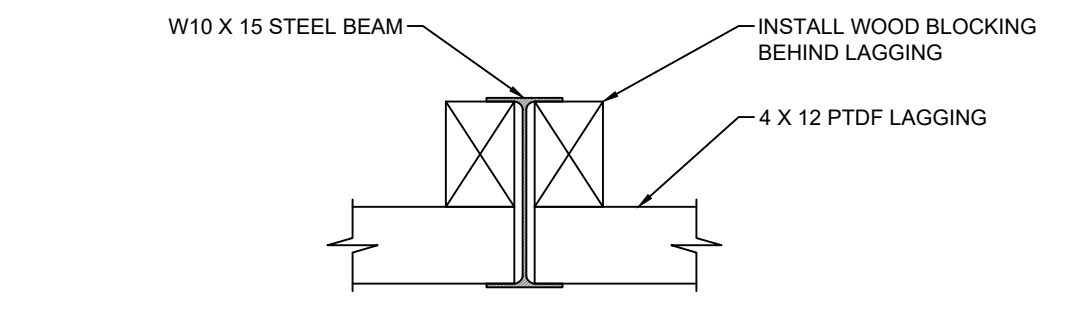
B RETAINING WALL AT TIEBACK
(NO SCALE)



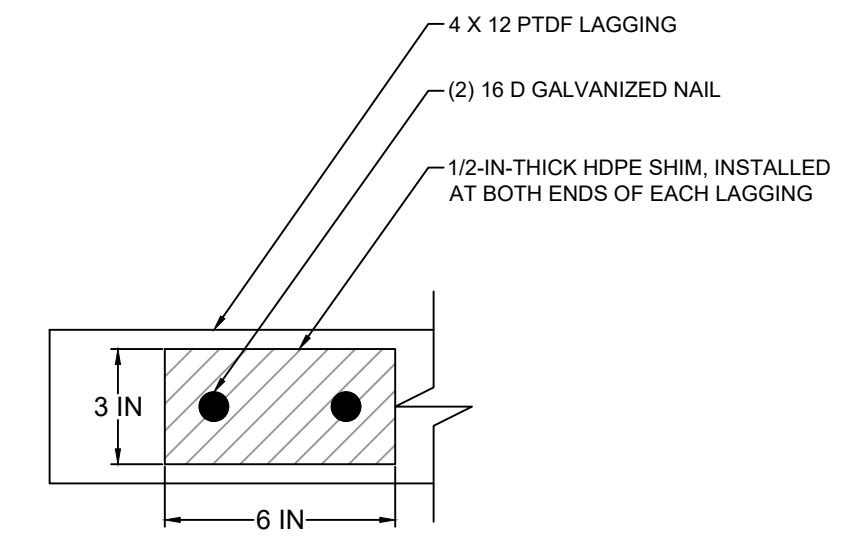
2 CULVERT THROUGH LAGGING
(NO SCALE)



C SOLDIER PILE CROSS SECTION
(NO SCALE)



D SOLDIER PILE/LAGGING CROSS SECTION
(NO SCALE)



1 HDPE SHIMS FOR LAGGING
(NO SCALE)

ISSUED FOR CONSTRUCTION	ADDENDUM NO. 1	DATE	MARK	DESCRIPTION	BY
6/9/2023					RCA
7/11/2023					RCA

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MILLER PACIFIC ENGINEERING GROUP

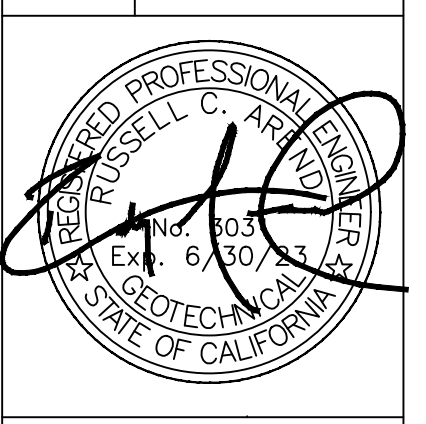
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FILE: 201.143 Drawings, Addendum 1.dwg

DESIGNED	DRAWN	CHECKED	SAS
RCA	RCA	RCA	SAS

WALL PROFILE & DETAILS

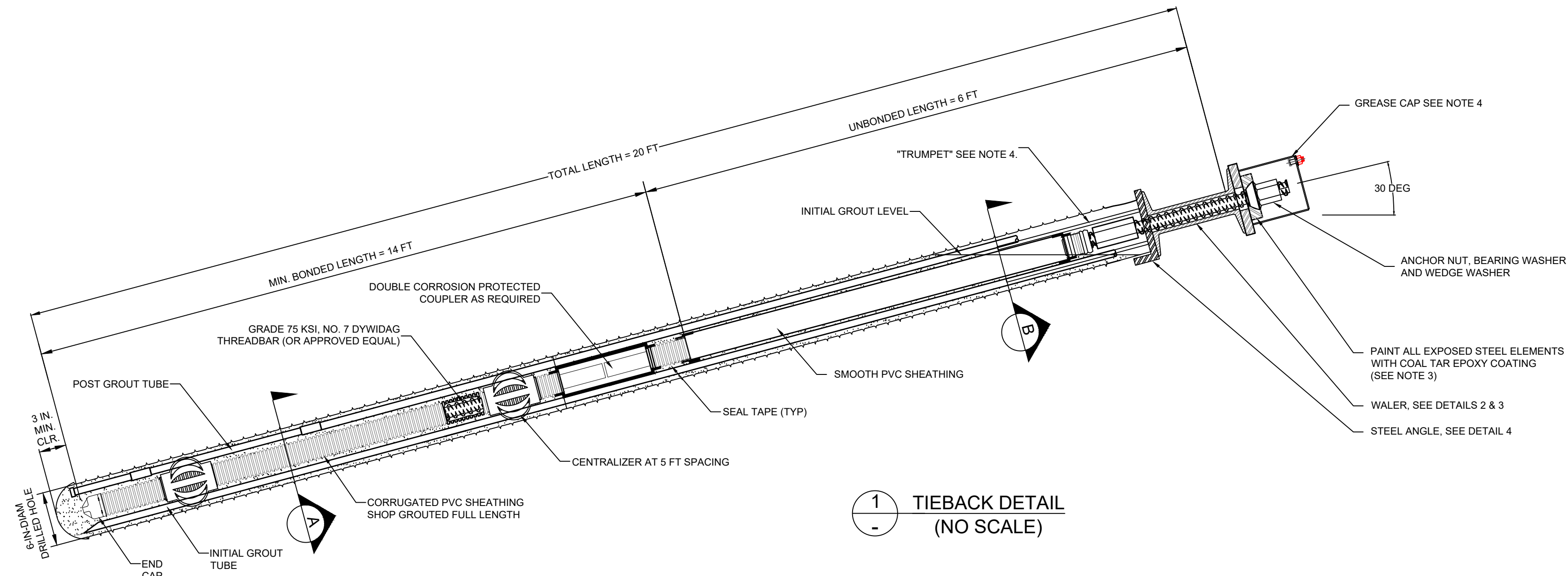
Canyon Road Wall Replacement
145 Canyon Road
Fairfax, California

Date: 5/3/2023
Project No. 201.143



SHEET

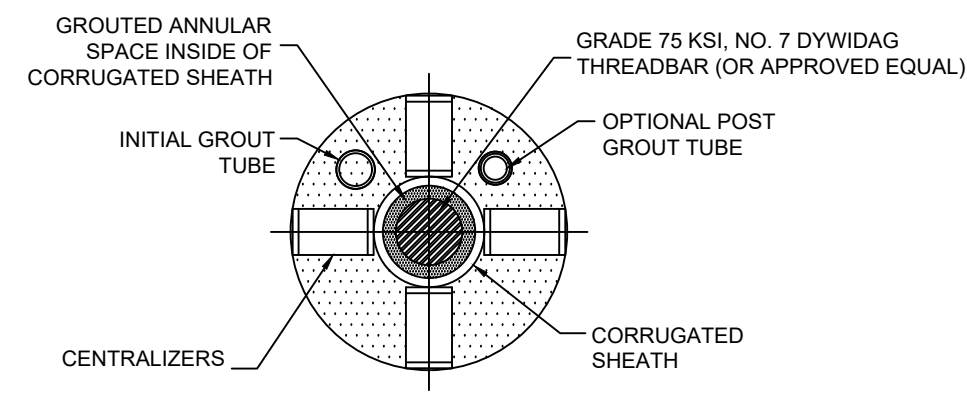
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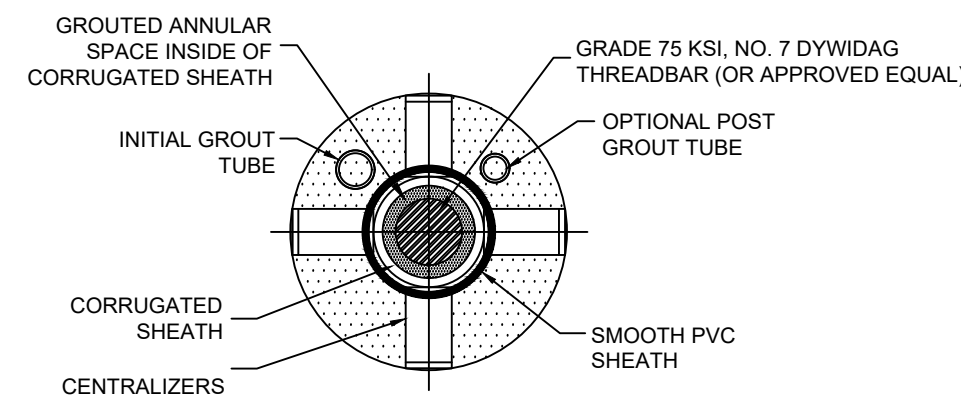
1 TIEBACK DETAIL
(NO SCALE)

TIEBACK NOTES:

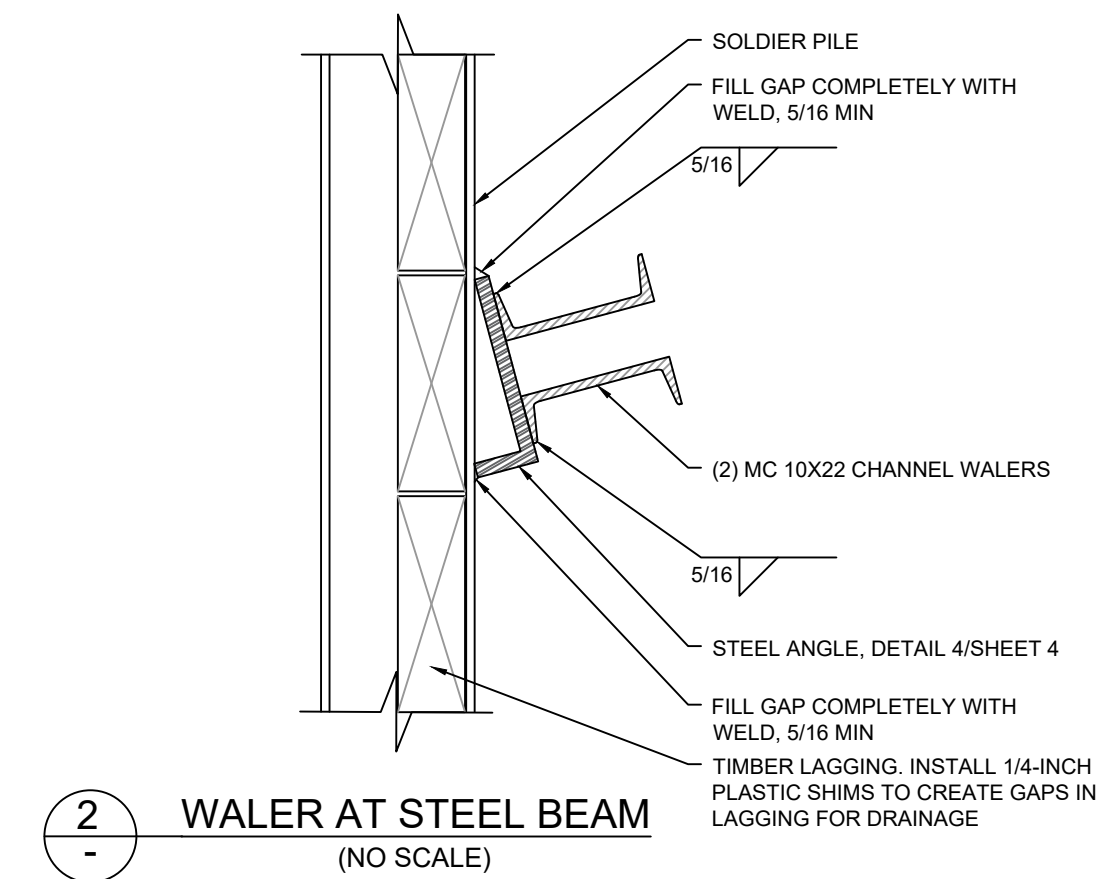
1. TIEBACK DESIGN LOAD = 22 KIPS, MAXIMUM TEST LOAD = 30 KIPS
2. HAND PACK GROUT IN REMAINING VOID UPON COMPLETION OF ANCHOR TEST LOADING AND FINAL ANCHOR LOCK-OFF
3. AFTER HAND-PACKED GROUT HAS CURED, PAINT ALL EXPOSED BAR, WALER, PLATE ASSEMBLY, WASHER AND NUT WITH COAL-TAR EPOXY COATING
4. INSTALL TRUMPET AND CAP AT NAIL HEAD AND FILL WITH GROUT OR GREASE PER MANUFACTURER'S RECOMMENDATIONS



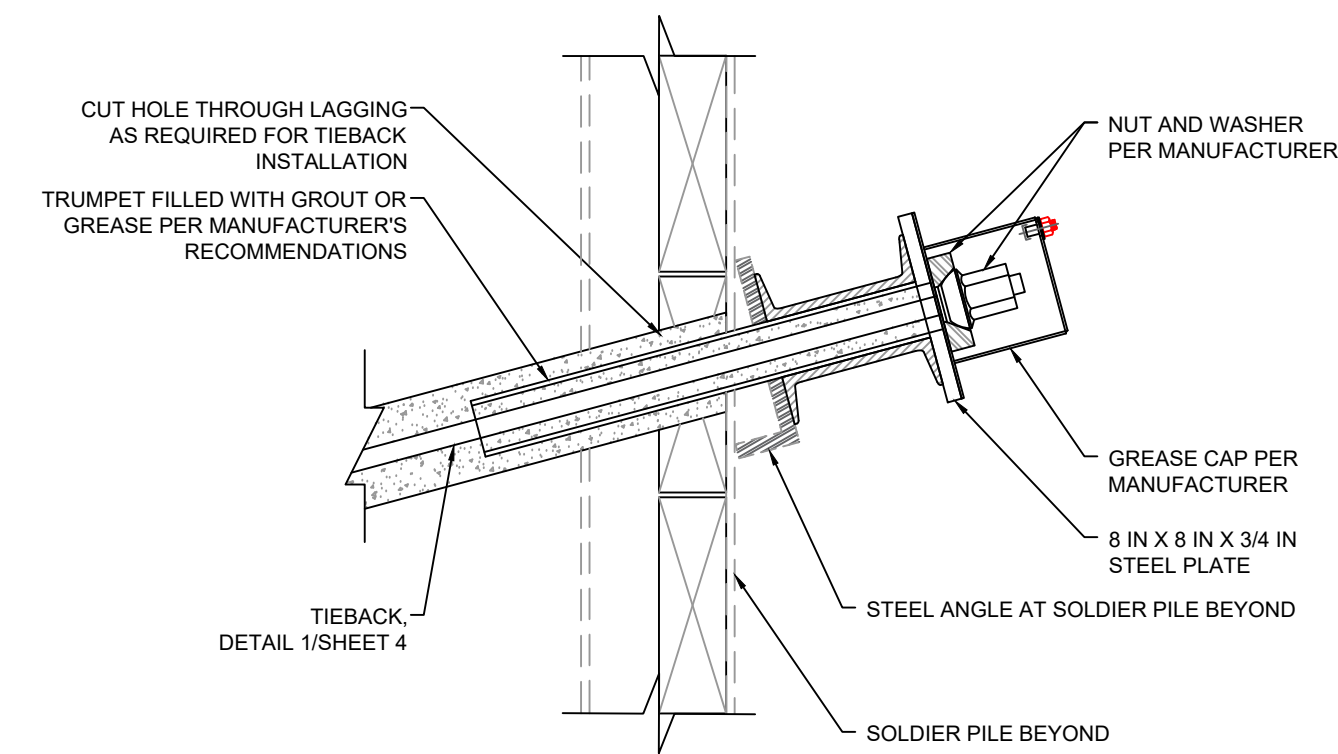
A BONDED TIEBACK SECTION
(NO SCALE)



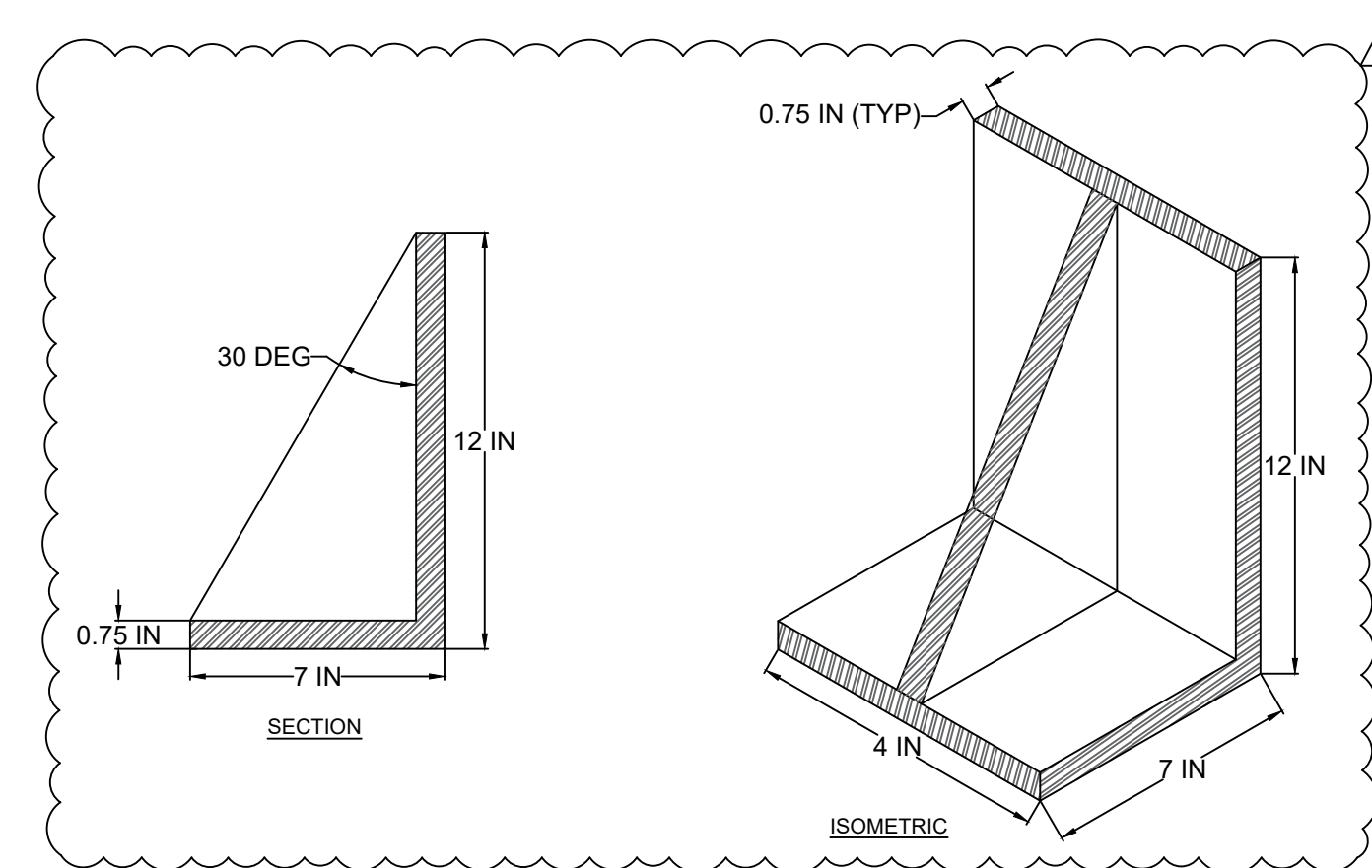
B UNBONDED TIEBACK SECTION
(NO SCALE)



2 WALER AT STEEL BEAM
(NO SCALE)



3 WALER AT TIEBACK
(NO SCALE)



4 STEEL ANGLE
(NO SCALE)

ISSUED FOR CONSTRUCTION	ADDENDUM NO. 1	REVISION	DATE	BY
		1	7/11/2023	RCA
		2		RCA

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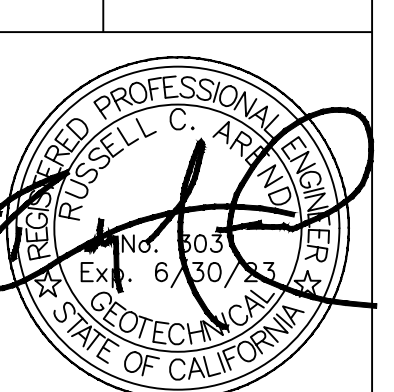
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FILE: 201.143 Drawings, Addendum 1.dwg

Designed	RCA
Drawn	RCA
Checked	SAS

TIEBACK & WALER DETAILS

Canyon Road Wall Replacement
145 Canyon Road
Fairfax, California

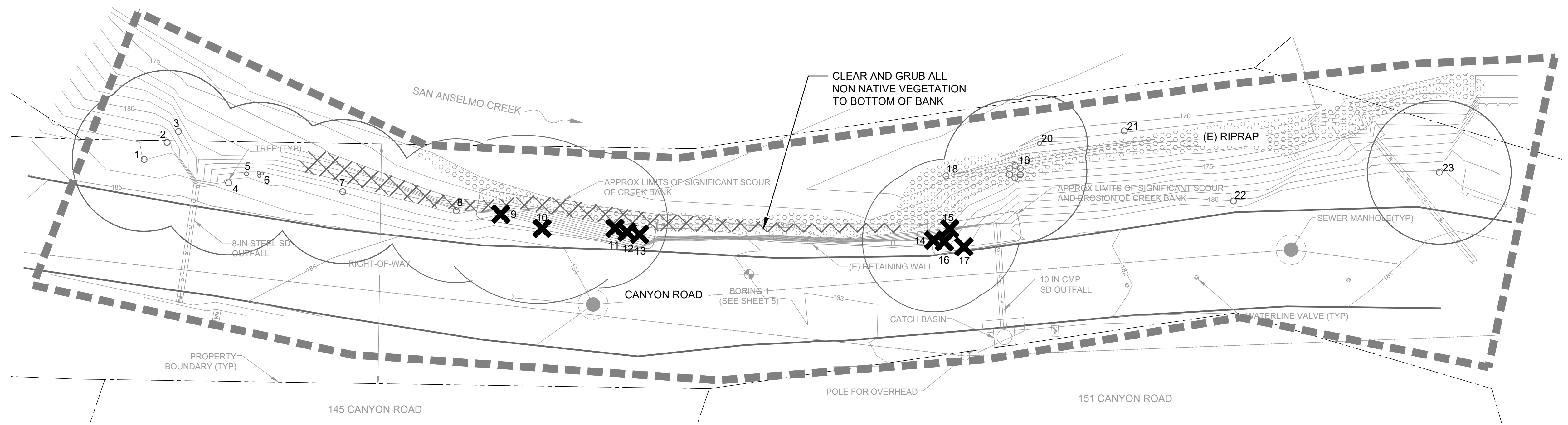
Date: 5/3/2023
Project No. 201.143



EXISTING TREE INVENTORY

TREE #	DBH (IN)	SPECIES	ACTION
1	11	QUERCUS LOBATA / VALLEY OAK	PP
2	13	UMBELLULARIA CALIFORNICA / CA BAY	PP
3	6	FRAXINUS LATIFOLIA / OREGON ASH	PP
4	11	FRAXINUS LATIFOLIA / OREGON ASH	PP
5	9	UMBELLULARIA CALIFORNICA / CA BAY	PP
6	7.6,5	UMBELLULARIA CALIFORNICA / CA BAY	PP
7	4	UMBELLULARIA CALIFORNICA / CA BAY	PP
8	7	UMBELLULARIA CALIFORNICA / CA BAY	PP
9	10	UMBELLULARIA CALIFORNICA / CA BAY	R
10	5	UMBELLULARIA CALIFORNICA / CA BAY	R
11	4,5	AESCULUS CALIFORNICA / CA BUCKEYE	R

12	16	QUERCUS LOBATA / VALLEY OAK	R
13	12	QUERCUS LOBATA / VALLEY OAK	R
14	6	AESCULUS CALIFORNICA / CA BUCKEYE	R
15	14, 16	QUERCUS LOBATA / VALLEY OAK	R
16	3	UMBELLULARIA CALIFORNICA / CA BAY	R
17	4.5	UMBELLULARIA CALIFORNICA / CA BAY	R
18	7	FRAXINUS LATIFOLIA / OREGON ASH	PP
19	3,4,4,5,9	UMBELLULARIA CALIFORNICA / CA BAY	PP
20	7.5	AESCULUS CALIFORNICA / CA BUCKEYE	PP
21	5,6	UMBELLULARIA CALIFORNICA / CA BAY	PP
22	2.5	QUERCUS AGRIFOLIA / LIVE OAK	PP
23	UNKNOWN	QUERCUS AGRIFOLIA / LIVE OAK	PP



DEMOLITION LEGEND

- PROPERTY BOUNDARY
- LIMIT OF WORK (L.O.W.)
- XXXXX AREA TO BE CLEARED AND GRUBBED. SEE DEMOLITION NOTES
- X TREES TO BE REMOVED
- TREE TO REMAIN, PRESERVE AND PROTECT

DEMOLITION NOTES

1. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL WORK IN THIS AREA.
2. PROTECT ALL IMPROVEMENTS NOT NOTED FOR DEMOLITION.
3. PP ALL UTILITIES UNLESS OTHERWISE NOTED.
4. LEGALLY DISPOSE OF ALL MATERIAL CLEARED, GRUBBED, DEMOLISHED, OR SALVAGED BUT NOT UTILIZED FOR PROJECT OR ACCEPTED BY OWNER. STOCKPILE ALL MATERIALS NOTED ON PLANS FOR REUSE.

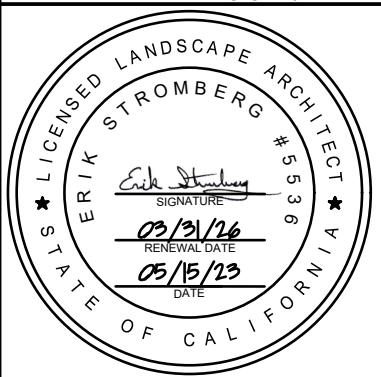
REVISIONS

DATE	DESCRIPTION
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PROJECT TITLE
145 CANYON ROAD WALL REPLACEMENT REVEGETATION SET
 SHEET TITLE
DEMOLITION
 DESIGN PHASE
BID SET



Restoration Design Group, Inc.
 2332 Fifth Street, Suite C
 Berkeley, CA 94710
 T: 510.644.2798 F: 510.644.2799
 www.restorationsdesigngroup.com



DESIGN BY ES
 DRAWN BY KB, NQ
 CHECKED BY ES
 SCALE 1" = 10'-0"
 DATE JUNE 2023
 SHEET

L-1.0

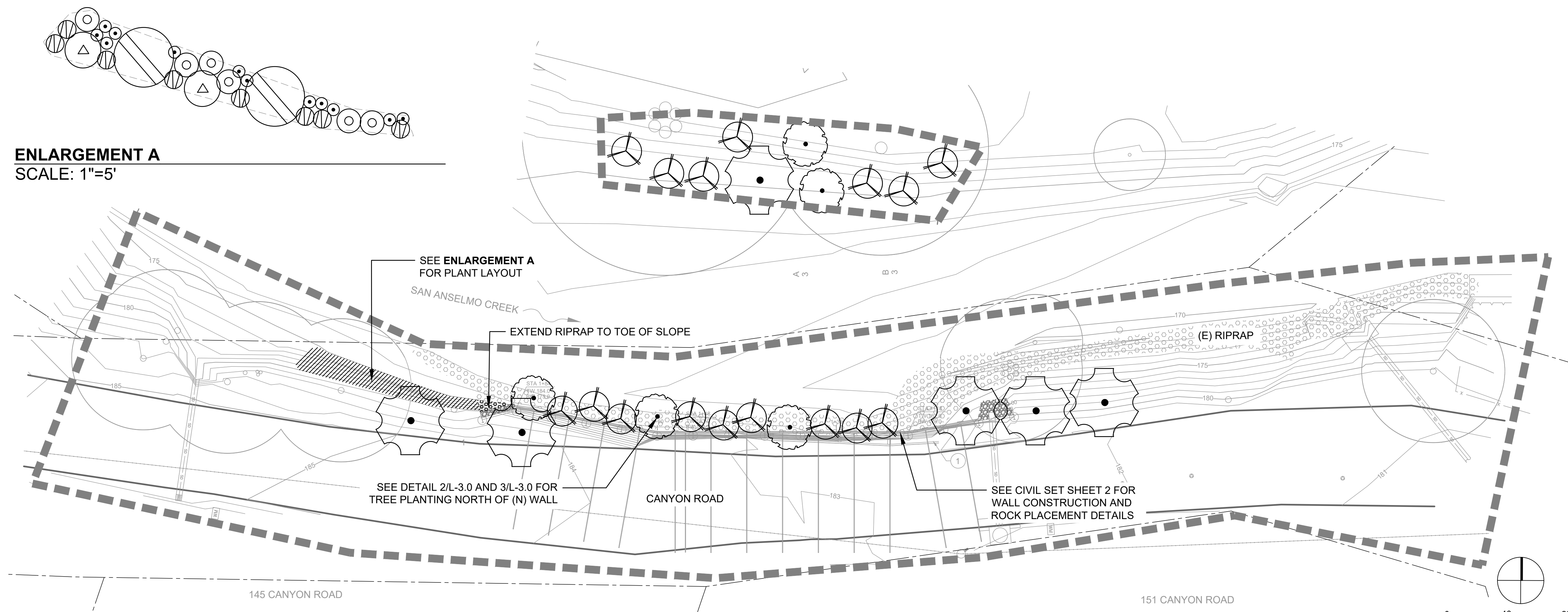
C:\Users\erik.s\OneDrive\Documents\PROJECTS\145 CANYON RD - RIPRAP AND GRUBBED AREAS\145 CANYON RD - RIPRAP AND GRUBBED AREAS - DEMOLITION SET - 06/2023

TREE SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY
	AESCULUS CALIFORNICA	CALIFORNIA BUCKEYE	1 GALLON	16
	FRAXINUS LATIFOLIA	OREGON ASH	1 GALLON	5
	QUERCUS LOBATA	VALLEY OAK	15 GALLON	6

SHRUB AND PERENNIAL PLANTING SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	QTY	
	CORYLUS CORNUTA	CA HAZELNUT	1 GALLON	2
	HETEROMELES ARBUTIFOLIA	TOYON	1 GALLON	2
	JUNCUS PATENS	COMMON RUSH	1 GALLON	6
	RUBUS URSINUS	CA BLACKBERRY	D-40	8
	SYMPHORICARPOS MOLLIS	SNOWBERRY	D-40	12

ENLARGEMENT A
SCALE: 1"=5'**REVEGETATION LEGEND**

	PROPERTY BOUNDARY
	LIMIT OF WORK (L.O.W.)
	SHRUB AND PERENNIAL PLANTING AREA (37 LF / 95 SF)
TOTAL PLANTING: ~300 LF / ~460 SF	

REVEGETATION NOTES

1. CONTAINER PLANTS SHALL BE RESTORATION GRADE NATIVE PLANTS. CULTIVARS OF NATIVE SPECIES WILL NOT BE ACCEPTED. COUNTY OF ORIGIN FOR EACH PLANT SHALL BE NOTED IN SUBMITTAL.
2. FINAL LAYOUT OF CONTAINER PLANTS TO BE APPROVED BY O.R. IN THE FIELD. CONTRACTOR TO PROVIDE MEANS OF MARKING PLANT LOCATIONS.
3. CONTRACTOR SHALL PROVIDE PLANTS IN CONTAINER SIZES NOTED IN LEGEND. IN SOME CIRCUMSTANCES CONTAINER SIZES MAY BE SUBSTITUTED WITH O.R. APPROVAL. THE FOLLOWING ARE PLANT QUANTITY RATIOS FOR PLANT CONTAINER SIZE SUBSTITUTIONS. CONTRACTOR TO PROVIDE A SUBMITTAL FOR ALL PROPOSED SUBSTITUTIONS. SEE SPECIFICATIONS.

• 15 GAL POT	= NO SUBSTITUTIONS
• 5 GAL POT TO 4-GAL TREEPOT	= 1:1.2
• 1 GAL POT TO D-40	= 1:1.2
• 1 GAL POT TO 4" POT	= 1:1.4
• 1 GAL POT TO D-16	= 1:2
4. PLANTS SHALL BE UNEVENLY SPACED, UNLESS DIRECTED OTHERWISE BY O.R. IN THE FIELD.
5. CURRENT SITE CONDITIONS PROVIDE LIMITED TO NO RIPARIAN VEGETATION, AND NO SALIX SPP. WERE LOCATED IN THE PROJECT VICINITY. PROPOSED PLANTING PALETTE IS TYPICAL MIXED-OAK WOODLAND.
6. SEE SPECS FOR SOIL PREPARATION FOR REVEGETATION
7. SOAK PLANTING PITS BEFORE PLANTING AND IMMEDIATELY AFTER PLANTING. WATER PLANTS EVERY OTHER DAY UNTIL PROJECT ACCEPTANCE.
 - 7.1. FOUR (4) GALLONS OF WATER PER 15 GALLON CONTAINER PLANT
 - 7.2. ONE (1) GALLON OF WATER PER 1 GALLON AND SMALLER CONTAINER

REVISIONS

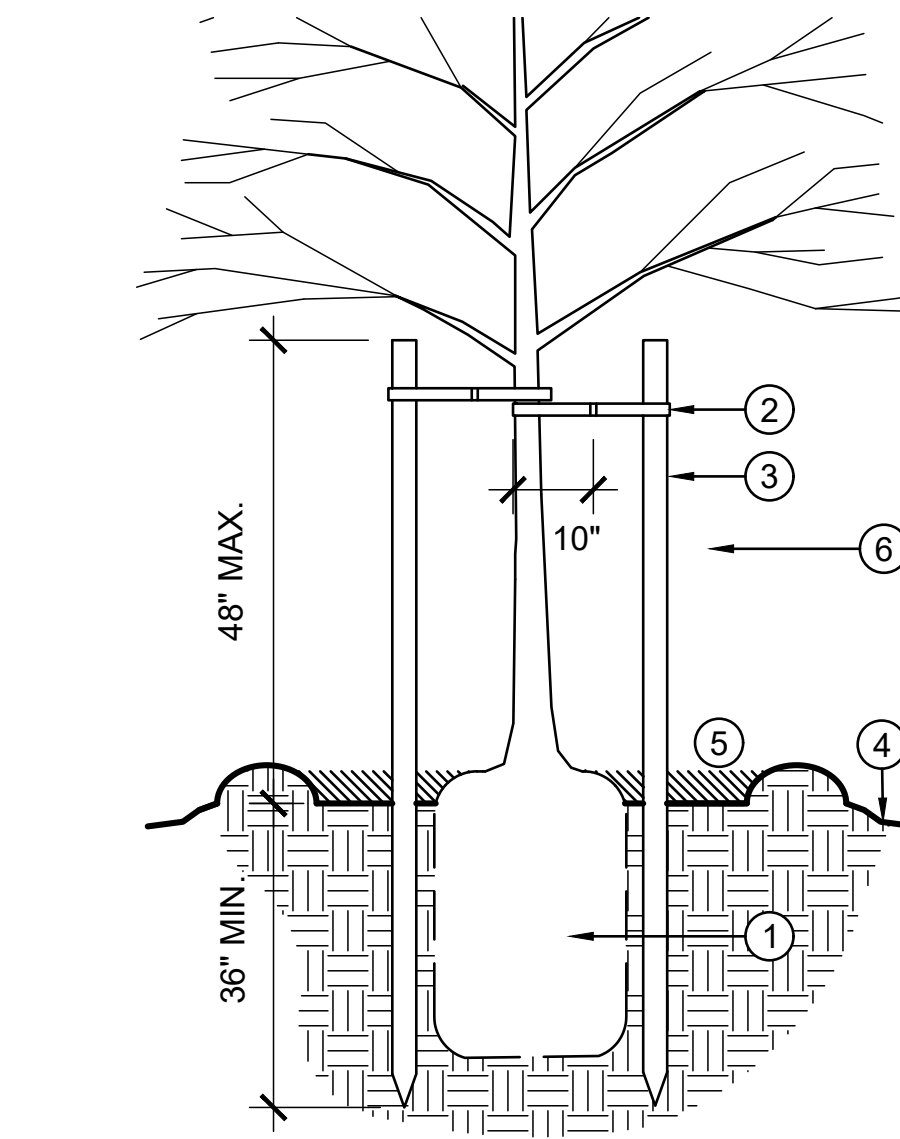
DATE	DESCRIPTION
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PROJECT TITLE	SHEET TITLE
145 CANYON ROAD WALL REPLACEMENT	LAYOUT AND REVEGETATION
REVEGETATION SET	DESIGN PHASE
	BID SET

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2332 Fifth Street, Suite C
Berkeley, CA 94710
T: 510.644.2798 F: 510.644.2799
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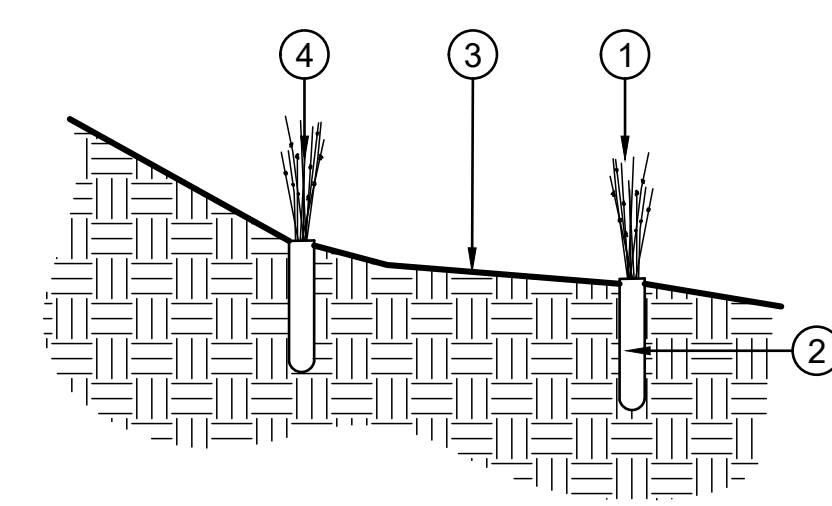
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SCALE	1" = 10'-0"
DATE	JUNE 2023
SHEET	

L-2.0



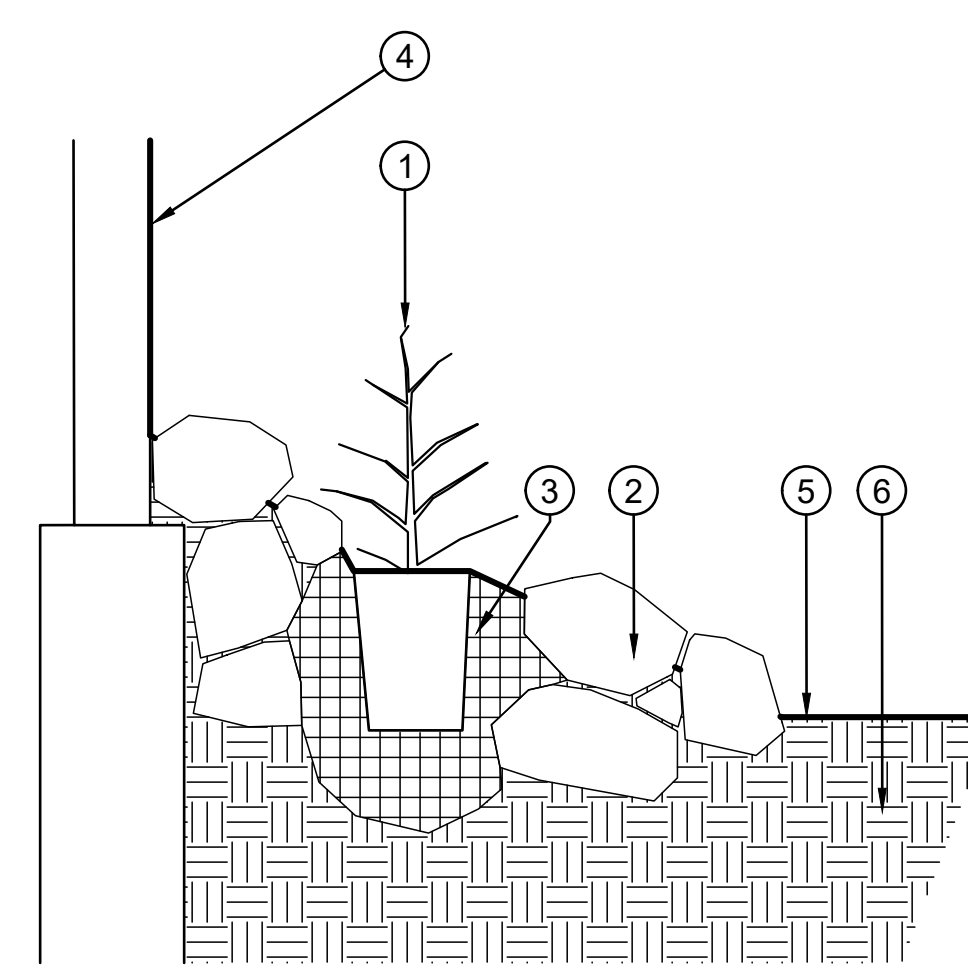
- ① LARGE CONTAINER TREE (15 GALLON)
- ② ARBORVITAE TREE TIES (2), W/ 10" WIDE LOOPS AROUND TRUNK. SECURE ARBORVITAE 4" MIN FROM TOP OF STAKES. DIRECTION AND APPROVAL OF INSTALLATION BY O.R.
- ③ TREE STAKES, SET VERTICAL OUTSIDE ROOTBALL. KEEP TOP OF STAKES 6" MIN CLEAR OF LIMBS. SET IN LINE WITH CREEK FLOW DIRECTION.
- ④ FINISH GRADE
- ⑤ MULCH
- ⑥ CREEK FLOW DIRECTION

1 TREE STAKING
SCALE: NTS



- ① PLANT GROWN IN RESTORATION CONTAINER 1 GALLON OR D-POT
- ② PLANTING PIT, EQUAL DIAMETER TO CONTAINER. USE DIBBLE OR HAND SPADE. SET CROWN ABOVE FINISH GRADE. PINCH NATIVE SOIL TIGHT AGAINST ROOTS.
- ③ SEE DETAIL 3/L-3.0 FOR PLANTING IN BETWEEN PLACED ROCKS
- ④ SLOPED CONDITION - SET PLANT PLUMB

2 PLANT - SMALL
SCALE: NTS



- ① 1 GALLON TREES, JOINT PLANT BETWEEN PLACED ROCKS. ENSURE ROOTBALL HAS COMPLETE SOIL CONTACT.
- ② ROCKS, ADJUST AS REQUIRED TO PROVIDE 1.5 CU FT SOIL POCKET
- ③ SOIL, INTEGRATE 1 CU FT OF COMPOST INTO SOIL AT EACH PLANTING
- ④ (N) WALL, SEE STRUCTURAL
- ⑤ SAN ANSELMO CREEK
- ⑥ SUBGRADE

NOTES:
1. RANDOM SPACE PLANTINGS BETWEEN 3' AND 10' BETWEEN EACH OTHER AND 1' AND 4' AWAY FROM WALL
2. ADJUST ROCKS AS REQUIRED TO ENSURE PLANTING POCKET IS ACHIEVED.

3 TREE PLANTING IN PLACED ROCKS
SCALE: NTS

REVISIONS	
DATE	DESCRIPTION

PROJECT TITLE
145 CANYON ROAD WALL REPLACEMENT REVEGETATION SET
 DESIGN PHASE
BID SET
 SHEET TITLE
REVEGETATION DETAILS

Restoration Design Group, Inc.
2332 Fifth Street, Suite G
Berkeley, CA 94710
T 510.644.2798 F 510.644.2799
www.restorationdesigngroup.com

DESIGN BY	ES
DRAWN BY	KB, NQ
CHECKED BY	ES
SCALE	AS NOTED
DATE	JUNE 2023
SHEET	

L-3.0

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
BAY DELTA REGION
2825 CORDELIA ROAD, SUITE 100
FAIRFIELD, CA 94534



STREAMBED ALTERATION AGREEMENT
EPIMS-MAN-27091-R3
SAN ANSELMO CREEK
TOWN OF FAIRFAX 145 CANYON ROAD WALL REPLACEMENT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and the Town of Fairfax (Permittee) as represented by Jonathon Goldman.

RECITALS

WHEREAS, pursuant to Fish and Game Code section 1602, Permittee notified CDFW on February 2, 2022 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to Fish and Game Code section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

The project is located at San Anselmo Creek, in the County of Marin, State of California; Latitude 37.976658, Longitude -122.61003; in the northeast ¼ of Section 34, Township 2 North, Range 7 West of the Mount Diablo Base Range and Meridian, U.S. Geological Survey San Rafael quadrangle; 145 Canyon Road, Fairfax, CA 94930.

PROJECT DESCRIPTION

The project is limited to installing a new 90-foot long and 10-foot tall soldier pile timber lagging retaining wall and placing rip-rap on the bank of San Anselmo Creek, to support Canyon Road. Sixteen 18-inch diameter holes will be drilled into the creek bank one to three feet toward the thalweg of the existing, failing retaining wall. Steel beams will be placed in the holes, then the holes will be filled with cement. Four-inch by 12-inch lumber lagging will be placed perpendicular to the steel beams to create the retaining wall. The new wall will be attached through the old wall to the slope with tiebacks; the

old wall is being retained to support Canyon Road and allow access to residences during project construction. The area between the new and existing retaining walls will be filled with soil compacted to 90%, except for a 12-inch drain layer adjacent to the new wall to be composed of permeable material. Ten square feet of rip-rap will be placed at the upstream end of the new retaining wall and 18 square feet at the downstream end. Cobbles from the bed adjacent to the old retaining wall will be removed prior to demolition and stockpiled; these will be placed at the base of the new wall with up to one cubic yard of imported rip-rap.

Nine trees will be removed, including four California bay trees (*Umbellularia californica*), two California buckeyes (*Aesculus californica*), and three Valley oaks (*Quercus lobata*). Dewatering will not occur as part of this project, and all equipment will be operated from the top-of-bank. Approximately 110 square feet and 55 linear feet of San Anselmo Creek will be temporarily impacted by the project and approximately 199 square feet and 90 linear feet will be permanently impacted by the project.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include:

- Northern spotted owl (*Strix occidentalis caurina*), state and federally listed as threatened
- Coho salmon (*Oncorhynchus kisutch*), Central California Coast Evolutionary Significant Unit, state and federally listed as endangered
- Steelhead (*Oncorhynchus mykiss irideus*), Central Coast Distinct Population Segment, federally listed as threatened
- Foothill yellow-legged frog (*Rana boylei*), Northwest/North Coast clade, California species of special concern (SSC)
- California red-legged frog (*Rana draytonii*), federally listed as threatened and SSC
- Western pond turtle (*Emys marmorata*), SSC
- Pallid bat (*Antrozous pallidus*), SSC, and other bat species
- California giant salamander (*Dicamptodon ensatus*), SSC
- Napa false indigo (*Amorpha californica* var. *napensis*), California Rare Plant Rank (CRPR)¹ 1B.2, Bent-flowered fiddleneck (*Amsinckia lunaris*) CRPR 1B.2, and other special-status plant species
- Nesting birds
- Waterfowl
- Common aquatic and terrestrial species
- Water quality
- Riparian habitat

¹ CRPR rank definitions are available in CDFW's *Special Vascular Plants, Bryophytes, and Lichens List* (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline>) and on the California Native Plant Society website (<https://www.cnps.org/rare-plants/california-rare-plant-ranks>).

The adverse effects the project could have on the fish or wildlife resources identified above include:

- loss of natural bed or bank
- change in contour of bed, channel or bank
- change in channel cross-section (confinement)
- change in gradient of bed, channel, or bank
- change in flow depth, width, or velocity
- change in composition of channel materials
- loss of bank stability during construction
- increase of bank erosion during construction
- restriction or increase in sediment transport
- soil compaction or other disturbance to soil layer
- increased turbidity
- short term release of contaminants
- temporary and permanent loss of riparian and/or emergent marsh habitat
- decline of vegetative diversity
- colonization by exotic plant or animal species
- loss or decline of instream woody material
- disruption to nesting birds and other wildlife
- temporary impediment to migration of aquatic and terrestrial species
- loss of aquatic or terrestrial species
- disturbance from project activity

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in the Agreement might conflict with a

provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.

- 1.4 **Project Site Entry**. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with the Agreement.
- 1.5 **Notify CDFW Prior to Work**. The Permittee shall notify CDFW by email at least five working days prior to commencement of covered activities. See contact information below.
- 1.6 **No Trespass**. To the extent that any provisions of this Agreement provide for activities that require the Permittee to traverse another owner's property, such provisions are agreed to with the understanding that the Permittee possesses the legal right to so traverse. In the absence of such right, any such provision is void.
- 1.7 **Unauthorized Take**. The Permittee is required to comply with all applicable state and federal laws, including the California Endangered Species Act (CESA) and federal Endangered Species Act. This Agreement does not authorize the take² of any state or federal endangered or threatened species. Liability for any take or incidental take of such listed species remains the responsibility of the Permittee for the duration of the project. Any unauthorized take of such listed species may result in prosecution and nullification of the Agreement.
- 1.8 **Fish Passage**. The project shall comply with Fish and Game Code section 5901 and shall not install or maintain any device or contrivance that prevents, impedes, or tends to prevent or impede, the passing of fish³ up and down stream.
- 1.9 **Designated Representative**. Before initiating ground-disturbing project activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this Agreement. The Permittee shall notify CDFW in writing five days prior to commencement of project activities of the Designated Representative's name, business address, and contact information. Permittee shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this Agreement.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

² Take, as defined in Fish and Game Code section 86, means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill. Take, as defined in title 16 of U.S. Code section 1532 subsection 19, means harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt any of those activities.

³ Fish, as defined in Fish and Game Code section 45, means a wild fish, mollusk, crustacean, invertebrate, amphibian, or part, spawn, or ovum of any of those animals.

Work Period and Design

- 2.1 **Work Period.** All work shall begin on or after **June 15** and all work shall be completed by **October 15**. Revegetation work conducted with hand tools is not limited to this work window but must be completed within the same season as project activities.
- 2.2 **Work Period Modification.** If a work period modification is needed, the work may be permitted outside of the work period specified in Measure 2.1 by a CDFW representative who reviewed the project, or if unavailable, through contact with the Regional Office at (707) 428-2002. Permittee shall submit a written request for a work period variance on a week-by-week basis to CDFW. The work period variance request should consider the effects of noise, increased stream flows, rain delays, increased erosion control measures, limited access due to saturated soil conditions, and limited growth of erosion control grasses due to cool weather. Work period variances are issued at the discretion of CDFW. CDFW reserves the right to require additional measures, which shall be implemented by the Permittee, to protect fish and wildlife resources as a condition for granting the variance. At minimum, the work period variance request shall:
- 1) Describe the extent of work already completed.
 - 2) Detail the activities that remain to be completed.
 - 3) Provide a National Weather Service forecast covering the time needed, up to one week, to complete a phase or activity.
 - 4) Detail the time required to complete each of the remaining activities.
 - 5) Provide photographs of both the completed and proposed work sites.
 - 6) Include an assessment of additional biological impacts as a result of the work extension.
- 2.3 **Conduct Work During Daylight Hours.** Work is restricted to daylight hours (one hour after sunrise to sunset).
- 2.4 **Work According to Documents.** Except as they are contradicted by measures required by this Agreement, all work shall be conducted in conformance with the project description above and the avoidance, minimization, and mitigation measures provided in the notification package.
- 2.5 **Work According to Plans.** Project plans shall be submitted to CDFW at least 30 days prior to beginning project activities. Project activities shall not proceed until CDFW has accepted the plans in writing. At the discretion of CDFW, minor plan modifications may require an amendment to this Agreement. At the discretion of the CDFW, if substantial changes are made to the original plans this Agreement becomes void and the Permittee shall submit a new notification.

Weather Restrictions

2.6 Work Period in Dry Weather Only. Project work shall be restricted to dry weather, as allowed during the work period specified in Measure 2.1. The Permittee shall monitor forecasted precipitation. All necessary erosion control measures shall be implemented prior to the onset of precipitation. Construction activities shall cease when the National Weather Service 72-hour weather forecast indicates a 30 percent chance or higher of 0.25-inch or more of precipitation, unless otherwise approved in writing by CDFW. Construction equipment and materials shall be removed if inundation is likely. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-two-hour weather forecasts from the National Weather Service shall be consulted and work shall not resume until runoff ceases and there is less than a 30 percent forecast for precipitation for the following 24-hour period. Weather forecasts shall be documented upon request by CDFW.

Qualified Biologist(s) and Biological Monitor(s)

2.7 CDFW-Approved Qualified Biologist(s) and Monitor(s). No later than 30 days prior to project activities covered by this Agreement, the Permittee shall submit to CDFW, for review and approval, the qualifications for the biologist(s) that shall oversee the implementation of the conditions in this Agreement and conduct surveys or monitoring work using the Biologist Resume Form (found at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=202869>) or another format containing the same information. Project activities covered by this Agreement may not commence unless CDFW has approved in writing the proposed biologist(s).

- A Qualified Biologist is an individual who holds a bachelor's degree from an accredited university and: 1) is knowledgeable in relevant species' life histories and ecology, 2) can correctly identify relevant species, 3) has conducted field surveys for relevant species, 4) is familiar with relevant survey protocols, and 5) is knowledgeable of state and federal laws regarding the protection of sensitive species.
- A Biological Monitor is an individual who shall have academic and professional experience in biological sciences and related resource management activities as it pertains to this project, experience with construction-level Biological Monitoring, be able to recognize species that may be present within the project area, and be familiar with the habitats and behavior of those species.

2.8 CDFW Approved Qualified Biologist or Biological Monitor On-site. A Qualified Biologist or Biological Monitor shall be on site during all project activity to monitor compliance with all conditions of this Agreement unless otherwise approved in writing by CDFW. A Qualified Biologist or Biological Monitor shall have the authority to halt project activities, through communication with the project

manager or their on-site designee, to comply with the terms of this Agreement and otherwise avoid impacts to species and or habitats. If the on-site Biologist has requested a work stop due to failure to implement any of the conditions, CDFW shall be contacted within 24 hours.

General Wildlife Protection and Prevention

- 2.9 **Special-Status Species Survey.** A Qualified Biologist, approved by CDFW for this project, shall conduct a pre-construction survey **within 48 hours prior to the start of project activities**, focusing on the presence of special-status species. If any special-status species are discovered during the survey, project activities shall not begin until CDFW has been consulted with regarding avoidance and minimization measures to avoid and minimize impacts to special-status species. Permittee shall implement the avoidance and minimization measures if required by CDFW.
- 2.10 **Training Session for Personnel.** Permittee shall ensure that a CDFW-approved Qualified Biologist conducts an education program for all persons employed on the project prior to performing covered activities. Instruction shall consist of a presentation by the designated Qualified Biologist that includes a discussion of the biology and general behavior of any sensitive species which may be in the area, how they may be encountered within the work area, and procedures to follow when they are encountered. The status of CESA-listed species, including legal protection, penalties for violations, and project-specific protective measures provided in this Agreement shall be discussed. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to on-site project activity. Copies of the Agreement for this project shall be maintained at the worksite with the project supervisor. Permittee or Qualified Biologist shall prepare and distribute wallet-sized cards or a factsheet handout containing this information for workers to carry on-site. Upon completion of the program, employees shall sign an affidavit stating they attended the program and understand all protection measures. These forms shall be filed at the Permittee's office and be available to CDFW upon request.
- 2.11 **Daily Inspections.** At the beginning of each workday and prior to construction activities beginning, the work areas, equipment and material left onsite, and any access routes into the work area and nearby vicinity, shall be inspected by a Biological Monitor or qualified person approved in writing by CDFW for the presence of special-status species, roosting bats, nesting birds, or other wildlife. If any species is detected, CDFW shall be notified and construction activities shall not begin until the species has left the site of its own volition, or CDFW provides written permission to proceed.
- 2.12 **Wildlife Encounters.** If any wildlife is encountered during the course of construction, all work in the immediate area shall cease and the wildlife shall be allowed to leave the construction area unharmed. If any listed fish and wildlife are encountered, the Permittee shall contact CDFW immediately.

- 2.13 Trenches and Holes. At the end of each workday all trenches and holes greater than one foot deep shall be completely covered with a material flush with the ground to prevent wildlife from entering. When trenches cannot be fully covered, an escape ramp shall be placed at each end of any constructed open trench to allow any wildlife that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degrees.
- 2.14 Pipes, Hoses, and Similar Structures. All pipes, hoses, or similar structures less than 12 inches in diameter shall be closed or covered to prevent animal entry. All construction pipes or similar structures greater than 2 inches in diameter stored at the project site overnight shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved.
- 2.15 No Excavation in Stream Where Surface Water Present. No excavation shall occur in the portion of the stream where surface water is present or anticipated during the seasonal work period.
- 2.16 No Heavy Equipment in Stream Where Surface Water Present. No heavy equipment shall be staged or operated within the stream where surface water is present.

Northern Spotted Owl Protection

- 2.17 Northern Spotted Owl Surveys. No project activities shall occur from March 15 to August 31, unless northern spotted owl surveys have been completed by a Qualified Biologist following the USFWS *Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls*, dated (revised) January 9, 2012, or as otherwise approved in writing by CDFW. Surveys shall be conducted in accordance with Section 9 of the survey protocol, *Surveys for Disturbance-Only Projects*. If breeding northern spotted owls are detected during surveys, a quarter mile no-disturbance buffer zone shall be implemented around the nest. Survey results shall be provided to CDFW and to the Spotted Owl Observations Database (<https://wildlife.ca.gov/Data/CNDDDB/Spotted-Owl-Info>). No project activities shall occur within the buffer zone until the end of breeding season, or a Qualified Biologist determines that the nest is no longer active, unless otherwise approved in writing by CDFW.

Alternate buffer zones may be proposed by a Qualified Biologist after conducting an auditory and visual disturbance analysis following the USFWS guidance, *Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California*, dated October 1, 2020. Alternate buffers must be approved in writing by CDFW.

California Red-Legged Frog Protection

- 2.18 California Red-legged Frog Habitat Assessment and Surveys. At least two weeks prior to the commencement of ground-disturbing activities, the project area and nearby vicinity, including a minimum 500-foot radius surrounding the project activity area, shall be assessed by a Qualified Biologist for the presence of California red-legged frog individuals and habitat features. Habitat features include both aquatic habitat such as plunge pools and ponds and terrestrial habitat such as burrows or other refugia. If habitat occurs, then no more than 48 hours prior to ground-disturbing activities the area shall be surveyed by a Qualified Biologist. The results of the habitat feature assessment and survey shall be submitted to CDFW via EPIMS and email (see Contact Information) for written acceptance prior to starting project activities. Burrows and refugia sites shall be flagged or otherwise marked for avoidance; project activities shall avoid habitat features to the extent feasible. If California red-legged frogs are encountered during the assessment or project activities, the project shall not proceed or all work shall cease, and CDFW shall immediately be notified. Work shall not proceed until the frog, through its own volition, moves out of harm's way and CDFW has provided permission in writing to proceed with the project. If California red-legged frog is encountered or the Qualified Biologist determines that impacts to the species are likely to occur, Permittee shall consult with the U.S. Fish and Wildlife Service pursuant to the Federal Endangered Species Act and receive written approval from CDFW prior to the impact. In this case, CDFW may require additional protection measures which shall be implemented by the Permittee.

Foothill Yellow-legged Frog Protection

- 2.19 Foothill Yellow-Legged Frog Survey Methodology. The Permittee or a Qualified Biologist acting on behalf of Permittee, shall provide a foothill yellow-legged frog survey methodology to CDFW for review and written approval no less than 30 days prior to beginning project activities, unless CDFW approves otherwise in writing. No project activities shall begin until foothill yellow-legged frog surveys have been completed using a method approved by CDFW. Survey methodology is not required if the Permittee has collected data that the stream has been completely dry for greater than 30 days prior to starting project activities, and no water or moist areas within the streambed exist within 500 feet upstream and downstream of the project. Survey methodology shall target all life stages and shall have an adaptive management approach based on the stream conditions at the time of surveys (i.e., whether ponded or flowing water is present, or whether the stream has been completely dry for less than 30 days). Surveys within and adjacent to the project activity area shall include searching suitable habitat including but not limited to cavities under rocks, within vegetation such as sedges and other clumped vegetation, and under undercut banks, no less than 50 feet from the streambed and 500 feet upstream and downstream of the project activity area. Surveys should be conducted at different times of day and under variable weather conditions if

possible.

- 2.20 **Foothill Yellow-Legged Frog Surveys.** Prior to starting project activities, a Qualified Biologist shall conduct surveys for foothill yellow-legged frog using a CDFW-approved methodology (see above Measure). If foothill yellow-legged frogs, their eggs, or any other special-status species, are found, CDFW shall be notified immediately and construction shall not occur without written approval from CDFW allowing the project activities to proceed. In the event adult foothill yellow-legged frogs are observed, a temporary wildlife exclusion fence shall be installed, if requested by CDFW, to prevent frogs and/or other special-status species from entering the work site. The results of the survey shall be submitted to CDFW via email (see Contact Information) for written acceptance prior to starting project activities. If the Permittee has collected data that the stream has been completely dry for greater than 30 days prior to starting project activities, and no water or moist areas within the streambed exist within 500 feet upstream and downstream of the project, then Permittee may request CDFW written approval that surveys for foothill yellow-legged frogs are not necessary.
- 2.21 **Foothill Yellow-legged Frog Retaining Wall Exclusion.** Prior to construction of the new retaining wall, all holes and crevasses in the old wall will be thoroughly inspected for foothill yellow-legged frogs by a Qualified Biologist. If frogs are located in the old wall, they will be removed by a Qualified Biologist and relocated at least 500 feet upstream or downstream to suitable habitat. If foothill yellow-legged frog is detected during the foothill-yellow-legged frog surveys or old retaining wall inspection, foothill yellow-legged frog exclusion fencing shall be installed around the old wall. This fencing will be maintained until the area between the new and old retaining walls is filled and compacted. If the Permittee has collected data that no suitable holes or crevasses are present in the old wall, then Permittee may request and must receive CDFW written approval that exclusion fencing is not necessary.

Western Pond Turtle Protection

- 2.22 **Western Pond Turtle Surveys.** No more than two weeks prior to the commencement of ground-disturbing activities, a Qualified Biologist shall perform surveys for western pond turtles and their nests within aquatic and upland habitat at the project site. An additional survey shall occur no more than 48 hours prior to project activities. If a pond turtle or nest site is detected at any time, CDFW shall be notified immediately. Survey results shall be submitted to CDFW prior to construction activities. All western pond turtles observed on-site shall be avoided and allowed to leave the project activity area of their own volition or may be relocated to suitable habitat within the stream. Any turtle nest sites shall be avoided with an appropriate buffer identified by a Qualified Biologist and accepted in writing by CDFW. The Permittee shall prepare and implement a Western Pond Turtle Habitat Improvement Plan, if western pond turtle or their nests are found, if

required and approved in writing by CDFW.

Special-Status Plant Protection

2.23 Pre-Project Special-Status Plant Surveys. A Qualified Biologist shall conduct botanical surveys during the appropriate blooming period and conditions for all special-status plants that have the potential to occur prior to the start of construction, unless otherwise approved in writing by CDFW. More than one year of surveys may be necessary. Surveys shall be conducted following CDFW's *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (<https://wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants>). Survey reports shall be submitted to CDFW for written approval prior to the start of construction. If any special-status plant species are observed, the project shall fully avoid direct and indirect impacts to all individuals and prepare and implement a CDFW-approved avoidance plan prior to project activities. If full avoidance is not possible, project activities may not commence until the Permittee has consulted with CDFW and obtained CDFW's written approval, which may include an amendment to this Agreement.

Bat Protection

2.24 Roosting Bat Habitat Assessment and Surveys. Prior to any tree trimming or removal, a Qualified Biologist shall conduct a habitat assessment for bats. The habitat assessment shall be conducted a minimum of 30 days prior to tree removal and shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, or exfoliating bark for colonial species, and suitable canopy for foliage-roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. Trees may be removed only if: a) presence of bats is presumed, or documented during the surveys described below, in trees with suitable bat habitat, and removal using the two-step removal process detailed below occurs only during seasonal periods of bat activity from approximately March 1 through April 15 and September 1 through October 15, or b) after a qualified bat biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or complete visual examination of roost features that establish absence of roosting bats. Two-step tree removal shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under direct supervision and instruction by a qualified bat biologist with experience conducting two-step tree removal limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures shall be avoided, and 2) the second day the entire tree shall be removed. CDFW reserves the right to provide additional provisions to this Agreement in the event that roosting bats are found and an Amendment to this Agreement may be required.

Nesting Bird Surveys, Prohibitions, and Buffers

- 2.25 **Breeding Bird Nest Take Prohibition.** Permittee shall avoid active nests occurring at or near the project site. Permittee is responsible for complying with Fish and Game Code section 3503 et seq. and the Migratory Bird Treaty Act of 1918.
- 2.26 **Nesting Bird Surveys.** If construction, grading, vegetation removal, or other project-related activities are scheduled during the nesting season, February 1 to August 31, a focused survey for active nests shall be conducted by a Qualified Biologist within 7 days prior to the beginning of project-related activities. The results of the survey shall be sent to CDFW via EPIMS and by email prior to the start of project activities, for review and acceptance (see Contact Information). If an active nest is found, Permittee shall consult with CDFW regarding appropriate action to comply with Fish and Game Code. If a lapse in project-related work of 7 days or longer occurs, another focused survey and, if needed, consultation with CDFW, shall be required before project work can be reinitiated.
- 2.27 **Active Nest Buffers.** If an active nest is found during surveys, Permittee or the Qualified Biologist shall consult with CDFW regarding appropriate action to comply with state and federal laws. Active nest sites shall be designated as “Ecologically Sensitive Areas” (ESA) and protected (while occupied) during project work by demarking a “No Work Zone” around each nest site.
- Buffer distances for bird nests shall be site specific and an appropriate distance, as determined by a Qualified Biologist. The buffer distances shall be specified to protect the bird’s normal behavior to prevent nesting failure or abandonment. The buffer distance recommendation shall be developed after field investigations that evaluate the bird(s) apparent distress in the presence of people or equipment at various distances. Abnormal nesting behaviors which may cause reproductive harm include, but are not limited to, defensive flights/vocalizations directed towards project personnel, standing up from a brooding position, and flying away from the nest. The Qualified Biologist and Biological Monitor shall have authority to order the cessation of all nearby project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established.
 - The Qualified Biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by project work. Nest monitoring shall continue during project work until the young have fully fledged (have completely left the nest site and are no longer being fed by the parents), as determined by the Qualified Biologist. Any reduction in monitoring active nests must be approved in writing by CDFW

2.28 Nesting Habitat Removal or Modification. No habitat removal or modification shall occur within the ESA-marked nest zone (see above measure) until the young have fully fledged and will no longer be adversely affected by the project, as determined by a Qualified Biologist or Biological Monitor. Any trees or shrubs that are removed shall be “downed” in such a manner as to minimize disturbance to stable soil conditions.

Vegetation Protection, Prevention, and Restoration

2.29 Habitat Protection. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete the project. Vegetation outside the construction corridor shall not be removed or damaged without prior consultation and approval of a CDFW representative.

2.30 Vegetation Marked for Protection. Prior to project activities, the Permittee shall clearly mark all vegetation within the project area that shall be avoided during project activities.

2.31 Riparian Tree Protection. No trees will be removed unless otherwise approved in this Agreement or in writing by CDFW. For each existing tree with a greater than four-inch diameter at breast height (DBH) within or adjacent to the work area, a critical root zone shall be established by the Qualified Biologist. The critical root zone shall extend from the trunk to the drip-line (i.e., the outer extent of the tree canopy) of each tree within the project area and shall be flagged or fenced off from work. Protection and avoidance of the critical root zone shall be emphasized during the on-site education program to avoid impacts. If work will be conducted within the root protection zone of a tree, then that tree shall be considered an “impacted tree” and the Permittee or Qualified Biologist shall monitor the tree for signs of mortality as a result of project. If the tree becomes injured or shows signs of mortality, additional revegetation actions shall be required.

2.32 Tree Drip Line. Construction materials, equipment storage, and parking areas shall be located outside the drip line of any preserved tree. Construction equipment shall not cause root compaction.

2.33 Treat Exposed Areas. All exposed/disturbed areas and access points within the riparian zone left barren of vegetation as a result of the construction activities shall be restored by seeding with a blend of native erosion control grass seed. Seeded areas shall be mulched. Landscape fabric shall not be used. Revegetation shall be completed as soon as possible after activities in those areas cease. Seeding placed after October 15 must be covered with broadcast straw, jute netting, coconut fiber blanket or similar erosion control blanket.

2.34 Phytophthora. Permittee shall ensure that all plantings come from local nurseries implementing best management practices to avoid and minimize the spread of

Phytophthora.

- 2.35 Exotic Plants. Permittee shall not plant, seed or otherwise introduce invasive exotic plant species. Prohibited exotic plant species include those identified in the California Invasive Plant Council's database, which is accessible at: <https://www.cal-ipc.org/plants/inventory/>.
- 2.36 Control Invasive Species. Permittee is responsible for monitoring and if needed, eradication of invasive exotic species that may occur within the project area for a minimum of two years following construction. All revegetation efforts shall include local plant materials native to the project area.
- 2.37 Allowable Herbicide. If herbicide use is necessary, only herbicides registered with the California Department of Pesticide Regulation shall be used. All herbicides shall be applied in accordance with regulations set forth by the California Department of Pesticide Regulation and according to label instructions. Only herbicides approved for use in aquatic environments are permitted. Care shall be taken to avoid herbicide contact with native vegetation, and it shall only be applied on calm days (wind speed less than 5 miles per hour) to prevent airborne transfer of herbicide. No herbicides shall be used where threatened or endangered species occur, unless otherwise approved in writing by CDFW.
- 2.38 Riparian Revegetation and Monitoring Plan. A riparian revegetation and monitoring plan (RMP) shall be submitted to CDFW for written approval within 60 days of the Effective Date of the Agreement. The RMP shall be implemented the same year that impacts occur, unless otherwise approved in writing by CDFW. Approximately 110 square feet and 55 linear feet of San Anselmo Creek will be temporarily impacted by the project and approximately 199 square feet and 90 linear feet will be permanently impacted by the project. The RMP shall describe: 1) on site restoration and enhancement of all temporarily impacted areas; 2) restoration and enhancement onsite or offsite of a minimum of 597 square feet and 270 linear feet of riparian habitat as close to the project site as possible within the same watershed, unless otherwise approved in writing by CDFW; 3) a detailed native plant species palette and map showing plant spacing; and 4) specific performance criteria, monitoring and maintenance, adaptive management, and invasive species removal to allow for successful restoration and enhancement. An amendment to this Agreement or a separate Agreement may be required by CDFW based on the RMP.
- 2.39 Tree Replacement. Any trees removed as a result of the project shall be replaced pursuant to the below minimum restoration to impact ratios, unless otherwise approved in writing by CDFW.
- 1:1 for removal of non-native trees;
 - 1:1 for removal of native trees up to 3 inches DBH;

- 3:1 for removal of native trees 4 to 6 inches DBH;
- 6:1 for removal of native trees greater than 6 inches DBH;
- 4:1 for removal of oak (*Quercus* sp.) trees up to 6 inches DBH;
- 5:1 for removal of oak trees greater than 6 inches to 15 inches DBH; and
- 10:1 for removal of oak trees greater than 15 inches DBH.

Replacement oaks shall come from nursery stock grown from locally sourced acorns, or from acorns gathered locally, preferably from the same watershed in which they are planted. The trees should be able to survive the last two years of the minimum five-year monitoring period without irrigation.

2.40 Revegetation Monitoring. To ensure a successful revegetation effort, all plantings shall be monitored and maintained as necessary for a minimum of five years. Each category of plantings (e.g., oaks, other trees, shrubs, etc.) shall have a minimum of 85% survival at the end of the minimum monitoring period and plantings shall attain 70% cover after 3 years and 75% cover after 5 years. Survival and cover criteria shall both be required unless the herbaceous or spreading plants cannot be differentiated by individual, in which case only cover success criteria are required. If the survival or cover requirements are not meeting these goals, the Permittee is responsible for replacement planting, additional watering, invasive exotic eradication, or any other practice, to achieve these requirements. Irrigation shall be done in the most water-efficient manner possible, such as using hand-watering, drip/micro-irrigation, or using a time-release system. Permittee shall monitor replacement plants with the same survival and growth requirements for five years after planting.

2.41 Disposal of Vegetation and Debris. All removed vegetation and debris shall be moved outside the ordinary high-water mark prior to inundation by water. All removed vegetation and debris shall be disposed of according to state and local laws and ordinances.

Concrete and Cement-based Products

2.42 Cement Based Products. All cement-based products (concrete, mortar, etc.) poured or applied wet onsite shall be excluded from the wetted channel or areas where they may come into contact with water for a period of 30 days after application, unless otherwise approved in writing by CDFW. During that time the product shall be kept moist and runoff from the product shall not be allowed to enter the stream. Commercial sealants may be applied to the product surface or mixture where difficulty in excluding flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is cured.

2.43 Concrete – Primary Containment. The Permittee shall install the necessary containment structures to control the placement of wet concrete and to prevent it from entering the channel outside of those structures. No concrete shall be poured

within the high flow line if the 15-day weather forecast indicates any day with a greater than 20 percent chance of rain.

2.44 Concrete – Designated Monitor. At all times when the Permittee is pouring or working with wet concrete there shall be a designated monitor to inspect the containment structures and ensure that no concrete or other debris enters into the channel outside of those structures.

Rock Armoring

2.45 Rock Slope Protection - Limitations. Rock slope protection (i.e., RSP or rip-rap) shall not be used for armoring/protecting the bank if any of the following criteria apply:

- Rock slope protection could transfer erosive forces to the opposite bank or another area downstream
- Rock slope protection would narrow or otherwise constrain the stream channel, limiting passage of peak flows and debris; or
- Installation of the rock would require removal of woody vegetation and/or trees over 4" DBH, unless otherwise permitted in this Agreement.

2.46 Rock Slope Protection. Permittee shall install angular, energy dissipating rock slope protection that is properly sized to withstand washout during peak flows. Permittee shall use the least amount and smallest size rock necessary to stabilize the banks and withstand washout. Only clean material such as rock rip-rap that is free of trash, debris and deleterious material shall be used as bank stabilization. Asphalt shall not be considered an acceptable material.

2.47 Fill Voids in Rock Slope Protection. Permittee shall ensure that all voids and spaces within the rip-rap are filled with smaller rock, gravels, and native soil material, and/or willow cuttings. Cementitious grouts shall not be used.

2.48 Geotextile Linings. If non-biodegradable geotextile linings must be used to ensure the engineered stability of the rock slope protection, it shall be monitored for the life of the project to ensure that it is never exposed to the stream. If the geotextile fabric is exposed to the stream, CDFW shall be notified and an amendment to this Agreement or a new notification may be required, as determined by CDFW.

Erosion and Sediment Control

2.49 Erosion Control. At no time shall silt laden runoff be allowed to enter a river, stream, or lake or directed to where it may enter a river, stream, or lake. Erosion control measures shall be utilized throughout all phases of operation where sediment runoff from exposed slopes threatens to enter a river, stream, or lake.

Erosion control measures, such as, silt fences, straw hay bales, gravel or rock lined ditches, water check bars, and broadcasted straw shall be used wherever sediment has the potential to leave the work site and enter the river, stream, or lake.

- 2.50 Monofilament. Permittee shall not use erosion control materials containing plastic monofilament netting (erosion control matting) or similar material containing netting within the project area due to documented evidence of amphibians and reptiles becoming entangled or trapped in such material. Acceptable substitutes include coconut coir matting or similar.
- 2.51 Excavation. No spoil from the excavation shall be placed on the bed or bank of the stream. Excavated spoil shall be removed to an area where the sediment will not deliver to a watercourse.
- 2.52 Groundwater Encountered. Nuisance groundwater encountered during excavation within the streambed or floodplain shall be discharged at a location where it will infiltrate into the soil, resulting in no overland flow. Turbid water shall not be allowed to flow downstream.
- 2.53 Erosion Control Monitoring. Permittee shall monitor erosion control measures during and after each storm event and repair and/or replace ineffective measures immediately.
- 2.54 Disposal and Removal of Materials. All removed spoils and construction debris shall be moved outside the work area prior to inundation by water. Spoil sites shall not be located within the stream channel or areas that may be subjected to stream flows, where spoil may be washed back into a stream, or where it may impact streambed habitat, aquatic or riparian vegetation. All removed material shall be disposed of according to state and local laws and ordinances.

Equipment and Vehicles

- 2.55 Operating Equipment and Vehicle Leaks. Any equipment or vehicles driven and/or operated adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life or riparian habitat.
- 2.56 Stationary Equipment Leaks. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak.
- 2.57 Refueling of Equipment. Refueling of construction equipment and vehicles may not occur within 175 feet of any water body, or anywhere that spilled fuel could drain to a water body. Tarps or similar material shall be placed underneath the

construction equipment and vehicles, when refueling, to capture incidental spillage of fuels. Equipment and vehicles operating in the project area shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.

Material Handling, Debris, and Waste

- 2.58 Stockpiled Materials. Building materials and/or construction equipment shall not be stockpiled or stored where they may be washed into the water or cover aquatic or riparian vegetation. Stockpiles shall be covered when measurable rain is forecasted.
- 2.59 No Dumping. Permittee and all contractors, subcontractors, and employees shall not dump any litter or construction debris within the stream, or where it may pass into the stream.
- 2.60 Pick Up Debris. Permittee shall pick up all debris and waste daily.
- 2.61 Wash Water. Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter a lake or flowing stream or placed in locations that may be subjected to high storm flows.

Toxic and Hazardous Material

- 2.62 Toxic Materials. Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into the stream or its tributaries shall be contained in watertight containers or removed from the project site.
- 2.63 Hazardous and Deleterious Materials. Debris, soil, silt, bark, slash, sawdust, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, wildlife, or riparian habitat resulting from the project related activities shall be prevented from contaminating the soil and/or entering the Waters of the State.

Spills and Emergencies

- 2.64 Spill Kits. Prior to entering the work site, all field personnel shall know the location of spill kits and trained in their appropriate use.
- 2.65 Spill of Material Deleterious to Fish and Wildlife. In the event of a hazardous materials spill into a stream (e.g., concrete or bentonite), Permittee shall immediately notify the California Office of Emergency Services State Warning Center by calling 1-800-852-7550 and immediately provide written notification to CDFW by email at R3LSA@wildlife.ca.gov. Permittee shall take all reasonable measures to document the extent of the impacts and affected areas including

photographic documentation of affected areas, injured fish and wildlife. If dead fish or wildlife are found in the affected area, Permittee shall collect carcasses and immediately deliver them to CDFW. Permittee shall meet with CDFW within ten days of the reported spill in order to develop a resolution including: site clean-up, site remediation and compensatory mitigation for the harm caused to fish, wildlife and the habitats on which they depend as a result of the spill. The Permittee shall be responsible for all spill clean-up, site remediation and compensatory mitigation costs. Spill of materials to waters of the state that are deleterious to fish and wildlife are in violation of Fish and Game Code section 5650 et seq. and are subject to civil penalties for each person responsible. CDFW reserves the right to refer the matter to the District Attorney's Office if a resolution cannot be agreed upon and achieved within a specified timeframe, generally six months from the date of the incident.

- 2.66 Spill Containment. All activities performed in or near a river, stream, or lake shall have absorbent materials designated for spill containment and cleanup activities on-site for use in an accidental spill. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550 and immediately initiate the cleanup activities. CDFW shall be notified by the Permittee and consulted regarding clean-up procedures.

3. Reporting Measures

Permittee shall meet each reporting requirement described below.

- 3.1 Notification Prior to Work. Per Measure 1.6, Notify CDFW Prior to Work, at least five days prior to the start of project activities, Permittee shall notify CDFW that work will commence.
- 3.2 Notification of Designated Representative. Per Measure 1.10, Designated Representative, at least five days prior to the start of project activities, Permittee shall submit to CDFW the name, business address, and contact information of the Designated Representative.
- 3.3 Qualified Biologist Approval. Per Measure 2.7, CDFW-Approved Qualified Biologist(s) and Monitor(s), no later than 30 days prior to project activities Permittee shall submit to CDFW, for review and approval, the qualifications for the biologist(s) that shall oversee the implementation of the conditions in this Agreement and conduct surveys or monitoring work.
- 3.4 Survey Reports. Survey results for northern spotted owl, California red-legged frog, foothill yellow-legged frog, special-status plants, nesting birds and all other sensitive species shall be submitted to CDFW for review and written acceptance prior to the start of work.

- 3.5 Riparian Revegetation and Monitoring Plan. Per Measure 2.38, Riparian Revegetation and Monitoring Plan, Permittee shall submit a riparian revegetation and monitoring plan to CDFW for written acceptance within 60 days of the Effective Date of the Agreement.
- 3.6 Monitoring Reports. Permittee shall submit to CDFW a status report by January 31 every year until restoration goals identified in Measures 2.38, 2.39, and 2.40 are accomplished. This report shall include the survival and percent cover of species planted and native species that have colonized the area. The number by species of plants replaced, an overview of the revegetation effort, and the method used to assess these parameters shall also be included. The report shall include photos from designated photo stations and other relevant information such as: a summary of invasive species control, methods used to remove non-native plants, and a list of wildlife observed on-site. After CDFW's review of the fifth-year monitoring report, if plantings have achieved the required success criteria, CDFW shall email Permittee stating that the monitoring requirements have been satisfied.
Monitoring requirements will not be deemed complete until CDFW emails Permittee stating so.
- 3.7 Photographic Documentation of Work and Project Completion Report. Prior to commencement of work a minimum of four (4) vantage points that offer representative views of the project site and work areas shall be identified. The Permittee shall photograph the project area from each of the vantage points, noting the direction and magnification of each photo. Upon completion of work, the Permittee shall photograph post-project conditions from the vantage points using the same direction and magnification as pre-project photos. A project Completion Report shall be submitted to CDFW with the photos and a reference key describing the location of the photo, the direction of the view, and whether the photo is pre- or post-construction. **The Project Completion Report shall be submitted within 30 days of project conclusion.**
- 3.8 Notification to the California Natural Diversity Database. If any listed, rare, or special status species are detected during project surveys or on or around the project site during project activities, the Permittee shall submit CNDDDB Field Survey Forms to CDFW in the manner described at the CNDDDB website (<https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>) within five working days of the sightings. Copies of such submittals shall also be submitted to the CDFW regional office as specified below.

CONTACT INFORMATION

Any communication that Permittee or CDFW submits to the other shall be submitted through EPIMS as instructed by CDFW.

To Permittee:

Jonathon Goldman
EPIMS-MAN-27091-R3
145 Canyon Road Wall Replacement
142 Bolinas Road,
Fairfax, CA 94930
jgoldman@townoffairfax.org

To CDFW:

Department of Fish and Wildlife
Bay Delta Region
EPIMS-MAN-27091-R3
145 Canyon Road Wall Replacement
R3LSA@wildlife.ca.gov; alex.single@wildlife.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with, or obtaining any other permits or authorizations that might be required under, other federal, state, or local laws or regulations before beginning the project or an activity related to it. For example, if the project causes take of a species listed as threatened or endangered under the Endangered Species Act (ESA), such take will be unlawful under the ESA absent a permit or other form of authorization from the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the Fish and Game Code including, but not limited to, Fish and Game Code sections 2050 *et seq.* (threatened and endangered species), section 3503 (bird nests and eggs), section 3503.5 (birds of prey), section 5650 (water pollution), section 5652 (refuse disposal into water), section 5901 (fish passage), section 5937 (sufficient water for fish), and section 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, Permittee shall use the "Amendments & Extension" form in EPIMS to submit the request. Permittee shall include with the completed form, payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall use the "Amendments & Extension" form in EPIMS to submit the request. Permittee shall

include with the completed form, payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with Fish and Game Code section 1605, subdivision (b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall use the "Amendments & Extension" form in EPIMS to submit the request. Permittee shall include with the completed form, payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with Fish and Game Code section 1605, subdivisions (b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code § 1605, subd. (f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable Fish and Game Code section 711.4 filing fee listed at <https://www.wildlife.ca.gov/Conservation/CEQA/Fees>.

TERM

This Agreement shall expire on December 31, 2026, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as Fish and Game Code section 1605, subdivision (a)(2) requires.

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with Fish and Game Code section 1602.

CONCURRENCE

Through the electronic signature by the permittee or permittee's representative as evidenced by the attached concurrence from CDFW's Environmental Permit Information Management System (EPIMS), the permittee accepts and agrees to comply with all provisions contained herein.

The EPIMS concurrence page containing electronic signatures must be attached to this agreement to be valid.