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ABBREVIATIONS

AB	AGGREGATE BASE
AD	ALGEBRAIC DIFFERENCE IN GRADES
AP	ANGLE POINT
AVE	AVENUE
BB	BEGIN BRIDGE
BVC	BEGIN VERTICAL CURVE
CL, $\mathcal{C}$	CENTER LINE
CY	CUBIC YARDS
DIA	DIAMETER
DR	DRIVE
DWY	DRIVEWAY
EB	END BRIDGE
EG	EXISTING GROUND
ELEV	ELEVATION
ESA	ENVIRONMENTALLY SENSITIVE AREA
EVC	END VERTICAL CURVE
EXIST	EXISTING
FG	FINISH GRADE
GB	GRADE BREAK
IRR	IRRIGATION
K	GRADE CHANGE ABRUPTNESS
LT	LEFT
MAX	MAXIMUM
N.T.S.	NOT TO SCALE
OHE	OVERHEAD ELECTRICAL
PI	POINT OF INTERSECTION
PIP	PROTECT IN PLACE
POVC	POINT OF VERTICAL CURVE
POVT	POINT OF VERTICAL TANGENT
PROP	PROPOSED
PVI	POINT OF VERTICAL INTERSECTION
RD	ROAD
RE	RESIDENT ENGINEER
R/W	RIGHT OF WAY
ROW	RIGHT OF WAY
RT	RIGHT
SR	STATE ROUTE
TCE	TEMPORARY CONSTRUCTION EASEMENT
VC	VERTICAL CURB

SPECIAL NOTES

1. THE STANDARD PLANS APPLICABLE TO THE CONTRACT ARE INCLUDED IN THE SPECIAL PROVISIONS BOOK.
2. DESIGN CRITERIA FOR THIS PROJECT ARE ON FILE WITH THE TULARE COUNTY RESOURCE MANAGEMENT AGENCY.
3. THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS" OF THE SPECIAL PROVISIONS.
4. CONTRACTOR SHALL VERIFY ACTUAL DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CALL "UNDERGROUND SERVICE ALERT" (USA) (TOLL FREE 811) PRIOR TO TRENCHING, GRADING, EXCAVATION, DRILLING, PIPE PUSHING, PLANTING TREES, DIGGING POST HOLES FOR FENCES, ETC. USA WILL SUPPLY INFORMATION OR LOCATE AND MARK ALL UNDERGROUND UTILITIES.
5. UNDERGROUND FACILITIES SHOWN WERE LOCATED BASED ON INFORMATION PROVIDED BY UTILITY COMPANIES AND BY MEASURING SURFACE FEATURES. NO ATTEMPT WAS MADE TO LOCATE OTHER UNDERGROUND FACILITIES THAT WERE NOT READILY APPARENT FROM A VISUAL INSPECTION OF SURFACE FEATURES.
6. THE ENGINEER ASSUMES NO LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THE EXISTING FACILITIES SHOWN HEREON OR FOR WHICH THE CONTRACTOR MAY DISCOVER BUT ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING FACILITIES AND IMMEDIATELY NOTIFY THE ENGINEER IF ANY SUCH FACILITIES INTERFERE WITH THE CONSTRUCTION OF IMPROVEMENTS.

BASIS OF COORDINATES AND BEARINGS

The coordinates and bearings shown hereon are based upon the California Coordinate System of 1983, CCS83, Zone 4, (2017.50)

The combined scale factor is 0.999999324 to convert grid distances to ground distances divide the grid distance by the combined scale factor

BASIS OF ELEVATION

The vertical project control elevations shown hereon are based on the North American Vertical Datum of 1988 as derived by static and RTK GNSS observations. Geoid 12B was used.

SITE CONTROL

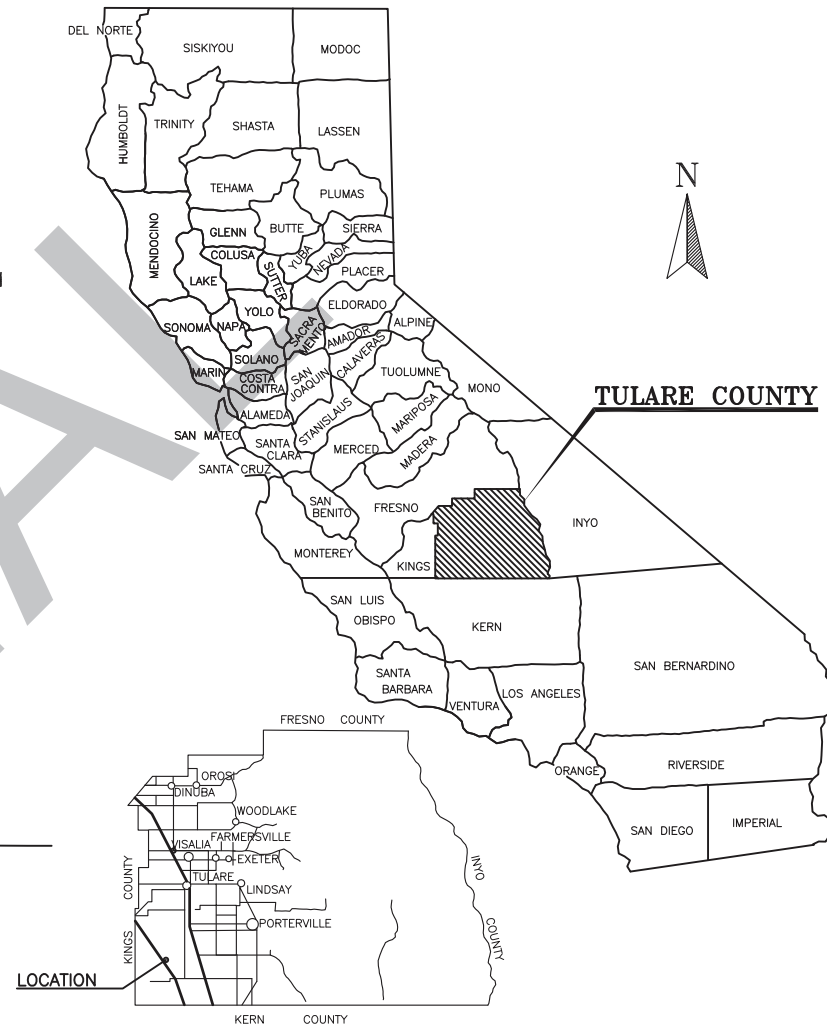
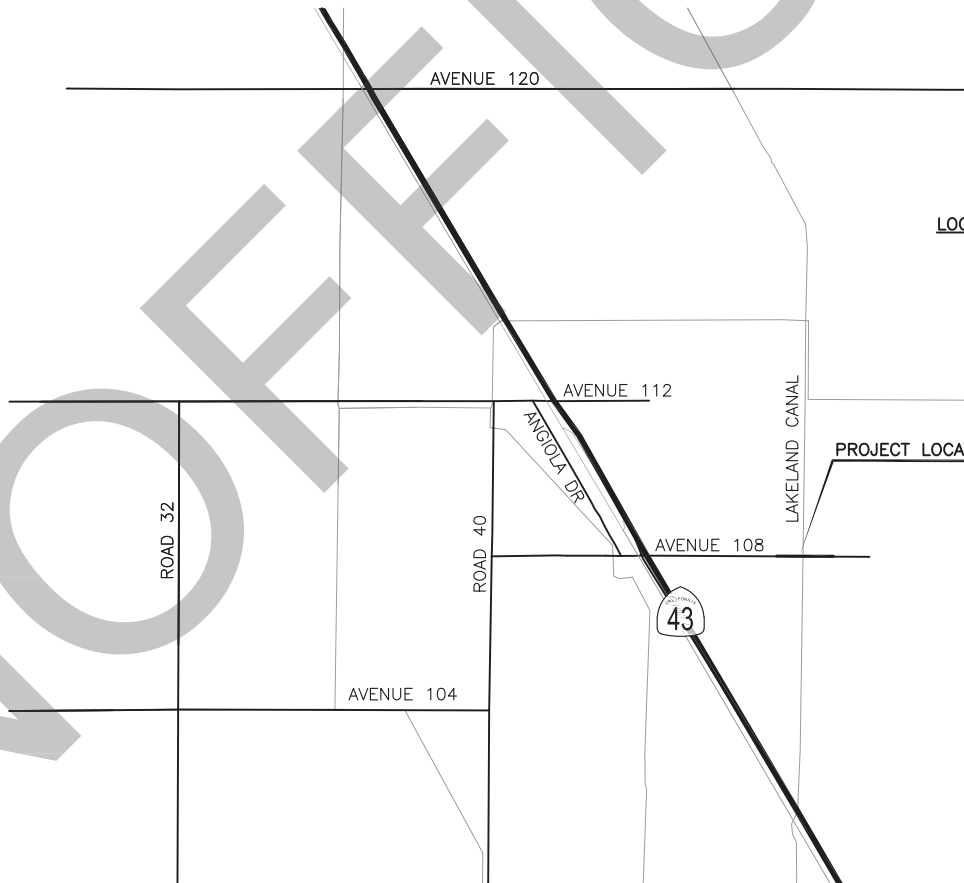
POINT NO.	NORTHING USFT	EASTING USFT	ELEV. USFT	DESCRIPTION
1	1878315.58	6424087.91	187.70	No. 4 rebar tagged "TULARE CO. CONTROL", down 0.5ft.
3	1878241.99	6424659.57	184.81	No. 4 rebar tagged "TULARE CO. CONTROL", down 0.5ft.
4	1878221.68	6424077.75	187.21	MAG nail in bridge deck, 2 ft. offset to E4 S27, T22S., R23E.
5	1878221.78	6424075.55	187.21	MAG nail in bridge deck, 2 ft. offset to E4 S27, T22S., R23E.
6	1877685.73	6423984.44	187.95	No. 4 rebar tagged "TULARE CO. CONTROL", down 0.5ft.

Project elevations and coordinates shall be referenced to the site control.

STATE OF CALIFORNIA
COUNTY OF TULAREPROJECT PLANS FOR CONSTRUCTION OF
AVENUE 108 LAKELAND CANAL
BRIDGE REPLACEMENT

BRIDGE NO. 46C-0486
(OLD BRIDGE NO. 46C-0300)
FEDERAL PROJECT NO. BRLO-5946(141)
HIGHWAY BRIDGE PROGRAM (HBP)

TO BE SUPPLEMENTED BY STANDARD PLANS AND STANDARD SPECIFICATIONS OF
THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DATED 2018



LOCATION MAP

APPROVED BY: _____ DATE: _____

DENNIS TOWNSEND, CHAIR
COUNTY OF TULARE BOARD OF SUPERVISOR

APPROVED BY: _____ DATE: _____

REED SCHENKE P.E. DIRECTOR
COUNTY OF TULARE RESOURCE MANAGEMENT AGENCY

SIGNED BY: _____ DATE: _____

STRUCTURAL DESIGNER
DEWBERRY ENGINEERS INC.

SIGNED BY: _____ DATE: _____

ROADWAY DESIGNER
COUNTY OF TULARE RESOURCE MANAGEMENT AGENCY



Contractor shall call
Underground Service Alert at
811 two working days prior
to excavation

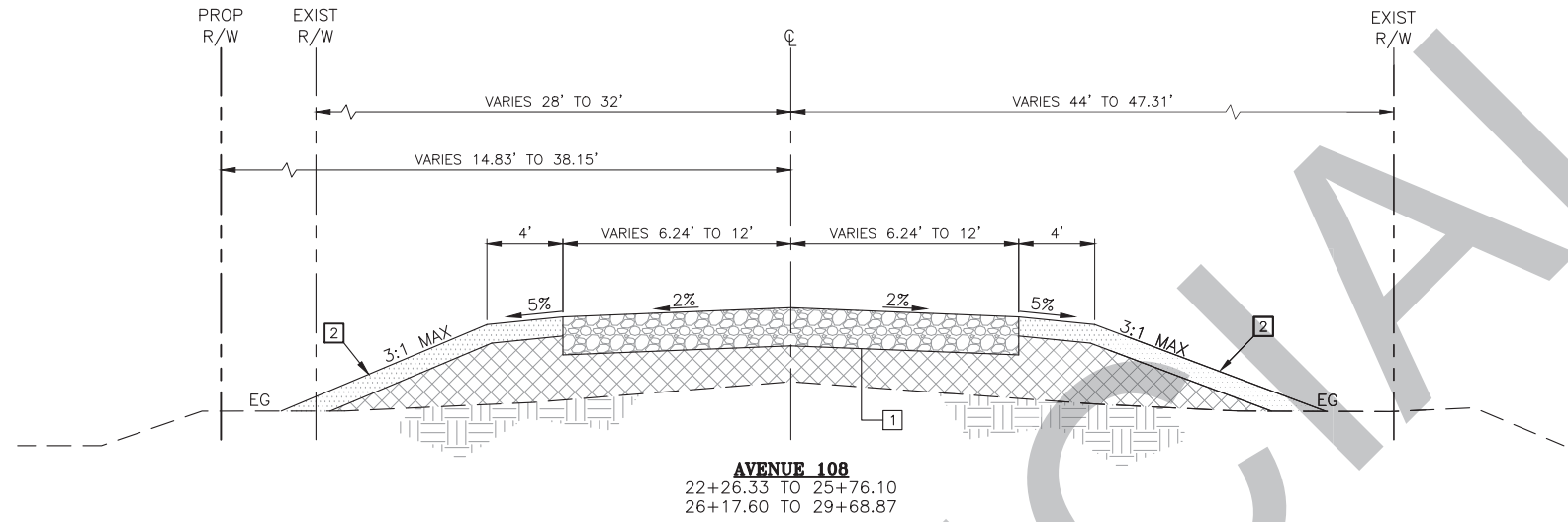
REVISIONS	DATE	BY
No.	DESCRIPTION	

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559) 624-7000
WWW.TULARECOUNTY.CA.GOV/RMA



TITLE SHEET
AVENUE 108 LAKELAND CANAL
BRIDGE
TULARE COUNTY

SCALE	N.T.S.
DIVISION	DESIGN
JOB NO.	18009-1
DESIGNED	PAO
DRAWN	PAO
CHECKED	JKV
FILE	18009-1T001.DWG
DATE	09/12/2023
SHEET No.	T1



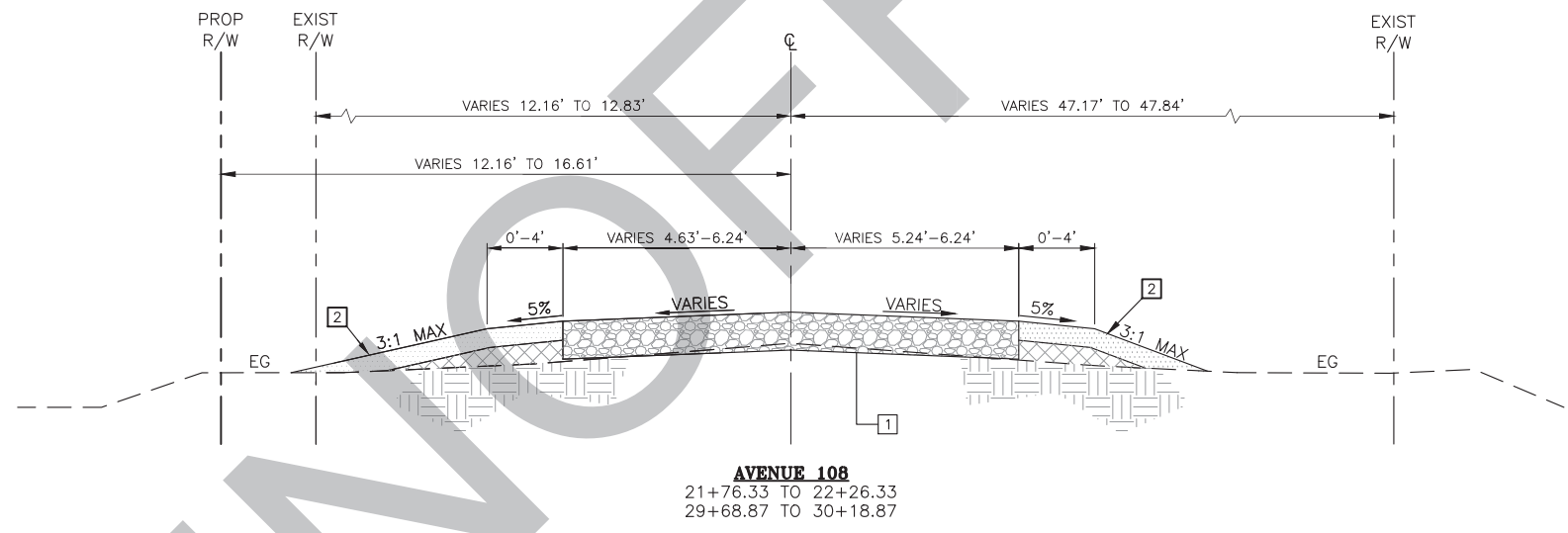
LEGEND

	AGGREGATE BASE
	IMPORT BORROW
	EXISTING GROUND
	SHOULDER BACKING

NOTES

1. ALL CONSTRUCTION SHALL BE INSIDE OF COUNTY RIGHT OF WAY AND VERIFIED BY RE.

- TYPICAL STRUCTURAL SECTION**
- 1. 1.00' CLASS 2 AGGREGATE BASE, 95% COMPACTION
 - 1. VARYING THICKNESS IMPORT BORROW, 95% COMPACTION
 - 0.50' COMPACTED NATIVE @ 95% COMPACTION
 - 2. 0.5' SHOULDER BACKING



REVISIONS	DATE	BY
	DESCRIPTION	
No.		

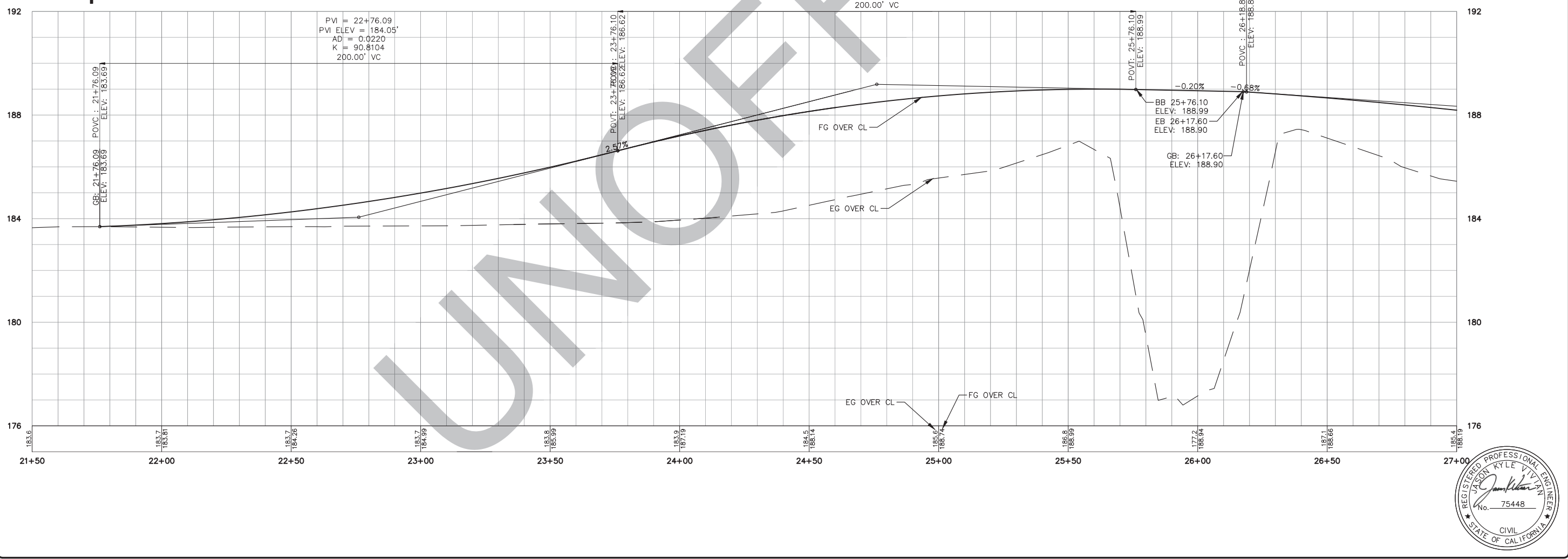
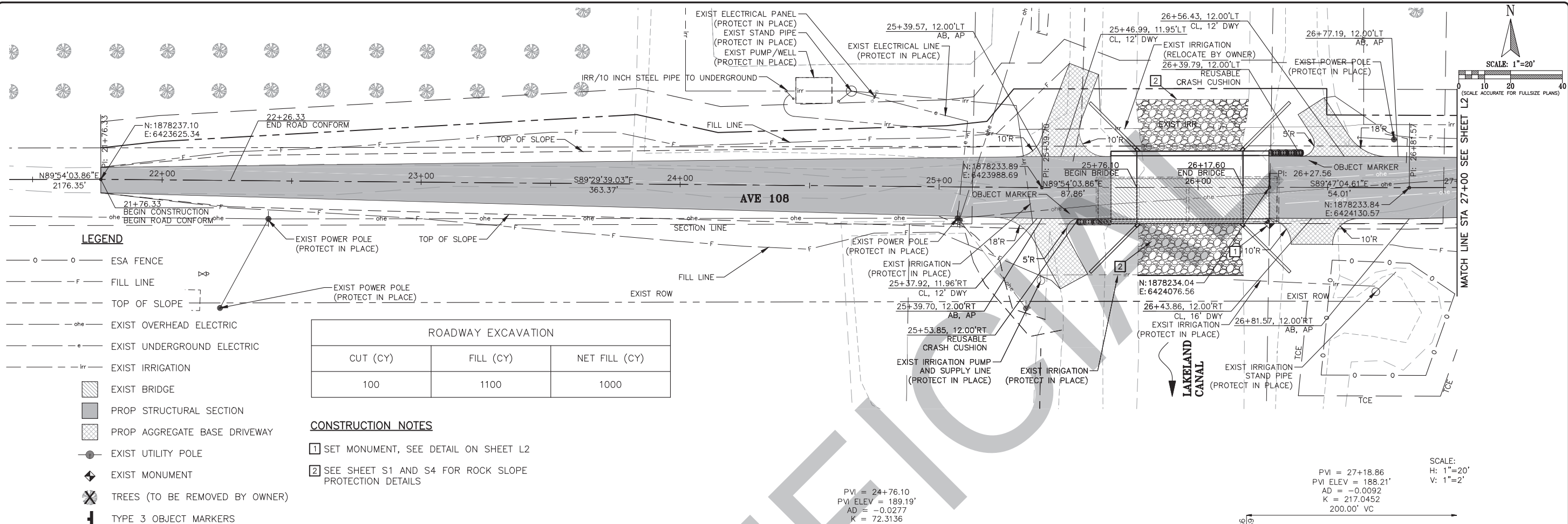
COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559) 624-7000
WWW.TULARECOUNTY.CA.GOV/RMA

TYPICAL CROSS SECTION
**AVENUE 108 LAKELAND CANAL
BRIDGE**
TULARE COUNTY

SCALE	1"=5'
DIVISION	DESIGN
JOB NO.	18009-1
DESIGNED	PAO
DRAWN	PAO
CHECKED	JKV
FILE	18009-1L001.DWG
DATE	09/12/2023
SHEET No.	X1

2 OF 20

\\PROJECTS\18009-1\18009-1L001.DWG 8/25/2023 4:39 PM



REVISIONS

No.	DESCRIPTION	DATE	BY

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
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PLAN AND PROFILE SHEET

AVENUE 108 LAKELAND CANAL
BRIDGE

TULARE COUNTY

SCALE 1"=20'

DIVISION DESIGN

JOB NO. 18009-1

DESIGNED PAO

DRAWN PAO

CHECKED JKV

FILE 18009-11001.DWG

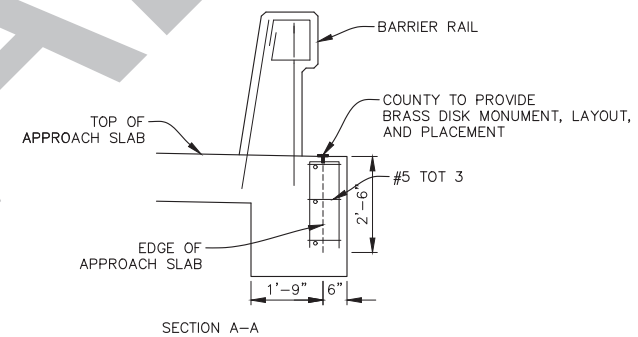
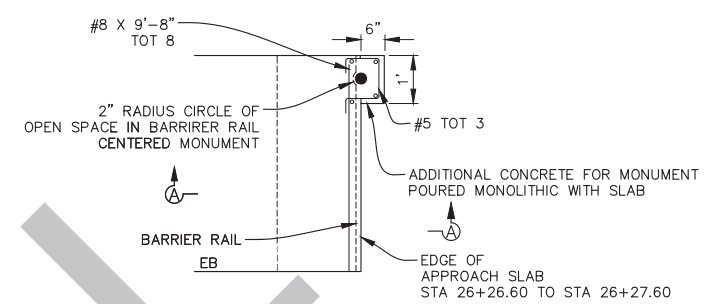
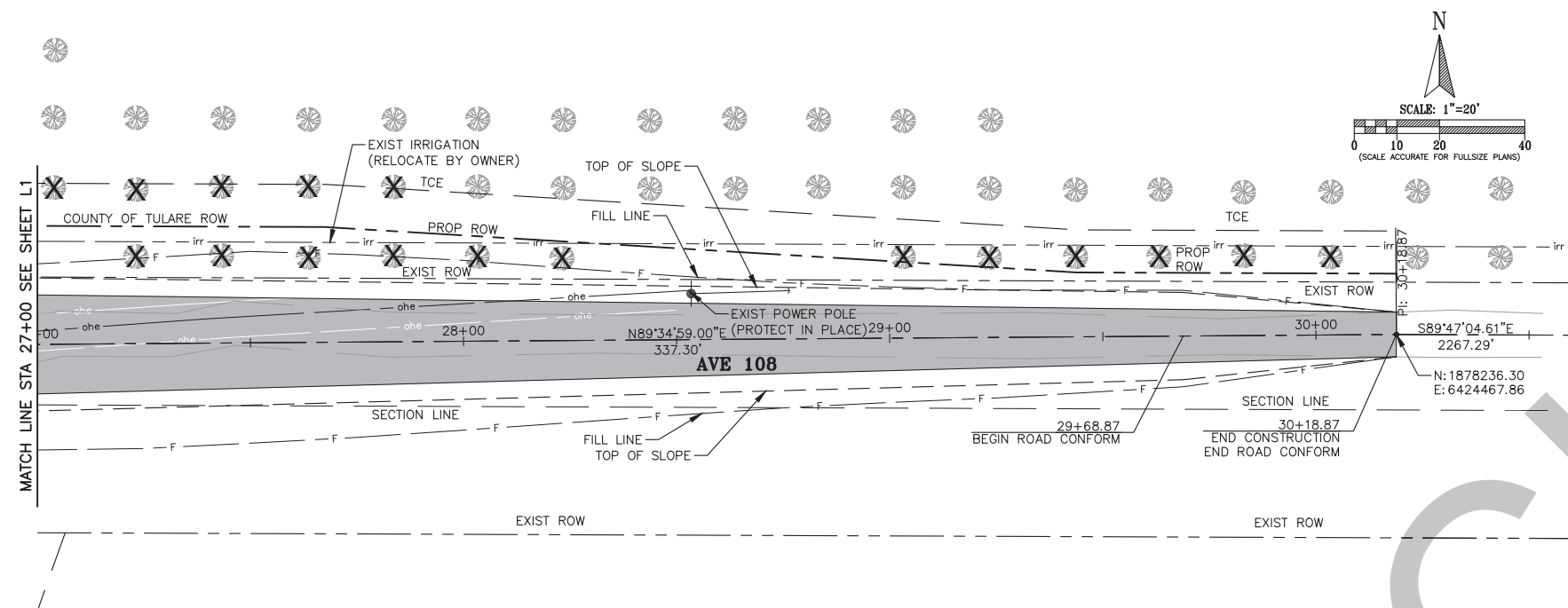
DATE 09/12/2023

SHEET No.

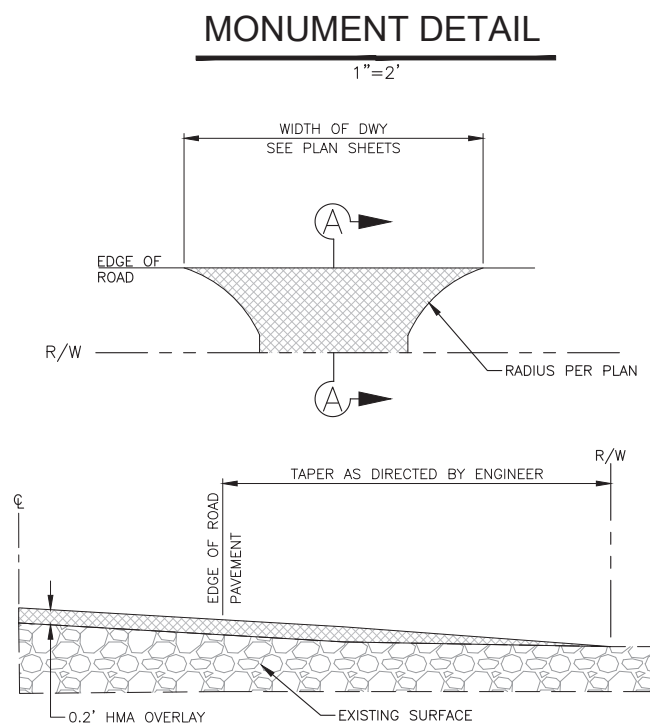
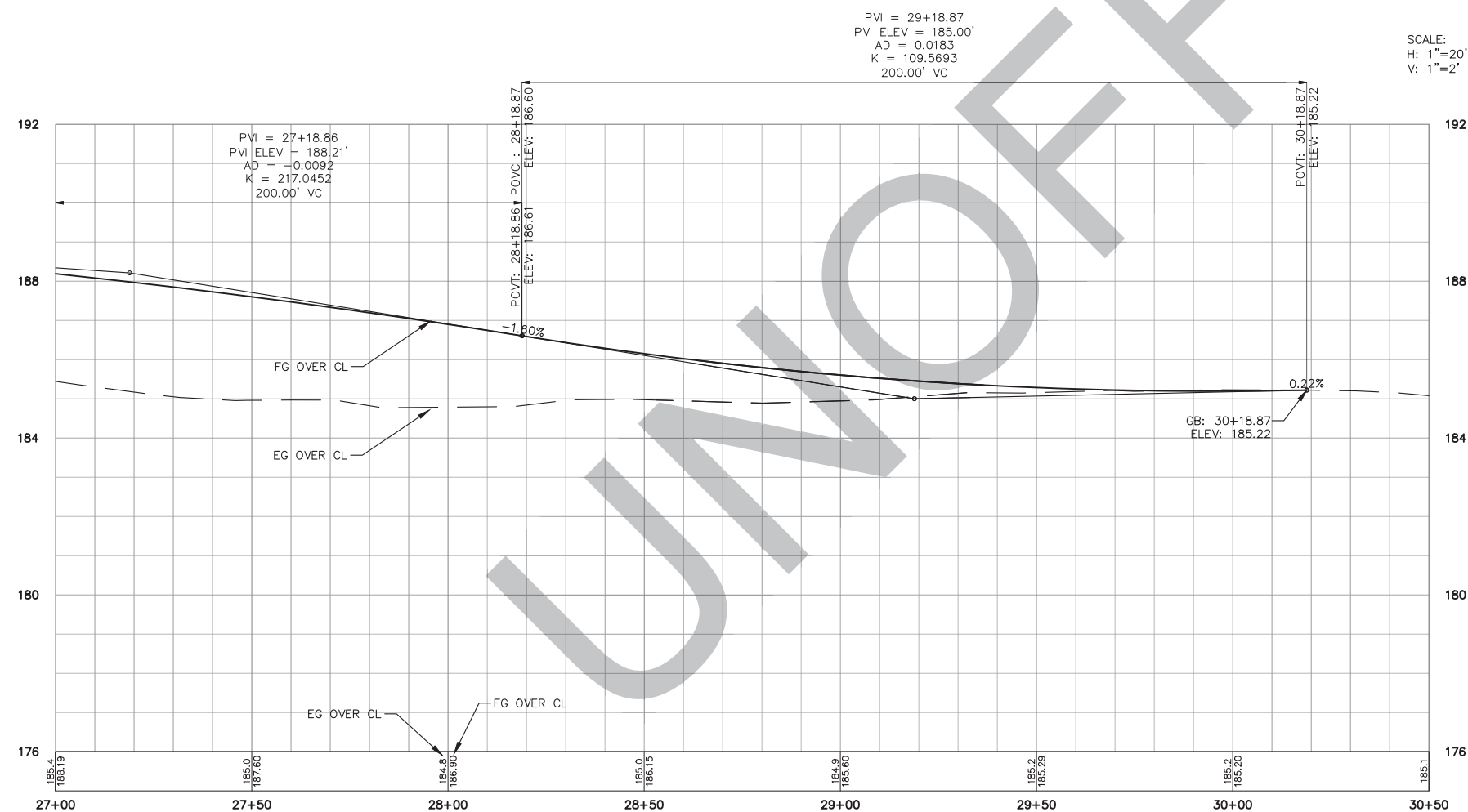
L1

3 OF 20

REGISTERED PROFESSIONAL ENGINEER
JASON KYLE VIVIAN
No. 75448
CIVIL
STATE OF CALIFORNIA



NOTE:
BRASS DISK FOR SECTION CORNER TO BE RESET
IN APPROACH SLAB. MINOR MODIFICATION TO
APPROACH SLAB AND RAIL AS TO ACCOMMODATE
SETTING, AS DIRECT BY RE. DISK AND LOCATION
TO BE PROVIDE BY COUNTY.



DRIVEWAY DETAIL

N.T.S.

[illegible]

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
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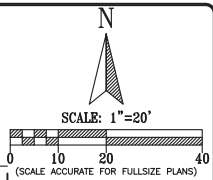
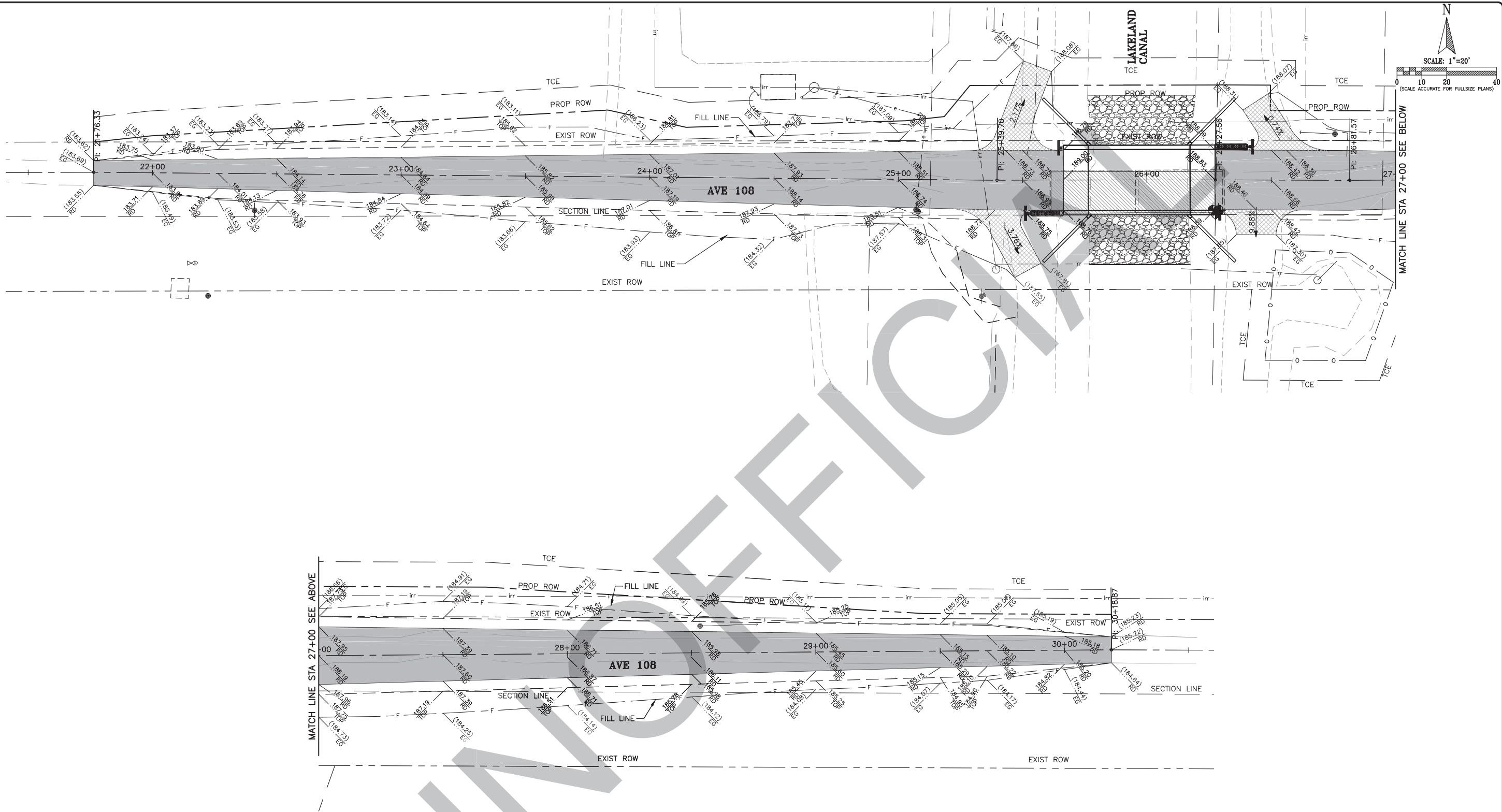
PLAN AND PROFILE SHEET

AVENUE 108 LAKE LAND CANAL
BRIDGE
TULARE COUNTY

SCALE	1"=20'
DIVISION	DESIGN
JOB NO.	18009-1
DESIGNED	PAO
DRAWN	PAO
CHECKED	JKV
FILE	18009-1L001.DWG
DATE	09/12/2023

L2

4 OF 20



MATCH LINE STA 27+00 SEE BELOW

MATCH LINE STA 27+00 SEE ABOVE



REVISIONS

No.	DESCRIPTION	DATE	BY

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559)624-7000
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GRADING PLAN
AVENUE 108 LAKELAND CANAL
BRIDGE
TULARE COUNTY

SCALE 1"=20'
DIVISION DESIGN
JOB NO. 18009-1
DESIGNED PAO
DRAWN PAO
CHECKED JKV
FILE 18009-10001.DWG
DATE 09/12/2023
SHEET No.

G1

5 OF 20

REGISTERED PROFESSIONAL ENGINEER
JASON KYLE VIVIAN
No. 75448
CIVIL
STATE OF CALIFORNIA



CONSTRUCTION AREA SIGNS					
TYPE	CODE	MESSAGE	PANEL SIZE (IN X IN)	SUPPORT TYPE	NO. SIGNS
(A)	R11-2	ROAD CLOSED	48 X 30	3-TYPE 3	2
(B)	W20-3	ROAD CLOSED 500 FT	36 X 36	4"X4" POST	1
(C)	W20-3	ROAD CLOSED 1,000 FT	36 X 36	4"X4" POST	1
(D)	C-19	ROAD CLOSED AHEAD	36 X 36	4"X4" POST	1
(E)	-	PROJECT FUNDING SIGN	40 X 30	4"X4" POST	2

- NOTES:
- 1. LOCATIONS TO BE APPROVED BY THE ENGINEER.
 - 2. SIGNS SHALL BE FIELD ADJUSTED AS NECESSARY.
 - 3. INSTALL SIGN PER CALTRANS STANDARD PLANS RS1 & RS2.
 - 4. ALL BARRICADES ARE TYPE 3 WITH FLASHERS

- LEGEND
- CONSTRUCTION AREA SIGN
 - K-RAIL



REVISIONS		DATE	BY
No.	DESCRIPTION		

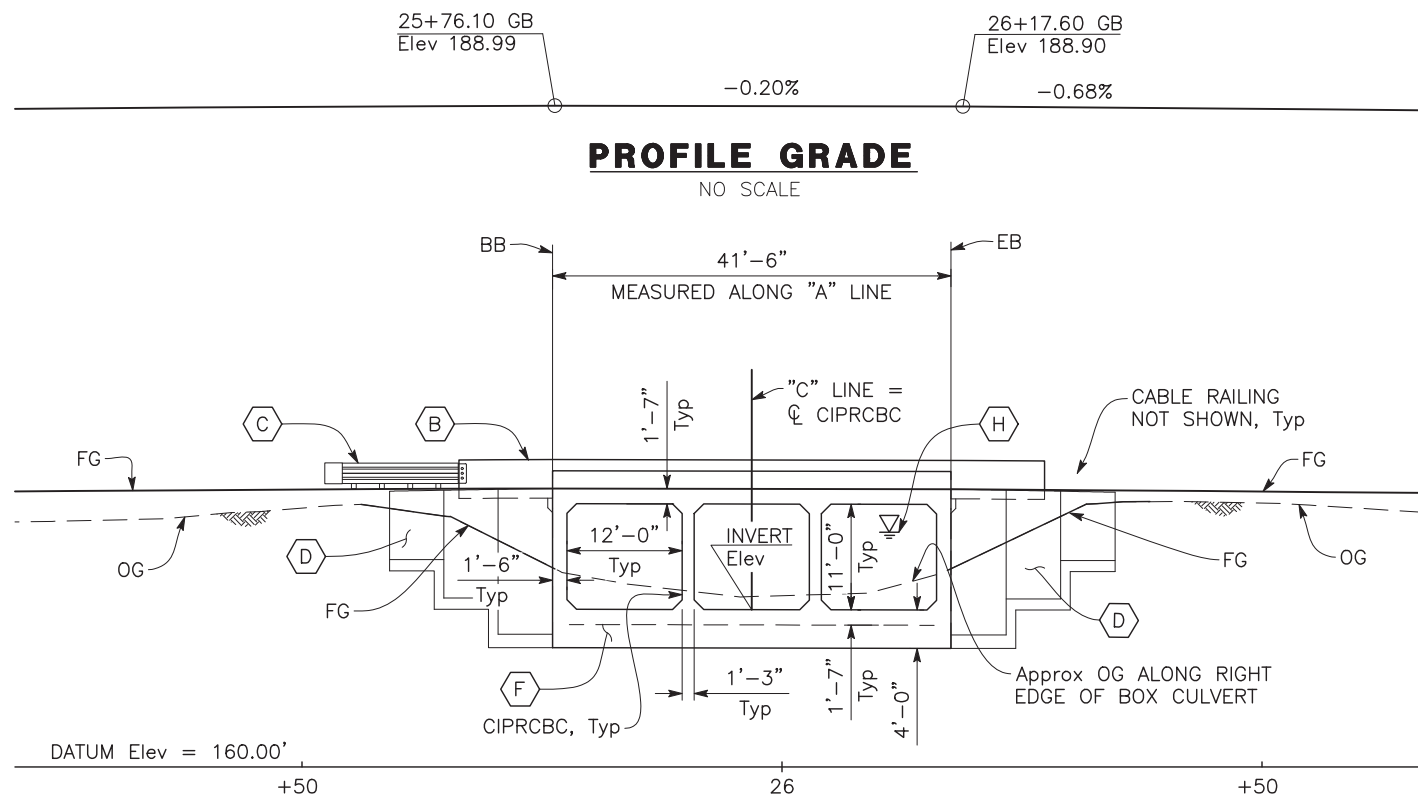
COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559)624-7000
WWW.TULARECOUNTY.CA.GOV/RMA

CONSTRUCTION AREA SIGN PLAN

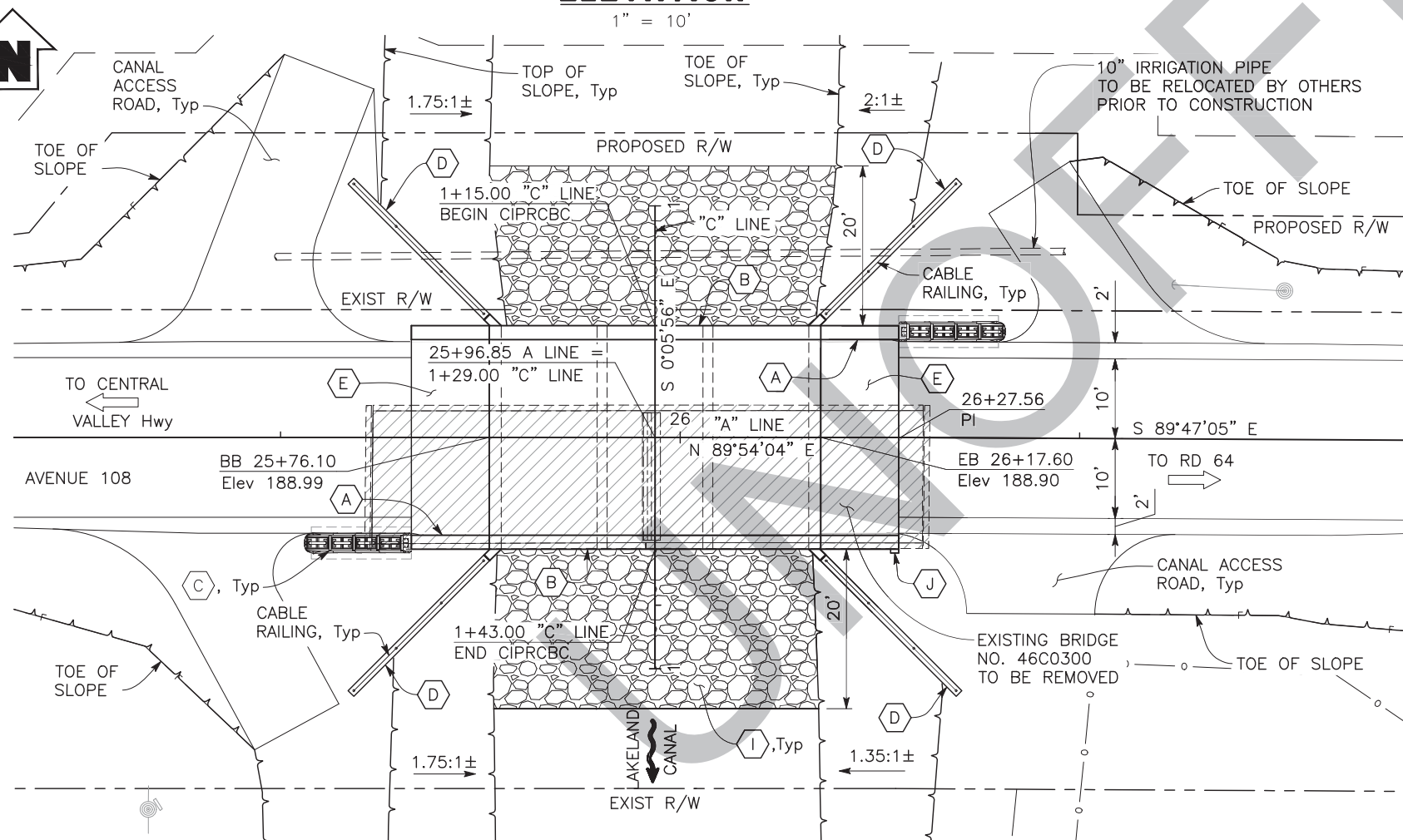
AVENUE 108 LAKELAND CANAL
BRIDGE
TULARE COUNTY

SCALE	NTS
DIVISION	DESIGN
JOB NO.	18009-1
DESIGNED	PAO
DRAWN	PAO
CHECKED	JKV
FILE	18009-1CAS001.DWG
DATE	09/12/2023
SHEET No.	



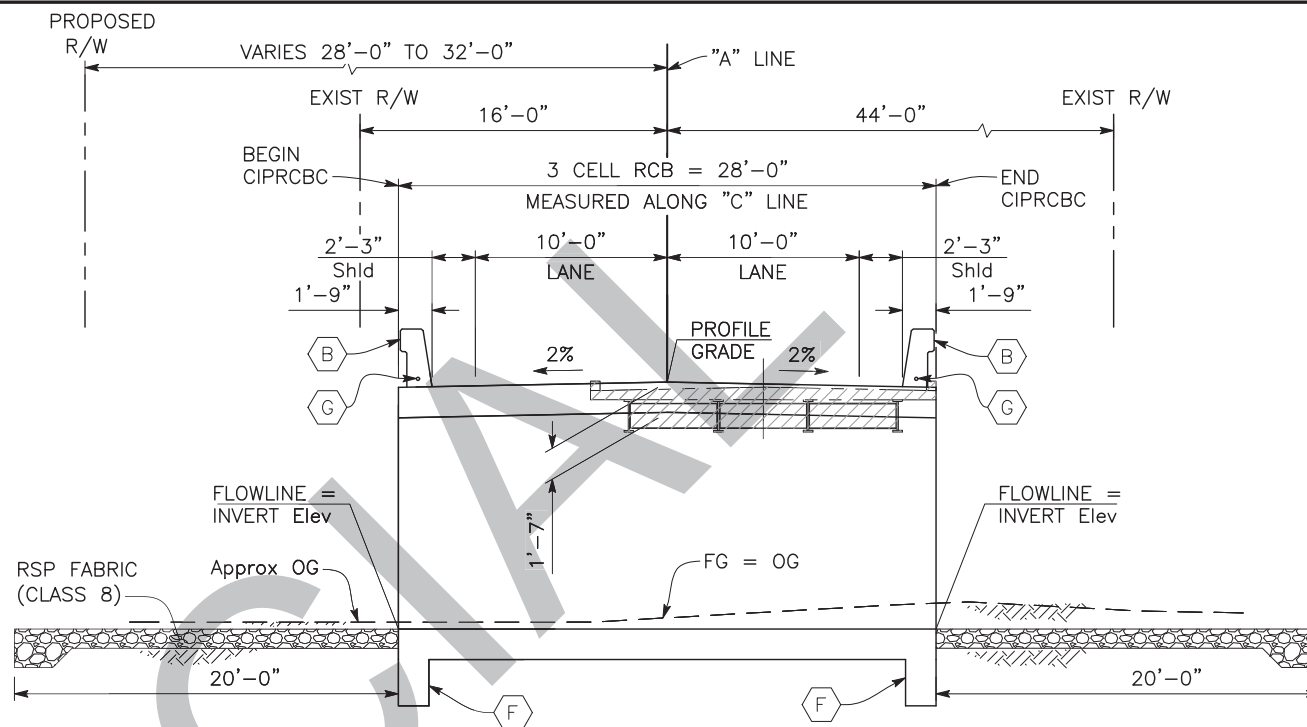
ELEVATION

1" = 10'



PLAN

1" = 10'



SECTION (ALONG "C" LINE)

1" = 5'

LEGEND:

- DIRECTION OF WATER FLOW
- DIRECTION OF TRAVEL
- EXISTING STRUCTURE TO BE REMOVED
- NEW CONSTRUCTION

CIPRCBC CAST-IN-PLACE REINFORCED CONCRETE BOX CULVERT

KEY NOTES:

- (A) PAINT "BRIDGE NO. 46C-0486"
- (B) CONCRETE BARRIER (TYPE 836)
- (C) CRASH CUSHION, SEE "ROADWAY PLANS"
- (D) TYPE B CULVERT WINGWALL
- (E) APPROACH SLAB TYPE EQ (10)
- (F) CUTOFF WALL RSP
D84
- (G) 2" CONDUIT FOR FUTURE UTILITIES
- (H) SEE "FOUNDATION PLAN" SHEET FOR "HYDROLOGIC SUMMARY TABLE"
- (I) ROCK SLOPE PROTECTION, SEE "FOUNDATION PLAN" SHEET FOR DETAILS
- (J) SURVEY MONUMENT. SEE SHEETS L1 AND L2



REVISIONS	DATE	BY
No.		
DESCRIPTION		

COUNTY OF TULARE
RESOURCE MANAGEMENT AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559) 824-7000
WWW.TULARECOUNTY.CA.GOV/RMA

Dewberry
DEWBERRY ENGINEERING INC.
c/o DEWBERRY | DRAKE HAGLAN
11060 WHITE ROCK ROAD SUITE 200
RANCHO CORDOVA, CA 95670

GENERAL PLAN
**AVENUE 108 LAKELAND CANAL
BRIDGE**
TULARE COUNTY

SCALE	AS SHOWN
DIVISION	DESIGN
JOB NO.	18052
DESIGNED	K. LUNDBLOM
DRAWN	E. CISNEROS
CHECKED	M. PUGH
FILE	LC-S-GP.DWG
DATE	5-31-22

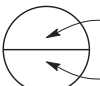
SHEET No.
S1
7 of 20

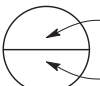
INDEX TO PLANS:

No.	Title
S1	GENERAL PLAN
S2	INDEX TO PLANS
S3	DECK CONTOURS
S4	FOUNDATION PLAN
S5	BRIDGE REMOVAL DETAILS
S6	TYPICAL SECTION
S7	SLAB DETAILS No. 1
S8	SLAB DETAILS No. 2
S9	CULVERT DETAILS No. 1
S10	CULVERT DETAILS No. 2
S11	MISCELLANEOUS DETAILS
S12	ALTERNATIVE CRASH CUSHION
S13	LOG OF TEST BORINGS No. 1
S14	LOG OF TEST BORINGS NO. 2

CALTRANS STANDARD PLANS DATED 2018:

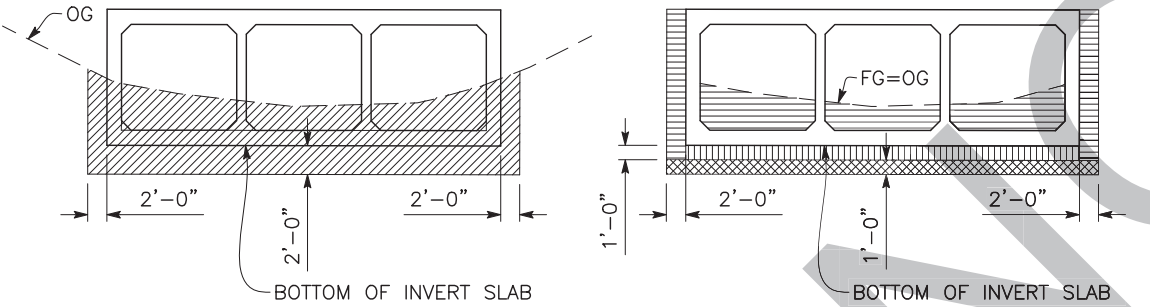
No.	Title
A3A	ABBREVIATIONS (SHEET 1 OF 3)
A3B	ABBREVIATIONS (SHEET 2 OF 3)
A3C	ABBREVIATIONS (SHEET 3 OF 3)
A10A	LEGEND – LINES AND SYMBOLS (SHEET 1 OF 5)
A10B	LEGEND – LINES AND SYMBOLS (SHEET 2 OF 5)
A10C	LEGEND – LINES AND SYMBOLS (SHEET 3 OF 5)
A10D	LEGEND – LINES AND SYMBOLS (SHEET 4 OF 5)
A10E	LEGEND – LINES AND SYMBOLS (SHEET 5 OF 5)
A10F	LEGEND – SOIL (SHEET 1 OF 2)
A10G	LEGEND – SOIL (SHEET 2 OF 2)
A10H	LEGEND – ROCK
A62A	EXCAVATION AND BACKFILL – MISCELLANEOUS DETAILS
A62E	EXCAVATION AND BACKFILL – CAST-IN-PLACE REINFORCED CONCRETE BOX AND ARCH CULVERTS
RSP B0-1	BRIDGE DETAILS
RSP B0-3	BRIDGE DETAILS
B3-5	RETAINING WALL DETAILS NO. 1
B3-6	RETAINING WALL DETAILS NO. 2
RSP B9-4	STRUCTURE APPROACH TYPE EQ (10)
RSP B9-5	STRUCTURE APPROACH SLAB DETAILS
RSP B11-47	CABLE RAILING
RSP B11-79	CONCRETE BARRIER TYPE 836 DETAILS No. 1
RSP B11-80	CONCRETE BARRIER TYPE 836 DETAILS No. 2
RSP D82	CAST-IN-PLACE REINFORCED CONCRETE – BOX CULVERT – MISCELLANEOUS DETAILS
RSP D84	BOX CULVERT WINGWALLS – TYPES A, B AND C

STANDARD PLAN SHEET No. 

DETAIL No. 

GENERAL NOTES
LOAD AND RESISTANCE
FACTOR DESIGN:

DESIGN:	AASHTO LRFD Bridge Design Specifications, Eighth Edition, and the California Amendments, preface dated January 2019
EARTH LOAD:	Two Conditions: 140 pcf Vertical, 42 pcf horizontal 140 pcf Vertical, 140 pcf horizontal
DEAD LOAD:	Includes 35 psf for future wearing surface
LIVE LOADING:	HL-93 consists of design truck or design tandem and lane loading
REINFORCED CONCRETE:	$f_y = 60$ ksi $f'_c = 4.0$ ksi UON $n = 8$
ALLOWABLE BEARING CAPACITY:	See "Foundation Plan"



LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL

NO SCALE

LEGEND

	Structure Excavation (Culvert)
	Structure Backfill (Culvert)
	95% Relative Compaction
	Sand Bedding (Culvert)
	Class 2 AB 95% Compaction

EXCAVATION AND BACKFILL NOTES:

- For Details not shown see  and 
- Slope or shore excavation sides as necessary.
- Dimensions shown are minimum

BRIDGE QUANTITIES		
STRUCTURE EXCAVATION (CULVERT)	CY	739
SAND BEDDING	CY	40
STRUCTURAL BACKFILL (CULVERT)	CY	544
CLASS 2 AGGREGATE BASE (CULVERT)	CY	44
STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	CY	69
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE EQ)	CY	23
STRUCTURAL CONCRETE, BOX CULVERT	CY	257
JOINT SEAL (MR 1/2")	LF	55
BAR REINFORCING STEEL (BOX CULVERT)	LB	65,842
BRIDGE REMOVAL	LS	1
ROCK SLOPE PROTECTION (20lb, CLASS I, METHOD B)	CY	80
ROCK SLOPE PROTECTION FABRIC (CLASS 8)	SQYD	243
CABLE RAILING	LF	96
CRASH CUSHION	EA	2
CONCRETE BARRIER (TYPE 836)	LF	123



REVISIONS

No.	DESCRIPTION	DATE	BY

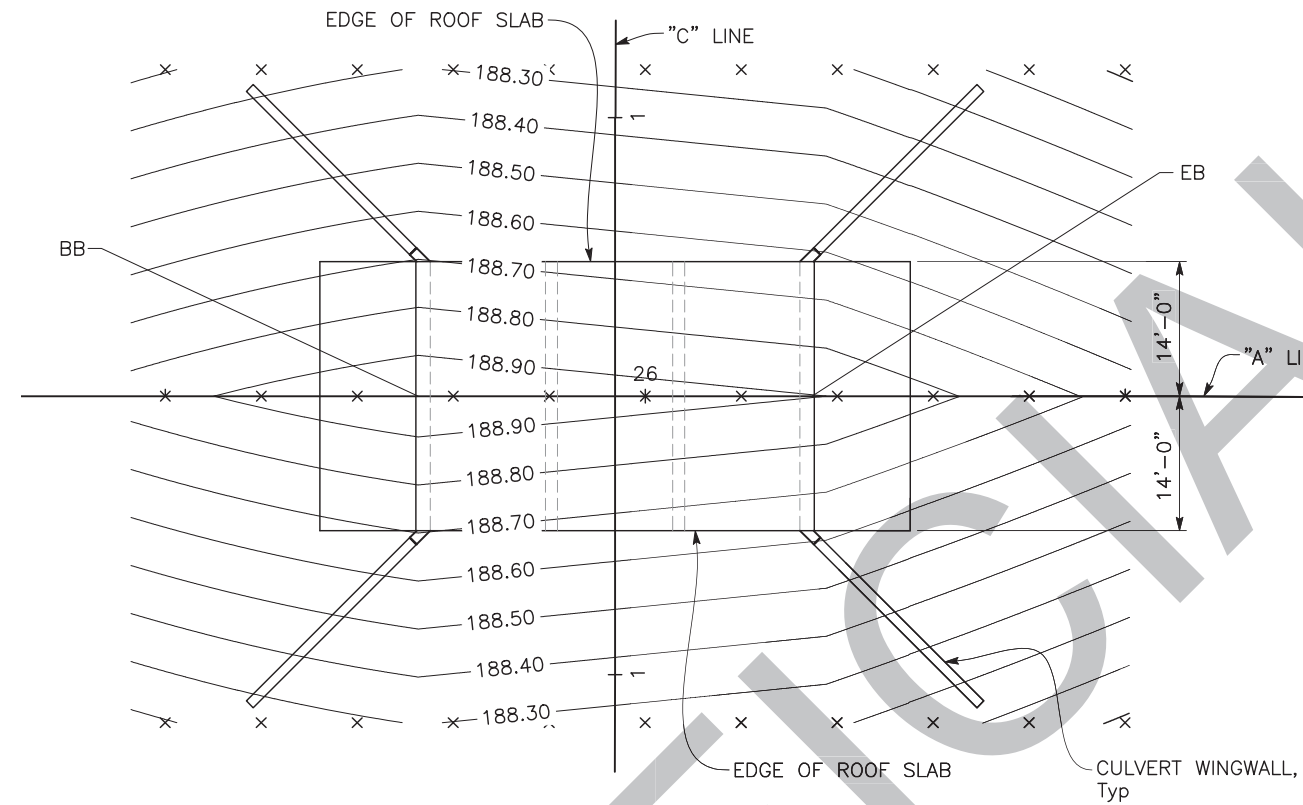
COUNTY OF TULARE
RESOURCE MANAGEMENT
AGENCY
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559) 824-7000
WWW.TULARECOUNTY.CA.GOV/RMA



Dewberry
DEWBERRY ENGINEERING INC.
c/o DEWBERRY | DRAKE HAGLAN
11060 WHITE ROCK ROAD SUITE 200
RANCHO CORDOVA, CA 95670

INDEX TO PLANS
AVENUE 108 LAKE LAND CANAL
BRIDGE
TULARE COUNTY

SCALE	AS SHOWN
DIVISION	DESIGN
JOB NO.	18052
DESIGNED	K. LUNDBLOM
DRAWN	E. CISNEROS
CHECKED	M. PUGH
FILE	LC-S-IP.DWG
DATE	5-31-22
SHEET No.	S2
8	of 20



DECK CONTOURS

-
- CULVERT WINGWALL
- CULVERT WINGWALL

NO SCALE

-
- REGISTERED PROFESSIONAL ENGINEER
 KYLE J. LINDSTROM
 No. 92686
 Exp. 09/30/23
 CIVIL
 STATE OF CALIFORNIA

[illegible]

**COUNTY OF TULARE
RESOURCE MANAGEMENT
AGENCY**
5961 SOUTH MOONEY BLVD.
VISALIA, CA 93277
(559) 624-7000
WWW.TULARECOUNTY.CA.GOV/RMA



Dewberry
DEWBERRY ENGINEERING INC.
d/b/a DEWBERRY | DRAKE HAGLAN
11060 WHITE ROCK ROAD SUITE 200
RANCHO CORDOVA, CA 95670

DECK CONTOURS

AVENUE 108 LAKELAND CANAL
BRIDGE

TULARE COUNTY

SCALE	AS SHOWN
DIVISION	DESIGN
JOB NO.	18052
DESIGNED	K. LUNDBLOM
DRAWN	E. CISNEROS
CHECKED	M. PUGH
FILE	LC-S-DC.DWG
DATE	5-31-22

SHEET No. S3

9 OF 20

BENCH MARK:

See "ROADWAY PLANS"



INVERT SLAB LAYOUT TABLE

Location	Station	Offset	Bottom of Invert Slab Elevation
A	25+76.10	14.00 Lt	174.81'
B	26+17.60	14.00 Lt	174.73'
C	26+17.60	14.00 Rt	174.73'
D	25+76.10	14.00 Rt	174.81'

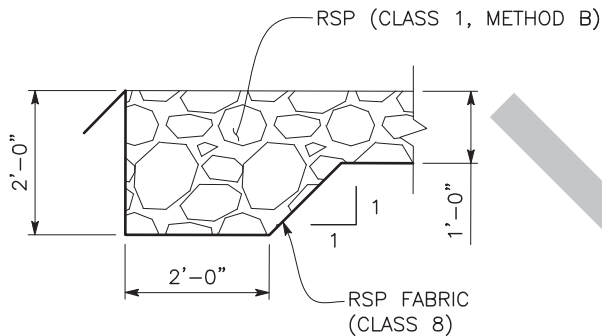
	North	East
1	1878233.96	6424025.85
2	1878233.98	6424039.23
3	1878234.00	6424052.48
4	1878234.03	6424065.85

BEARING TABLE

Location	Bearing
West Exterior Wall	S 0°05'56" E
Interior Walls	S 0°05'56" E
East Exterior Wall	S 0°05'56" E

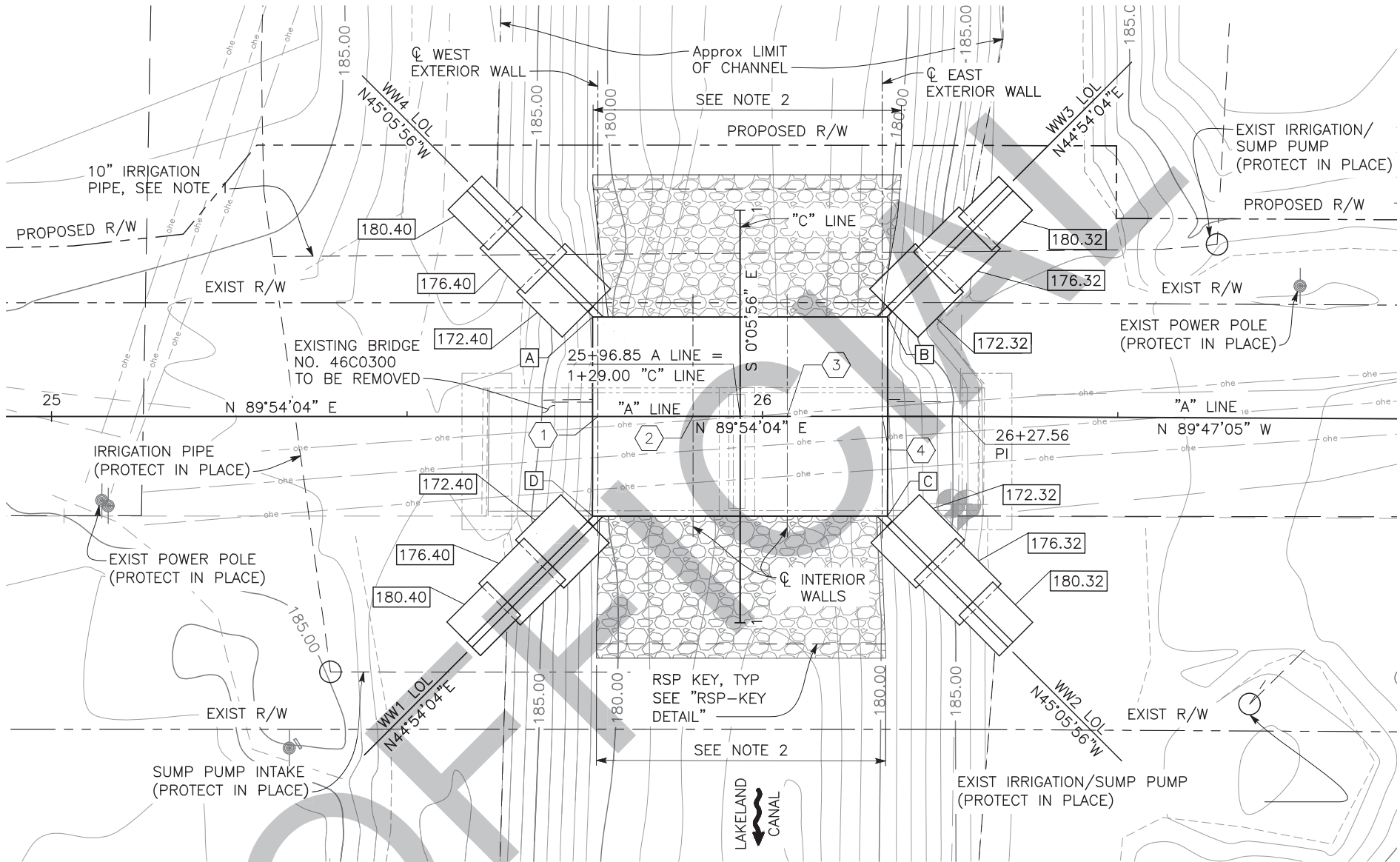
SPREAD FOOTING DATA TABLE

Support Location	Service Permissible Net Contact Stress (Settlement) (ksf)	Strength/Construction Factored Gross Nominal Bearing Resistance $\phi_b = 0.45$ (ksf)	Extreme Event Factored Gross Nominal Bearing Resistance $\phi_b = 1.0$ (ksf)
Box Culvert	2.9	5.4	N/A



RSP-KEY DETAIL

3/4" = 1'-0"



PLAN

1" = 10'

LEGEND:

- Indicates Bottom of Footing Elevation
- Indicates Direction of Water Flow
- Indicates Existing Bridge to be removed
- Indicates New Structure
- Exist Overhead Electric
- Exist Underground Electric
- Exist Utility Pole

NOTES:

- EXISTING 10" IRRIGATION PIPE TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.
- ROCK SLOPE PROTECTION WIDTH SHALL BE THE GREATER OF THE WIDTH OF BOTTOM OF CHANNEL OR THE WIDTH OF THE CULVERT MEASURED FROM THE INSIDE FACE OF THE EXTERIOR WALLS.



REVISIONS

No.	DESCRIPTION	DATE	BY

COUNTY OF TULARE
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AGENCY

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VISALIA, CA 93277
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Dewberry

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11060 WHITE ROCK ROAD SUITE 200
RANCHO CORDOVA, CA 95670

FOUNDATION PLAN

AVENUE 108 LAKELAND CANAL
BRIDGE

TULARE COUNTY

SCALE AS SHOWN

DIVISION DESIGN

JOB NO. 18052

DESIGNED K. LUNDBLOM

DRAWN E. CISNEROS

CHECKED M. PUGH

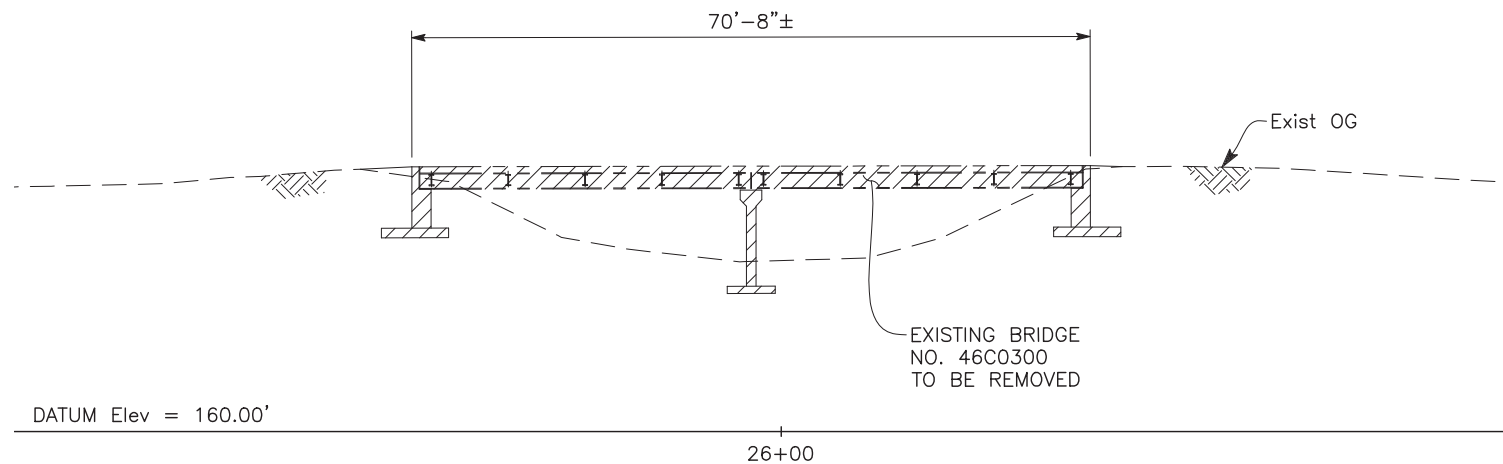
FILE LC-S-FP.DWG

DATE 5-31-22

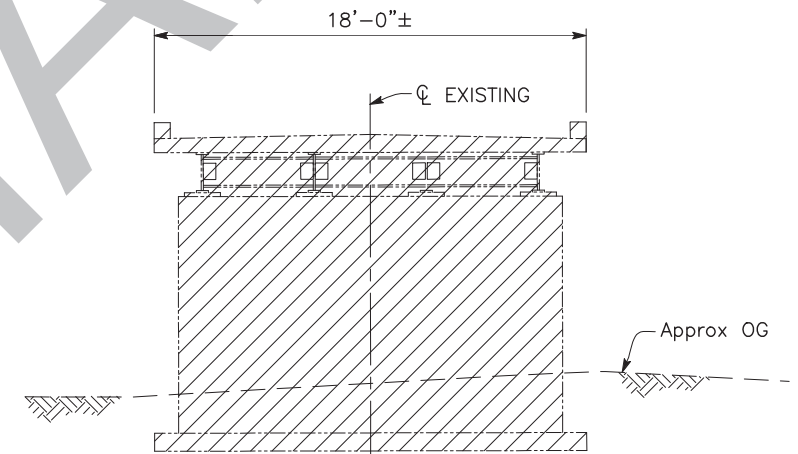
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S4

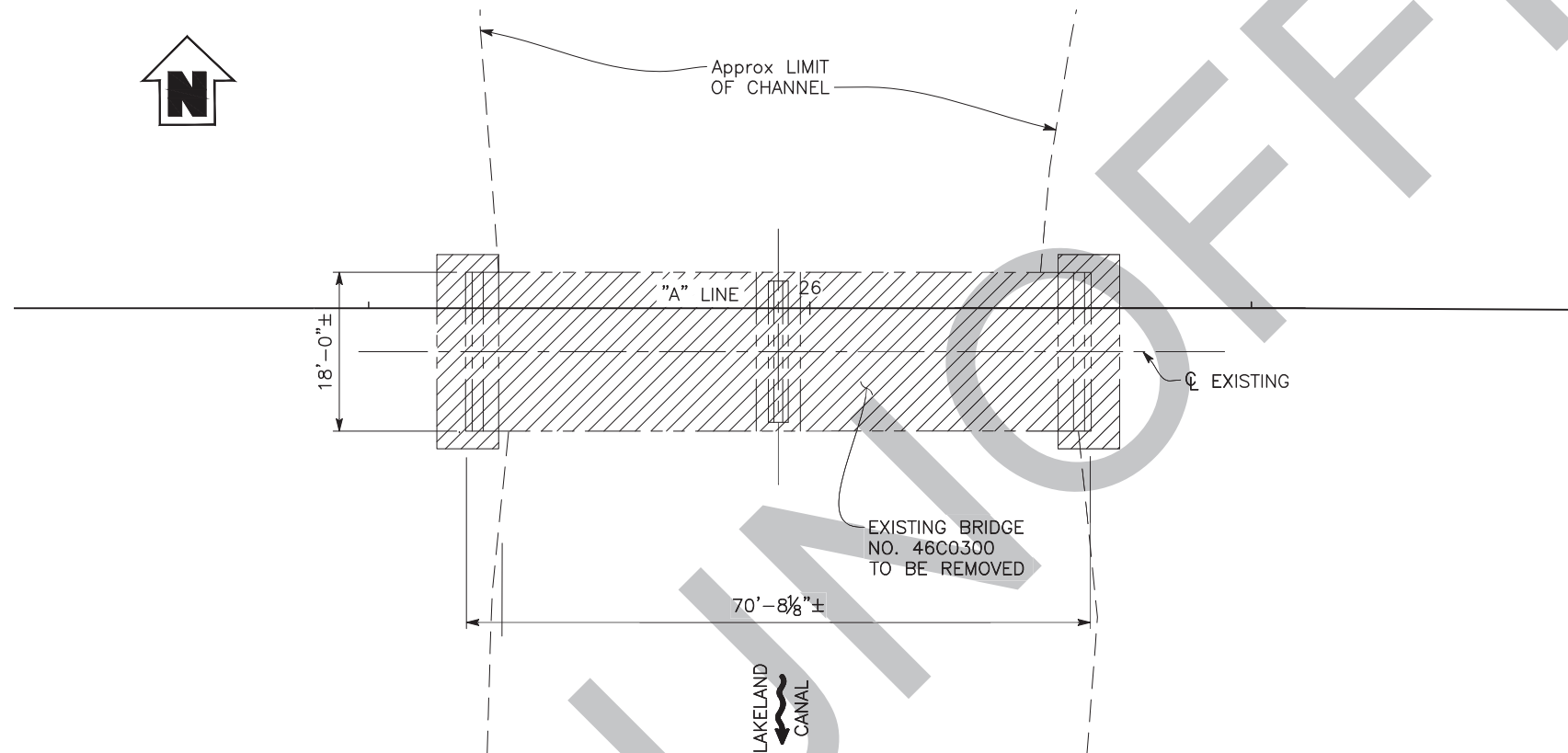
10 of 20



ELEVATION
1" = 10'



TYPICAL SECTION
¼" = 1'-0"



PLAN
1" = 10'

LEGEND:

- Indicates Direction of Water Flow
- Indicates Existing Bridge to be removed



REVISIONS	
DESCRIPTION	DATE

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RESOURCE MANAGEMENT
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5961 SOUTH MOONEY BLVD.
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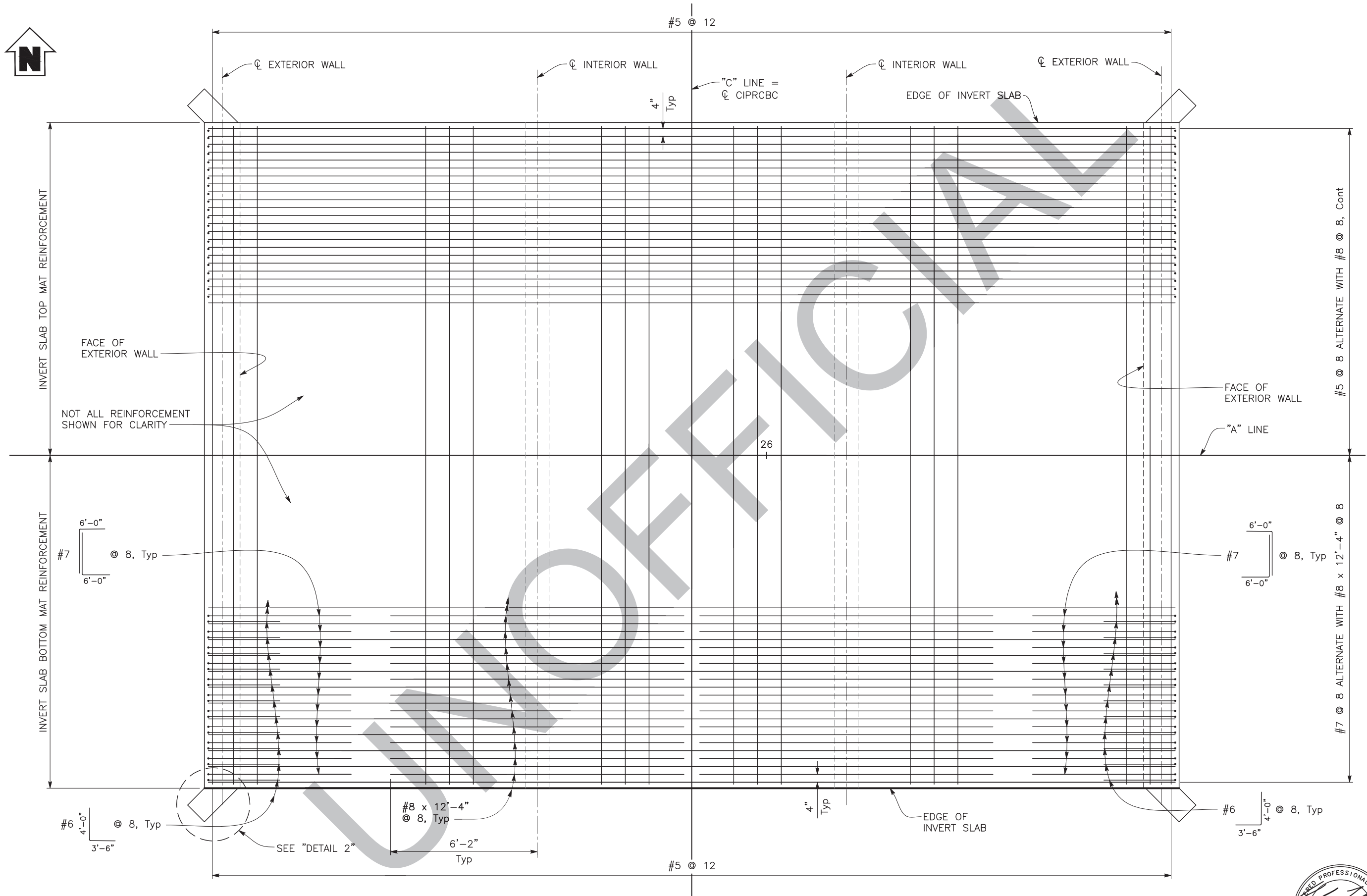
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RANCHO CORDOVA, CA 95670

BRIDGE REMOVAL DETAILS
**AVENUE 108 LAKELAND CANAL
BRIDGE**
TULARE COUNTY

SCALE	AS SHOWN
DIVISION	DESIGN
JOB NO.	18052
DESIGNED	K. LUNDBLOM
DRAWN	E. CISNEROS
CHECKED	M. PUGH
FILE	LC-S-BR.DWG
DATE	5-31-22

SHEET No.

S5



INVERT SLAB REINFORCEMENT

$\frac{1}{2}'' = 1'-0''$

NOTES:

1. FOR "DETAIL 2", SEE "MISCELLANEOUS DETAILS" SHEET.



REVISIONS	
No.	DESCRIPTION

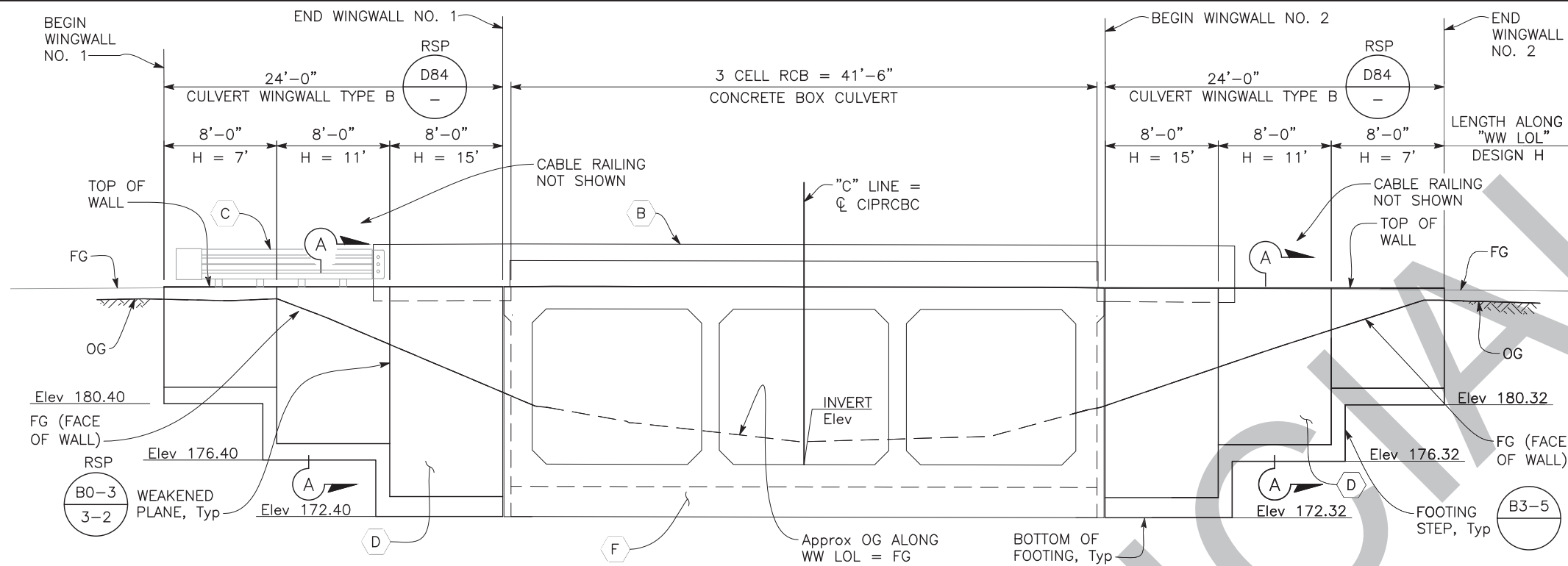
COUNTY OF TULARE
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SLAB DETAILS NO. 2
AVENUE 108 LAKELAND CANAL
BRIDGE
TULARE COUNTY

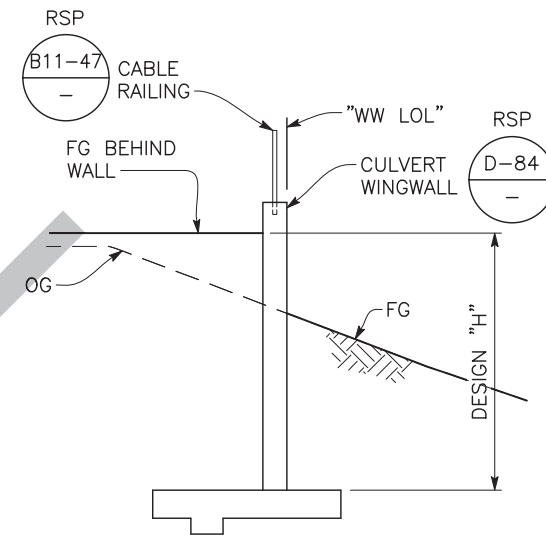
SCALE	AS SHOWN
DIVISION	DESIGN
JOB NO.	18052
DESIGNED	K. LUNDBLOM
DRAWN	E. CISNEROS
CHECKED	M. PUGH
FILE	LC-S-SD.DWG
DATE	5-31-22
SHEET No.	S8

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WINGWALL NO. 1 AND NO. 2 - DEVELOPED ELEVATION

1" = 5'



SECTION A-A

1/4" = 1'-0"

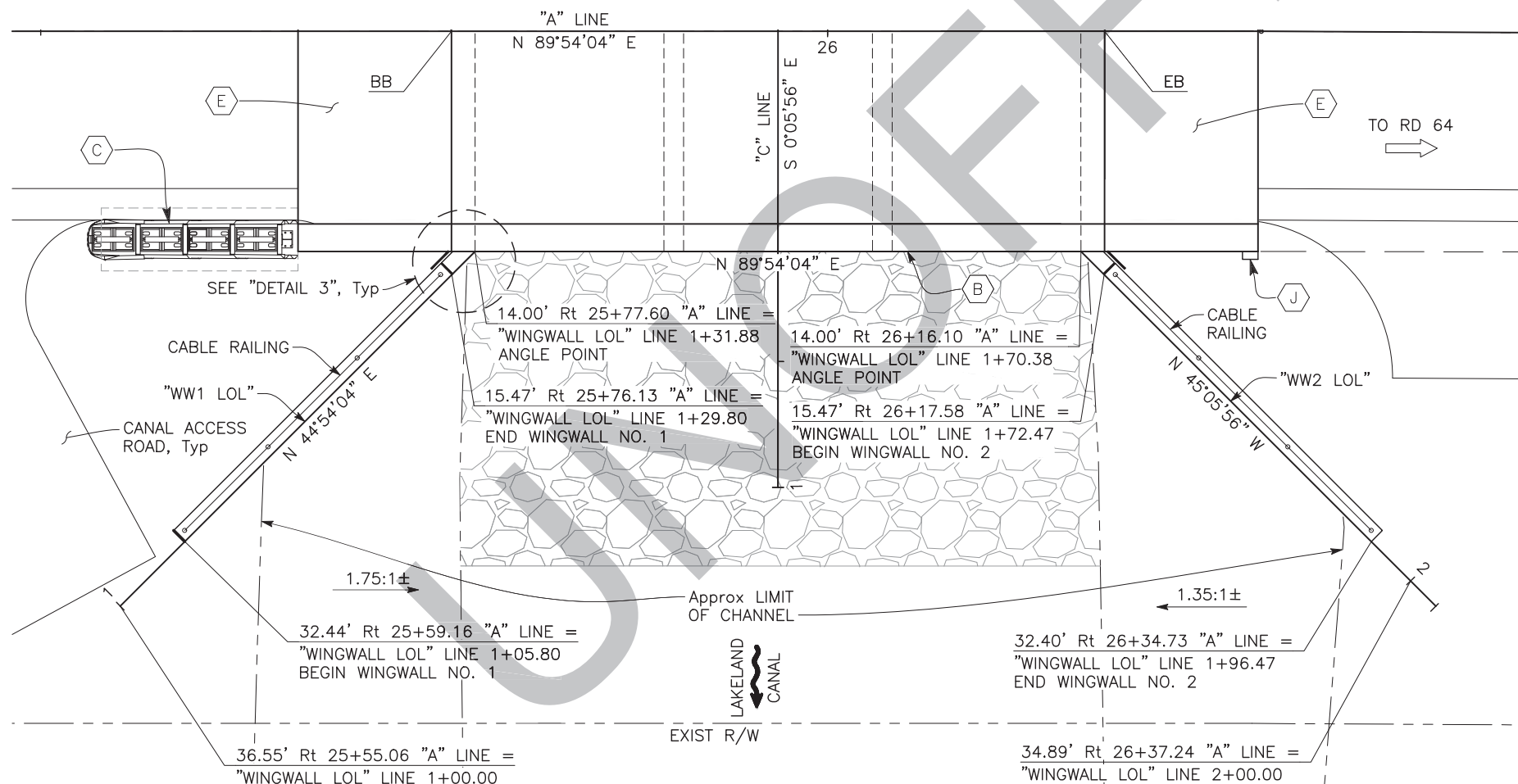
TOP OF WALL ELEVATIONS	
WINGWALL NO. 1	188.68
WINGWALL NO. 2	188.59

NOTE:

1. FOR "DETAIL 3", SEE "MISCELLANEOUS DETAILS" SHEET.

KEY NOTES:

- (B) CONCRETE BARRIER (TYPE 836)
- (C) CRASH CUSHION, SEE "ROADWAY PLANS"
- (D) TYPE B CULVERT WINGWALL
- (E) APPROACH SLAB TYPE EQ (10)
- (F) CUTOFF WALL
- (J) SURVEY MONUMENT, SEE SHEETS L1 AND L2



PLAN

1" = 5'



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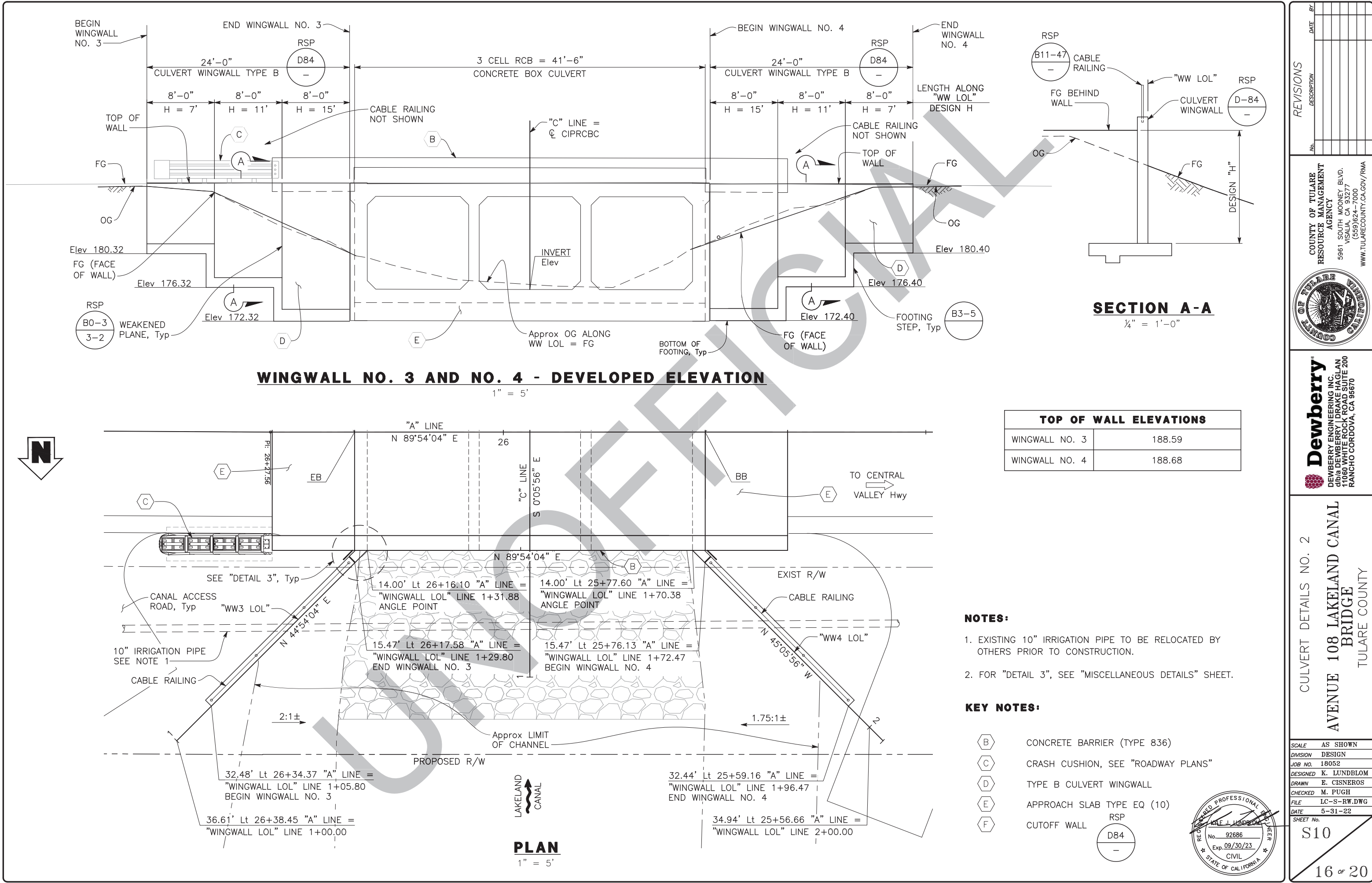
CULVERT DETAILS NO. 1
**AVENUE 108 LAKELAND CANAL
BRIDGE**
TULARE COUNTY

SCALE	AS SHOWN
DIVISION	DESIGN
JOB NO.	18052
DESIGNED	K. LUNDBLOM
DRAWN	E. CISNEROS
CHECKED	M. PUGH
FILE	LC-S-RW.DWG
DATE	5-31-22

SHEET No.

S9

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REVISIONS

No.	DESCRIPTION	DATE	BY

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CULVERT DETAILS NO. 2

AVENUE 108 LAKE LAND CANAL
BRIDGE

TULARE COUNTY

SCALE AS SHOWN

DIVISION DESIGN

JOB NO. 18052

DESIGNED K. LUNDBLOM

DRAWN E. CISNEROS

CHECKED M. PUGH

FILE LC-S-RW.DWG

DATE 5-31-22

SHEET No.

REGISTERED PROFESSIONAL ENGINEER

KYLE J. LUNDBLOM

No. 92686

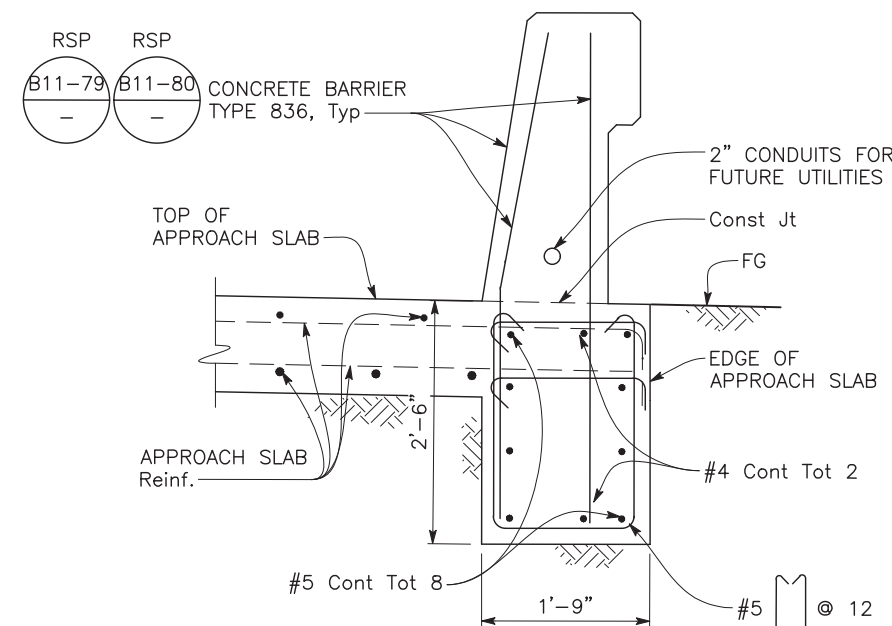
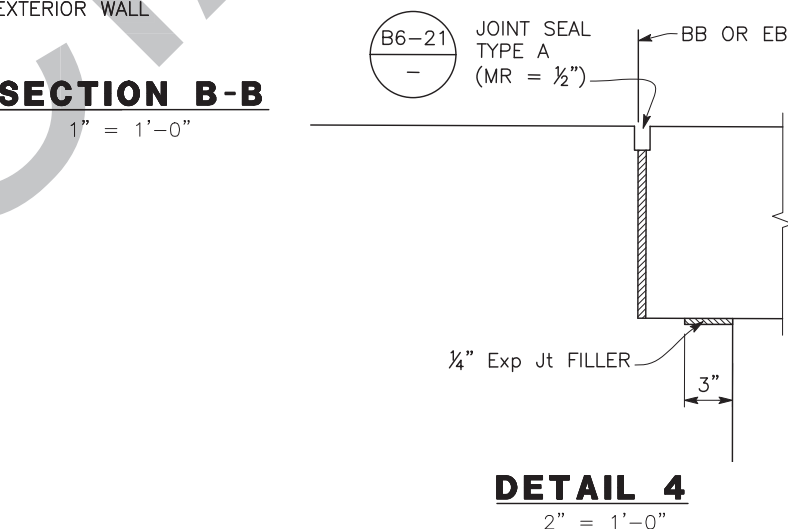
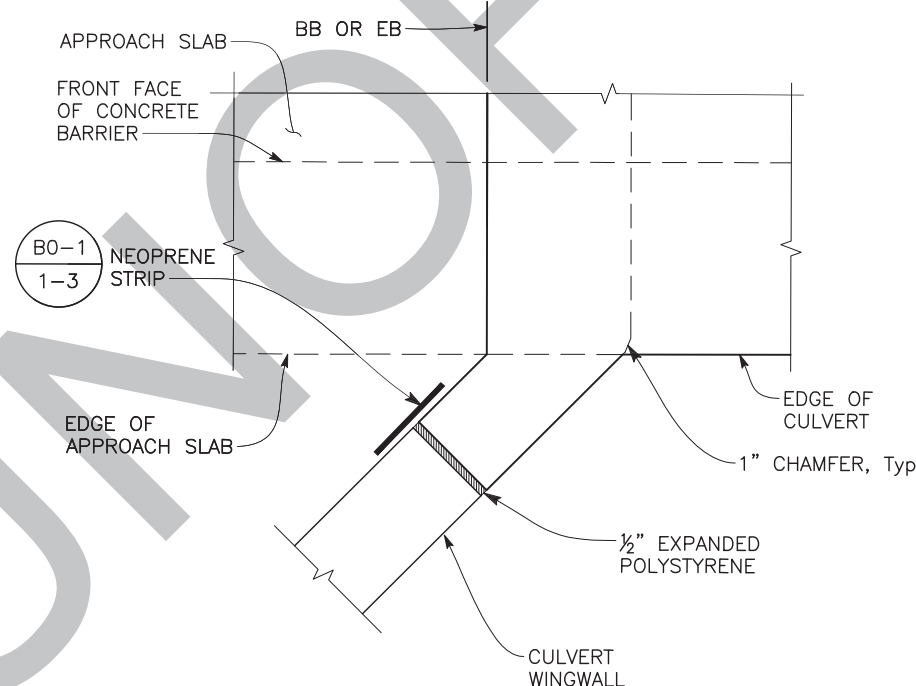
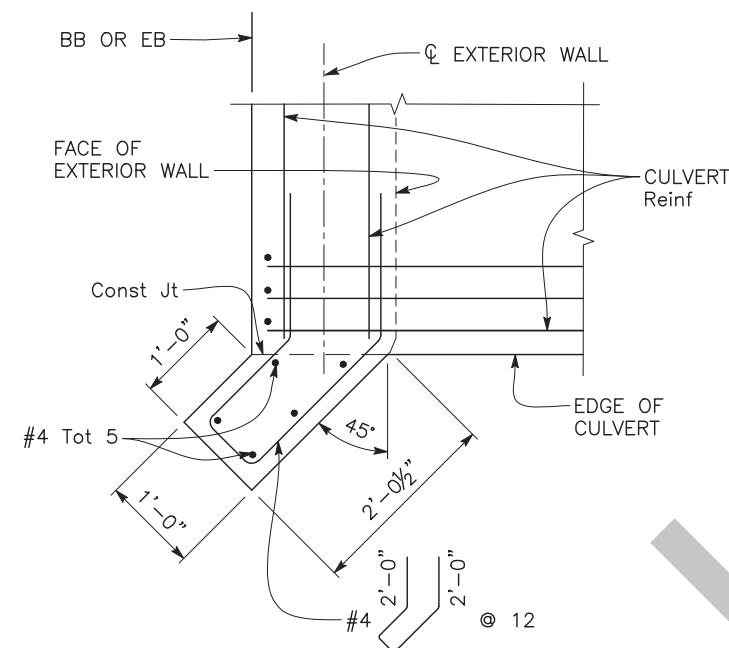
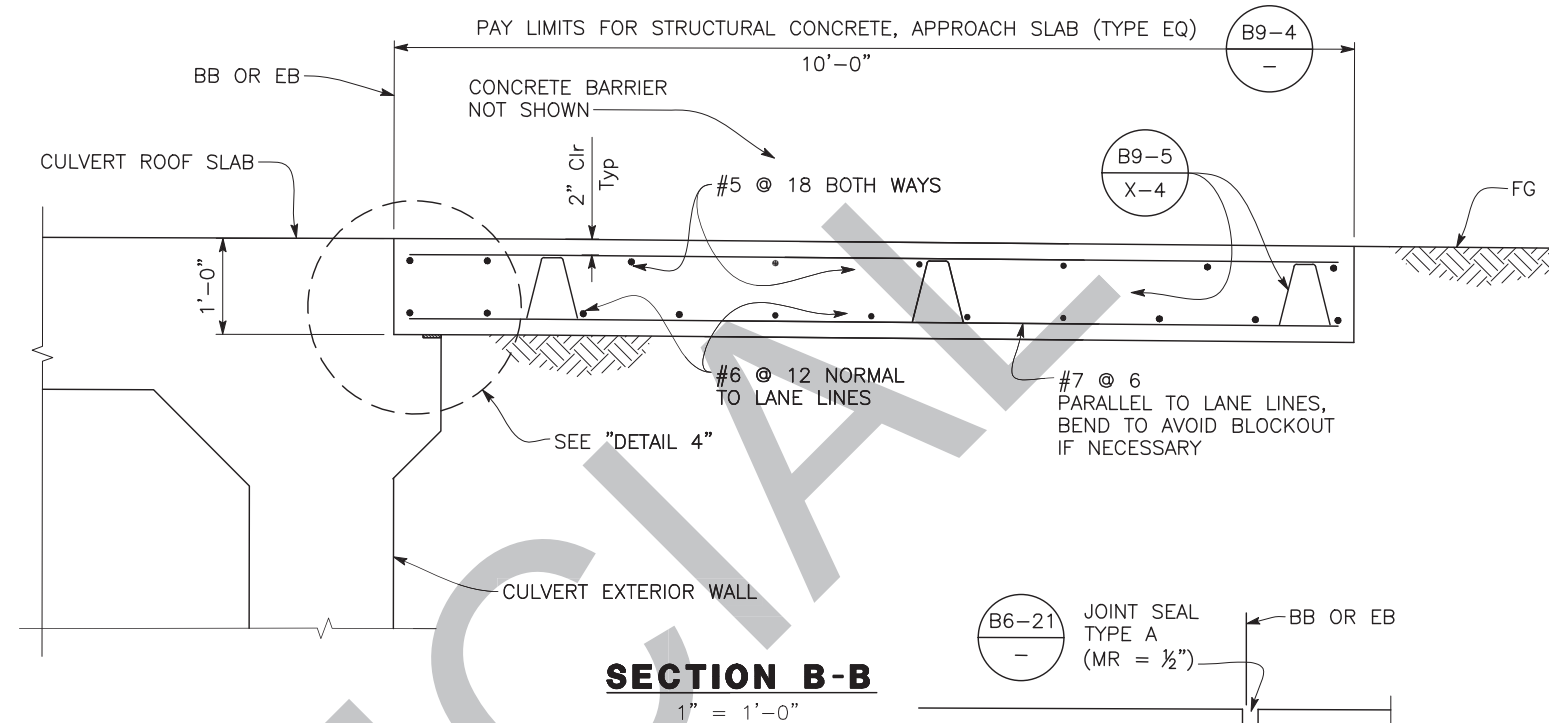
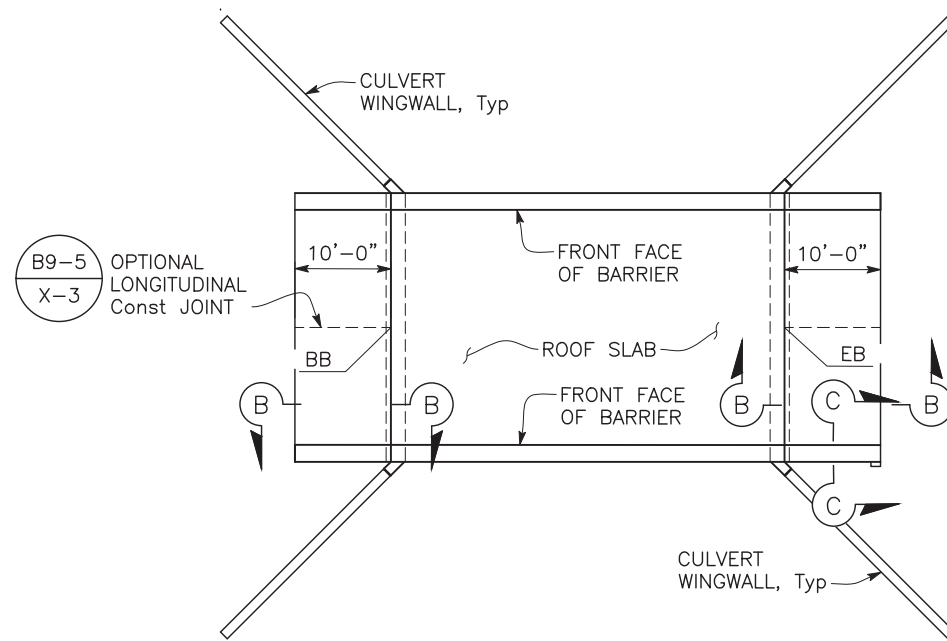
Exp. 09/30/23

CIVIL

STATE OF CALIFORNIA

S10

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REVISIONS	DATE	BY
No.		
DESCRIPTION		

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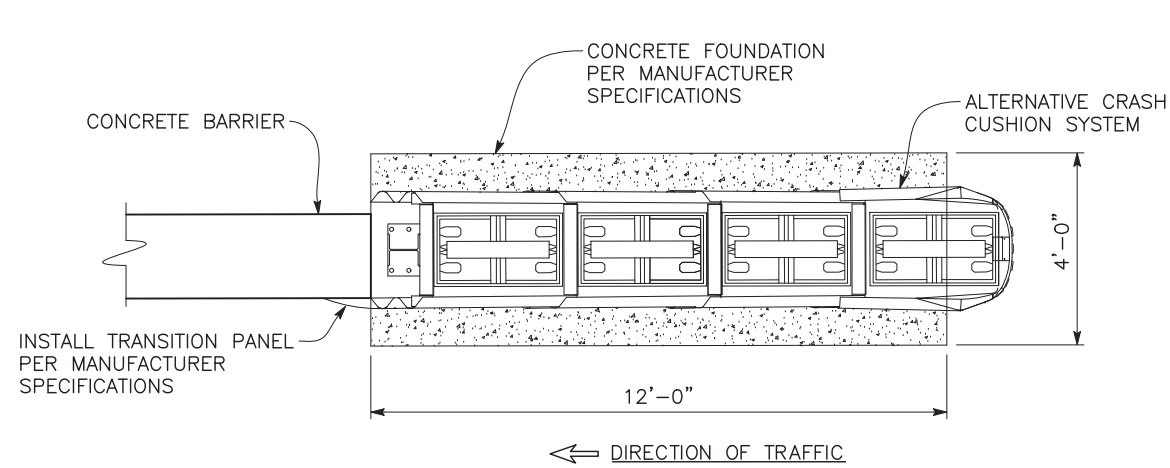


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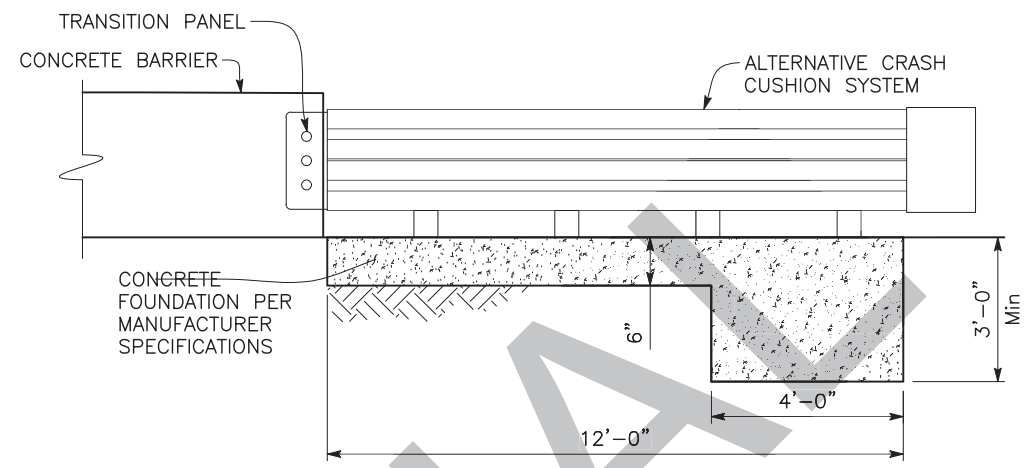
MISCELLANEOUS DETAILS
AVENUE 108 LAKE LAND CANAL
BRIDGE
TULARE COUNTY

SCALE	AS SHOWN
DIVISION	DESIGN
JOB NO.	18052
DESIGNED	K. LUNDBLOM
DRAWN	E. CISNEROS
CHECKED	M. PUGH
FILE	LC-S-SA.DWG
DATE	5-31-22
SHEET No.	

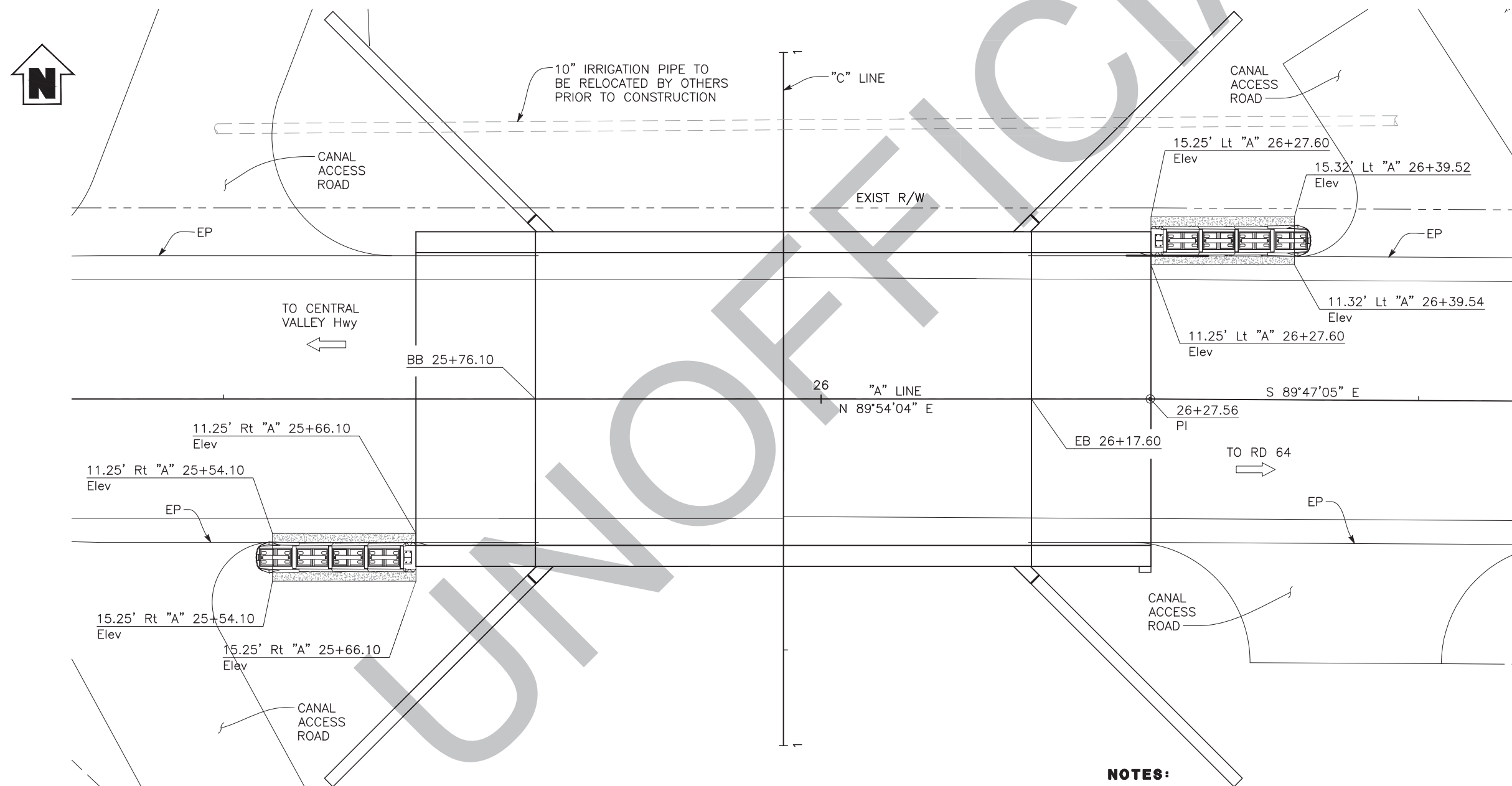
S11



PLAN



ELEVATION



ALTERNATIVE CRASH CUSHION PLAN

1" = 5'

NOTES:

1. ALTERNATIVE CRASH CUSHION SYSTEM SHALL BE QUADGUARD M10 SYSTEM, MODEL QGMTSCVR-U, OR APPROVED EQUAL.
2. ALTERNATIVE CRASH CUSHION SYSTEM ARE TO BE MINIMUM TL-2 AS DEFINED BY MASH WITH A DESIGN SPEED OF 45 MPH.



REVISIONS	
DATE	BY

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ALTERNATIVE CRASH CUSHION
**AVENUE 108 LAKELAND CANAL
BRIDGE**
TULARE COUNTY

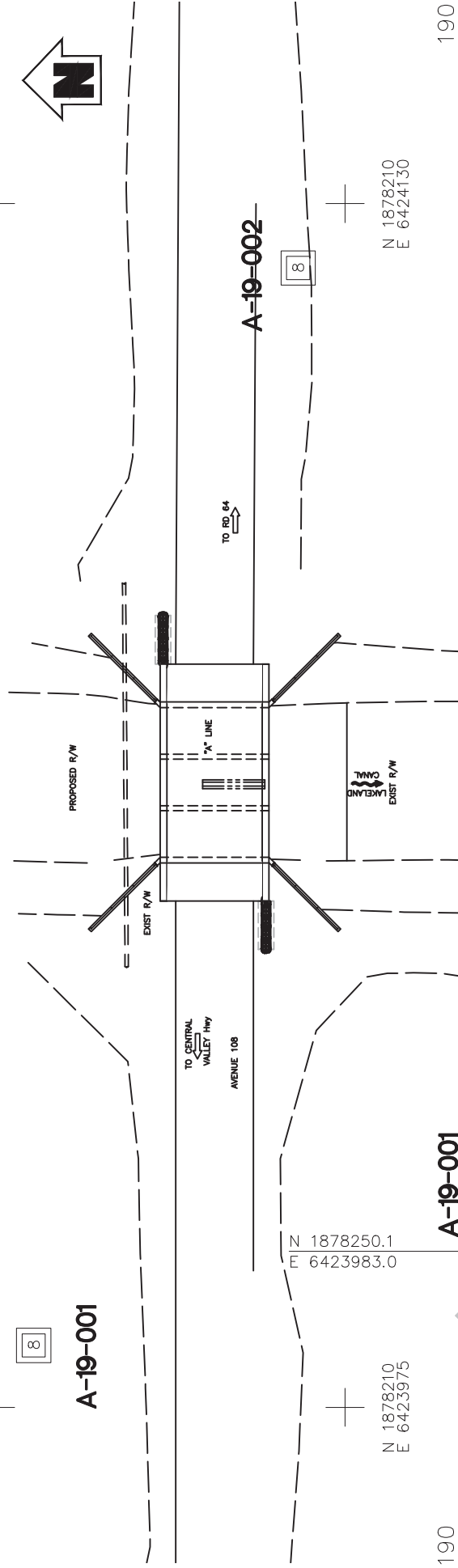
SCALE	AS SHOWN
DIVISION	DESIGN
JOB NO.	18052
DESIGNED	K. LUNDBLOM
DRAWN	E. CISNEROS
CHECKED	M. PUGH
FILE	LC-S-MD.DWG
DATE	5-31-22

SHEET No.

S12

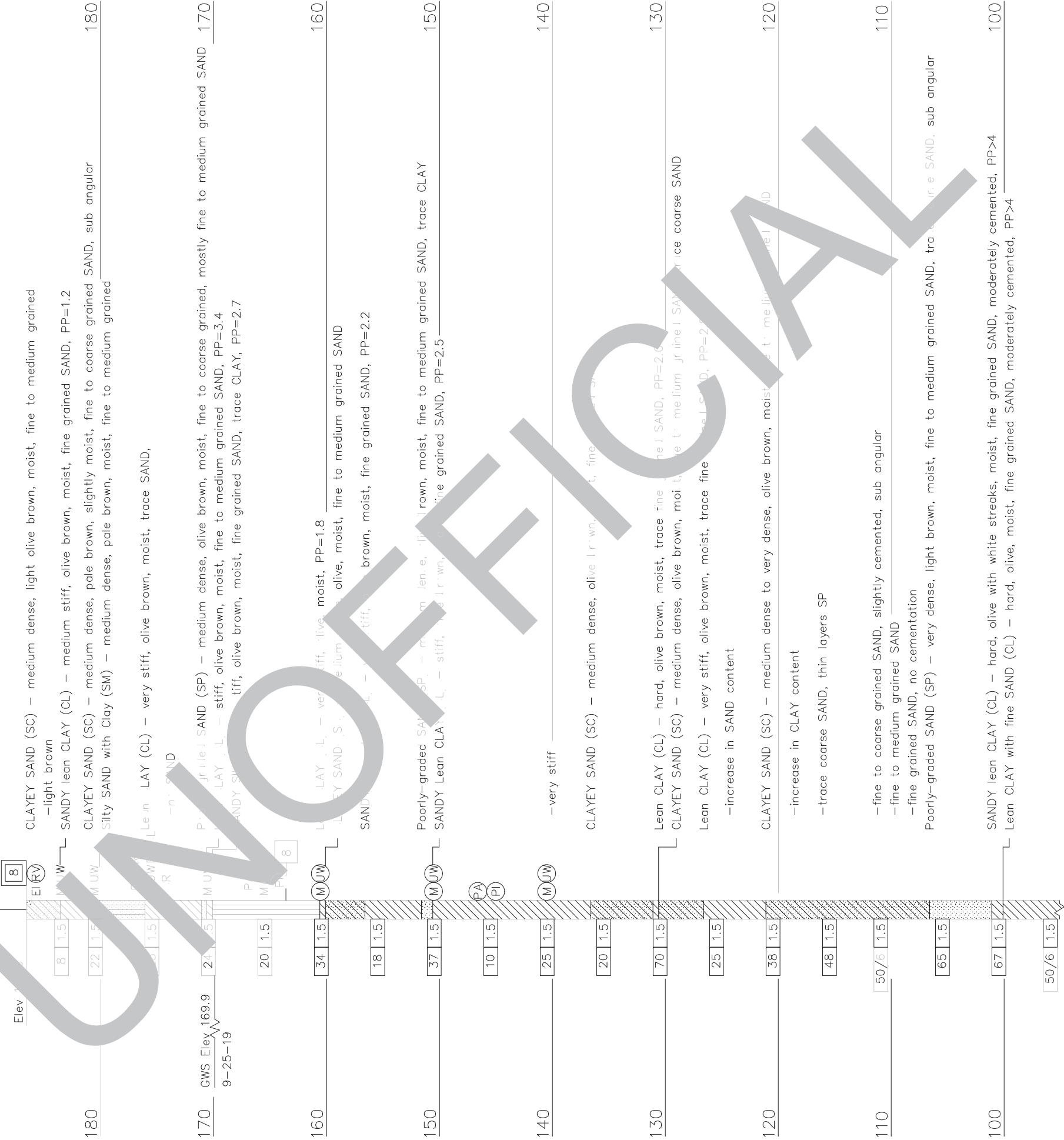
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HOLE ID	ALIGNMENT NAME	STATION AND OFFSET
A-19-001	"A" Line	25+34.00 16.20' Lt
A-19-002	"A" Line	26+72.67 18.00' Rt



N 1878210
F 6424130

190



90 9-25-19
Terminated at Elev 95.1'
ER₁ = 69.2%

09



Horiz" Not to Scale
Vert: 1" = 10'

LOG OF TEST BORINGS 1 OF 2
AVENUE 108 LAKELAND CANAL
BRIDGE
 TULARE COUNTY



**TULARE COUNTY
RESOURCE MANAGEMENT
AGENCY**

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[illegible]

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