

CAMP MEEKER PARKS AND RECREATION

DUTCH BILL CREEK DAM REMOVAL AND RESTORATION

GENERAL NOTES:

1. **Source of Topography.** 2005 SURVEY BY BRELJIE AND RACE 5570 Skylane Blvd. Santa Rosa, CA 95403.

2. **Datums:**
HORIZONTAL: ASSUMED
VERTICAL: ASSUMED

3. **Design Intent.** These drawings represent the general design intent to be implemented and contractor is responsible for all items shown on these Plans. Contractor shall be responsible for contacting Engineer for any clarifications or further details necessary to accommodate actual site conditions. Any deviation from these plans without the Engineers approval are at the Contractor's own risk and expense. Notify Engineer immediately of any unexpected and changed conditions, safety hazards, and environmental problems encountered.

4. **Pre-construction Meeting.** A Pre-construction meeting will be held at the job site(s) to be attended by the the Engineer and the Construction site foreman and key contractor work personnel. The purpose of the meeting is to go over the work, provide clarifications, and discuss conditions of the permits. Special attention will be paid to Fisheries and Endangered Species issues and protection requirements. Provide Engineer with minimum 72 hours notice prior to meeting. Notice to proceed will be provided at completion of Pre-construction meeting.

5. **Completion Schedule.** Provide Engineer with project construction completion schedule within 72 hours of award of contract. All work within stream channels must be completed by October 15, 2009 and all erosion control measures must be in place by October 15, 2009. All contract work must be completed and contractor demobilized by November 15, 2009.

6. **Clarifications, Change Orders, and Additional Work.** The Engineer, acting on behalf of the Camp Meeker Recreation & Park District, may require revisions in the Plans due to unforeseen circumstances and problems that may arise in the field. Extra Work will be that as defined in State of California Caltrans Standard Specifications. Contractor is to promptly notify the City's Project Manager of all work considered Extra. Written cost estimates will be required for all Extra Work and written change orders will be executed upon the recommendation of the Engineer by the Gold Ridge RCD.

7. **Materials and Workmanship.** All materials, workmanship, and construction shall conform to State of California CalTrans Standard Plans and Specifications unless otherwise noted.

8. **Job Site Conditions and Contractor Responsibility.** Contractor shall assume sole and complete responsibility for site conditions during the course of the construction of this project, including the safety of all persons and property, and all environmental protection elements, whether shown on these Drawings or not. Contractor shall follow all applicable construction and safety regulations. These requirement shall apply continuously and will not be limited to normal working hours. The Contractor shall defend, indemnify, and hold Camp Meeker, Gold Ridge RCD and the project engineer (Questa Engineering Corporation) harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except from liability arising from the sole negligence of the Owner or Engineer.

9. **Damage.** Contractor shall exercise care to avoid damage to existing public and private property, including ornamental and native trees and shrubs, and other property improvements. If contractor causes damages to such items, he shall be responsible for repair or replacement in like number, kind, condition, and size. Any such cost may be deducted by RCD from monies due Contractor under this contract.

10. **Limits of Work, Access, Staging and Mobilization Areas.** The approximate Limits of Work are shown on the Drawings. Exact Limits of Work, points of ingress-egress, creek channel access, mobilization, staging, and work areas will be flagged in the field by the Project Manager or Engineer. All materials, excess soil, demolition debris and rubble, and equipment storage must occur within the staging and mobilization area. Equipment maintenance and fueling must occur within the staging and mobilization areas.

11. **Utilities.** Prior to commencing construction, the Contractor is required to contact the utility companies involved and request a visual verification of the location of their underground facilities. It shall be the responsibility of the contractor to identify, locate, and protect all underground utilities. The utility companies are thought to be members of the Underground Service Alert (U.S.A.) On-call program. The contractor shall notify the USA 48 hours in advance of performing excavation work by calling toll-free 1-800-642-2444.

12. **Erosion Control.** Contractor is responsible for all erosion control as part of the work. Install silt fence and/or hay bale barrier at downslope end of all channel grading projects prior to initiation of creek grading work. Hydroseed or broadcast seed, rake and straw mulch all disturbed areas upon job completion as shown on Drawings.

13. **Work in Stream Channels and Stream Diversions.** All work involving use of heavy equipment must be completed from top of bank unless a specific point of creek channel access has been approved and is shown on the plans, and then only in non-live water as defined by the Calif. Dept. of Fish and Game. The Contractor shall be responsible for following the Stream Diversion and Water Control Plan. All stream diversion and water control work is assumed to be a part of the mobilization and/or earthwork job requirements for payment purposes.

At or before the Pre-construction meeting the Contractor shall submit written and/or graphic descriptions of how the project site work areas will be dewatered, including but not limited to bypassing low flows around the work site to a point downstream of a silt trap (if deemed necessary), constructing of such a silt trap, necessary holding facilities, upstream or downstream cofferdams, pumps, or pipe conveyance systems. In general sand bag and geotextile filter fabric diversion structures and creek lining are preferred. Contractor is responsible for removal and disposition of all water control structures. The Contractor shall furnish, install, and operate all necessary machinery, appliances, and equipment to divert flowing water around work areas, and to keep excavations and trenches reasonably free from water during construction. Contractor shall dispose of the water so as not to cause injury to public or private property, or to cause a nuisance or a menace to the public, or to degrade water quality. He shall at all times have on hand sufficient pumping equipment and machinery in good working condition for all ordinary emergencies and shall have available at all times competent mechanics for the operation of all pumping equipment. If the Contractor chooses to use a pumping system for any portion of the water control work, he shall have adequate back-up equipment to insure the continuous operation of the equipment.

The Contractor shall at all times provide for the adequate return flow of diversions below the project site. The Contractor may temporarily divert water during construction, as outlined in their approved Stream Diversion and Water Control Plan. This may include for instance, visqueen and straw bale or sand bag diversion dikes and piping systems.

Turbid dewatering flows shall be pumped into a holding facility or sprayed over a large area outside the stream channel to allow for natural filtration of sediments. At no time shall turbid water be allowed back into the stream channel until water is clear of silt.

All heavy equipment must have a supply of sorbent pads available to clean-up grease, oil, or fuel that drips or spills into the stream channel. Sorbent booms must be placed downstream from locations where machinery is expected to cross the stream channel. Used pads and booms are to be disposed of properly at Contractor's expense.

14. **Endangered species may be present in the work areas.** The regulatory agencies including the California Dept. of Fish and Game, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service will issue terms and conditions and other permit requirements related to work in or near the stream channel. This will likely require periodic inspections, monitoring, and capturing and moving fish and other aquatic organisms. Camp Meeker will be responsible for providing a Biological Monitor to perform the required inspections, monitoring, and capture and move work tasks. Contractor is to coordinate with Engineer and Biologist in meeting these conditions of approval. The Biologist will have the authority to shut down the job site if in their opinion, Contractor is violating conditions of the permits, or if there is a significant threat to the safety of the Endangered Species.

15. **Earthwork and Grading.** All earthwork and grading shall be done in conformance with Chapter 33 of the UBC, the Grading Ordinance of Sonoma County, and as shown on these Drawings. Grading work will be completed under the direct supervision of the Engineer. Contractor is to provide a smooth or uniform slope as shown on the Drawings, and uniform transition to adjacent natural grades. Clearing for earthwork and grading shall be narrowly confined to only that absolutely necessary to complete the work, within the Limits of Work. Additional, unauthorized grading outside of the Limits of Work will not be compensated for, and must be restored and repaired by Contractor. The final grade must be approved by Engineer.

16. **Earthwork Quantities.** Contractor is responsible for all earthwork, including grading, provision and placement of rock meeting size limits, as shown on Drawings, and off-haul and legal disposal of all excess soil and rubble. Earthwork quantities, including grading, placed rock rip-rap and off-haul quantity estimates provided by Engineer is for purposes of estimating permit fees and for bid comparison only. Contractor is responsible for pre-bid job site inspection and independent estimation of all quantities. City and Engineer do not, expressly or otherwise by implication, extend any warranty to earthwork calculations.

17. **Archaeological Resources.** If Archaeological or Cultural Resources are identified during the work, then all work will halt in the affected area until a qualified professional is brought in to determine the significance of the resources, assess the situation and make recommendations.

The Owner will be responsible for developing and implementing a plan for dealing with the resources.

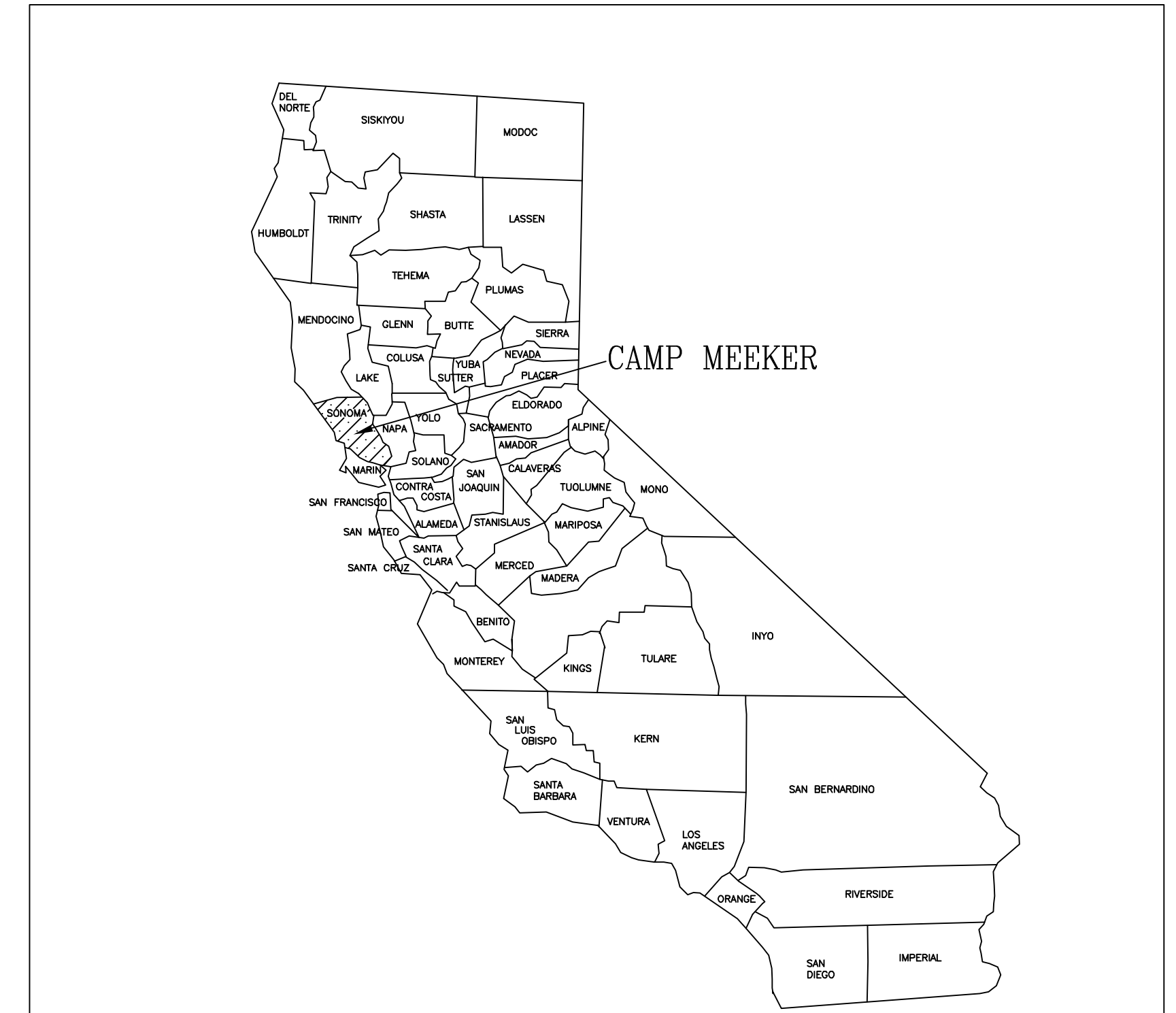
18. **Permits.**
Sec. 404 permit issued by US Army Corps of Engineers
1602/1603 Streambed Alteration Agreement issued by CA Dept. Fish & Game
NPDES Storm Water Discharge permit and Water Quality Certification, by North Coast Regional Water Quality Control Board
US Fish and Wildlife Service Consultation and Implementation Recommendations
National Marine Fisheries Service Consultation and Implementation Recommendations

The Contractor shall be given copies of all the permits, shall become familiar with the permit requirements, and shall be responsible for adherence to and conformance with all permit conditions as part of the overall work, including possible fines and mitigation for violations. No additional charges will be allowed for permit compliance work.

18. Telephone Numbers.

Client: Gold Ridge RCD
Contact: Lisa Huletta (707) 874-2907

Consultant: Questa Engineering Corporation
Contact: Syd Temple (510) 236-6114



REGIONAL VICINITY

NTS

SHEET LEGEND:

1. TITLE SHEET
2. STAGING AND SURVEY CONTROL PLAN
3. DEMOLITION AND DEWATERING PLAN
4. GRADING PLAN AND PROFILE
5. IMPROVEMENTS PLAN
6. CROSS SECTIONS & PROFILE
7. STORMDRAIN AND STAIRWAY DETAILS
8. BANK AND CHANNEL STABILIZATION DETAILS
9. PLANTING & EROSION CONTROL PLAN
10. STRUCTURAL - GENERAL PLAN
11. STRUCTURAL - FOUNDATION PLAN
12. STRUCTURAL - ABUTMENT 1 LAYOUT
13. STRUCTURAL - ABUTMENT 2 LAYOUT
14. STRUCTURAL - ABUTMENT DETAILS
15. STRUCTURAL - MISCELLANEOUS DETAILS

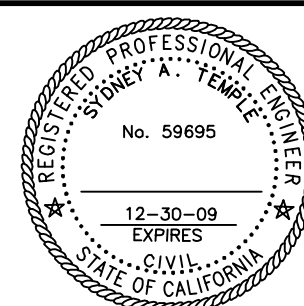


PROJECT VICINITY

NTS

DUTCH BILL CREEK DAM REMOVAL
CAMP MEEKER PARKS AND RECREATION
CAMP MEEKER, CALIFORNIA

QUESTA Environmental & Water Resources
ENGINEERING CORP.
(510) 236-6114
FAX (510) 236-2423
quest@questoec.com
P.O. Box 70356 1220 Brickyard Cove Road Point Richmond, CA 94807



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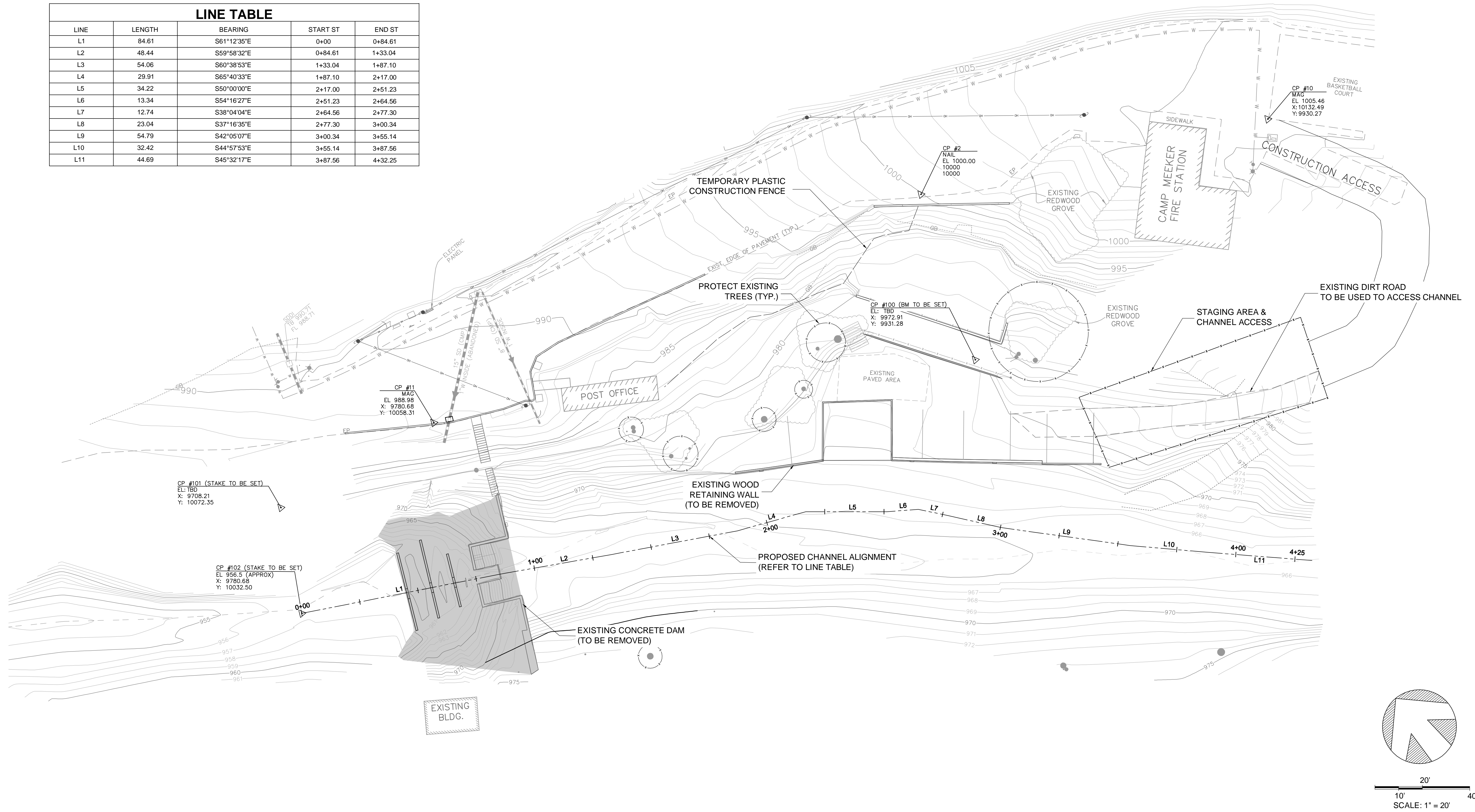
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TITLE SHEET
DUTCH BILL CREEK
CAMP MEEKER, CALIFORNIA

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Sheet:	1 OF 15	

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LINE TABLE				
LINE	LENGTH	BEARING	START ST	END ST
L1	84.61	S61°12'35"E	0+00	0+84.61
L2	48.44	S59°58'32"E	0+84.61	1+33.04
L3	54.06	S60°38'53"E	1+33.04	1+87.10
L4	29.91	S65°40'33"E	1+87.10	2+17.00
L5	34.22	S50°00'00"E	2+17.00	2+51.23
L6	13.34	S54°16'27"E	2+51.23	2+64.56
L7	12.74	S38°04'04"E	2+64.56	2+77.30
L8	23.04	S37°16'35"E	2+77.30	3+00.34
L9	54.79	S42°05'07"E	3+00.34	3+55.14
L10	32.42	S44°57'53"E	3+55.14	3+87.56
L11	44.69	S45°32'17"E	3+87.56	4+32.25



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DUTCH BILL CREEK DAM REMOVAL
 CAMP MEEKER PARKS AND RECREATION
 CAMP MEEKER, CALIFORNIA



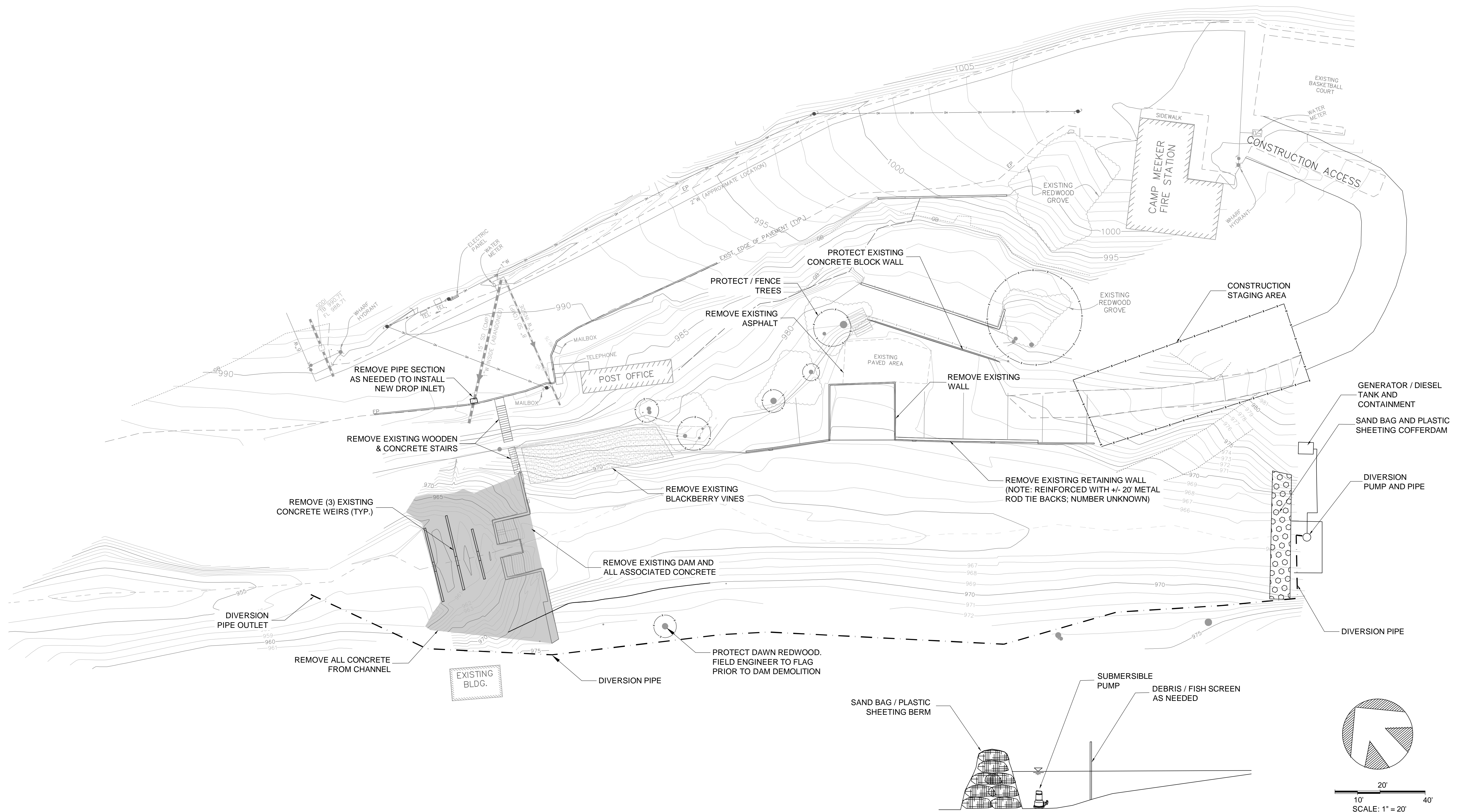
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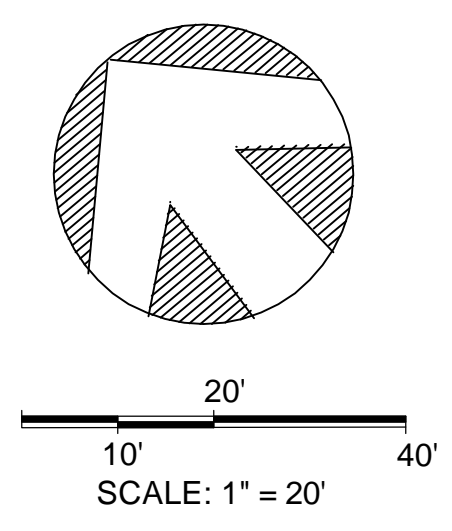
STAGING AND SURVEY CONTROL PLAN
 DUTCH BILL CREEK
 CAMP MEEKER, CALIFORNIA

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DIVERSION SCHEMATIC



DUTCH BILL CREEK DAM REMOVAL
 CAMP MEEKER PARKS AND RECREATION
 CAMP MEEKER, CALIFORNIA

QUESTA *Civil Environmental & Water Resources*
 ENGINEERING CORP.
 P.O. Box 70356 1220 Brickyard Cove Road Point Richmond, CA 94807
 (510) 236-6114
 FAX (510) 236-2423
 questa@questaec.com



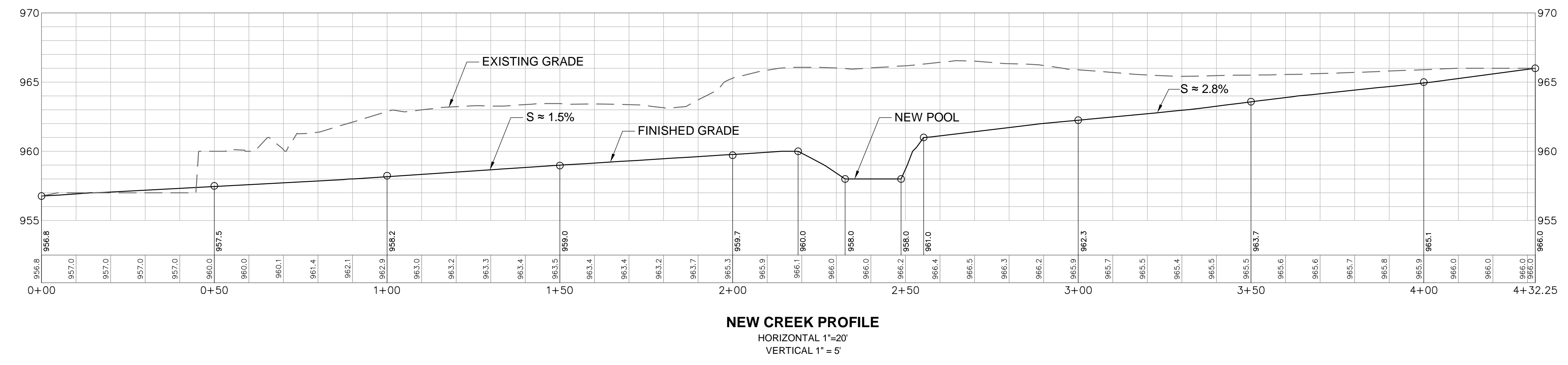
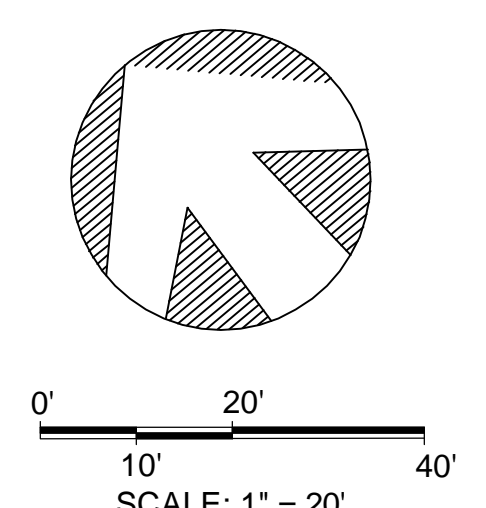
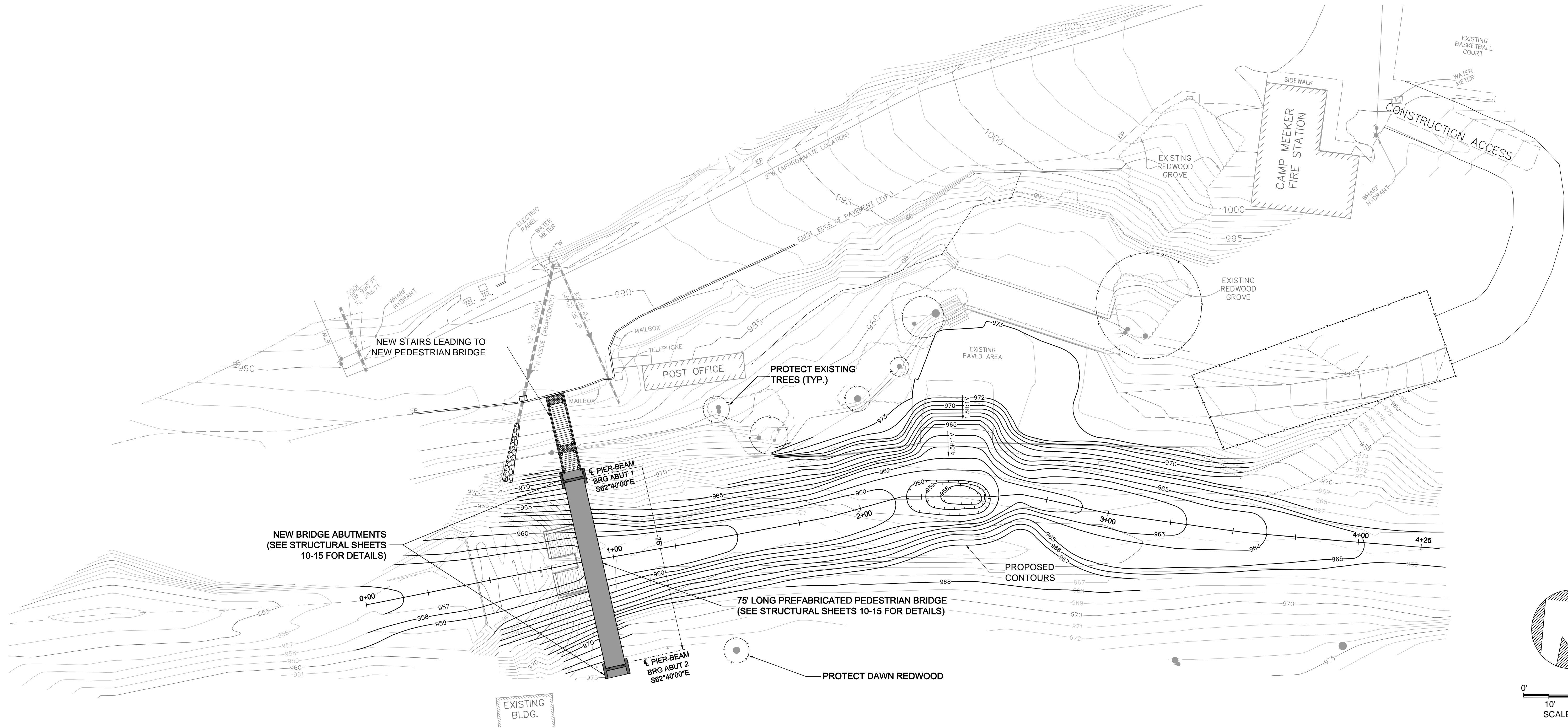
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DEMOLITION AND DEWATERING PLAN
 DUTCH BILL CREEK
 CAMP MEEKER, CALIFORNIA

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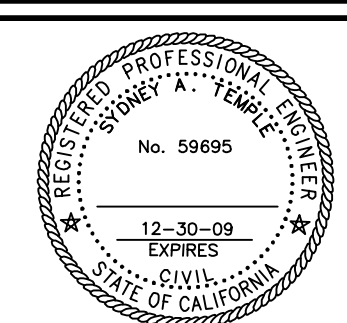
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NOTE:
 EXCESS SEDIMENTS MAY BE USED FOR CONSTRUCTION DOWNSTREAM ON THE MARKET STREET CULVERT. EXCESS SEDIMENT MAY ALSO BE SPREAD DOWNSTREAM OF THE DAM REMOVAL AT THE DIRECTION OF SUPERVISING ENGINEER. ALL OVER-MATERIAL MUST BE HAULED OFF.

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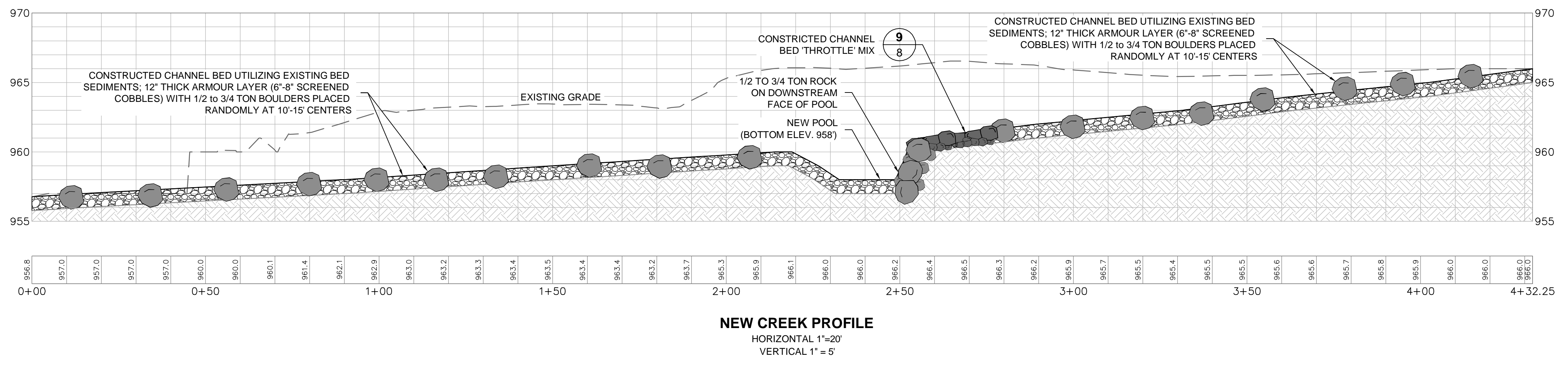
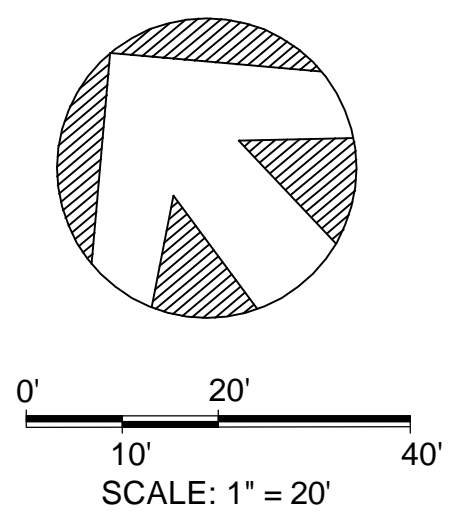
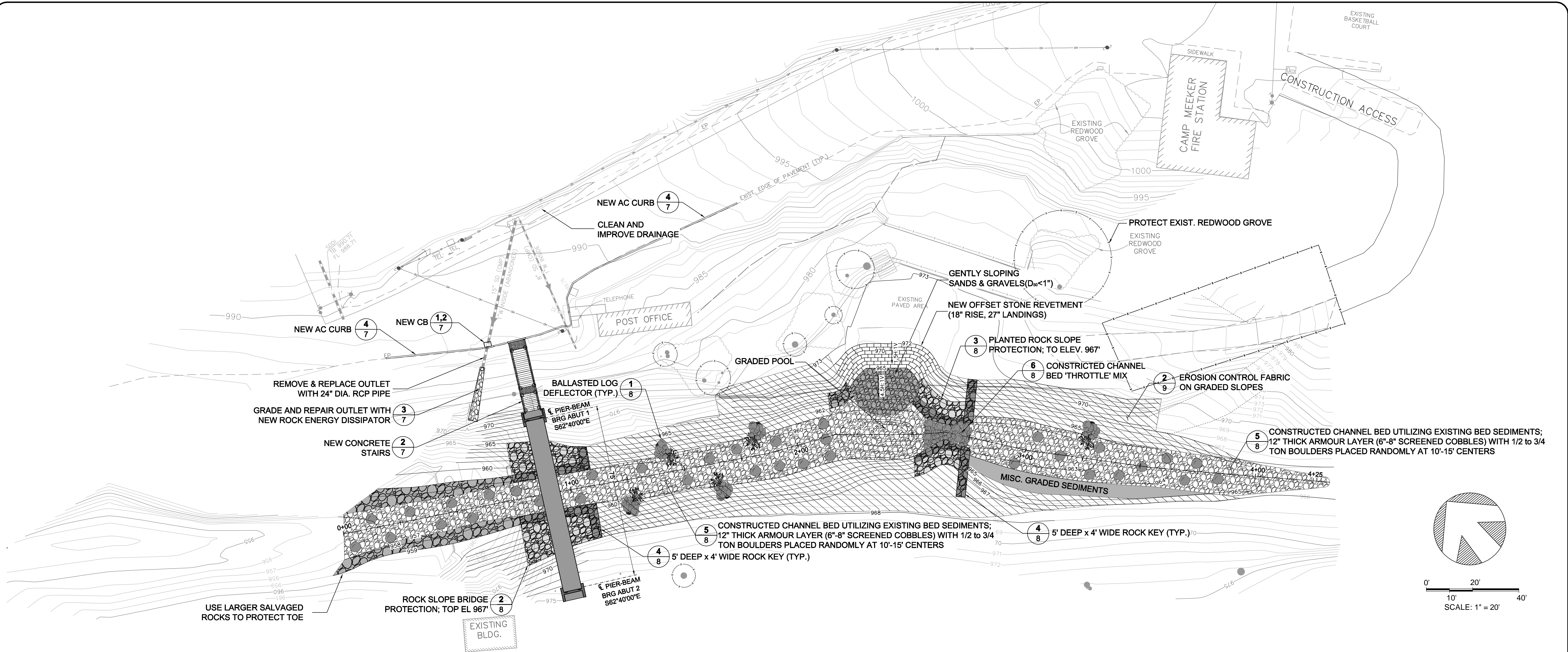
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GRADING PLAN AND PROFILE
 DUTCH BILL CREEK
 CAMP MEEKER, CALIFORNIA

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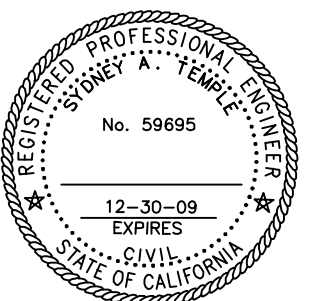
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NOTE:
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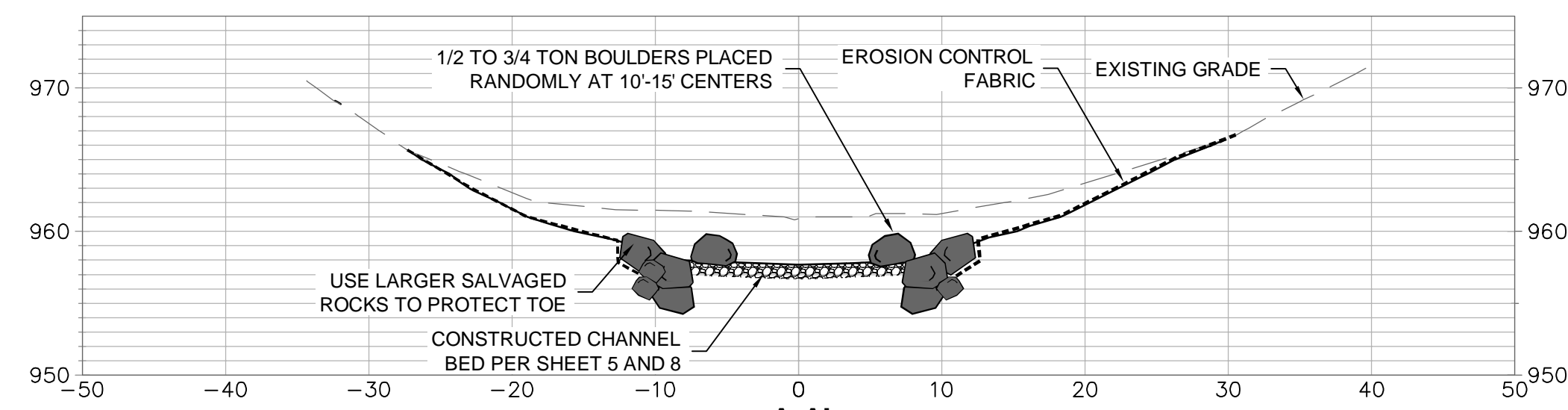
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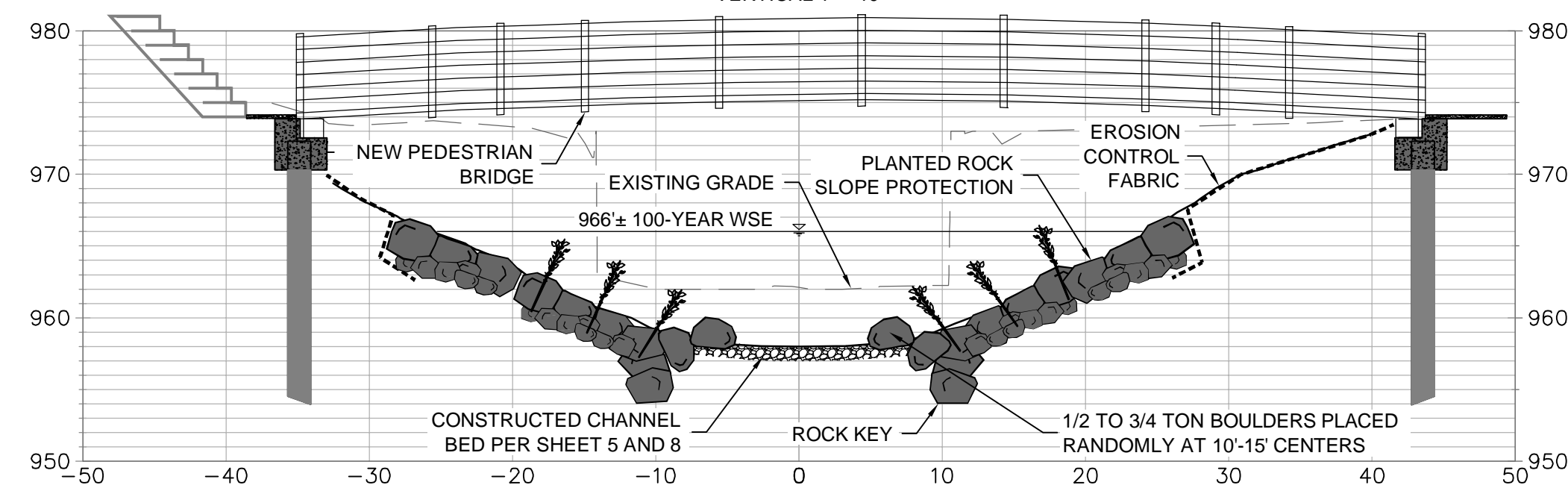
IMPROVEMENTS PLAN
 DUTCH BILL CREEK
 CAMP MEEKER, CALIFORNIA

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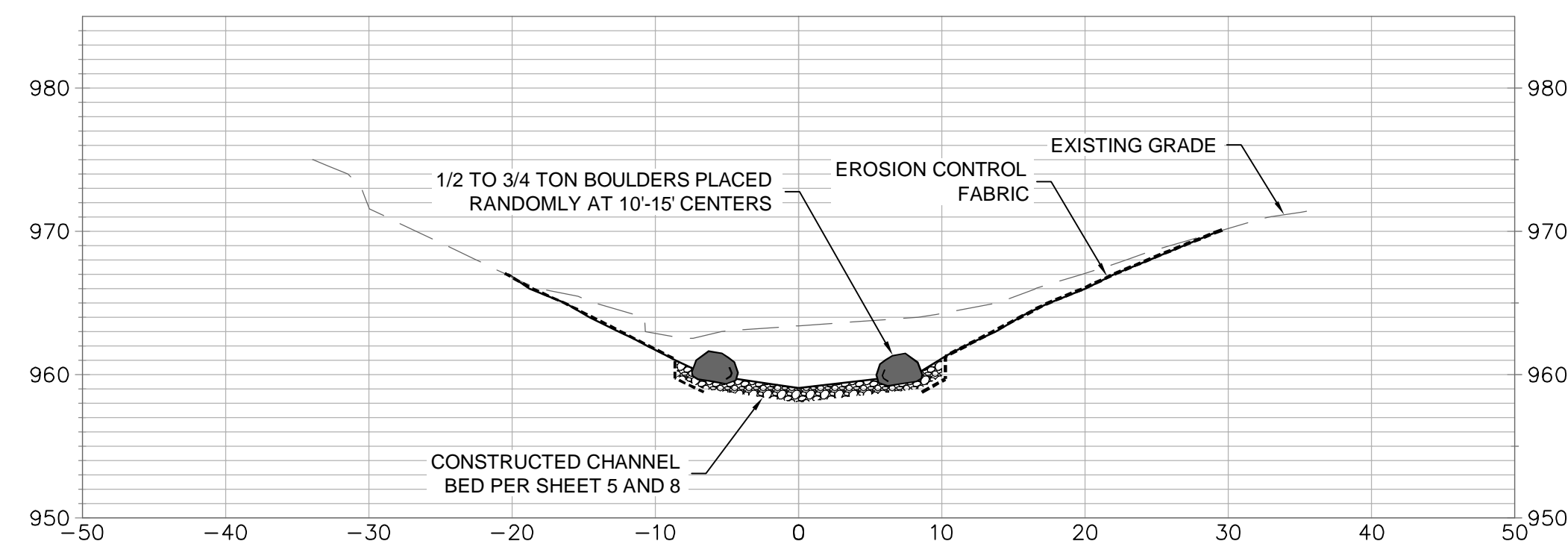
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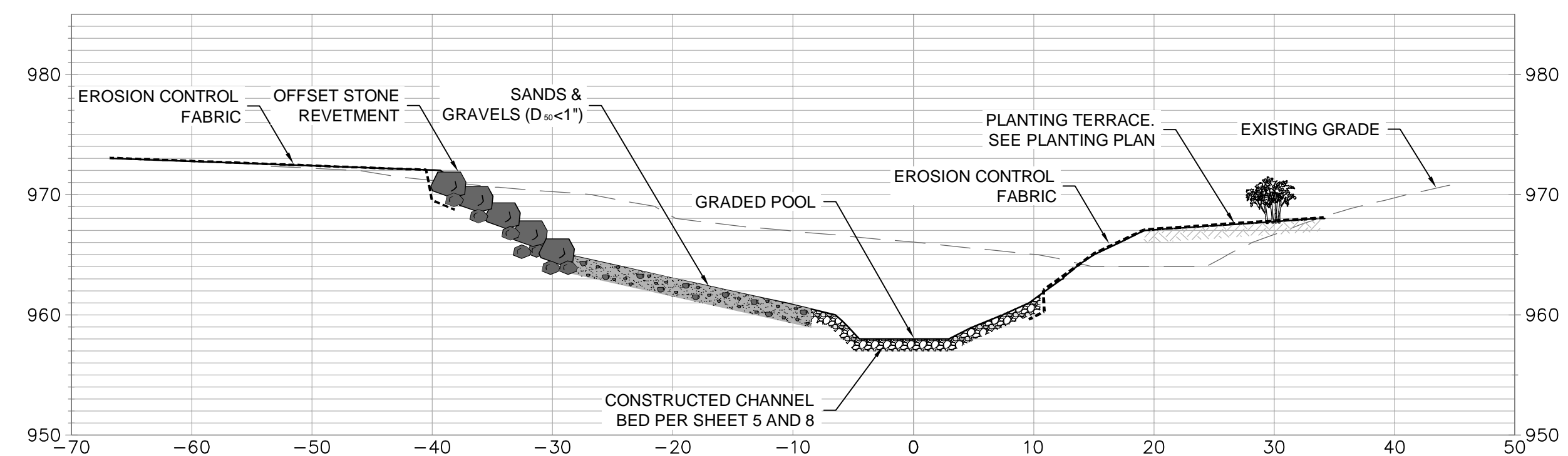
A-A'
STATION 0+65
HORIZONTAL 1"=10'
VERTICAL 1"=10'



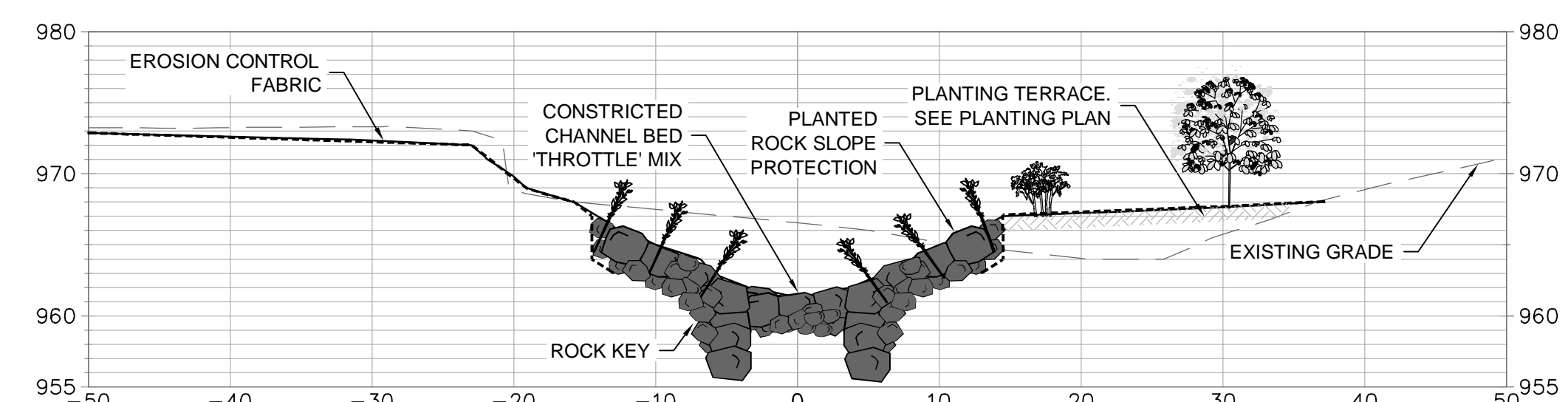
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HORIZONTAL 1"=10'
VERTICAL 1"=10'



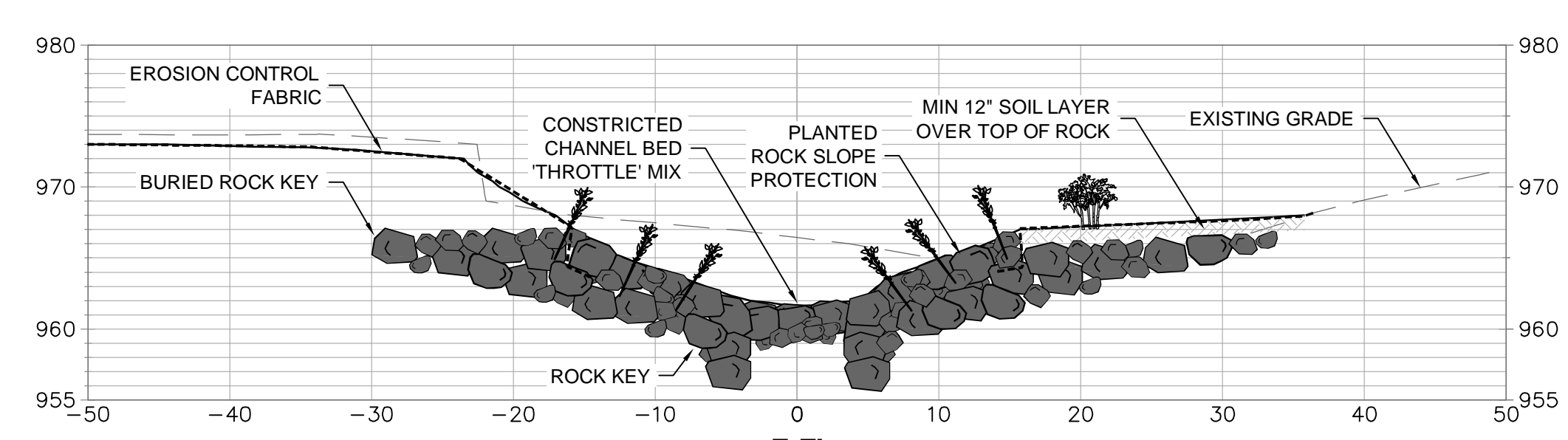
C-C'
STATION 1+55
HORIZONTAL 1"=10'
VERTICAL 1"=10'



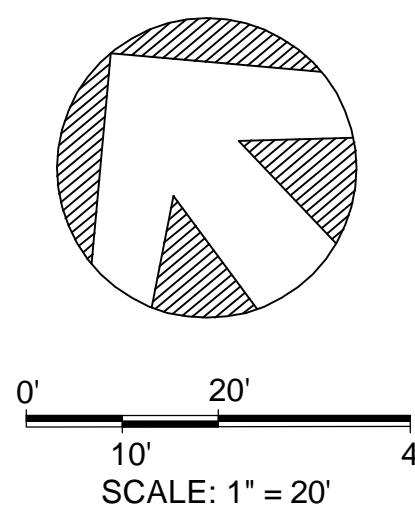
D-D'
STATION 2+40
HORIZONTAL 1"=10'
VERTICAL 1"=10'



E-E'
STATION 2+65
HORIZONTAL 1"=10'
VERTICAL 1"=10'



F-F'
STATION 2+74
HORIZONTAL 1"=10'
VERTICAL 1"=10'



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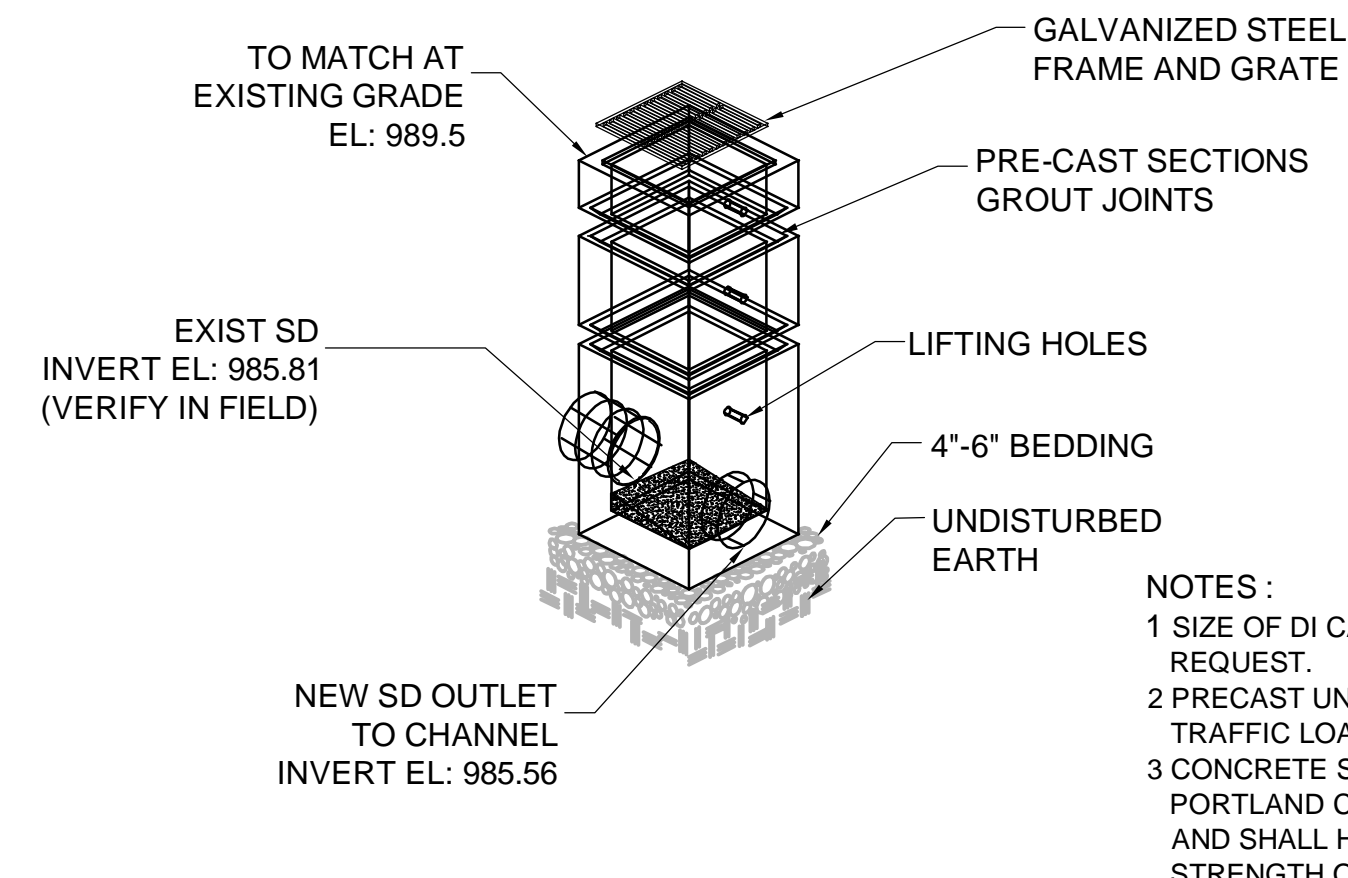
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CROSS-SECTIONS & PROFILE

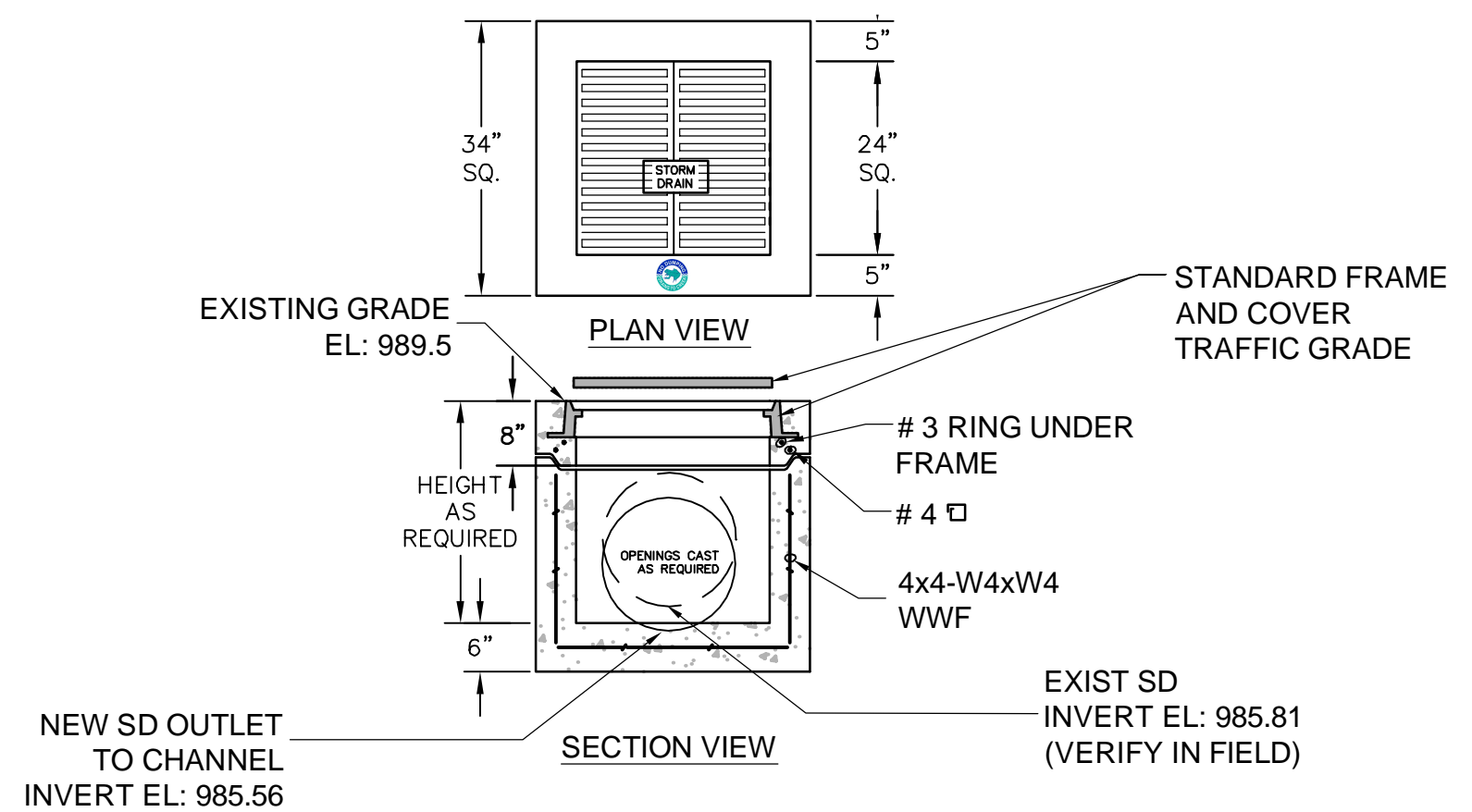
DUTCH BILL CREEK
CAMP MEEKER, CALIFORNIA

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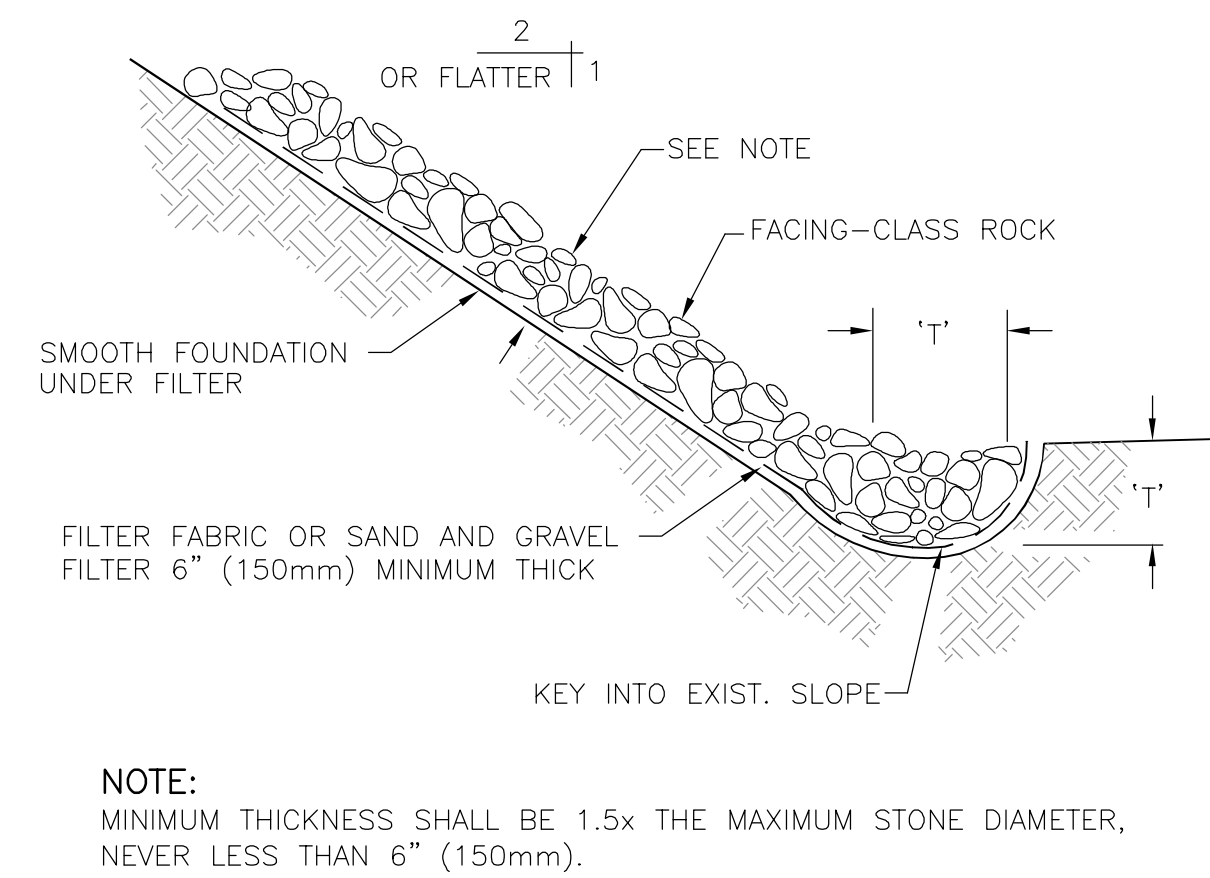


NOTES:
 1. SIZE OF DI CAN BE CHANGED UPON REQUEST.
 2. PRECAST UNIT DESIGNED TO BEAR FULL TRAFFIC LOADING.
 3. CONCRETE SHALL CONTAIN 6 SACKS OF PORTLAND CEMENT PER CUBIC YARD AND SHALL HAVE COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS.

1
7
PRECAST CATCH BASIN
 NTS

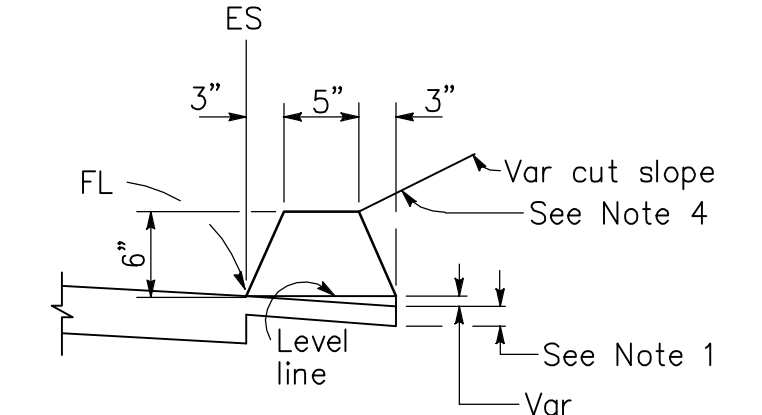


2
7
CATCH BASIN CONNECTION
 NTS



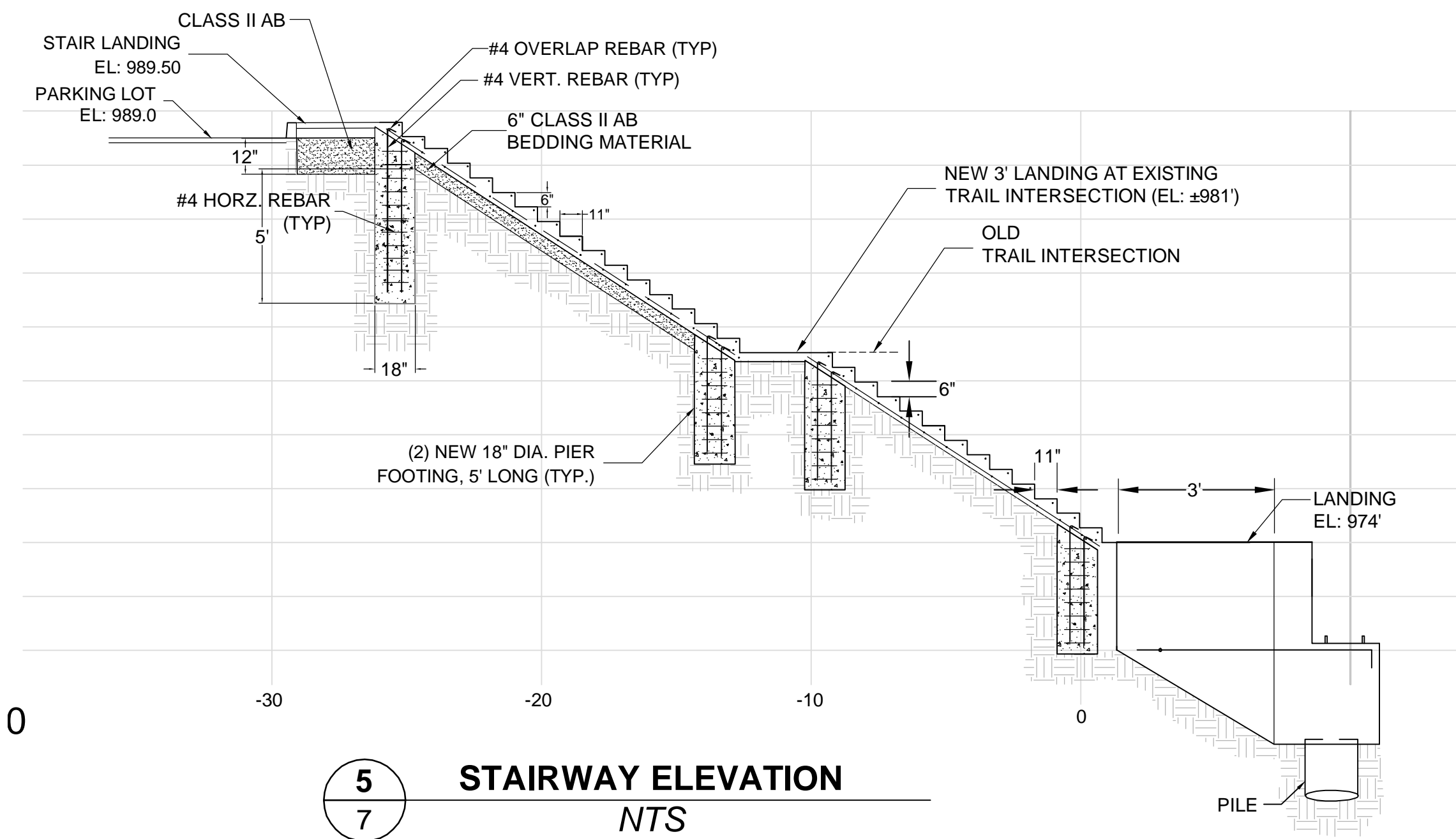
NOTE:
 MINIMUM THICKNESS SHALL BE 1.5x THE MAXIMUM STONE DIAMETER, NEVER LESS THAN 6" (150mm).

3
7
ROCK OUTFALL
 NTS

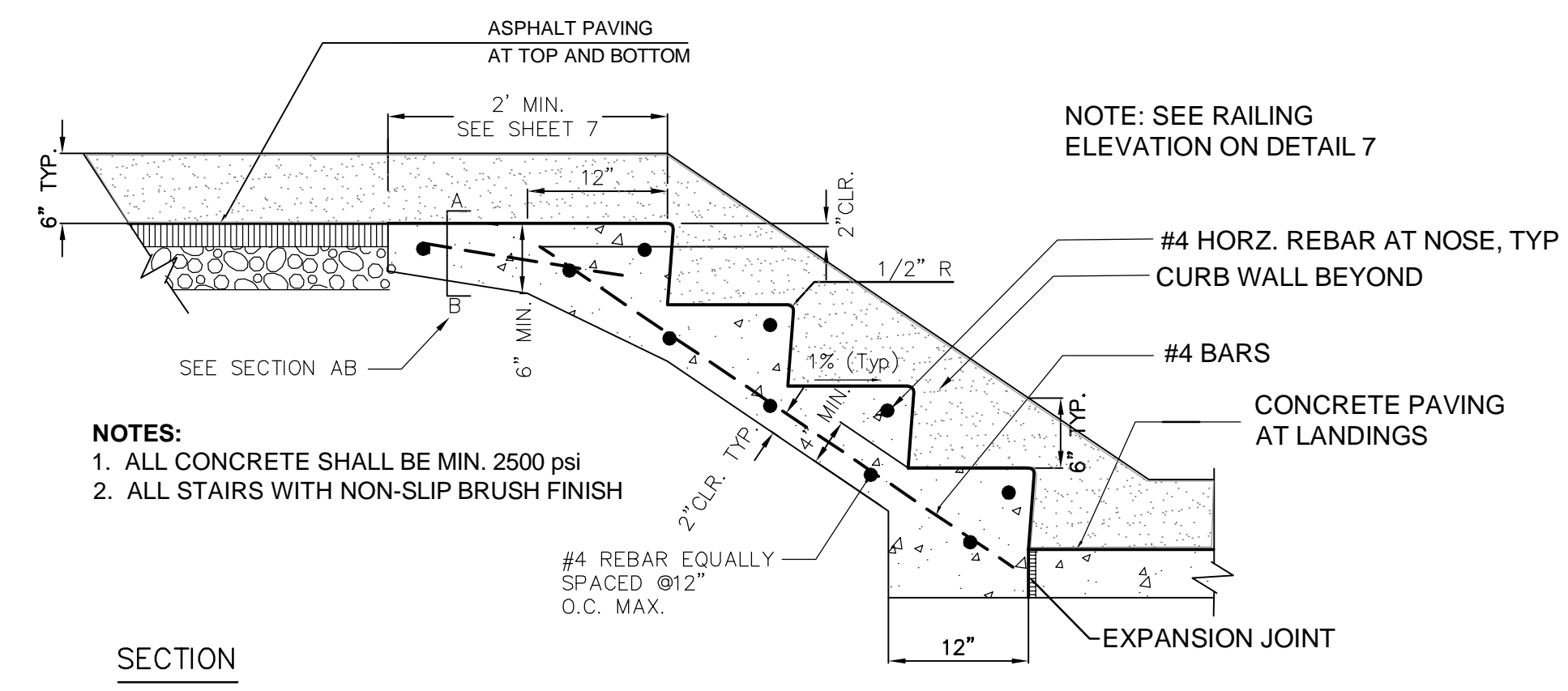


NOTES:
 1. FOR AC SHOULDERS ONLY, EXTEND TOP LAYER OF AC PLACED ON THE SHOULDER UNDER DIKE WITH NO JOINT AT THE ES.
 2. CASE R APPLIES TO RETROFIT ONLY PROJECTS WHERE RESTRICTIVE CONDITIONS DO NOT PROVIDE ENOUGH WIDTH FOR CASE F BACKFILL.
 3. TYPE A DIKE ONLY TO BE USED WHERE RESTRICTIVE SLOPE CONDITIONS DO NOT PROVIDE ENOUGH WIDTH TO USE TYPE D OR TYPE E DIKE.
 4. FILL AND COMPACT WITH EXCAVATED MATERIAL TO TOP OF DIKE.
 5. REFER TO CALTRANS STANDARD A87B FOR ADDITIONAL INFORMATION.

4
7
CALTRANS 'TYPE A' AC DIKE
 NTS

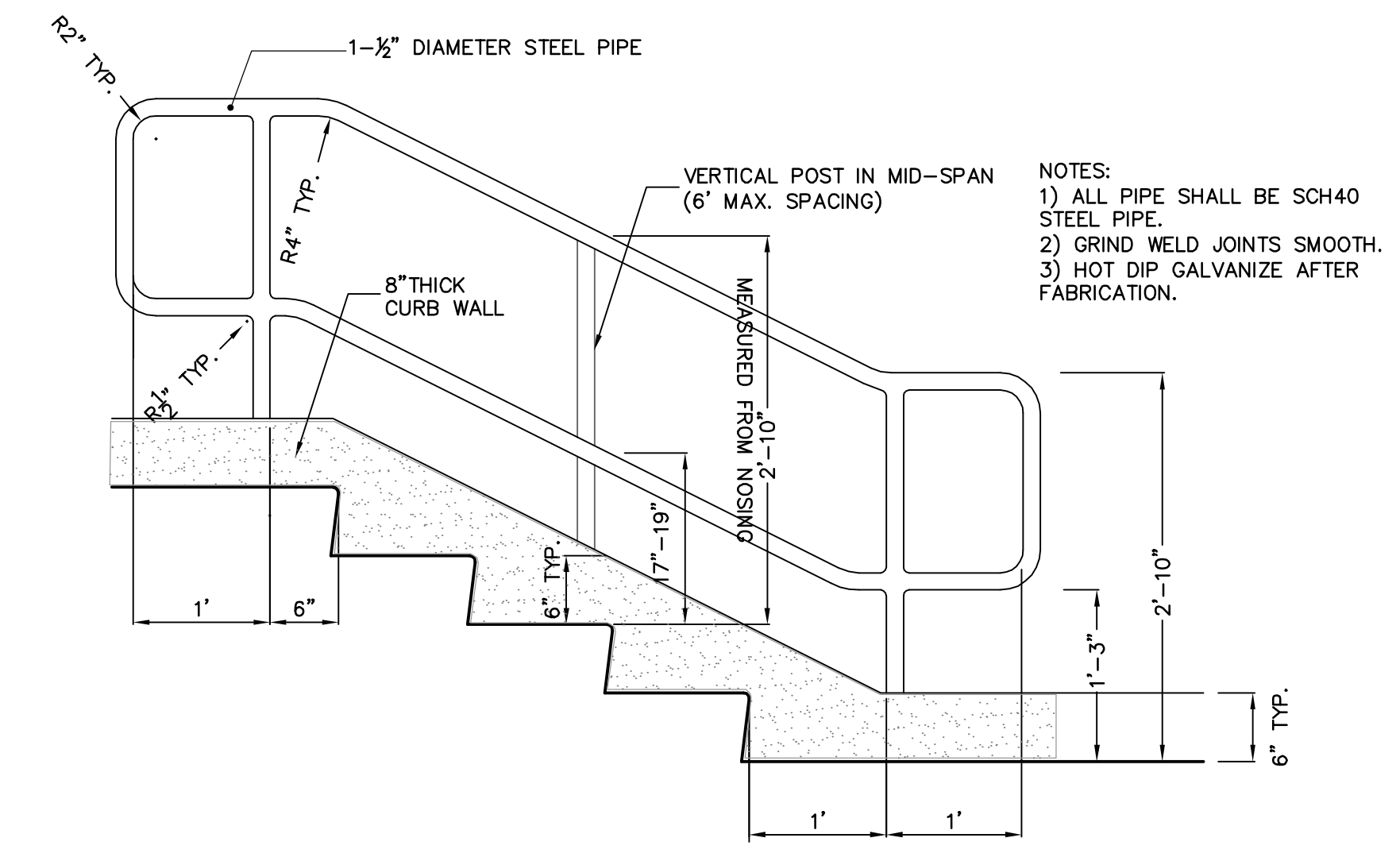


5
7
STAIRWAY ELEVATION
 NTS



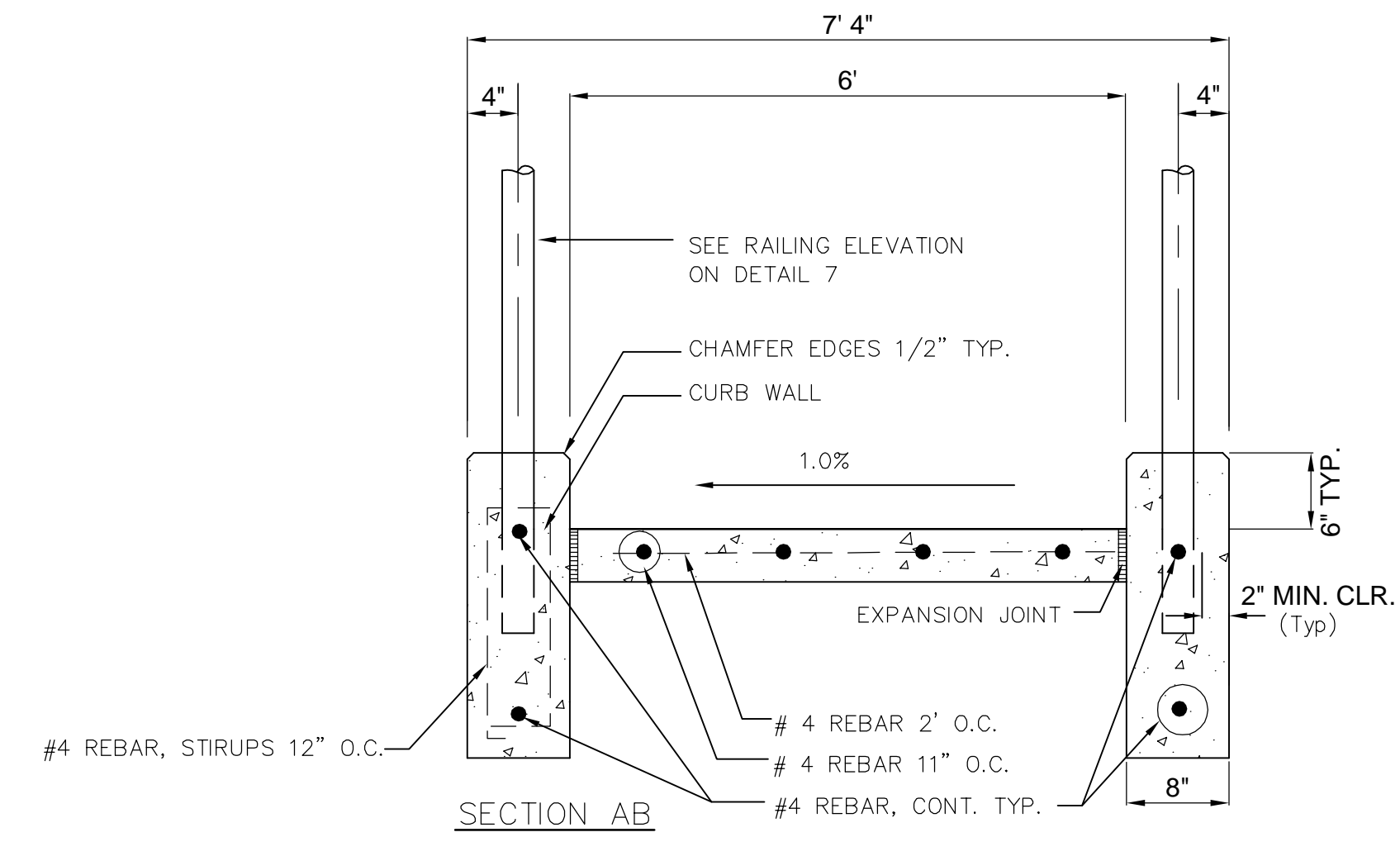
NOTES:
 1. ALL CONCRETE SHALL BE MIN. 2500 PSI
 2. ALL STAIRS WITH NON-SLIP BRUSH FINISH

6
7
TYPICAL STAIRWAY REINFORCEMENT
 NTS

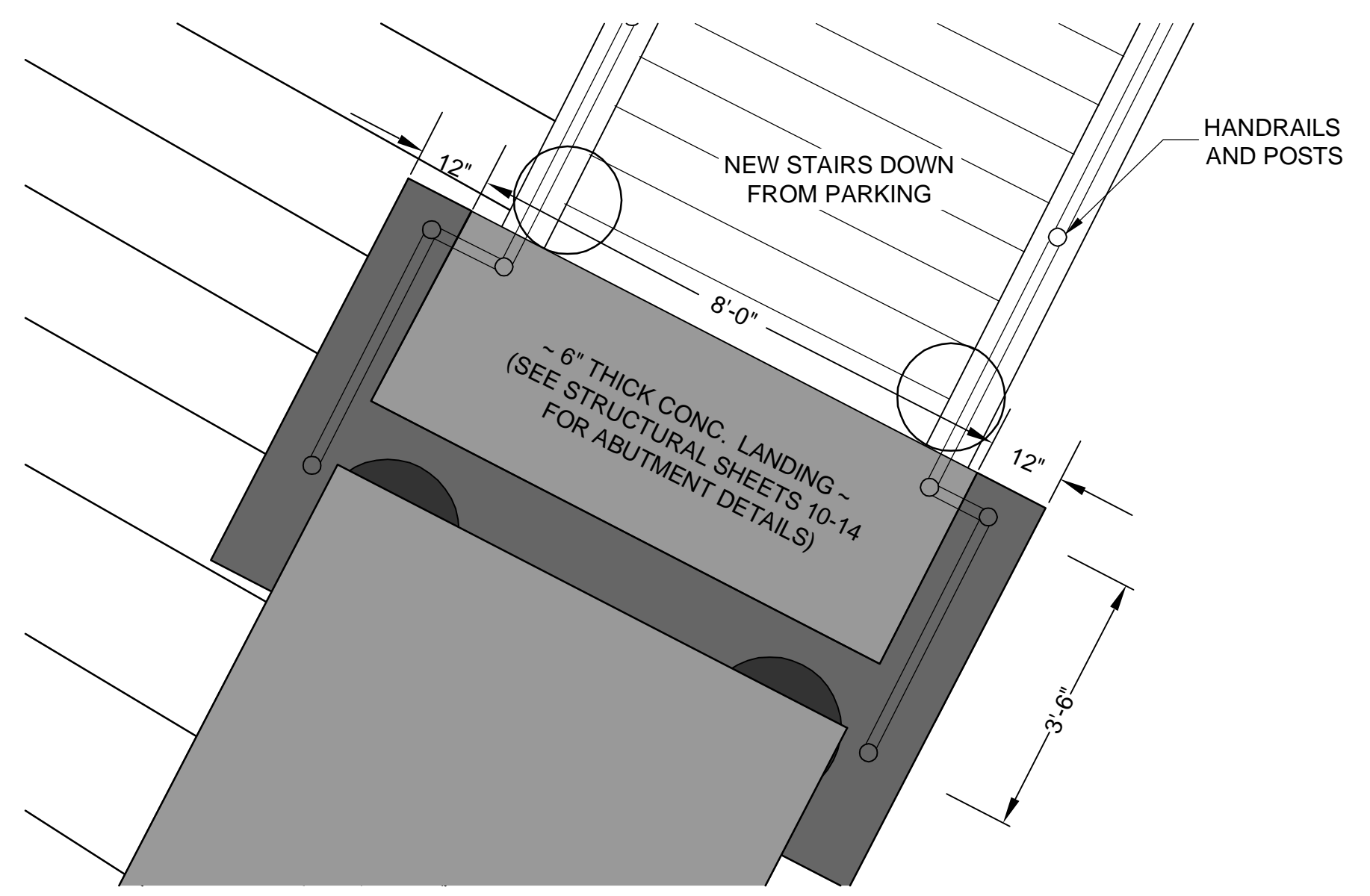


NOTES:
 1) ALL PIPE SHALL BE SCH40 STEEL PIPE.
 2) GRIND WELD JOINTS SMOOTH.
 3) HOT DIP GALVANIZE AFTER FABRICATION.

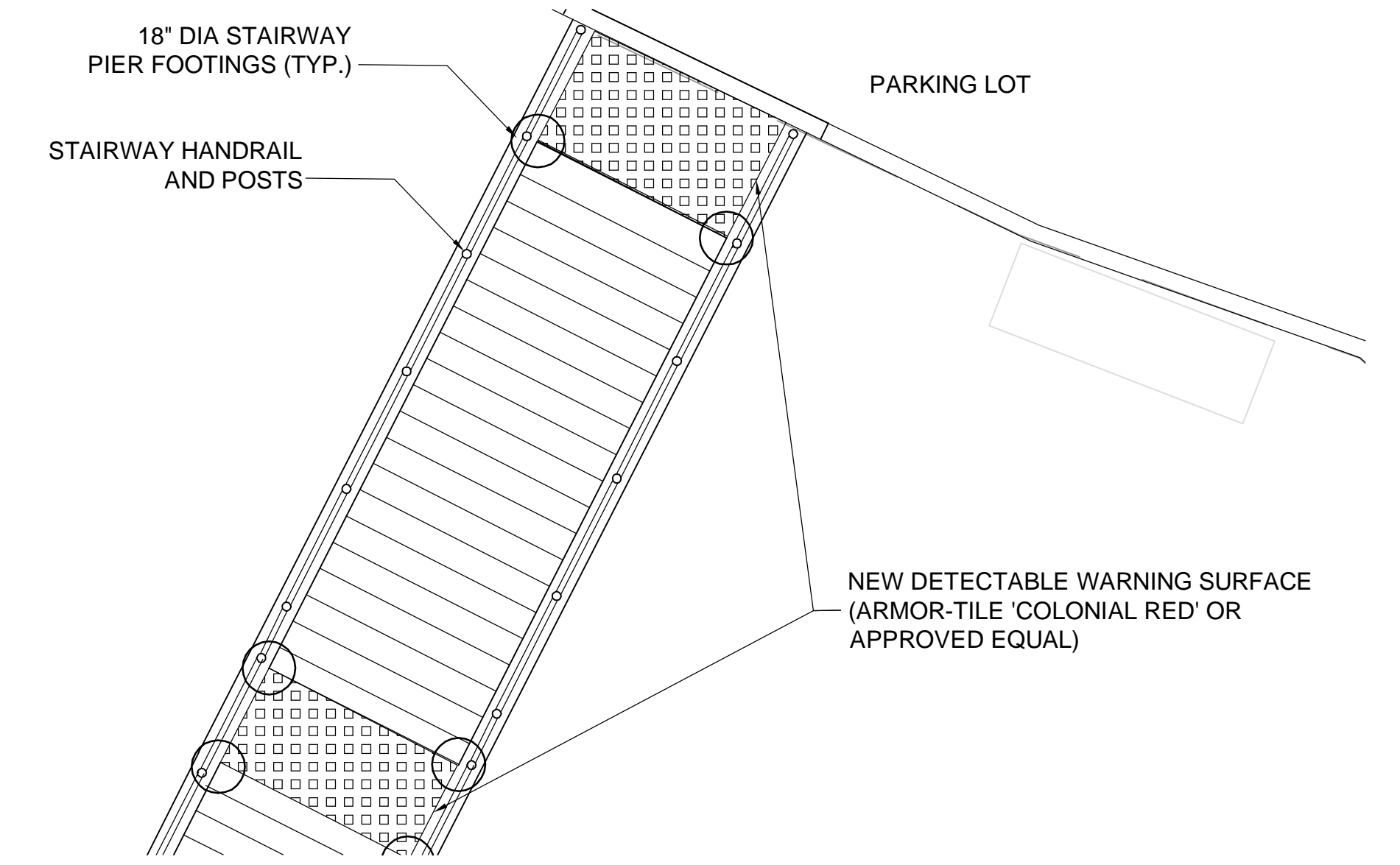
7
7
TYPICAL STAIRWAY HAND RAIL
 NTS



8
7
STAIR HANDRAIL
 NTS



9
7
BRIDGE LANDING
 NTS

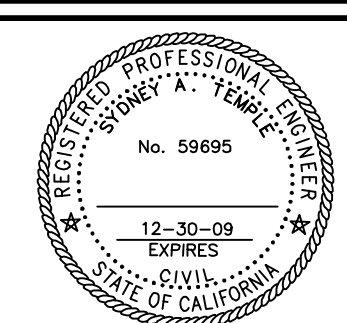


10
7
STAIRWAY PIER
 NTS

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DUTCH BILL CREEK DAM REMOVAL
 CAMP MEEKER PARKS AND RECREATION
 CAMP MEEKER, CALIFORNIA

QUESTA
 Civil Environmental & Water Resources
 ENGINEERING CORP.
 P.O. Box 70356 1220 Brickyard Cove Road Point Richmond, CA 94807

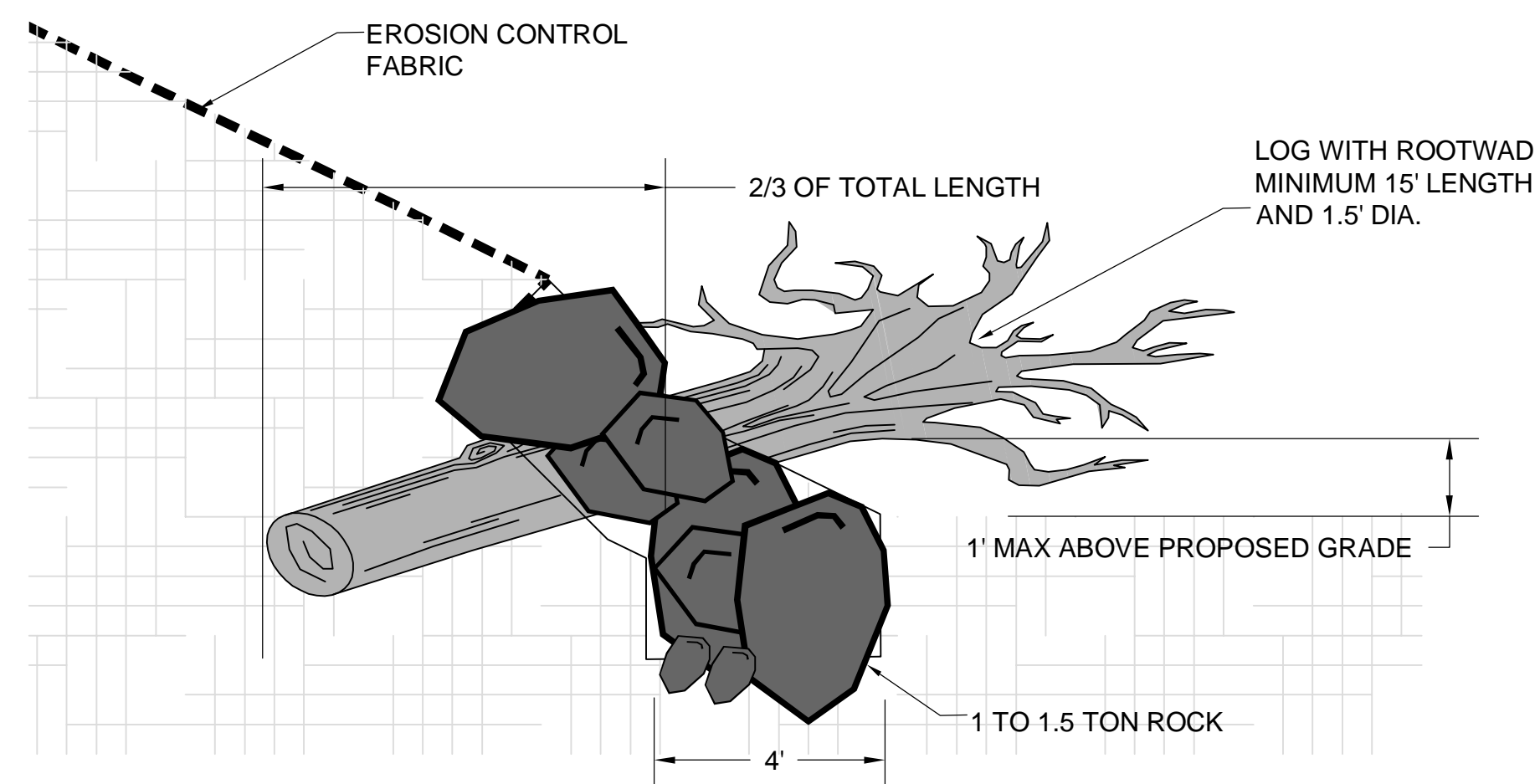


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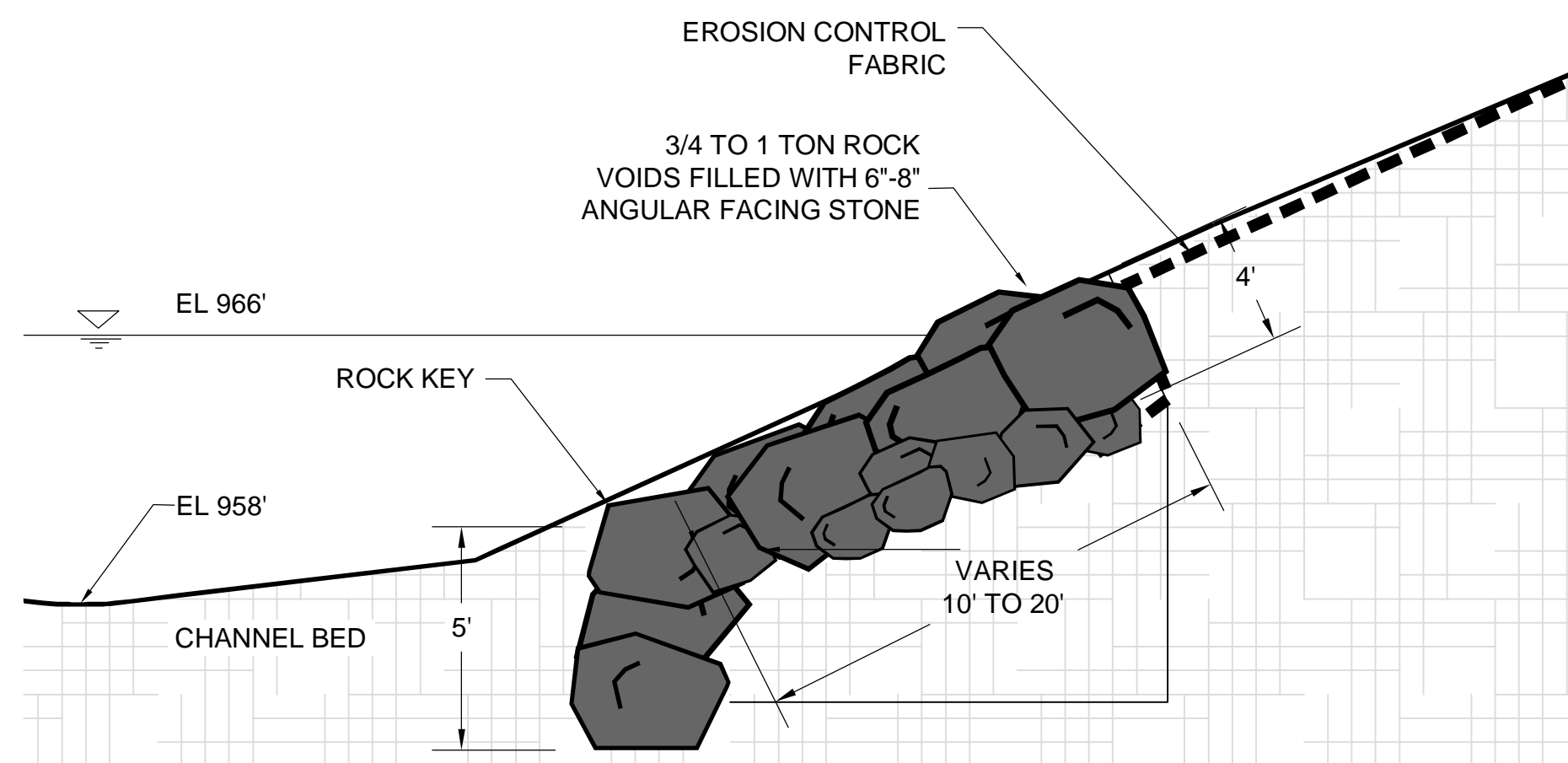
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 Drawn: W.S./M.L.
 Checked: S.T.
 App'd: S.T.

STORMDRAIN AND STAIRWAY DETAILS
 DUTCH BILL CREEK
 CAMP MEEKER, CALIFORNIA

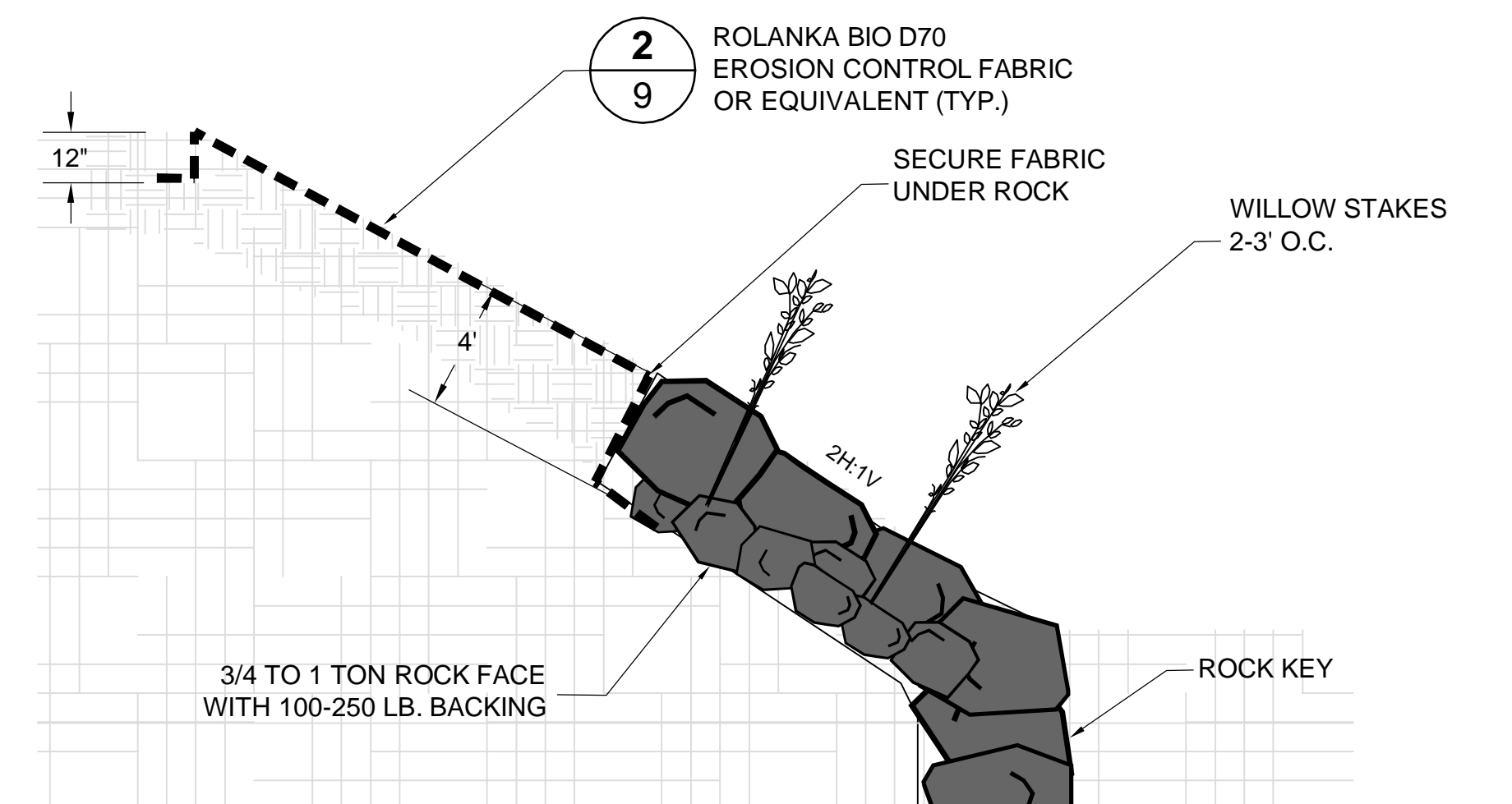
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Scale: AS SHOWN	Date: 6/05/09	Sheet: 7 OF 15



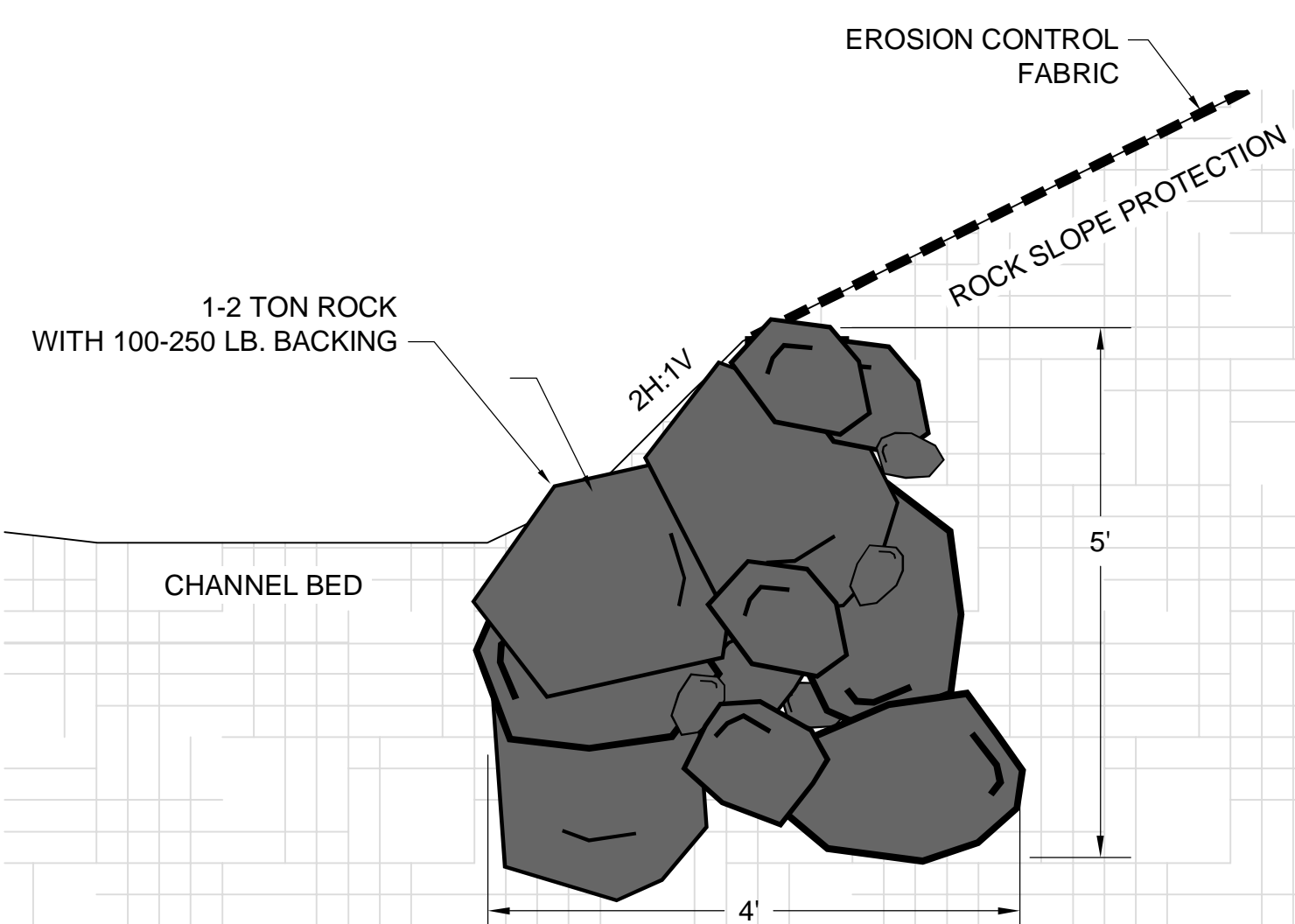
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8 BALLASTED LOG DEFLECTOR
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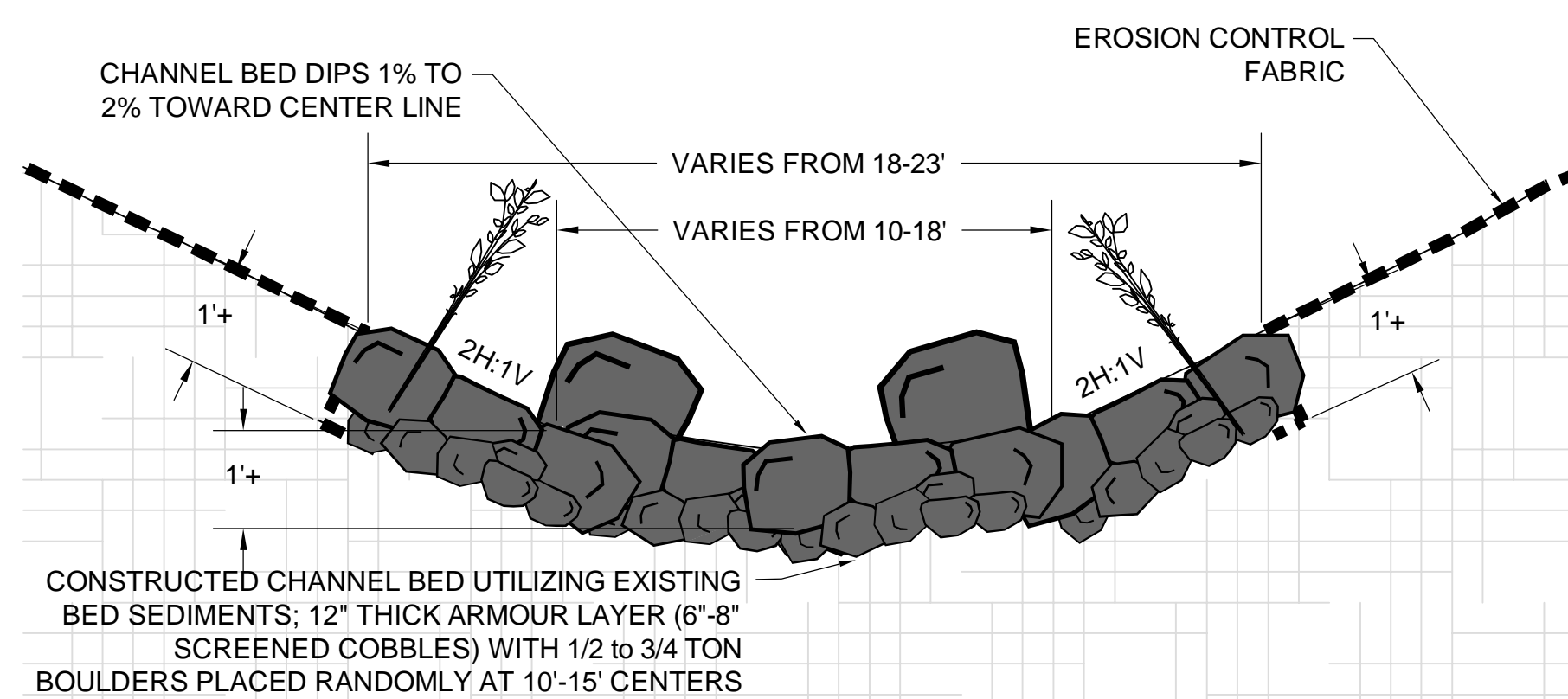
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8 ROCK SLOPE BRIDGE PROTECTION
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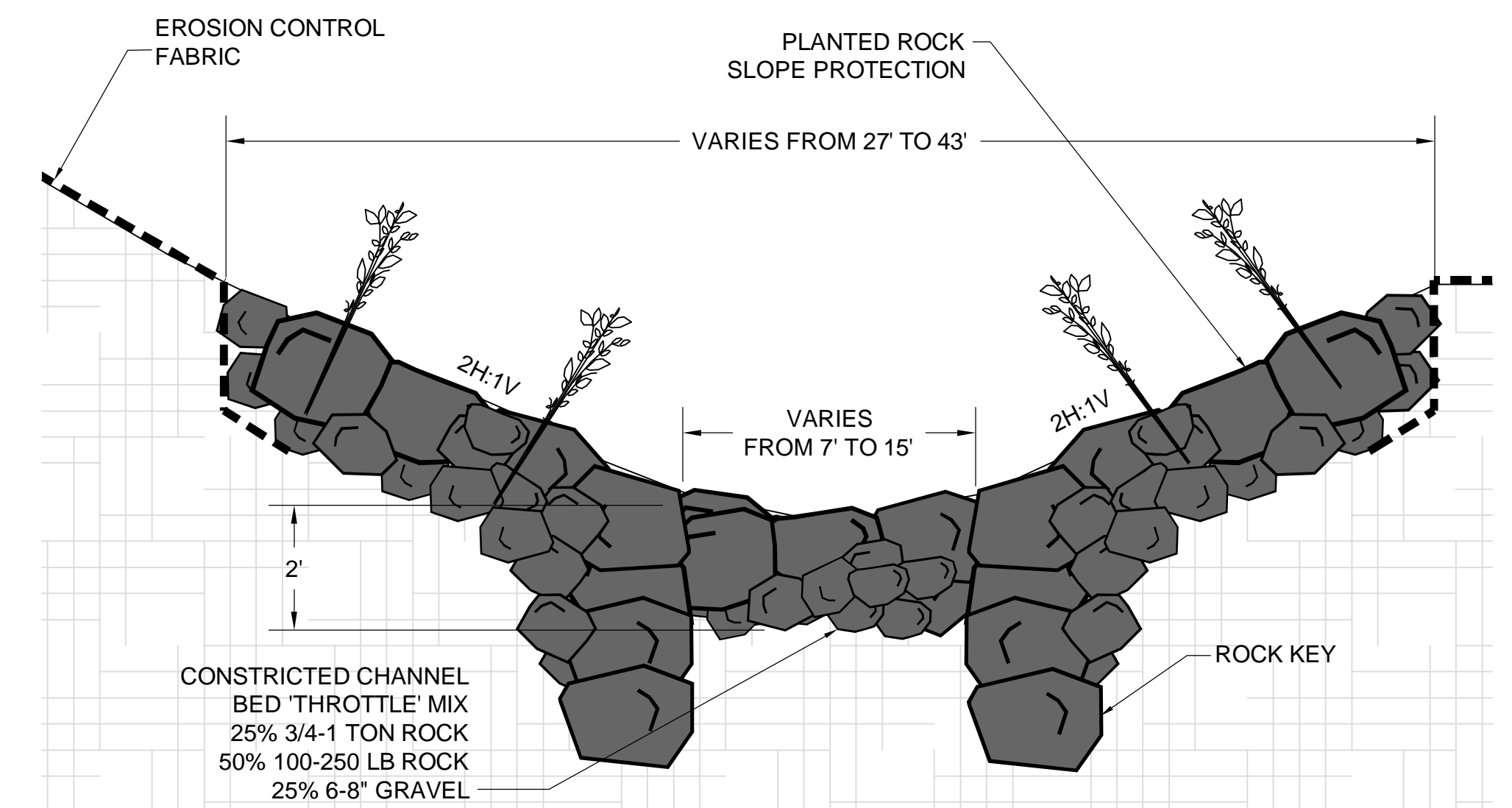
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8 PLANTED ROCK SLOPE PROTECTION
NTS



4
8 ROCK KEY
NTS



5
8 CONSTRUCTED CHANNEL BED - TYPICAL
NTS



6
8 CONSTRICTED CHANNEL - 'THROTTLE' AREA PROTECTION
NTS

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& Water Resources
ENGINEERING CORP.
P.O. Box 70356 1220 Brickyard Cove Road Point Richmond, CA 94807
(510) 236-6114
FAX (510) 236-2423
questa@questaec.com



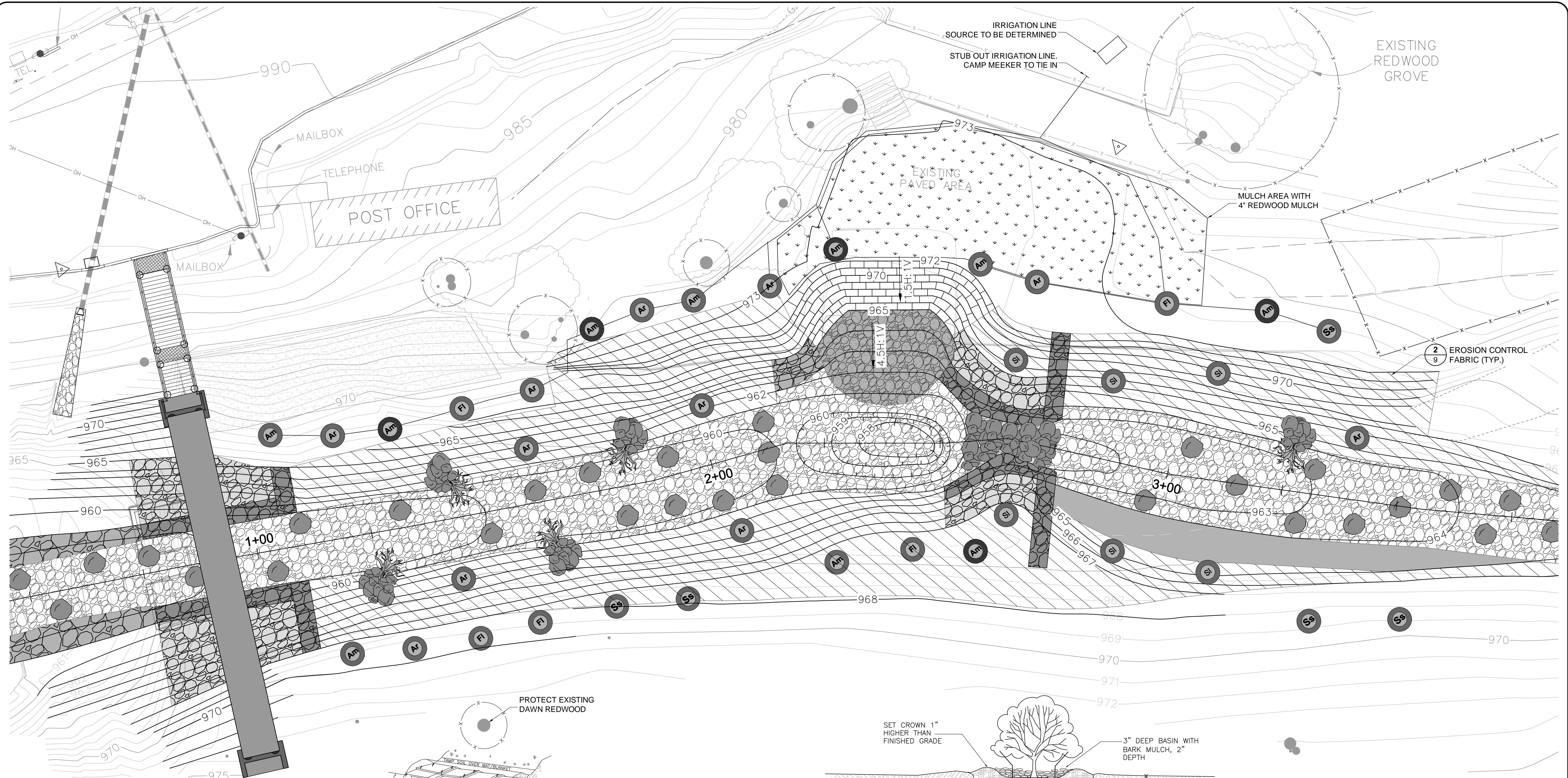
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**BANK AND CHANNEL
STABILIZATION DETAILS**
DUTCH BILL CREEK
CAMP MEEKER, CALIFORNIA

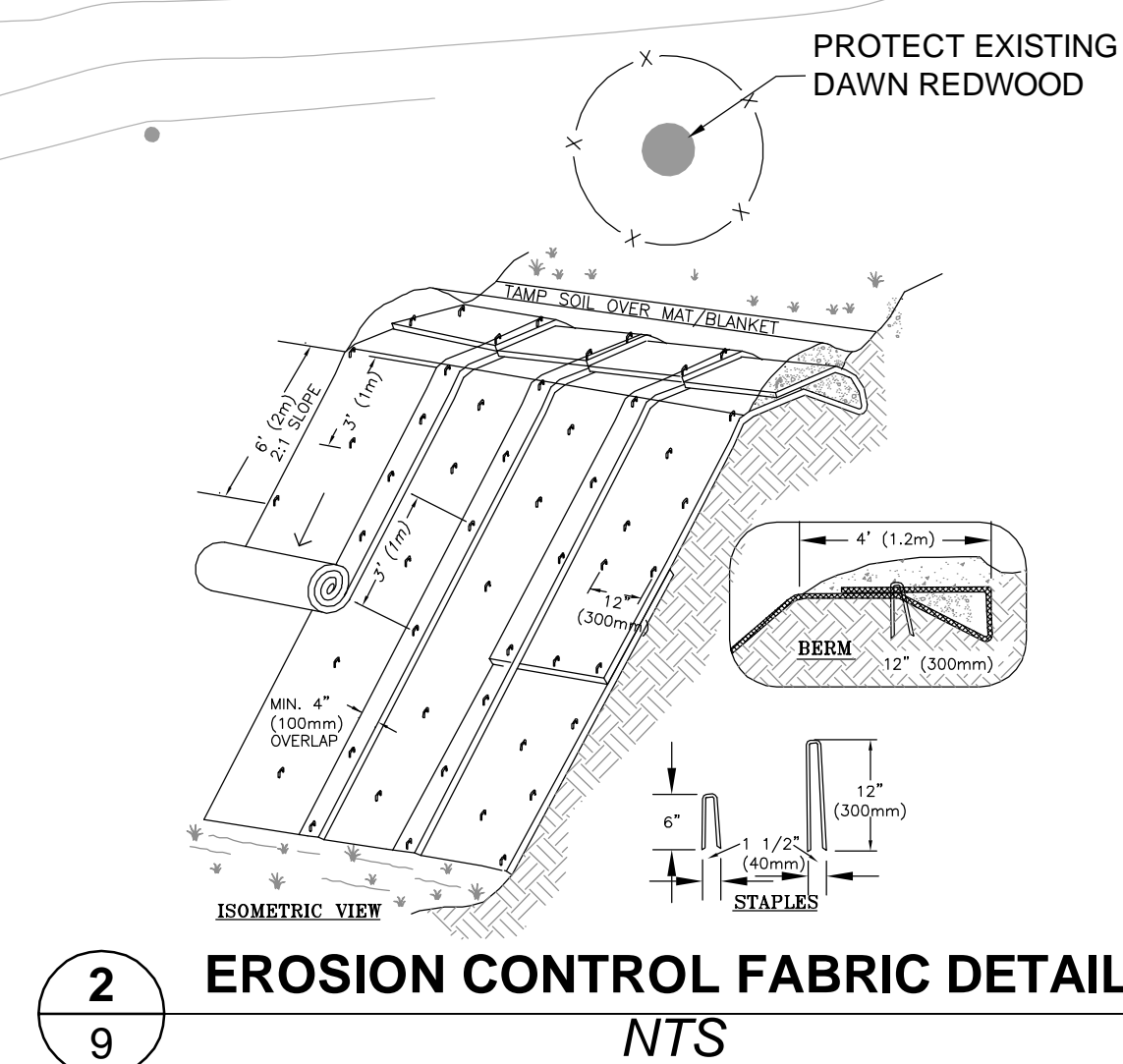
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D	250041	
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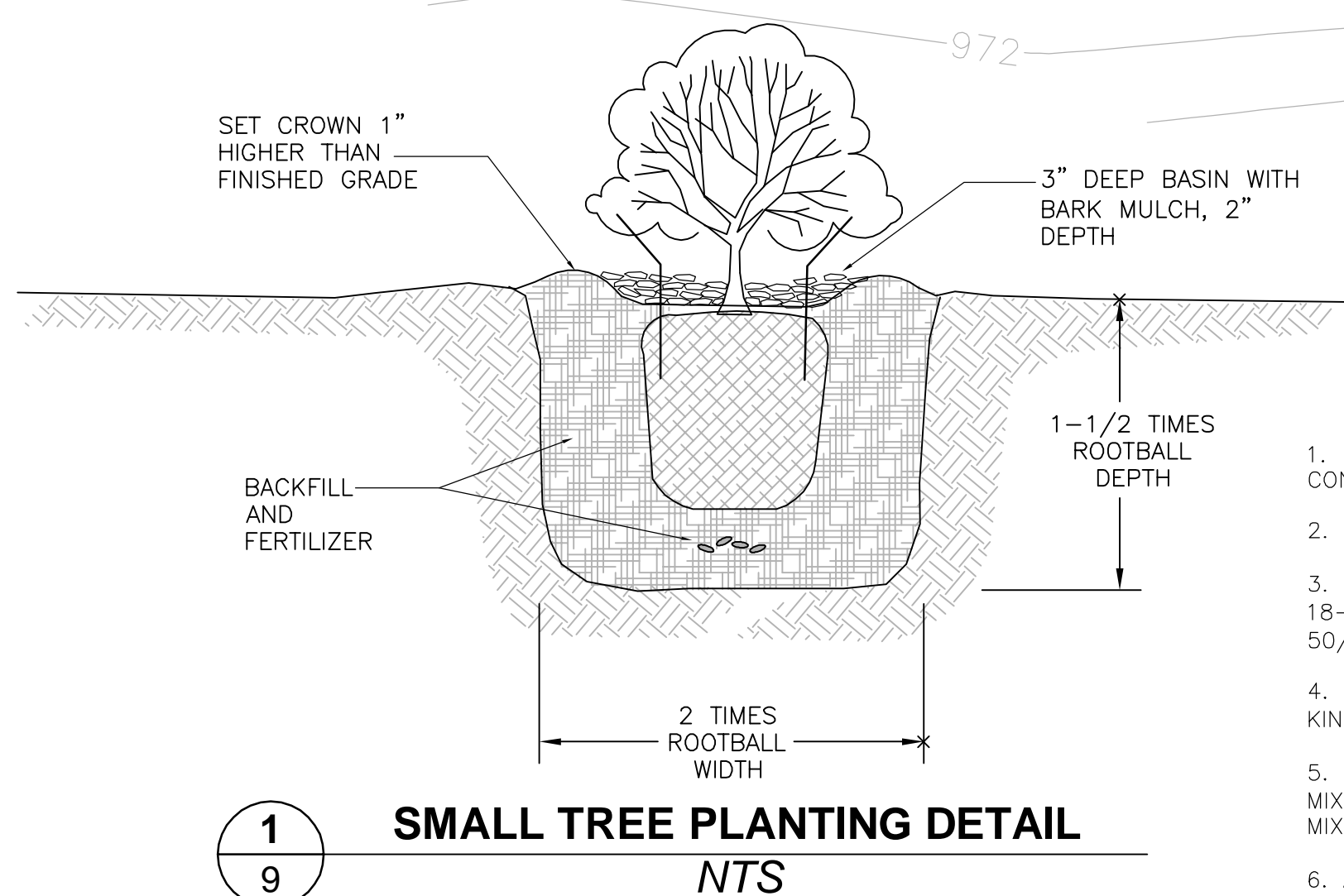


LEGEND - 5 GALLON TREES

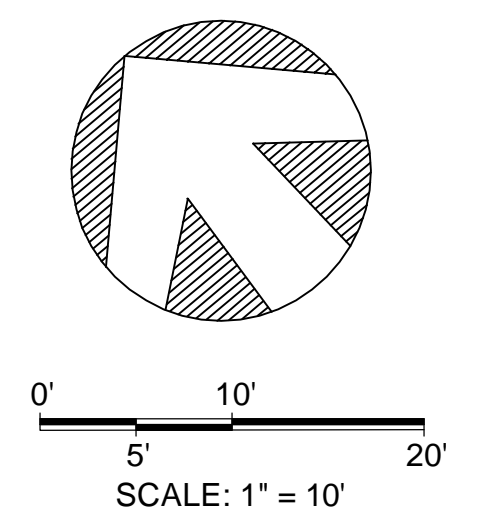
- Ss** Coast Redwood - Ss - Sequoia sempervirens
- Am** Pacific Madrone -Am - Arbutus menziesii
- Am** Big Leaf Maple - Am - Acer macrophyllum
- Ar** Red Alder - Ar - Alnus rubrus
- FI** Oregon Ash - FI - Fraxinus latifolia
- SI** Red Willow - SI - Salix laevigata



1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
4. MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE.

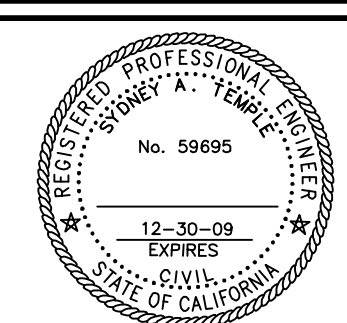


1. DIG HOLE 1-1/2 TIMES AS DEEP AND TWICE AS WIDE AS CONTAINER. SCARIFY SIDEWALLS.
2. ADD WATER TO HOLE AND LET DRAIN.
3. PLACE ONE SLOW RELEASE FERTILIZER PELLET (OSMOCOTE 18-18-0) IN THE BOTTOM OF HOLE. FILL BOTTOM 4" WITH 50/50 MIXTURE OF LOOSE SOIL AND ORGANIC MIXTURE.
4. CUT CAN AND GENTLY REMOVE PLANT. PRUNE ANY ENCIRCLING KINKED OR "J" ROOTS.
5. PLACE PLANT IN HOLE AND FILL 1/2 WAY WITH PLANTING MIXTURE. MAINTAIN CROWN OF PLANT 1/2" BELOW GRADE. TAMP MIXTURE, ADD WATER AND LET DRAIN.
6. ADD 2" THICK BARK MULCH LAYER TO SURFACE.



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 (510) 236-6114 FAX (510) 236-2423
 questa@questaec.com

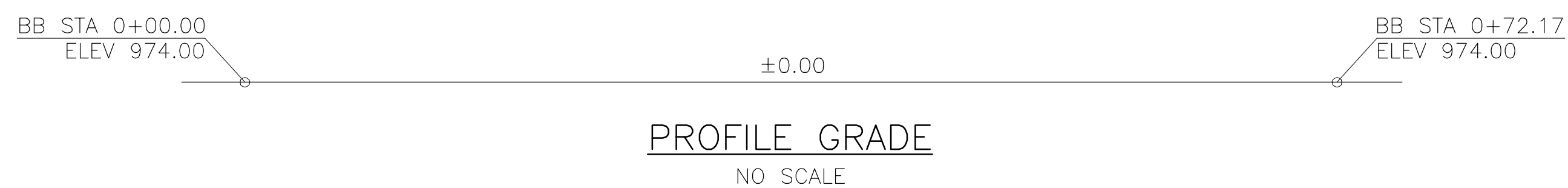


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Design: S.T./R.A.B.
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PLANTING PLAN
 DUTCH BILL CREEK
 CAMP MEEKER, CALIFORNIA

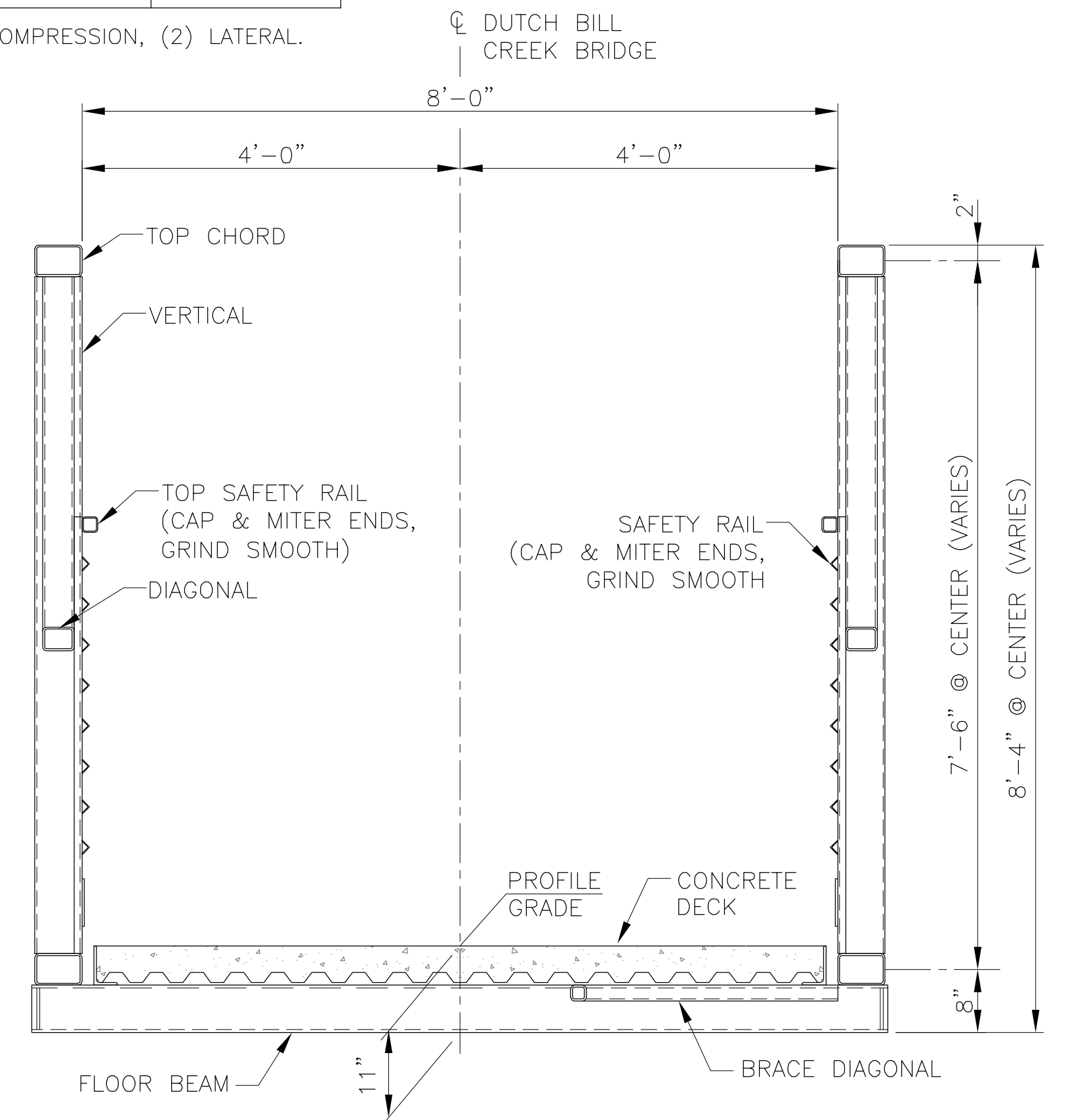
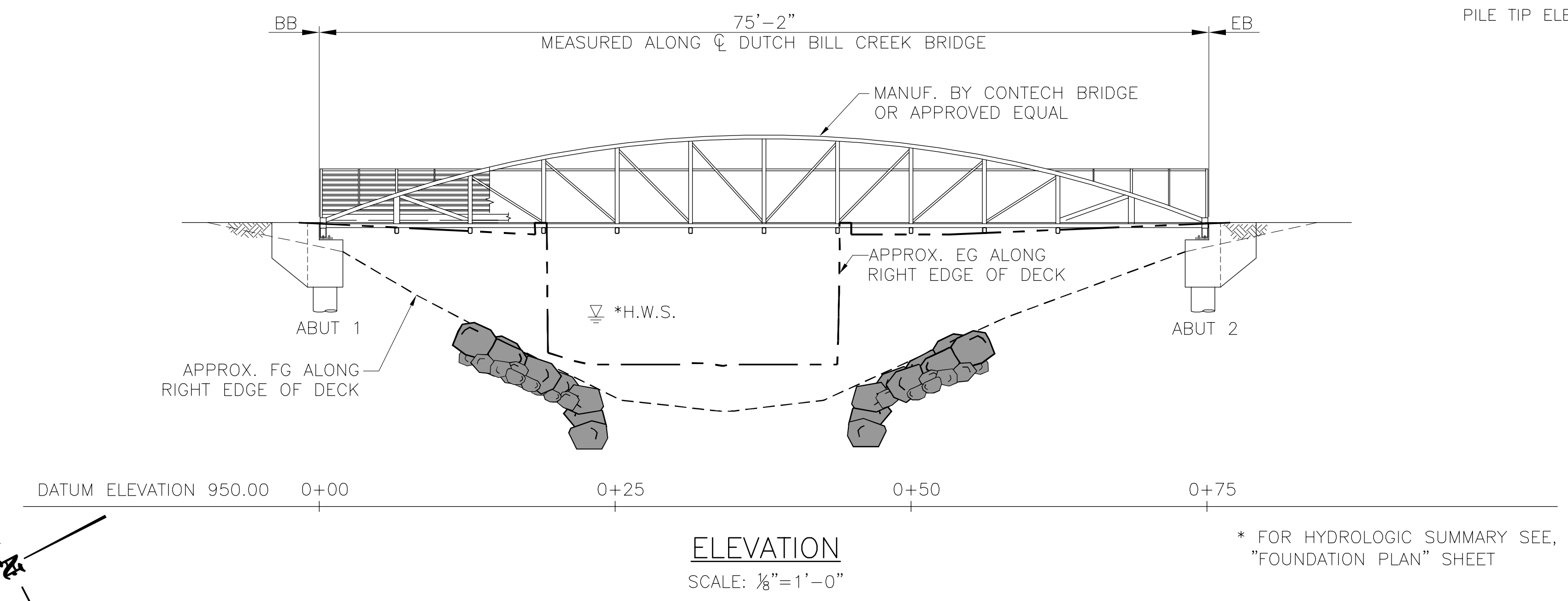
Size D	Project No. 250041	Rev.
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PILE DATA

LOCATION	PILE TYPE	DESIGN LOADING (SERVICE LOAD)	NOMINAL RESISTANCE		DESIGN TIP ELEVATION	SPECIFIED TIP ELEVATION
			COMPRESSION	TENSION		
ABUT 1	24" Ø CIDH	200 KIPS	400 KIPS	0 KIPS	938.53	938.53
ABUT 2	24" Ø CIDH	200 KIPS	400 KIPS	0 KIPS	943.53	943.53

PILE TIP ELEVATION IS CONTROLLED BY THE FOLLOWING DEMANDS: (1) COMPRESSION, (2) LATERAL.



TYPICAL SECTION

SCALE: 3/4"=1'-0"

INDEX TO BRIDGE PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	FOUNDATION PLAN
3	ABUTMENT 1 LAYOUT
4	ABUTMENT 2 LAYOUT
5	ABUTMENT DETAILS
6	MISCELLANEOUS DETAILS

CALTRANS STANDARD PLANS DATED MAY 2006

A10A	ACRONYMS AND ABBREVIATIONS
110C	SYMBOLS
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL-BRIDGE
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS

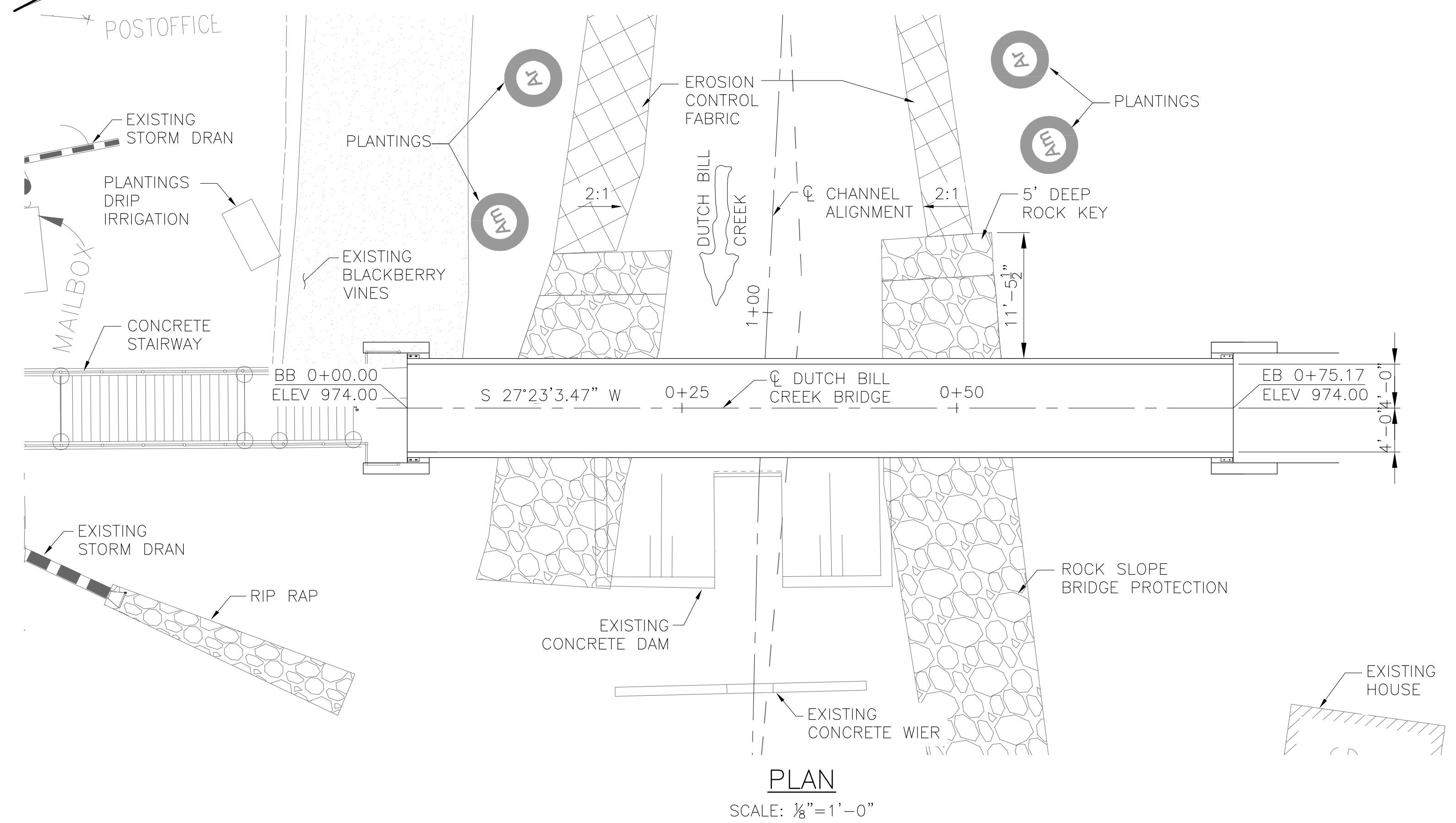
LEGEND

- STANDARD PLAN SHEET NO.
- DETAIL NO.
- INDICATES 100 YR WATER SURFACE ELEVATION

CONTRACTOR TO VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTES:

1. FOR HORIZONTAL ALIGNMENT, SEE ROAD PLANS.
2. FOR ROCK SLOPE PROTECTION, SEE ROAD PLANS.
3. FOR EROSION CONTROL, SEE ROAD PLANS.
4. FOR STAIRWAY DETAIL, SEE ROAD PLANS.
5. FOR BRIDGE PLANS, SEE CONTECH BRIDGE PLANS.



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ADK Engineering
400 PLAZA DRIVE
SUITE 125
FOLSOM, CA 95630
(916) 294-0059
(916) 294-0875 (FAX)

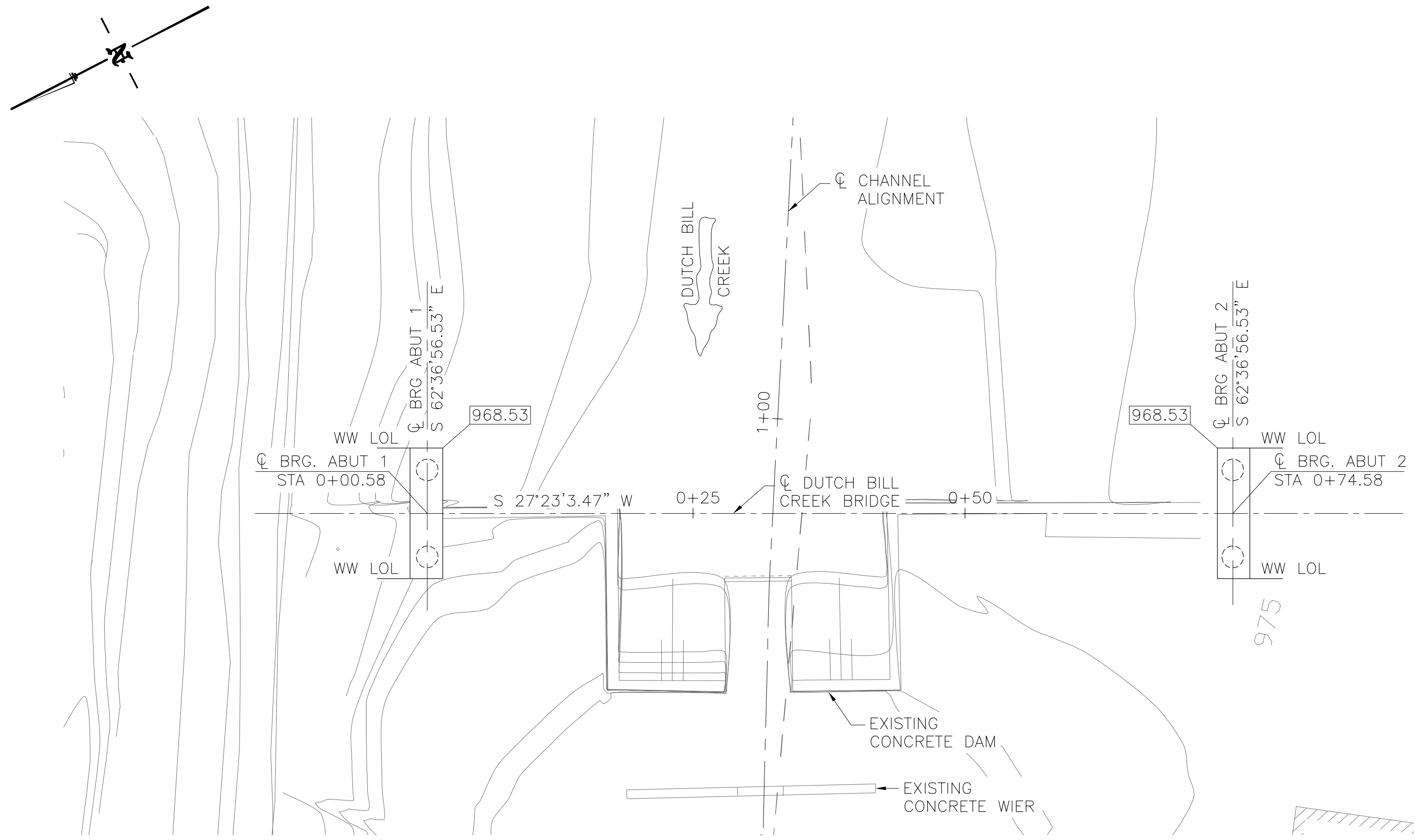


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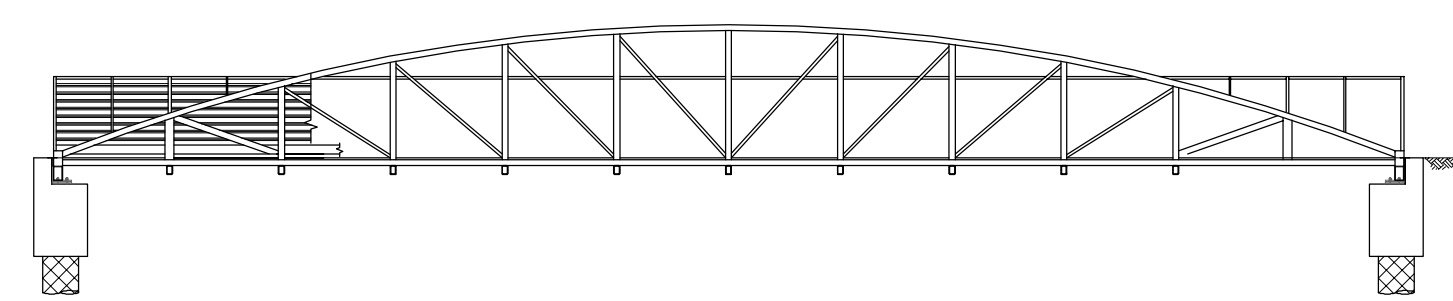
Design: M. KANAAN
Drawn: M. KENDALL
Checked: A. MALLA
Apprd:

GENERAL PLAN
STRUCTURAL PLANS
DUTCH BILL CREEK
CAMP MEEKER, CALIFORNIA

Size	Project No.	Rev.
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PLAN
SCALE: 1/8"=1'-0"



CONCRETE STRENGTH AND TYPE LIMITS
NO SCALE:

LEGEND:

- STRUCTURAL CONCRETE, BRIDGE (3600 PSI @ 28 DAYS)
- 24" CIDH PILE (3600 PSI @ 28 DAYS)

GENERAL NOTES

- DESIGN SEISMIC DESIGN: 2001 CALIFORNIA BUILDING CODE (CBC) CALTRANS SEISMIC DESIGN CRITERIA (SDC) VERSION 1.4, DATED JUNE 2006
- DEAD LOAD: 26.60 KIP PER ABUTMENT
- UNIFORM LIVE LOAD: 25.50 KIP PER ABUTMENT
- VEHICLE LOAD: 8.00 KIP PER ABUTMENT
- REINFORCED CONCRETE: $f_y = 60,000$ PSI, $f'_c = 3,600$ PSI, UNLESS OTHER SPECIFIED, $n = 8.5$

HYDROLOGIC SUMMARY

DRAINAGE AREA:	2.80 SQUARE MILES		
	DESIGN FLOOD	BASE FLOOD	OVERTAPPING FLOOD
FREQUENCY (YRS)	100	100	N/A
DISCHARGE (CFT/SEC)	2,710	-	N/A
WATER SURFACE	967.00	-	N/A

FLOOD PLAIN DATA ARE BASED UPON INFORMATION AVAILABLE WHEN THE PLANS WERE PREPARED AND SHOWN TO MEET FEDERAL REQUIREMENTS. THE ACCURACY OF SAID INFORMATION IS NOT WARRANTED BY THE STATE AND INTERESTED OR AFFECTED PARTIES SHOULD MAKE THEIR OWN INVESTIGATION

LEGEND:

966.00 INDICATES BOTTOM OF ABUT FOOTING ELEVATION

BENCHMARK:

CONTROLLING POINT	NORTHING	EASTING	ELEVATION
CP-#100	9931.28	9972.91	TBO
CP-#101	10072.35	9708.21	TBO
CP-#102	10032.50	9780.68	956.50

NOTES:

1. FOR UNDERGROUND UTILITIES, SEE ROAD PLANS
2. FOR HORIZONTAL ALIGNMENT, SEE ROAD PLANS.

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SUITE 125
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(916) 294-0059
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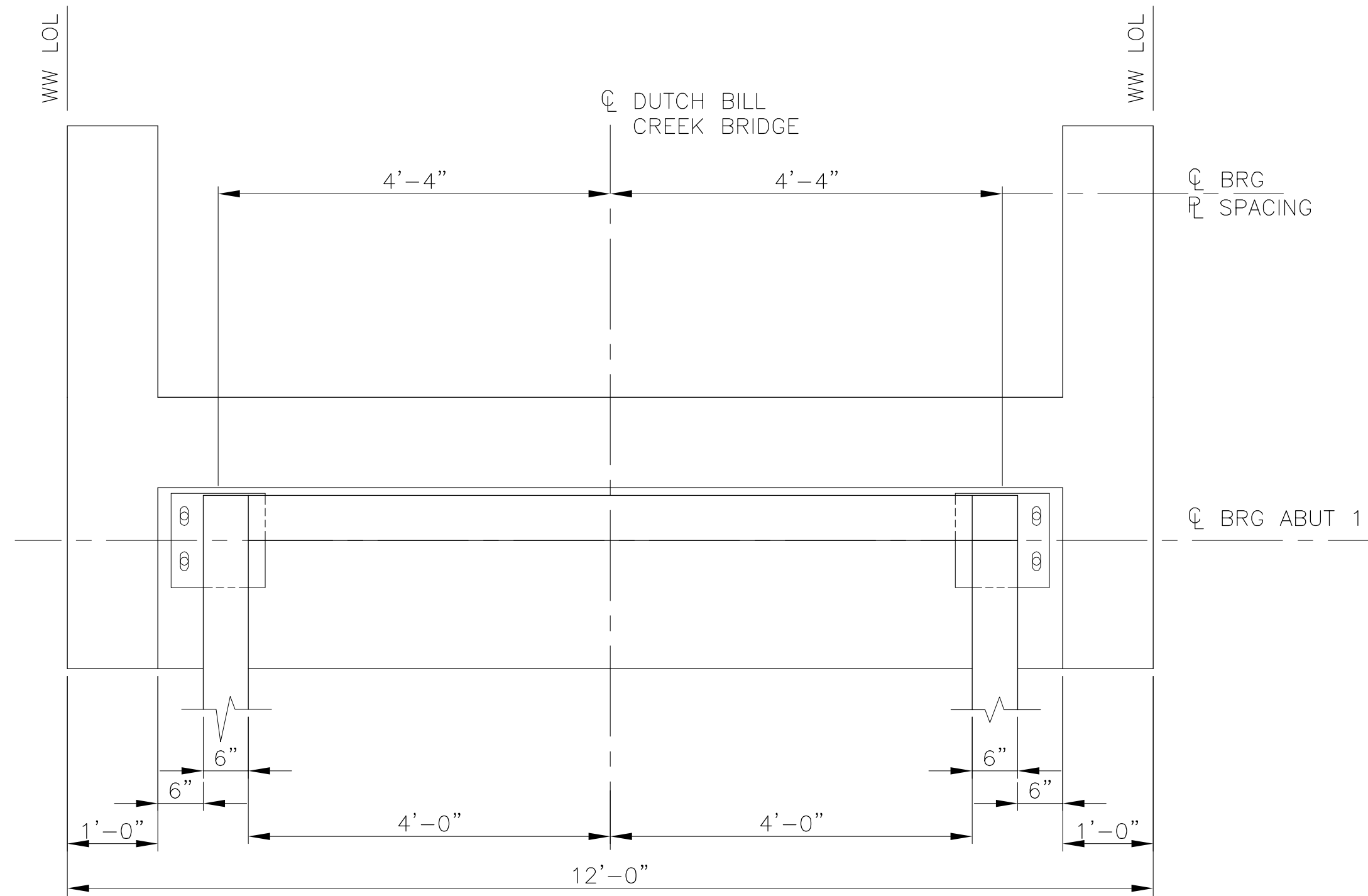


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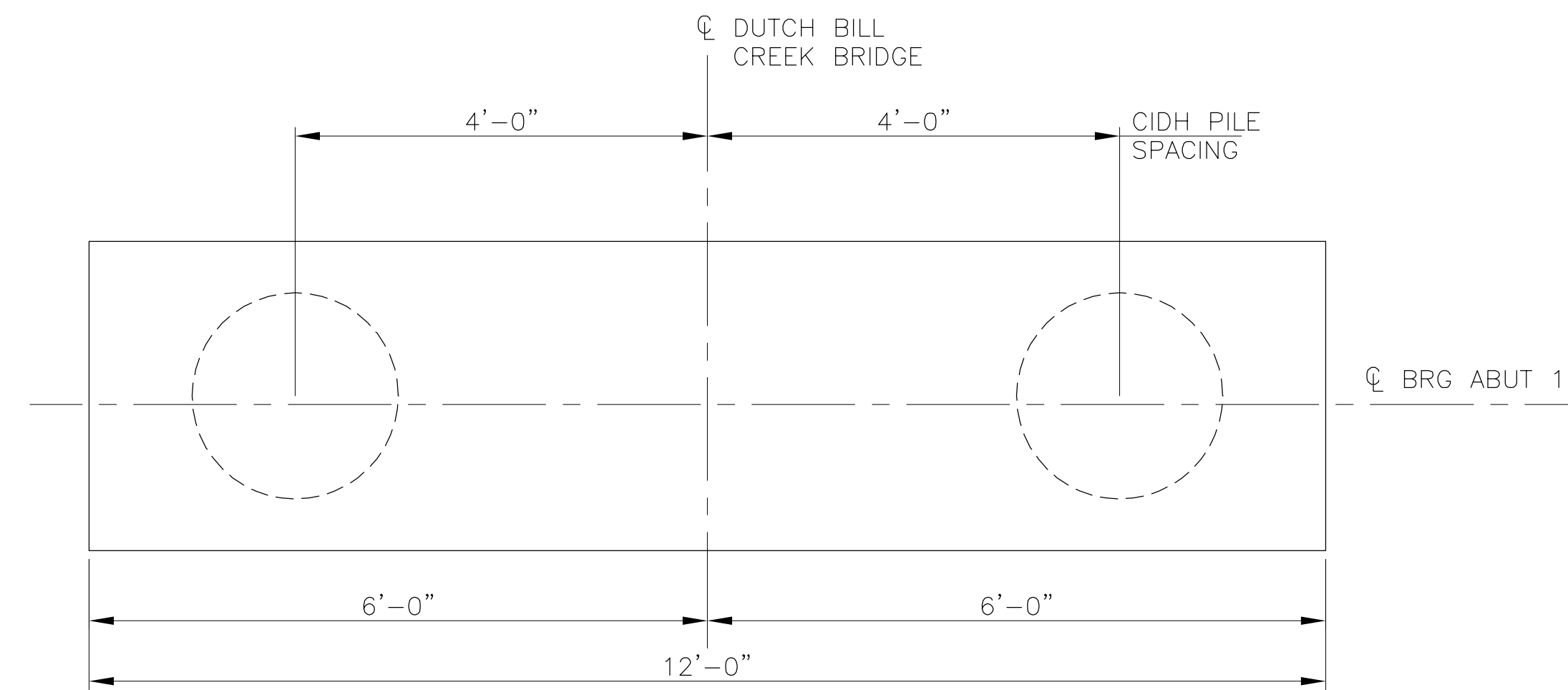
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Drawn: M. KENDALL
Checked: A. MALLA
Appr'd:

FOUNDATION PLAN
STRUCTURAL PLANS
DUTCH BILL CREEK
CAMP MEEKER, CALIFORNIA

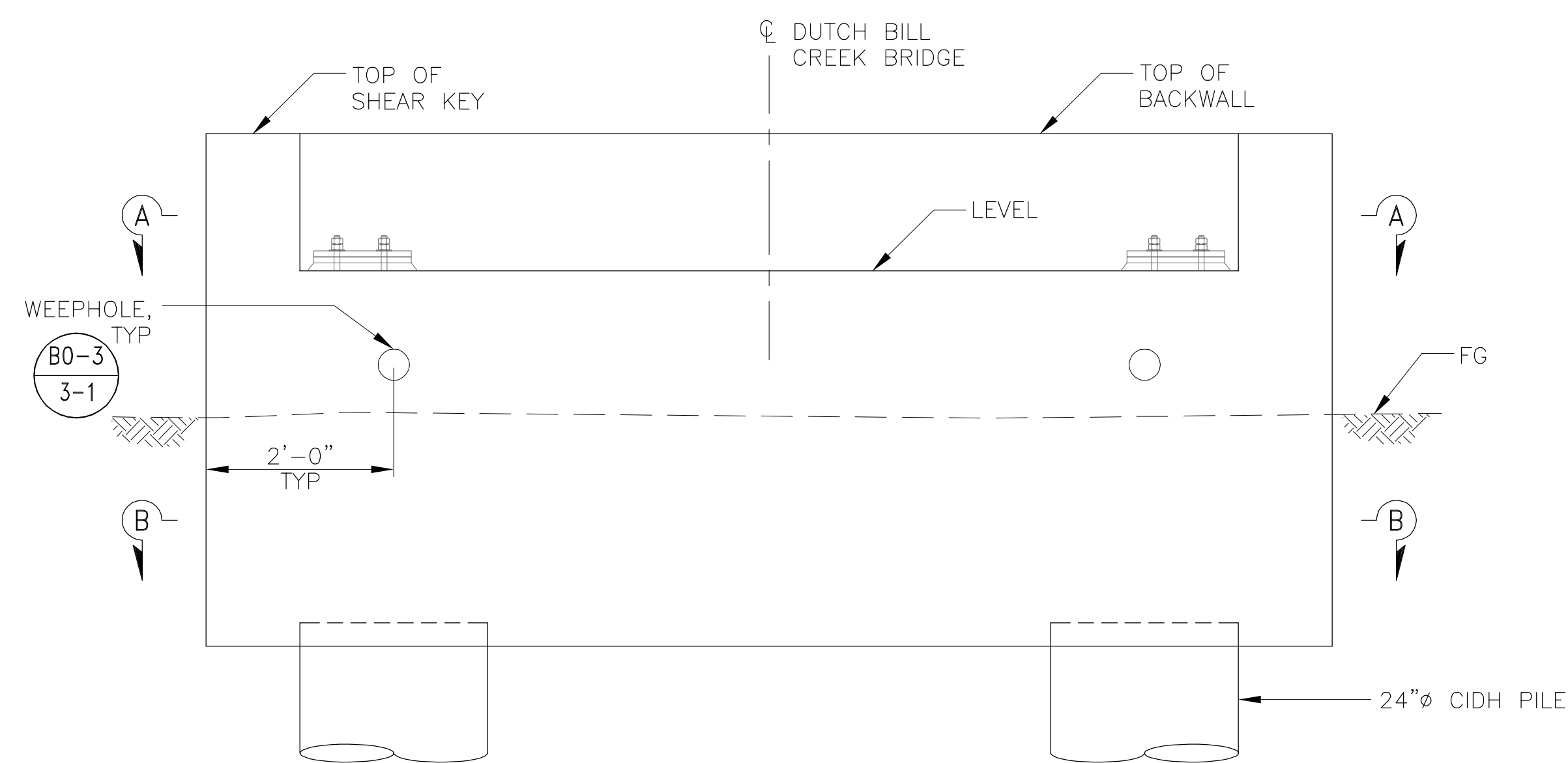
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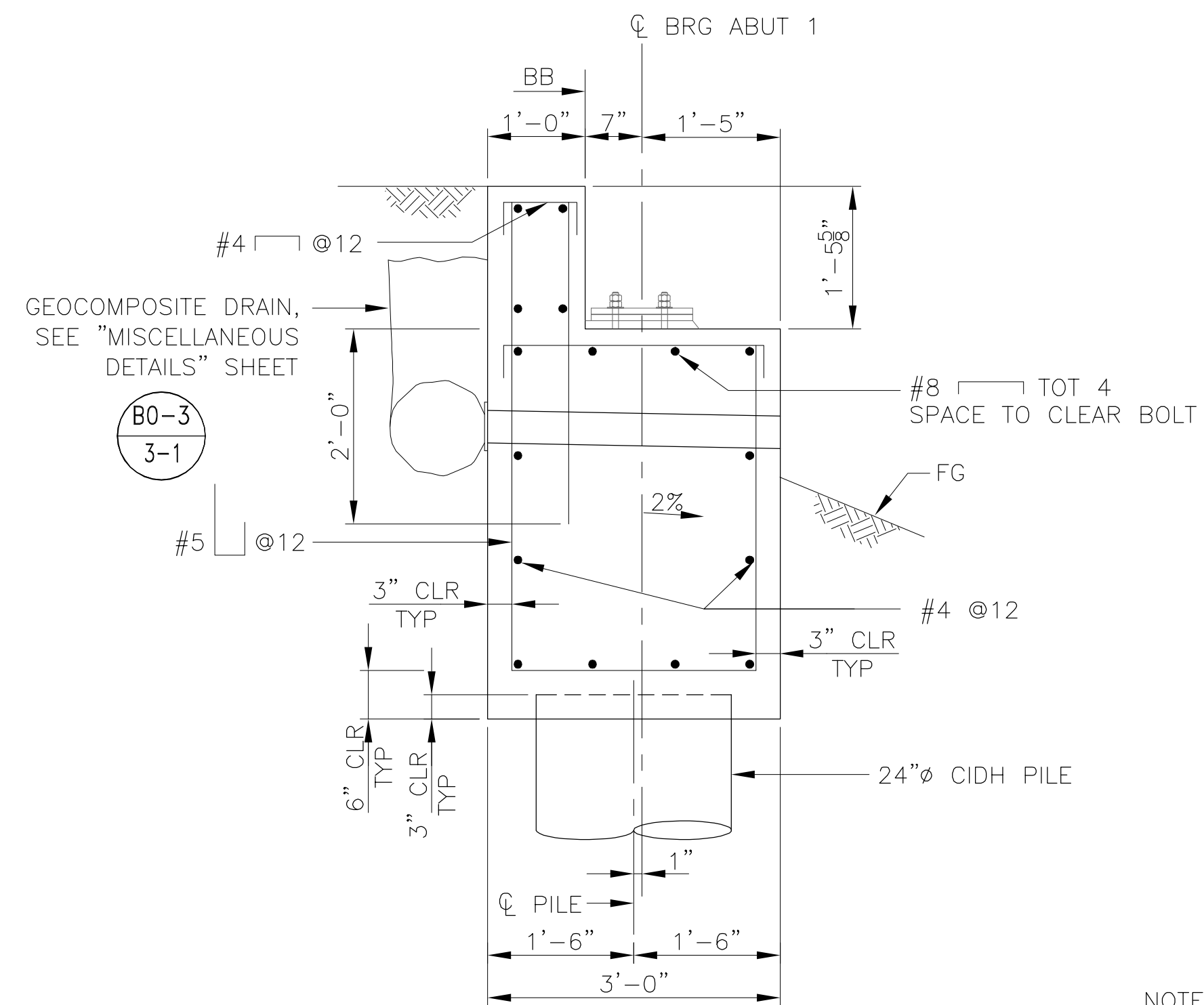
ABUTMENT 1 PLAN
SCALE: 3/4"=1'-0"



ABUTMENT 1 FOOTING PLAN
SCALE: 3/4"=1'-0"



ABUTMENT 1 ELEVATION
SCALE: 3/4"=1'-0"



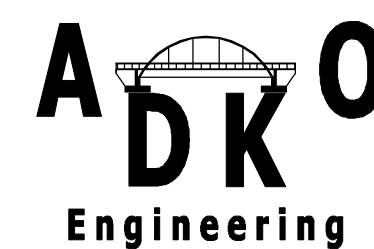
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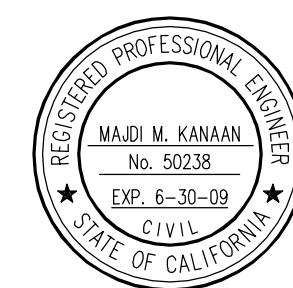
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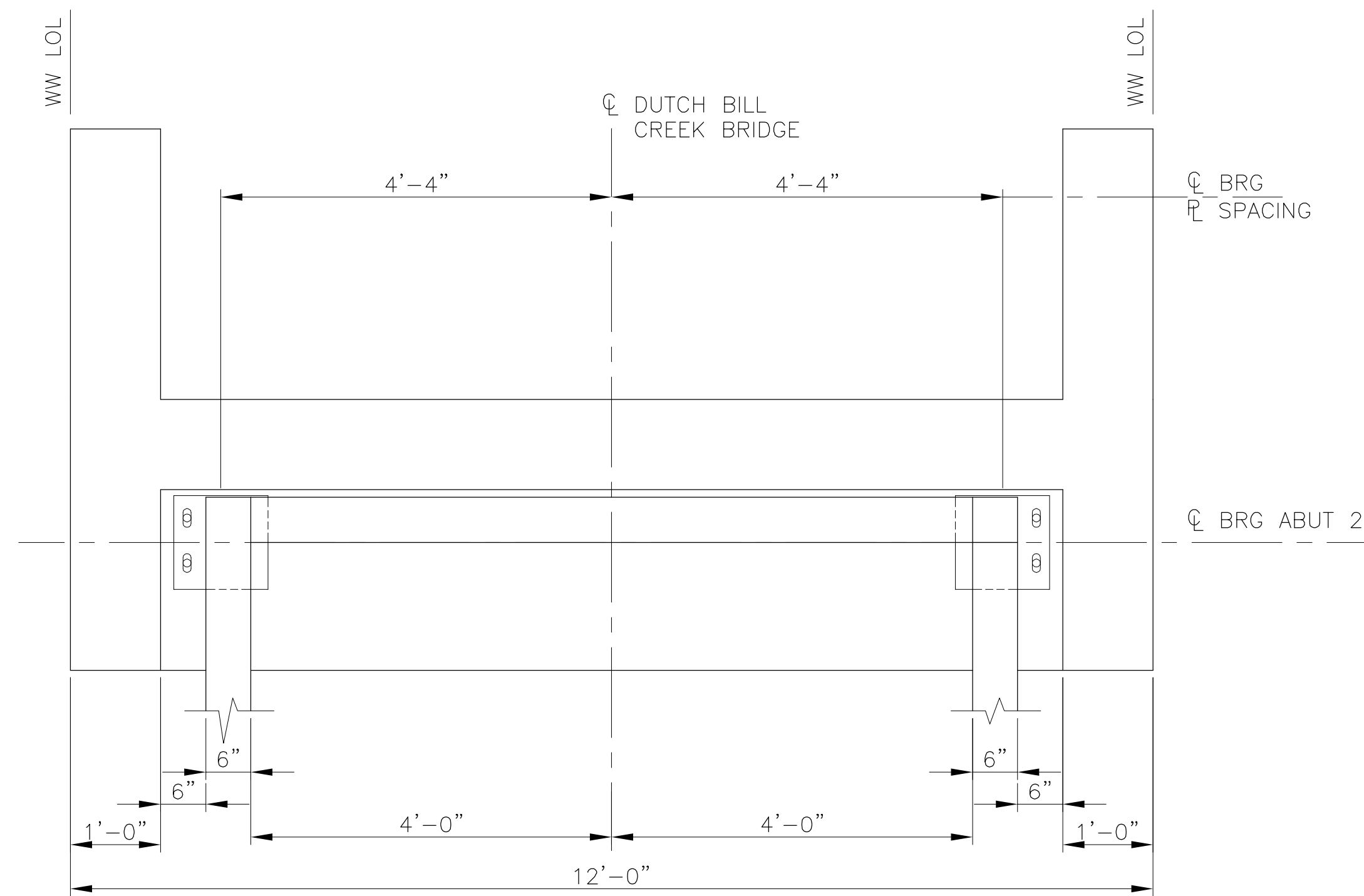


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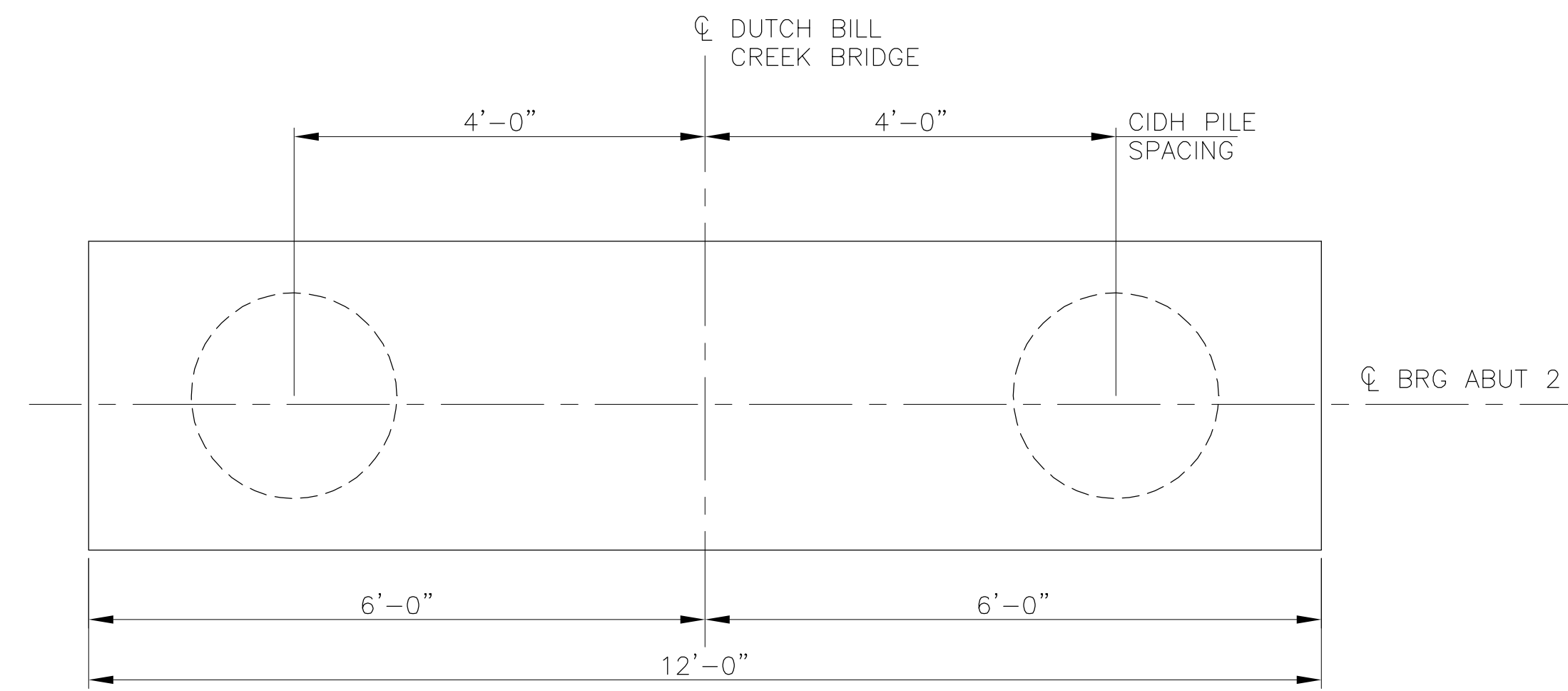
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ABUTMENT 1 LAYOUT
STRUCTURAL PLANS
DUTCH BILL CREEK
CAMP MEEKER, CALIFORNIA

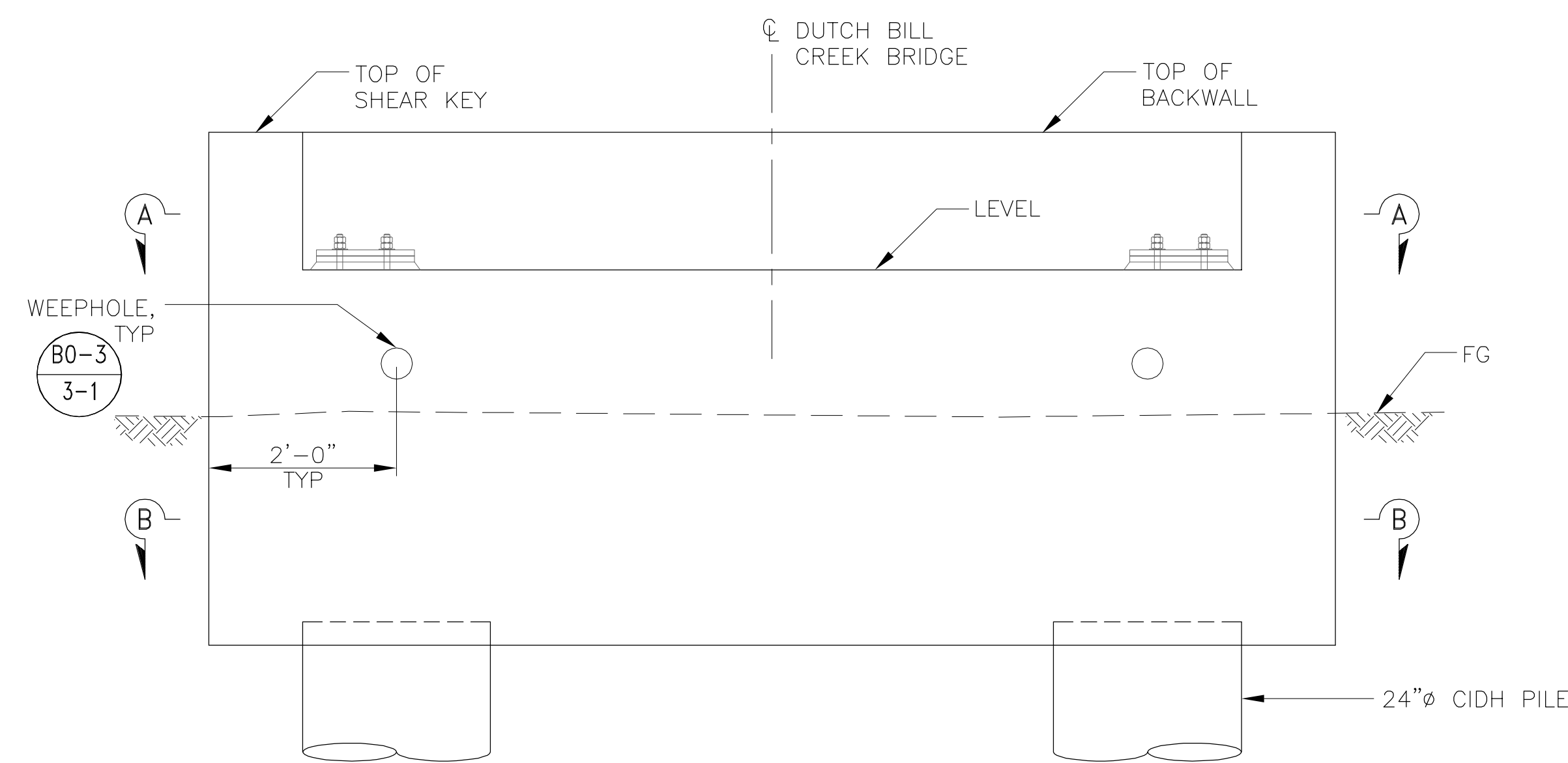
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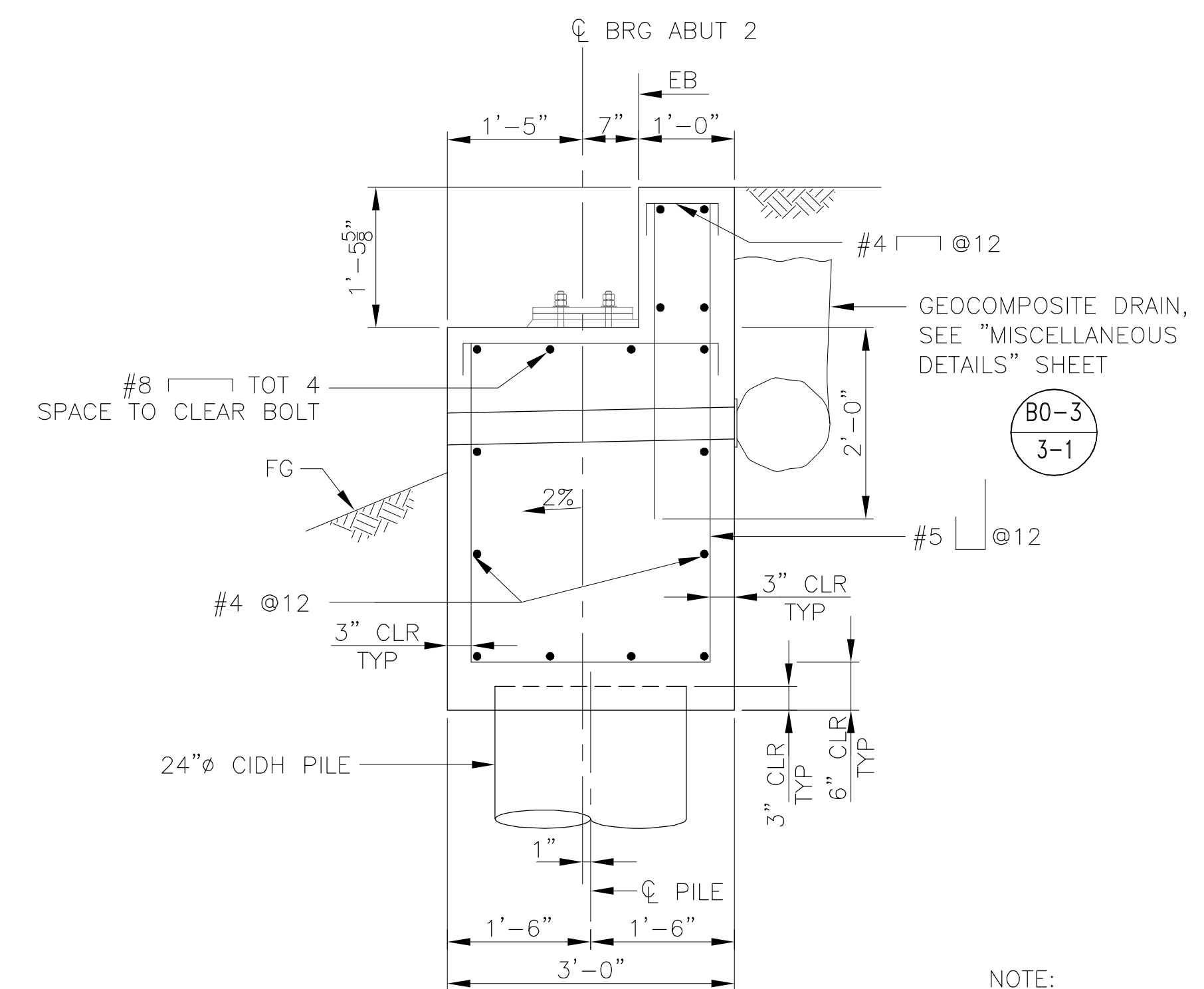
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SCALE: 3/4"=1'-0"



ABUTMENT 2 FOOTING PLAN
SCALE: 3/4"=1'-0"



ABUTMENT 2 ELEVATION
SCALE: 3/4"=1'-0"



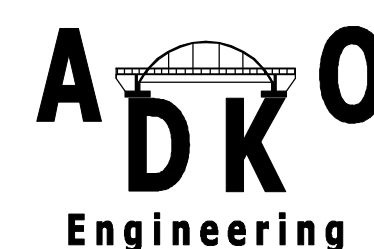
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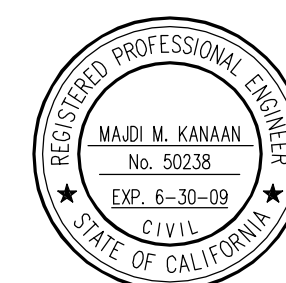
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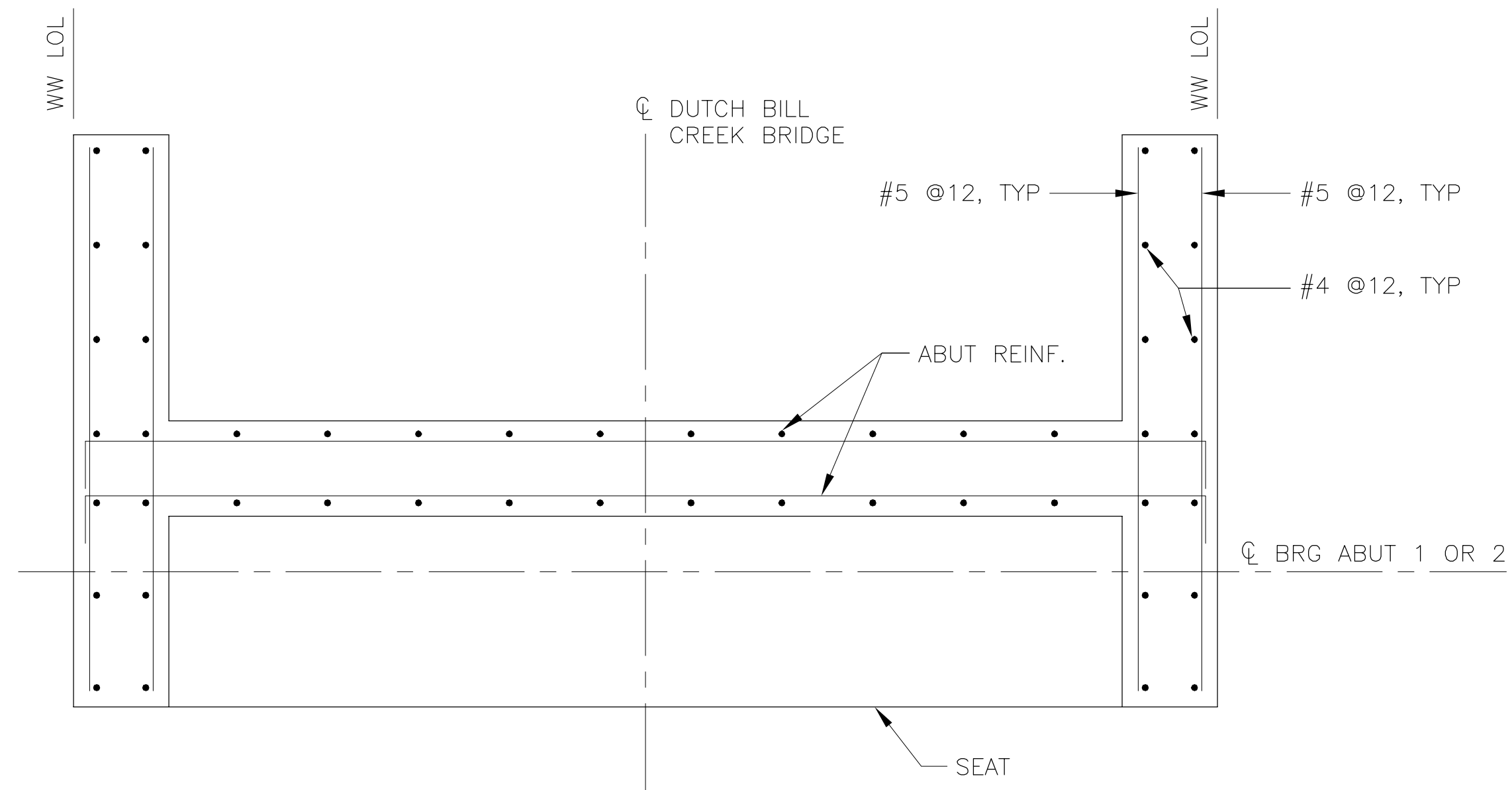


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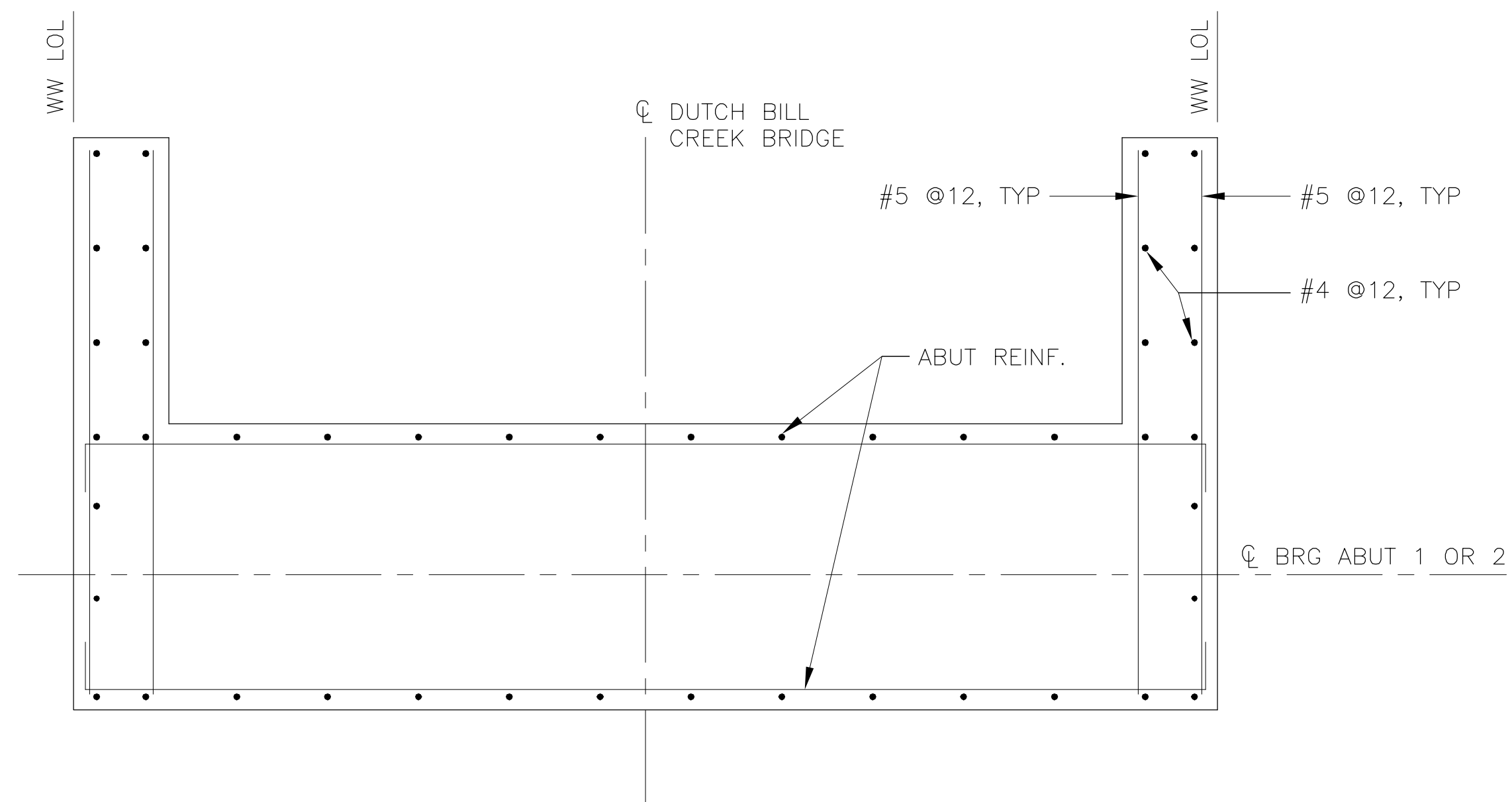
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ABUTMENT 2 LAYOUT
STRUCTURAL PLANS
DUTCH BILL CREEK
CAMP MEEKER, CALIFORNIA

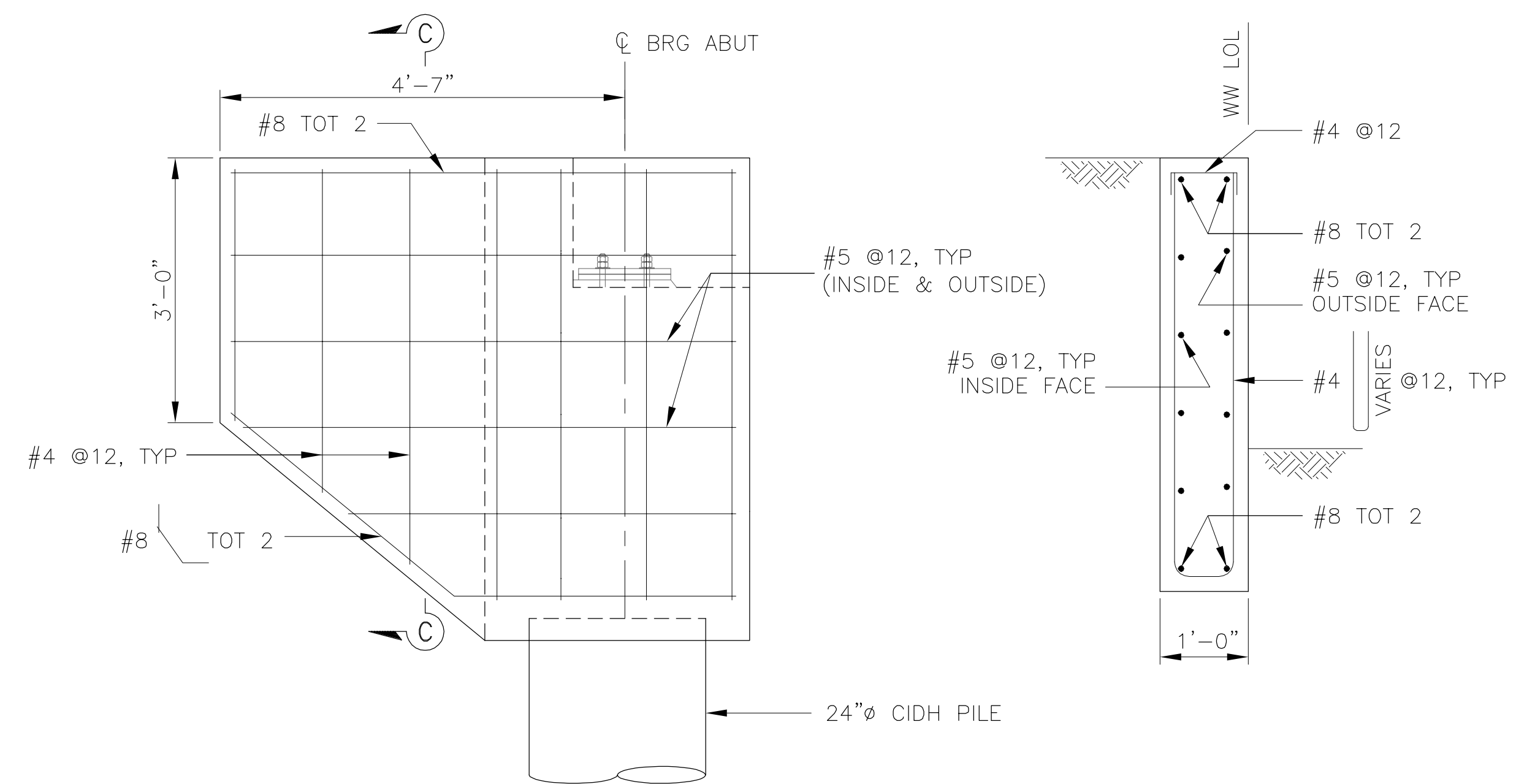
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SECTION A-A REINFORCEMENT
SCALE: 3/4"=1'-0"



SECTION B-B REINFORCEMENT
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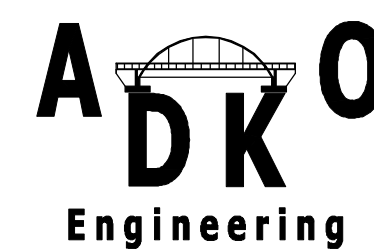


WINGWALL REINFORCEMENT
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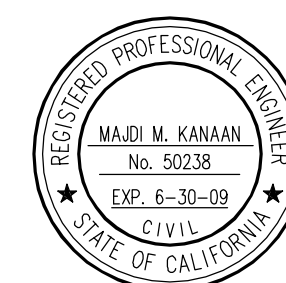
SECTION C-C
SCALE: 3/4"=1'-0"

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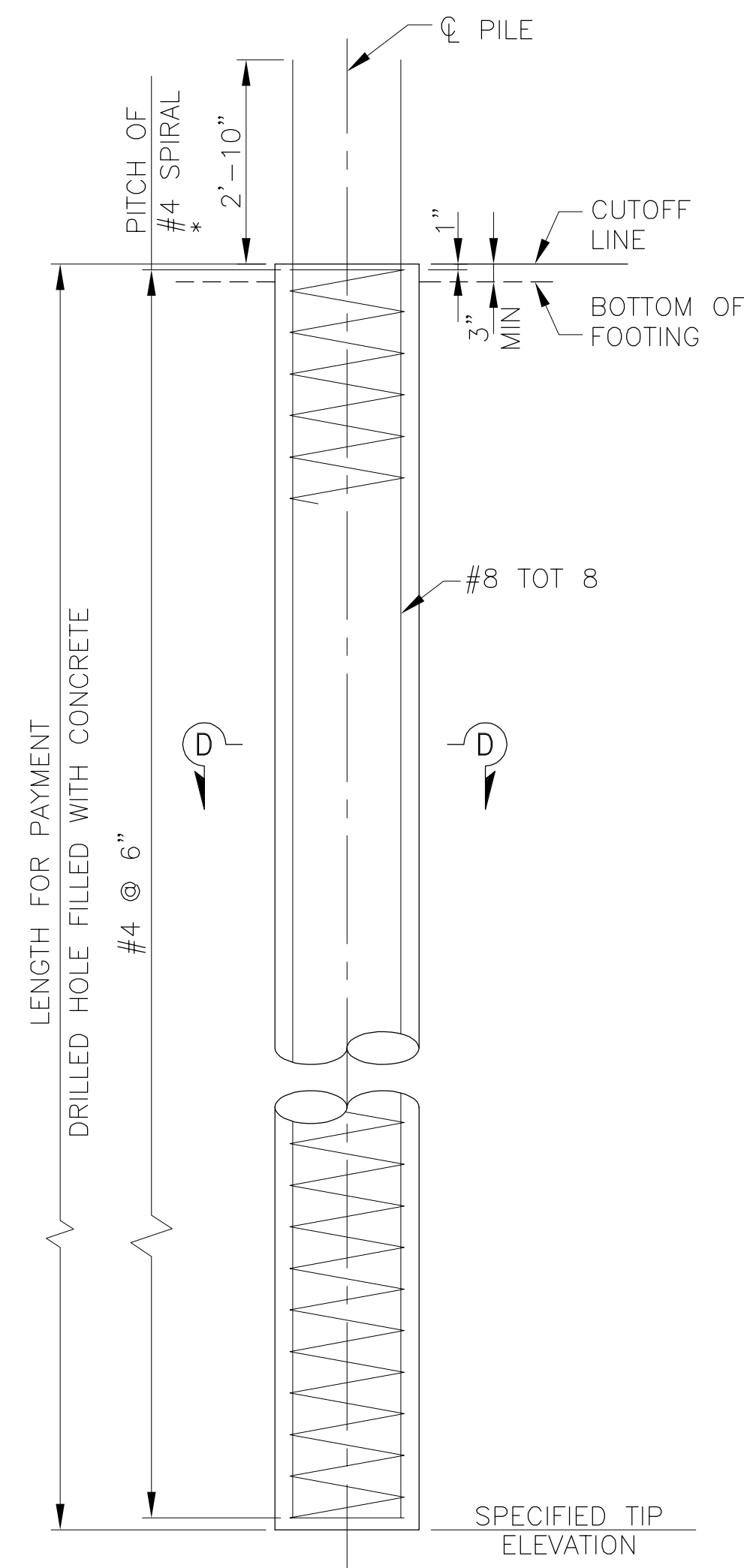


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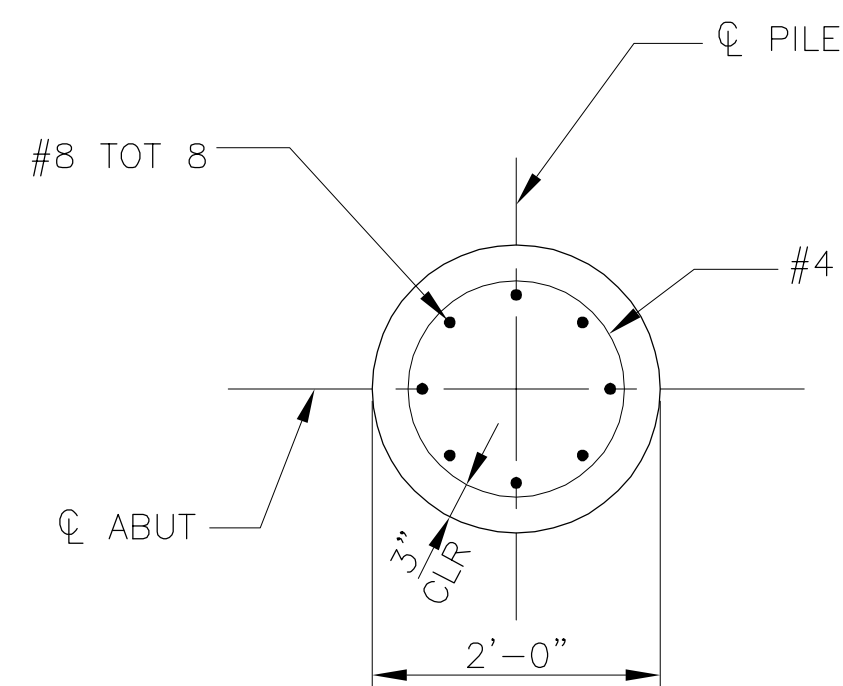
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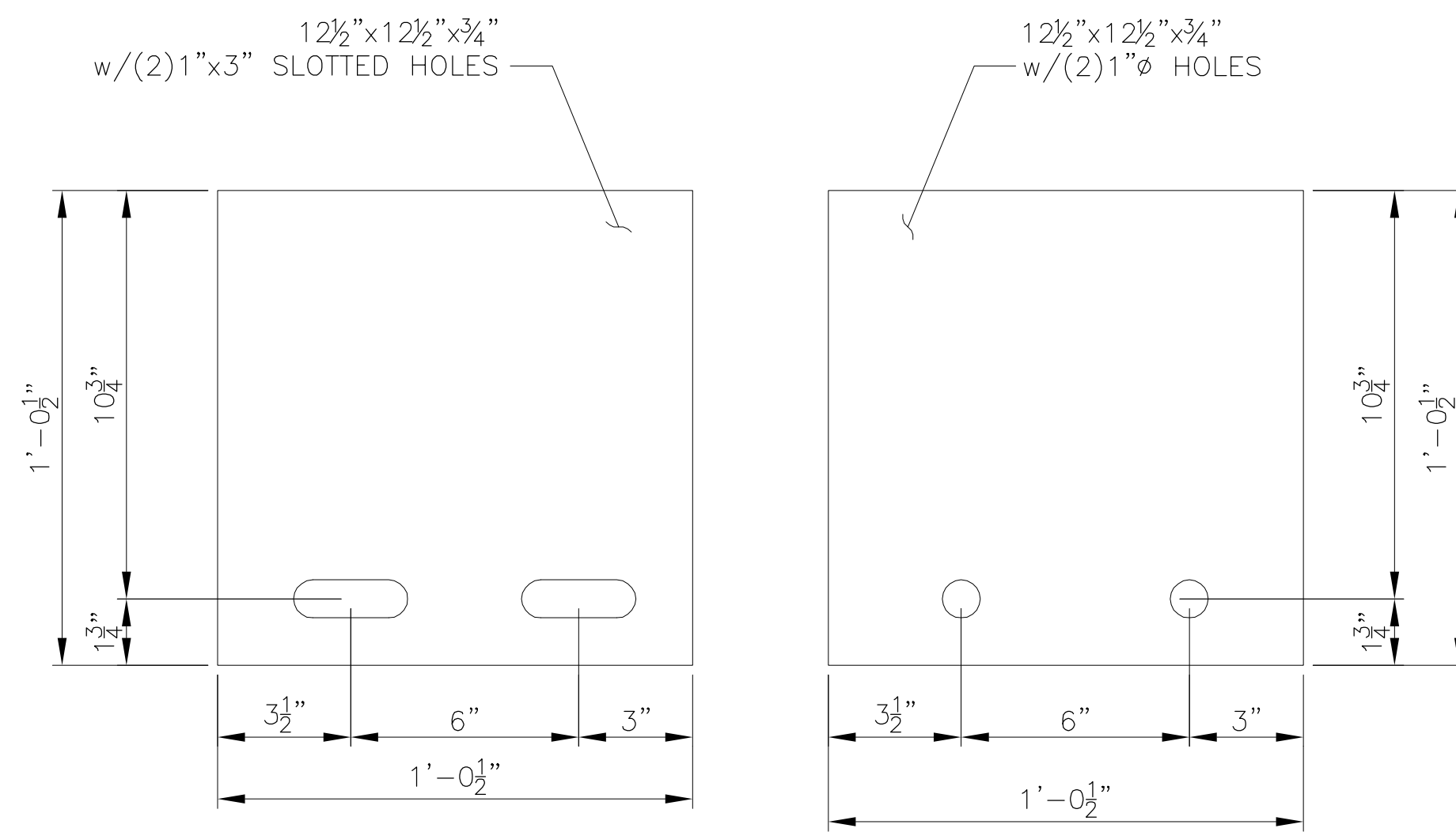


* EXTEND AT 2" PITCH TO TOP OF ANCHOR PILES AND LOAD TEST PILES.

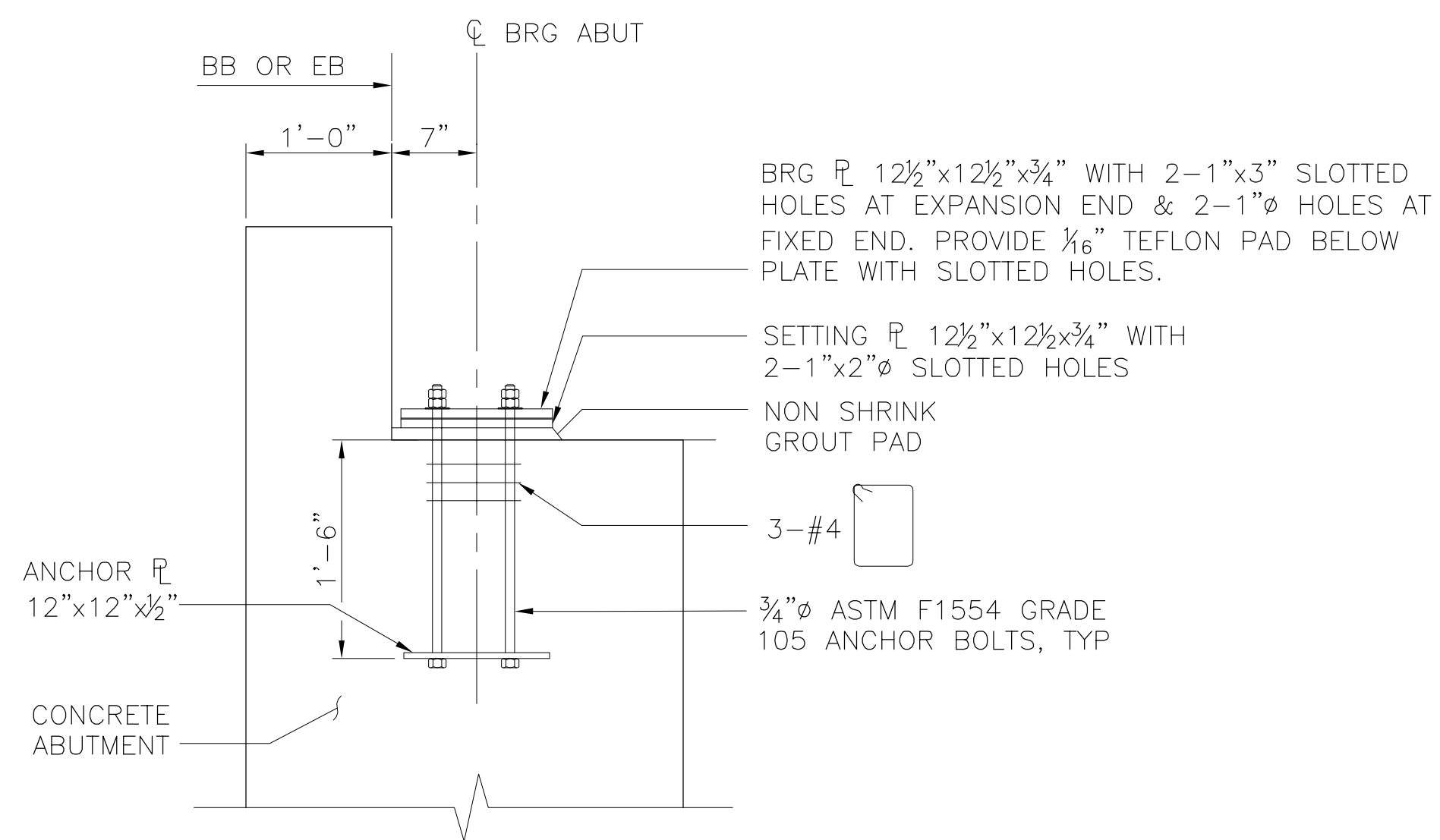
CIDH PILE ELEVATION
SCALE: 1/2"=1'-0"



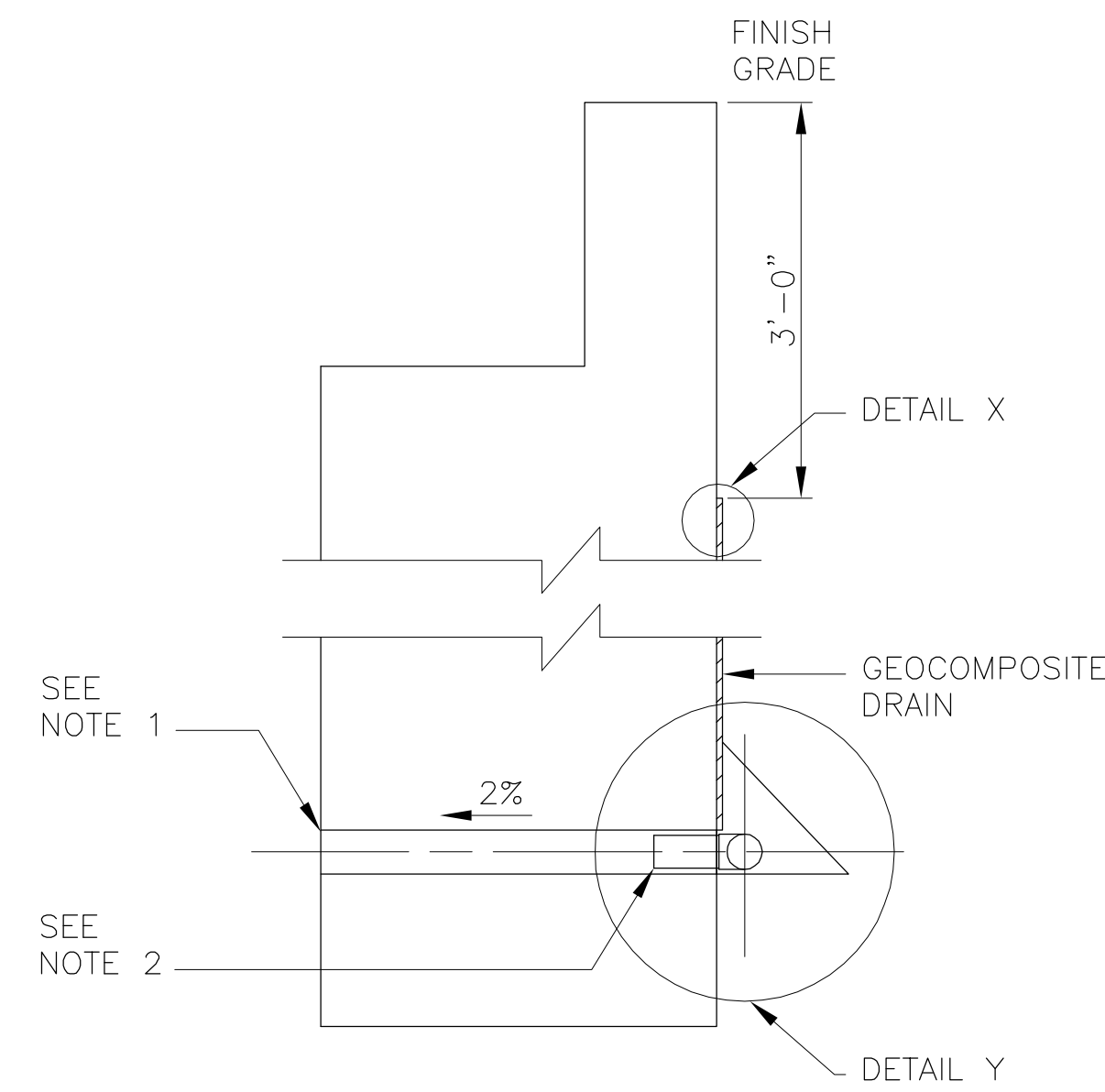
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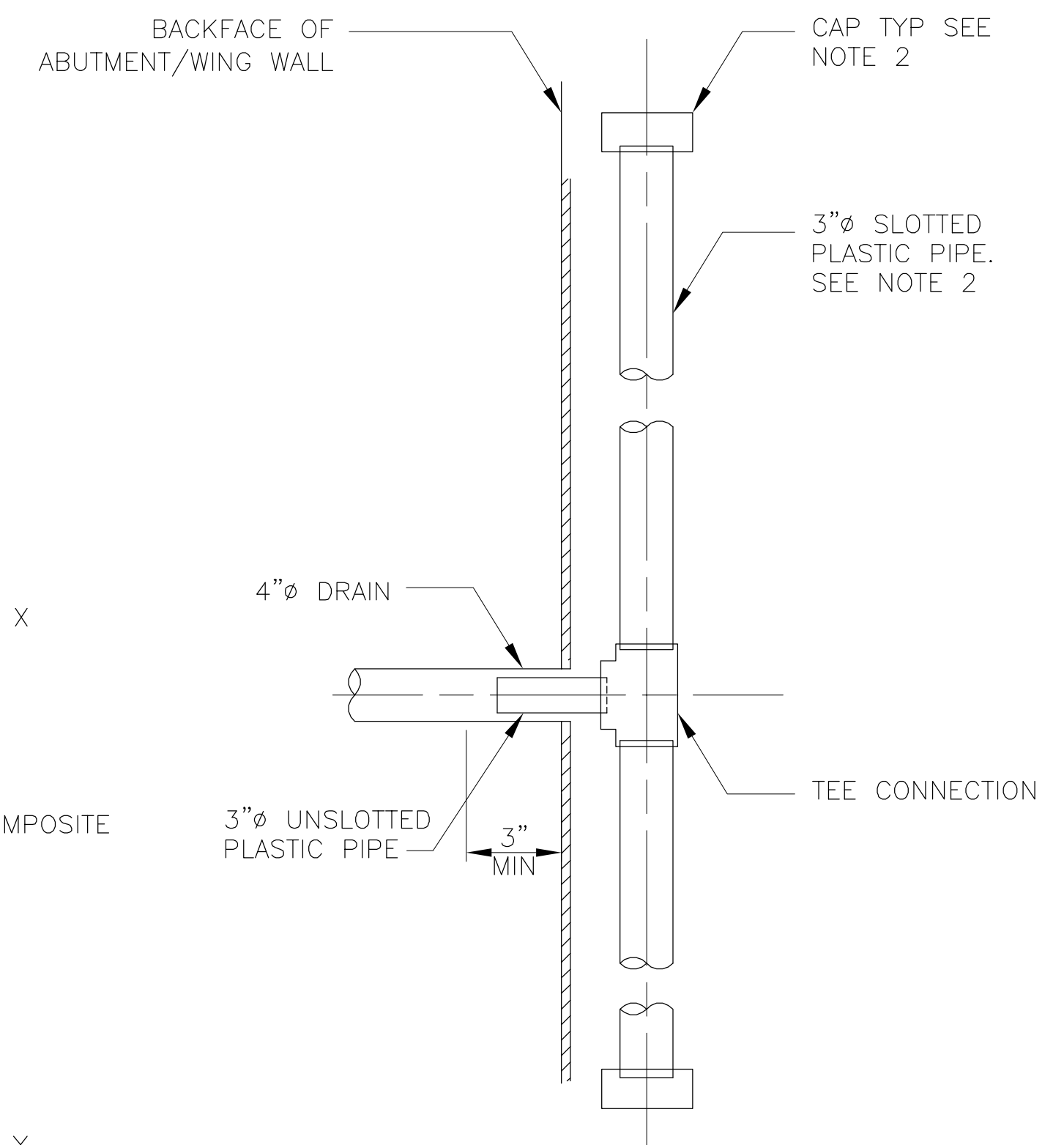
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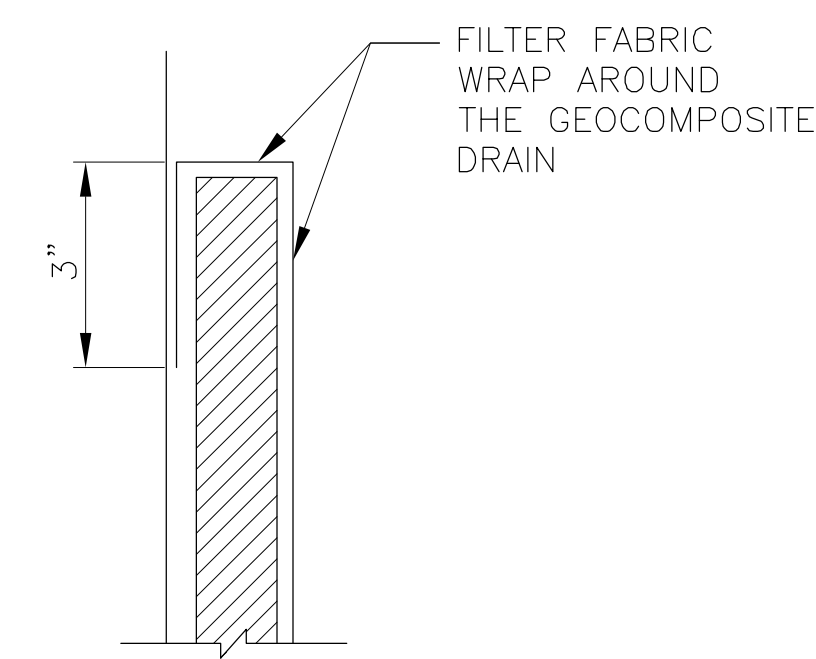
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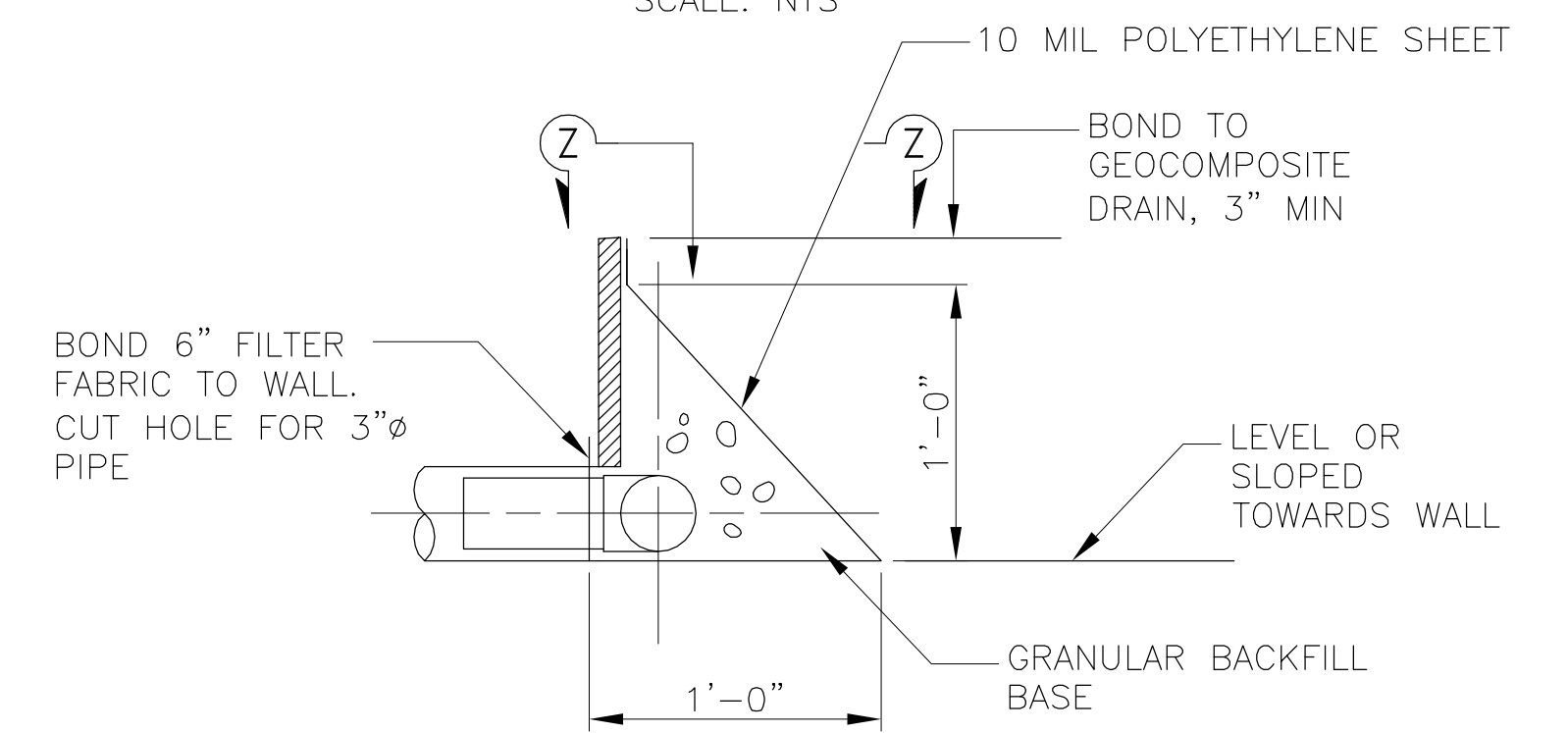
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SECTION Z-Z
SCALE: NTS



DETAIL X
SCALE: NTS



DETAIL Y
SCALE: NTS

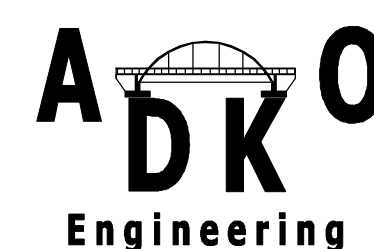
**ALTERNATIVE TO PVIOUS BACKFILL
WEEP HOLE AND GEOCOMPOSITE DRAIN**

NOTES

- 4" DRAINS AT 13' CENTER TO CENTER, EXPOSED WALL DRAINS SHALL BE 9"± ABOVE FG.
- GEOCOMPOSITE DRAIN, GRANULAR BACKFILL BASE, AND 3" SLOTTED PLASTIC PIPE CONTINUOUS BEHIND ABUTMENTS AND WING WALLS, CAP ENDS OF PIPE. PROVIDE TEE CONNECTION AT EACH 4" DRAIN.
- CONNECT THE LOW END OF PLASTIC PIPE TO THE MAIN OUTLET PIPE AS APPLICABLE

CONTRACTOR TO VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

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FOLSOM, CA 95630
(916) 294-0059
(916) 294-0875 (FAX)



Sht.	Rev.	Date:	By:	Description:	App'd:

Design: M. KANAAN
Drawn: M. KENDALL
Checked: A. MALLA
App'd:

MISCELLANEOUS DETAILS
STRUCTURAL PLANS
DUTCH BILL CREEK
CAMP MEEKER, CALIFORNIA

Size D	Project No.	Rev.
	250041	
Scale:	AS SHOWN	
Date:	6/05/09	
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