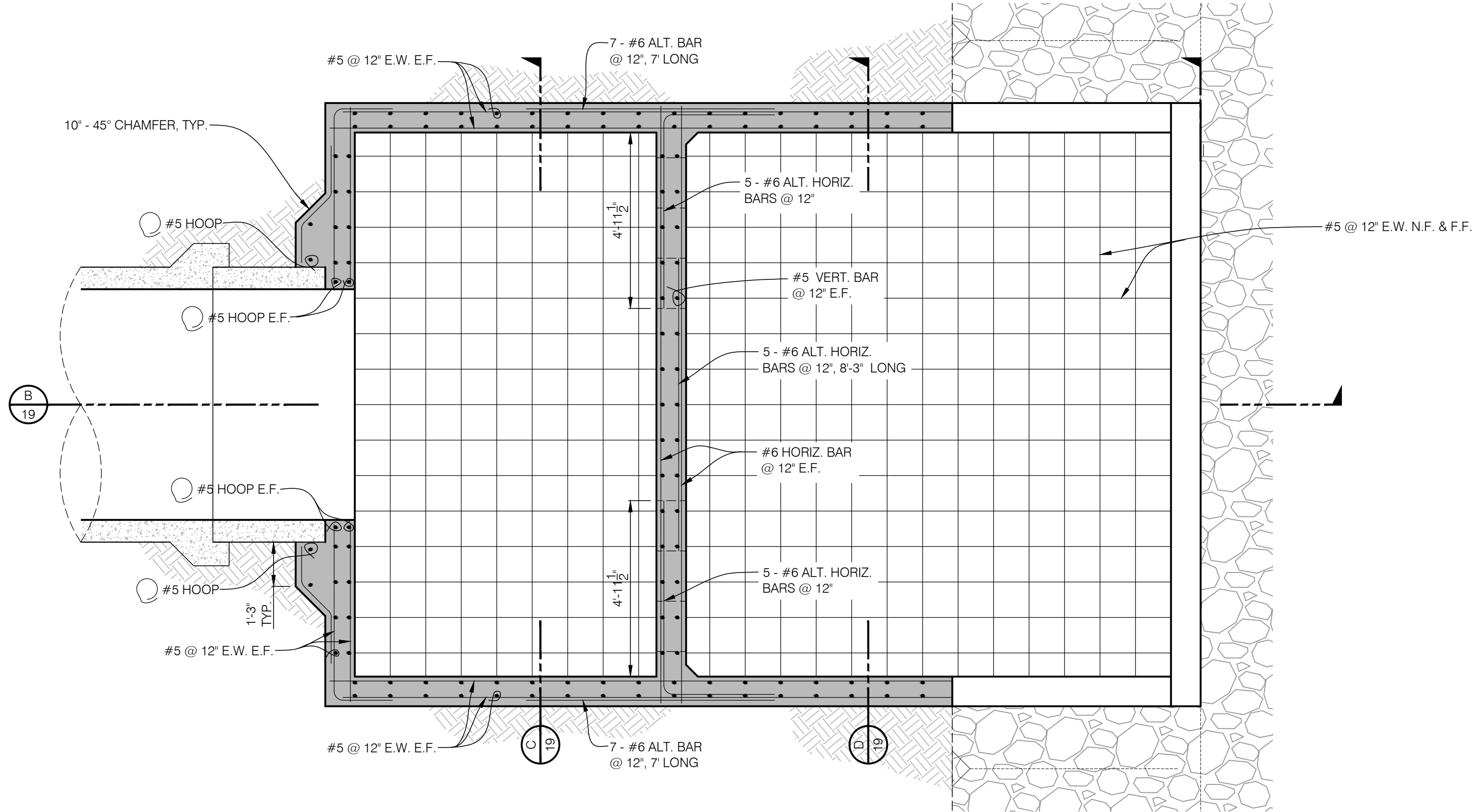

FINAL ENVIRONMENTAL ASSESSMENT (EA/IS-09-080)

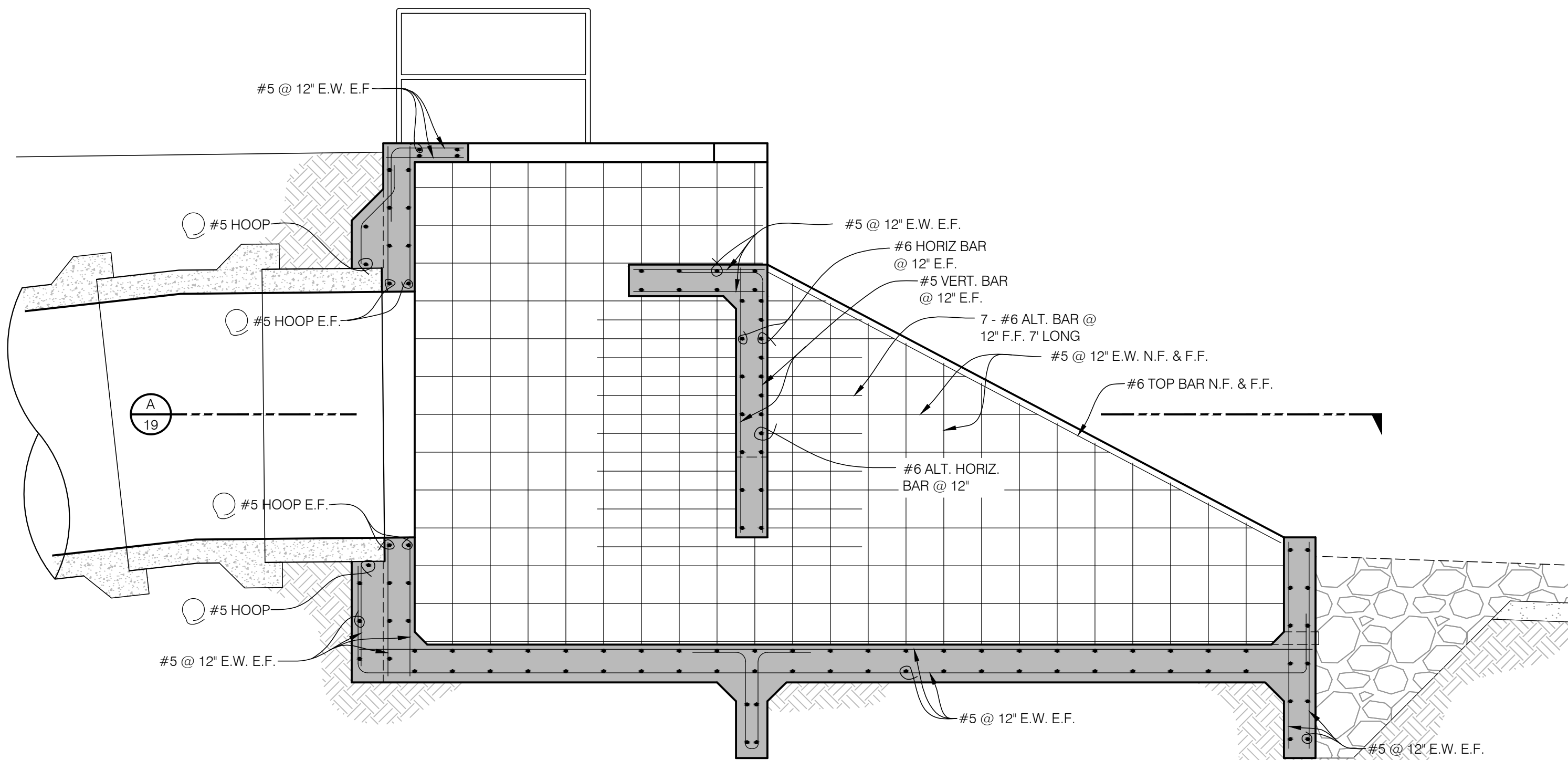
*BUENA VISTA WASTER STORAGE DISTRICT
BV8 STATE WATER PROJECT TURNOUT*

Appendix A
Final Project Designs (Pages 18-25)

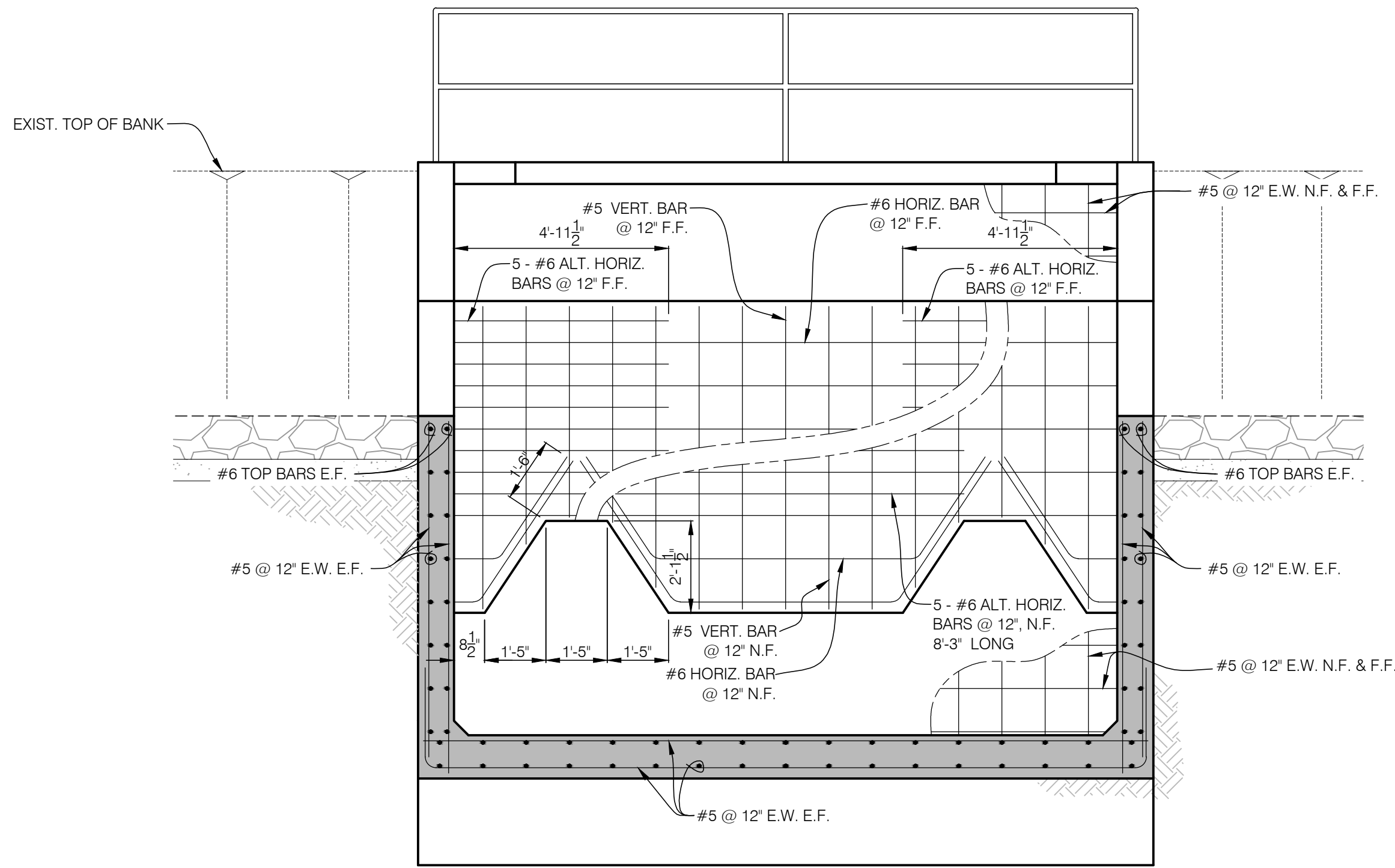
December 2011



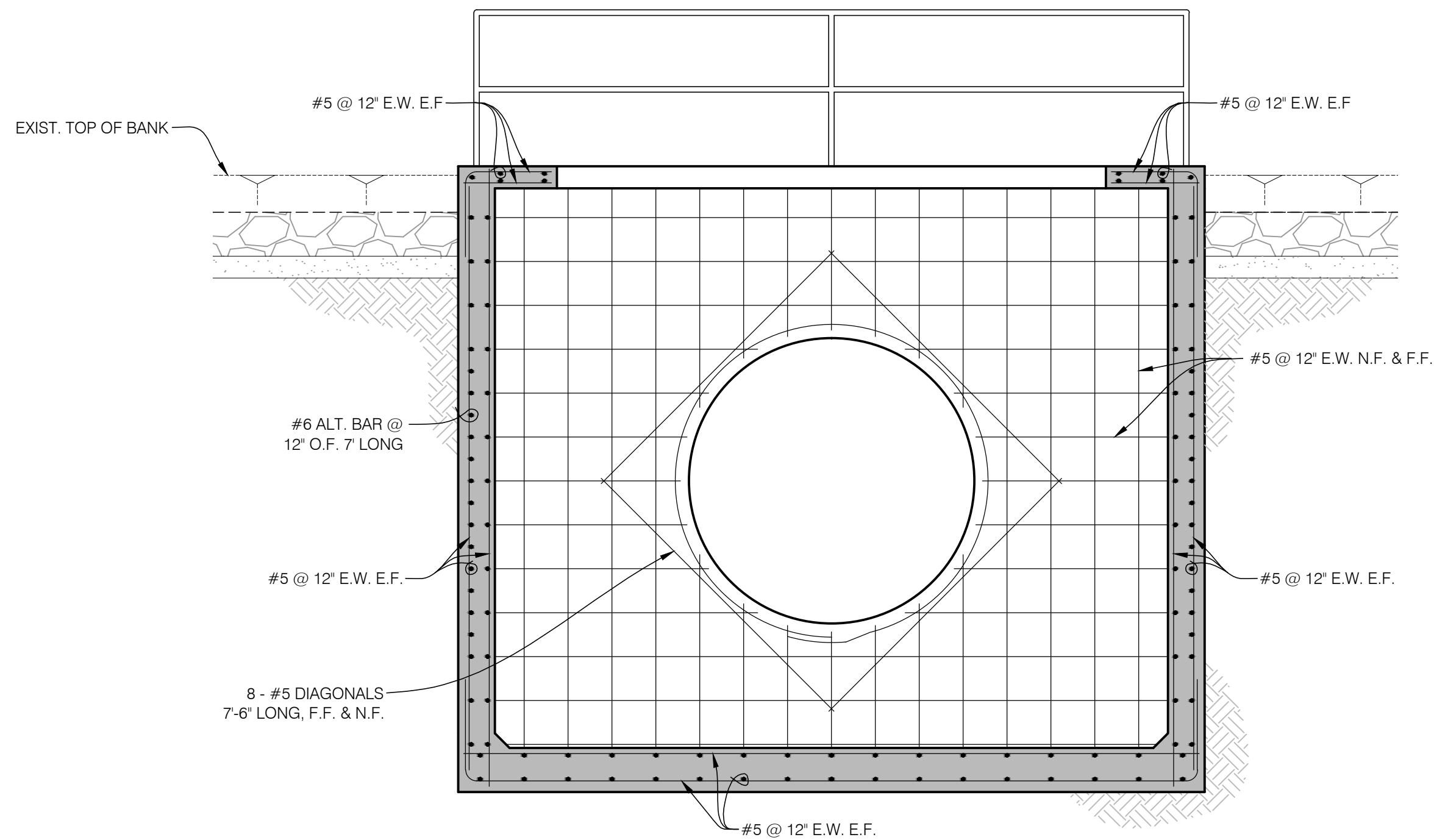
SECTION - PIPELINE OUTLET
SCALE: 3/8"=1'-0"
A 19



SECTION - PIPELINE OUTLET
SCALE: 3/8"=1'-0"
B 19



SECTION - BAFFLE WALL
SCALE: 3/8"=1'-0"
D 19



SECTION - HEADWALL
SCALE: 3/8"=1'-0"
C 19



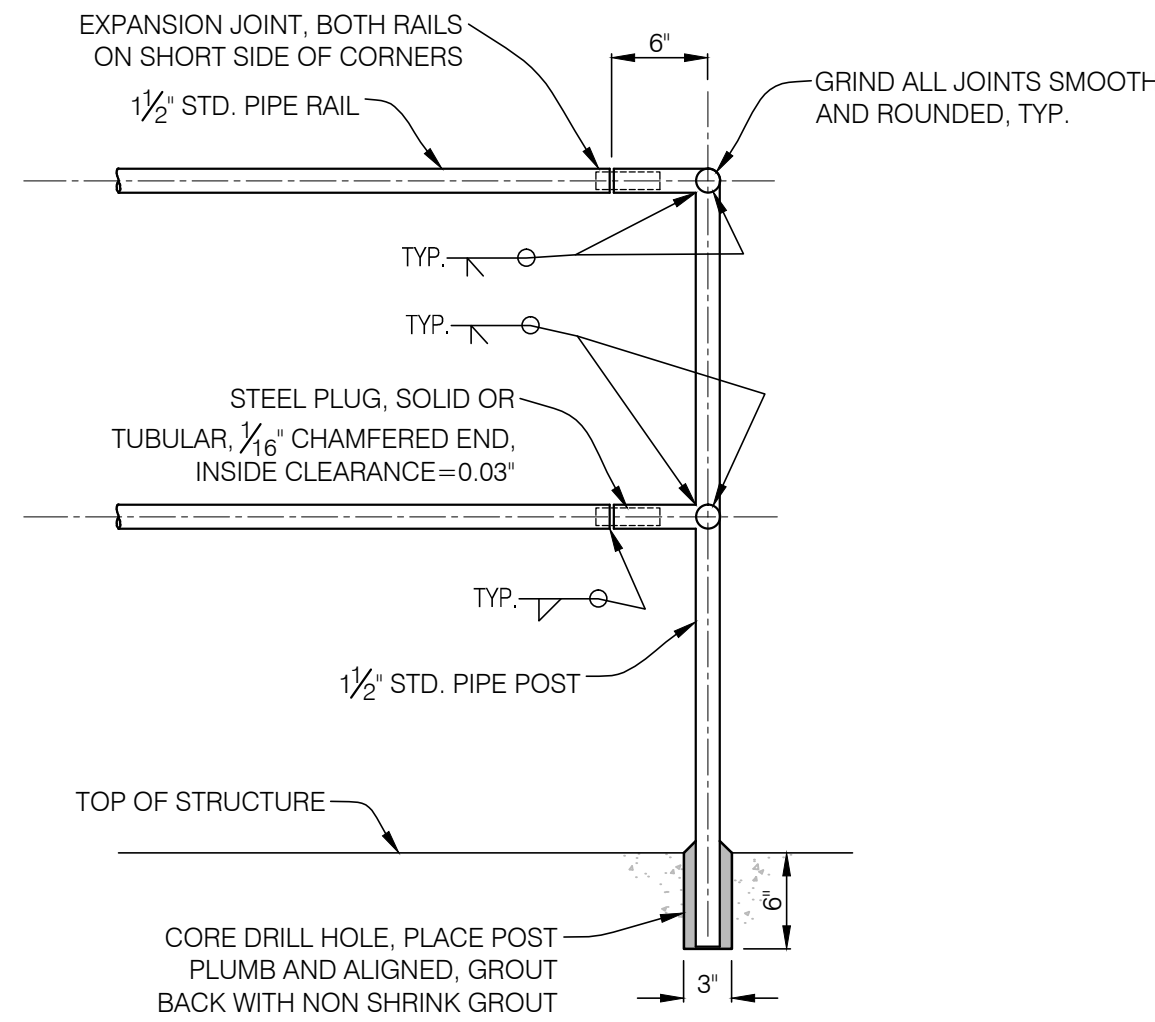
Richard D. Meyer 10-7-11
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Rev. No.	Date	Revision Description	Approved By

Drawn By: RDM	Rev. No. 10/07/11
Aug/CAD File: RDM/SCB	Date: 10/07/11
File Name: 08-001	

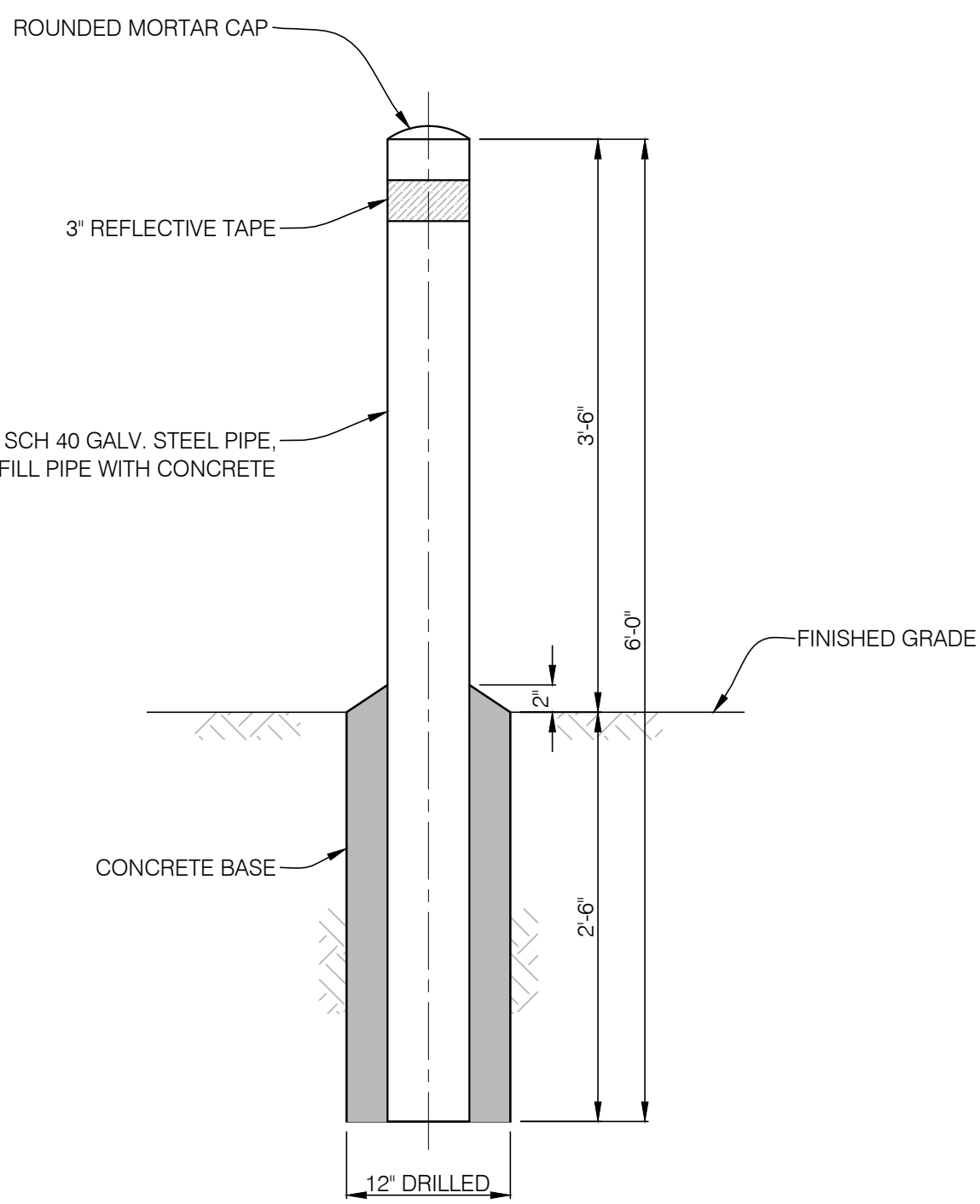
BUENA VISTA WATER STORAGE DISTRICT
BUENA VISTA TURNOUT #8
OUTLET STRUCTURE REINFORCING DETAILS



DETAIL - HAND RAIL

SCALE: 1"=1'-0"
ALL HANDRAILS TO BE HOT-DIP GALVANIZED AFTER FABRICATION

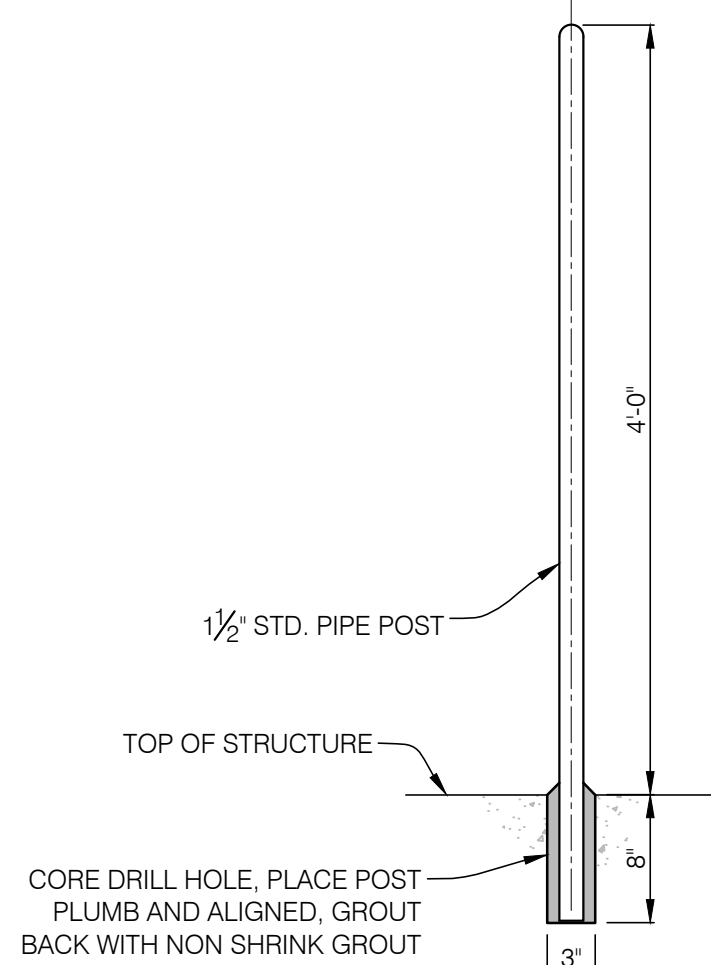
A
20



DETAIL - METAL GUARD POST

SCALE: 1"=1'-0"

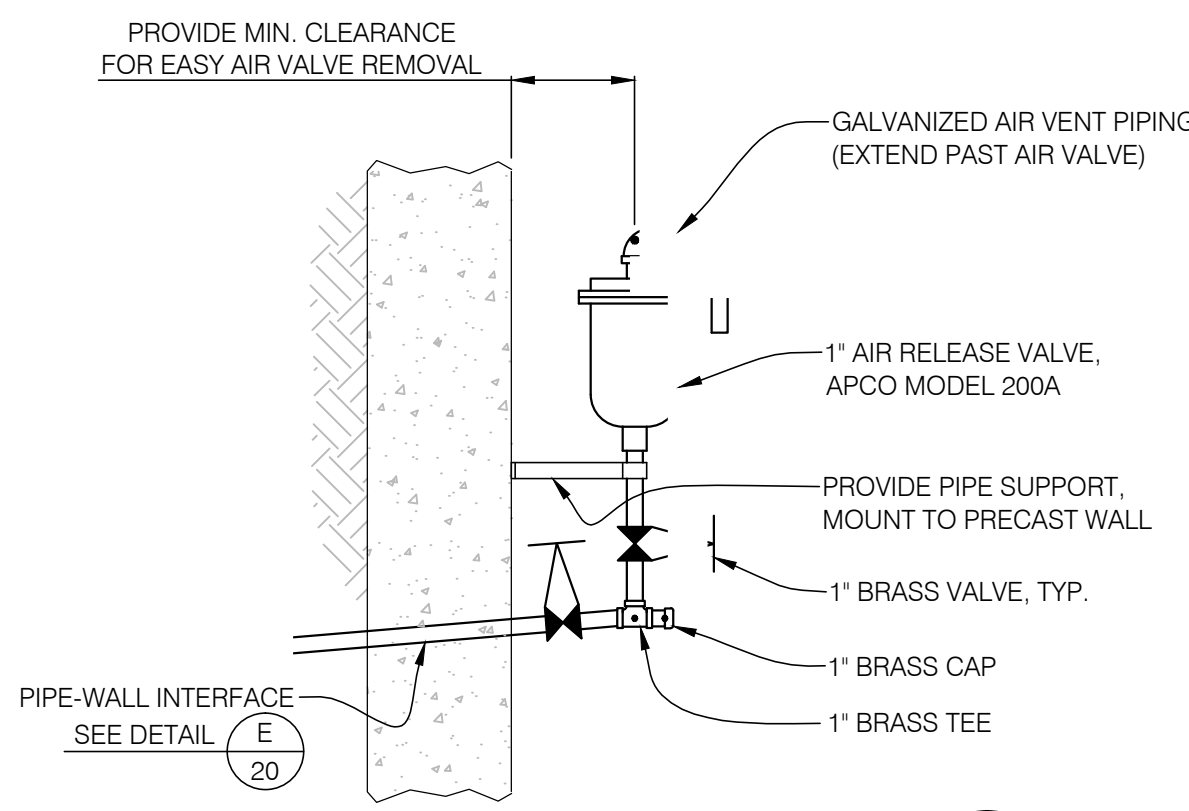
B
20



DETAIL - GRAB BAR

SCALE: 1"=1'-0"
ALL GRAB BARS TO BE HOT-DIP GALVANIZED AFTER FABRICATION

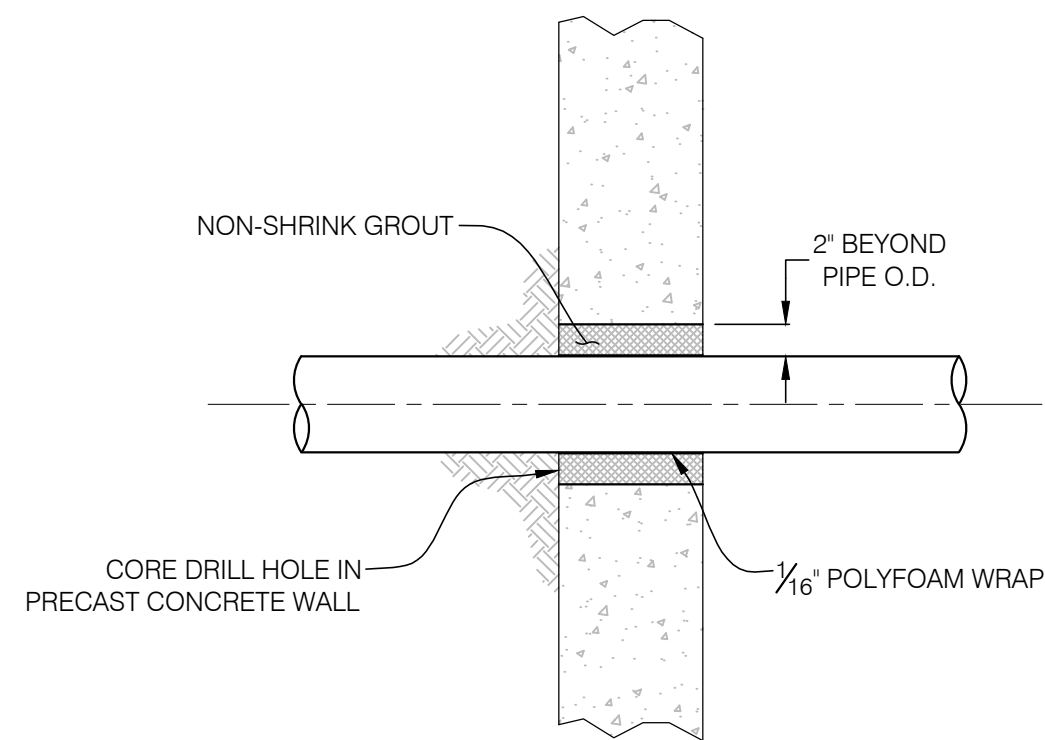
C
20



DETAIL - VAULT AIR VALVE

SCALE: 1"=1'-0"

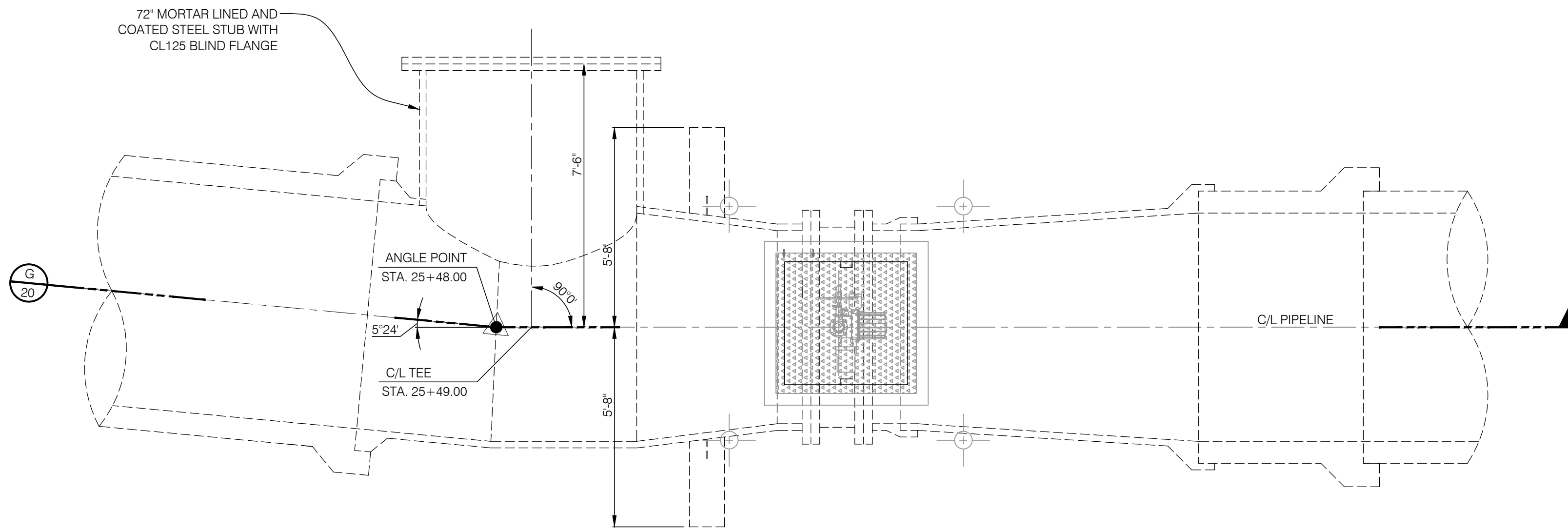
D
20



DETAIL - PIPE ENTRY

NOT TO SCALE

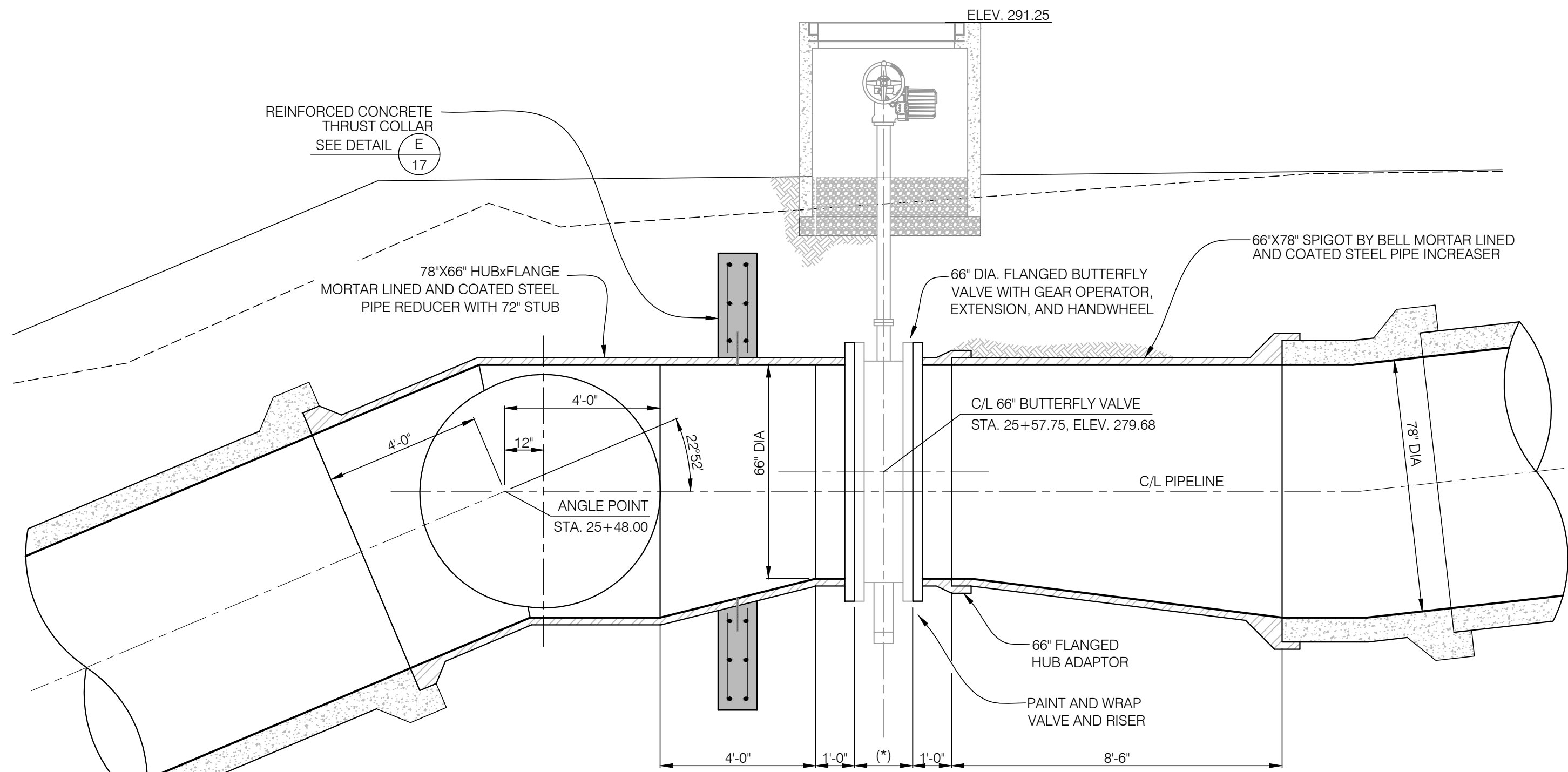
E
20



PLAN - BID ALTERNATE NO. 2

SCALE: 3/8"=1'-0"

F
20



SECTION - BID ALTERNATE NO. 2

SCALE: 3/8"=1'-0"

G
20



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BUENA VISTA WATER STORAGE DISTRICT
BUENA VISTA TURNOUT #8
HANDRAIL, GUARD POST, VAULT AIR VALVE
PIPE ENTRY & BID ALTERNATE NO. 2 DETAILS

SHEET NO.
20
OF
25



PANEL

LA

BUS AMPS

125

MFR.

C-H OR EQUAL

LOC.

INDOOR

MTG.

SURFACE

MAIN AMPS

100A/3P

PHASE

3

WIRES

4

VOLTS

120/208

FEEDER

SEE 1-LINE

AT

BOTTOM

AIC RATING

10K

DESCRIPTION	VOLT-AMPS			OUTLETS			BKR.			WIRE			BUS CONNECTION										WIRE			BKR.			OUTLETS			VOLT-AMPS			DESCRIPTION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	A	B	C	LTG	REC	MISC	AMP	P	AWG	AWG	P	AMP	MISC	REC	LTG	A	B	C	AWG	P	AMP	MISC	REC	LTG	A	B	C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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TYPICAL PIPE TRENCH

- The diagram illustrates five different trench backfill patterns, each represented by a rectangular box with a unique internal texture. To the right of each box is a label describing the pattern.

 - STRUCTURE EXCAVATION:** Represented by a grid of small squares.
 - STRUCTURE BACKFILL:** Represented by a dense pattern of small dots.
 - TRENCH EXCAVATION:** Represented by diagonal lines running from the top-left to the bottom-right.
 - NORMAL TRENCH BACKFILL:** Represented by a pattern of small crosses or plus signs.
 - COMPACTED TRENCH BACKFILL:** Represented by a pattern of horizontal dashes or short lines.



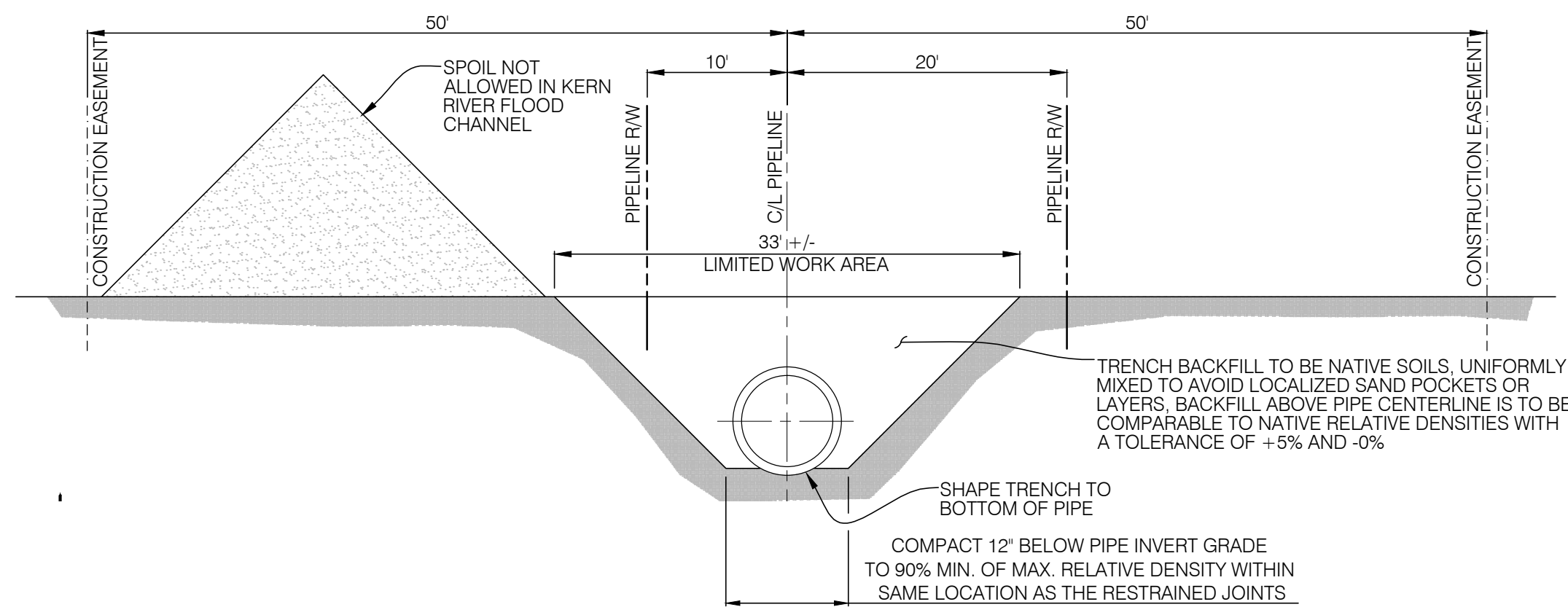
1. STRUCTURE BACKFILL PLACED INSIDE STRUCTURE WINGWALLS SHALL BE OBTAINED FROM STRUCTURE EXCAVATIONS OR FROM SELECT BORROW AREAS. BACKFILL MATERIAL SHALL NOT CONTAIN MORE THAN 15% FINES PASSING A #200 SIEVE.
2. WHERE UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED, OVER EXCAVATE 12" MINIMUM AND REPLACE WITH SELECT PVIOUS BACKFILL

[illegible]

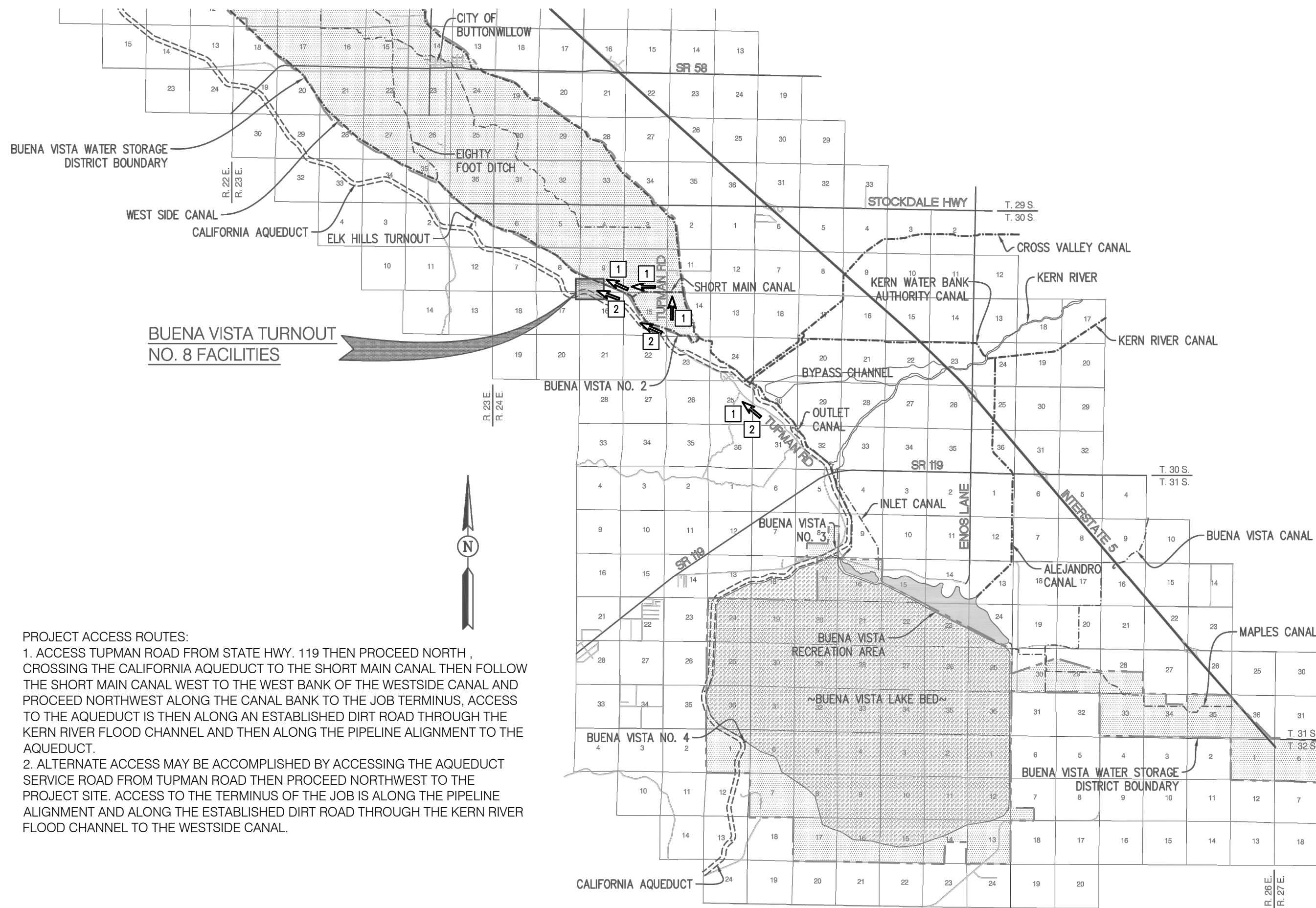
RDM
Drawn By: RDM/SCB
AutoCAD File: Bvw09001TO
File No: Bvw-09-001
Date: 10/07/11

BUENA VISTA WATER STORAGE DISTRICT
BUENA VISTA TURNOUT #8
EARTHWORK PAYLINES

SHEET NO.
23
OF
25

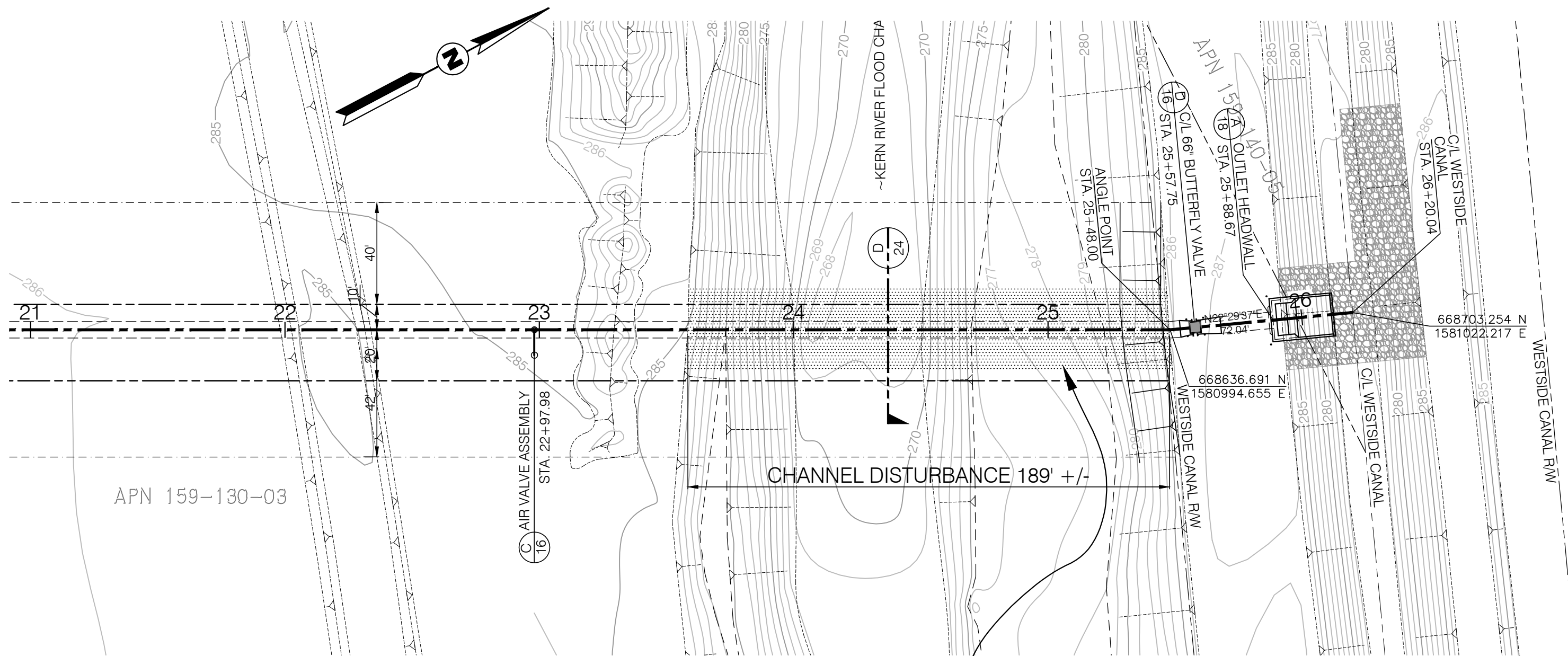


PIPELINE TRENCH WITHIN FLOODWAY (D 24)



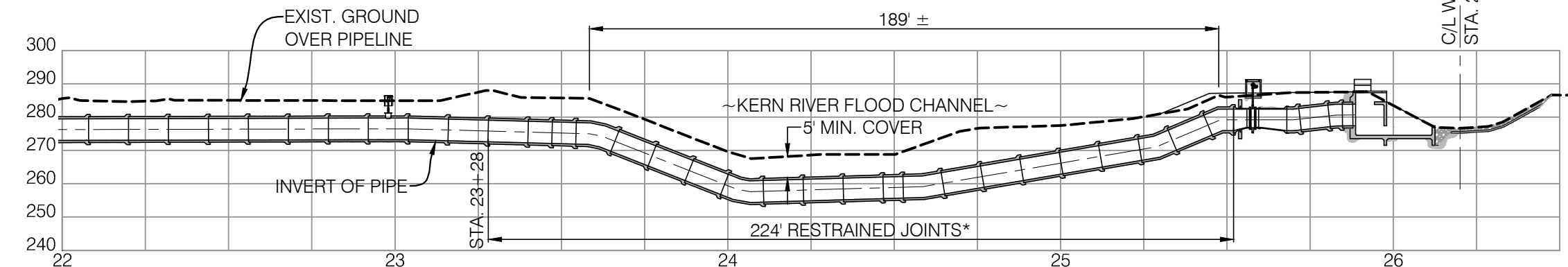
PROJECT ACCESS (C 24)

PROJECT ACCESS ROUTES:
1. ACCESS TUPMAN ROAD FROM STATE HWY. 119 THEN PROCEED NORTH, CROSSING THE CALIFORNIA AQUEDUCT TO THE SHORT MAIN CANAL THEN FOLLOW THE SHORT MAIN CANAL WEST TO THE WEST BANK OF THE WESTSIDE CANAL AND PROCEED NORTHWEST ALONG THE CANAL BANK TO THE JOB TERMINUS. ACCESS TO THE AQUEDUCT IS THEN ALONG AN ESTABLISHED DIRT ROAD THROUGH THE KERN RIVER FLOOD CHANNEL AND THEN ALONG THE PIPELINE ALIGNMENT TO THE AQUEDUCT.
2. ALTERNATE ACCESS MAY BE ACCOMPLISHED BY ACCESSING THE AQUEDUCT SERVICE ROAD FROM TUPMAN ROAD THEN PROCEED NORTHWEST TO THE PROJECT SITE. ACCESS TO THE TERMINUS OF THE JOB IS ALONG THE PIPELINE ALIGNMENT AND ALONG THE ESTABLISHED DIRT ROAD THROUGH THE KERN RIVER FLOOD CHANNEL TO THE WESTSIDE CANAL.



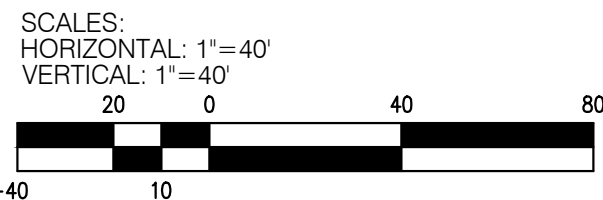
PLAN - KERN RIVER FLOOD CHANNEL XING (A 24)

- 1) THE MAXIMUM DISTURBED SURFACE AREA OF THE FLOOD CHANNEL DUE TO TRENCHING IS 0.14 ACRES.
- 2) NO SPOIL OR EQUIPMENT STAGING TO OCCUR WITHIN THE FLOOD CHANNEL.
- 3) EXCESS SOIL SHALL BE DISPOSED OF IN AN UPLAND LOCATION.
- 4) ALL EQUIPMENT REQUIRE RUBBER TIRES OR RUBBER TRACKS IN THE WETLAND AREAS OF THE CHANNEL.



*JOINTS ARE TO BE LONGITUDINALLY RESTRAINED WITH AN APPROVED BELL-BOLT TYPE SYSTEM OR CLAMP TYPE JOINT RING. SPECIAL COMPACTION REQUIREMENT, REFER TO SECTION D/24.

PROFILE - KERN RIVER FLOOD CHANNEL XING (B 24)



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BUENA VISTA WATER STORAGE DISTRICT
BUENA VISTA TURNOUT #8
FLOOD CHANNEL DISTURBANCE REQUIREMENTS

SHEET NO.
24
OF
25

