



ATTACHMENT D

PROJECT PLANS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	1	35



INDEX OF PLANS
SHEET No. DESCRIPTION

- 1 TITLE AND LOCATION MAP
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- 10 CONSTRUCTION AREA SIGNS PLAN
- 11 DETOUR PLAN
- 12 PAVEMENT DELINEATION AND SIGN PLAN
- 13 SUMMARY OF QUANTITIES
- 14-18 REVISED STANDARD PLANS

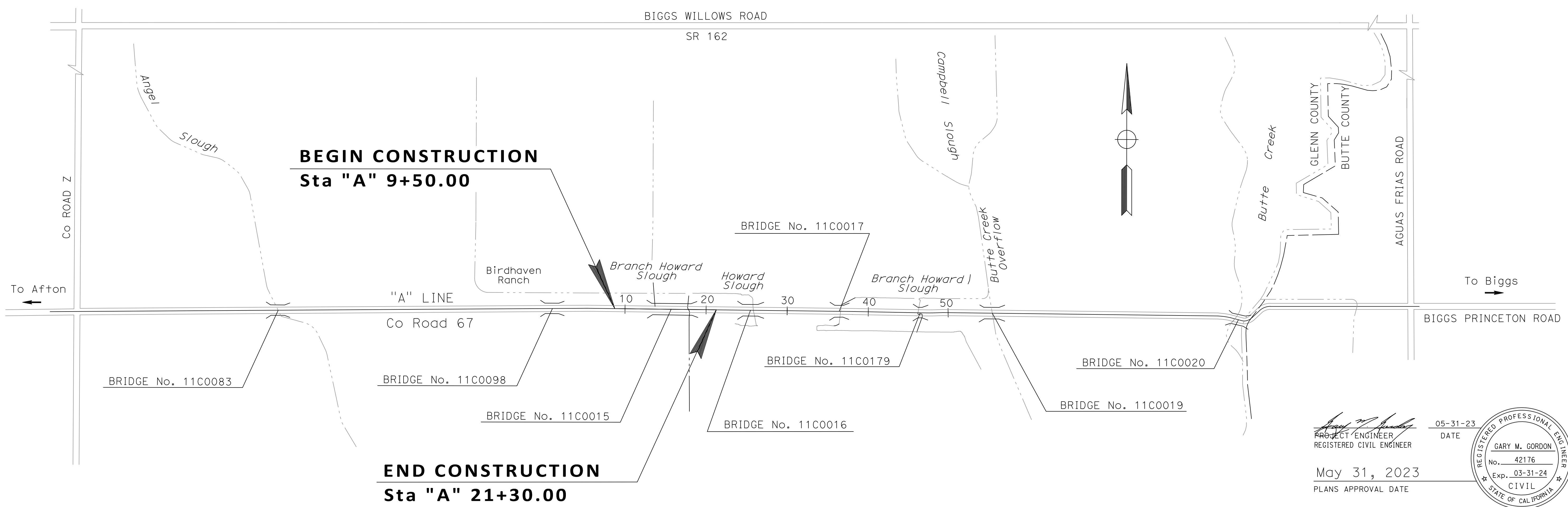
STRUCTURES
19-35 STRUCTURE PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

**STATE OF CALIFORNIA
COUNTY OF GLENN
PUBLIC WORKS AGENCY**

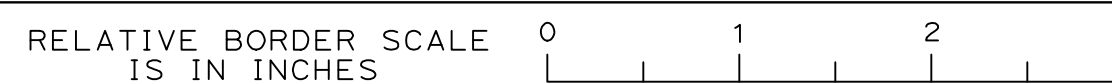
**PROJECT PLANS FOR CONSTRUCTION ON
COUNTY ROAD 67
BRIDGE REPLACEMENT AT BRANCH HOWARD SLOUGH
ON COUNTY ROAD 67
FEDERAL AID PROJECT BRLO-5911 (048)
STATE BRIDGE No.11C0015**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2022



THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

NO SCALE



USERNAME = KEVIN
DGN FILE = 03-101782aa001

COUNTY OF GLENN:

Gary M. Gordon
Gary M. Gordon, PE
County Engineer

05-31-23
DATE

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

Gary M. Gordon
PROJECT ENGINEER
REGISTERED CIVIL ENGINEER

05-31-23
DATE

May 31, 2023
PLANS APPROVAL DATE



DATE PLOTTED = 5/31/2023
TIME PLOTTED = 2:53:09 PM
LAST REVISION 05-31-23

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. PLACE GEOSYNTHETIC REINFORCED EMBANKMENT WHERE SLOPES ARE STEEPER THAN 2:1. PLACE IN TWO FOOT MAXIMUM LIFTS.

STRUCTURAL SECTION NOTES:

- 1 Prop SECTION
6.25" HMA TYPE A
23.5" CI 2 AB
- 2 EXISTING SECTION VARIES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	2	35

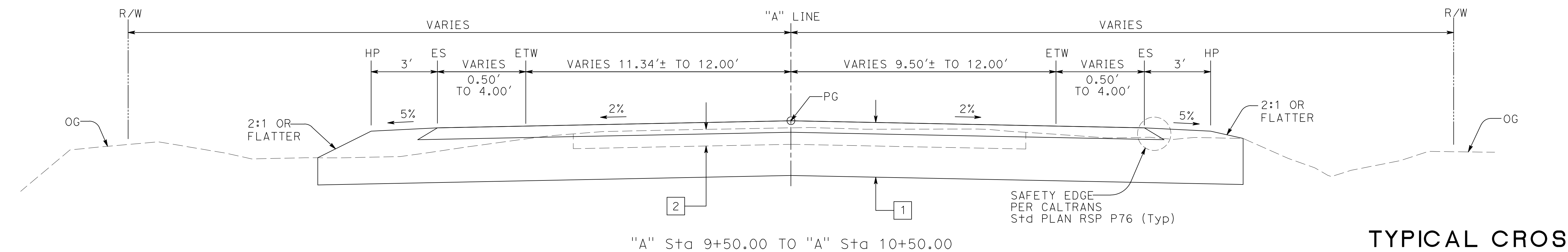
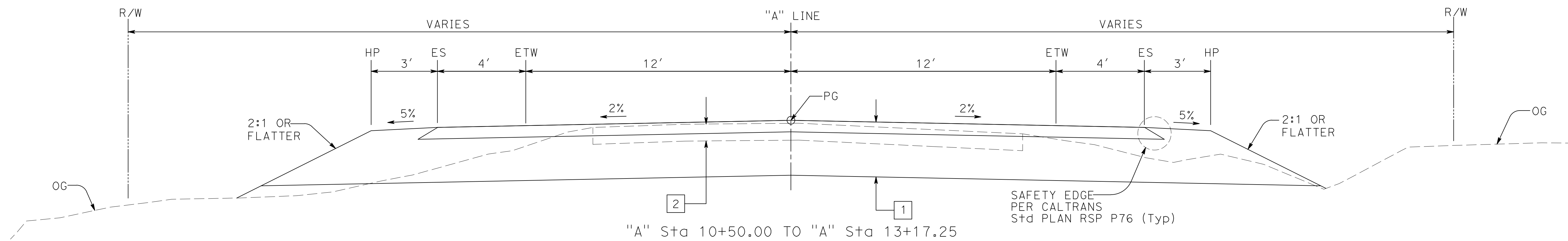
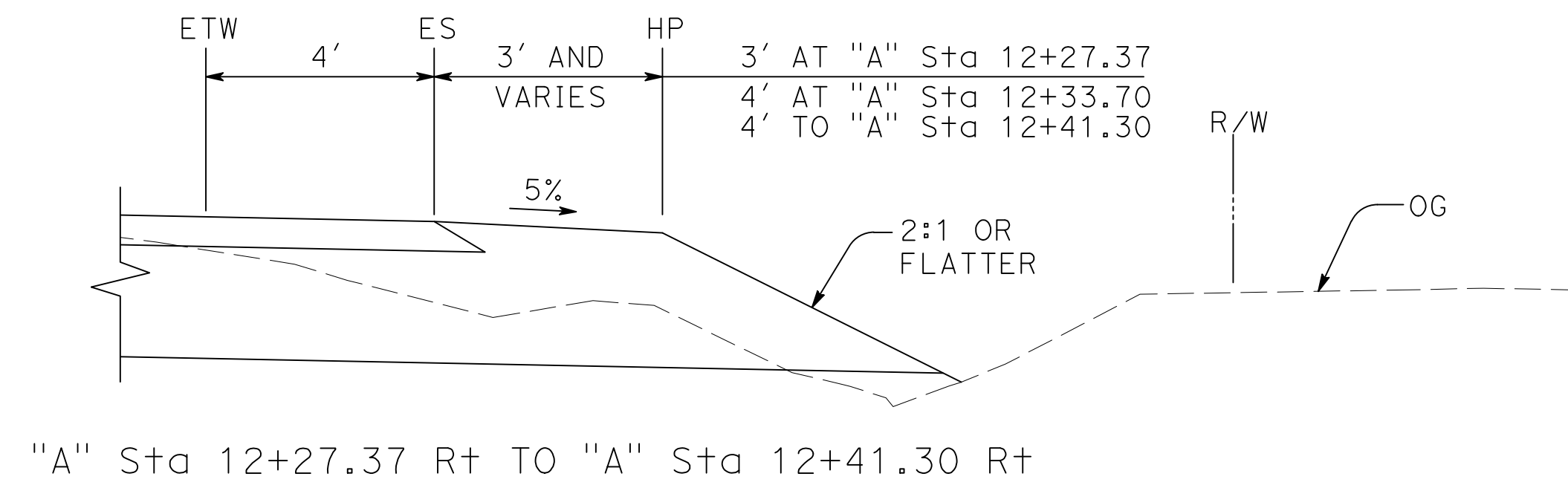
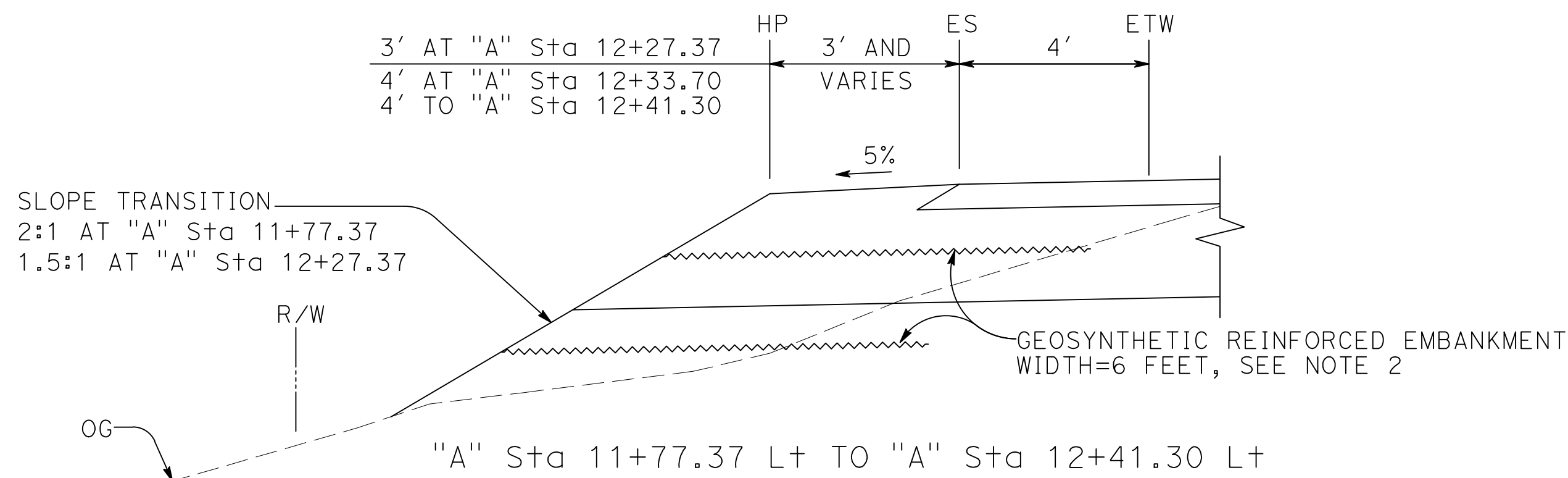
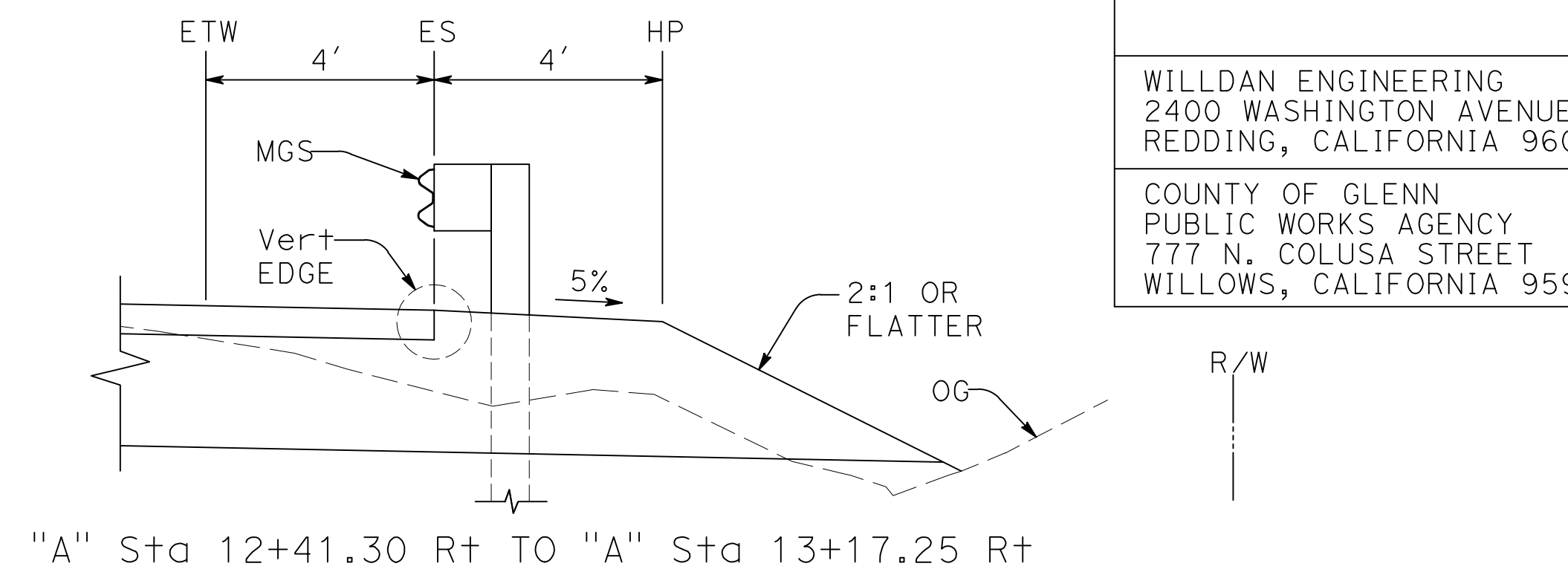
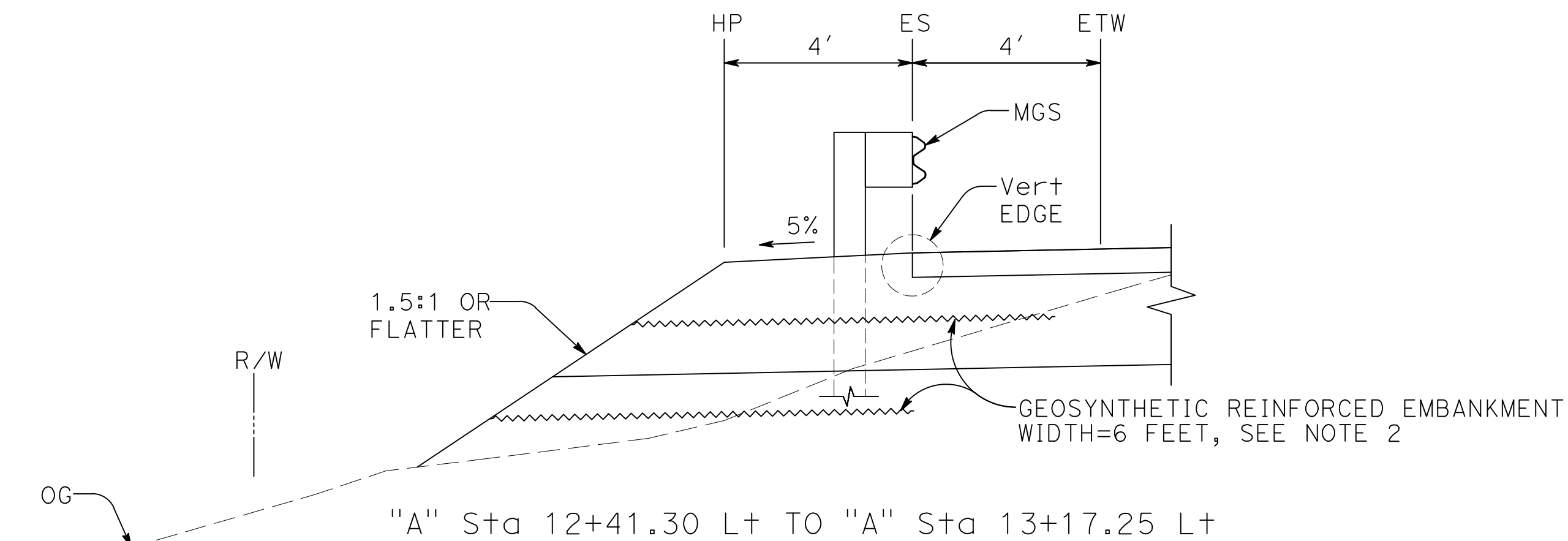
REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

KCG
 05-31-23
 REVISED BY DATE REVISED
 R. UHLMANN G. GORDON
 CALCULATED-DESIGNED BY CHECKED BY
 PROJECT ENGINEER GARY M. GORDON

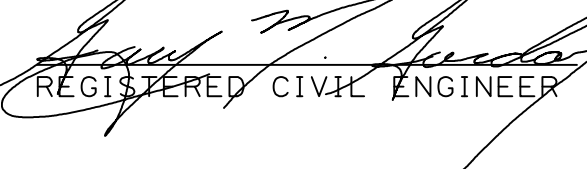


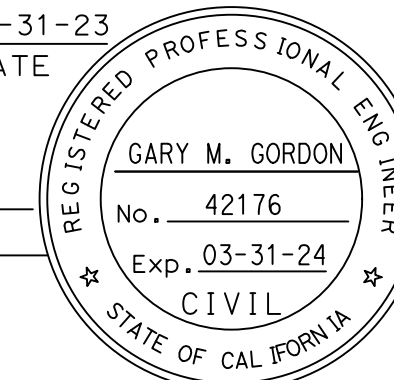
TYPICAL CROSS SECTION X-1
 NO SCALE

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. PLACE GEOSYNTHETIC REINFORCED EMBANKMENT WHERE SLOPES ARE STEEPER THAN 2:1. PLACE IN TWO FOOT MAXIMUM LIFTS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	3	35


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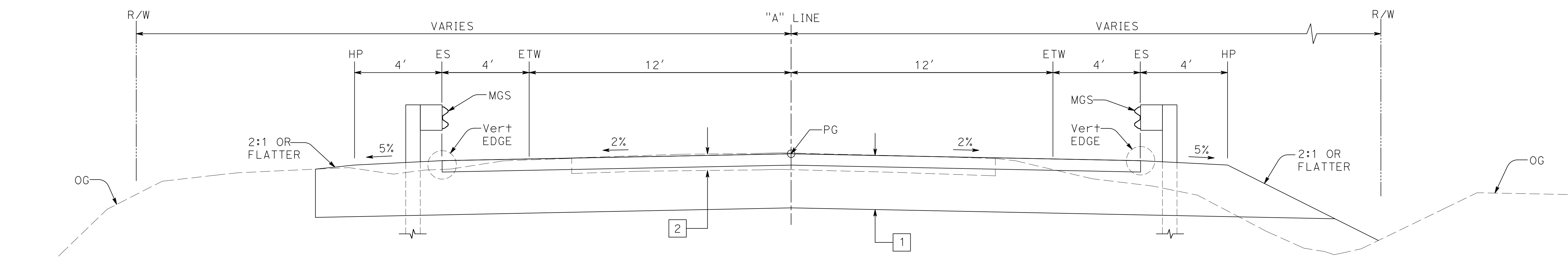
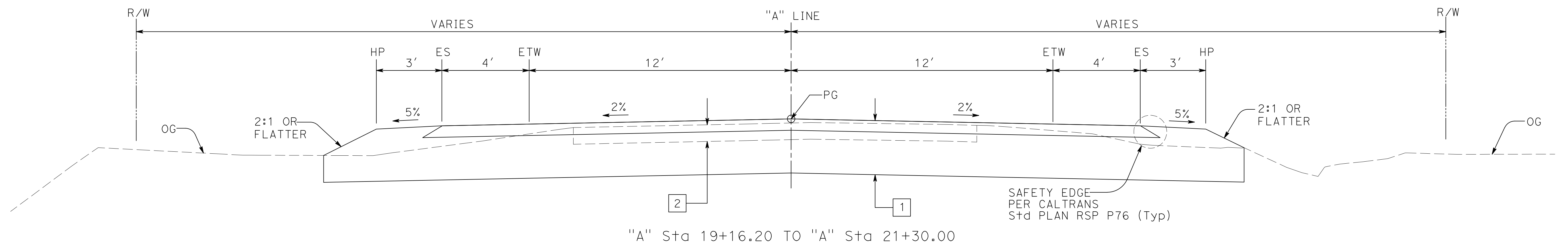
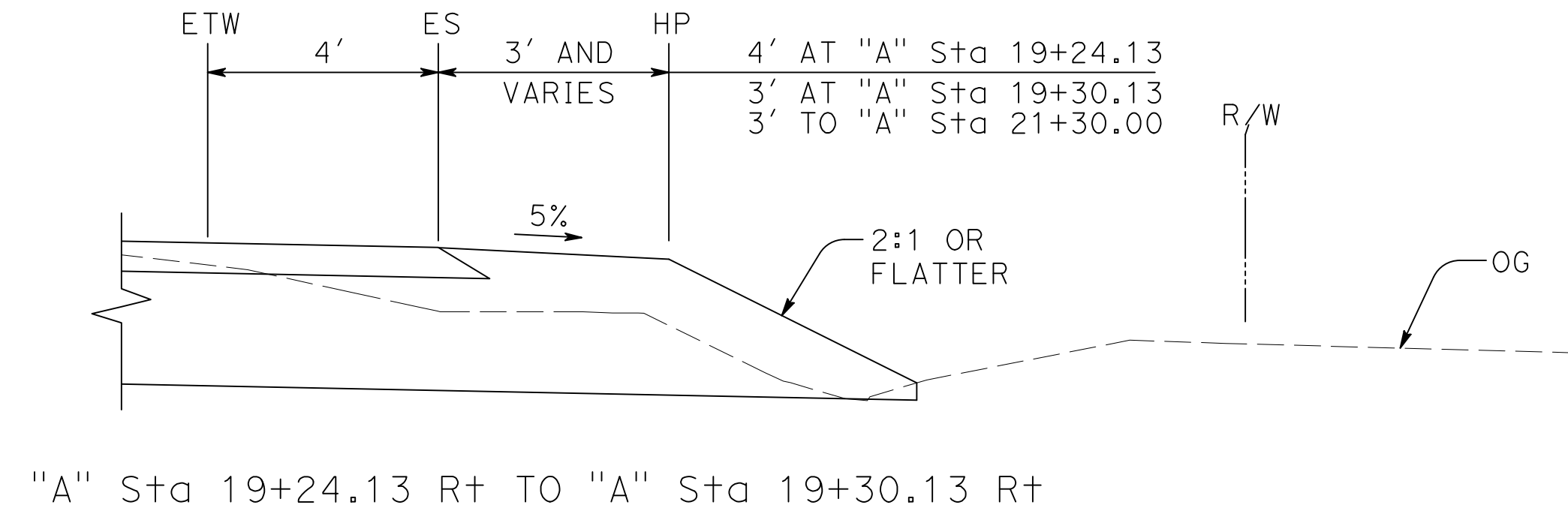
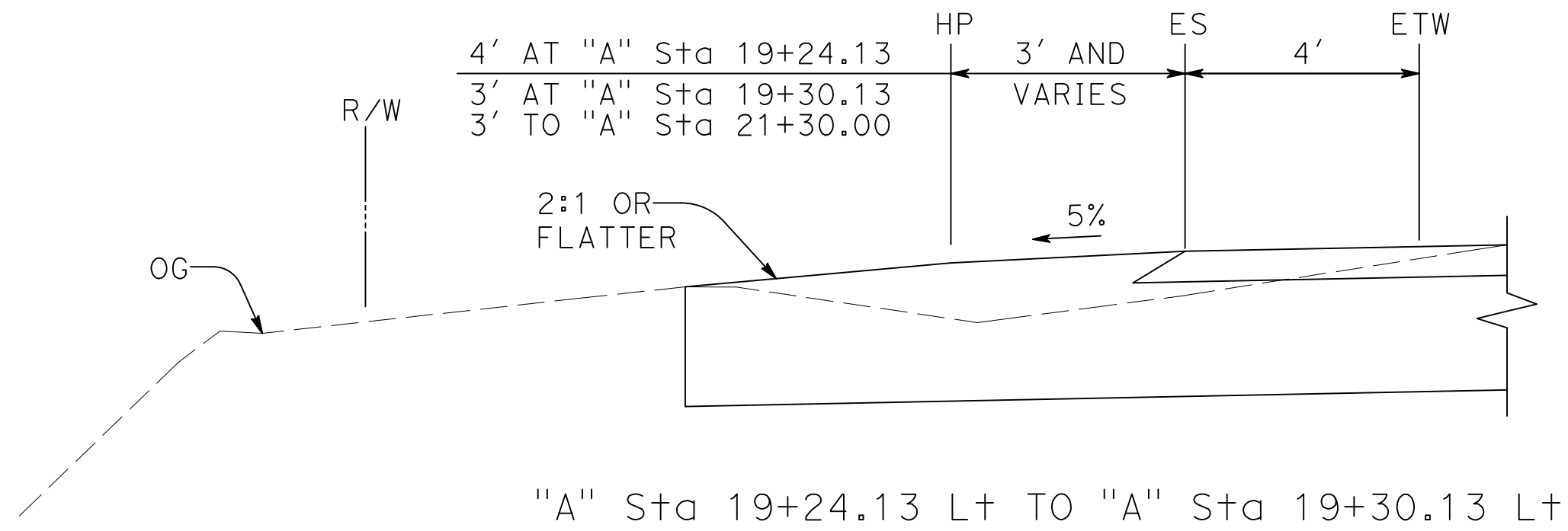
KCG
05-31-23

REVISED BY
DATE REVISED

R. UHLMANN
G. GORDON

CALCULATED-DESIGNED BY
CHECKED BY

PROJECT ENGINEER
GARY M. GORDON



Co ROAD 67

TYPICAL CROSS SECTION X-2
NO SCALE

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT GLENN COUNTY PUBLIC WORKS AGENCY.
- BASIS OF BEARING: TAKEN AS N87°6'59.47"E BETWEEN POINTS 5860 AND 5001 AS SHOWN ON THIS SHEET.
- COORDINATES, DISTANCES AND BEARINGS ARE BASED ON CCS 1983, ZONE 2, DERIVED FROM GPS OBSERVATIONS. MULTIPLY DISTANCES SHOWN BY 1.000063654 TO OBTAIN GROUND LEVEL DISTANCES.
- ELEVATIONS ARE BASED ON 1988 NATIONAL GEODETIC VERTICAL DATUM (NGVD). BENCHMARK ELEVATIONS ARE BASED UPON A FOUND BRONZE DISK "HOWARD" TAKEN AS ELEVATION 74.88.

CONTROL FOR DESIGN AND CONSTRUCTION

POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
5001	2279027.67	6590514.16	74.88	FOUND BRONZE DISK "HOWARD" IN TOP OF SOUTHEAST WINGWALL OF Br. No. 11C0017
5860	2279009.86	6590160.48	70.84	FOUND ALUMINUM CAP "465", SOUTHWEST OF Br. No. 11C0017 (37.28' Rt "A" 33+48.24)

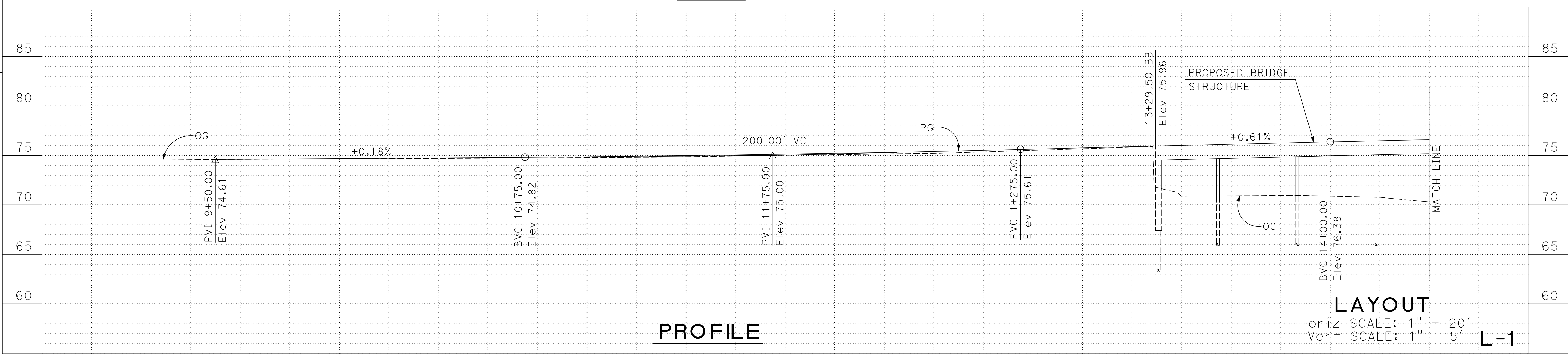
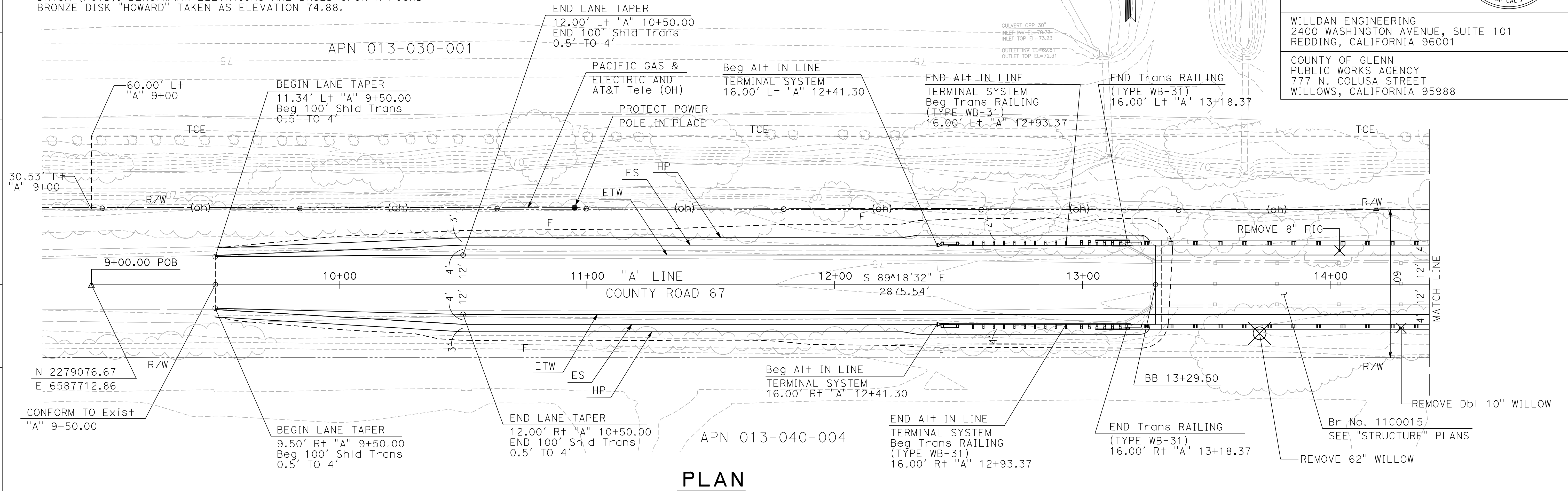
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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 REDDING, CALIFORNIA 96001

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STATION	Exc	Emb	TOTAL
10+00			
11+00			
12+00			
13+00			
14+00			
TOTAL	1095	42	1095

DATE PLOTTED => 5/31/2023
 TIME PLOTTED => 3:34:57 PM

NOTE:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

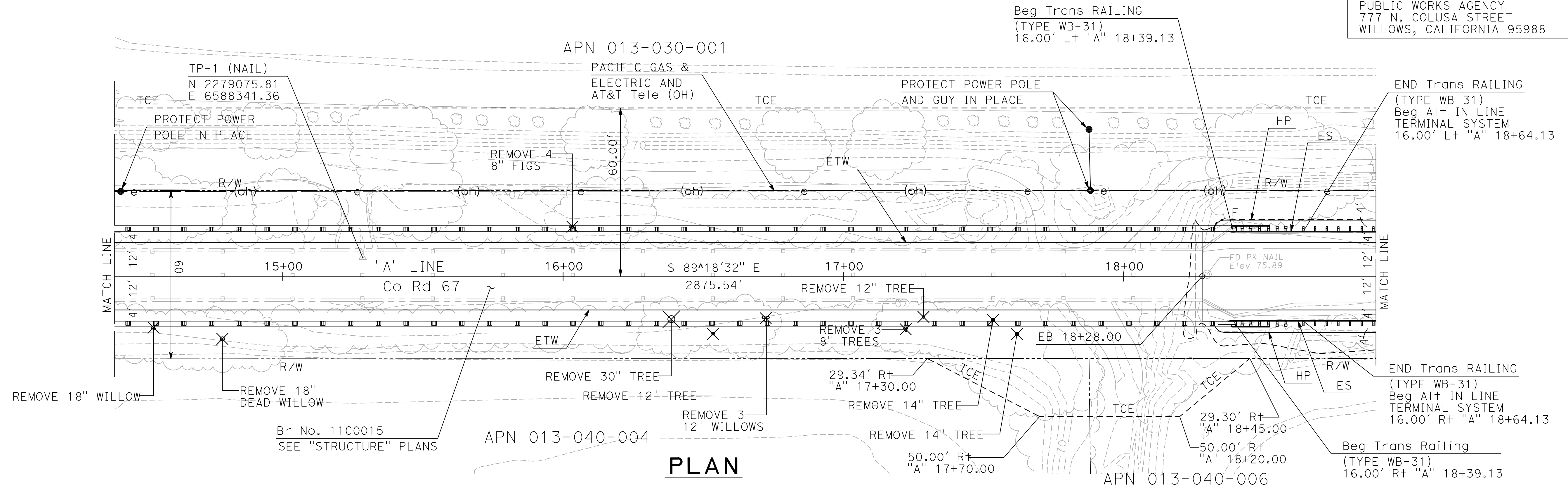
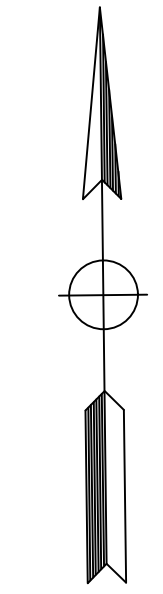
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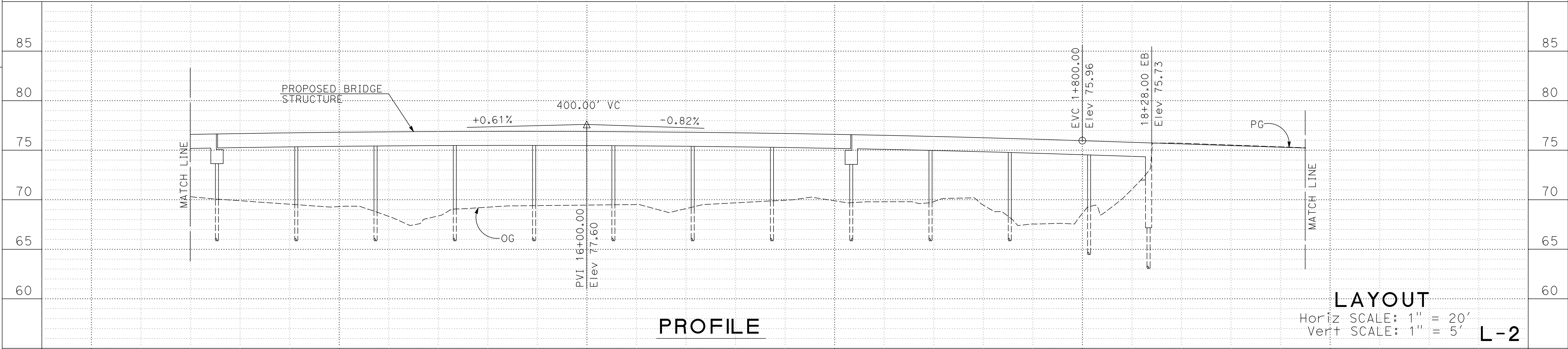
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PLAN



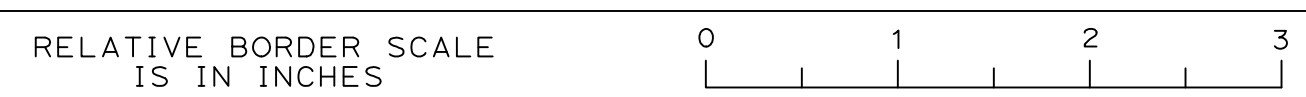
PROFILE

LAYOUT
 Horiz SCALE: 1" = 20'
 Vert SCALE: 1" = 5'

L-2

STATION	14+00	15+00	16+00	17+00	18+00	19+00	TOTAL
Exc							189
Emb							7

USERNAME => KEVIN
 DGN FILE => 03-101782e002



LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 3:51:17 PM

NOTE:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	6	35

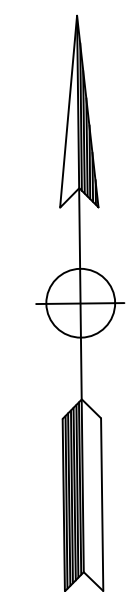
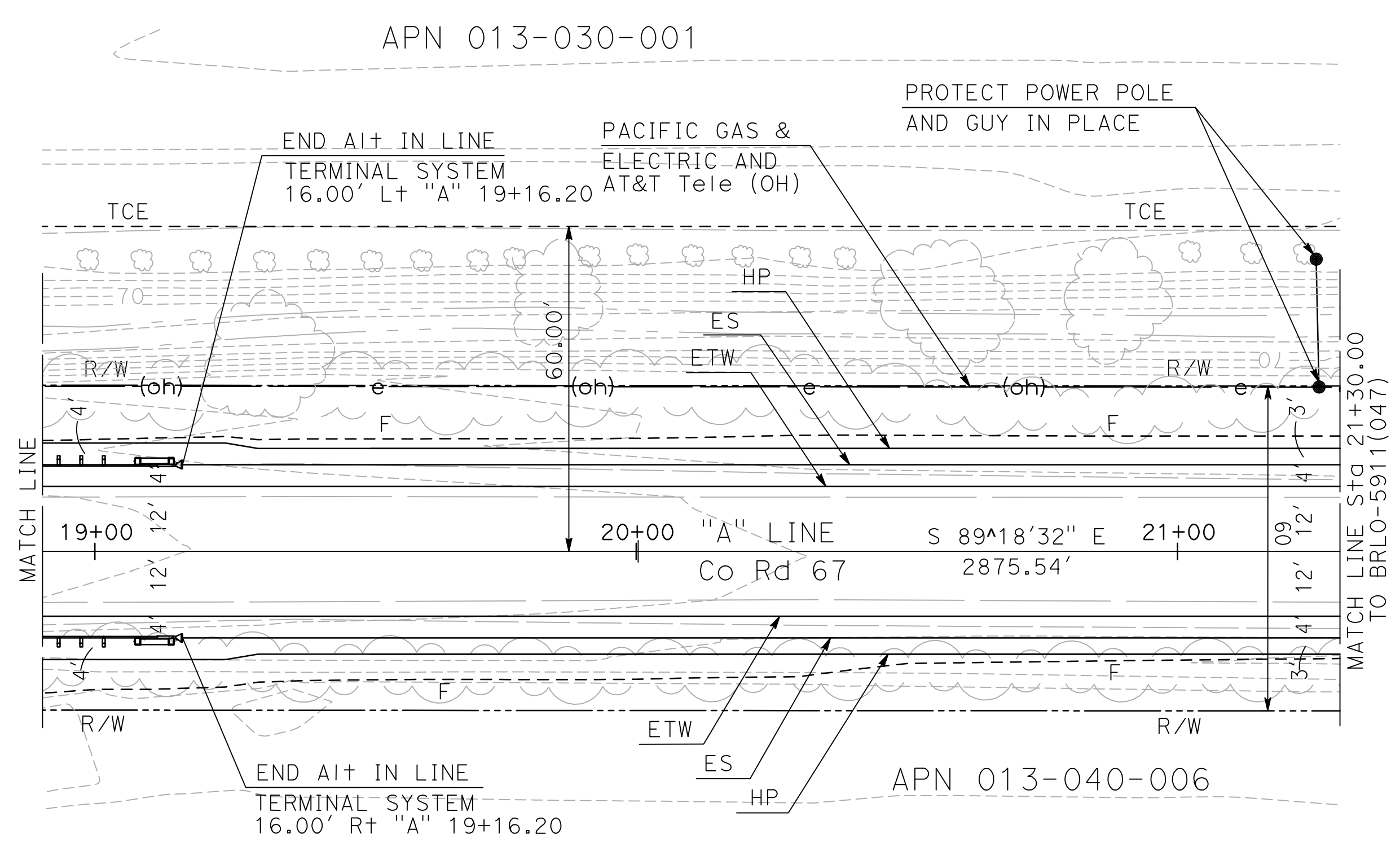
05-31-23
REGISTERED CIVIL ENGINEER DATE

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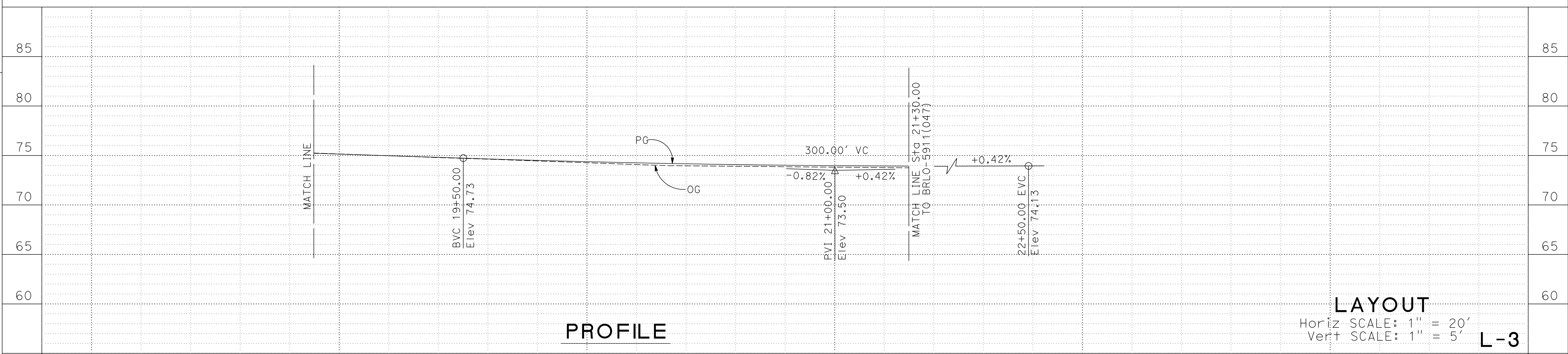
REG. NO. 42176
Exp. 03-31-24
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2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

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WILLOWS, CALIFORNIA 95988



PLAN



PROFILE

LAYOUT
Horiz SCALE: 1" = 20'
Vert SCALE: 1" = 5'

L-3

STATION	19+00	20+00	21+00	22+00	TOTAL
Exc		758			758
Emb		4			4

USERNAME => KEVIN
DGN FILE => 03-101782e003



LAST REVISION DATE PLOTTED => 5/31/2023
05-31-23 TIME PLOTTED => 3:59:47 PM

NOTE:
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CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

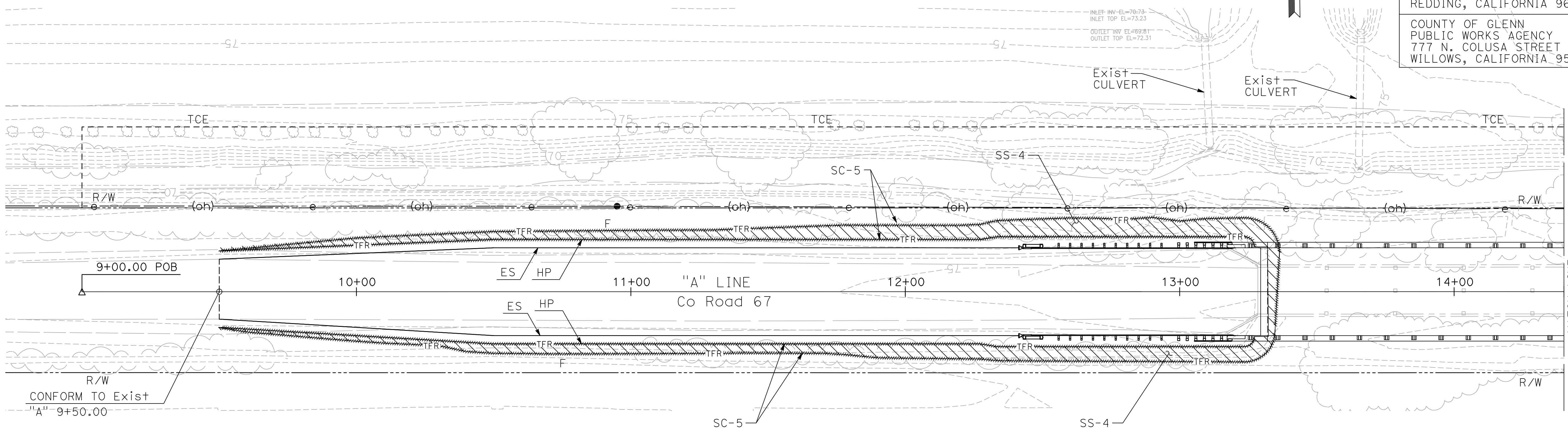
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REGISTERED CIVIL ENGINEER DATE 05-31-23
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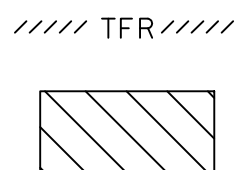
GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



LEGEND:



SC-5: TEMPORARY FIBER ROLL CONTROL PER CALTRANS STANDARD T56
 SS-4: HYDROSEEDING FOR ALL PROPOSED SLOPES. MIX TO BE DETERMINED.

TEMPORARY BMP NOTES:

- NOT ALL BEST MANAGEMENT PRACTICES (BMPs) SHOWN. CONTRACTOR SHALL USE ALL APPROPRIATE TEMPORARY WATER POLLUTION CONTROL BMPs AS INDICATED ON THE PLANS AND AS DIRECTED BY THE APPROVED PROJECT WPCP OR SWPPP.
- BMPs WILL BE APPLIED TO AND MAINTAINED IN ACTIVE AND NON-ACTIVE DISTURBED SOIL AREAS (DSAs).
- FIBER ROLLS SHALL BE PLACED ON DISTURBED SOIL AT THE COMPLETION OF GRADING.
- CONTRACTOR TO ESTABLISH TEMPORARY CONSTRUCTION ENTRANCE PER CALTRANS STANDARD T58 AND TEMPORARY CONCRETE WASHOUT FACILITY PER CALTRANS STANDARD T59.
- THE CHANNEL CAPACITY MUST BE MAINTAINED DURING THE RAINY SEASON OCTOBER 15 TO APRIL 15.
- A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES OR TO REPAIR ANY DAMAGED EROSION CONTROL MEASURES WHEN RAIN IS IMMINENT.

TEMPORARY BMP NOTES (CONTINUED):

- DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE ENGINEER.
- ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT.
- AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERM'S, AND DESILTING BASINS AND THE BASINS PUMPED DRY. ANY GRADED SLOPE SURFACE PROTECTION MEASURES DAMAGED DURING A RAINSTORM SHALL ALSO BE IMMEDIATELY REPAIRED.
- GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE TO BE DIRECTED TOWARD DESILTING FACILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREA WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.

PERMANENT BMP NOTES:

- CONTRACTOR SHALL PROVIDE APPROPRIATE EROSION CONTROL BMPs AS INDICATED ON THE PLANS AND AS DIRECTED BY THE APPROVED PROJECT WPCP OR SWPPP.
- SEED MIX FOR HYDROSEEDING SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
- PROPERLY MAINTAINED FIBER ROLLS FROM TEMPORARY WATER POLLUTION CONTROL WORK MAY BE USED FOR EROSION CONTROL. MISSING, DEGRADED OR OTHERWISE DAMAGED FIBER ROLLS WILL BE REPLACED AS DIRECTED BY THE ENGINEER.

**TEMPORARY WATER POLLUTION/
 EROSION CONTROL PLAN**

SCALE: 1" = 20'
WPC-1

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

USERNAME => KEVIN
 DGN FILE => 03-101782gb001



LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 4:06:35 PM

PROJECT ENGINEER GARY M. GORDON	CALCULATED-DESIGNED BY GARY M. GORDON	REVISOR R. UHLMANN	DATE 05-31-23
	CHECKED BY	REVISOR G. GORDON	DATE 05-31-23

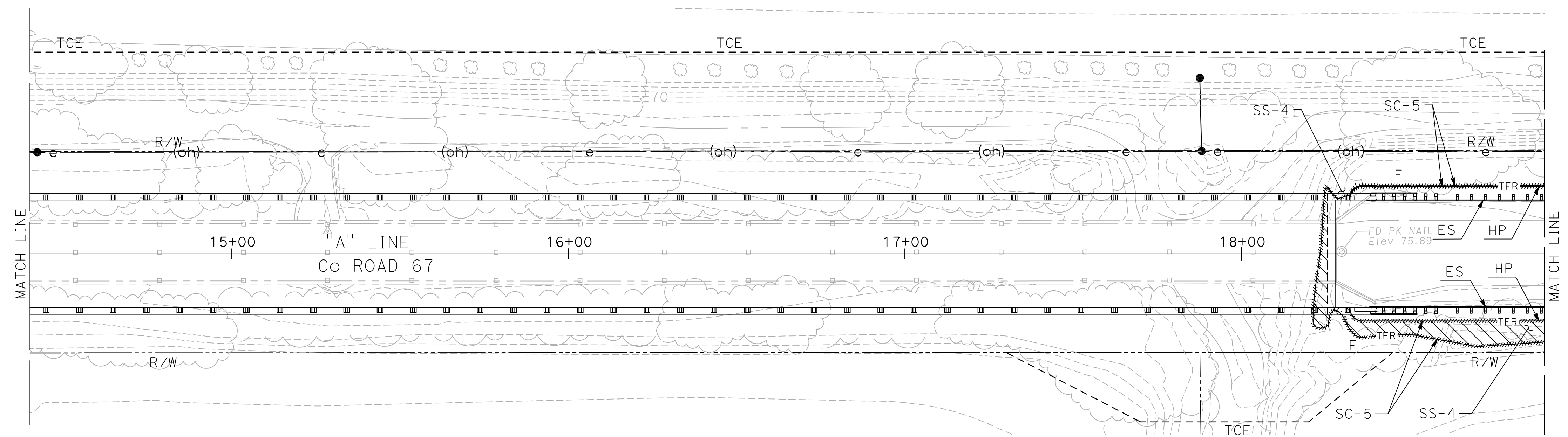
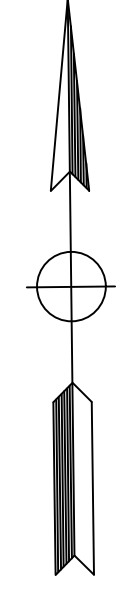
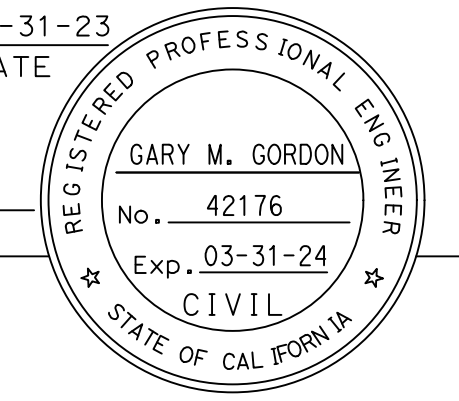
NOTE:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	8	35

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 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



TEMPORARY WATER POLLUTION/ EROSION CONTROL PLAN

SCALE: 1" = 20'

WPC-2

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

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DGN FILE => 03-101782gb002

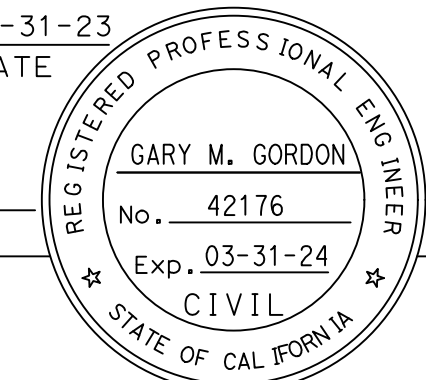


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 05-31-23 TIME PLOTTED => 4:09:31 PM

NOTE:
 FOR ACCURATE RIGHT OF WAY DATA,
 CONTACT COUNTY OF GLENN PUBLIC
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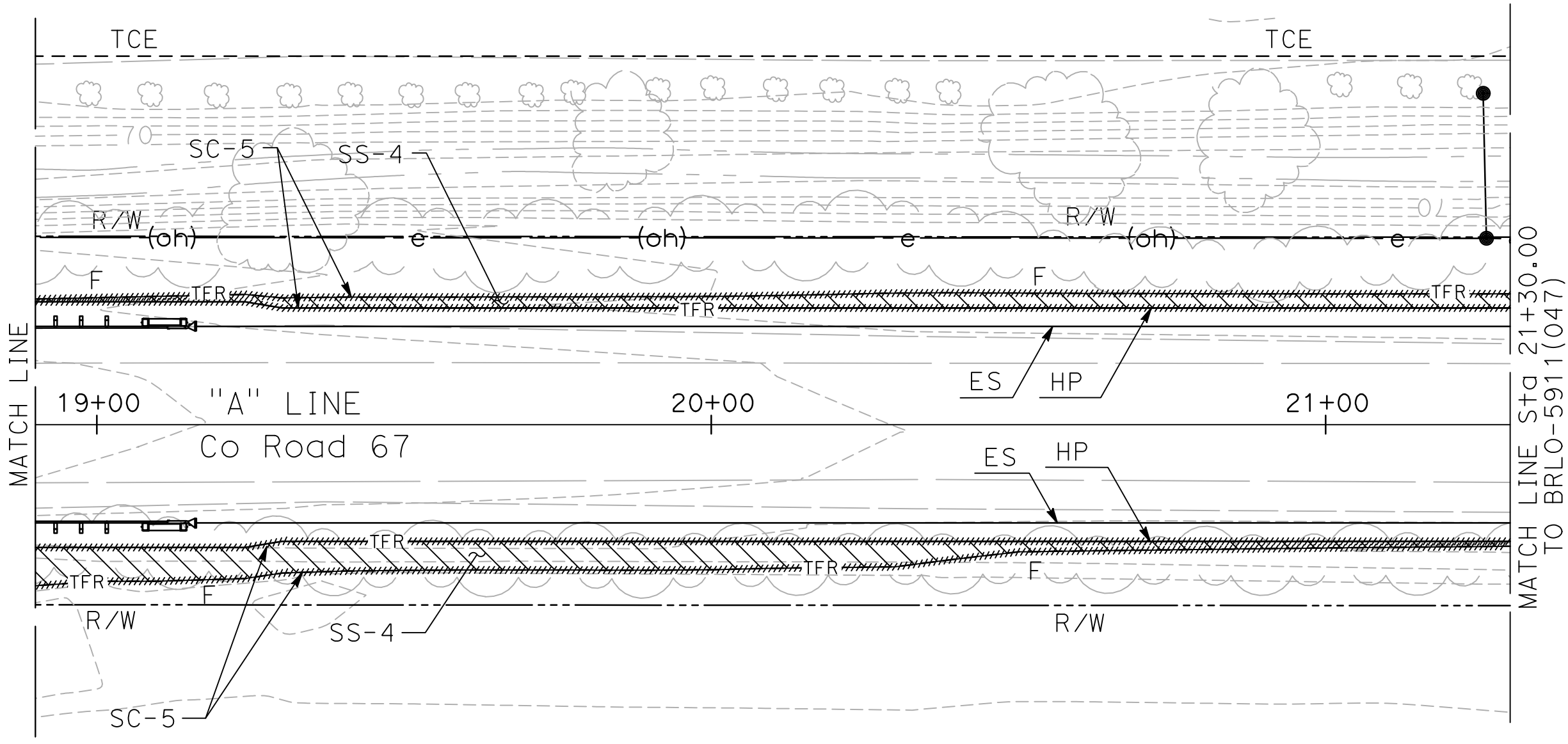
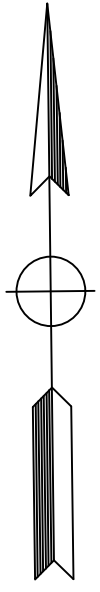
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 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



TEMPORARY WATER POLLUTION/ EROSION CONTROL PLAN

SCALE: 1" = 20'

WPC-3

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

USERNAME => KEVIN
 DGN FILE => 03-101782gb003



LAST REVISION | DATE PLOTTED => 5/31/2023
 05-31-23 | TIME PLOTTED => 4:13:24 PM

PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
B. BURCH	R. UHLMANN
REVISED BY	DATE REVISED
KCG	05-31-23

GENERAL NOTES:

- SIGNS SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
- SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- SIGNS WILL REMAIN IN PLACE FOR DURATION OF PROJECT.
- FOR ADDITIONAL TRAFFIC CONTROL SIGNS, SEE DETOUR PLAN DE-1.
- CONTRACTOR SHALL OBTAIN CALTRANS ENCROACHMENT PERMIT FOR SIGNS ON SR 162.
- CONTRACTOR SHALL OBTAIN BUTTE COUNTY ENCROACHMENT PERMIT FOR SIGNS ON AGUAS FRIAS ROAD, AFTON ROAD, AND COUNTY ROAD 67 EAST OF THE GLENN/BUTTE COUNTY LINE.

LEGEND

- TEMPORARY SIGN AND POST (ONE POST)
- TEMPORARY SIGN AND POST (TWO POST)
- CONSTRUCTION AREA
- AGRICULTURAL FIELD ACCESS POINT
LAT: 39°25'13"N, LONG: 121°54'4"W

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	10	35

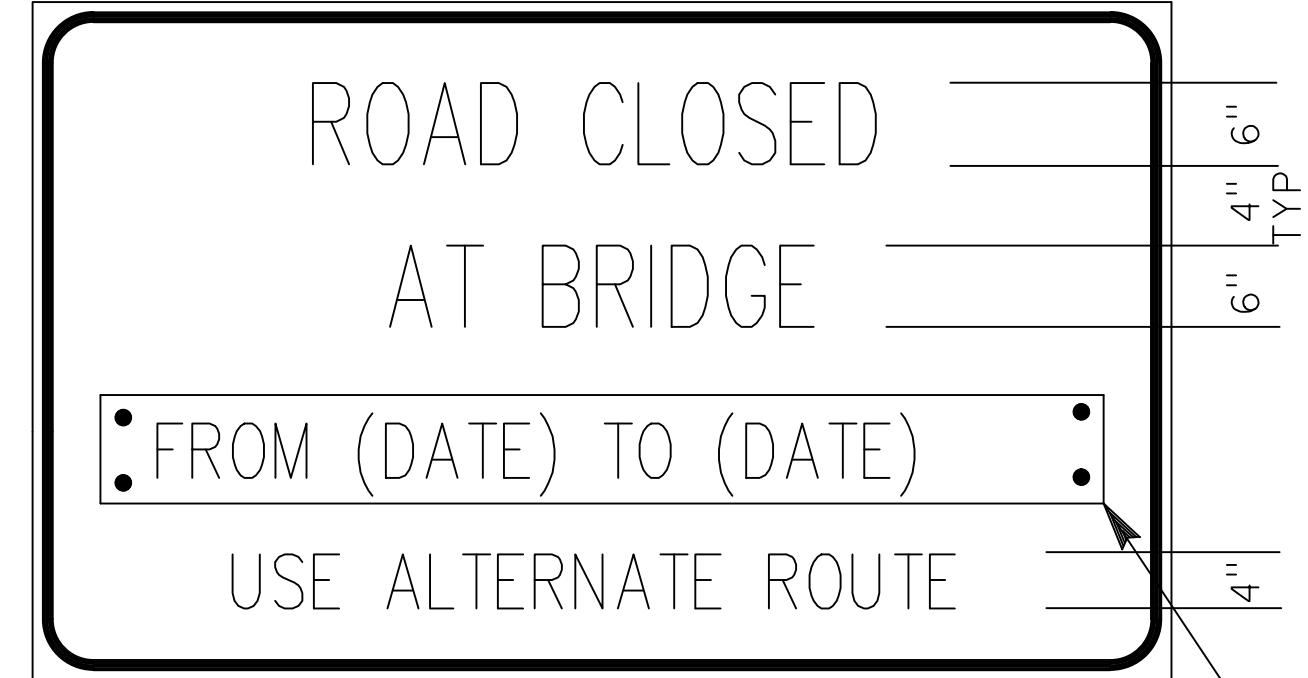
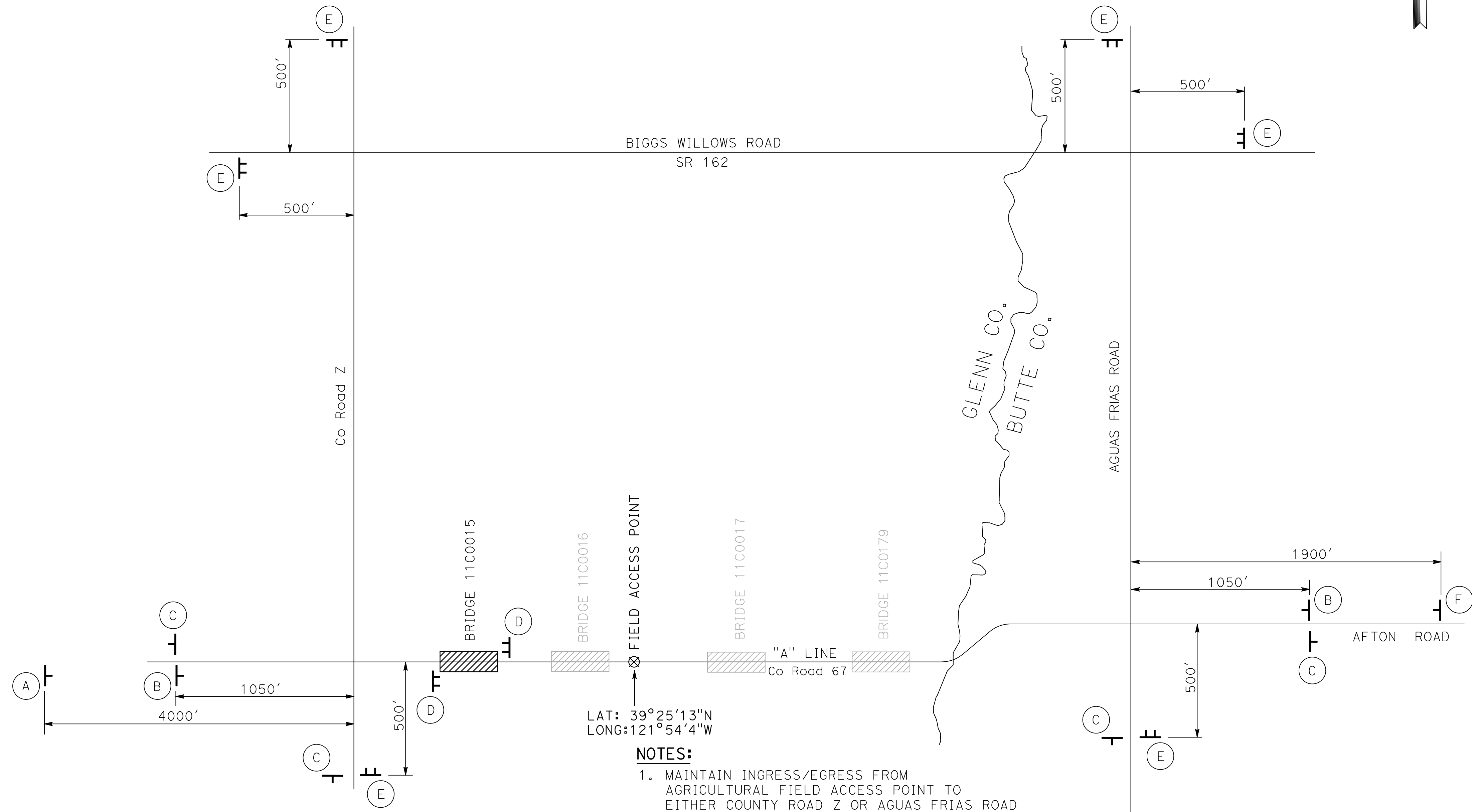
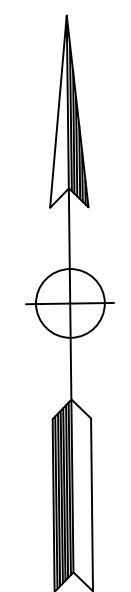
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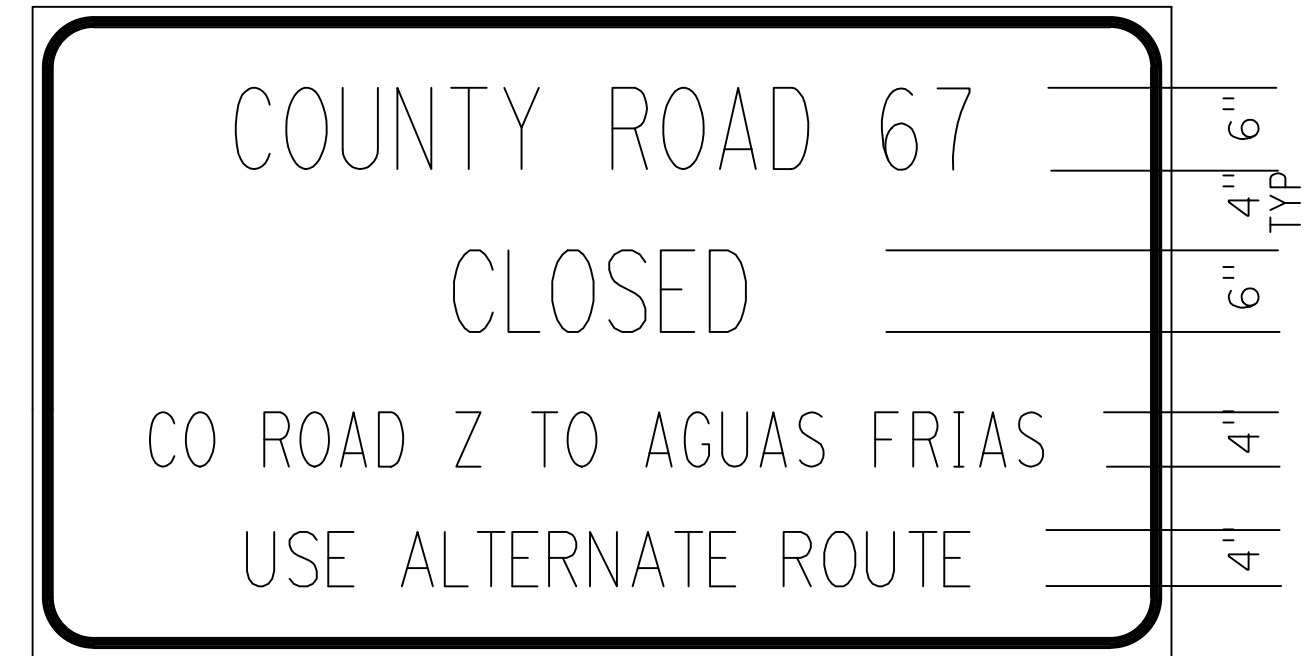
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988



SIGN D 6" OVERLAY PANEL WITH 4" LETTERING

NOTES:

- LETTERS - SERIES C.
- LETTERS AND BORDERS - BLACK ON ORANGE BACKGROUND.
- SIGN TO BE INSTALLED 2 WEEKS PRIOR TO CONSTRUCTION.



SIGN E

NOTES:

- LETTERS - SERIES C.
- LETTERS AND BORDERS - BLACK ON ORANGE BACKGROUND.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	POST		No. of SIGNS
				No.	SIZE	
A	R11-3b	30" X 60"	BRIDGE OUT 2 MILES LOCAL TRAFFIC ONLY	1	4" X 4"	1
B	C19(CA)	48" X 48"	ROAD CLOSED AHEAD	1	4" X 4"	2
C	G20-2	36" X 18"	END ROAD WORK	1	4" X 4"	4
D	SPECIAL	84" X 42"	ROAD CLOSED INFORMATION	2	6" X 6"	2
E	SPECIAL	84" X 40"	ROAD CLOSED INFORMATION	2	6" X 6"	5
F	R11-3b	30" X 60"	BRIDGE OUT 3 MILES LOCAL TRAFFIC ONLY	1	4" X 4"	1

NOTES:

- MAINTAIN INGRESS/EGRESS FROM AGRICULTURAL FIELD ACCESS POINT TO EITHER COUNTY ROAD Z OR AGUAS FRIAS ROAD AT ALL TIMES.
- COORDINATE CONSTRUCTION PHASING OF ALL PROJECTS TO MAINTAIN ACCESS OR PROVIDE ALTERNATIVE MEANS OF INGRESS/EGRESS.
- IF MULTIPLE BRIDGES ARE UNDER CONSTRUCTION SIMULTANEOUSLY, THE CONTRACTOR SHALL COORDINATE SIGN PLACEMENT WITH THE ENGINEER.

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS
NO SCALE CS-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	11	35

05-31-23
 REGISTERED CIVIL ENGINEER DATE
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

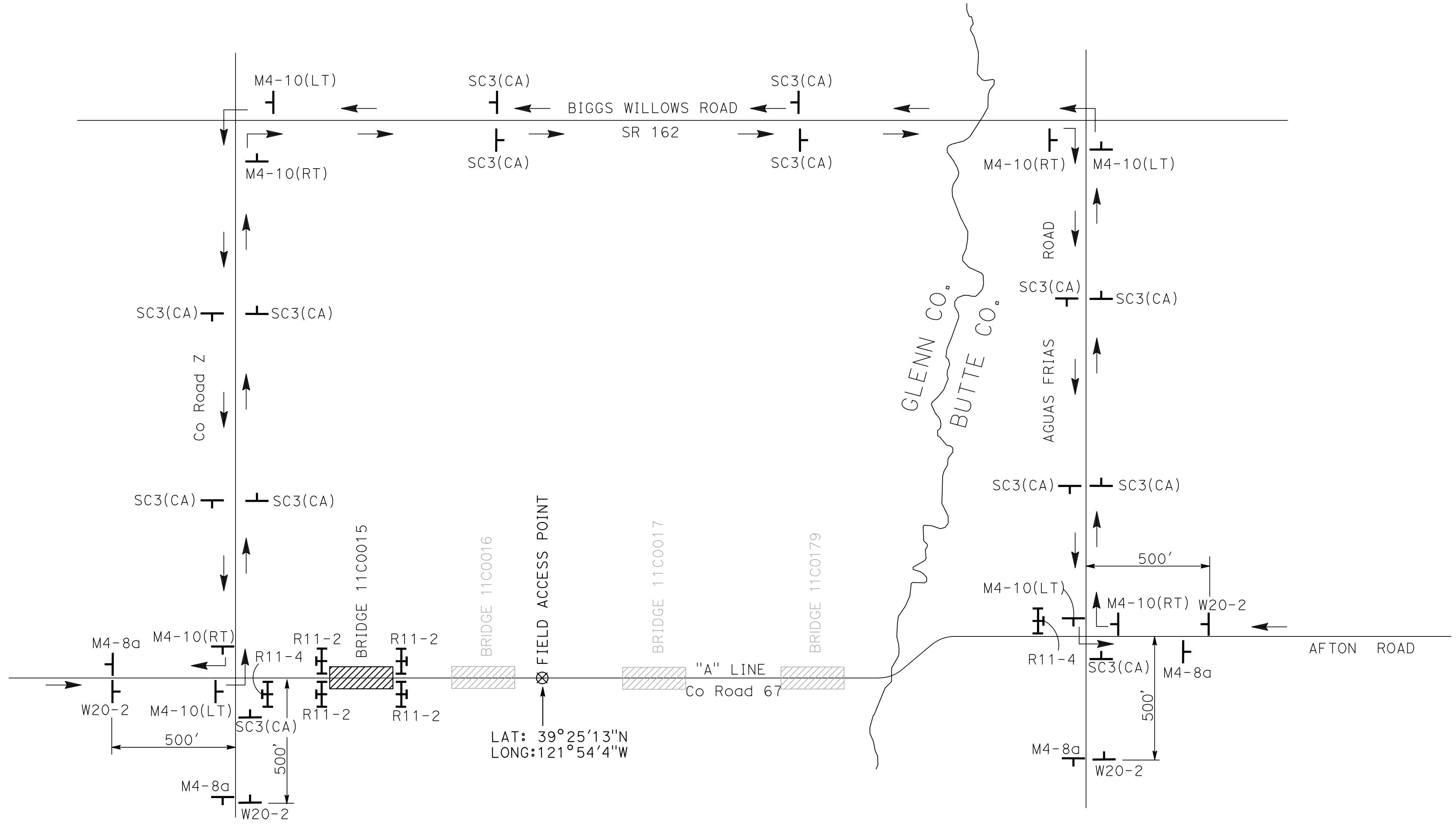
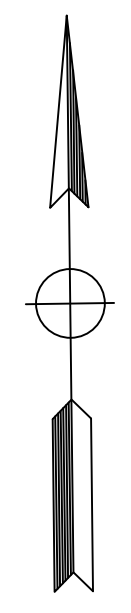
COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

GENERAL NOTES:

- SIGNS SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
- SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- SIGNS WILL REMAIN IN PLACE FOR DURATION OF PROJECT.
- CONTRACTOR SHALL OBTAIN CALTRANS ENCROACHMENT PERMIT FOR SIGNS ON SR 162.
- CONTRACTOR SHALL OBTAIN BUTTE COUNTY ENCROACHMENT PERMIT FOR SIGNS ON AGUAS FRIAS ROAD, AFTON ROAD, AND COUNTY ROAD 67 EAST OF THE GLENN/BUTTE COUNTY LINE.
- MAINTAIN INGRESS/EGRESS FROM AGRICULTURAL FIELD ACCESS POINT TO EITHER COUNTY ROAD Z OR AGUAS FRIAS ROAD AT ALL TIMES. COORDINATE CONSTRUCTION PHASING OF ALL PROJECTS TO MAINTAIN ACCESS OR PROVIDE ALTERNATIVE MEANS OF INGRESS/EGRESS. IF MULTIPLE BRIDGES ARE UNDER CONSTRUCTION SIMULTANEOUSLY, THE CONTRACTOR SHALL COORDINATE SIGN PLACEMENT WITH THE ENGINEER.

LEGEND

- TEMPORARY SIGN AND POST
- TYPE III BARRICADE WITH SIGN
L=8.00', WITH THREE WARNING LIGHTS (TYPE B)
- CONSTRUCTION AREA
- DIRECTION OF TRAVEL
- AGRICULTURAL FIELD ACCESS POINT
LAT: 39°25'13"N, LONG: 121°54'4"W



DETOUR SIGNS

SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. of SIGNS
M4-10(RT)	18" X 48"	DETOUR (RIGHT)	4
M4-10(LT)	18" X 48"	DETOUR (LEFT)	4
SC-3(CA)	18" X 48"	DETOUR (STRAIGHT)	14
R11-4	30" X 48"	ROAD CLOSED TO THROUGH TRAFFIC	2
R11-2	30" X 48"	ROAD CLOSED	4
M4-8a	18" X 24"	END DETOUR	4
W20-2	36" X 36"	DETOUR AHEAD	4

DETOUR PLAN
NO SCALE
DE-1

APPROVED FOR DETOUR SIGN WORK ONLY



USERNAME => KEVIN
DGN FILE => 03-101782md001

LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 4:24:21 PM

GENERAL NOTES:

- ALL TRAFFIC LINES SHALL CONFORM TO THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
- LANE WIDTH SHALL BE MEASURED BETWEEN THE CENTERLINES OF EACH SINGLE STRIPE.
- ALL SIGNING TO BE INSTALLED SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).

LEGEND

- Prop SIGN AND POST
- Exist SIGN AND POST TO BE REMOVED
- TRAFFIC STRIPE DETAIL

PAVEMENT DELINEATION QUANTITIES

SHEET No.	LOCATION/STATIONING	DIRECTION	DETAIL No.	THERMOPLASTIC TRAFFIC STRIPE					COMMENTS
				4" WHITE SOLID	4" WHITE BROKEN	4" YELLOW BROKEN	8" WHITE SOLID	8" WHITE BROKEN	
				LF	LF	LF	LF	LF	
PD-1	9+50.00 TO 21+30.00	EB	27B	1180.0					
PD-1	9+50.00 TO 21+30.00	WB	27B	1180.0					
PD-1	9+50.00 TO 21+30.00	WB	5			1180.0			
TOTAL				2360.0		1180.0			

ROADSIDE SIGN QUANTITIES

SIGN CODE	PANEL SIZE	REMOVE ROADSIDE SIGN (EA)	ROADSIDE SIGN	REMARKS
			ONE POST EA	
OM3-L	12" x 36"	2	2	8'-0" LONG METAL POST PER S+d PLAN A73B
OM3-R	12" x 36"	2	2	8'-0" LONG METAL POST PER S+d PLAN A73B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	12	35

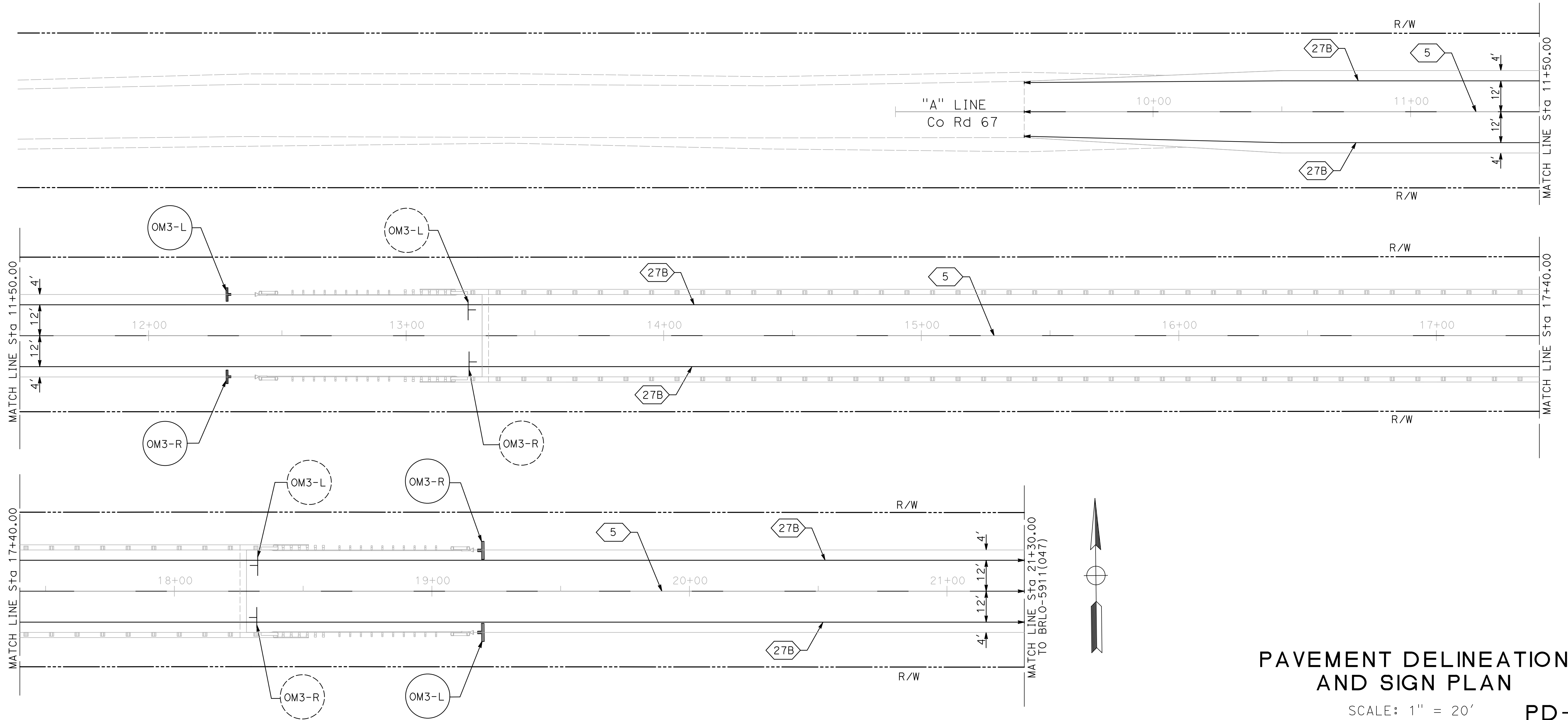
05-31-23
 REGISTERED CIVIL ENGINEER DATE

May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

PROJECT ENGINEER: GARY M. GORDON
 CALCULATED/DESIGNED BY: GARY M. GORDON
 CHECKED BY: R. UHLMANN
 REVISED BY: B. BURCH
 DATE REVISED: 05-31-23
 KCG



THIS PLAN IS ACCURATE FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

PAVEMENT DELINEATION AND SIGN PLAN
 SCALE: 1" = 20' PD-1

USERNAME => KEVIN
 DGN FILE => 03-101782nd001

RELATIVE BORDER SCALE IS IN INCHES

LAST REVISION: DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 4:32:32 PM

PROJECT ENGINEER: GARY M. GORDON
 CALCULATED/DESIGNED BY: GARY M. GORDON
 CHECKED BY: G. GORDON
 REVISED BY: R. UHLMANN
 DATE REVISED: 05-31-23
 KCG: 05-31-23

EARTHWORK QUANTITIES

SHEET No.	STATION	ROADWAY EXCAVATION	EMBANKMENT (N)		IMPORTED BORROW	GEOSYNTHETIC REINFORCED EMBANKMENT
		CY	CY	CY		
L-1	"A" 9+50.00 TO "A" 13+35.55	1,095	42	42		
L-1	"A" 12+00.00 L+ TO "A" 13+23.57 L+					93.0
L-2 TO L-3	"A" 18+23.37 TO "A" 21+30.00	947	11	11		
TOTAL		2,042	53	53		93.0

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

TEMPORARY WATER POLLUTION CONTROL AND EROSION CONTROL QUANTITIES

SHEET No.	STATION	TEMPORARY FIBER ROLLS	TEMPORARY CONCRETE WASHOUT FACILITY	EROSION CONTROL (HYDROSEED)
		LF	EA	SQFT
WPC-1 TO WPC-3		TO BE DETERMINED		
WPC-1	"A" 9+50.00 L+ TO "A" 13+35.55 L+	775		1,975
WPC-1	"A" 9+50.00 R+ TO "A" 13+35.55 R+	771		1,716
WPC-2 TO WPC-3	"A" 18+23.37 L+ TO "A" 21+30.00 L+	628		582
WPC-2 TO WPC-3	"A" 18+23.37 R+ TO "A" 21+30.00 R+	638		1,414
TOTAL		2,812	1	5,687

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	13	35

05-31-23
 REGISTERED CIVIL ENGINEER DATE

May 31, 2023
 PLANS APPROVAL DATE

GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

SAFETY EDGE

SHEET No.	STATION	DIRECTION	TOTAL THICKNESS OF SAFETY EDGE (N)	LENGTH SAFETY EDGE (N)	HOT MIX ASPHALT (TYPE A) (N)
			FT	LF	TON
L-1	"A" 9+50.00 L+ TO "A" 12+41.30 L+	WB	0.52	291.30	4.9
L-1	"A" 9+50.00 R+ TO "A" 12+41.30 R+	EB	0.52	291.30	4.9
L-2 TO L-3	"A" 19+16.20 L+ TO "A" 21+30.00 L+	WB	0.52	213.80	3.6
L-2 TO L-3	"A" 19+16.20 R+ TO "A" 21+30.00 R+	EB	0.52	213.80	3.6
SUBTOTAL					17.0

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

PAVEMENT STRUCTURE QUANTITIES

SHEET No.	STATION	REMOVE ASPHALT CONCRETE PAVEMENT	HOT MIX ASPHALT (TYPE A)	CLASS 2 AGGREGATE BASE	TACK COAT
		SQFT	TON	CY	TON
L-1	"A" 9+50.00 TO "A" 13+29.50	7,809	438.7	1,224	0.81
L-2 TO L-3	"A" 18+28.00 TO "A" 21+30.00	5,870	364.3	1,003	0.67
L-1 TO L-3	SAFETY EDGE		17.0		
TOTAL		13,679	820.0	2,227	1.48

MIDWEST GUARDRAIL SYSTEM

SHEET No.	STATION	TRANSITION RAILING (TYPE WB-31)	ALTERNATIVE IN-LINE TERMINAL SYSTEM
		EA	EA
L-1	"A" 12+41.30 L+		
L-1	"A" 12+41.30 R+		
L-1	"A" 12+41.30 L+ TO "A" 12+93.37 L+		1
L-1	"A" 12+41.30 R+ TO "A" 12+93.37 R+		1
L-1	"A" 12+93.37 L+ TO "A" 13+18.37 L+	1	
L-1	"A" 12+93.37 R+ TO "A" 13+18.37 R+	1	
L-2	"A" 18+39.13 L+ TO "A" 18+64.13 L+	1	
L-2	"A" 18+39.13 R+ TO "A" 18+64.13 R+	1	
L-2 TO L-3	"A" 18+64.13 L+ TO "A" 19+16.20 L+		1
L-2 TO L-3	"A" 18+64.13 R+ TO "A" 19+16.20 R+		1
TOTAL		4	4

SUMMARY OF QUANTITIES

Q-1



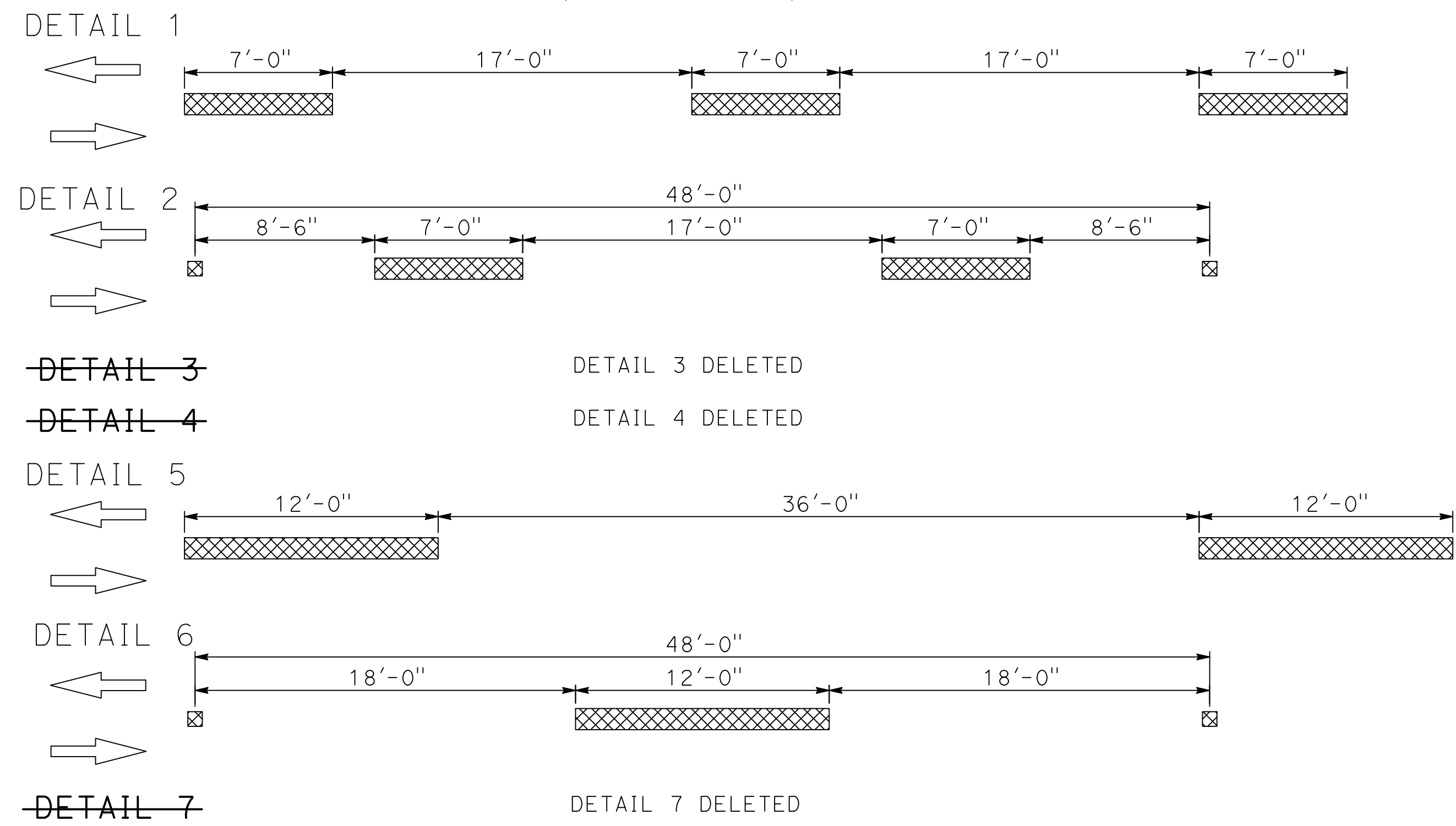
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	14	35

05-31-23
DATE
REGISTERED CIVIL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CAL FORM #

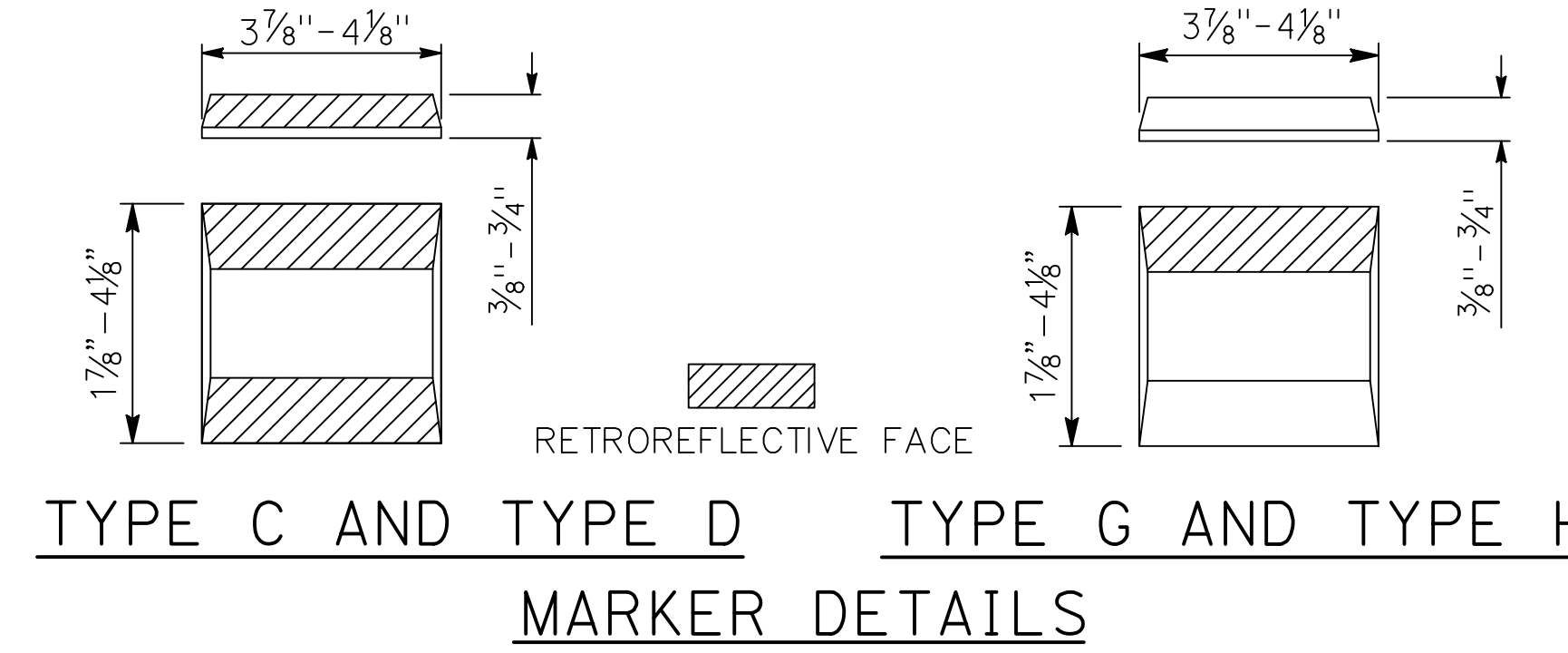
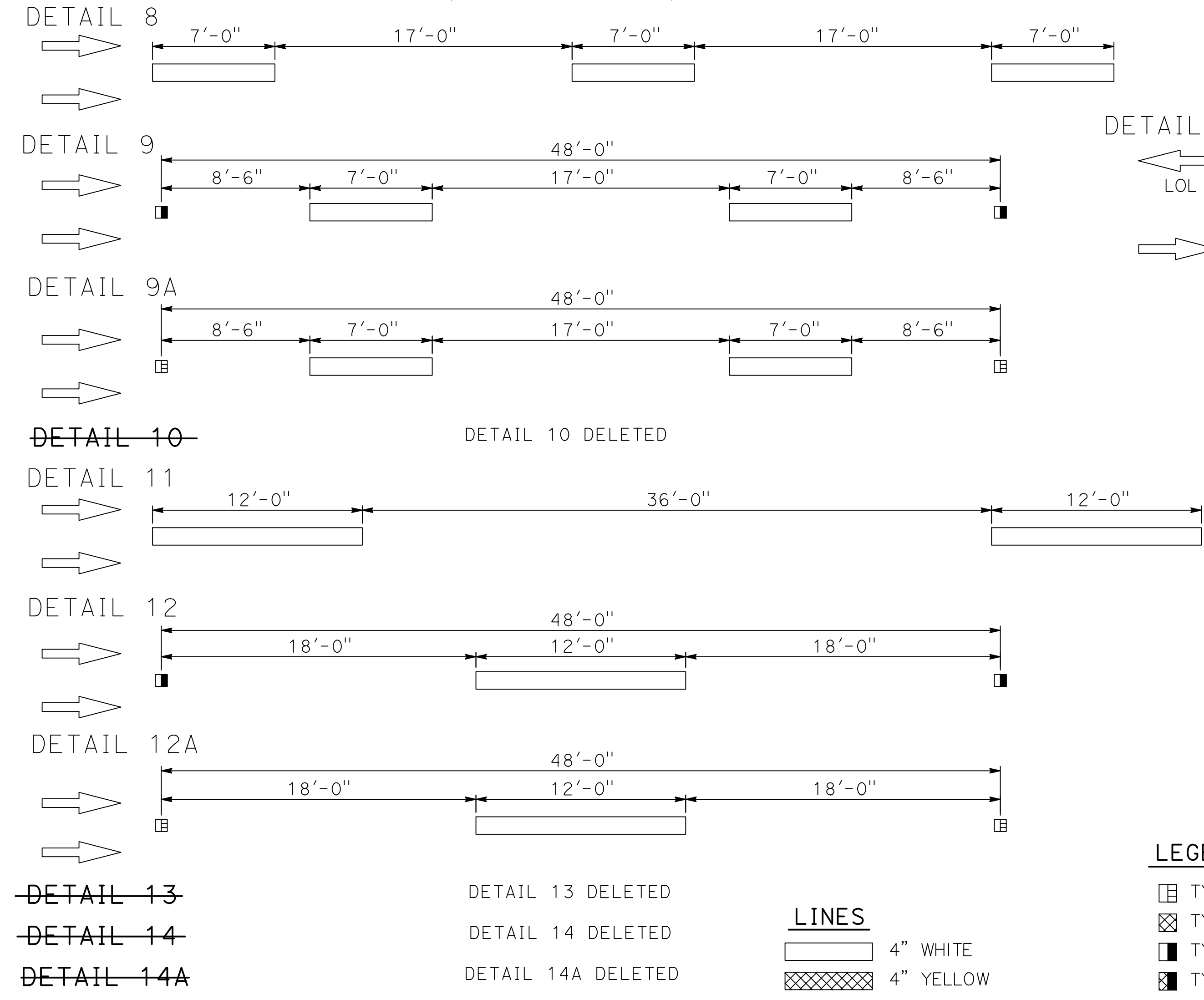
May 31, 2023
PLANS APPROVAL DATE

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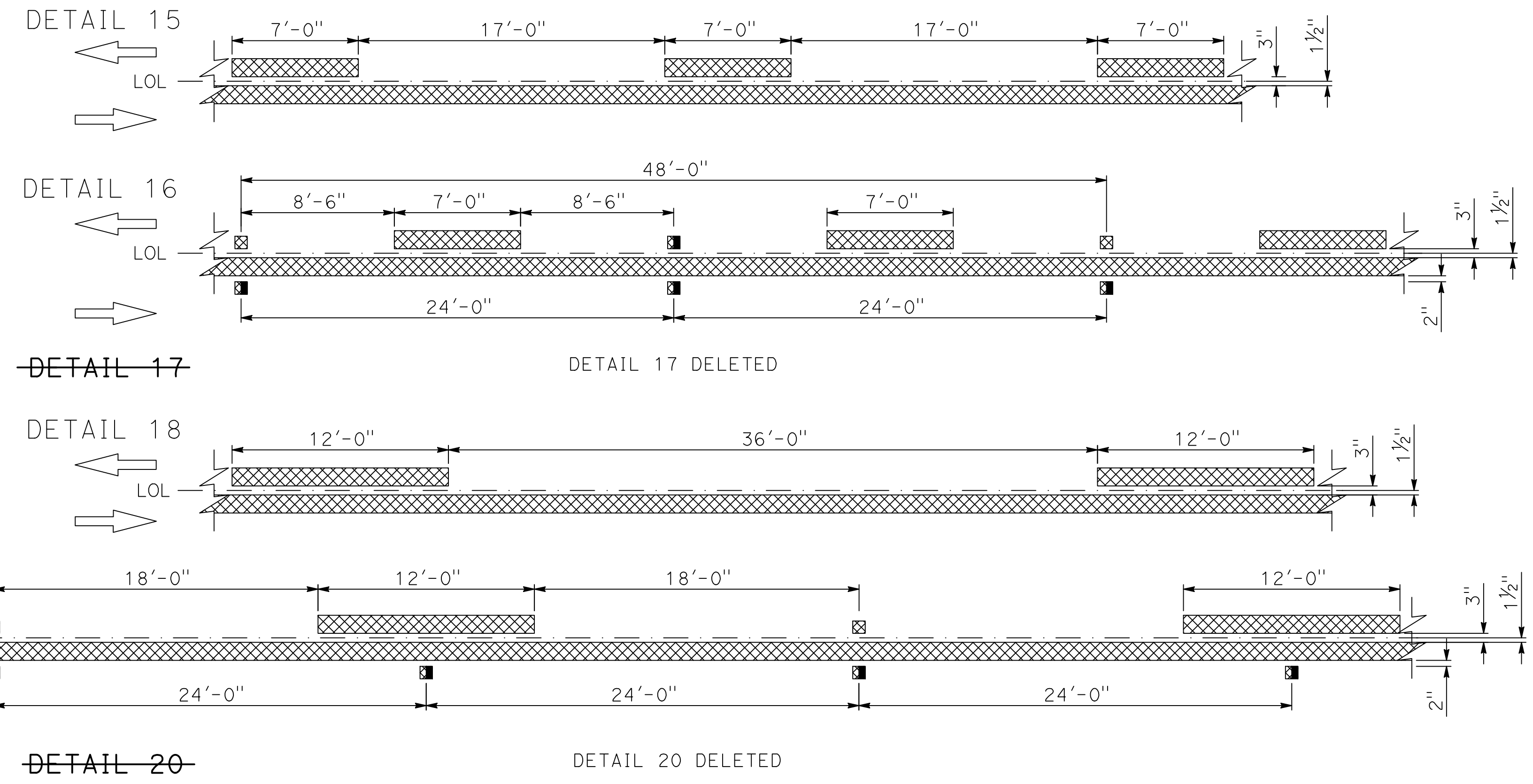
CENTERLINES
(2 LANE HIGHWAYS)



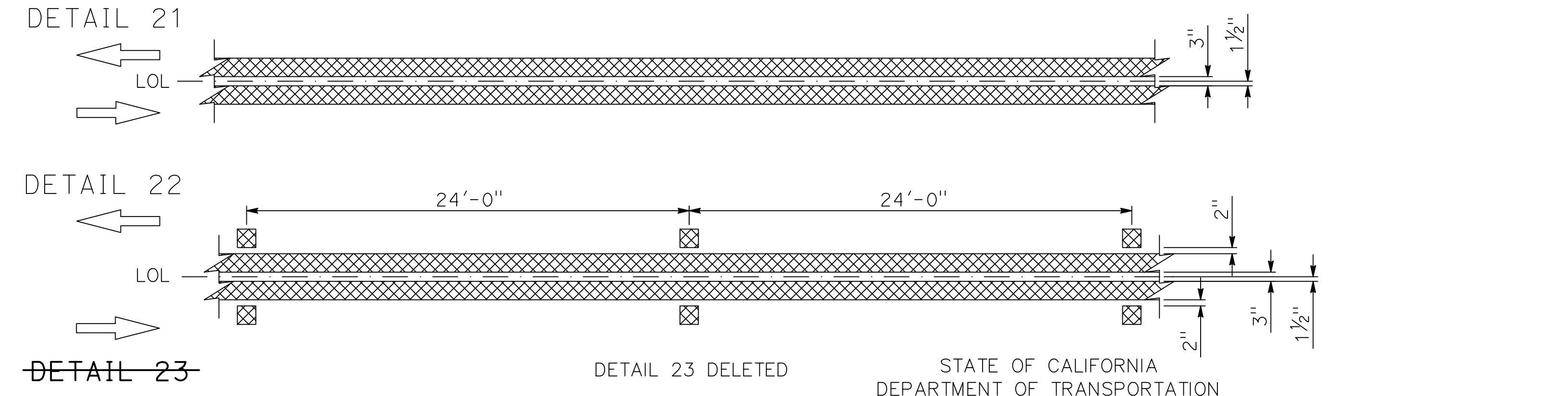
LANE LINES
(MULTILANE HIGHWAYS)



NO PASSING ZONES-ONE DIRECTION



NO PASSING ZONES-TWO DIRECTION



LEGEND

- ☐ TYPE C RED-CLEAR RETROREFLECTIVE MARKER
- ▣ TYPE D TWO-WAY YELLOW RETROREFLECTIVE MARKER
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE MARKER
- ▣ TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER

LINES

- ▭ 4" WHITE
- ▣ 4" YELLOW

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKERS AND TRAFFIC LINES
TYPICAL DETAILS

NO SCALE

RSP A20A DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A20A
DATED AUGUST 1, 2022 - PAGE 12 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A20A MOD

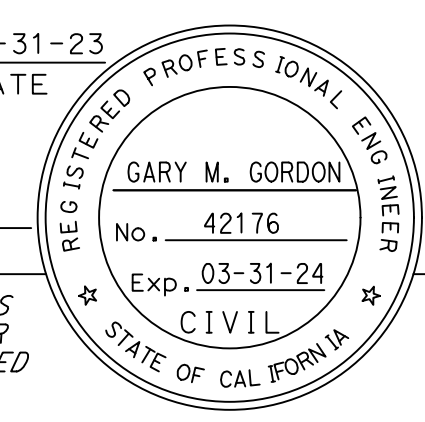
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DGN FILE = 03-101782-rspd20a

2022 REVISED STANDARD PLAN RSP A20A

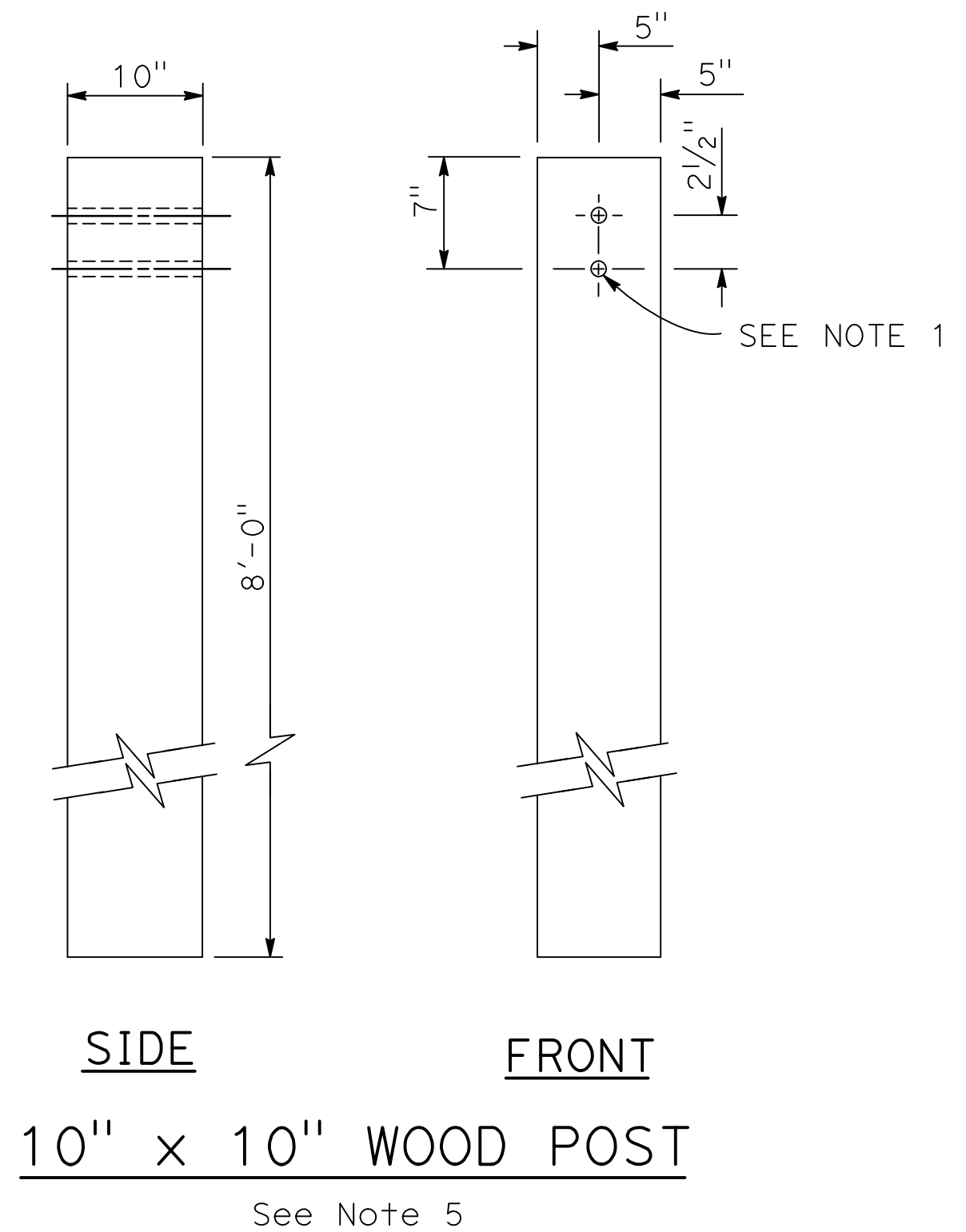
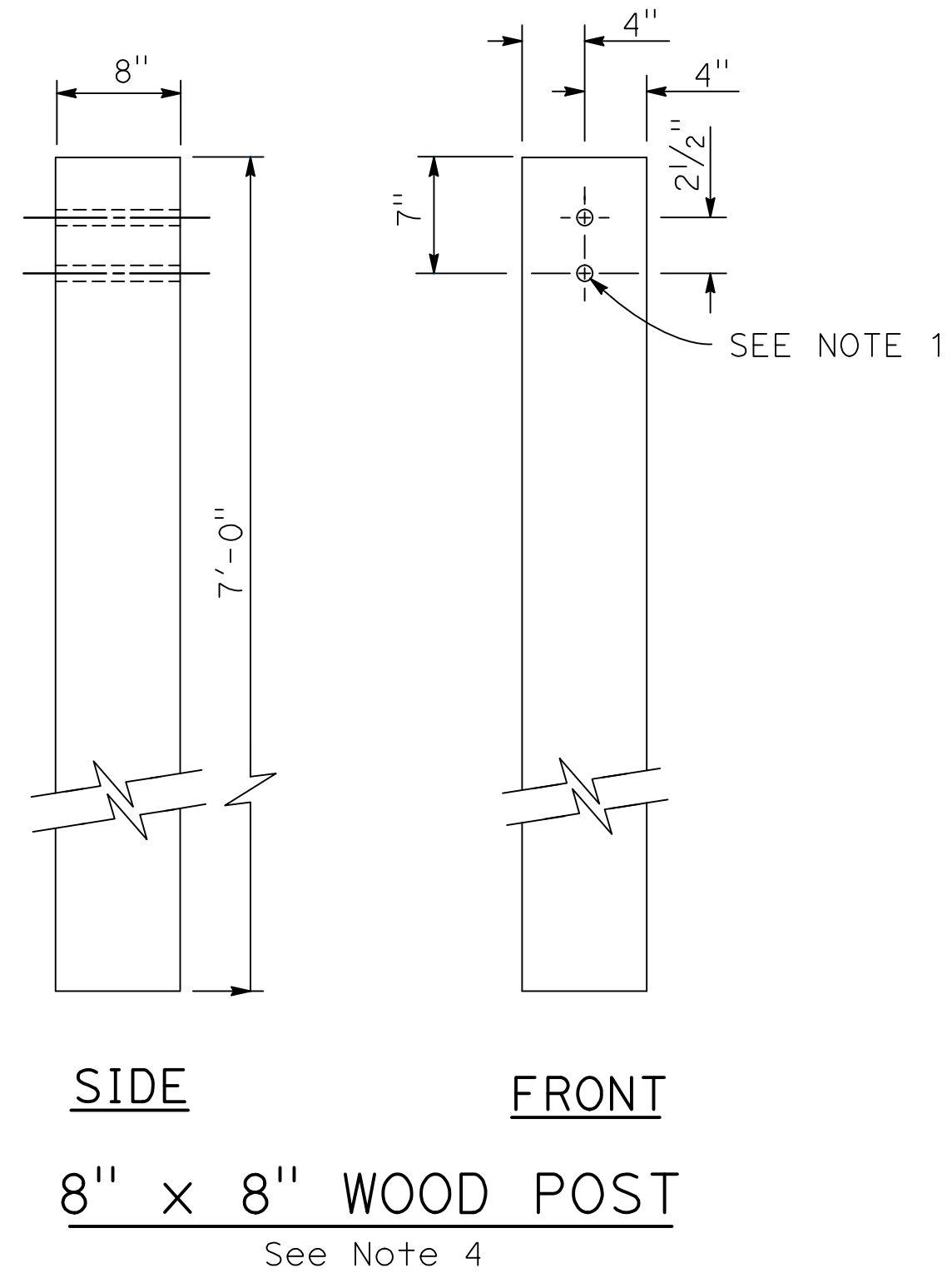
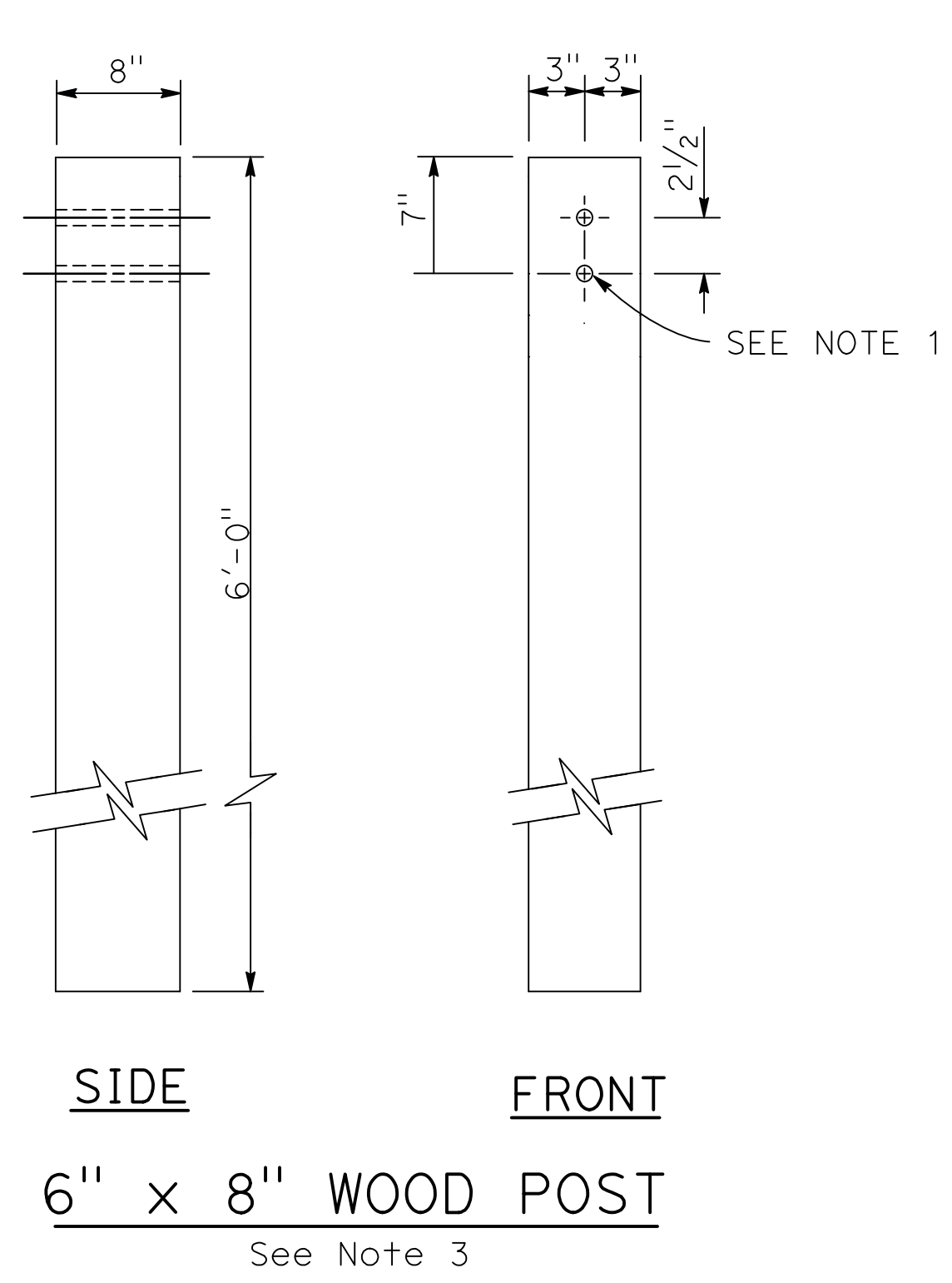
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TIME PLOTTED = 8:19:33 AM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	15	35

<i>Gary M. Gordon</i> REGISTERED CIVIL ENGINEER	05-31-23 DATE
May 31, 2023 PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	

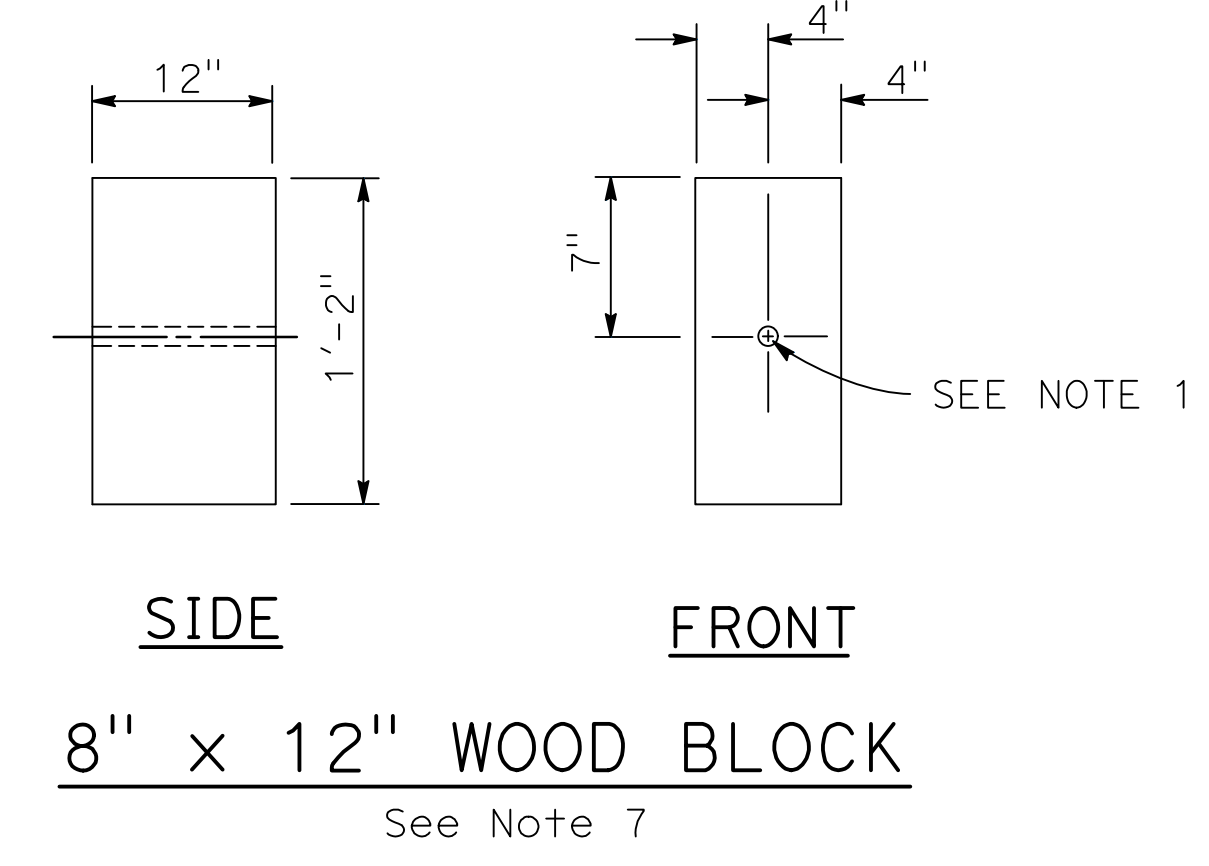
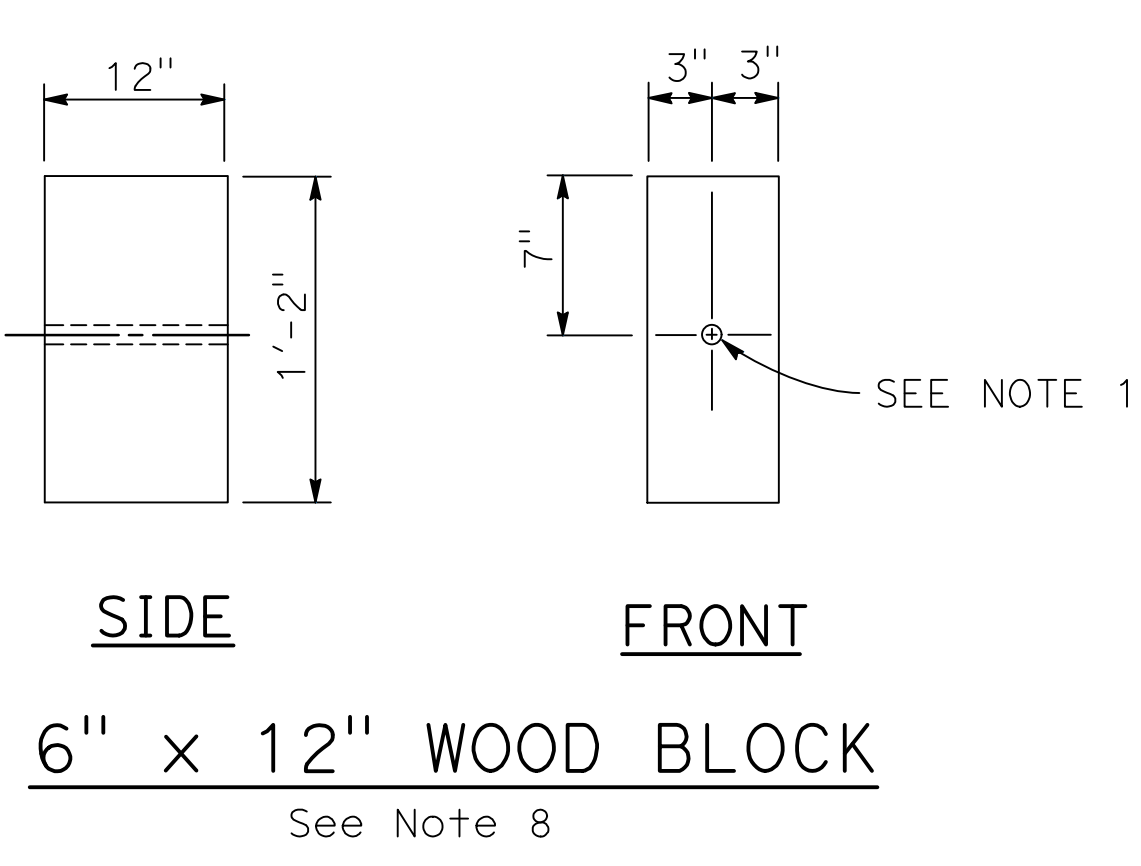
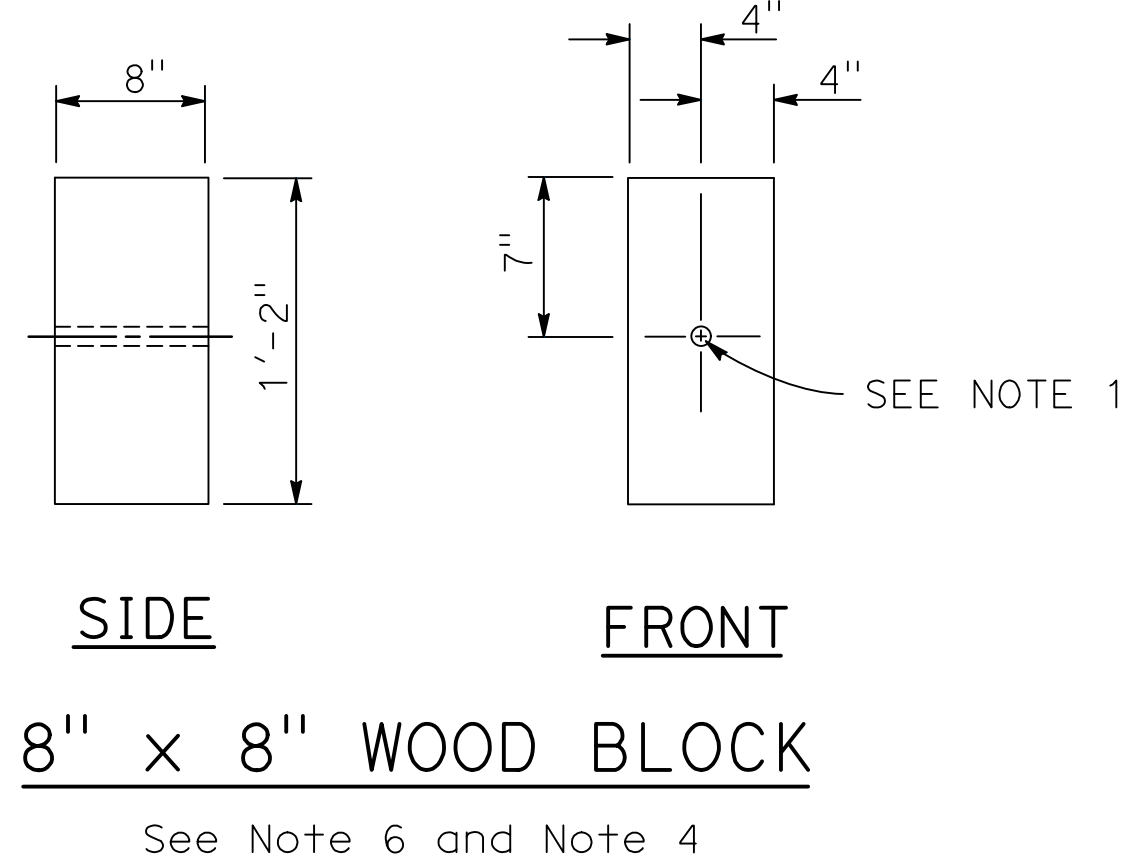
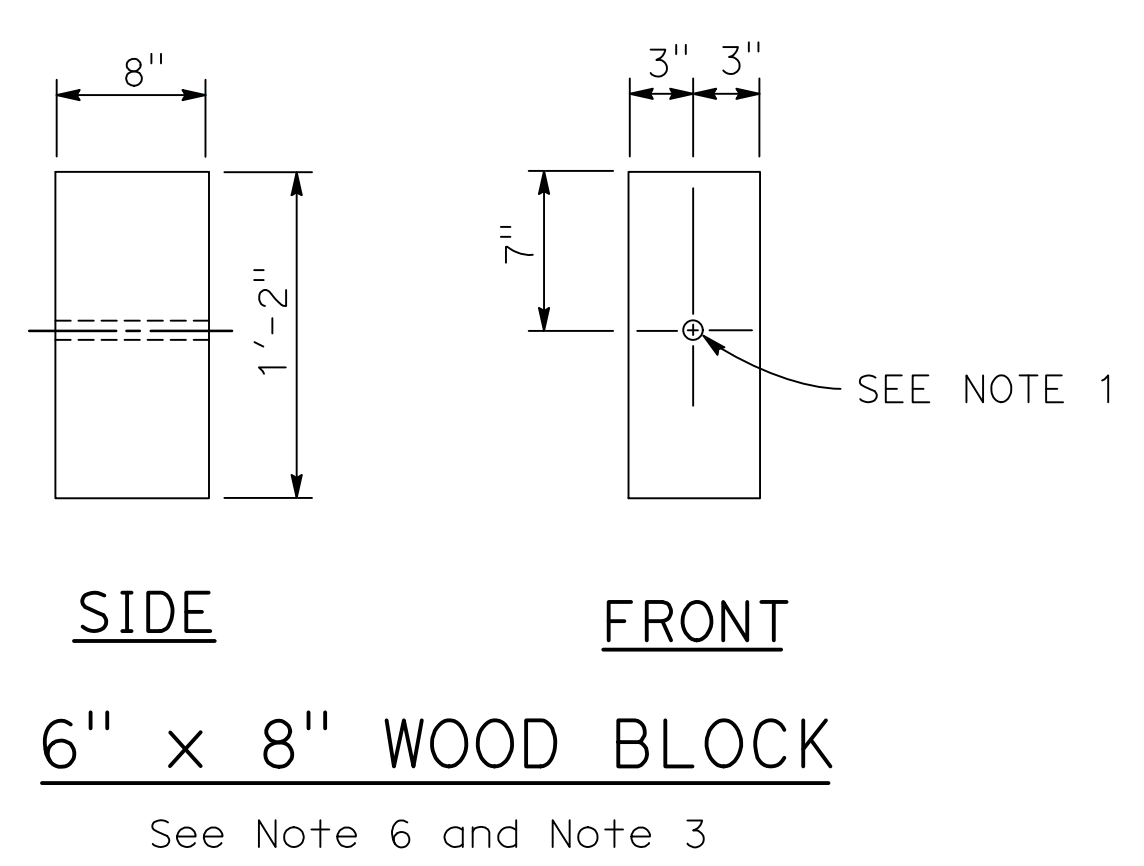


TO ACCOMPANY PLANS DATED 05-31-23



NOTES:

1. All holes in wood posts and blocks shall be 3/4" Dia ± 1/16".
2. Dimensions shown for wood post are nominal.
3. This post and block combination used for standard line post sections of MGS.
4. This post and 8" x 12" block combination used for line post sections of MGS on narrow roadways.
5. This post and 8" x 12" block combination is typically used where strengthened line post sections of MGS are warranted to shield fixed objects.
6. See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" wood blocks.
7. To be used with 8" x 8" x 7'-0" wood post if installed with 6" height dike.
8. To be used with 6" x 8" x 6'-0" wood post if installed with 6" height dike.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
WOOD POST AND
WOOD BLOCK DETAILS**

NO SCALE

RSP A77N1 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77N1
DATED AUGUST 1, 2022 - PAGE 67 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP N771

2022 REVISED STANDARD PLAN RSP A77N1

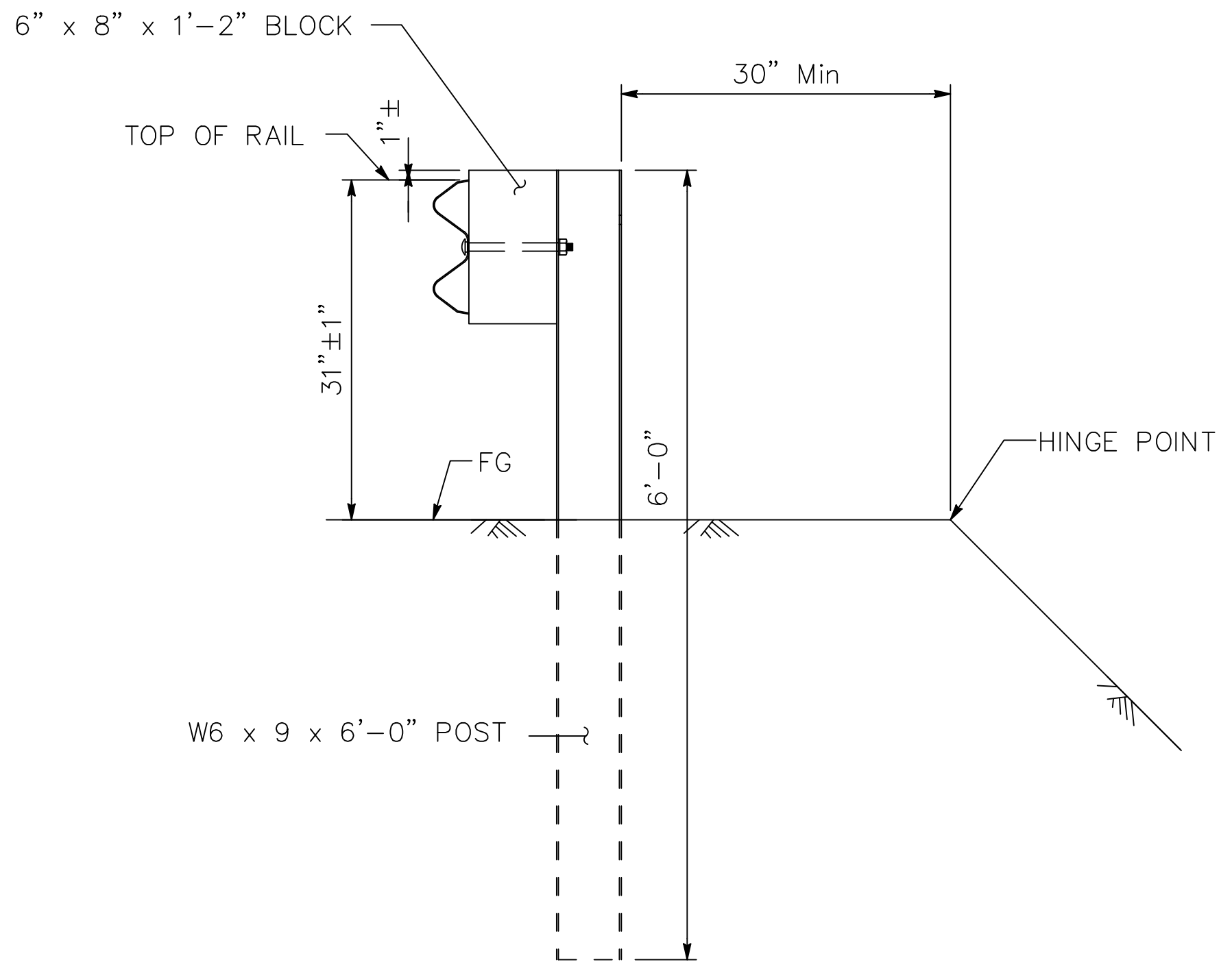
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	16	35

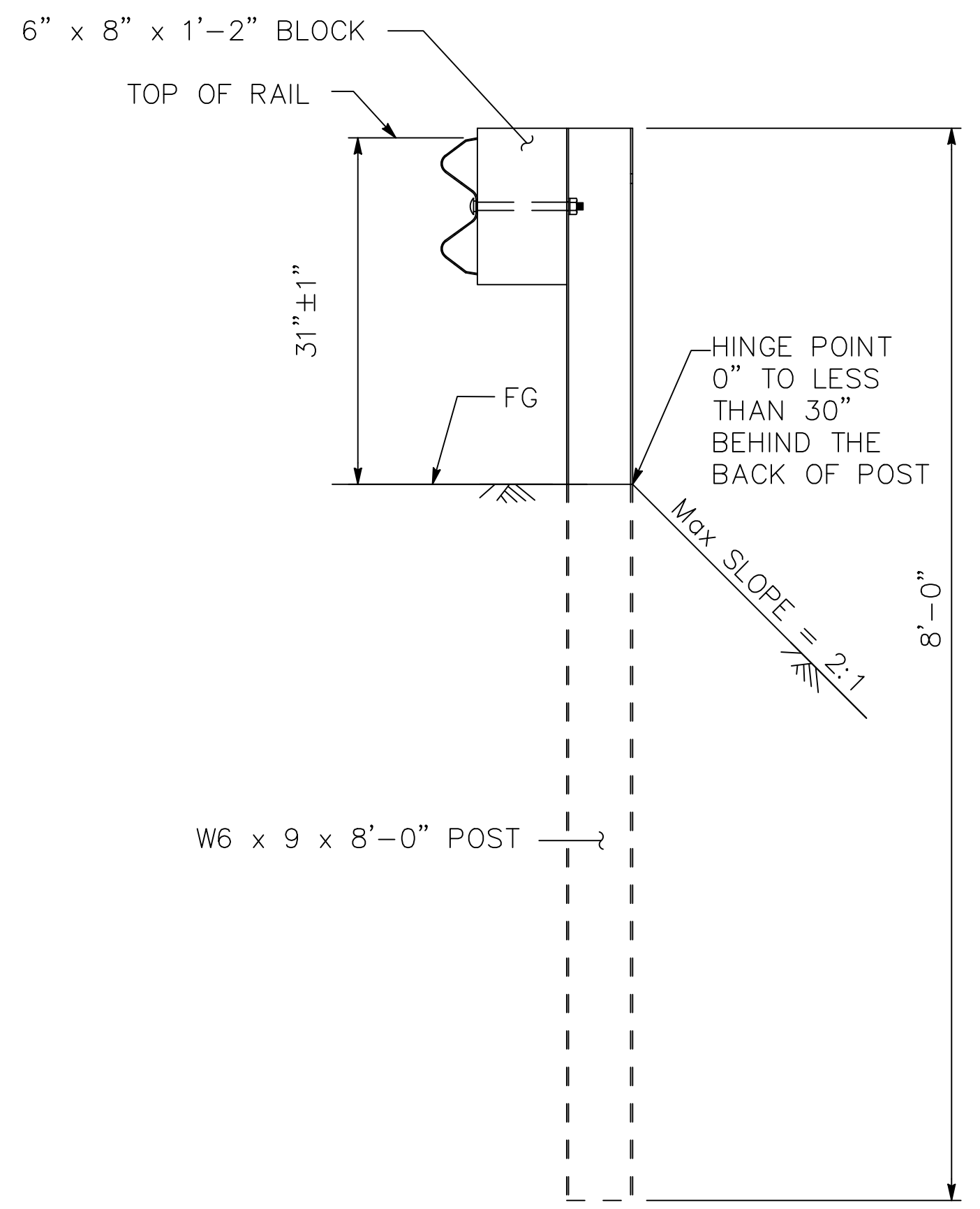
<i>Gary M. Gordon</i> REGISTERED CIVIL ENGINEER	05-31-23 DATE
May 31, 2023 PLANS APPROVAL DATE	

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	REGISTERED PROFESSIONAL ENGINEER GARY M. GORDON No. 42176 Exp. 03-31-24 CIVIL STATE OF CALIFORNIA
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TO ACCOMPANY PLANS DATED 05-31-23

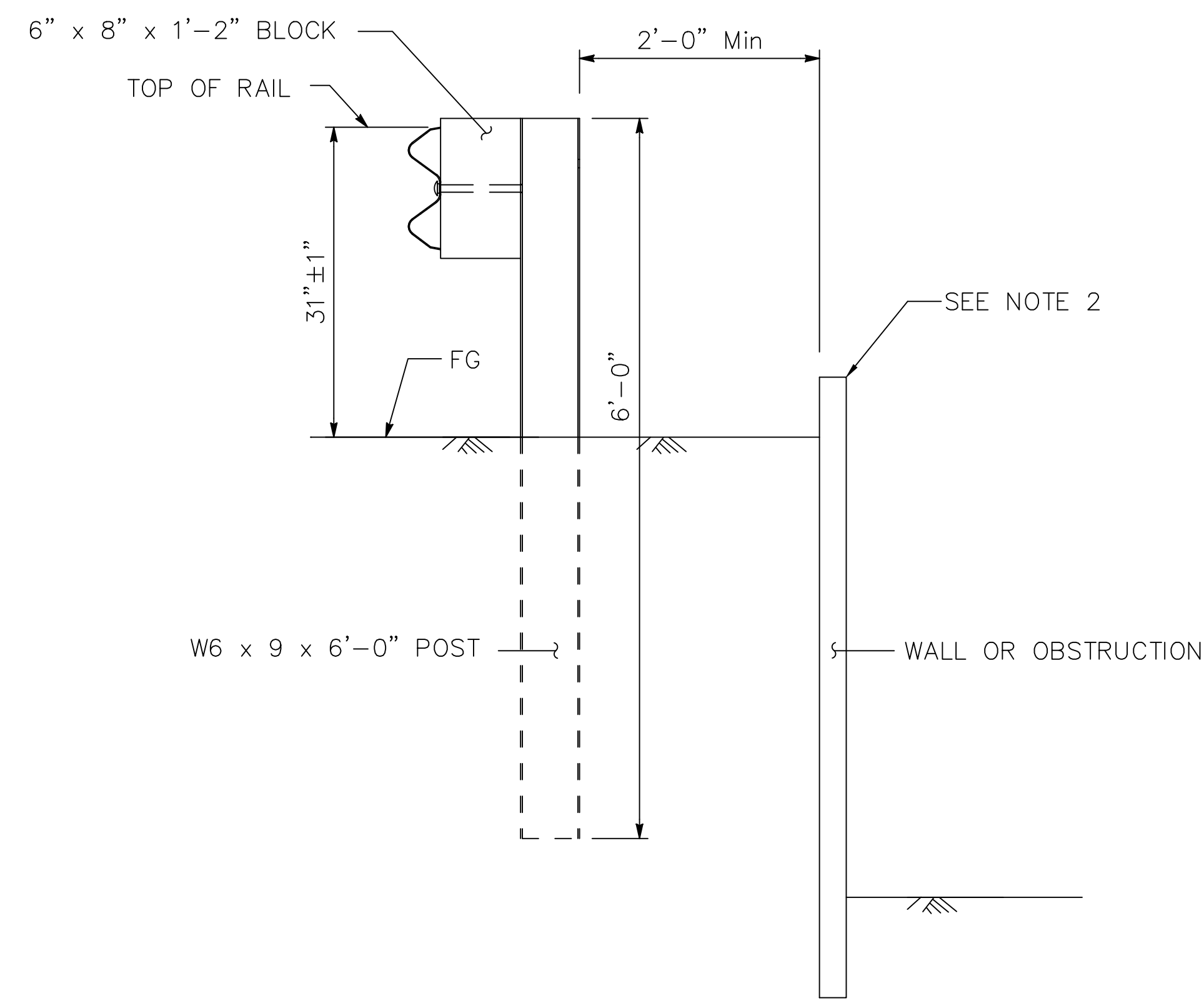


DETAIL A
TYPICAL ROADWAY INSTALLATION
See Note 1

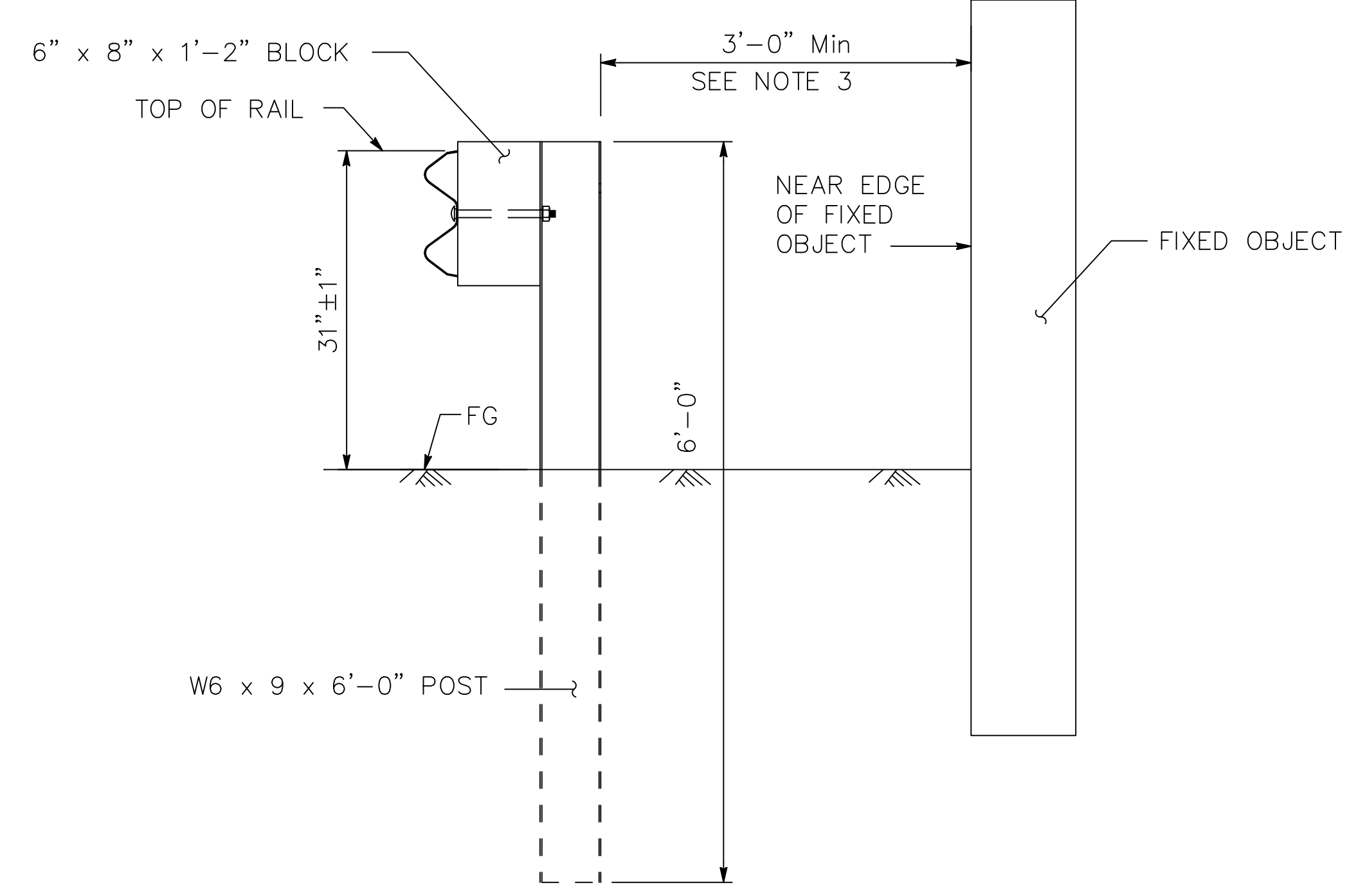


DETAIL B
NARROW ROADWAY INSTALLATION
See Note 1

POST EMBEDMENT



DETAIL C
AT OR BELOW GRADE



DETAIL D
ABOVE GRADE

INSTALLATION AT WALLS OR OBSTRUCTIONS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
MIDWEST GUARDRAIL SYSTEM
TYPICAL LINE POST EMBEDMENT
AND HINGE POINT OFFSET DETAILS

NO SCALE

RSP A77N3 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77N3
DATED AUGUST 1, 2022 - PAGE 69 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77N3

2022 REVISED STANDARD PLAN RSP A77N3

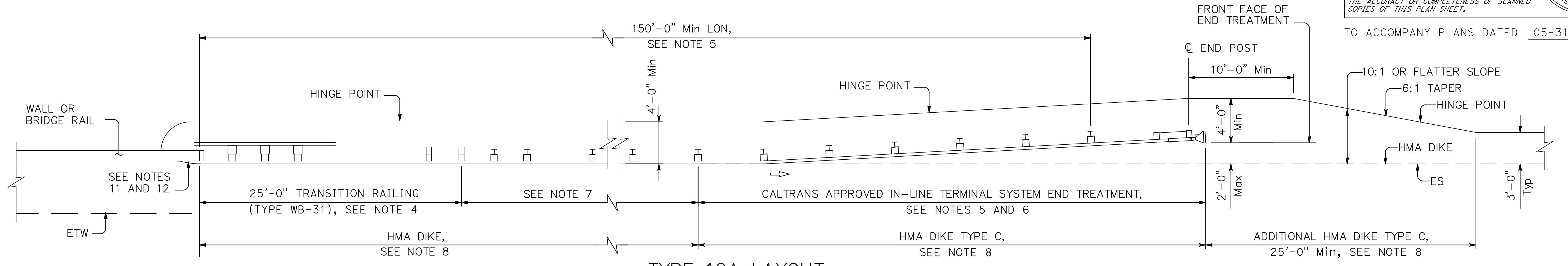
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TIME PLOTTED = 9:09:58 AM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	17	35

<i>Gary M. Gordon</i> REGISTERED CIVIL ENGINEER	05-31-23 DATE
May 31, 2023 PLANS APPROVAL DATE	

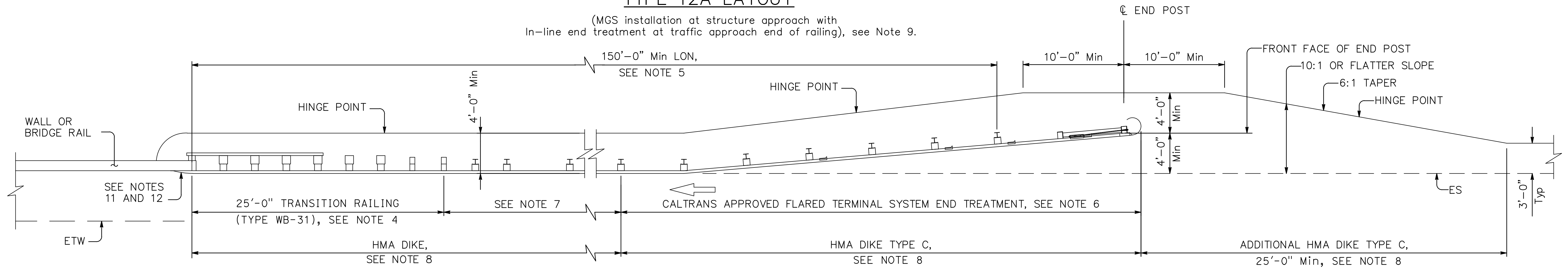
GARY M. GORDON No. 42176 Exp. 03-31-24 CIVIL STATE OF CALIFORNIA
--

TO ACCOMPANY PLANS DATED 05-31-23



TYPE 12A LAYOUT

(MGS installation at structure approach with
In-line end treatment at traffic approach end of railing), see Note 9.



TYPE 12B LAYOUT

(MGS installation at structure approach with
Flared end treatment at traffic approach end of railing), see Note 9.

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77L1, A77L2, A77M1, A77N2 and Revised Standard Plan RSP A77N1.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6'-0" long Steel W6 x 9 or W6 x 8.5 with blocks, or 6" x 8" x 6'-0" wood with blocks.
- For Transition Railing (Type WB-31) details for Types 12A and 12B Layouts, see Standard Plan A77U4.
- A minimum of 150'-0" of MGS is needed to develop Length of Need (LON).
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes or other fixed objects), it may be advisable to construct additional guard railing (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatment.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12A or Type 12B Layouts are typically used at the approach end of a structure, to the right or left on two-lane conventional highway where the roadbed width across the structure is 40 feet or less.
- See Revised Standard Plan RSP A77Q3 for typical layout used left of approaching traffic at the ends of each structure on multilane freeways or expressways with separate adjacent or parallel bridges.
- For additional details of typical connections to bridge rail, see Connection Detail AA on Standard Plans A77U1 and A77U2 and Connection Detail FF on Standard Plans A77V1 and A77V2.
- For additional details of a typical connection to walls or abutments, see Revised Standard Plans RSP A77U3A and RSP A77U3B.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE APPROACH**

NO SCALE
RSP A77Q1 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77Q1
DATED AUGUST 1, 2022 - PAGE 92 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77Q1

2022 REVISED STANDARD PLAN RSP A77Q1

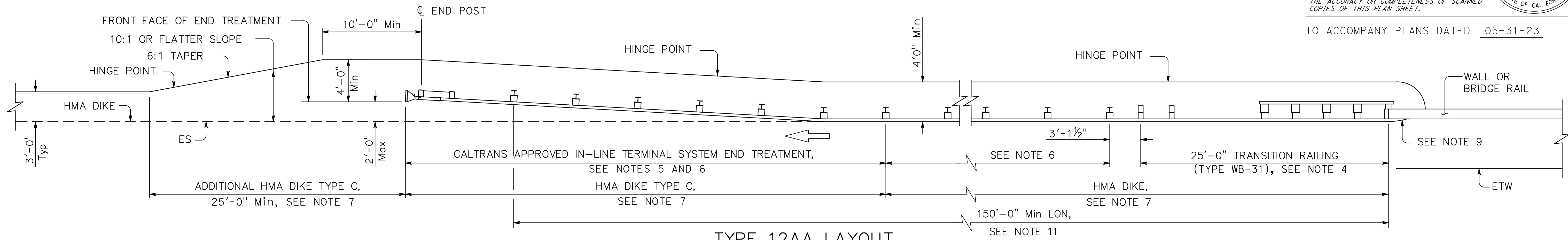
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TIME PLOTTED = 9:23:08 AM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	18	35

REGISTERED CIVIL ENGINEER DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CAL FORM #

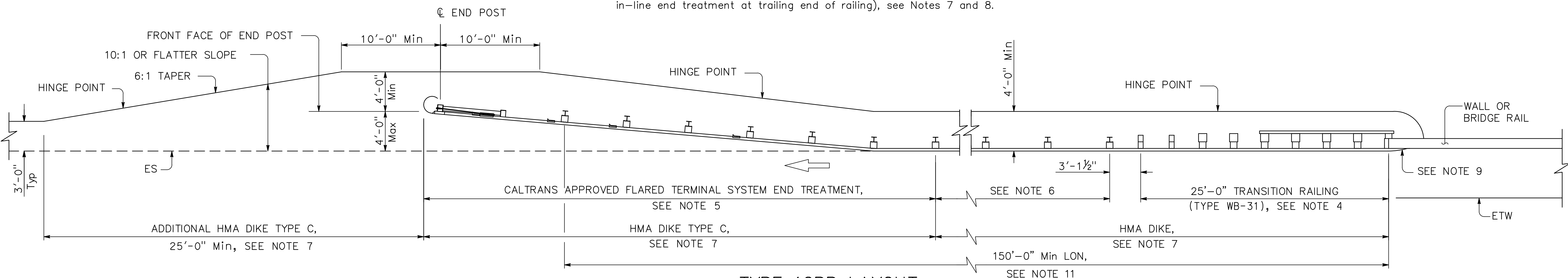
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 05-31-23



TYPE 12AA LAYOUT

(MGS installation at structure departure with in-line end treatment at trailing end of railing), see Notes 7 and 8.



TYPE 12BB LAYOUT

(MGS installation at structure departure with Flared end treatment at trailing end of railing), see Notes 7 and 8.

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77L1, A77L2, A77M1, A77N2 and Revised Standard Plan RSP A77N1.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6'-0" long Steel W6 x 9 or W6 x 8.5 with blocks, or 6" x 8" x 6'-0" wood with blocks.
- For Transition Railing (Type WB-31) details for Types 12AA and 12BB Layouts, see Standard Plan A77U4.
- The type of terminal system to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes, other fixed objects), it may be advisable to construct additional MGS (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatments.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12AA or Type 12BB Layouts are typically used to the right or left of traffic departing a structure on two-way conventional highways where the roadbed width across the structure is less than 40 feet.
- For additional details of typical connections to bridge rail, see Connection Detail CC on Standard Plan A77U2 and Connection Detail HH on Standard Plan A77V2.
- For roadways with parallel structures and non traversable medians, the Type 12AA or Type 12BB layout may be used.
- A minimum of 150'-0" of MGS is needed to develop Length of Need (LON).

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE APPROACH**

NO SCALE

RSP A77Q4 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77Q4
DATED AUGUST 1, 2022 - PAGE 95 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77Q4

2022 REVISED STANDARD PLAN RSP A77Q4

DATE PLOTTED = 5/31/23
TIME PLOTTED = 9:31:35 AM

CALTRANS STANDARD PLANS, 2022 EDITION

- A10A ABBREVIATIONS (SHEET 1 OF 2)
- A10B ABBREVIATIONS (SHEET 2 OF 2)
- A10C LINES AND SYMBOLS (SHEET 1 OF 3)
- A10D LINES AND SYMBOLS (SHEET 2 OF 3)
- A10E LINES AND SYMBOLS (SHEET 3 OF 3)
- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
- B0-1 BRIDGE DETAILS
- B6-21 JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")

LEGEND

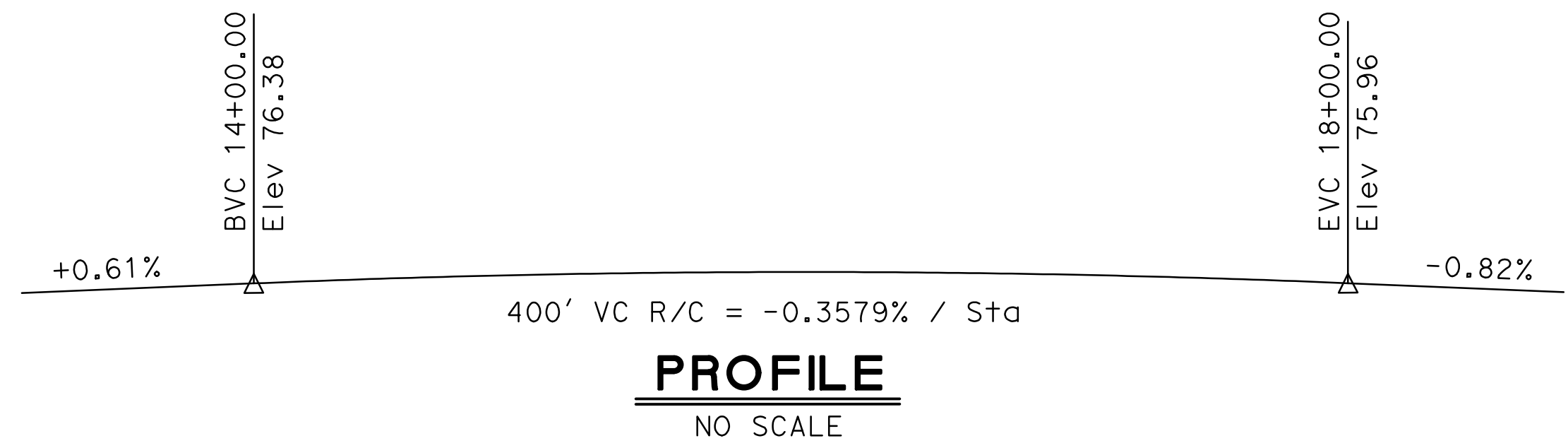
- Denotes Existing Structure
- Denotes Proposed Structure
- STANDARD PLAN SHEET No.
- DETAIL No.
- SECTION IDENTIFICATION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	19	35

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

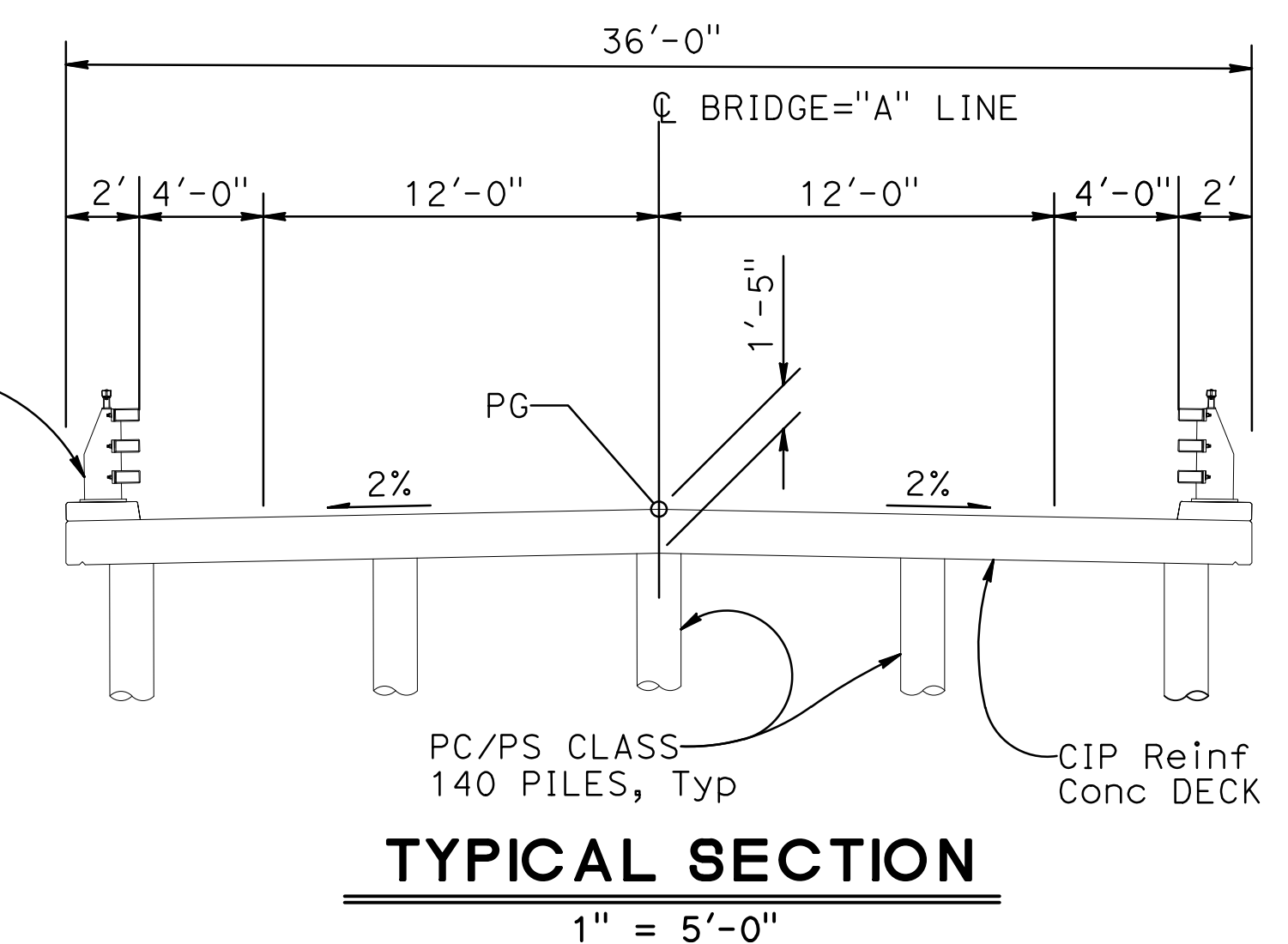
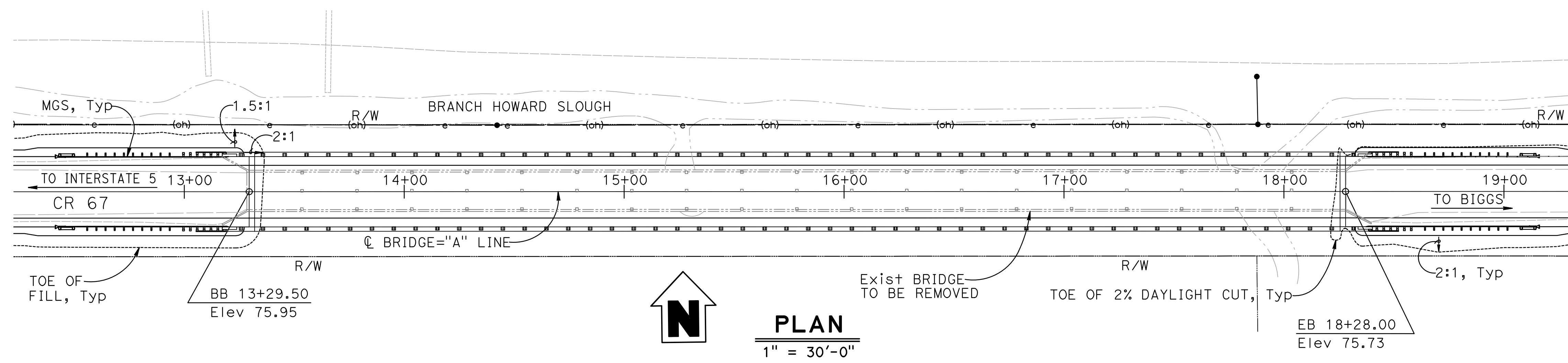
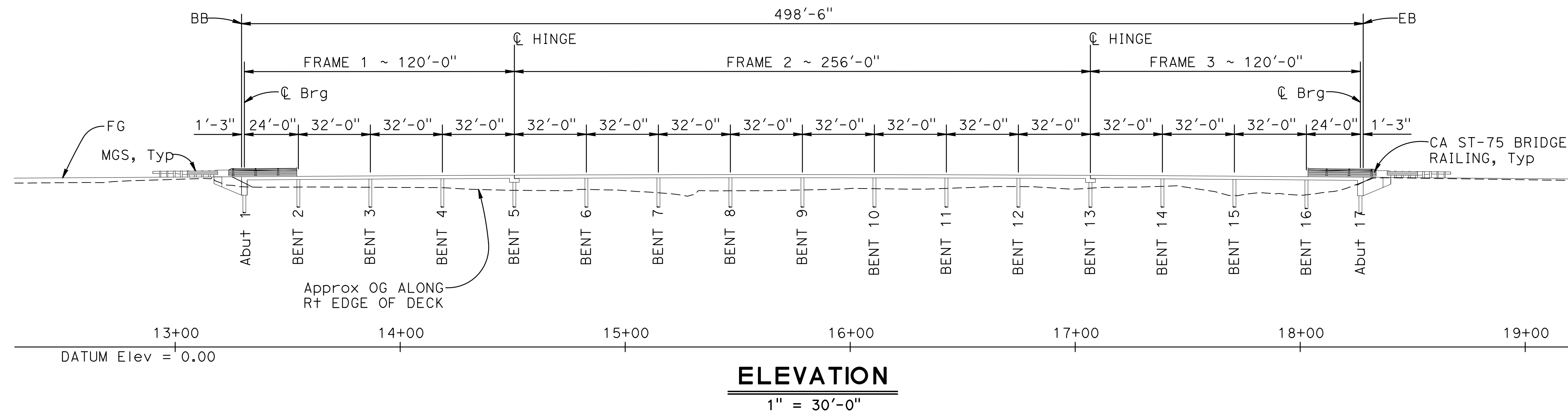
REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



INDEX TO BRIDGE PLANS

SHEET No.	TITLE
1	GENERAL PLAN
2	DECK CONTOURS
3	FOUNDATION PLAN
4	ABUTMENT LAYOUT
5	BENT LAYOUT
6	SLAB REINFORCEMENT DETAILS No. 1
7	SLAB REINFORCEMENT DETAILS No. 2
8	SLAB HINGE DETAILS
9	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 1
10	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 2
11	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 3
12	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 4
13	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 5
14	SOIL LEGEND 1 OF 2
15	SOIL LEGEND 2 OF 2
16	LOG OF TEST BORINGS 1 OF 2
17	LOG OF TEST BORINGS 2 OF 2



DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	PREPARED FOR	BRIDGE NO.
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI	LAYOUT	BY R. UHLMANN	COUNTY OF GLENN	11C0015
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN	SPECIFICATIONS	BY X	PUBLIC WORKS AGENCY	POST MILES
						NA

G. GORDON PROJECT ENGINEER		BRANCH HOWARD SLOUGH BRIDGE (REPLACE)	
GENERAL PLAN			

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	FILE => 11-0015-a-gp01	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 1 OF 17
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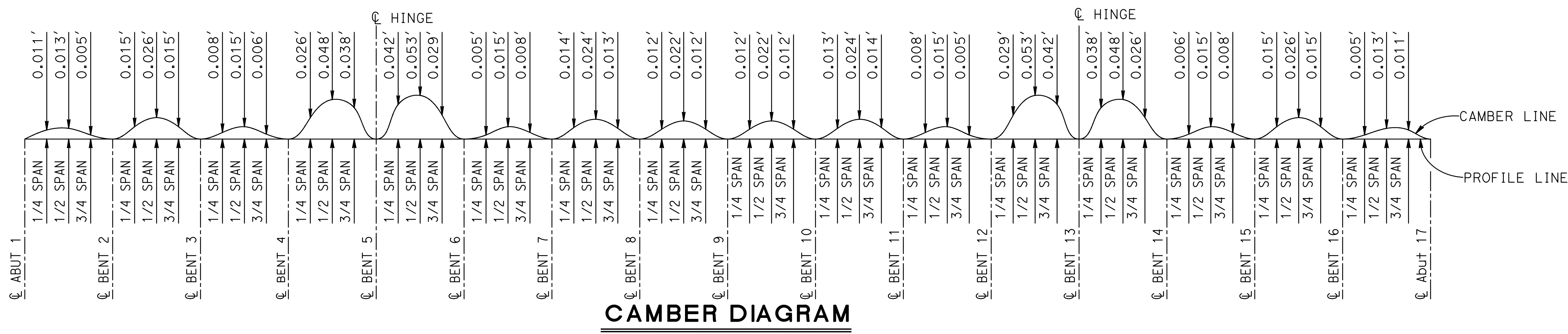
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03	Glenn	CR 67	NA	20	35

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

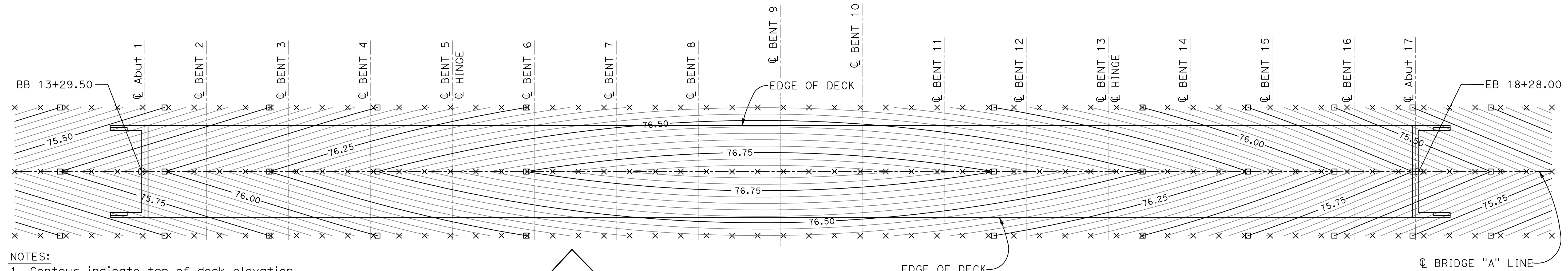
REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



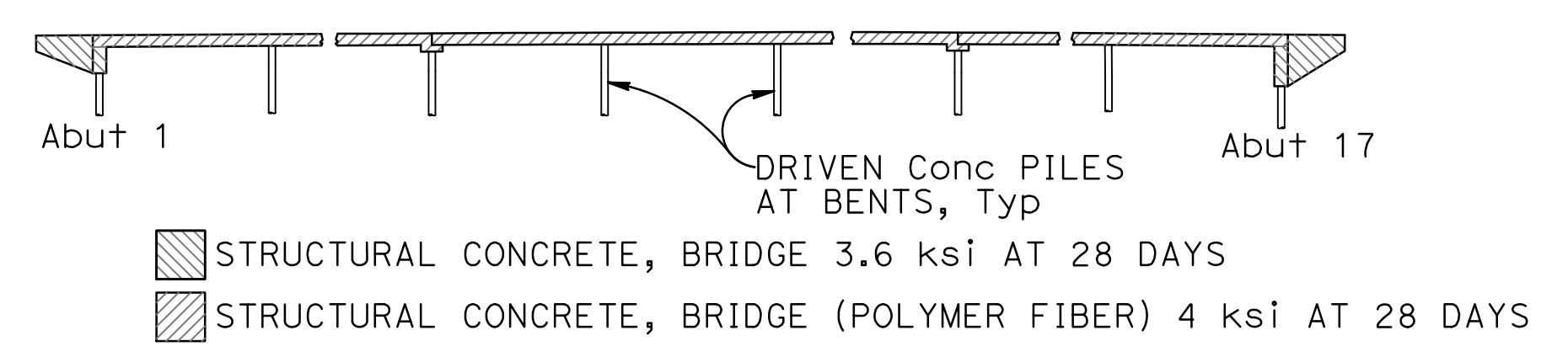
CAMBER DIAGRAM

NO SCALE
 NOTE: DOES NOT INCLUDE ALLOWANCE FOR FALSEWORK SETTLEMENT.



- NOTES:
1. Contour indicate top of deck elevation.
 2. □ Indicates even 0.25 foot contours.
 3. x Indicates 10' intervals measured along "A" Line.
 4. Contour interval = 0.05'
 5. Contours do not include allowances for camber or falsework settlement.

DECK CONTOURS
 SCALE: 1" = 20'-0"



CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: AASHTO LRFD Bridge Design Specifications, 6th Edition and with Caltrans Amendments, preface dated September 2010.

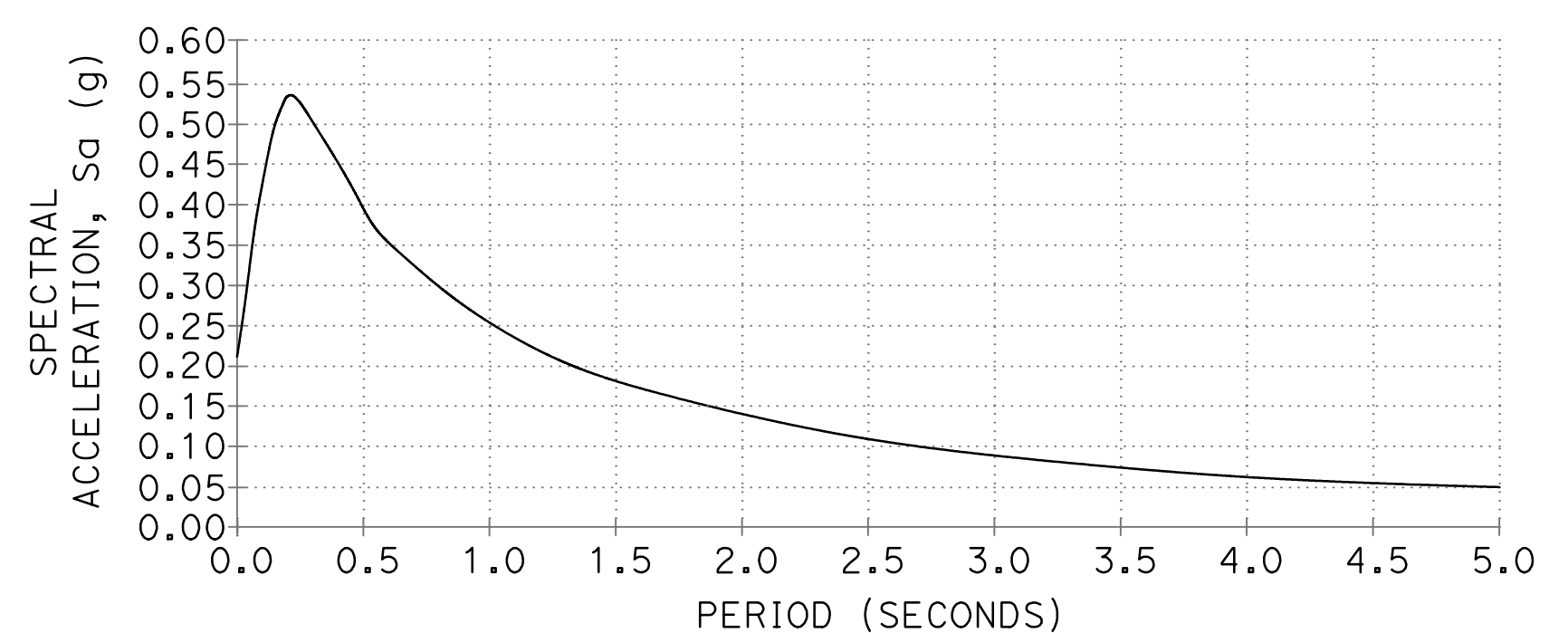
SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.7 dated April 2013.

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: HL93 and permit design load.

SEISMIC LOADING: Soil Profile: C
 Moment Magnitude: 6.7
 Peak Ground Acceleration = 0.22 g

REINFORCED CONCRETE: $f_y = 60$ ksi
 $f'_c = 4.0$ ksi (Superstructure)
 $f'_c = 3.6$ ksi (Substructure)



ACCELERATION RESPONSE SPECTRUM CURVE

APPROXIMATE QUANTITIES

ITEM CODE	ITEM DESCRIPTION	QUANTITY	UNIT
157550	BRIDGE REMOVAL	1	LS
192020	STRUCTURE EXCAVATION (TYPE D)	80	CY
193003	STRUCTURE BACKFILL (BRIDGE)	53	CY
490736	FURNISH PILING (CLASS 90)	266	LF
490737	DRIVE PILE (CLASS 90)	10	EA
490746	FURNISH PILING (CLASS 140)	3,062	LF
490747	DRIVE PILE (CLASS 140)	75	EA
510053	STRUCTURAL CONCRETE, BRIDGE	62	CY
510054	STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	964	CY
519091	JOINT SEAL (MR 1 1/2")	72	LF
520102	BAR REINFORCING STEEL (BRIDGE)	222,000	Lbs
048290	CALIFORNIA ST-75 BRIDGE RAIL	1,046	LF

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO.	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)	
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI			11C0015		
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN			POST MILES		NA
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	FILE => 11-0015-d-dc01	REVISION DATES	SHEET 2 OF 17
						11/10/14 07/28/17 05/31/23	

DATE PLOTTED => 5/31/2023
 USERNAME => KEVIN
 TIME PLOTTED => 10:27:59 AM


LEGEND

- DENOTES EXISTING STRUCTURE
- DENOTES PROPOSED STRUCTURE
- DENOTES CLASS 140 PILES
- 67.40 DENOTES BOTTOM OF FOOTING ELEVATION

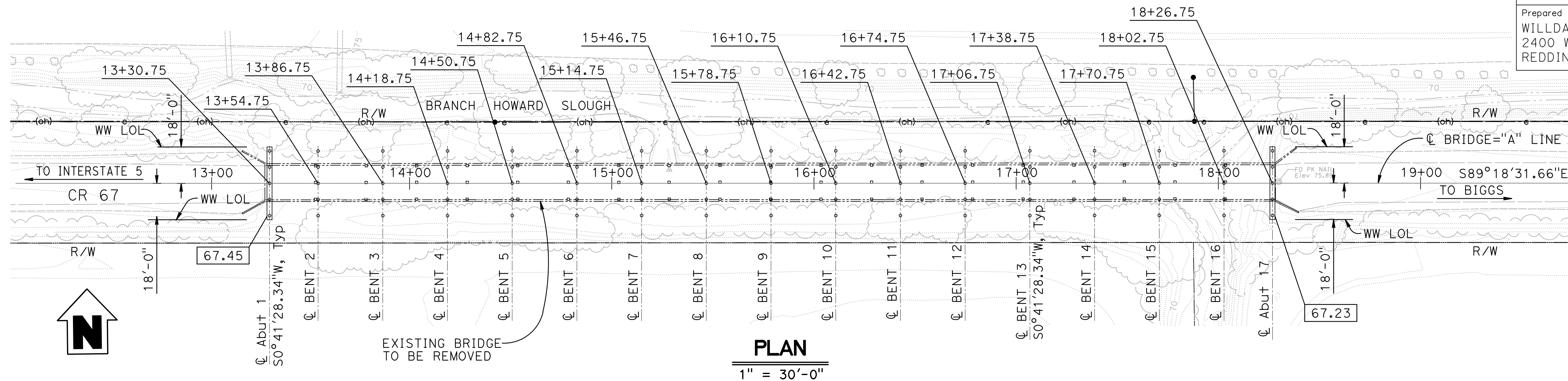
NOTES

1. Utility relocation not shown. Utilities in conflict with piles will be relocated for bridge construction.
2. For pile number locations, see "ABUTMENT LAYOUT" and "BENT LAYOUT" sheets.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	21	35


 REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



PLAN
 1" = 30'-0"

PILE DATA TABLE

LOCATION	PILE TYPE	DESIGN LOADING (SERVICE)	NOMINAL RESISTANCE		DESIGN TIP ELEV* (FEET)	SPECIFIED TIP ELEV (FEET)	PC/PS CONCRETE PILE CUT OFF ELEVATION (FEET)				
			COMPRESSION	TENSION			PILE No. 1	PILE No. 2	PILE No. 3	PILE No. 4	PILE No. 5
Abut 1	CLASS 90	90 kips	180 kips	90	41.00 (1)	41.00	67.70	67.70	67.70	67.70	67.70
BENT 2	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	74.49	74.63	74.77	74.63	74.49
BENT 3	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	74.68	74.82	74.96	74.82	74.68
BENT 4	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	74.87	75.01	75.15	75.01	74.87
BENT 5	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	73.28	73.42	73.56	73.42	73.28
BENT 6	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	75.15	75.29	75.43	75.29	75.15
BENT 7	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	75.23	75.37	75.51	75.37	75.23
BENT 8	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	75.28	75.42	75.56	75.42	75.28
BENT 9	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	75.29	75.43	75.57	75.43	75.29
BENT 10	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	75.26	75.40	75.54	75.40	75.26
BENT 11	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	75.19	75.33	75.47	75.33	75.19
BENT 12	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	75.09	75.23	75.37	75.23	75.09
BENT 13	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	73.21	73.35	73.49	73.35	73.21
BENT 14	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	74.78	74.92	75.06	74.92	74.78
BENT 15	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	74.57	74.71	74.85	74.71	74.57
BENT 16	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	74.32	74.46	74.60	74.46	74.32
Abut 17	CLASS 90	90 kips	180 kips	90	41.00 (1)	41.00	67.48	67.48	67.48	67.48	67.48

* DESIGN TIP ELEVATION IS CONTROLLED BY THE FOLLOWING DEMANDS:
 (1) COMPRESSION, (2) TENSION, (3) LATERAL LOADS, (4) SETTLEMENT

HYDROLOGIC SUMMARY

DRAINAGE AREA 22.2 SQ MI

	DESIGN FLOOD	BASE FLOOD	OVERTOPPING FLOOD	RECORD FLOOD
FREQUENCY, YEARS	50	100	X	X
DISCHARGE CUBIC ft/sec.	x	1,594	X	X
WATER SURFACE ELEVATION AT BRIDGE	x	73.35	X	X

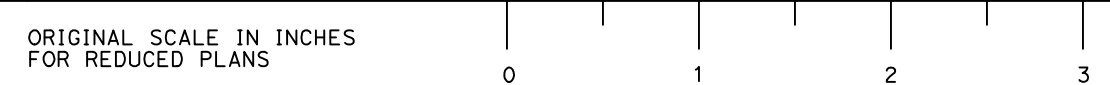
NOTE:
 Flood Plain Data is based upon information available when the plans were prepared and are shown to meet Federal requirements. The accuracy of said information is not warranted by the Designer and interested or affected parties should make their own investigation.

SCALE: 1"=30'	VERT.DATUM NAVD88	HORZ.DATUM NAD83
PHOTOGRAMMETRY AS OF: 06/12	ALIGNMENT TIES X	
SURVEYED BY S. ESPINOSA	DRAFTED BY J. JONES	
FIELD CHECKED BY B. STRATMAN	CHECKED BY P. ESPINOSA	

DESIGN BY J. DeMARTINI	CHECKED M. ILEY
DETAILS BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 G. GORDON
 PROJECT ENGINEER

BRIDGE NO. 11C0015
BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
 POST MILES NA
FOUNDATION PLAN



DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 3	OF 17
	11/10/14 01/28/17 05/31/23		

DATE PLOTTED => 5/31/2023 AM USERNAME => KEVIN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	22	35

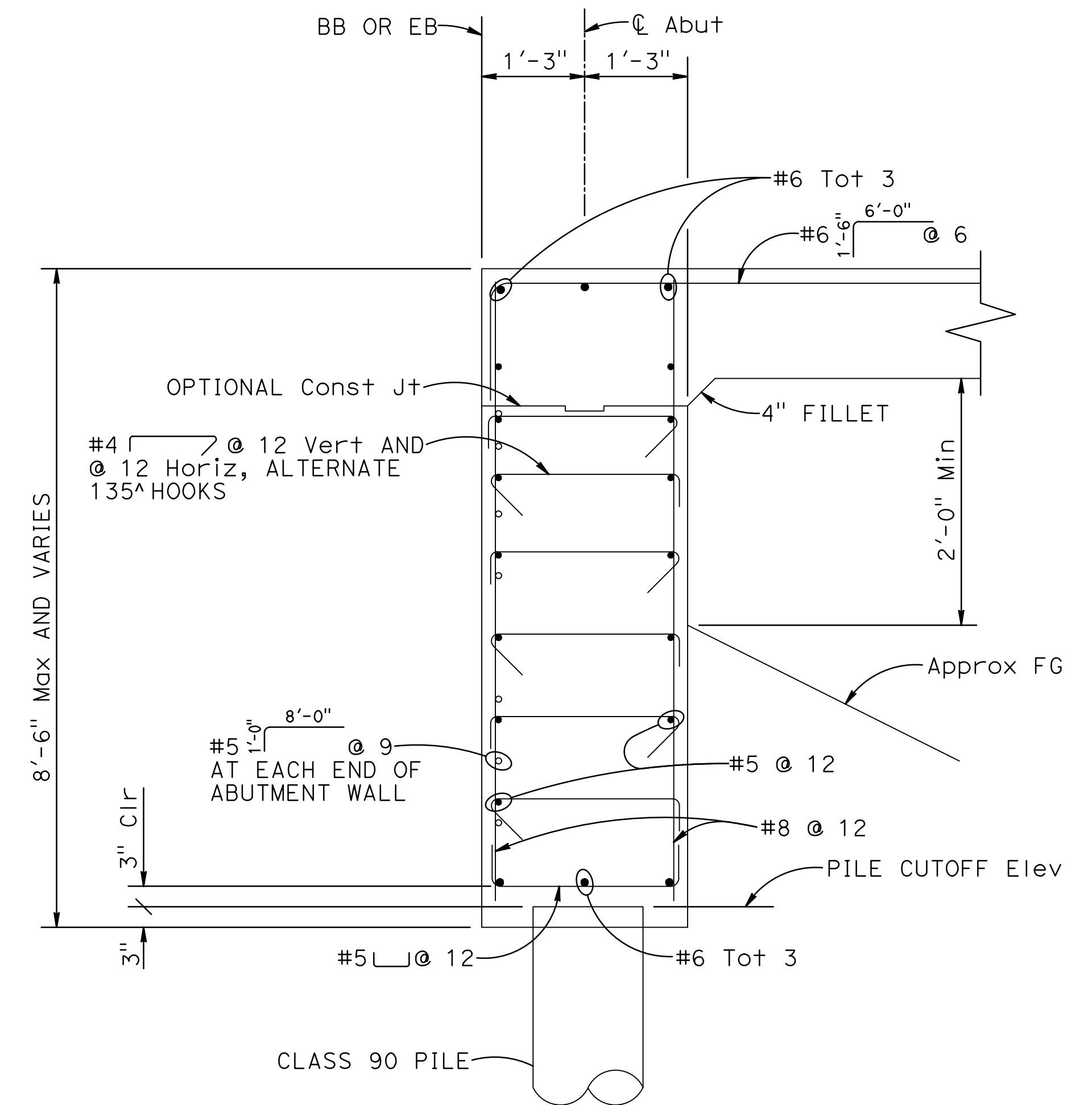
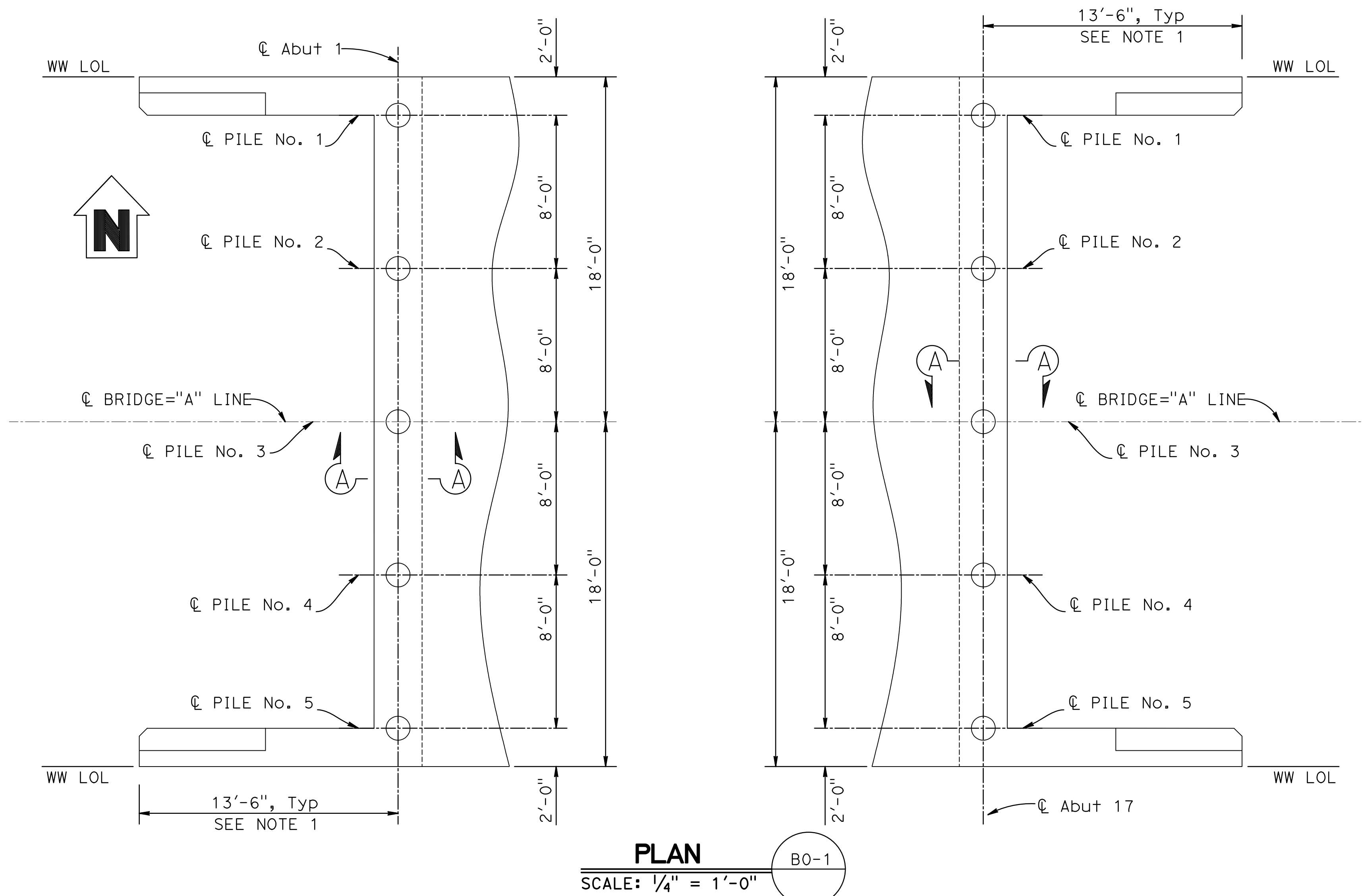
NOTES:
 1. For 'TYPICAL WINGWALL ELEVATION', see Caltrans Standard Plan B0-1.

REGISTERED CIVIL ENGINEER DATE 05-31-23

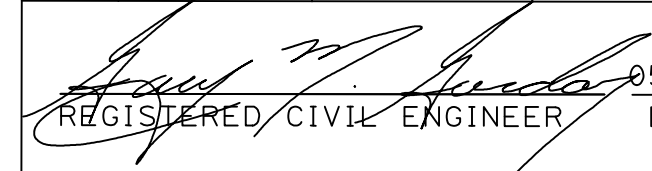
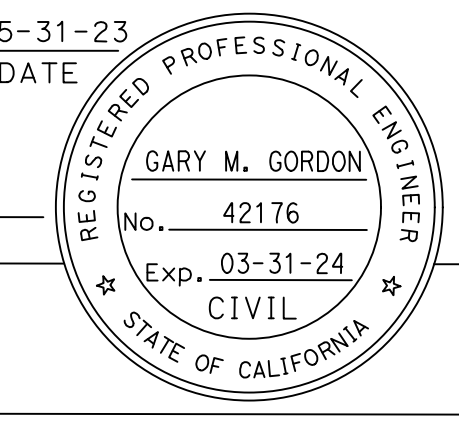
May 31, 2023
 PLANS APPROVAL DATE

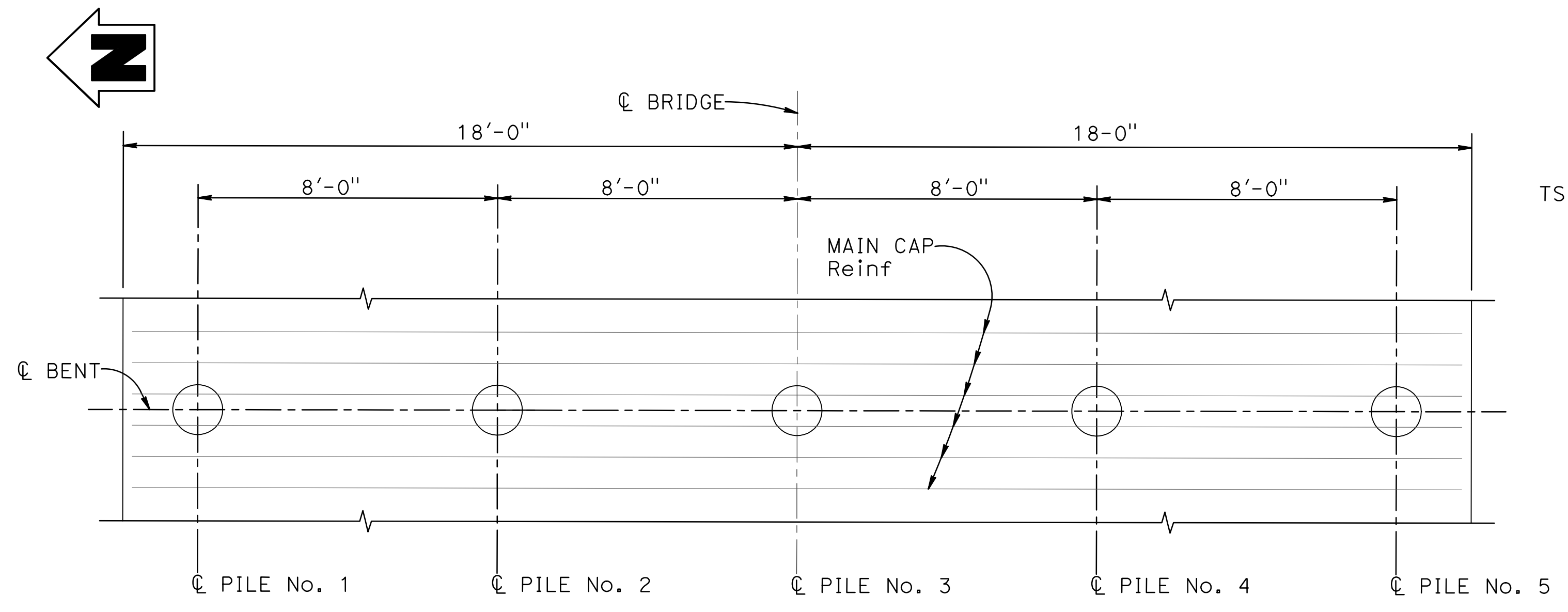
GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

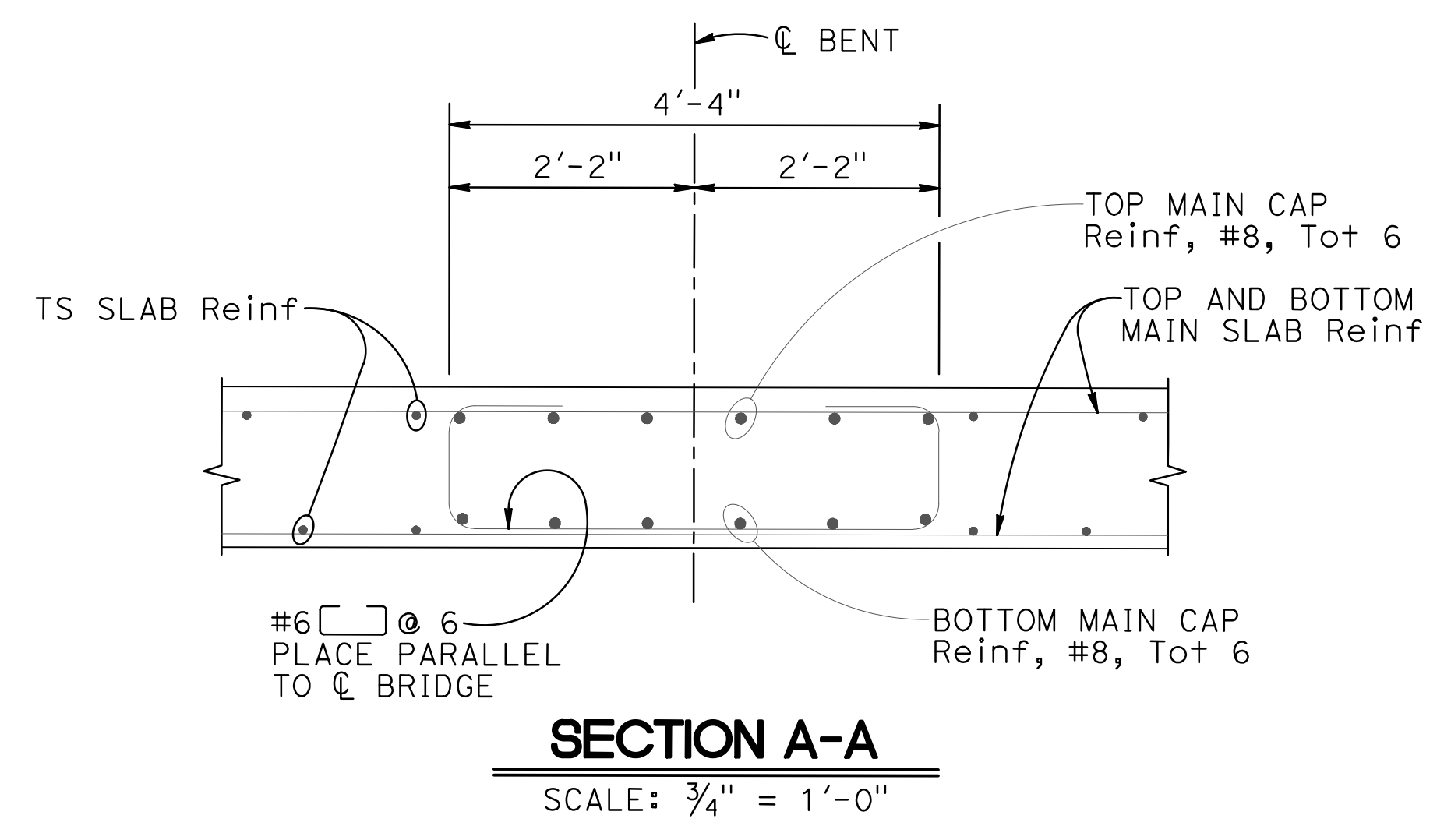


DESIGN	BY	J. DeMARTINI	CHECKED	M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO. 11C0015	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)											
	DETAILS	BY	R. UHLMANN	CHECKED				J. DeMARTINI	POST MILES NA	ABUTMENT LAYOUT								
	QUANTITIES	BY	J. DeMARTINI	CHECKED				R. UHLMANN										
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						0	1	2	3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	11/18/14	01/28/17	05/31/23	SHEET	4	OF	17

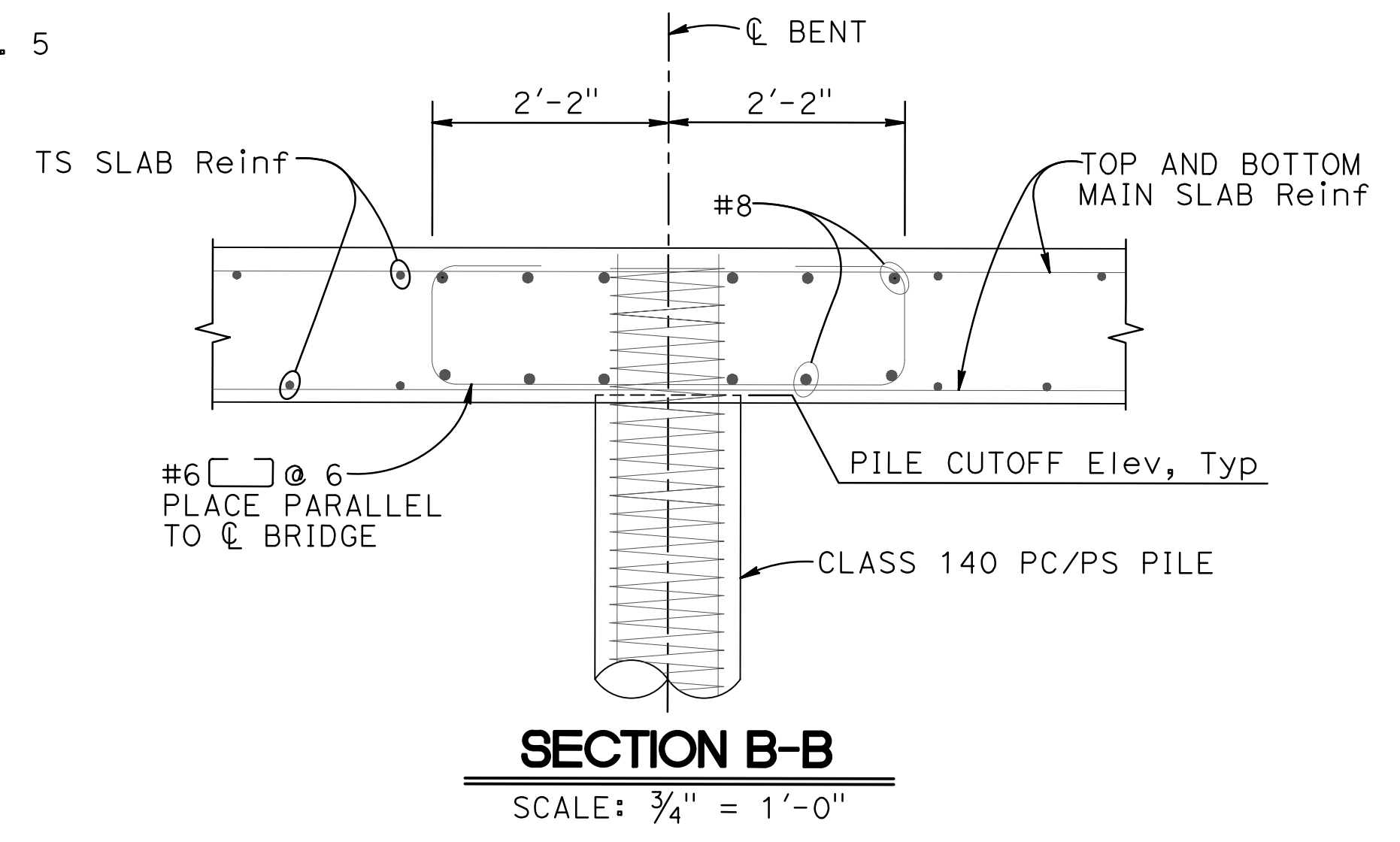
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	23	35
 REGISTERED CIVIL ENGINEER DATE 05-31-23					
May 31, 2023 PLANS APPROVAL DATE					
Prepared by: WILLDAN ENGINEERING 2400 WASHINGTON AVENUE, SUITE 101 REDDING, CALIFORNIA 96001					



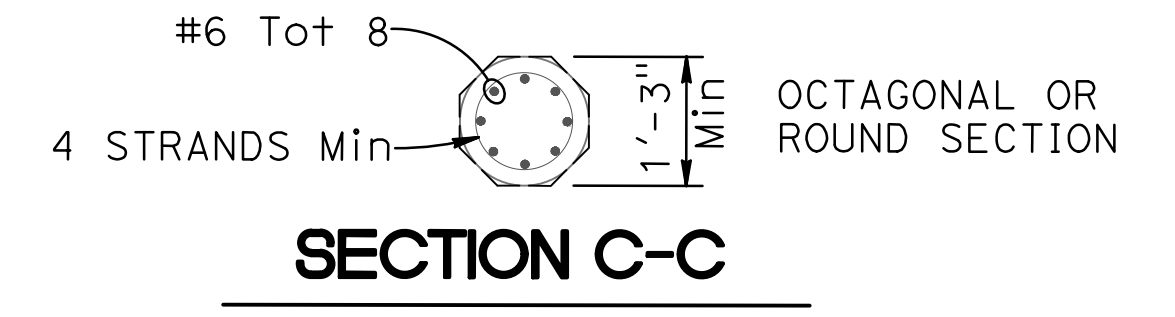
PLAN
SCALE: 3/8" = 1'-0"



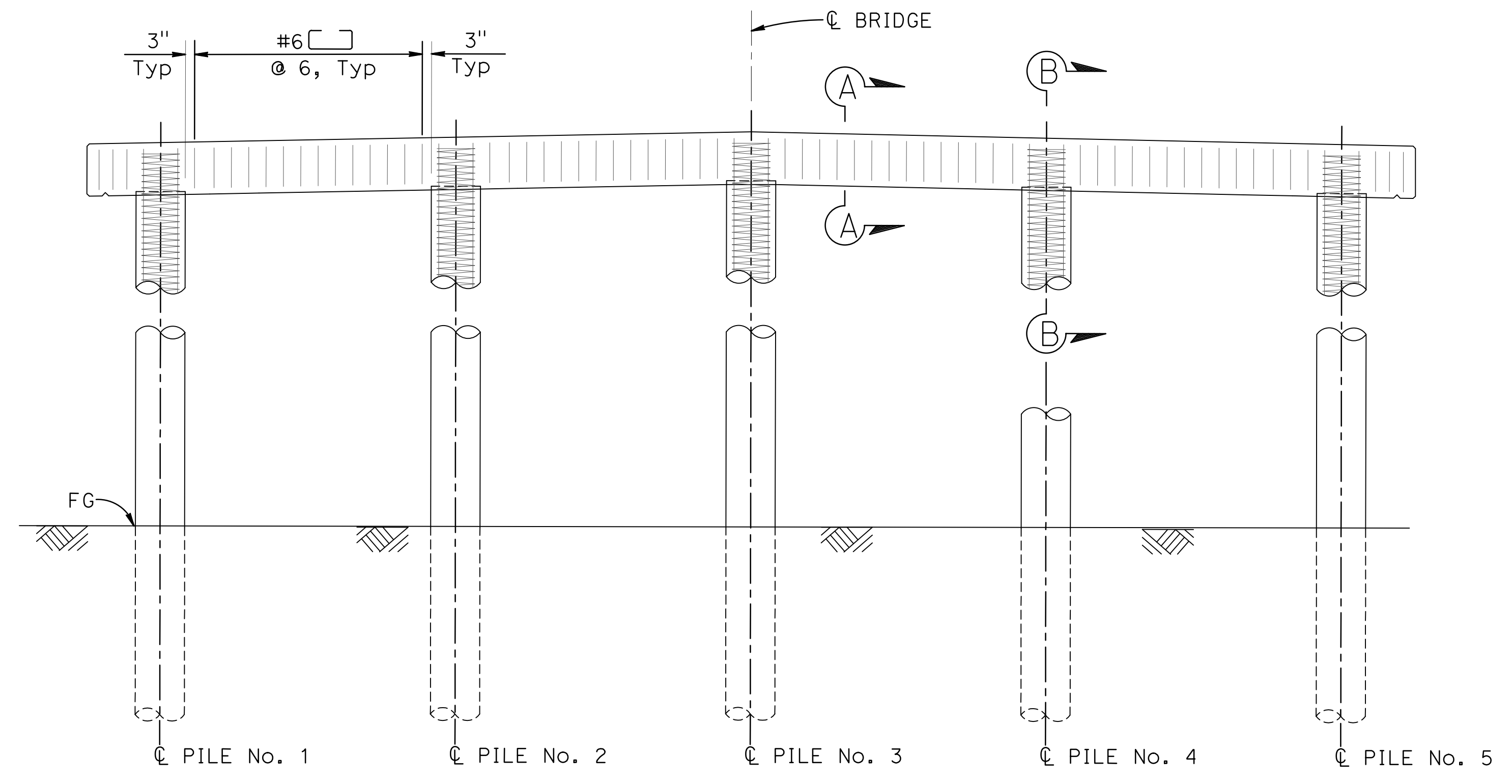
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SCALE: 3/4" = 1'-0"



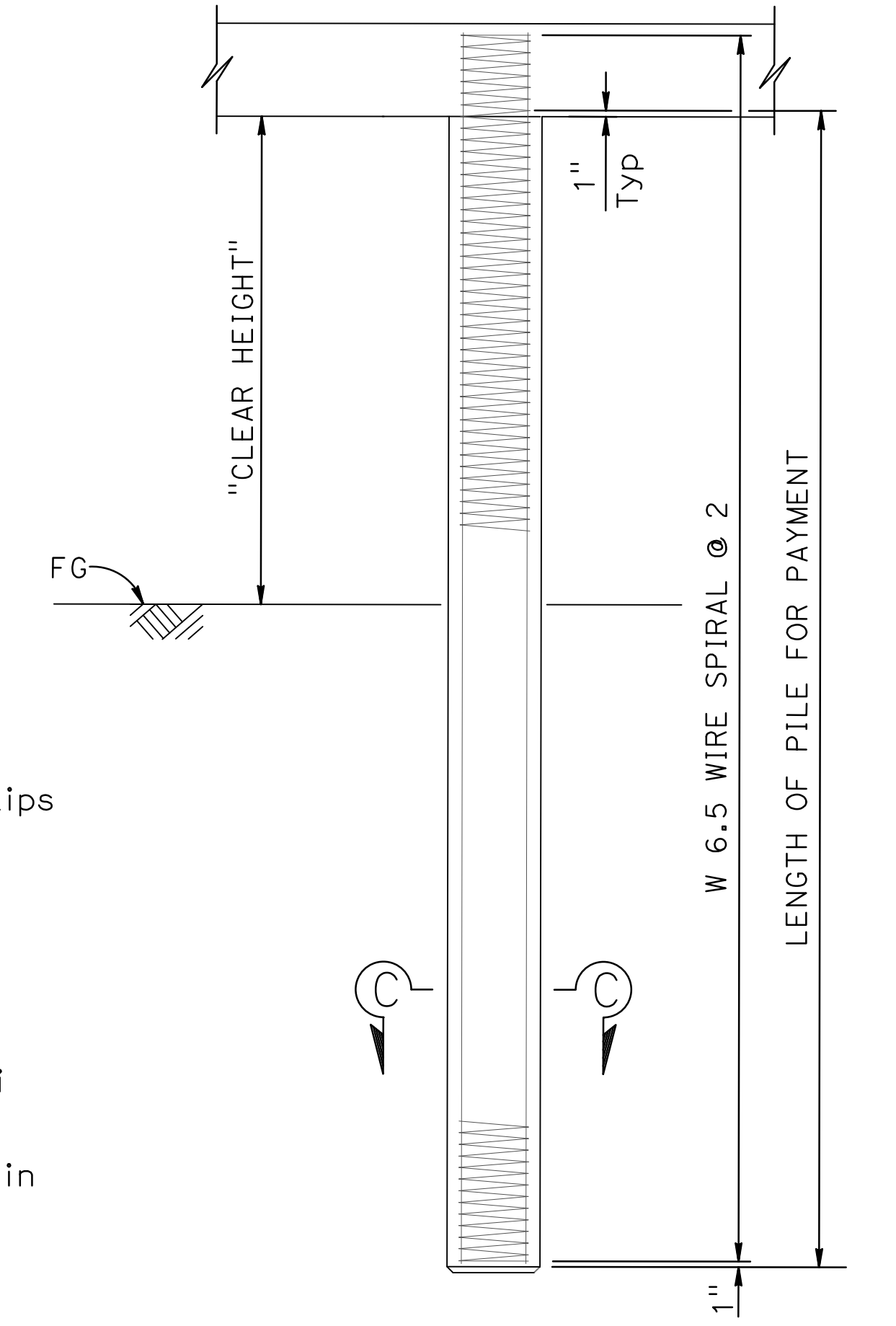
SECTION B-B
SCALE: 3/4" = 1'-0"



SECTION C-C



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



PRECAST PRESTRESSED CONCRETE PILE

- NOTES:**
- Design service level loading is 140 kips service and 280 kips nominal axial structural resistance or less as noted.
 - Maximum size of aggregate is 1".
 - For the prestressed concrete pile:
 - The prestress force after all losses shall provide 700 psi minimum stress.
 - The concrete strength shall not be less than 6000 psi at 28 days.
 - No splices allowed in the longitudinal reinforcement within the "CLEAR HEIGHT" or within 10' below the ground line.

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO.	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
	DETAILS BY R. UHLMANN	CHECKED J. DeMARTINI			11C0015	
	QUANTITIES BY J. DeMARTINI	CHECKED R. UHLMANN			POST MILES	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3	REVISION DATES	SHEET 5 OF 17
				FILE => 11-0015-h-b01_101	11/28/14 07/28/17 05/31/23	

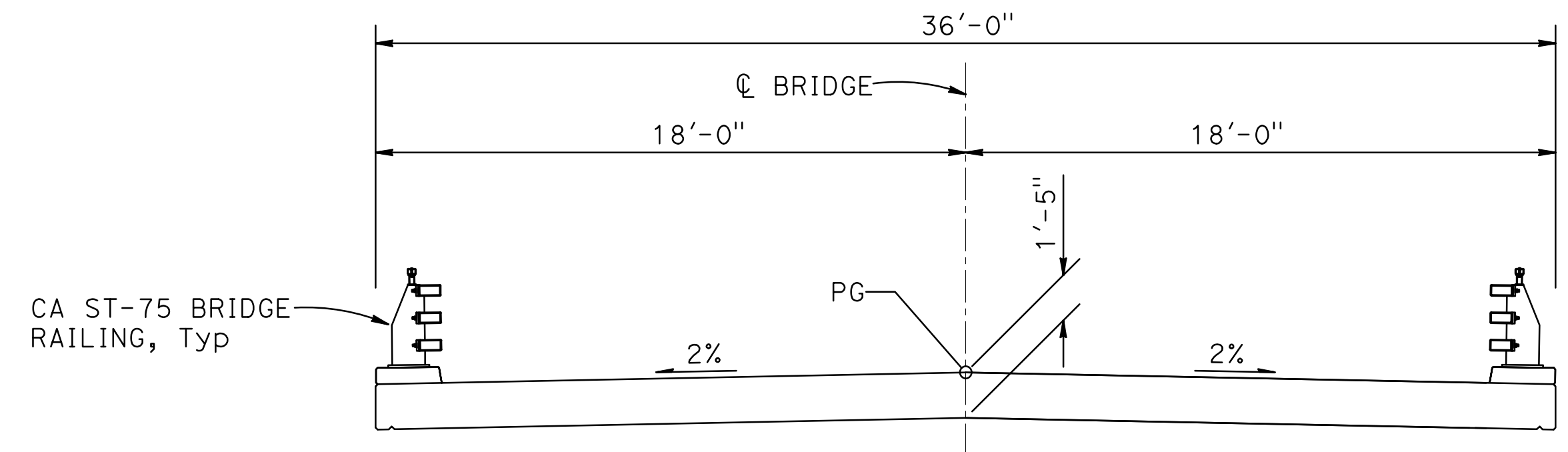
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
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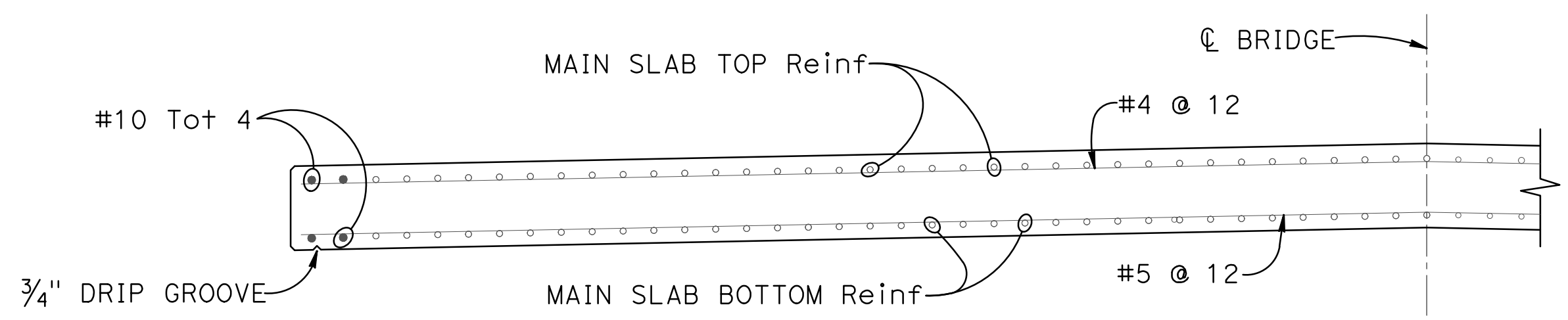
REGISTERED CIVIL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

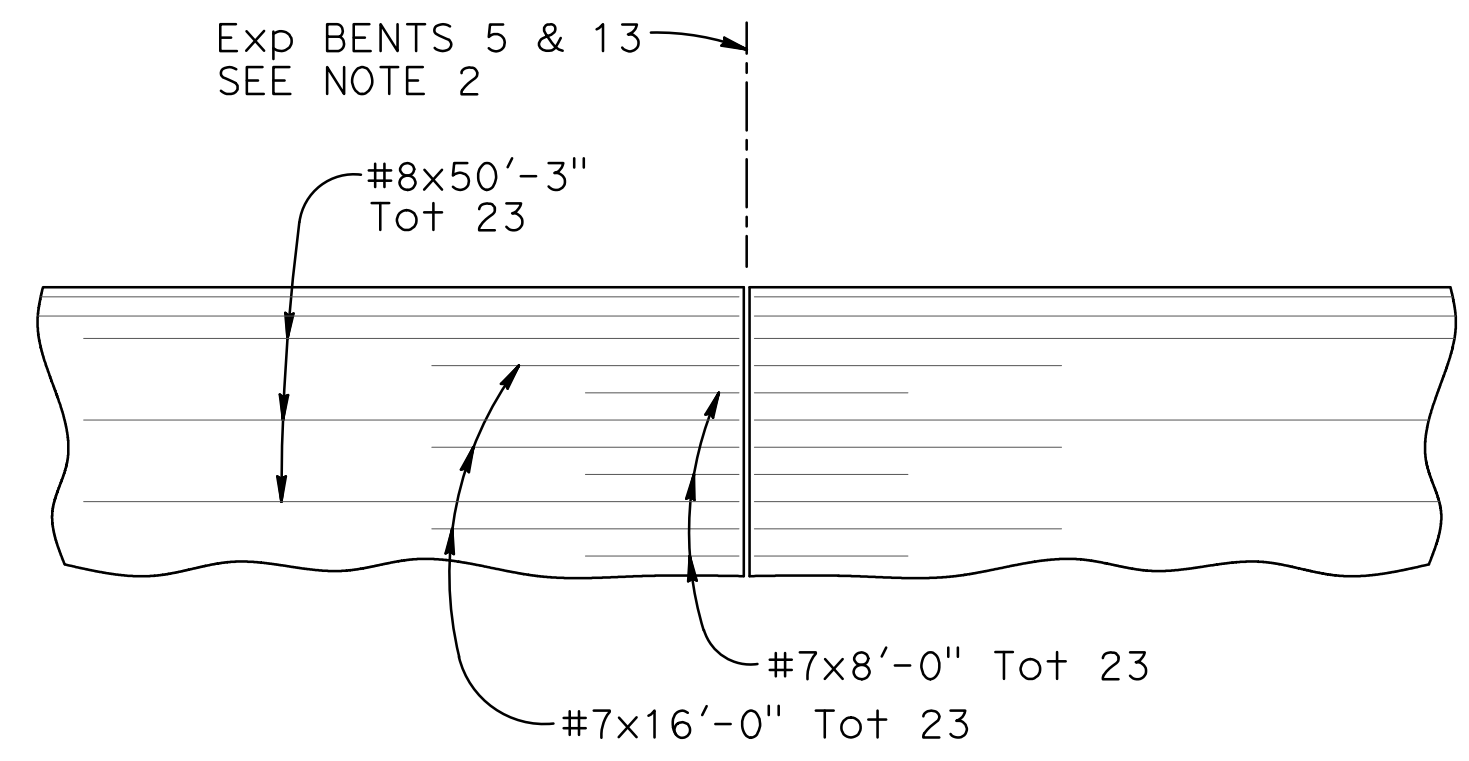
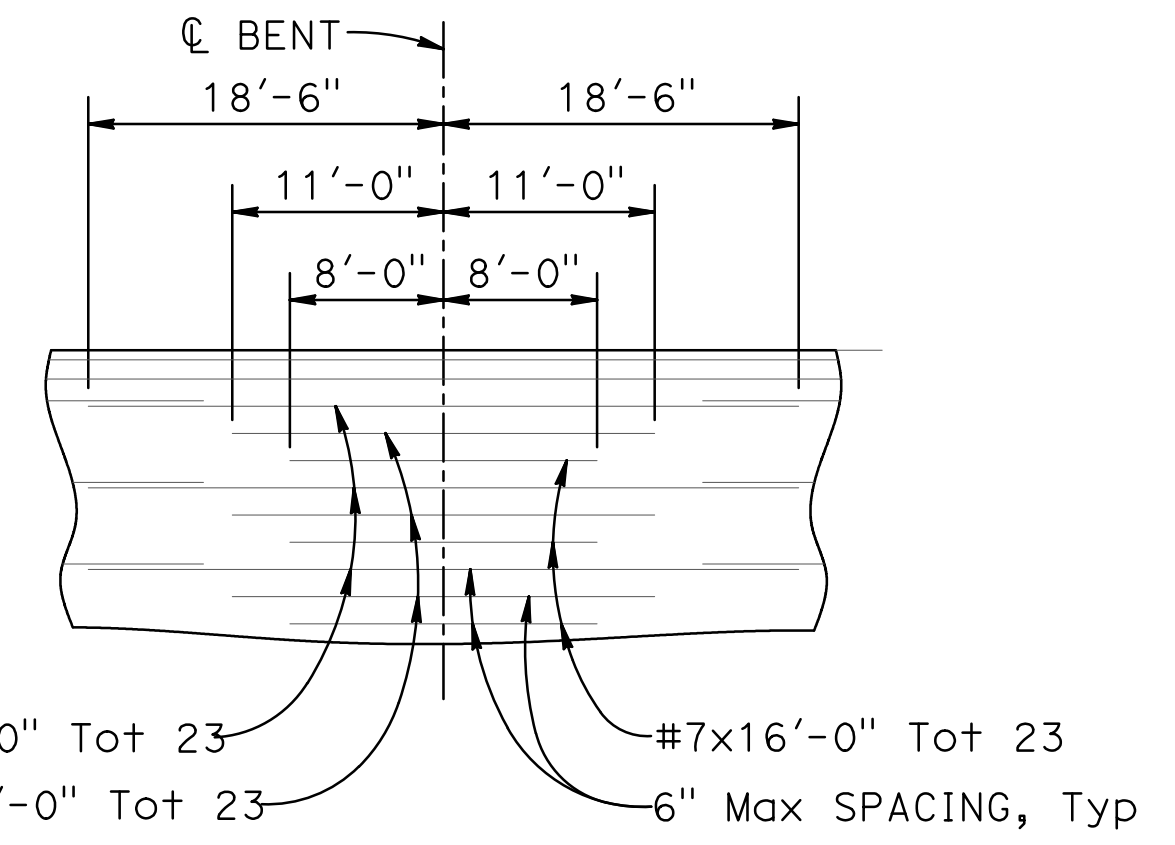
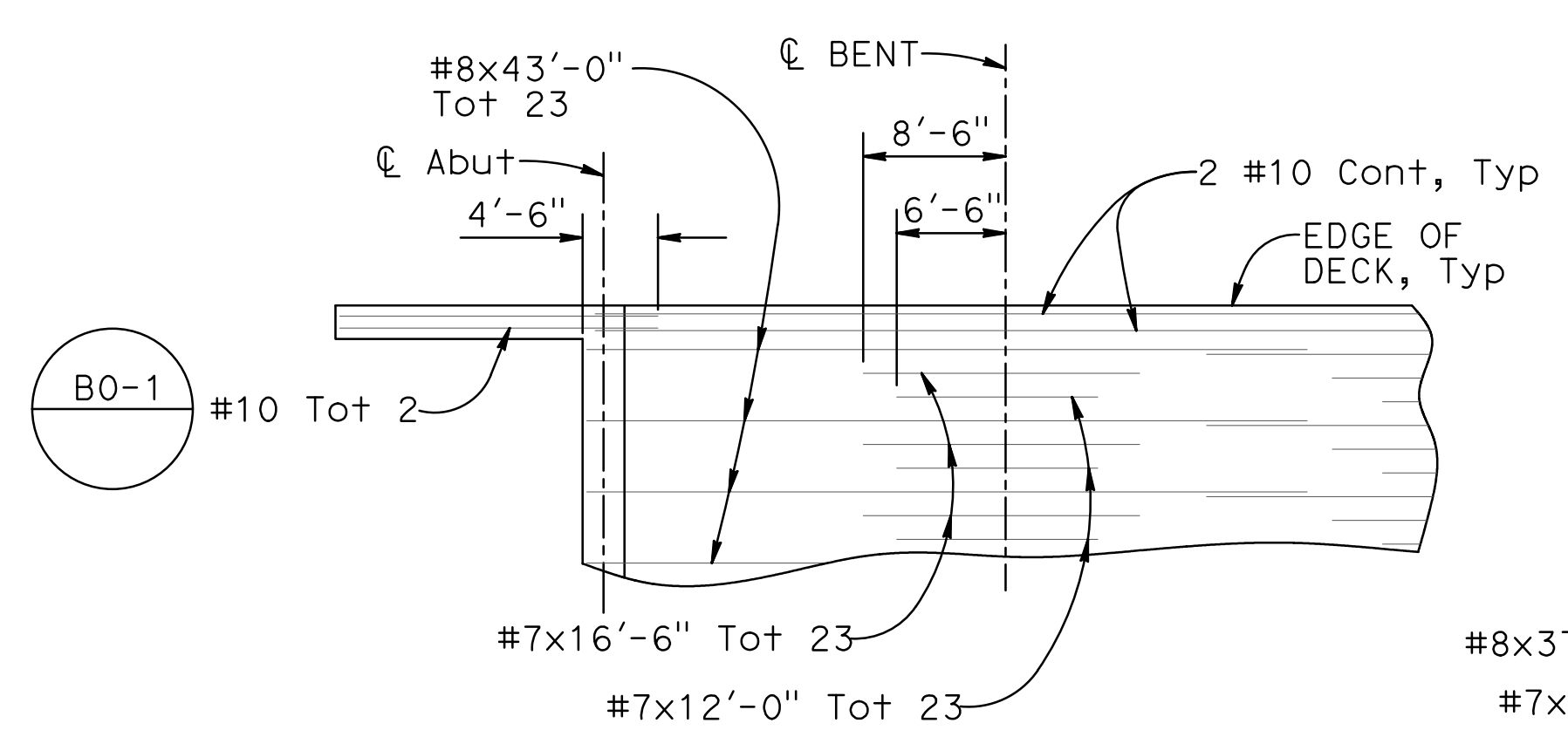


TYPICAL SECTION
 SCALE: 1/4" = 1'-0"

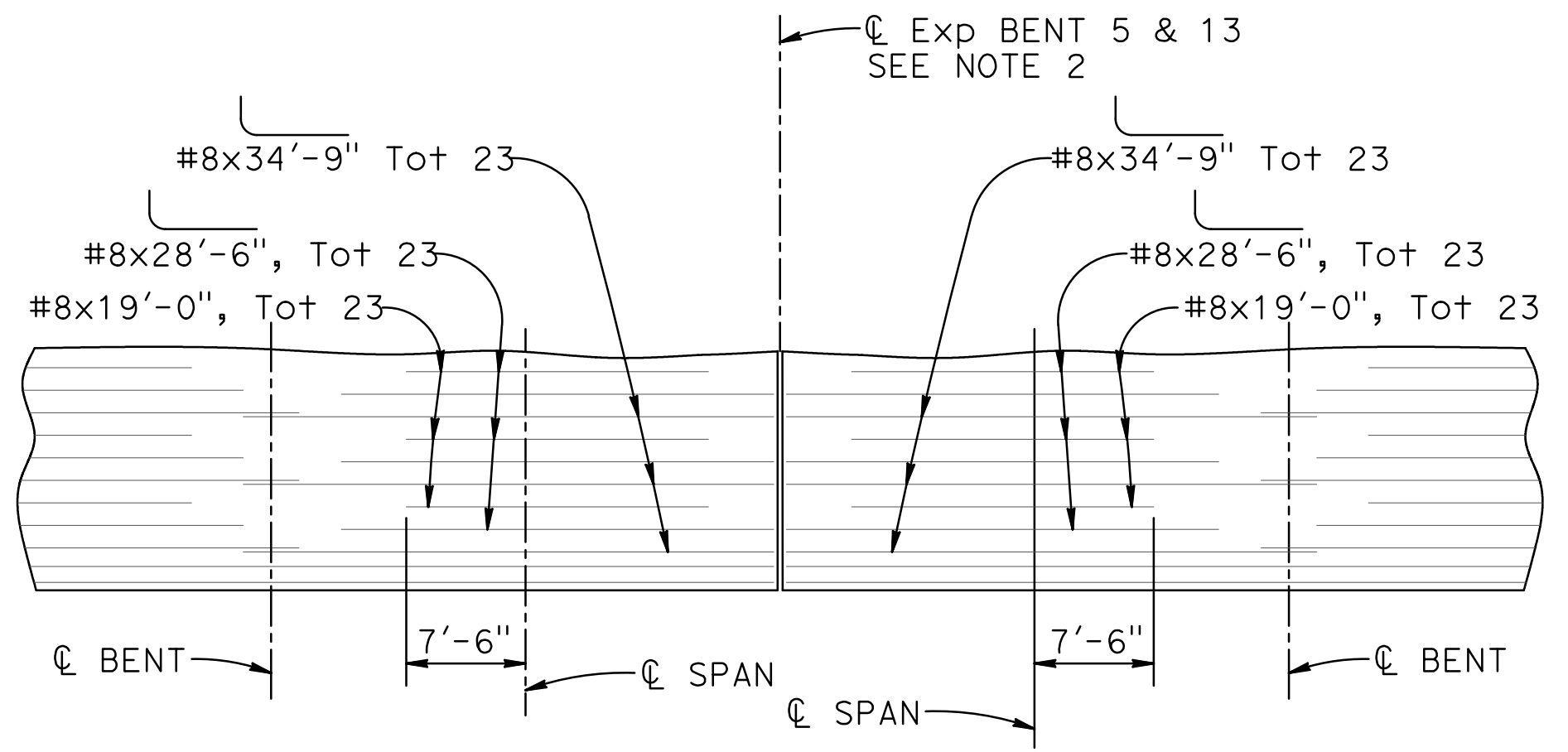
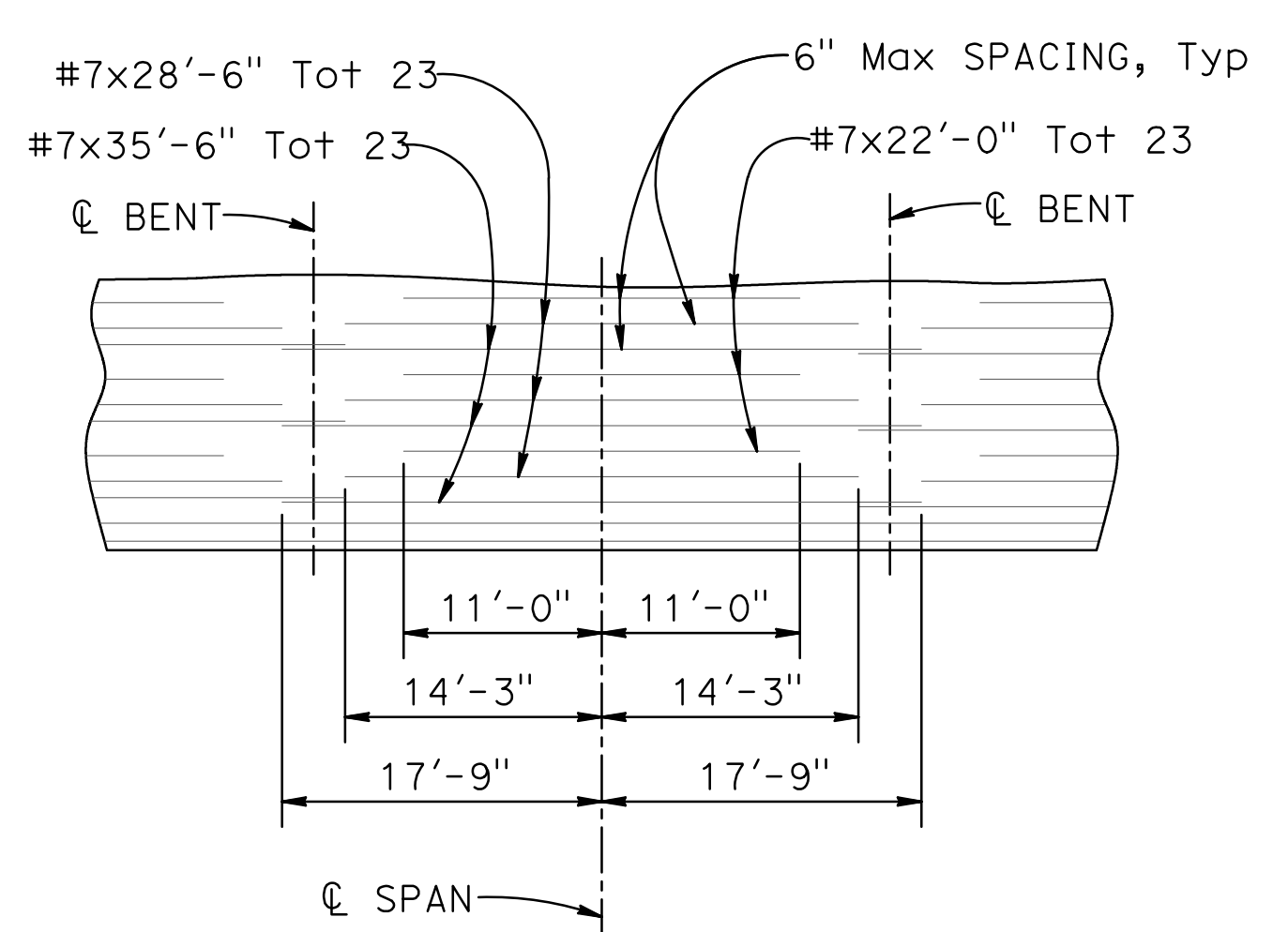
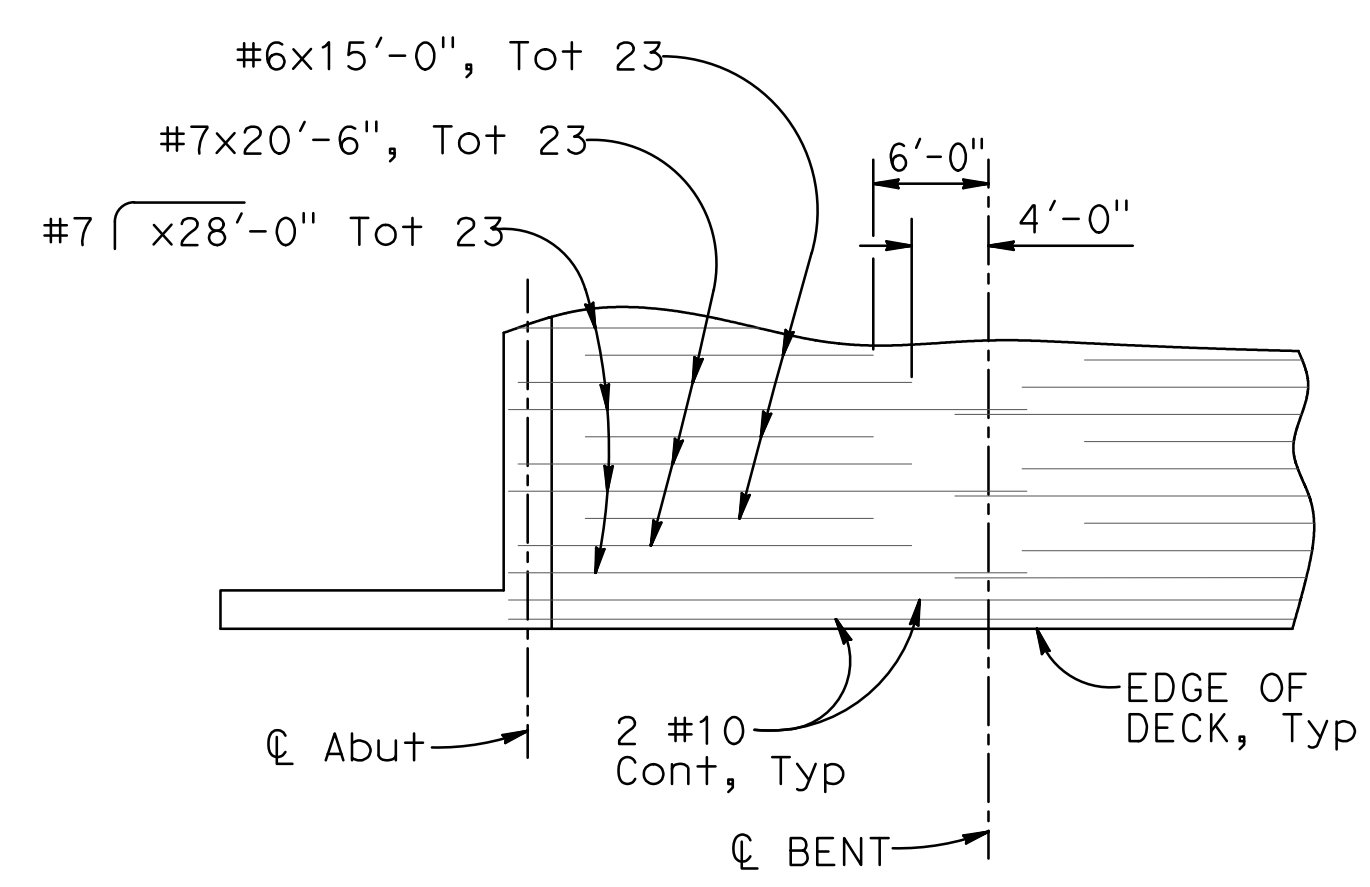


PART TYPICAL SECTION
 SCALE: 1/2" = 1'-0"
 NOTE: BAR CHAIRS NOT SHOWN.

- NOTES:**
- FOR SLAB REINFORCING DETAILS NOT SHOWN SEE "SLAB REINFORCEMENT DETAILS NO. 2" SHEET.
 - SEE "SLAB HINGE DETAILS" SHEET FOR MAIN BAR REINFORCING BENDING AND HINGE REINFORCING DETAILS.



REINFORCEMENT - TOP OF SLAB
 NOT TO SCALE



REINFORCEMENT - BOTTOM OF SLAB
 NOT TO SCALE

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER

BRIDGE NO.	11C0015
POST MILES	NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
SLAB REINFORCEMENT DETAILS NO. 1

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



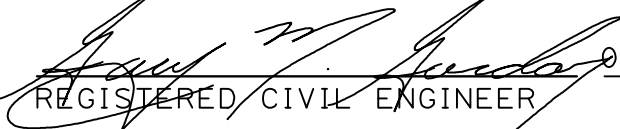
FILE => 11-0015-k1-Slab Reinf Details No 1

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
11/10/14 07/28/17 05/31/23	6	17

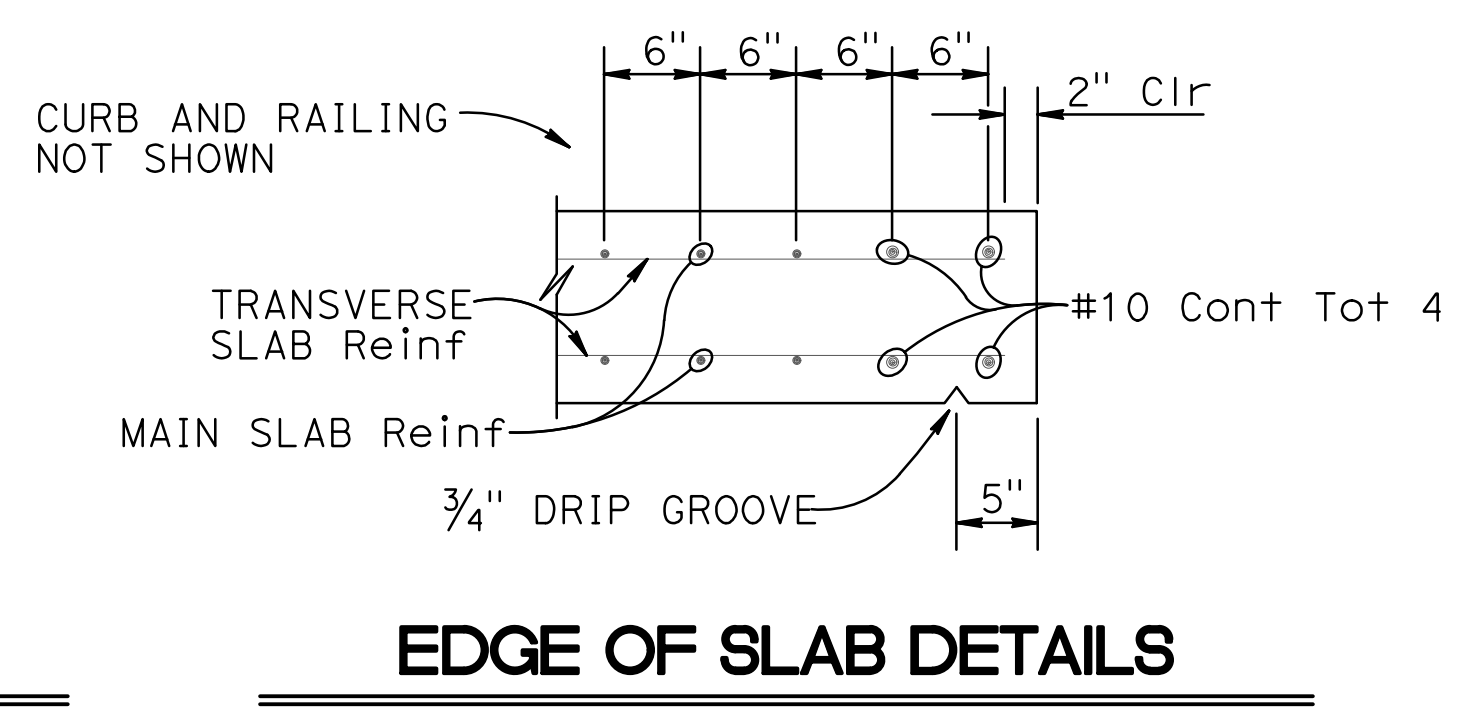
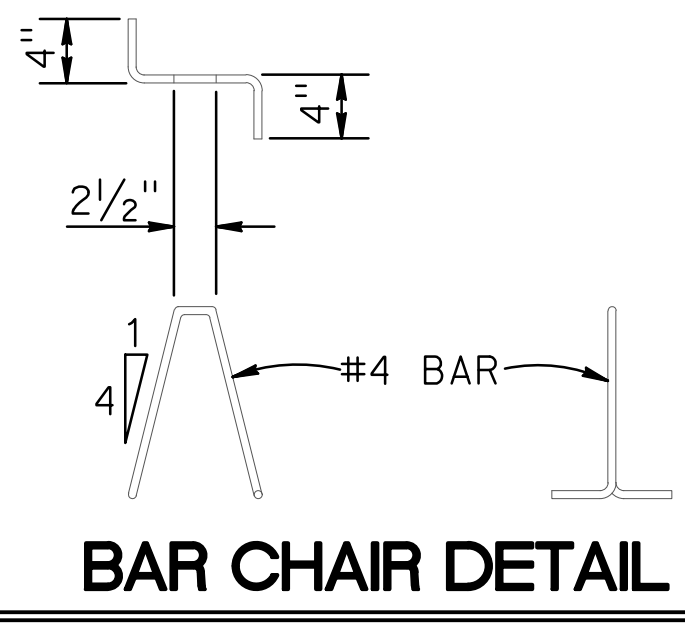
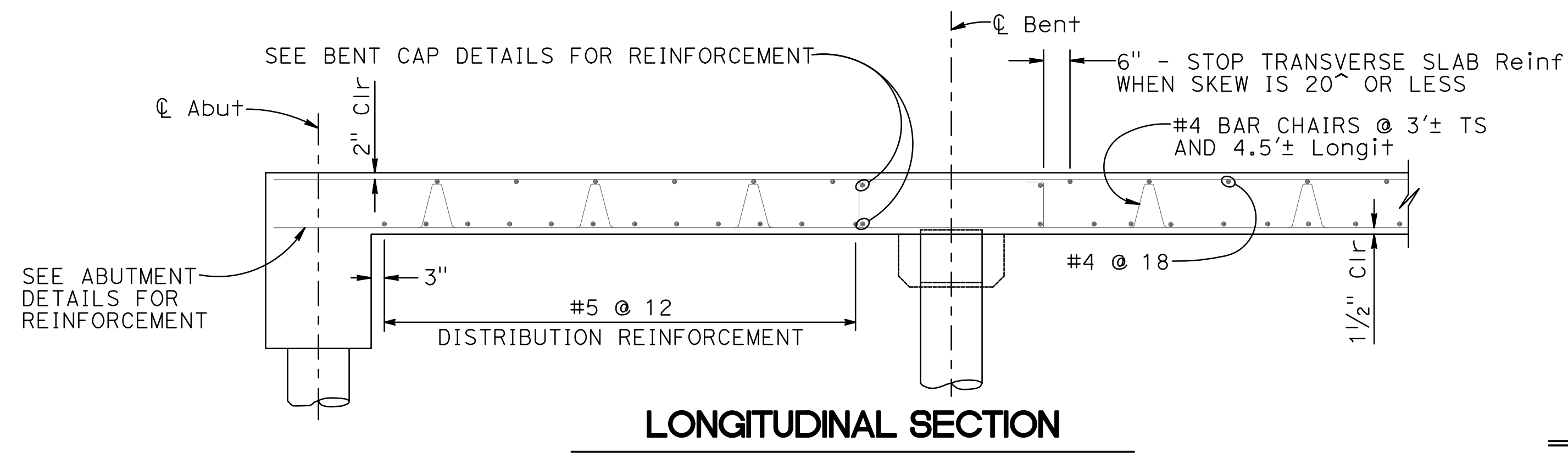
DATE PLOTTED => 5/31/2023 USERNAME => KEVIN TIME PLOTTED => 10:55:00 AM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	25	35


 REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



BAR SPLICE LENGTH								
BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
ALL BARS, EXCEPT TOP BARS IN SPANS OVER 24'	23"	28"	34"	43"	56"	71"	90"	110"
TOP BARS IN SPANS OVER 24'	23"	28"	34"	58"	74"	80"	115"	155"

REINFORCEMENT NOTES:
 Splices in top main bars to be located near center of span.
 Splices in bottom main bars to be located near bent.
 Spacing of all transverse bars is measured along ϕ roadway.

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER

BRIDGE NO.	11C0015	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) SLAB REINFORCEMENT DETAILS NO. 2
POST MILES	NA	
NA		

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



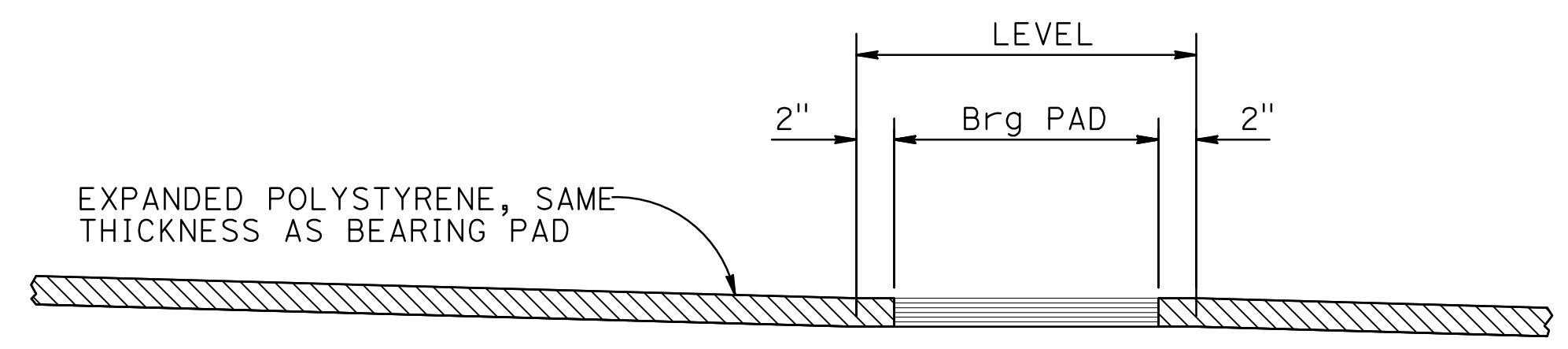
DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 11/10/14 07/28/17 05/31/23	SHEET 7	OF 17
---	--	---------	-------

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	26	35

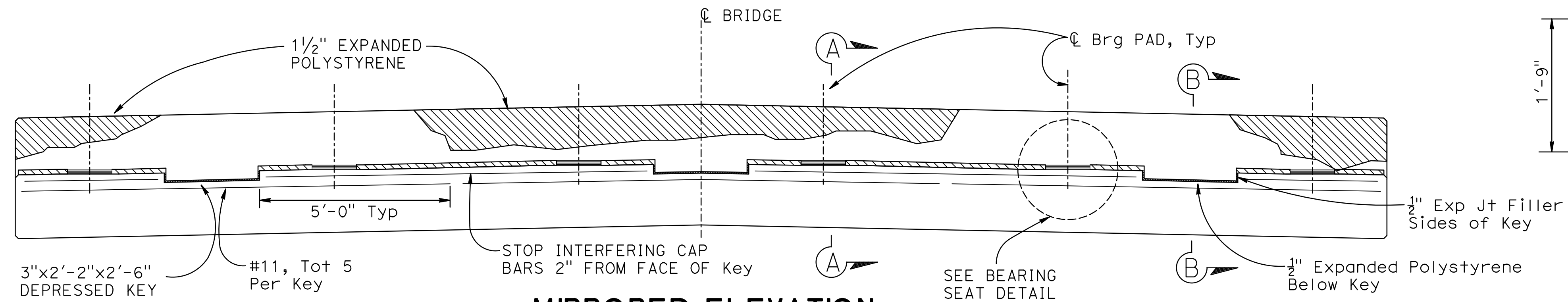
REGISTERED CIVIL ENGINEER
 DATE: 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

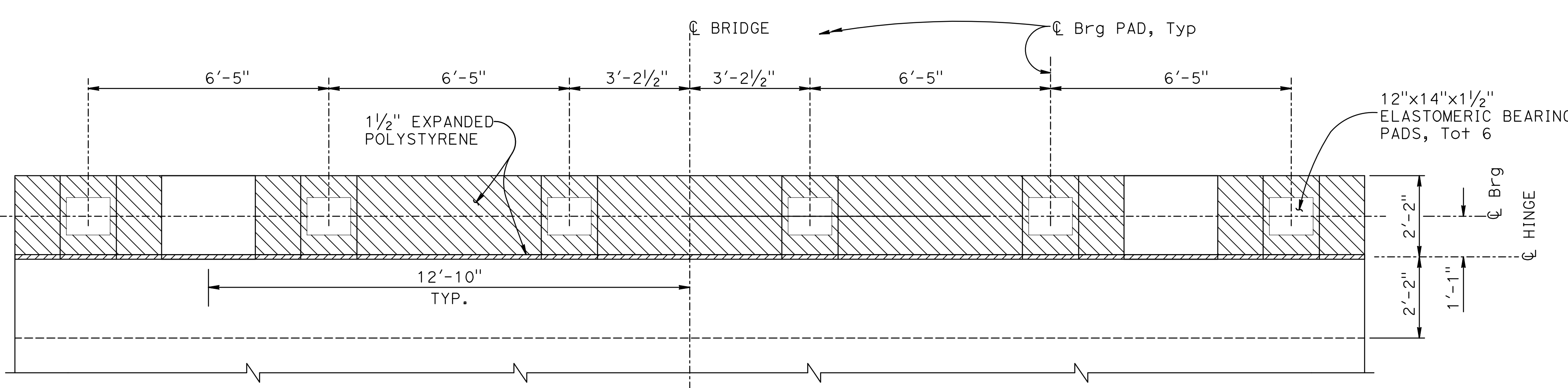
Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



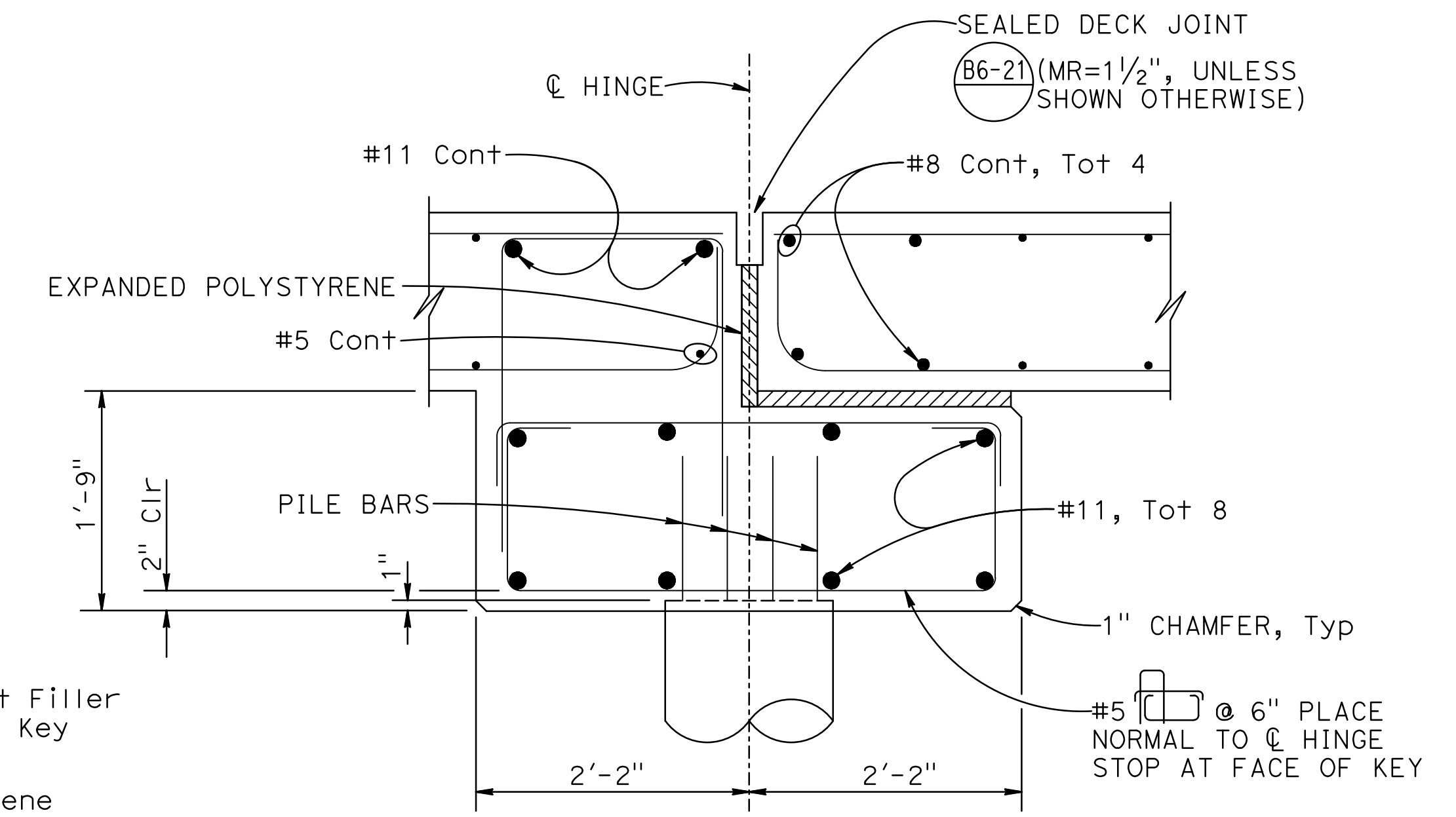
BEARING SEAT DETAIL
SCALE: 1/2" = 1'-0"



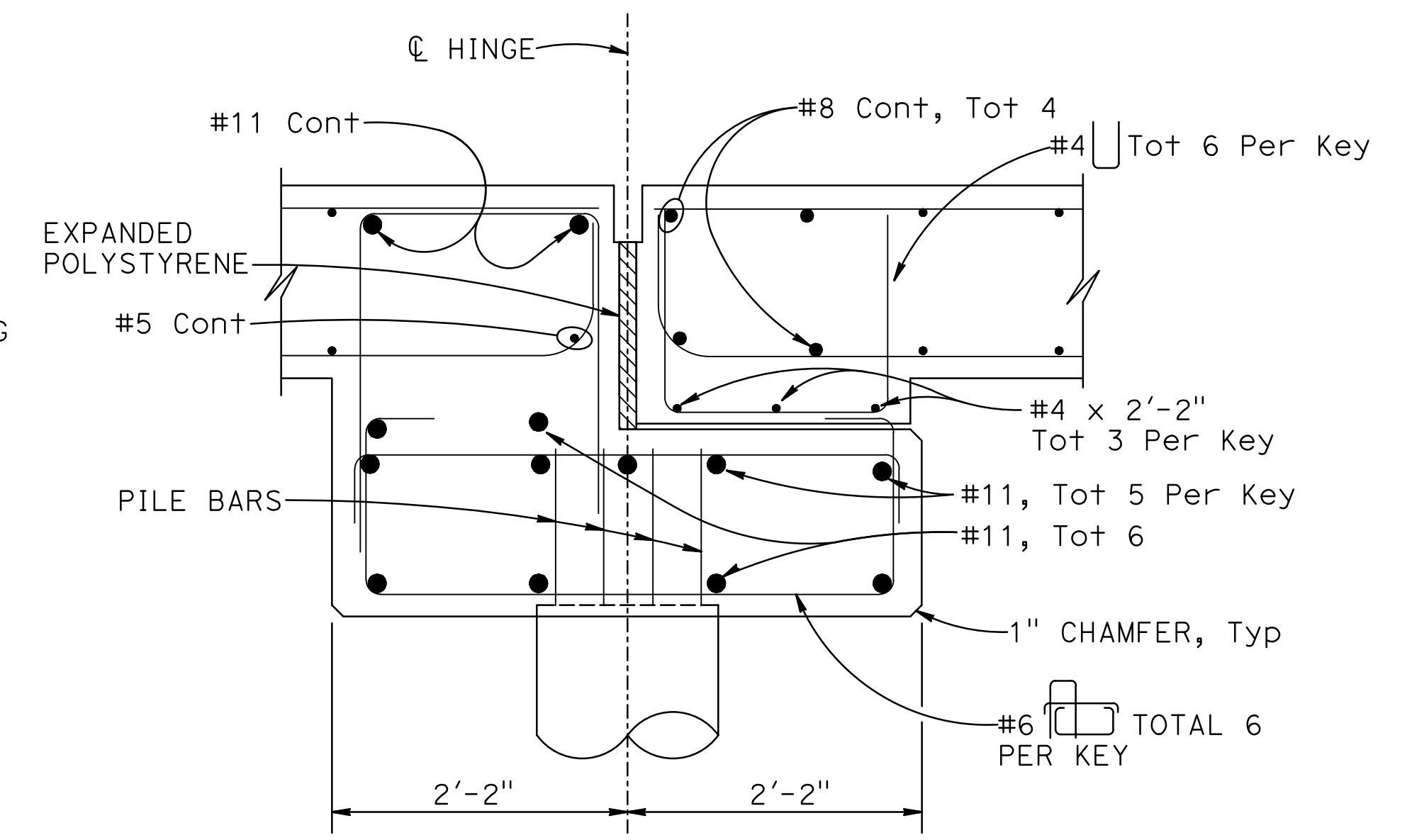
MIRRORED ELEVATION
SCALE: 1/2" = 1'-0"



PLAN
SCALE: 1/2" = 1'-0"



SECTION A-A
SCALE: 1" = 1'-0"



SECTION B-B
SCALE: 1" = 1'-0"

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON	BRIDGE NO.
PROJECT ENGINEER	11C0015
	POST MILES
	NA

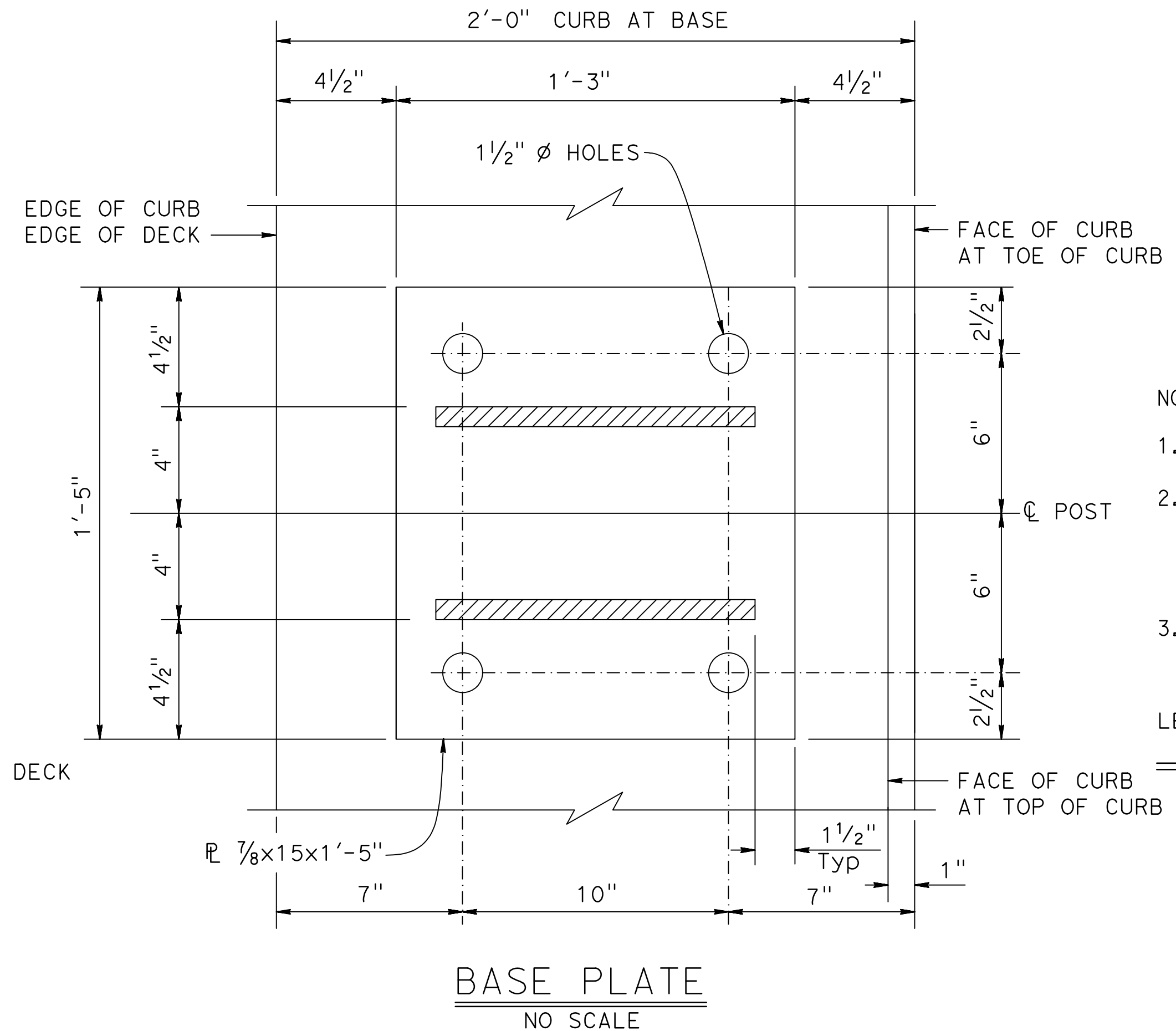
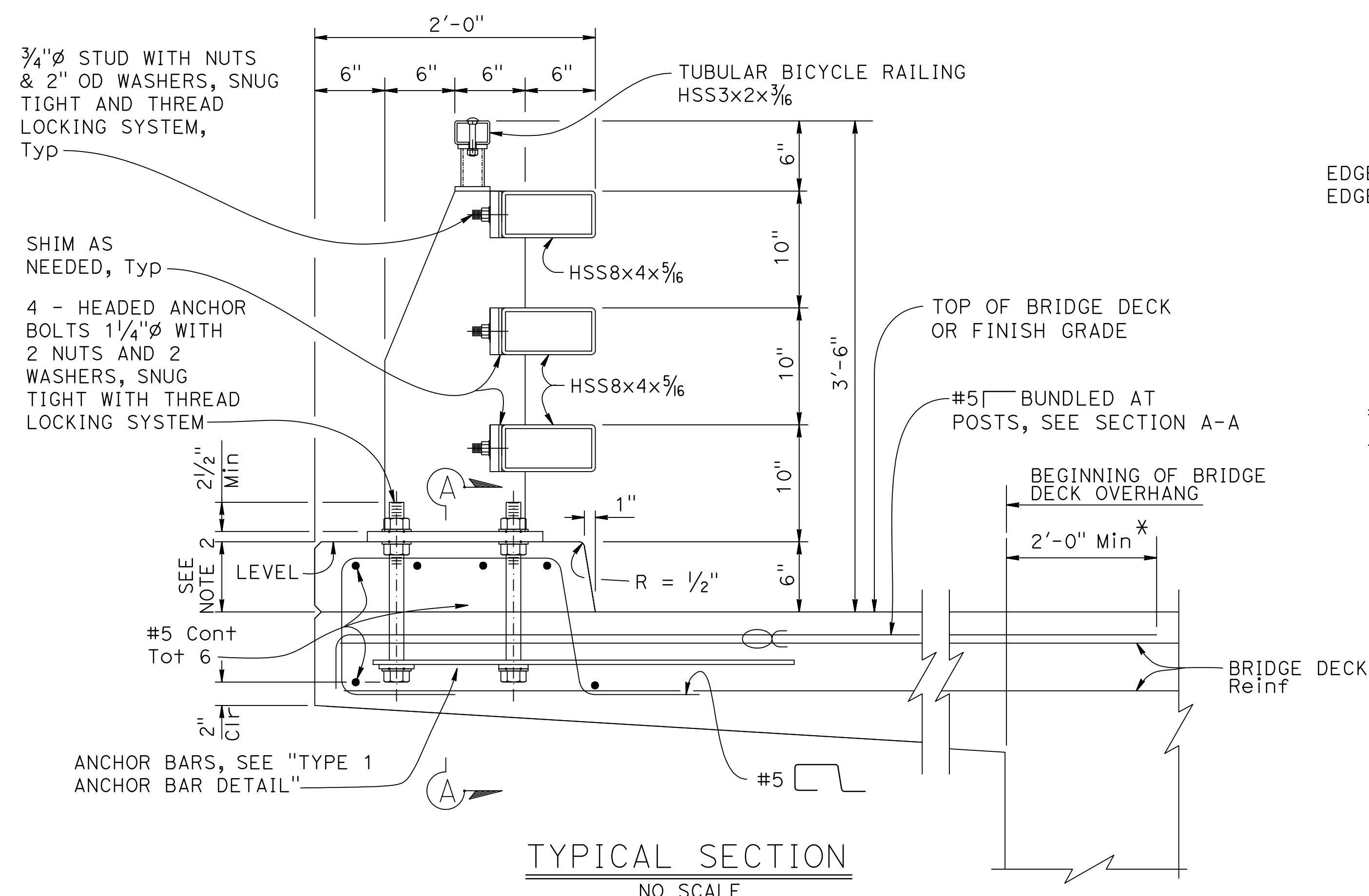
BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
SLAB HINGE DETAILS

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

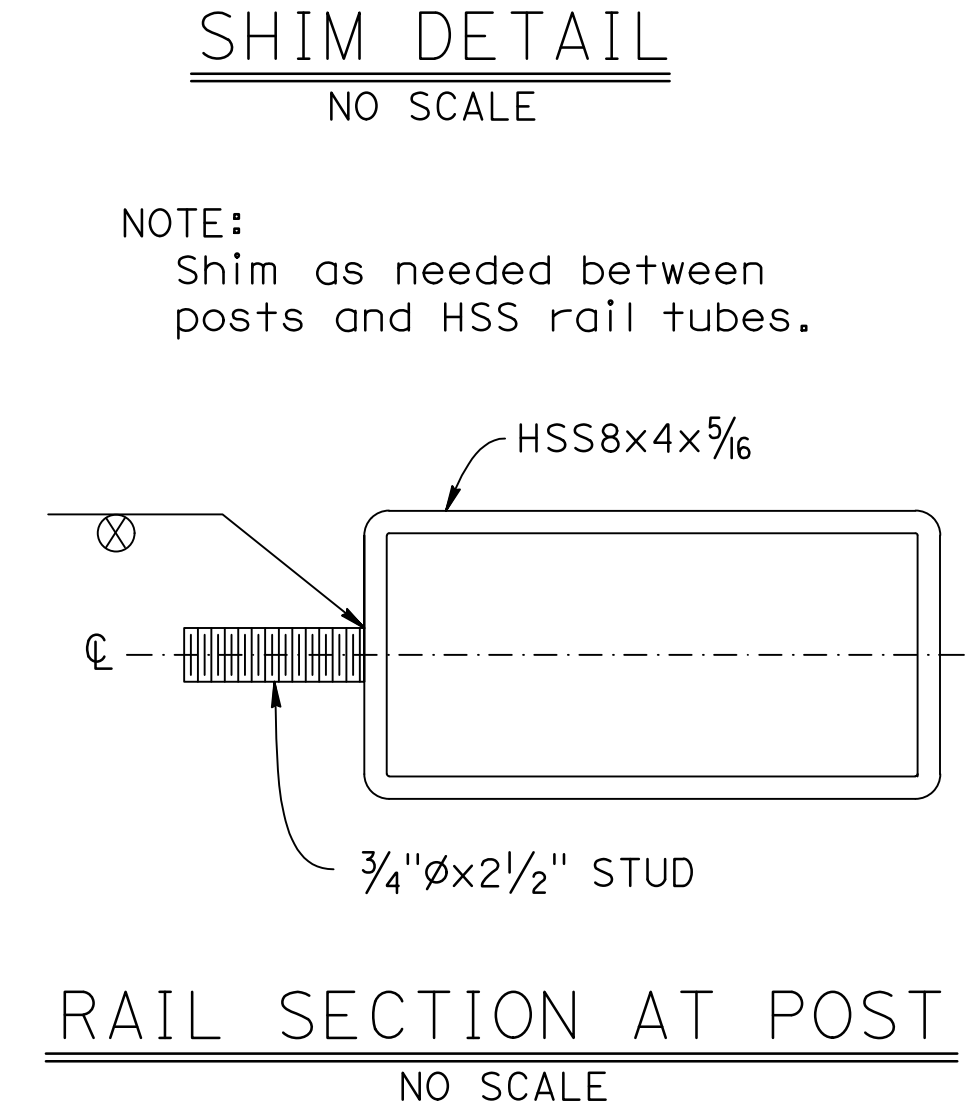
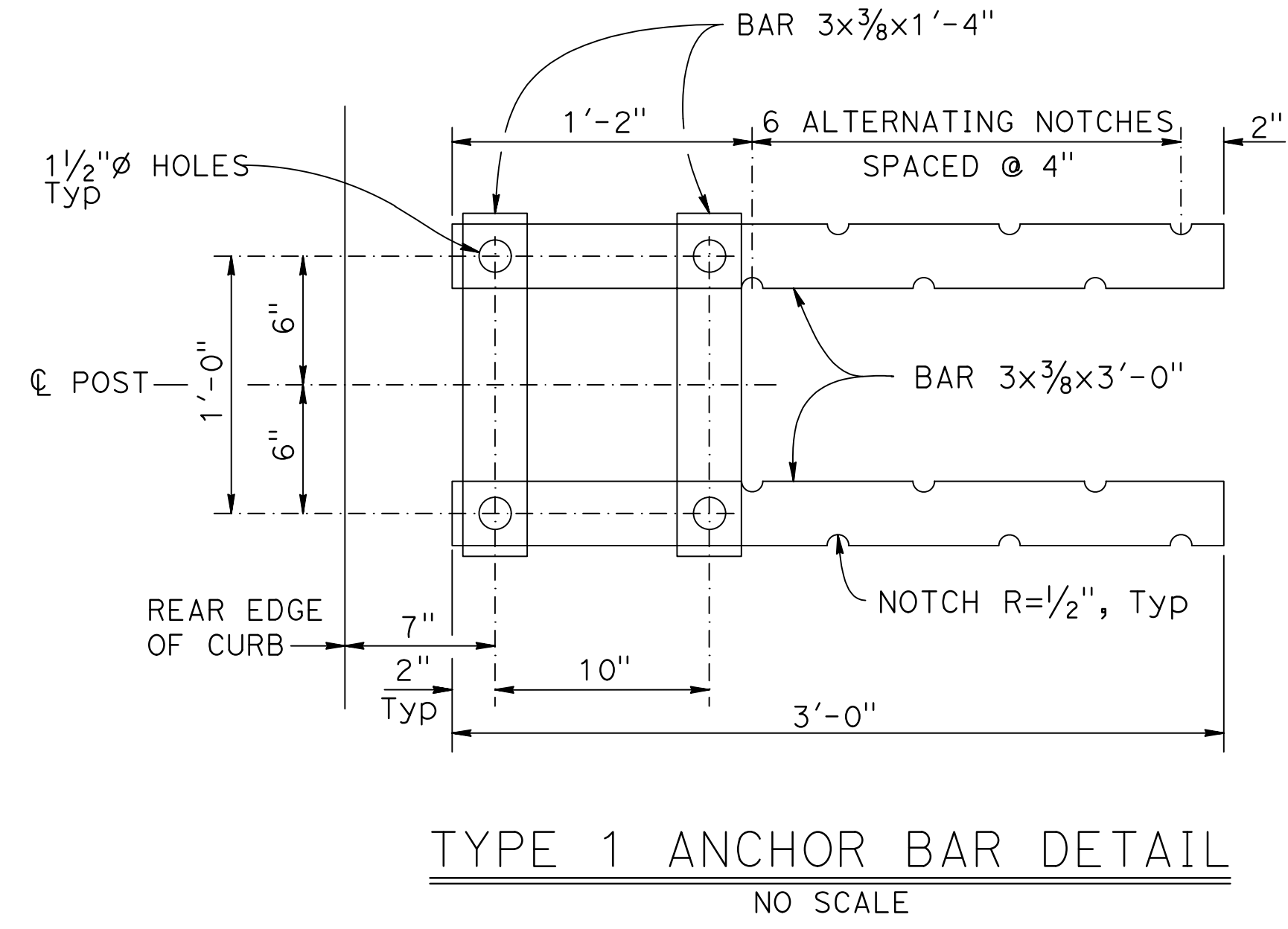
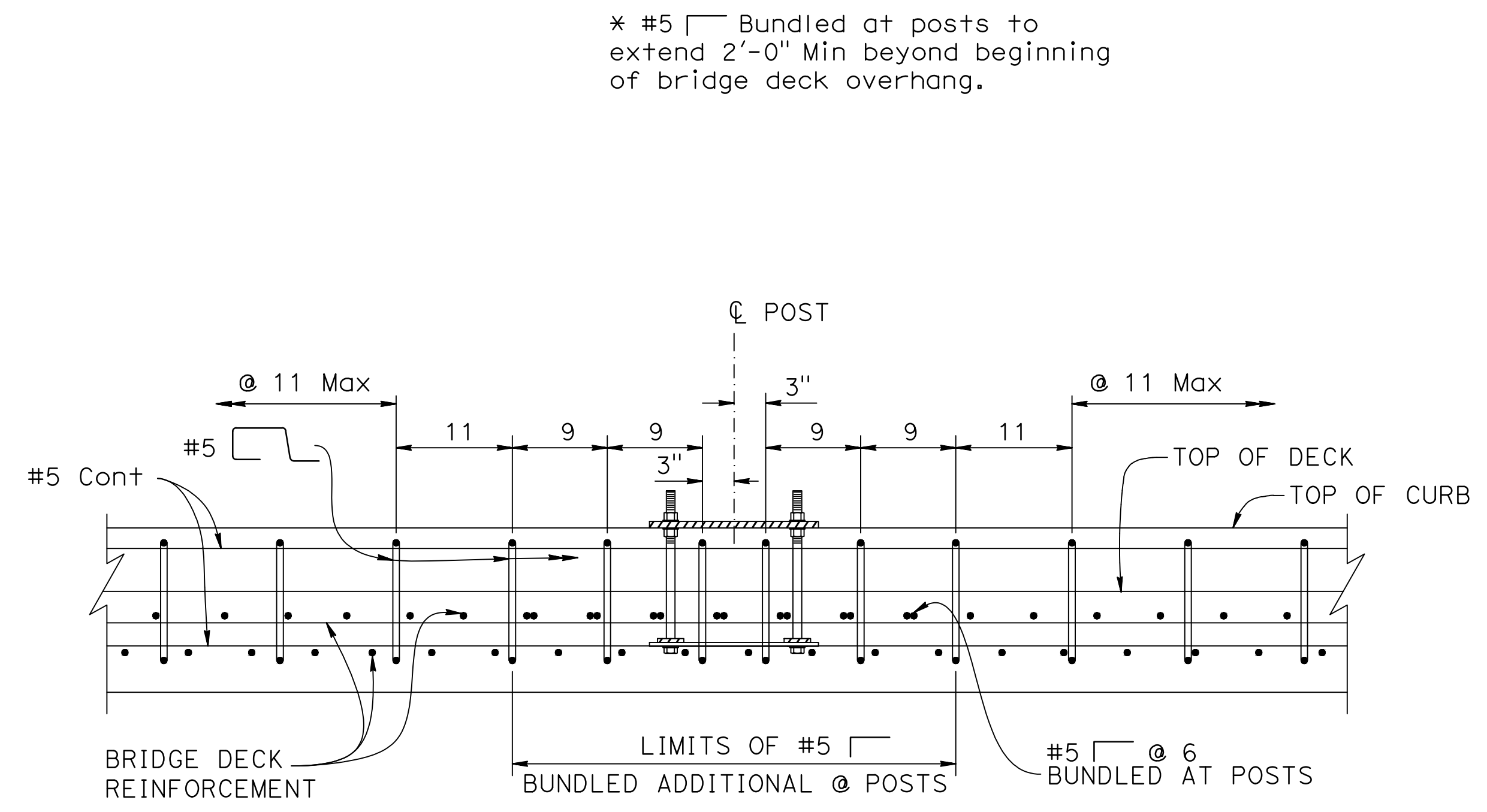
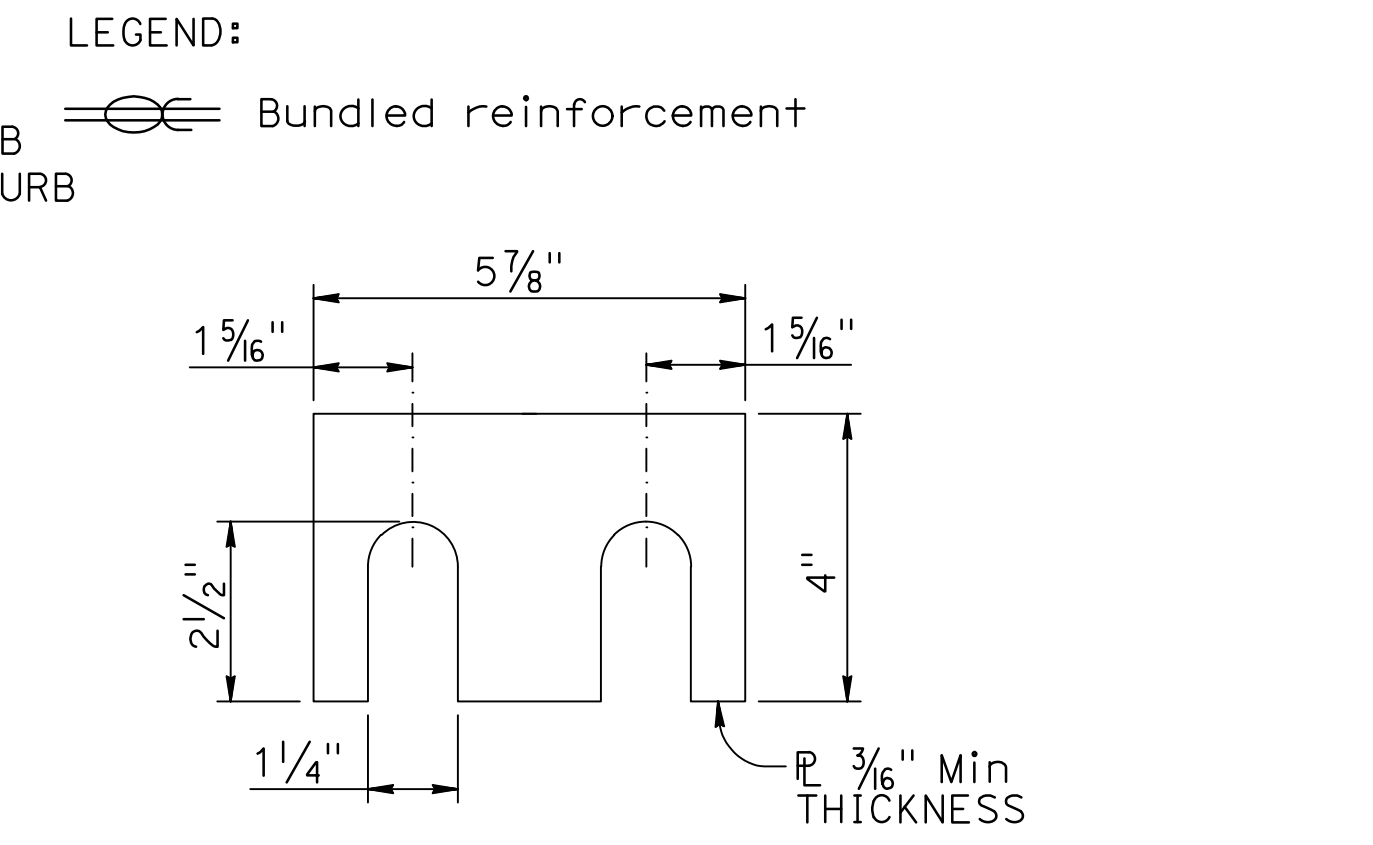


DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	11/10/14 07/28/17 05/31/23	8	17

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	27	35
REGISTERED CIVIL ENGINEER GARY M. GORDON No. 42176 Exp. 03-31-24 CIVIL STATE OF CALIFORNIA				05-31-23 DATE May 31, 2023 PLANS APPROVAL DATE	



- NOTES:
- Anchor bolts may be tack welded to anchor bars.
 - Curb dimension at back side of rail will vary with bridge deck cross slope, and if overlay is placed on the bridge deck. For the same reasons, the anchor bolt lengths will vary.
 - Use extra thick washers for anchor bolts, with a minimum thickness of 0.305" and a maximum thickness of 0.375".



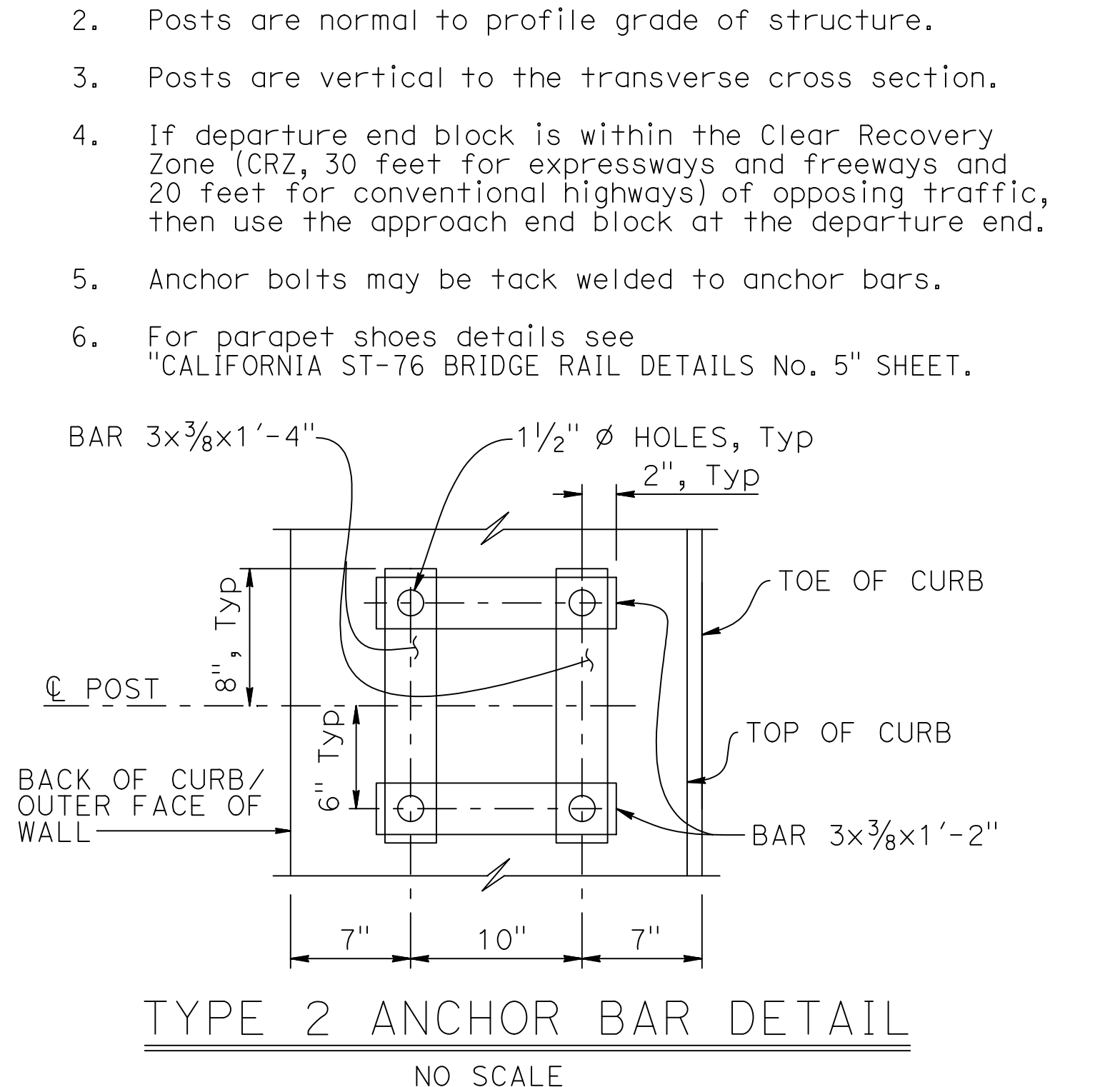
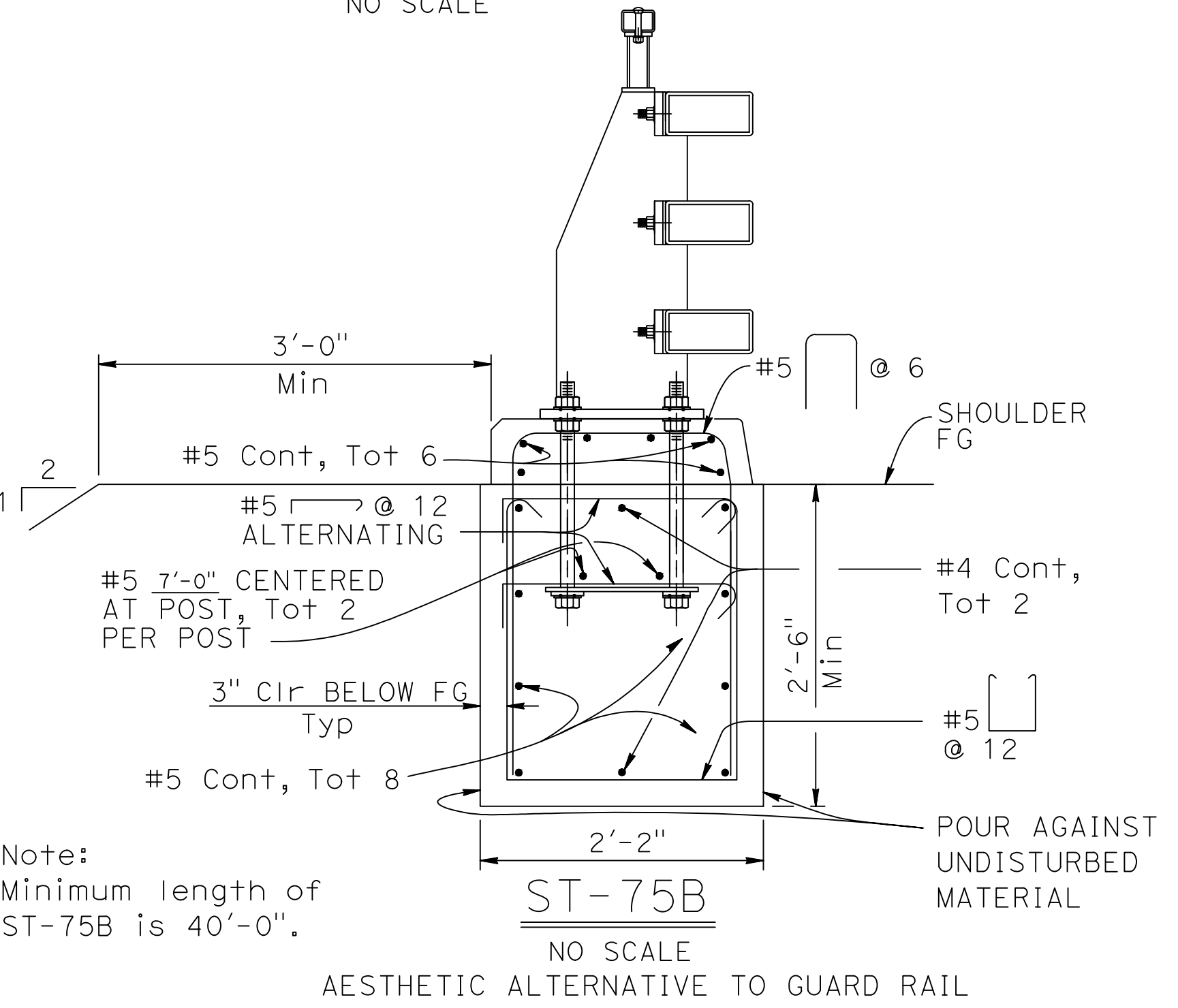
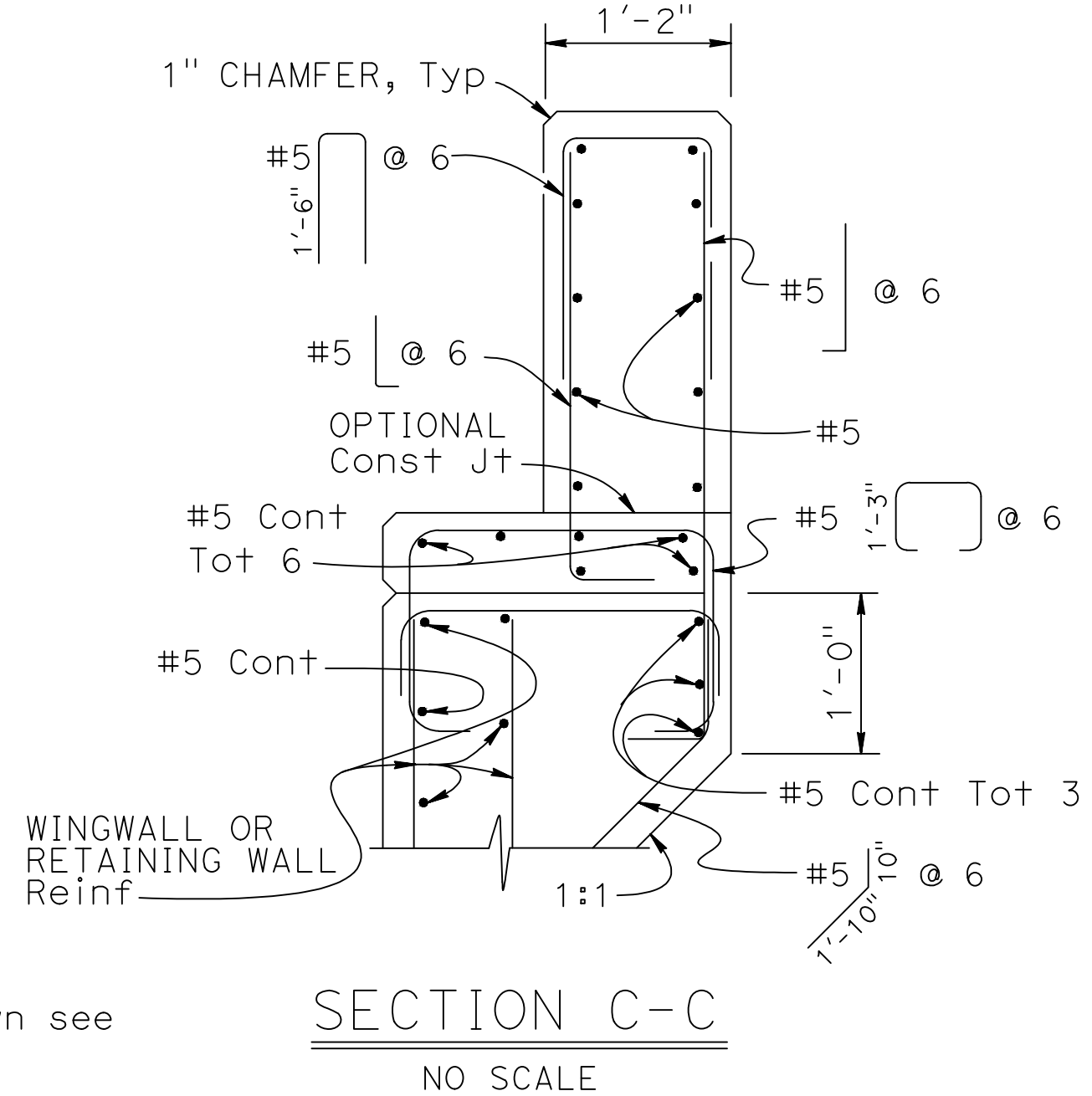
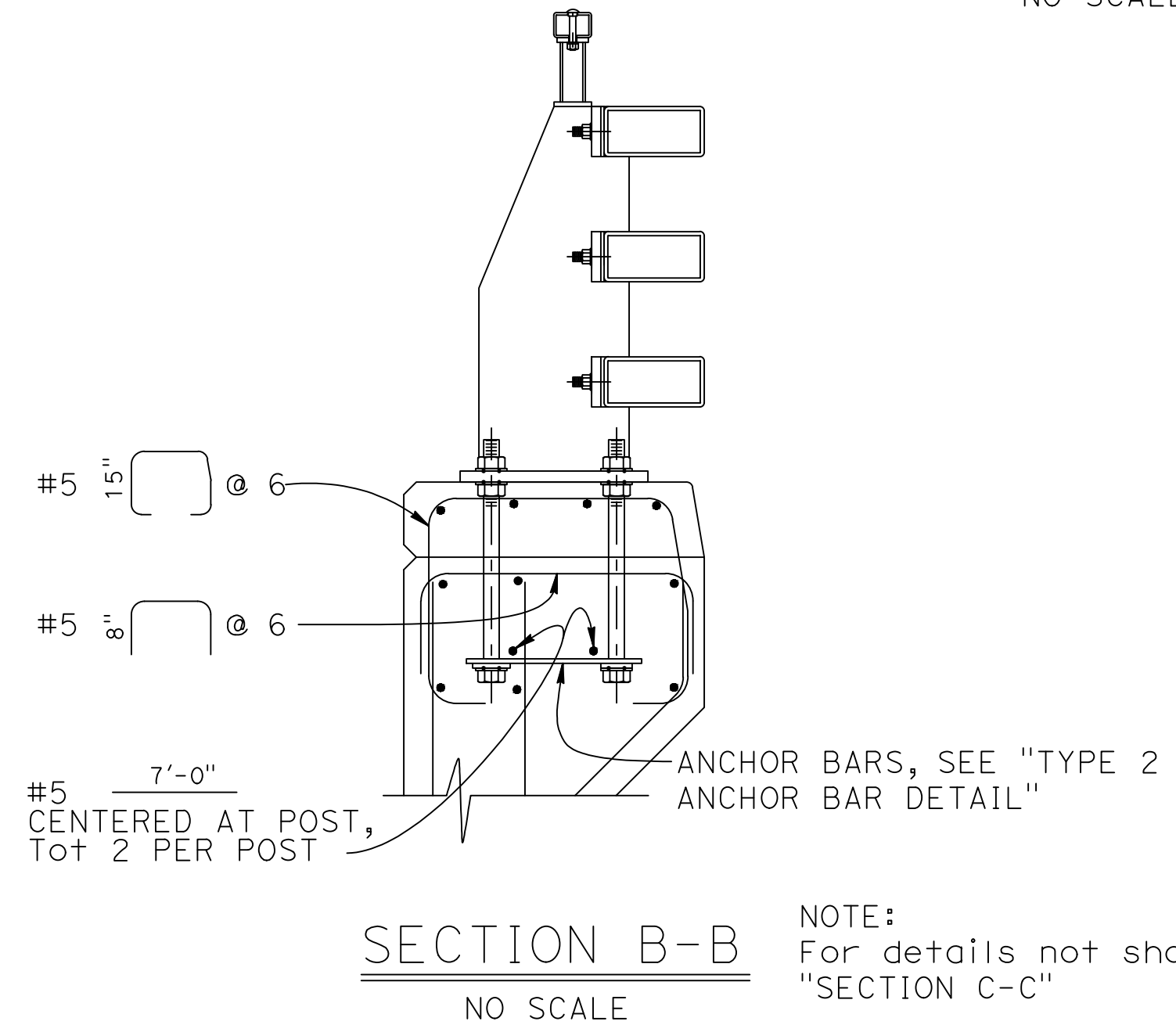
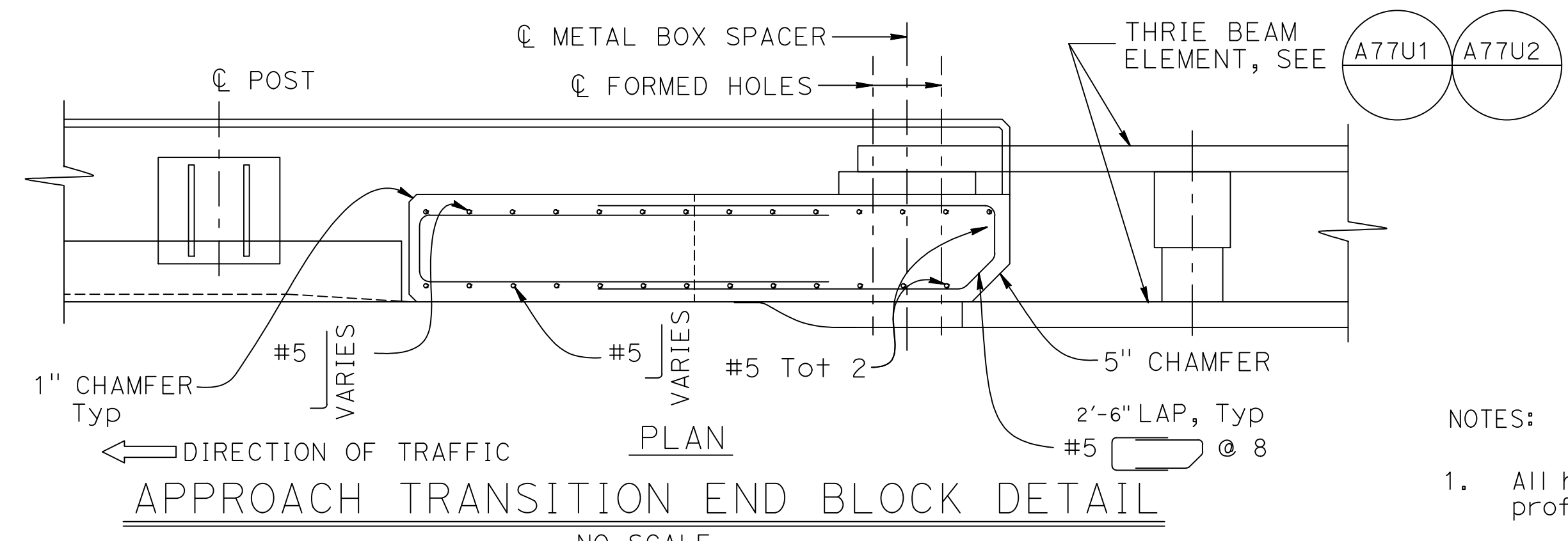
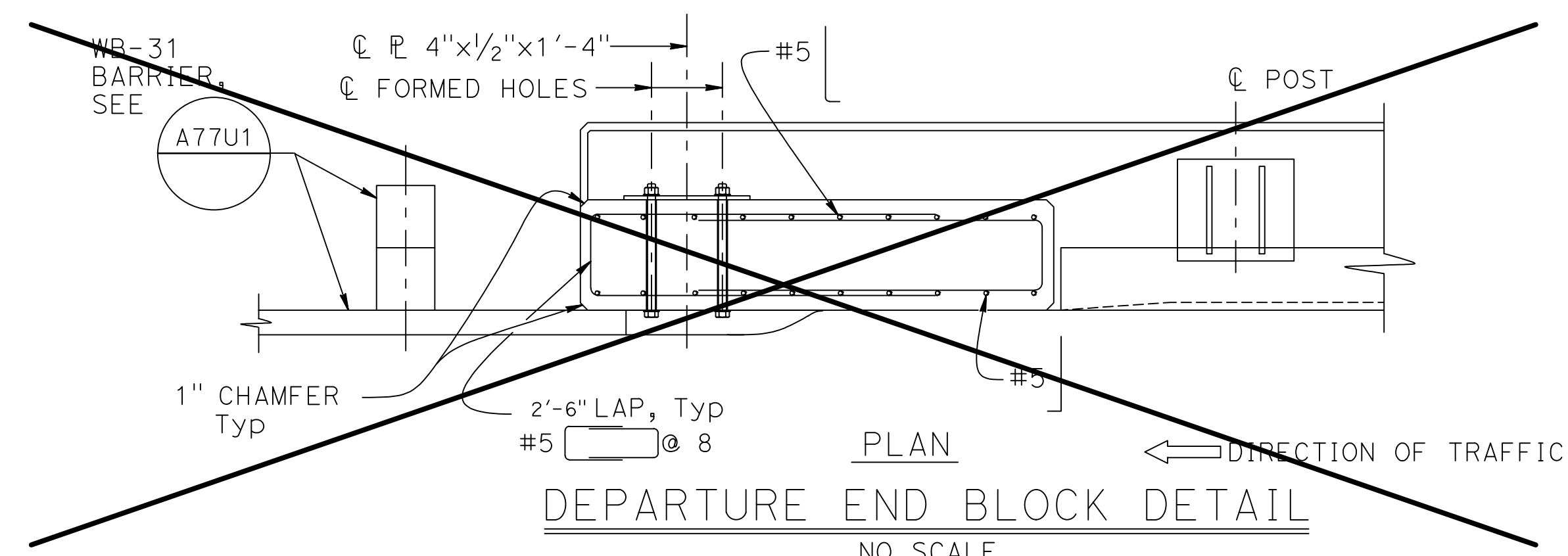
SECTION A-A
NO SCALE
NOTE: Post not shown for clarity.

BRIDGE STANDARD DETAILS		DESIGN	BY	CHECKED	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO.	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 1
xs16-116-1	JULY 2022	DETAILS	K. COOK-GUTERIEZ	G. GORDON		11C0015	
FILE NO.	APPROVAL DATE	QUANTITIES		G. GORDON PROJECT ENGINEER		NA	
Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		0 1 2 3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 9 OF 17
					FILE => 11-0015-r-rspxs16-116-1	12/18/19 06/28/22 01/05/22	

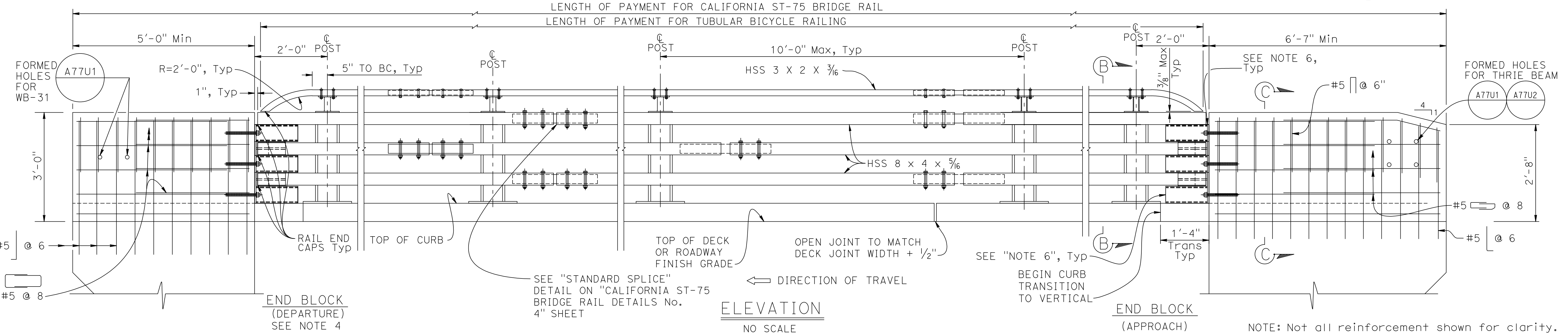
2022 STANDARD PLAN XS-16-116-1 DATE PLOTTED => 05/31/2023 11:00:11 AM USERNAME => KEVIN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	28	35

REGISTERED CIVIL ENGINEER
 DATE: 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



- NOTES:
- All horizontal members are parallel to longitudinal profile grade.
 - Posts are normal to profile grade of structure.
 - Posts are vertical to the transverse cross section.
 - If departure end block is within the Clear Recovery Zone (CRZ, 30 feet for expressways and freeways and 20 feet for conventional highways) of opposing traffic, then use the approach end block at the departure end.
 - Anchor bolts may be tack welded to anchor bars.
 - For parapet shoes details see "CALIFORNIA ST-76 BRIDGE RAIL DETAILS No. 5" SHEET.



BRIDGE STANDARD DETAILS

xs16-116-2	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.
FILE NO.	APPROVAL DATE	

DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

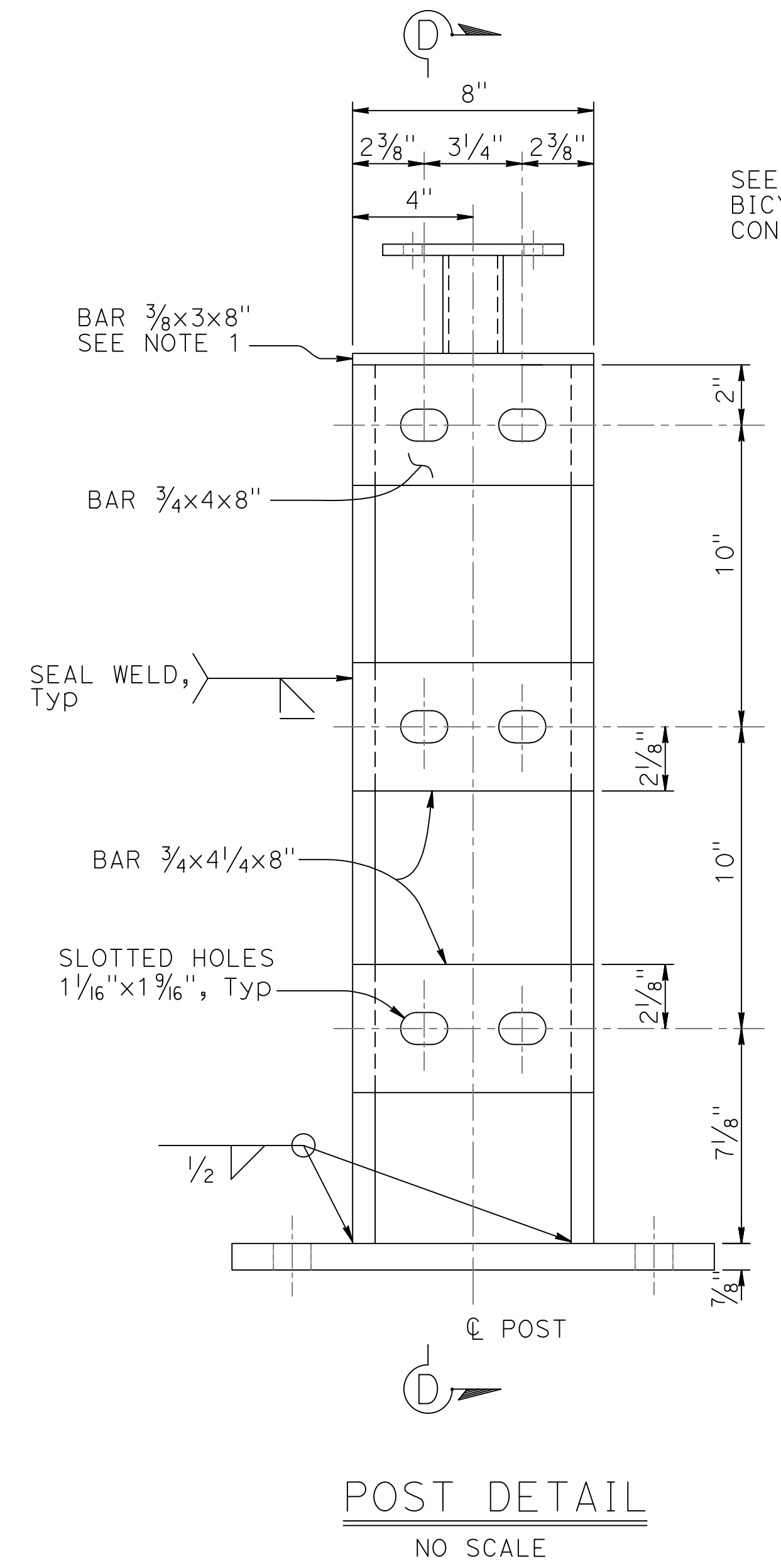
BRIDGE NO.	11C0015	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 2
POST MILES	NA	
REVISION DATES	12/21/19 06/28/22 01/05/22	

2022 STANDARD PLAN XS-16-116-2

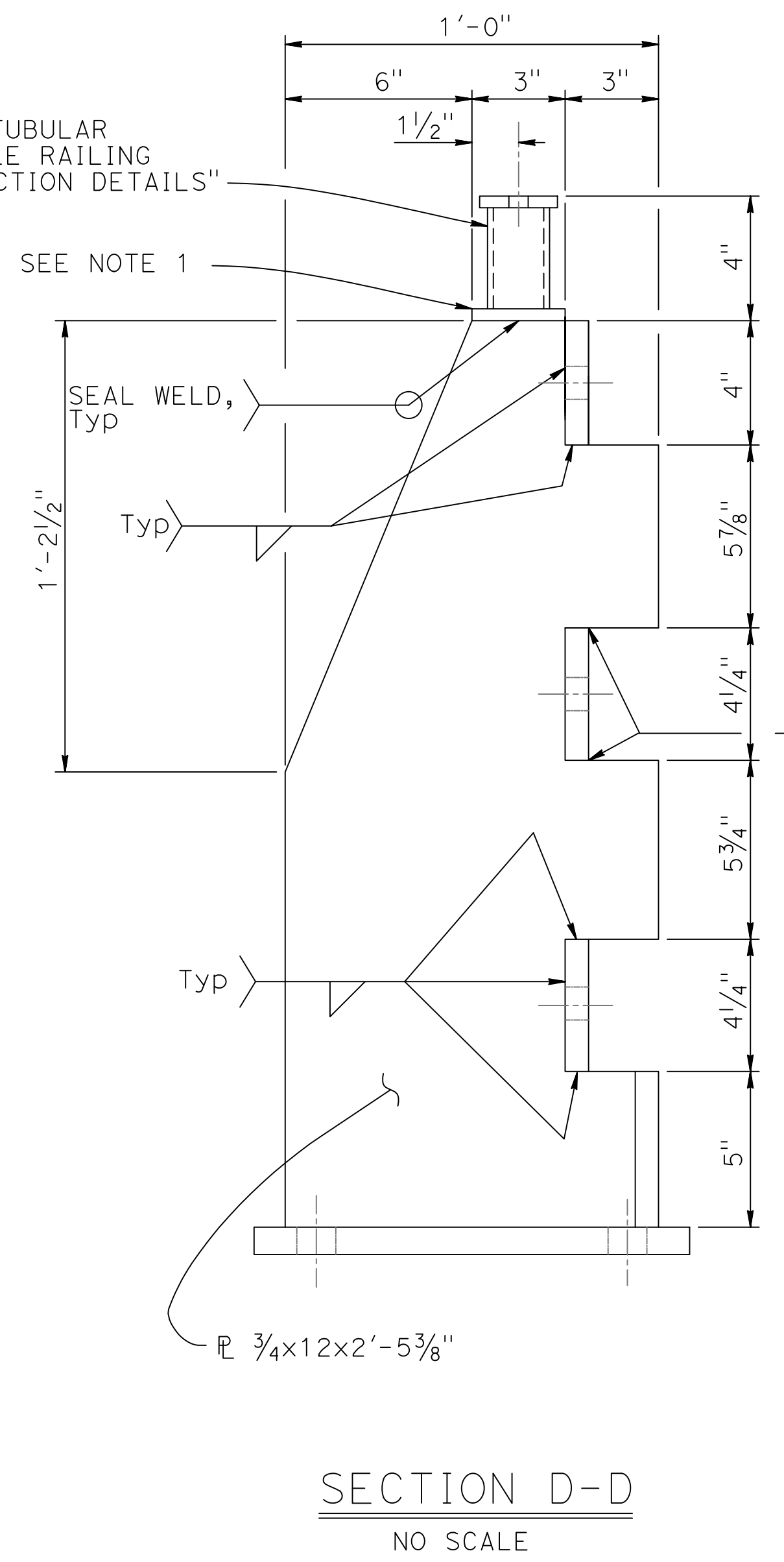
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	29	35

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

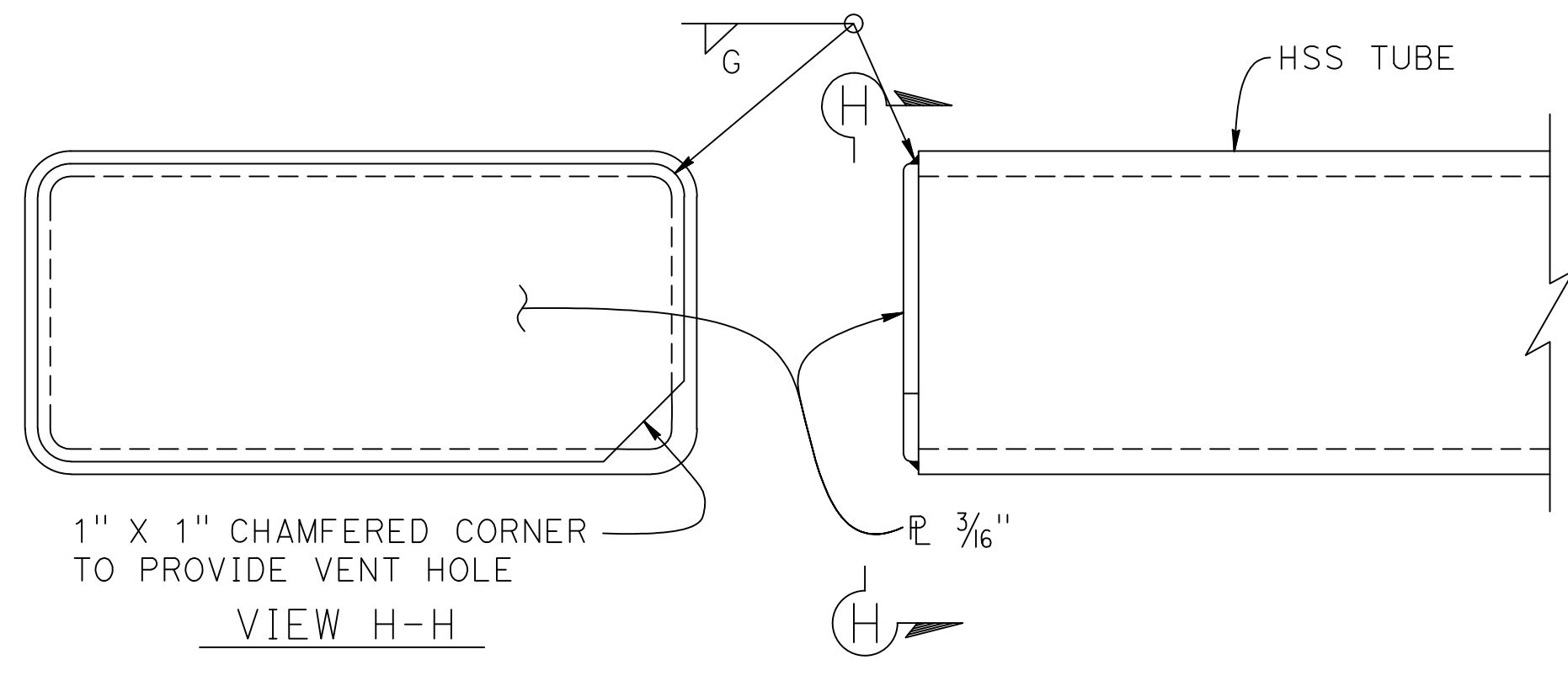
REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



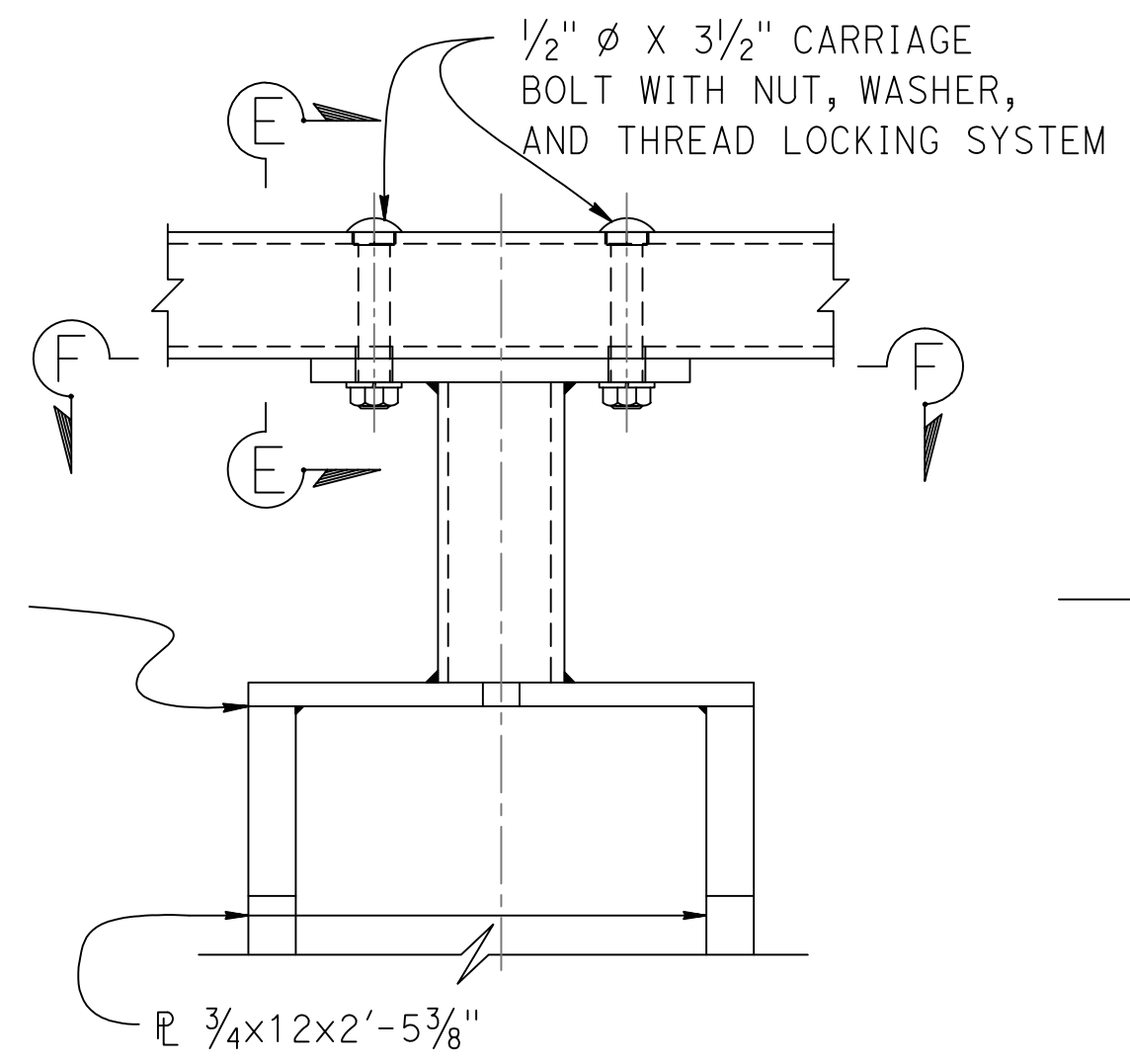
POST DETAIL
NO SCALE



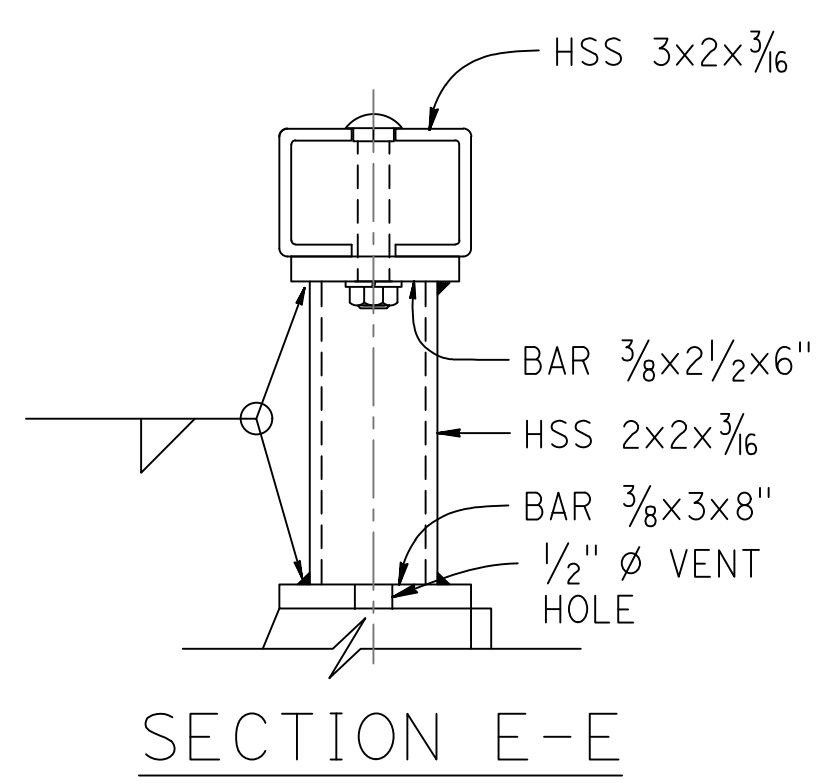
SECTION D-D
NO SCALE



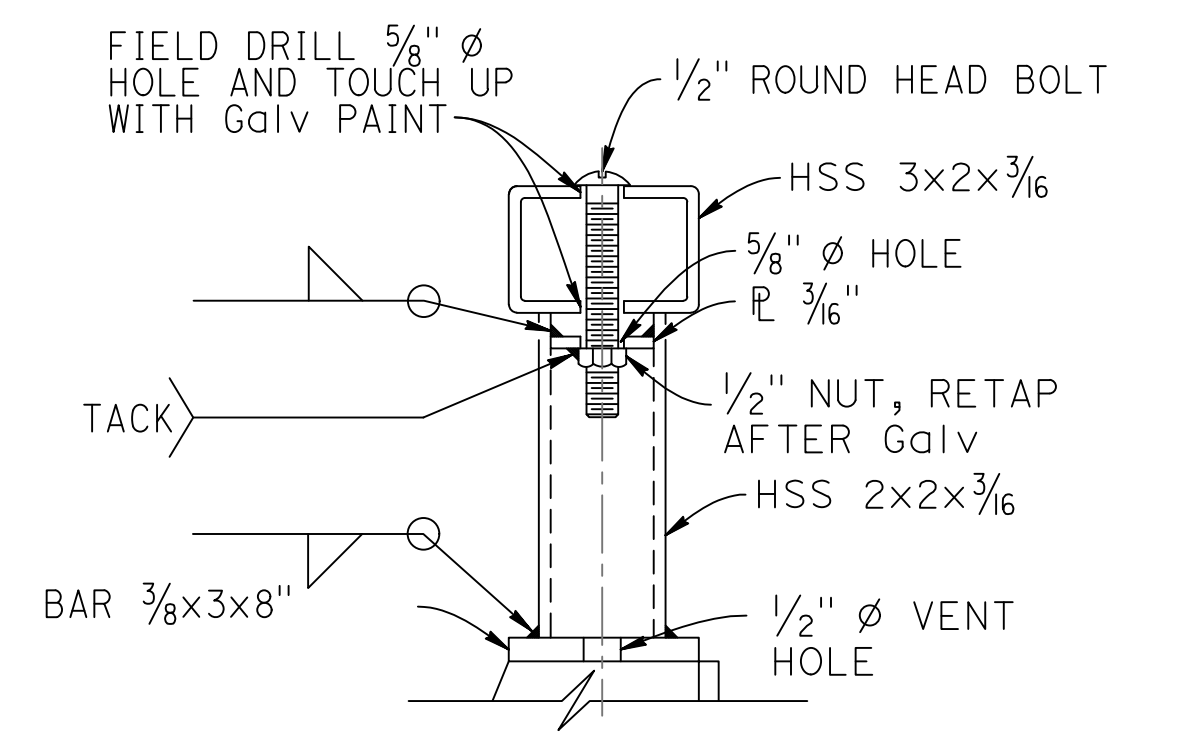
RAIL END CAP
NO SCALE
NOTE: For vehicular rail tube and bicycle railing tubes.



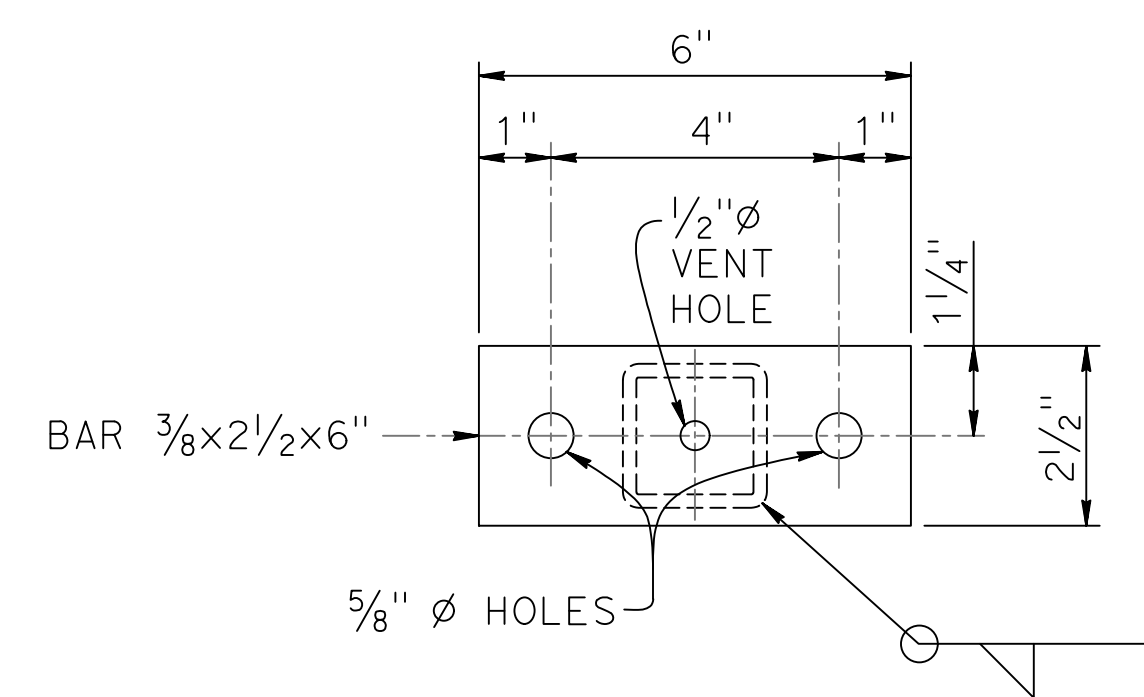
ELEVATION



SECTION E-E



SECTION E-E ALTERNATIVE



SECTION F-F
TUBULAR BICYCLE RAILING CONNECTION DETAILS

NO SCALE

BRIDGE STANDARD DETAILS		
xs16-116-3 FILE NO.	JULY 2022 APPROVAL DATE	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California

DESIGN	BY	CHECKED
DETAILS	K. COOK-GUTERIEZ	G. GORDON
QUANTITIES		

PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0015
		POST MILES NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)		
CALIFORNIA ST-75 BRIDGE RAIL		
DETAILS No. 3		

Refer to: <http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html>



FILE => 11-0015-r-rspxs16-116-3

REVISION DATES	SHEET	OF
12/18/19 06/28/22 01/05/22	11	17

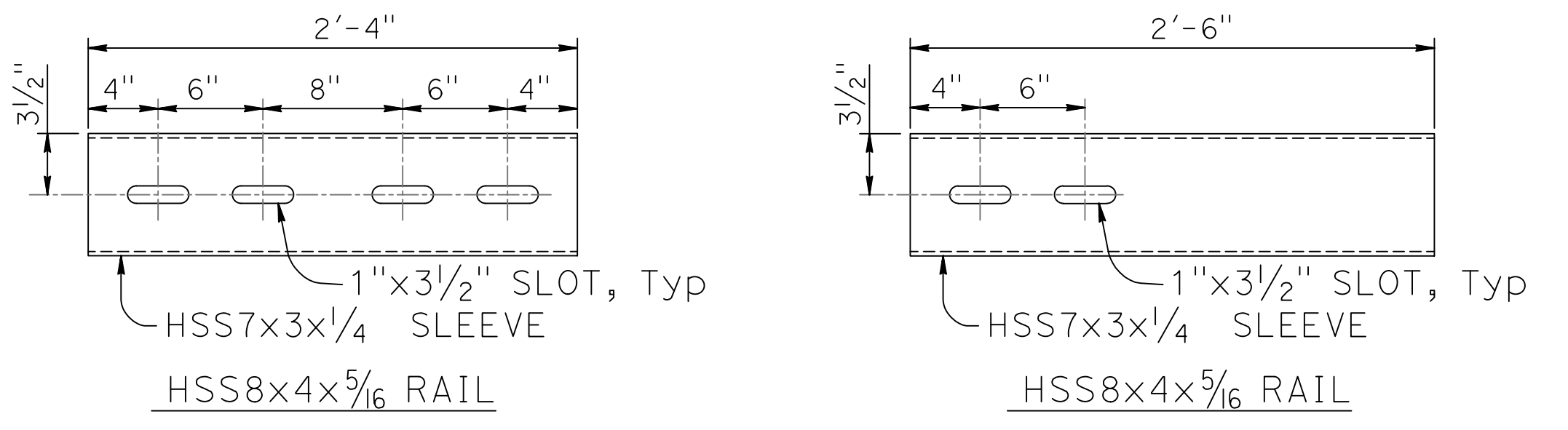
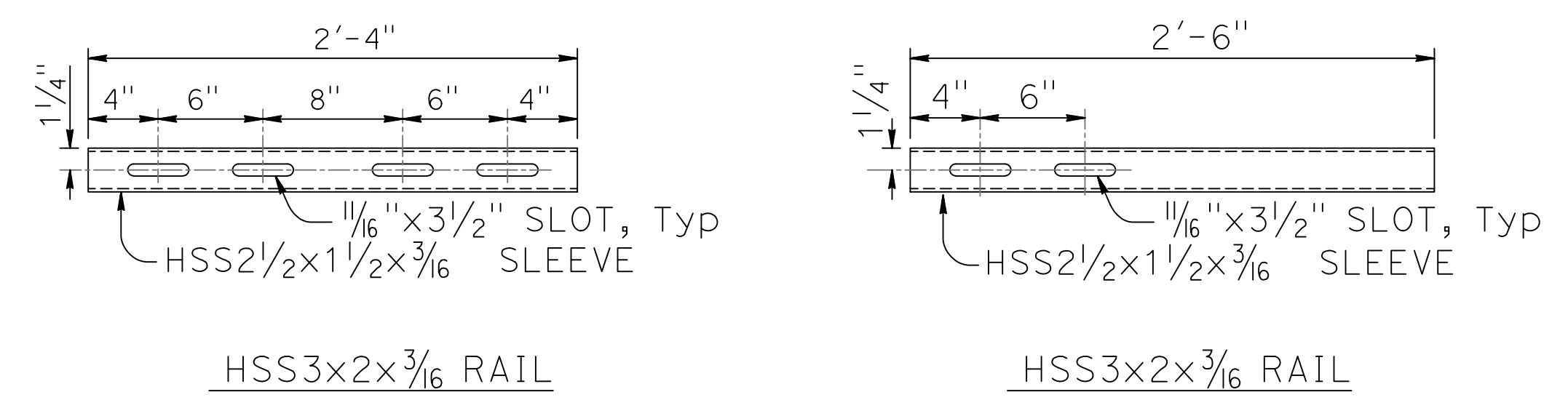
2022 STANDARD PLAN XS-16-116-3

DATE PLOTTED => 05/31/2023 14:10:11 USERNAME => KEVIN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	30	35

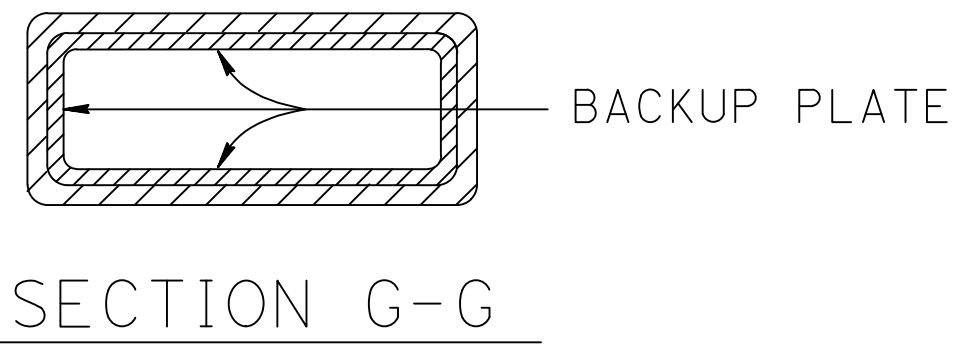
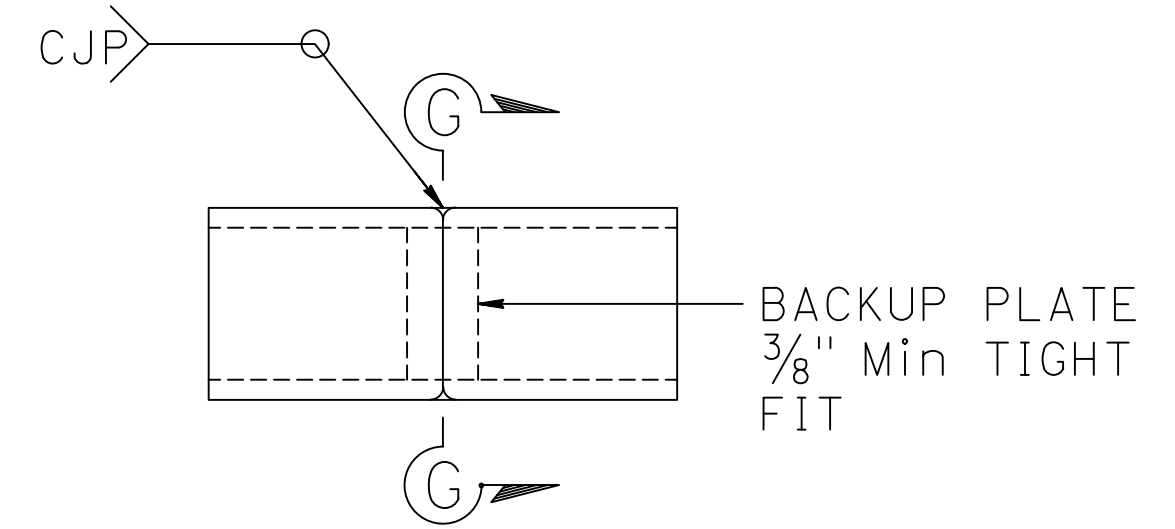
REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



STANDARD SLEEVES
DETAILS
NO SCALE

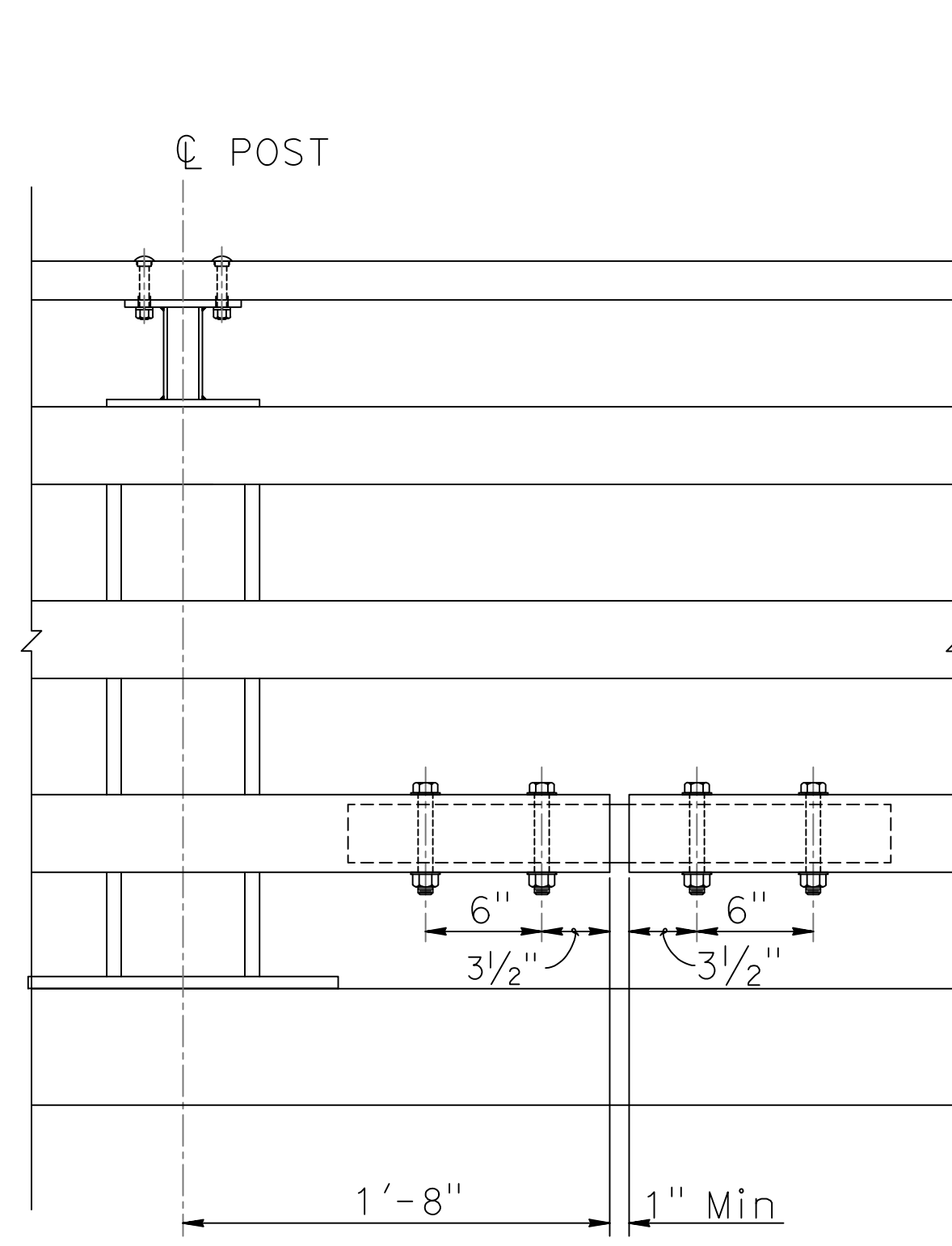
EXPANSION SLEEVES
DETAILS
NO SCALE



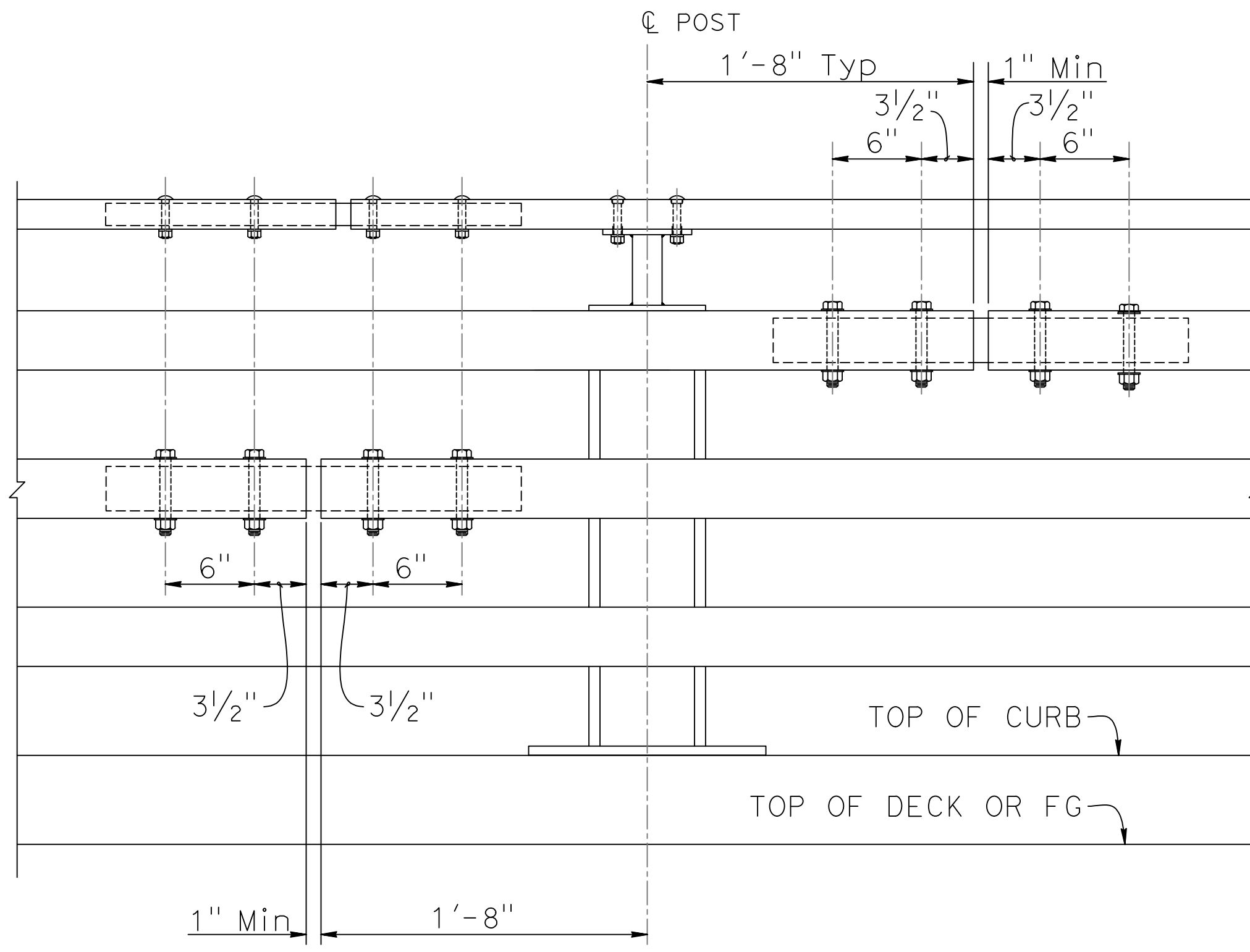
ALTERNATE TUBE
WELDED STANDARD SPLICE
NO SCALE

NOTES:

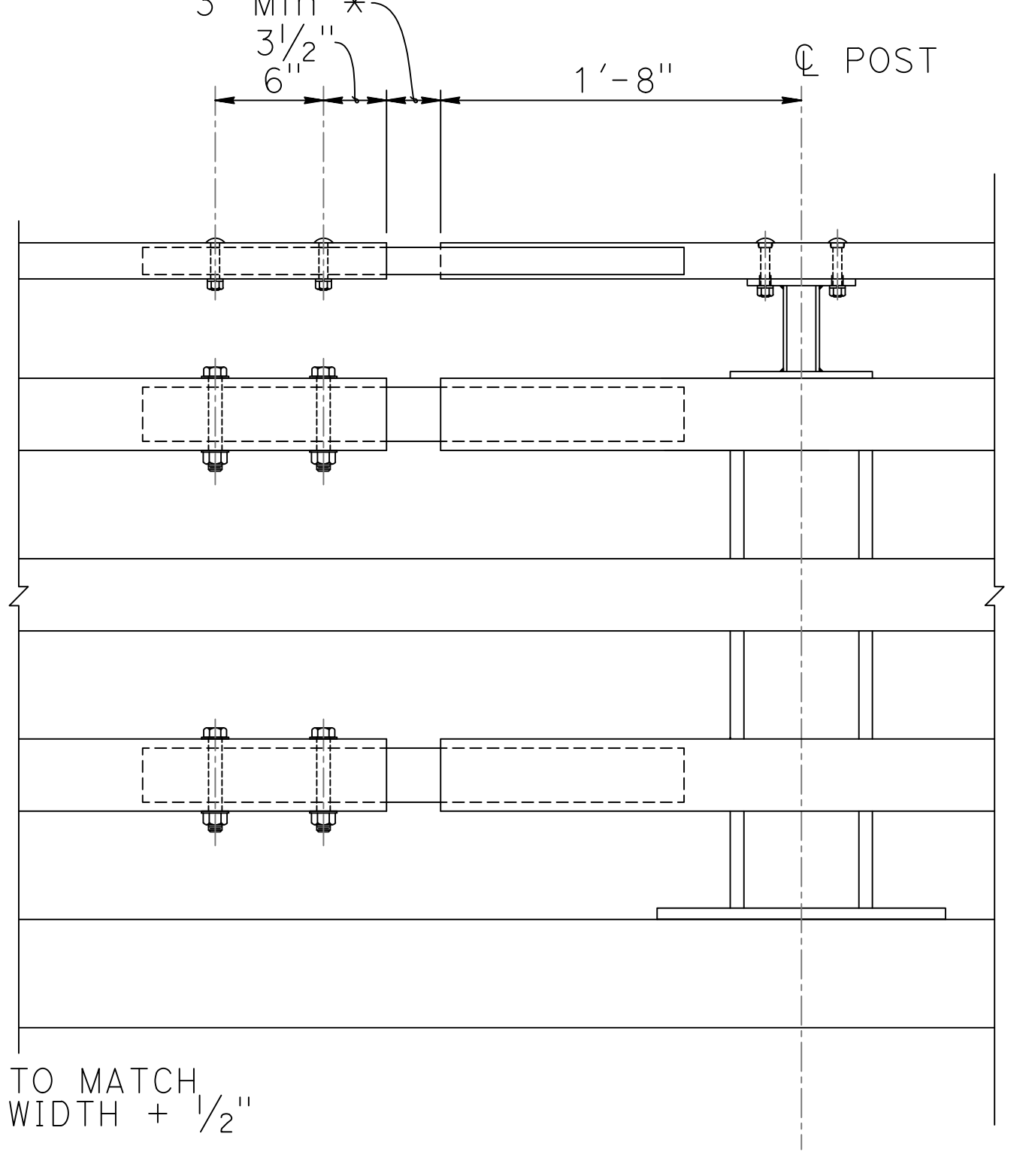
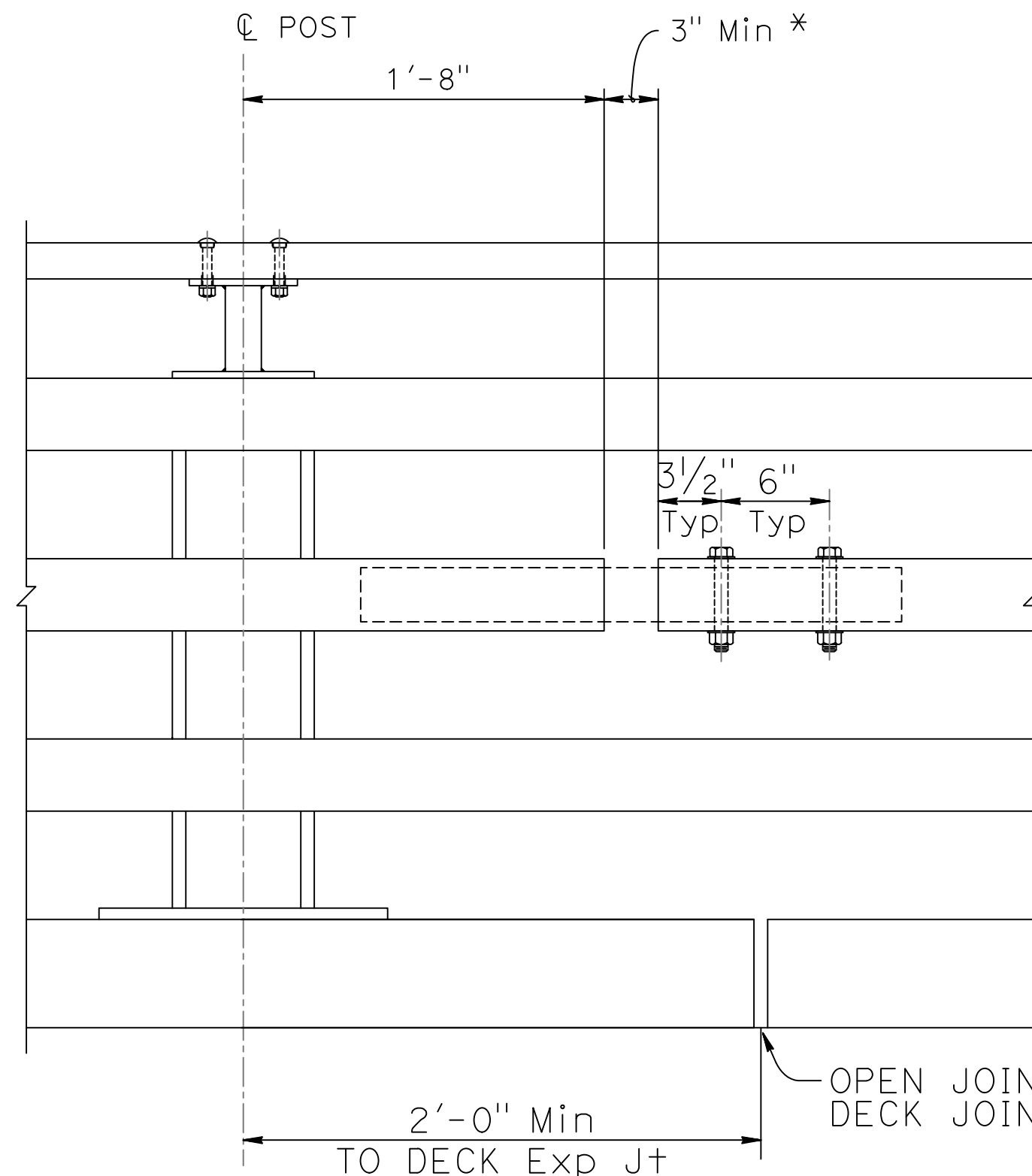
1. HS bolts with nut and washers, snug tightened, and thread locking system.
2. Use $\frac{1}{2}$ " ϕ x $\frac{3}{16}$ BOLTS (HSS3x2x $\frac{3}{16}$)
Use $\frac{3}{4}$ " ϕ x $\frac{5}{16}$ BOLTS (HSS8x4x $\frac{5}{16}$)
3. Each rail length must be continuous over a minimum of two posts.
4. The fabricator must check that the tubular sleeve splices conform to the dimensions indicated to assure proper clearance.
5. Except for expansion splices, not more than one splice permitted per same side of post.



STANDARD SPLICE
NO SCALE



EXPANSION SPLICE
NO SCALE
* Match deck or wall joint



BRIDGE STANDARD DETAILS		
xs16-116-4	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California
FILE NO.	APPROVAL DATE	

DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR	G. GORDON
COUNTY OF GLENN	PROJECT ENGINEER
PUBLIC WORKS AGENCY	

BRIDGE NO.	11C0015	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
POST MILES	NA	
NA		
CALIFORNIA ST-75 BRIDGE RAIL		DETAILS No. 4

Refer to: <http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html>

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

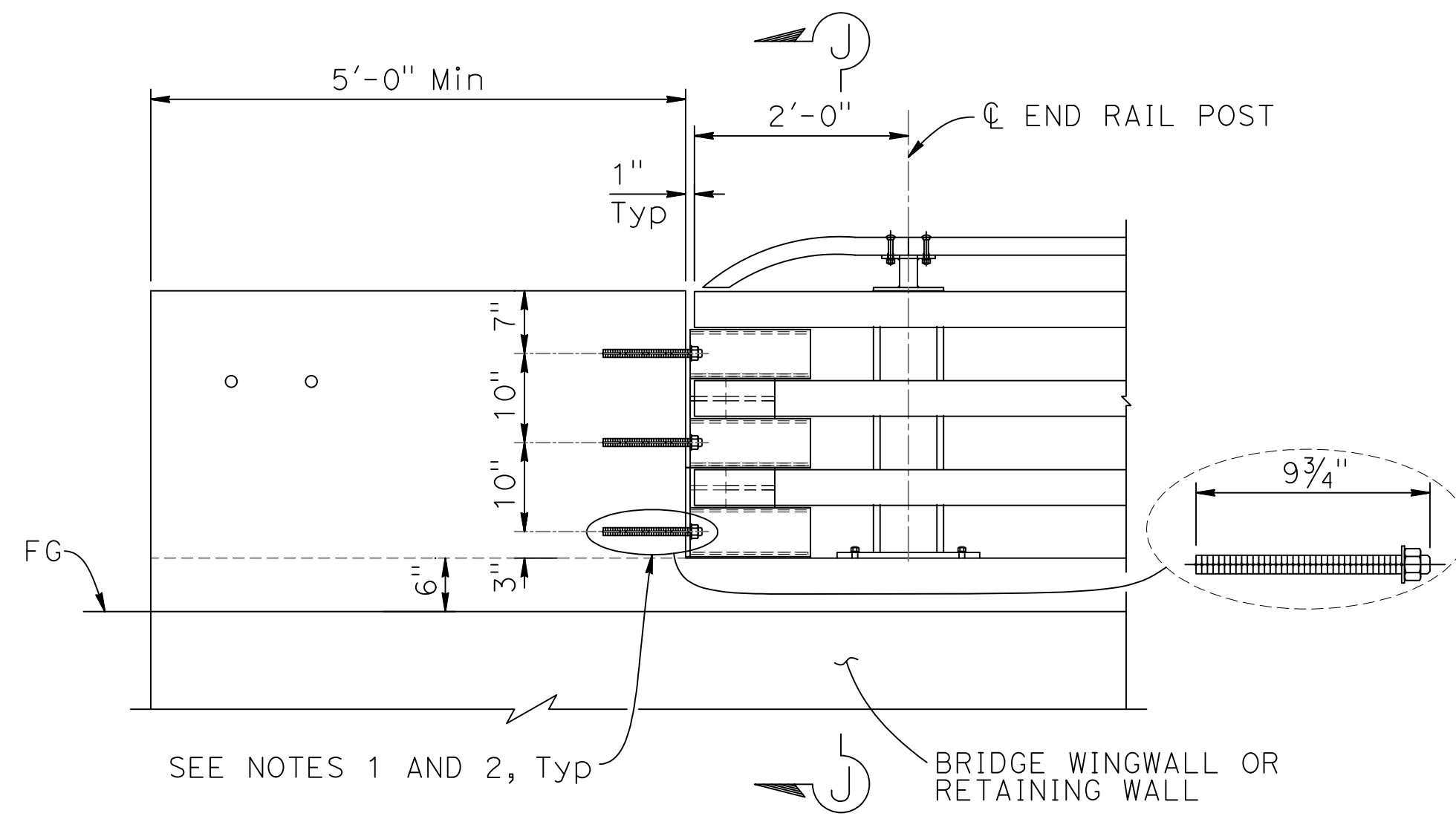
0 1 2 3

FILE => 11-0015-r-rspxs16-116-4

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	12/21/13 06/20/22 01/05/22	12	17

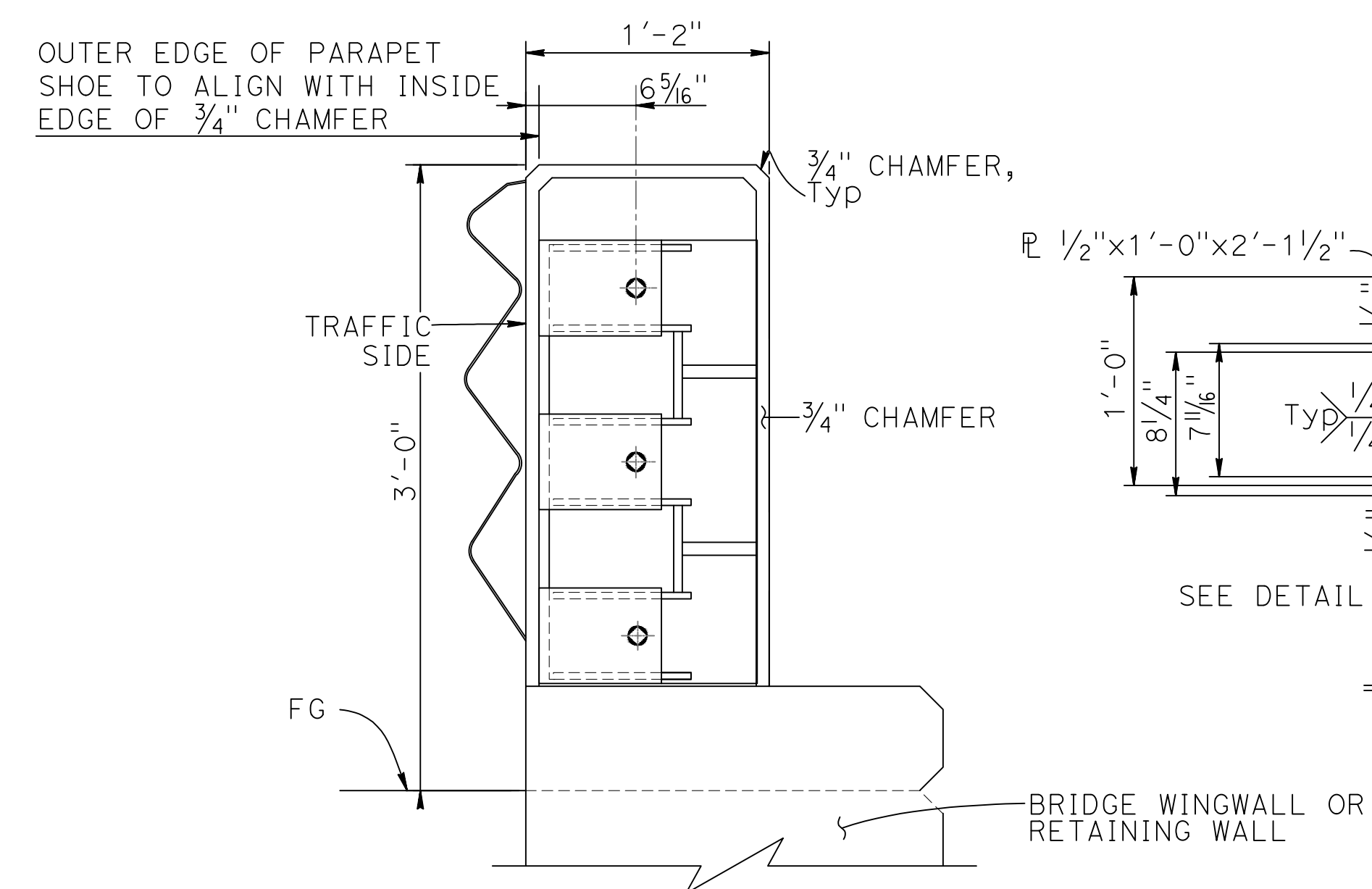
2022 STANDARD PLAN XS-16-116-4 DATE PLOTTED => 05/31/2023 11:01:41 AM USERNAME => KEVIN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	31	35
			DATE		
			05-31-23		
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
			May 31, 2023		
			REGISTERED PROFESSIONAL ENGINEER		
			GARY M. GORDON		
			No. 42176		
			Exp. 03-31-24		
			CIVIL		
			STATE OF CALIFORNIA		



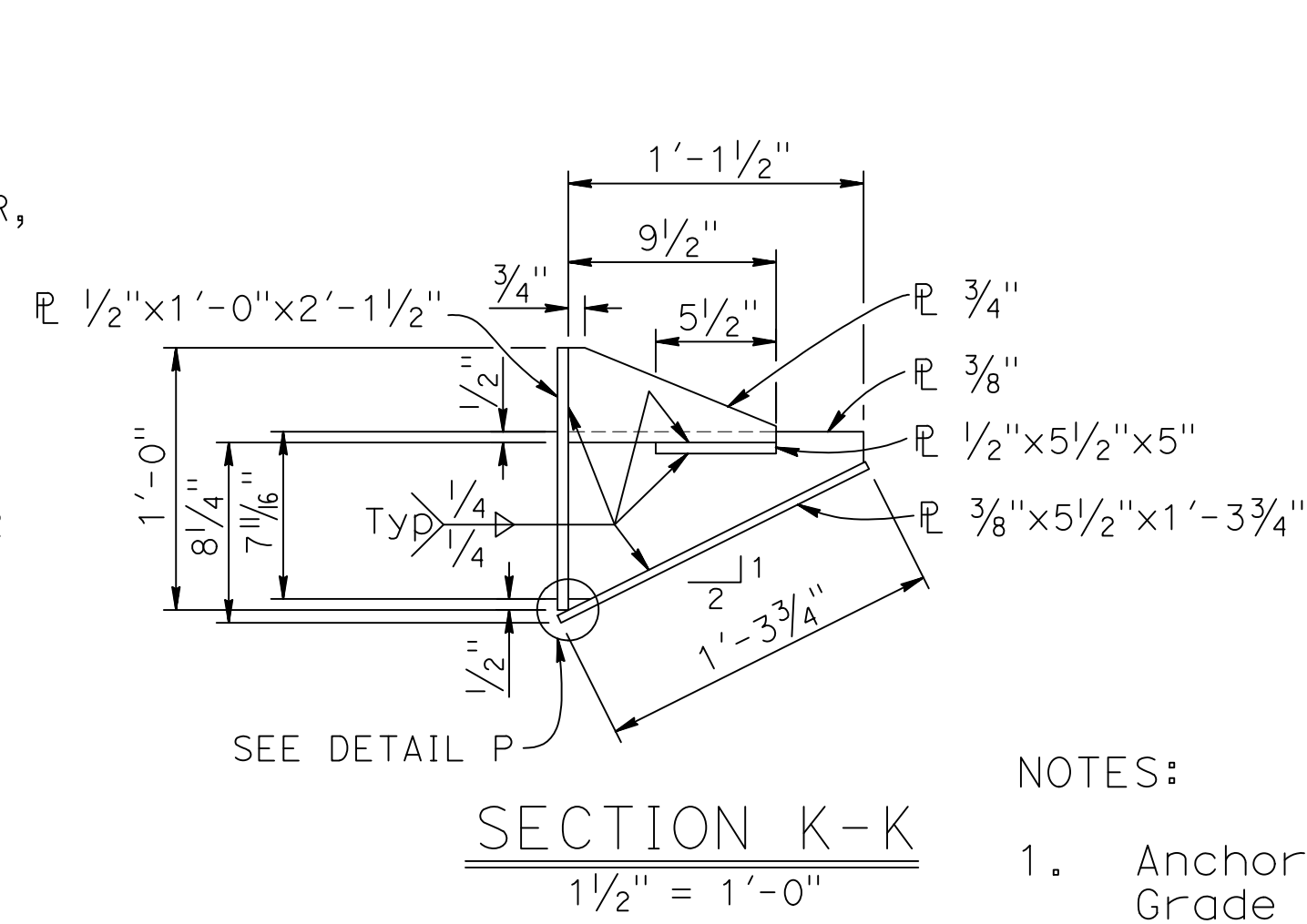
PARAPET SHOE AT DEPARTURE END BLOCK

NOTE: Parapet shoe connection to approach end block is similar.



SECTION J-J

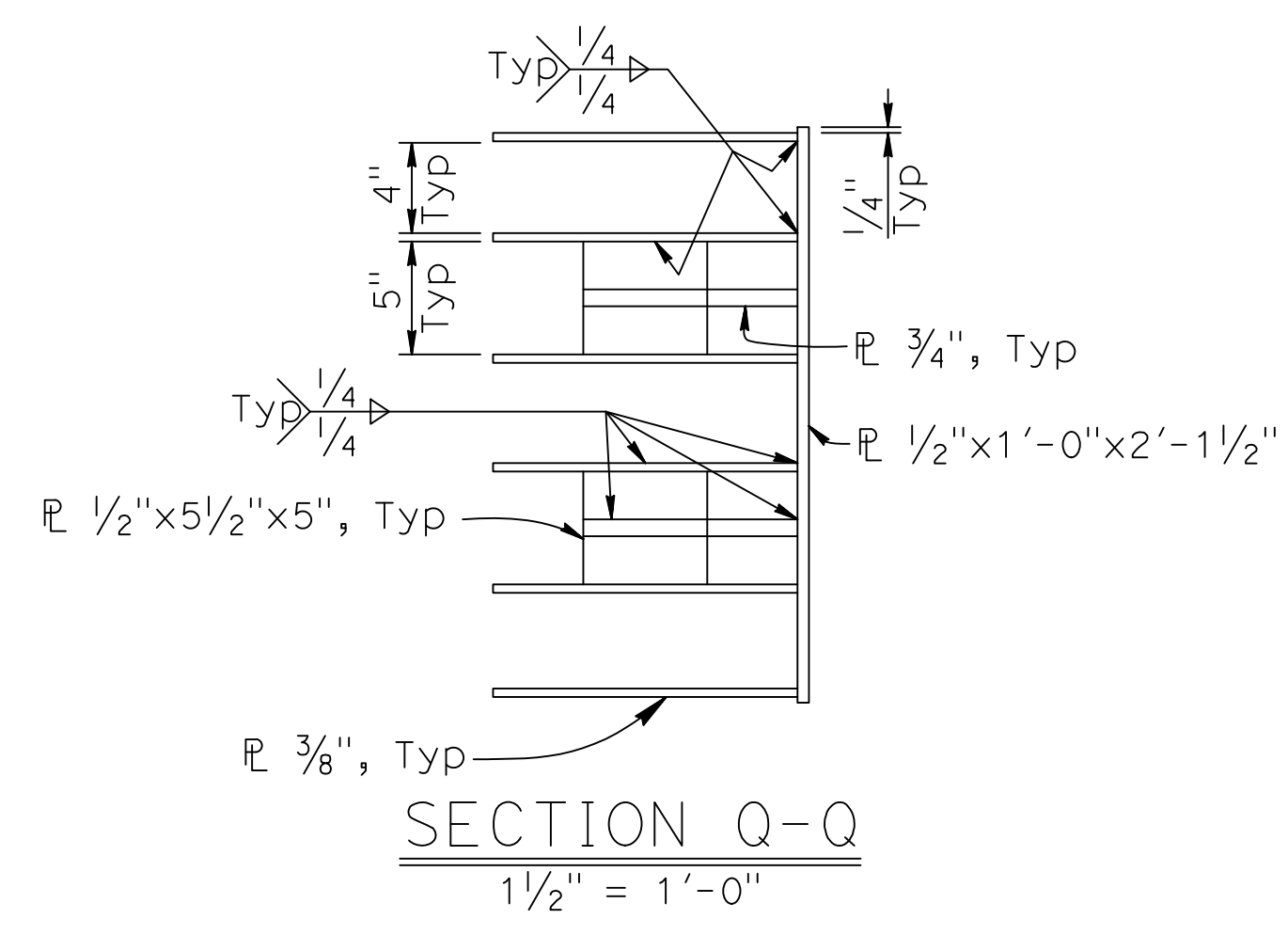
NOTE: Bridge railing not shown clarity.



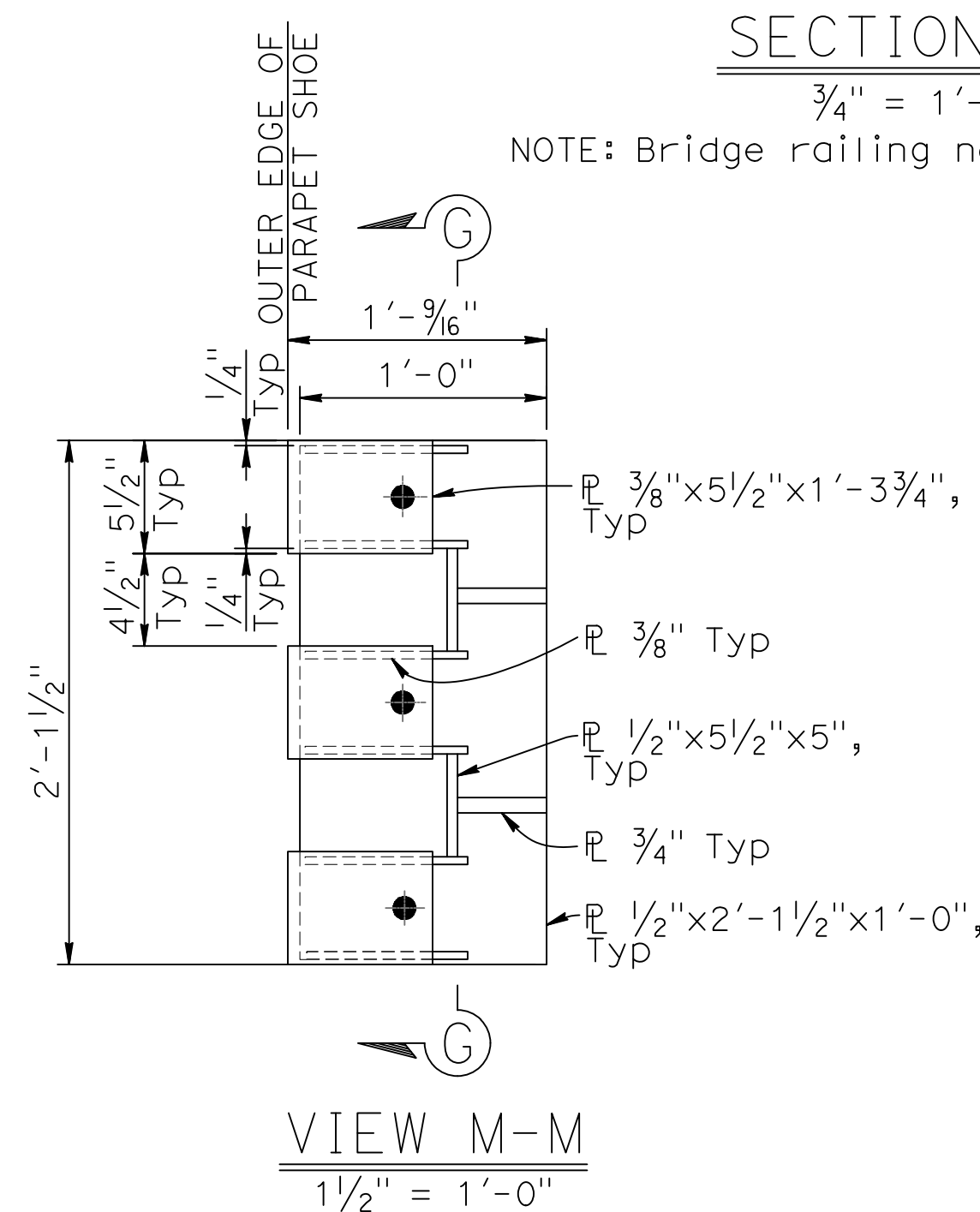
SECTION K-K

NOTES:

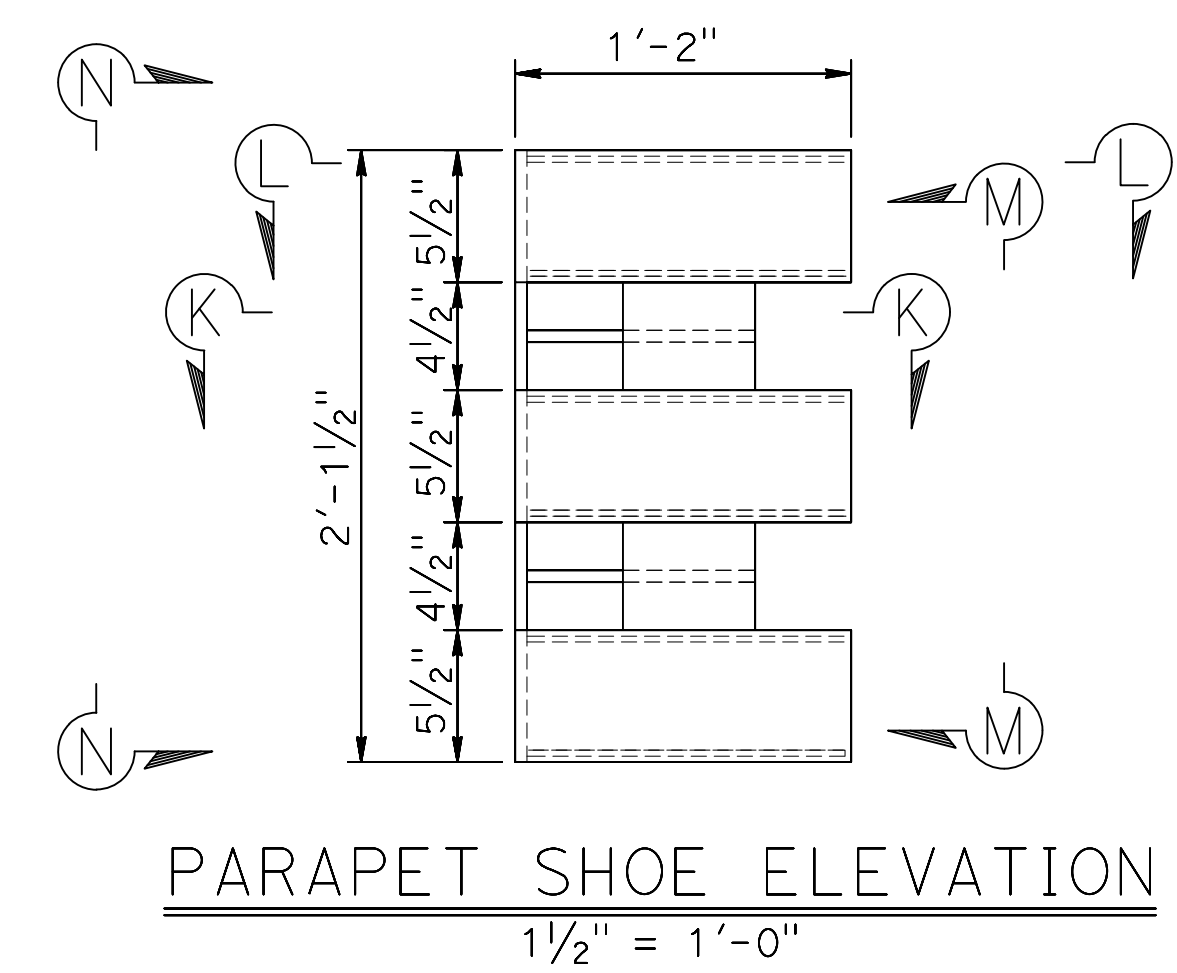
- Anchor bolts must be 7/8" Dia and ASTM F1554 Grade 105 fully threaded rods with heavy hex nut and one hardened washer (1 3/4" OD) each. Embed threaded rods 8" into concrete anchor block with DRILL AND BOND (CHEMICAL ADHESIVE) anchorage system.
- DRILL AND BOND (CHEMICAL ADHESIVE) anchorages is subjected to approval of Engineer. Installation procedure must comply with manufacture's instructions.



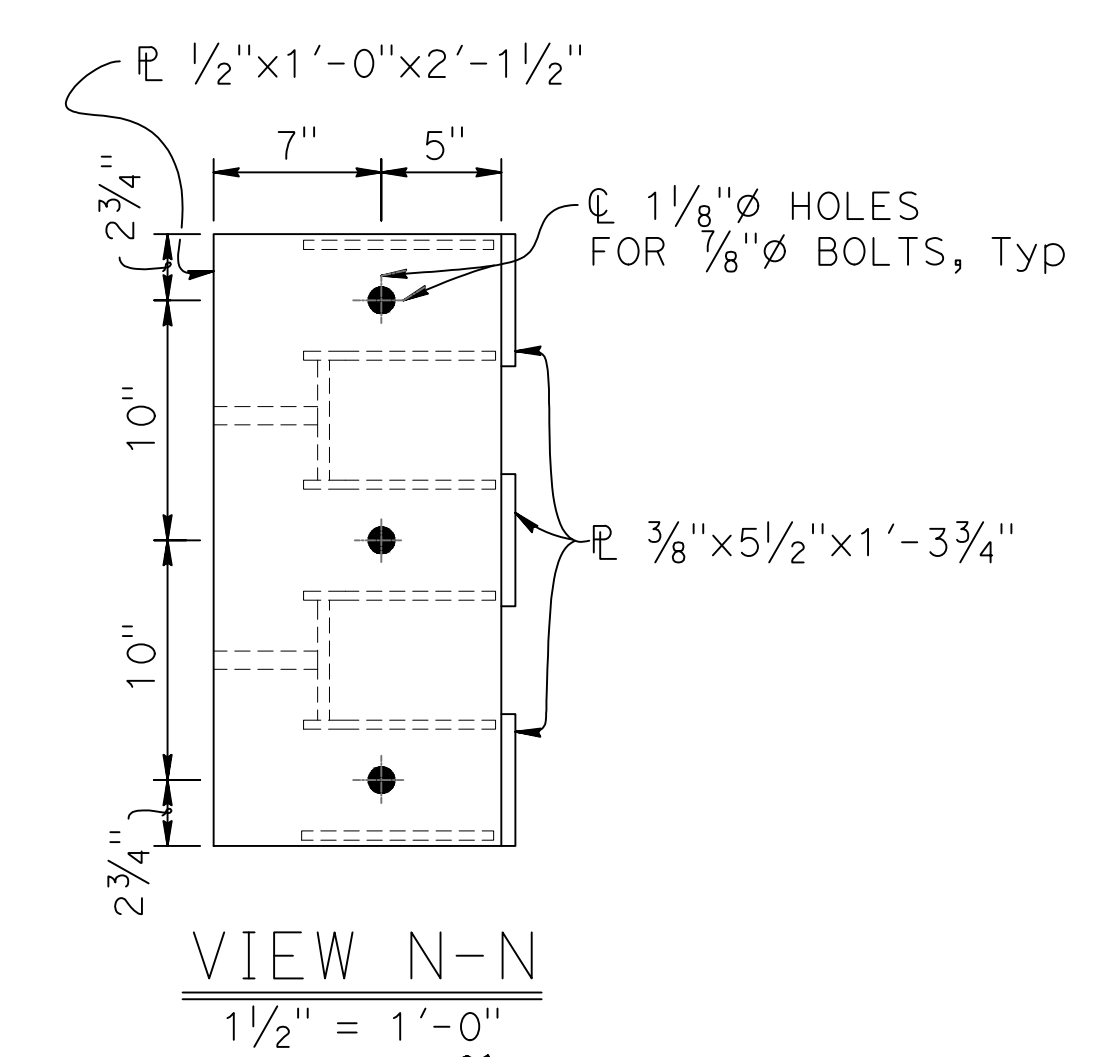
SECTION Q-Q



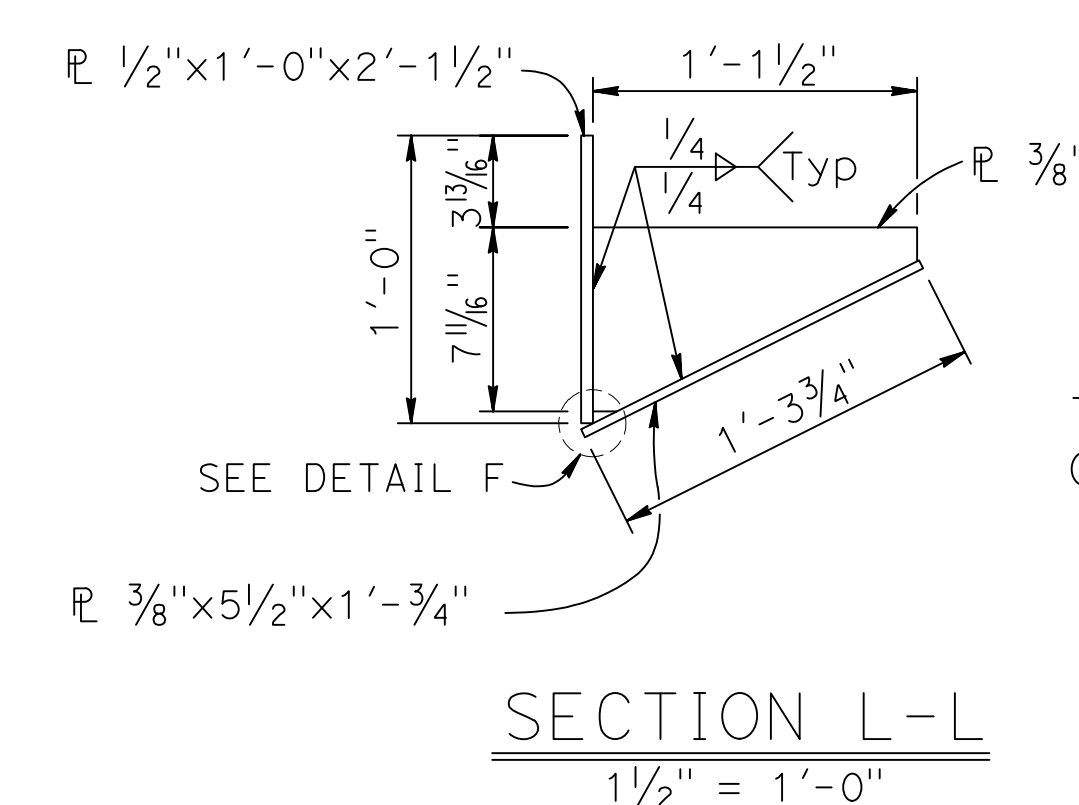
VIEW M-M



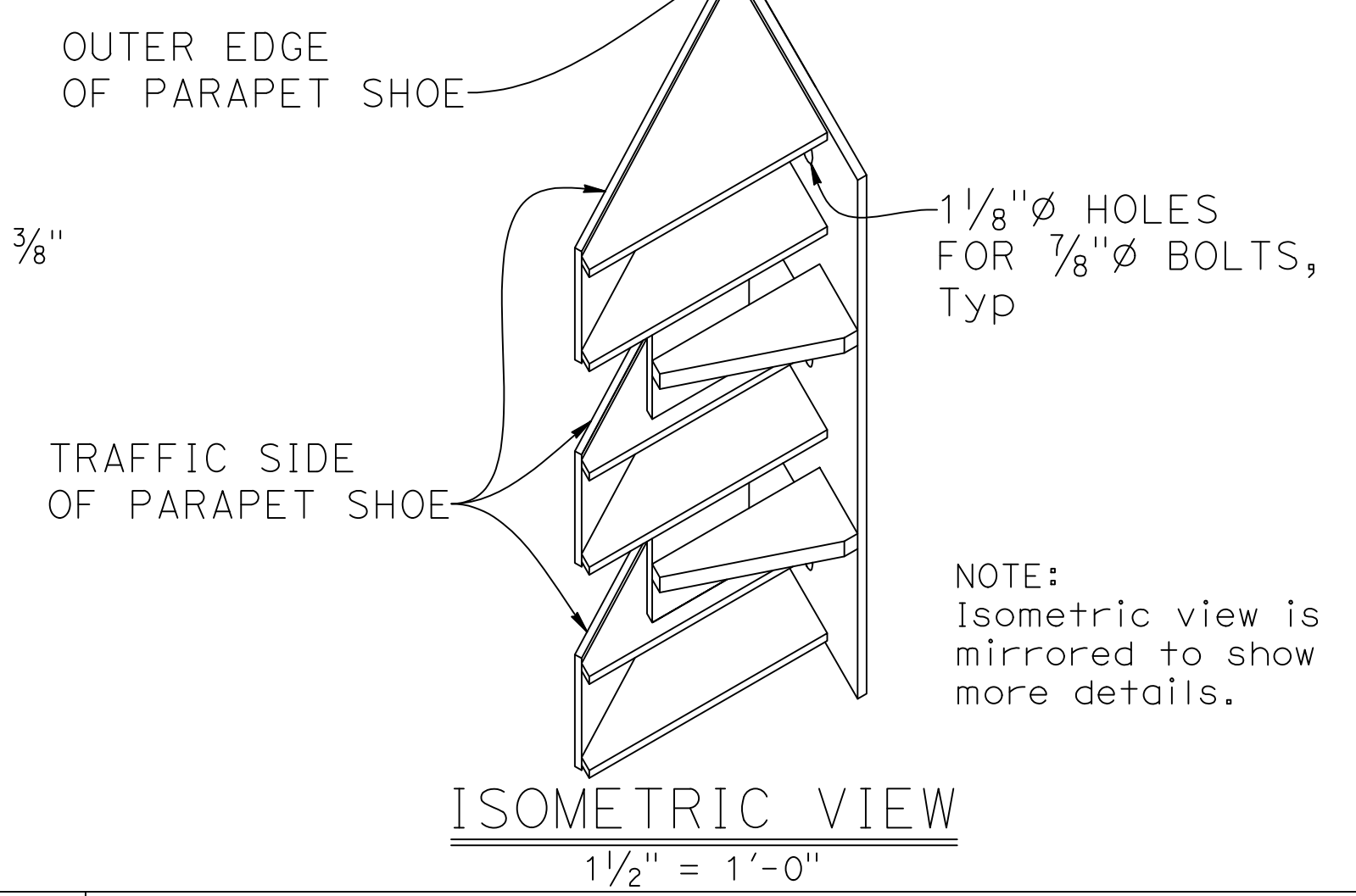
PARAPET SHOE ELEVATION



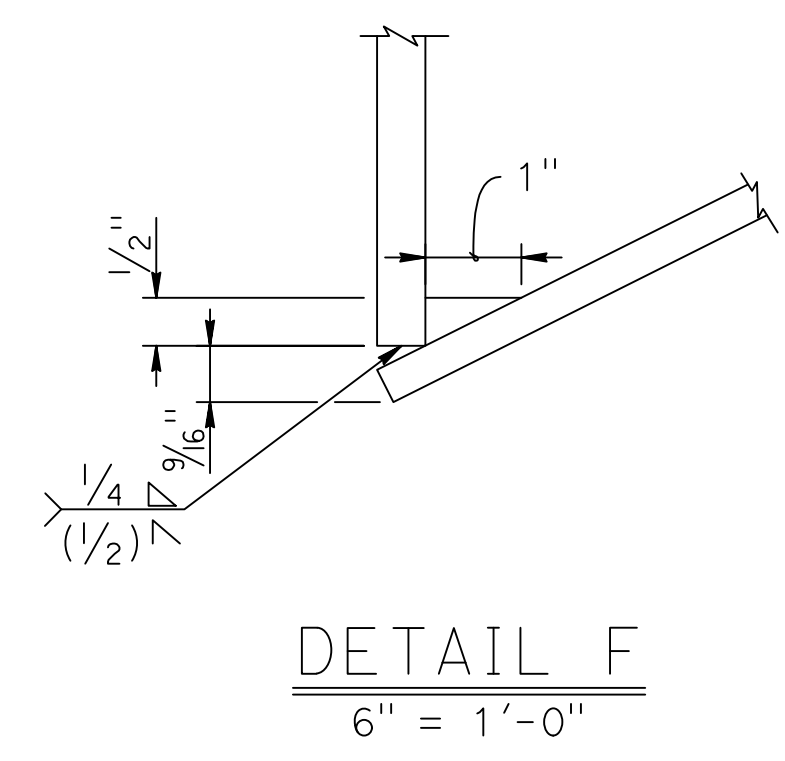
VIEW N-N



SECTION L-L



ISOMETRIC VIEW



DETAIL F

BRIDGE STANDARD DETAILS		
xs16-116-5	JULY 2022	<i>The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California</i>
FILE NO.	APPROVAL DATE	

DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR	BRIDGE NO.
COUNTY OF GLENN	11C0015
PUBLIC WORKS AGENCY	POST MILES
	NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
CALIFORNIA ST-75 BRIDGE RAIL
DETAILS No. 5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	32	35

7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
 June 14, 2018
 PLANS APPROVAL DATE

Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806

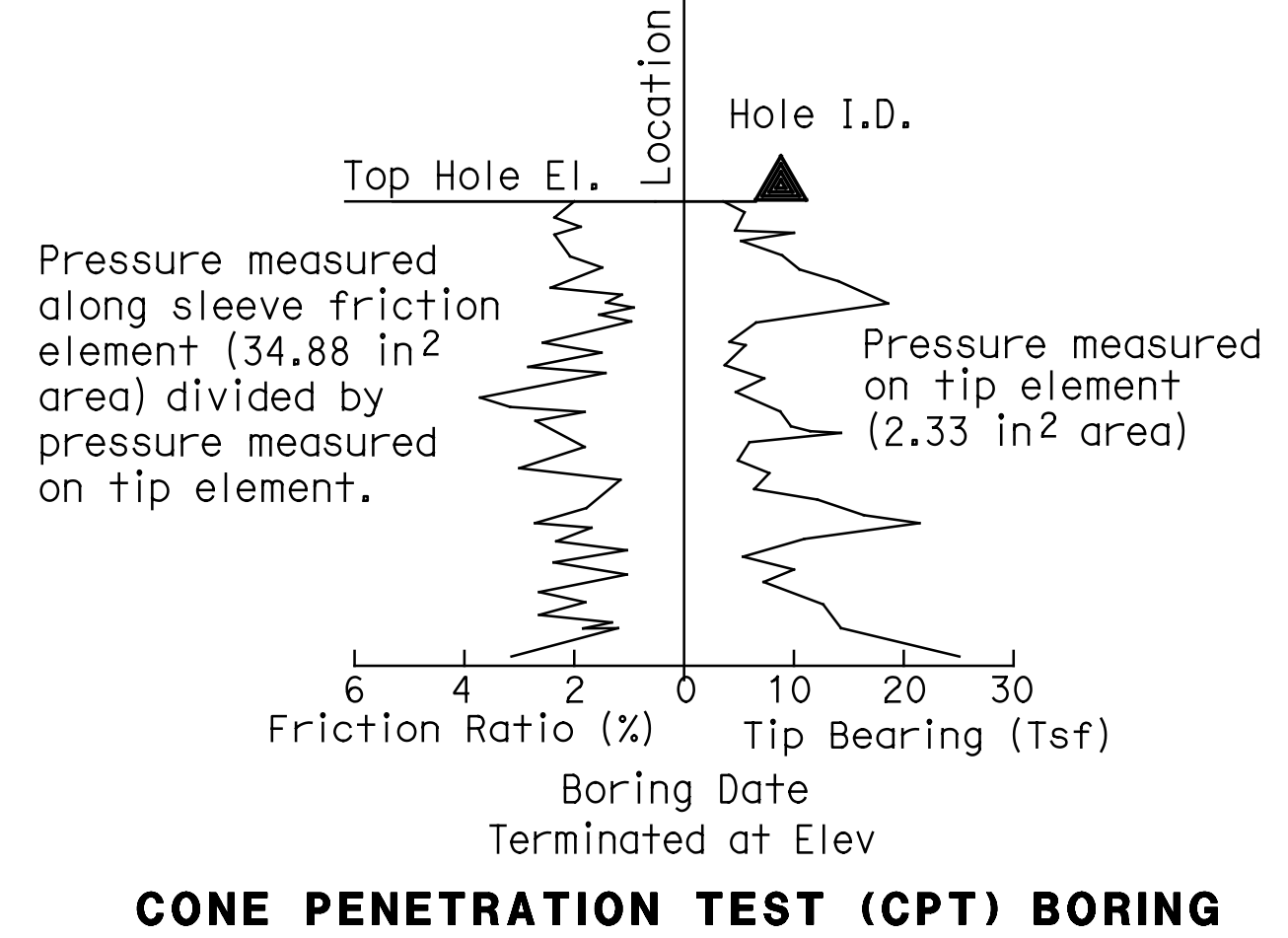
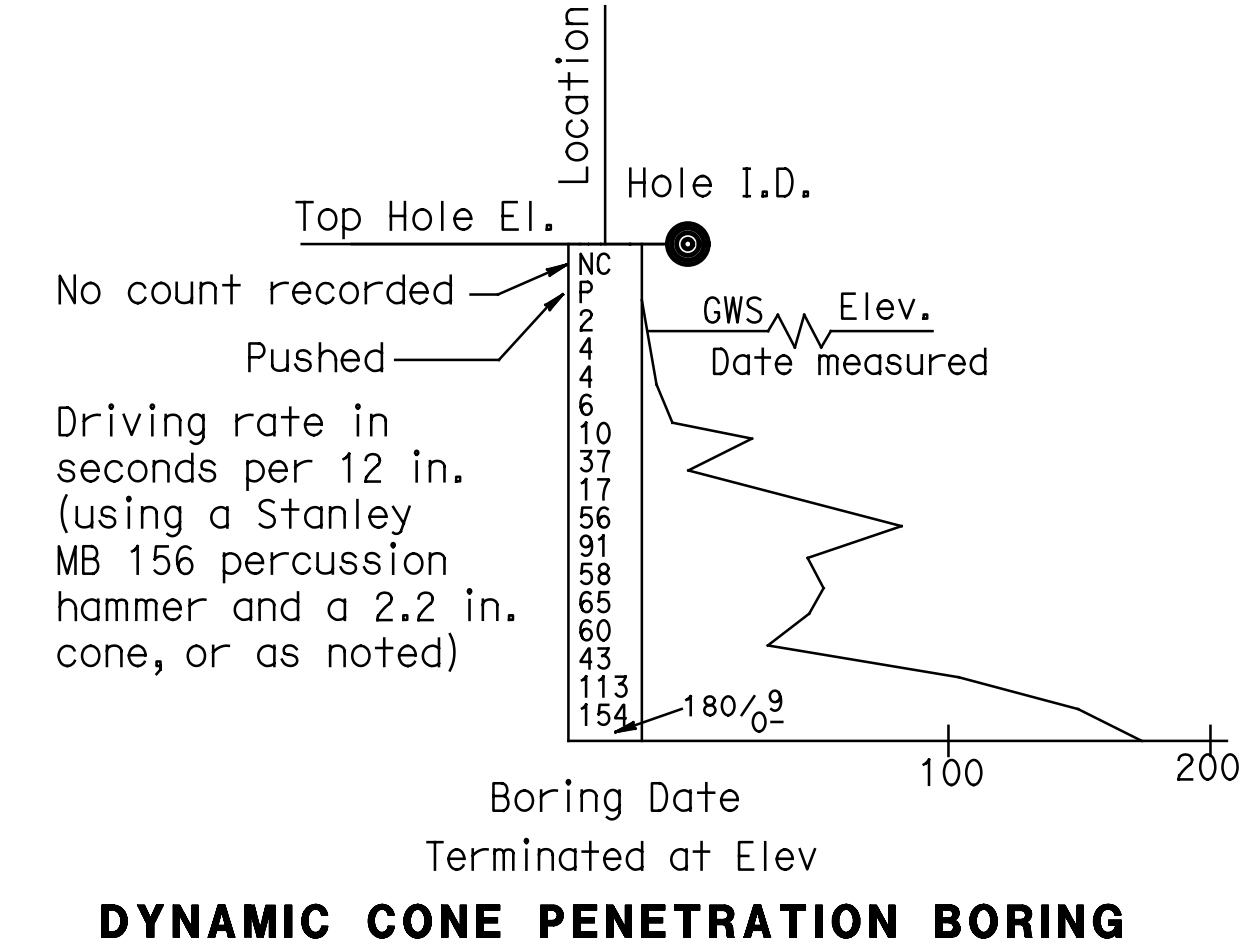
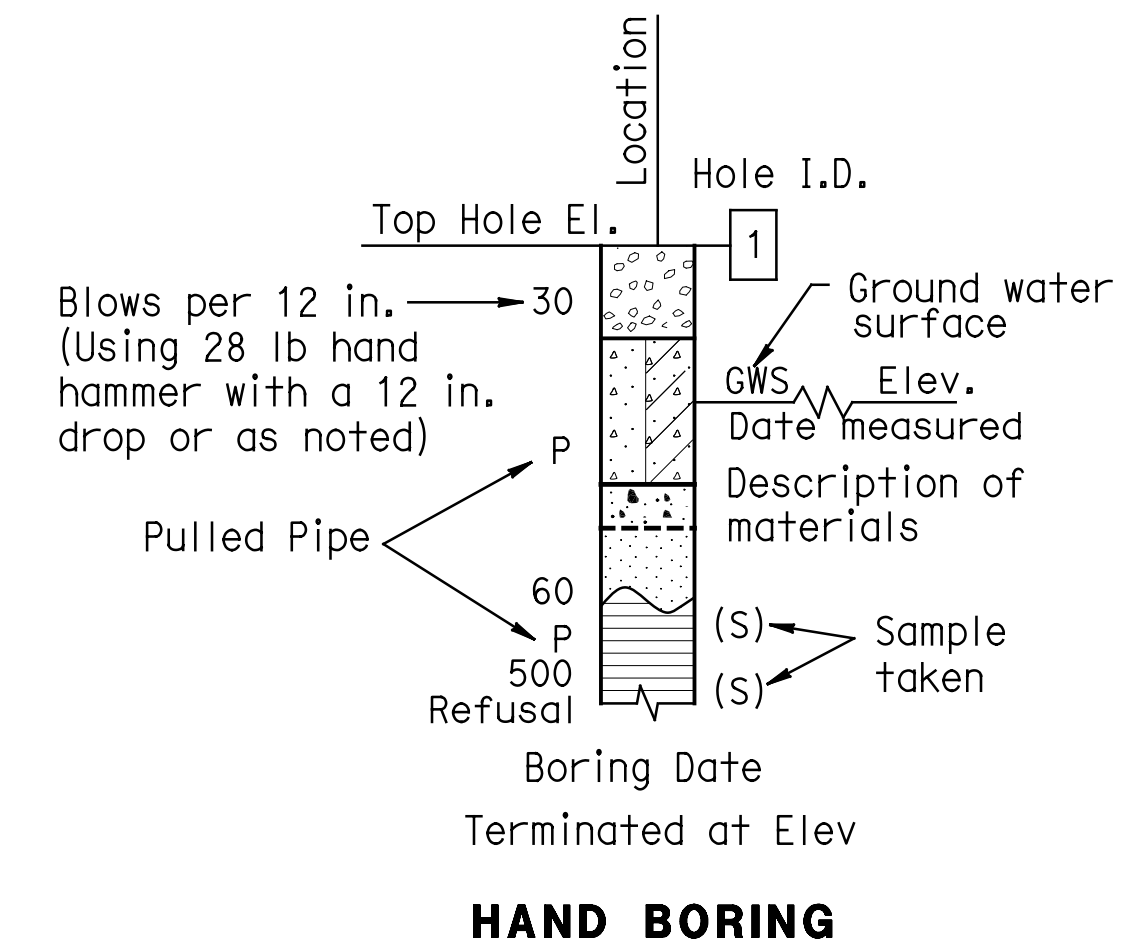
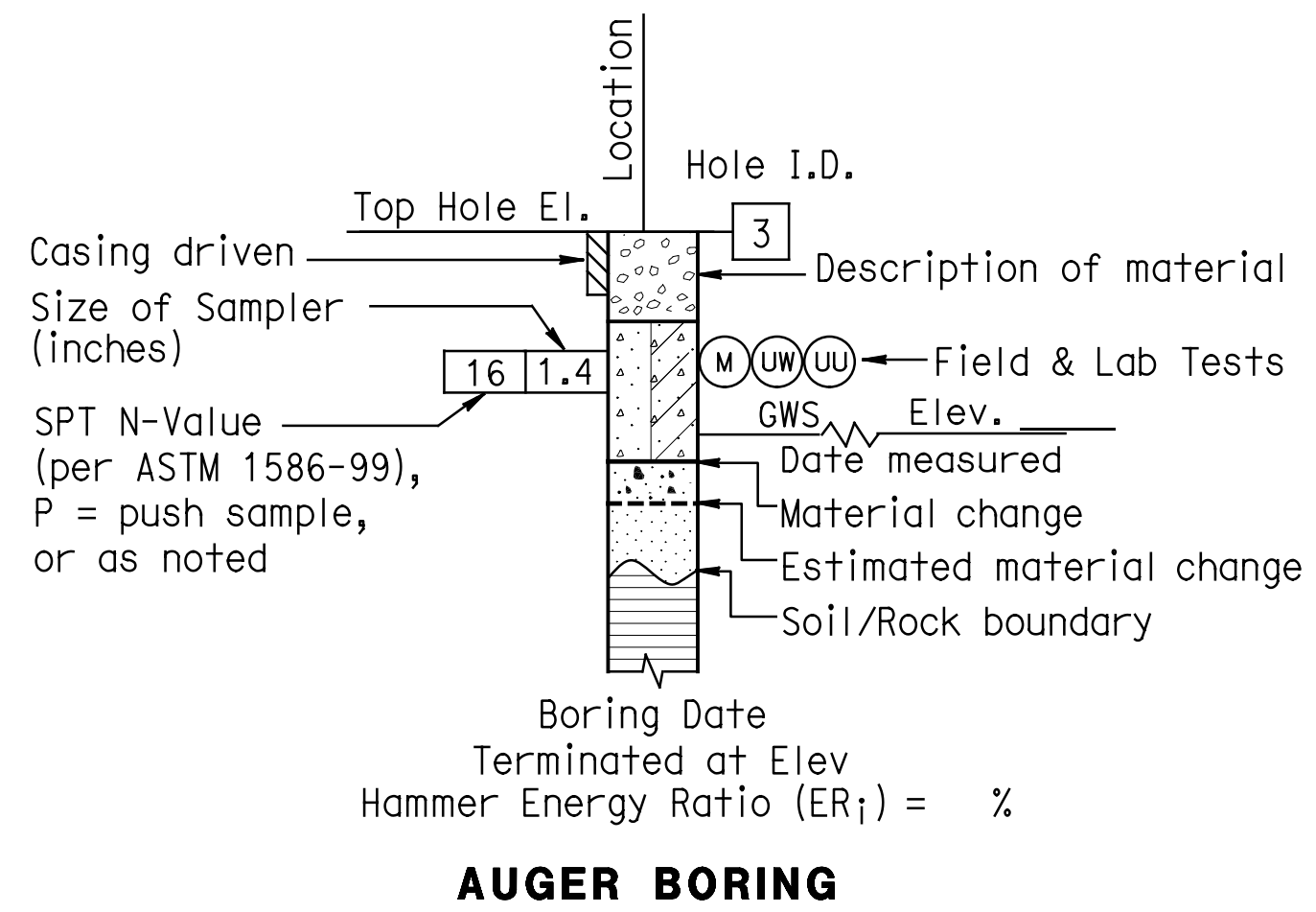
CEMENTATION	
Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

CONSISTENCY OF COHESIVE SOILS				
Description	Unconfined Compressive Strength (tsf)	Pocket Penetrometer Measurement (tsf)	Torvane Measurement (tsf)	Field Approximation
Very Soft	< 0.25	< 0.25	< 0.12	Easily penetrated several inches by fist
Soft	0.25 to 0.50	0.25 to 0.50	0.12 to 0.25	Easily penetrated several inches by thumb
Medium Stiff	0.50 to 1.0	0.50 to 1.0	0.25 to 0.50	Penetrated several inches by thumb with moderate effort
Stiff	1 to 2	1 to 2	0.50 to 1.0	Readily indented by thumb but penetrated only with great effort
Very Stiff	2 to 4	2 to 4	1.0 to 2.0	Readily indented by thumbnail
Hard	> 4.0	> 4.0	> 2.0	Indented by thumbnail with difficulty

BOREHOLE IDENTIFICATION		
Symbol	Hole Type	Description
	A	Auger Boring
	R	Rotary drilled boring
	P	Rotary percussion boring (air)
	R	Rotary drilled diamond core
	HD	Hand driven (1-inch soil tube)
	HA	Hand Auger
	D	Dynamic Cone Penetration Boring
	CPT	Cone Penetration Test (ASTM D 5778-95)
	O	Other

Note: Size in inches.

PLASTICITY OF FINE-GRAINED SOILS	
Description	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.



DRAWN BY	S. McCracken	B. KILLEEN
CHECKED BY	R. KHIABANI	FIELD INVESTIGATION BY: DATE: X

BRIDGE NO.	11C0015
POST MILES	NA

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 G. GORDON
 PROJECT ENGINEER

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
SOIL LEGEND 1 OF 2

USERNAME => Richard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:45:54 PM


 7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
June 14, 2018
 PLANS APPROVAL DATE

Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806

GROUP SYMBOLS AND NAMES			
Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
	GW Well-graded GRAVEL		CL Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
	GP Poorly-graded GRAVEL Poorly-graded GRAVEL with SAND		
	GW-GM Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND		CL-ML SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
	GW-GC Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
	GP-GM Poorly-graded GRAVEL with SILT Poorly-graded GRAVEL with SILT and SAND		ML SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND
	GP-GC Poorly-graded GRAVEL with CLAY (or SILTY CLAY) Poorly-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
	GM SILTY GRAVEL SILTY GRAVEL with SAND		OL ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
	GC CLAYEY GRAVEL CLAYEY GRAVEL with SAND		
	GC-GM SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND		OL ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND
	SW Well-graded SAND Well-graded SAND with GRAVEL		
	SP Poorly-graded SAND Poorly-graded SAND with GRAVEL		CH Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
	SW-SM Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL		
	SW-SC Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		MH Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
	SP-SM Poorly-graded SAND with SILT Poorly-graded SAND with SILT and GRAVEL		
	SP-SC Poorly-graded SAND with CLAY (or SILTY CLAY) Poorly-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
	SM SILTY SAND SILTY SAND with GRAVEL		
	SC CLAYEY SAND CLAYEY SAND with GRAVEL		OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	SC-SM SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL		
	PT PEAT		OL/OH ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND

FIELD AND LABORATORY TESTING	
(C)	
(CL)	Collapse Potential (ASTM D 5333)
(CP)	Compaction Curve (CTM 216)
(CR)	Corrosivity Testing (CTM 643, CTM 422, CTM 417)
(CU)	Consolidated Undrained Triaxial (ASTM D 4767)
(DS)	Direct Shear (ASTM D 3080)
(EI)	Expansion Index (ASTM D 4829)
(M)	Moisture Content (ASTM D 2216)
(OC)	Organic Content-% (ASTM D 2974)
(P)	Permeability (CTM 220)
(PA)	Particle Size Analysis (ASTM D 422)
(PI)	Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89)
(PL)	Point Load Index (ASTM D 5731)
(PM)	Pressure Meter
(W)	Passing # 200 (ASTM D 1140-00)
(R)	R-Value (CTM 301)
(SE)	Sand Equivalent (CTM 217)
(SG)	Specific Gravity (AASHTO T 100)
(SL)	Shrinkage Limit (ASTM D 427)
(SW)	Swell Potential (ASTM D 4546)
(TV)	Pocket Torvane
(UC)	Unconfined Compression-Soil (ASTM D 2166) Unconfined Compression-Rock (ASTM D 2938)
(UU)	Unconsolidated Undrained Triaxial (ASTM D 2850)
(UW)	Unit Weight (ASTM D 4767)
(VS)	Vane Shear (AASHTO T 223)

APPARENT DENSITY OF COHESIONLESS SOILS	
Description	SPT N ₆₀ (Blows / 12 in.)
Very Loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 31
Dense	30 - 50
Very Dense	> 50

MOISTURE	
Description	Criteria
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

PERCENT OR PROPORTION OF SOILS	
Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5% - 10%
Little	15% - 25%
Some	30% - 45%
Mostly	50% - 100%

PARTICLE SIZE		
Description	Size	
Boulder	> 12"	
Cobble	3" to 12"	
Gravel	Coarse	3/4" to 3"
	Fine	No. 4 to 3/4"
Sand	Coarse	No. 10 to No. 4
	Medium	No. 40 to No. 10
	Fine	No. 200 to No. 40
Silt and Clay	Less than 1/300	

BENCH MARK

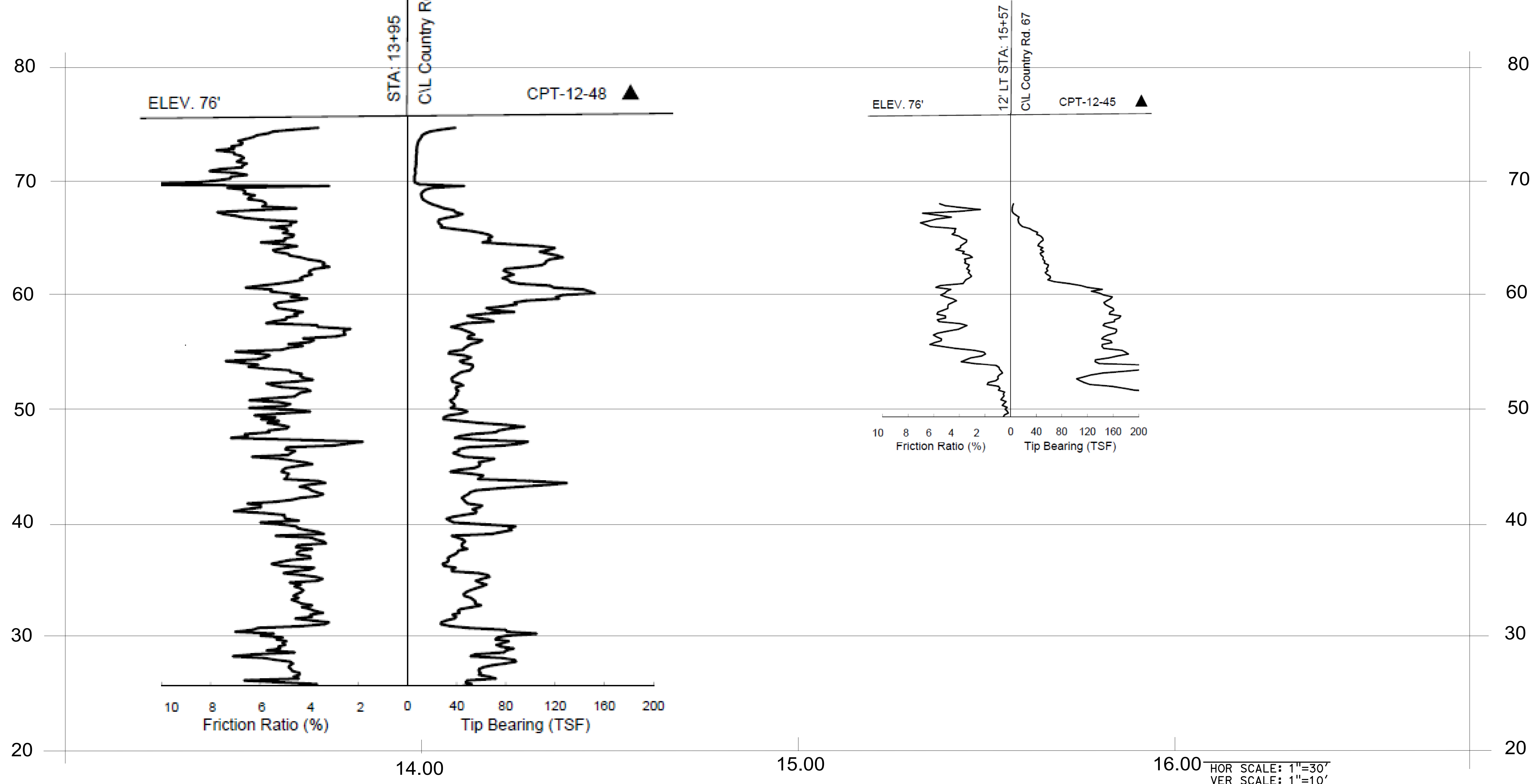
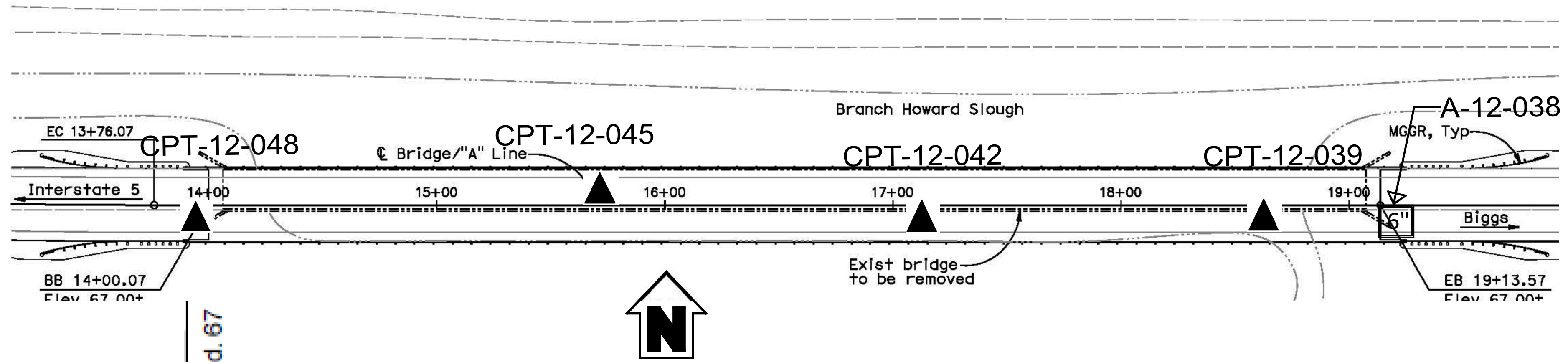
DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
Horizontal Datum is NAD83
Vertical Datum is NAVD88

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	34	35

ROSS KHIABANI 7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
 June 14, 2018
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 ROSS KHIABANI
 No. GE2202
 Exp. 6/30/20
 GEOTECHNICAL
 STATE OF CALIFORNIA

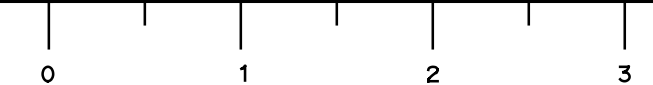
Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806



HOR SCALE: 1"=30'
 VER SCALE: 1"=10'

DRAWN BY S. McCracken	B. KILLEEN FIELD INVESTIGATION BY: DATE: X	BRIDGE NO. 11C0015	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
CHECKED BY R. KHIABANI		POST MILES NA	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

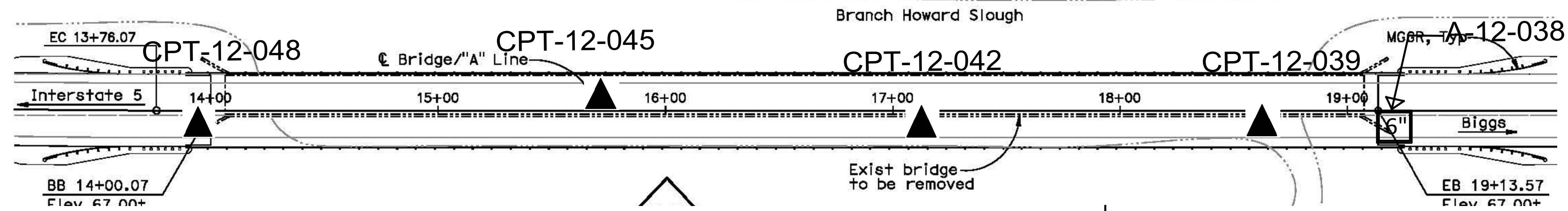


REVISION DATES	SHEET	OF
10/12/12	16	17

USERNAME => richard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:45:56 PM

BENCH MARK

DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
Horizontal Datum is NAD83
Vertical Datum is NAVD88



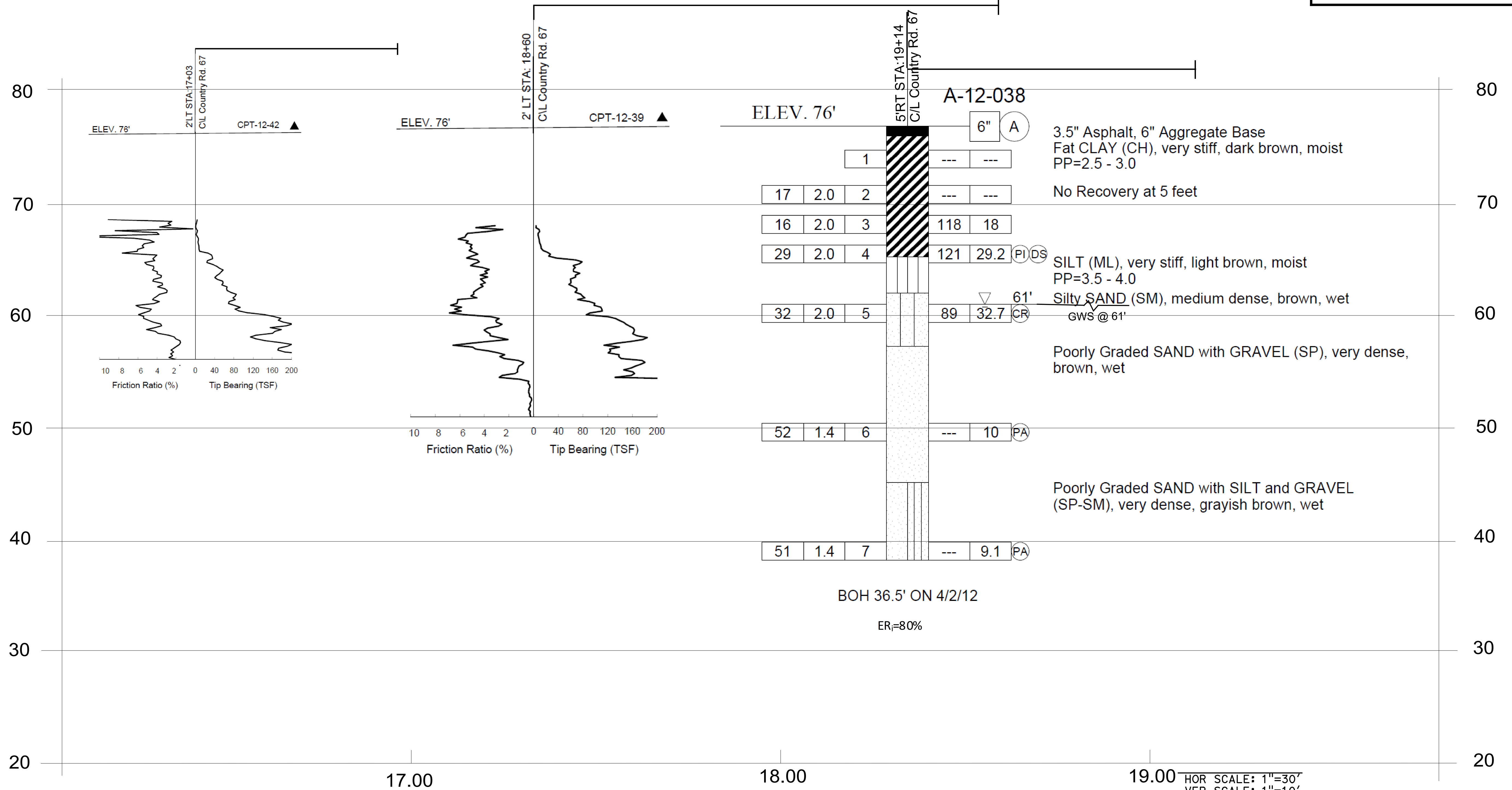
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	35	35

7/19/13
GEOTECHNICAL PROFESSIONAL DATE

June 14, 2018
PLANS APPROVAL DATE

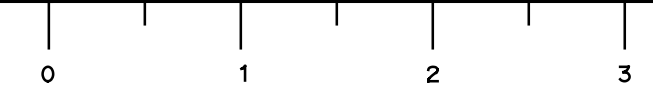
ROSS KHIABANI
No. GE2202
Exp. 6/30/20
GEOTECHNICAL
STATE OF CALIFORNIA

Prepared by:
WILLDAN ENGINEERING
1515 SOUTH SUNKIST STREET, SUITE E
ANAHEIM, CALIFORNIA 92806



DRAWN BY S. McCracken	B. KILLEEN FIELD INVESTIGATION BY: DATE: X	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0015 POST MILES NA	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) LOG OF TEST BORINGS 2 OF 2
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ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



REVISION DATES	SHEET	OF
10/12/12	17	17

USERNAME => richard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:46:25 PM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	1	38



**STATE OF CALIFORNIA
COUNTY OF GLENN
PUBLIC WORKS AGENCY**

**PROJECT PLANS FOR CONSTRUCTION ON
COUNTY ROAD 67
BRIDGE REPLACEMENT AT BRANCH HOWARD SLOUGH
ON COUNTY ROAD 67
FEDERAL AID PROJECT BRLO-5911 (047)
STATE BRIDGE No.11C0016**

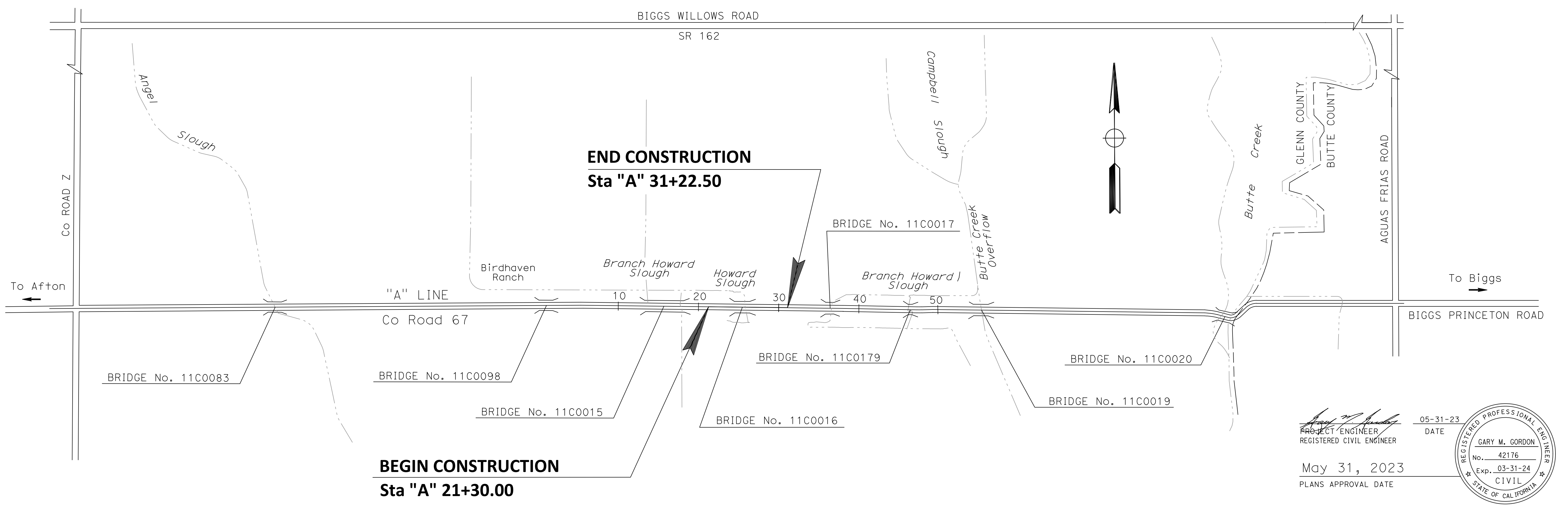
TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2022

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-4	TYPICAL CROSS SECTIONS
5-6	LAYOUTS
7-10	CONSTRUCTION DETAILS
11-12	TEMPORARY WATER POLLUTION/EROSION CONTROL PLANS
13	CONSTRUCTION AREA SIGNS PLAN
14	DETOUR PLAN
15	PAVEMENT DELINEATION AND SIGN PLAN
16	SUMMARY OF QUANTITIES
17-21	REVISED STANDARD PLANS

STRUCTURES
22-38 STRUCTURE PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.



Gary M. Gordon
PROJECT ENGINEER
REGISTERED CIVIL ENGINEER
DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME = KEVIN
DGN FILE = 03-101783aa001

COUNTY OF GLENN:

Gary M. Gordon
Gary M. Gordon, PE
County Engineer

DATE 05-31-23

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

DATE PLOTTED = 5/31/2023
TIME PLOTTED = 9:54:14 AM
LAST REVISION 05-31-23

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.

STRUCTURAL SECTION NOTES:

1 Prop SECTION
6.25" HMA TYPE A
23.5" CI 2 AB

2 EXISTING SECTION VARIES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	2	38

05-31-23
REGISTERED CIVIL ENGINEER DATE

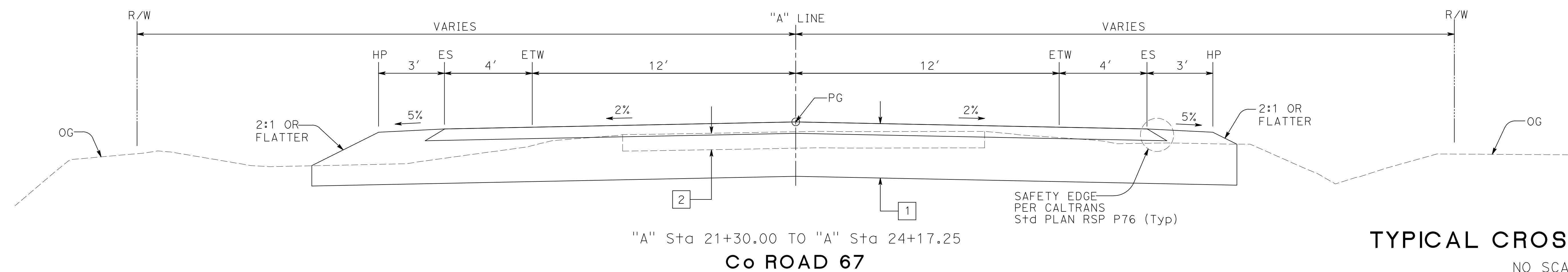
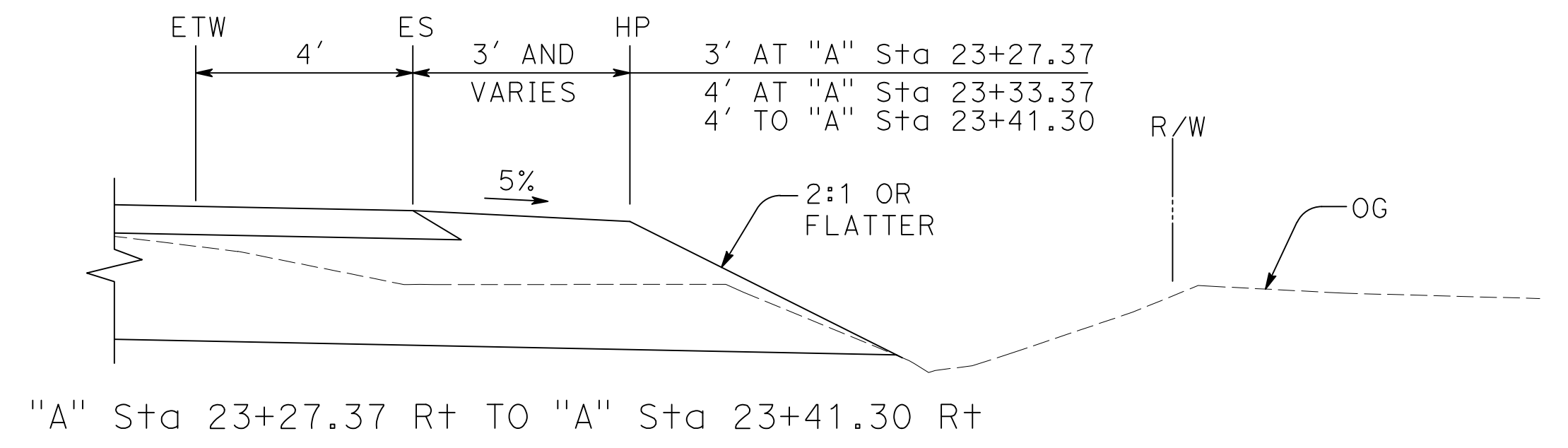
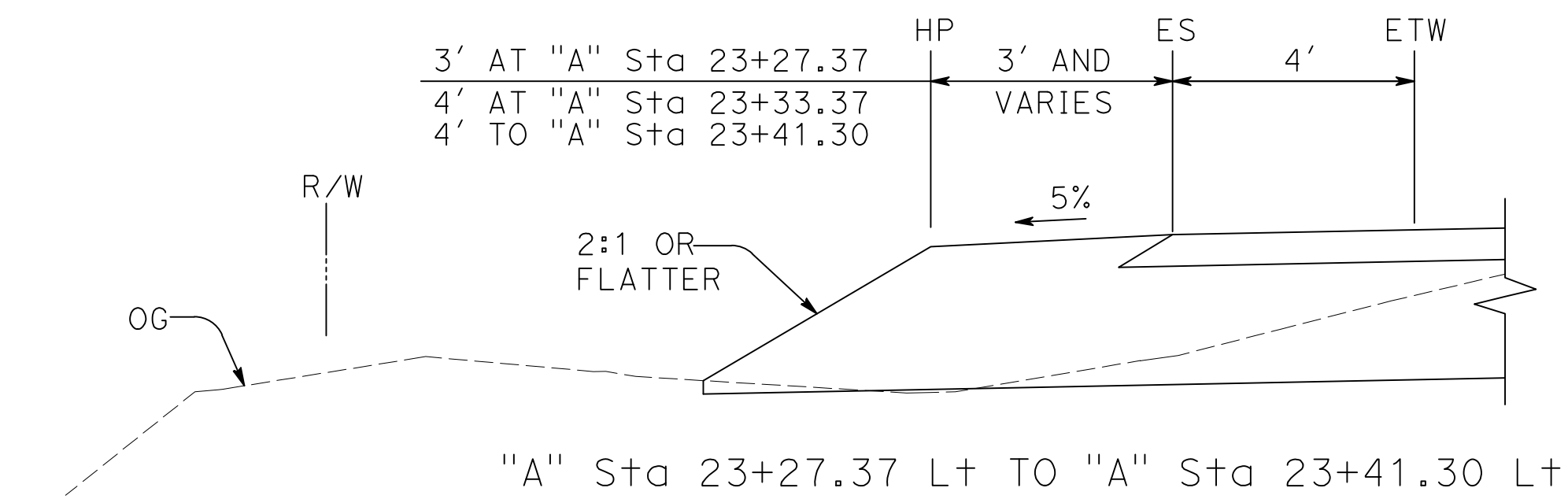
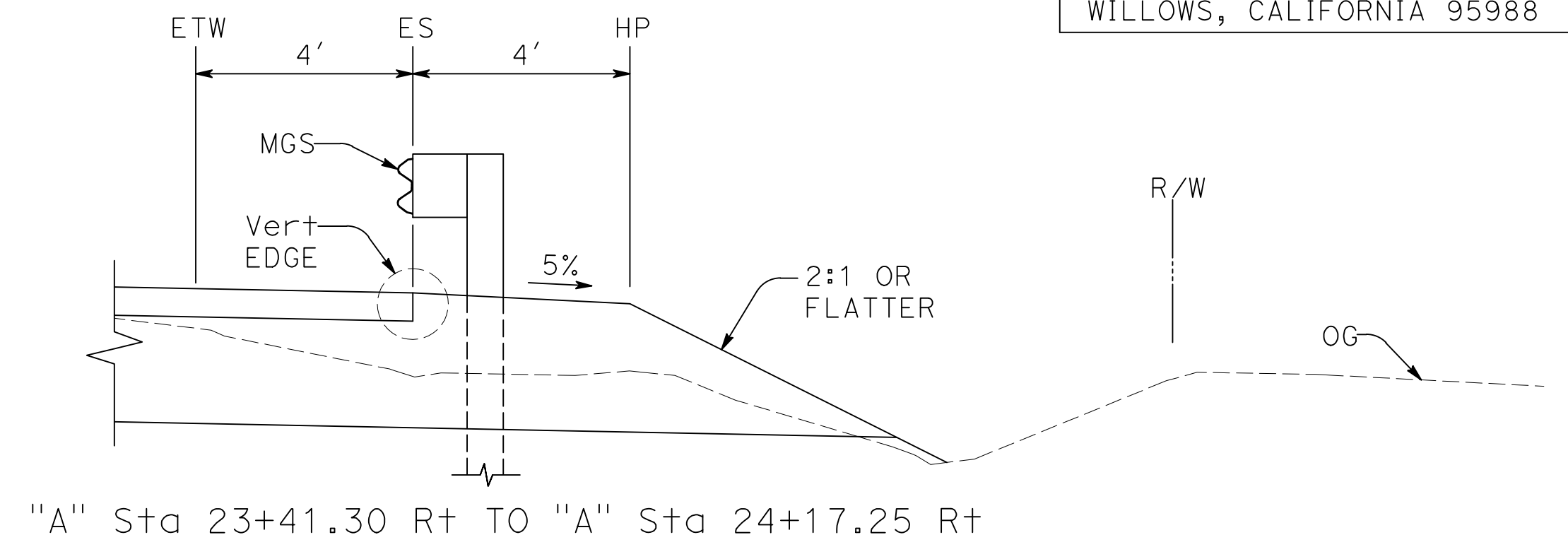
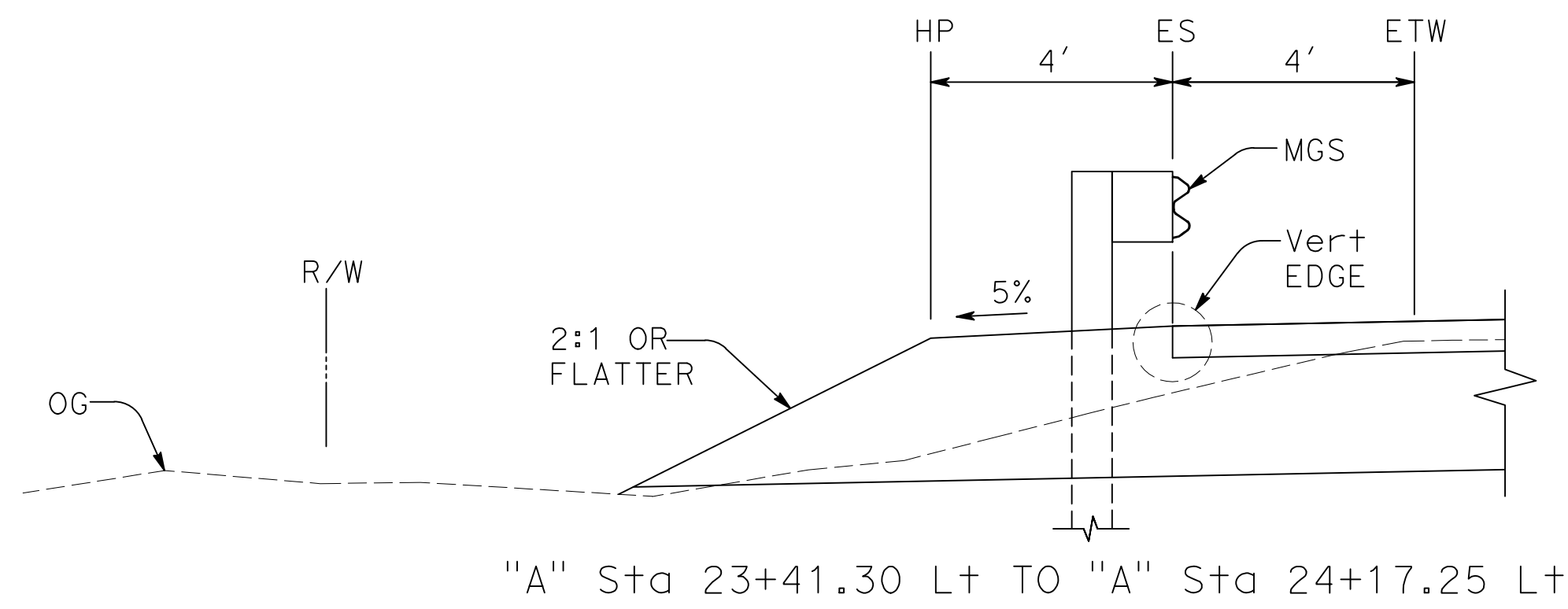
May 31, 2023
PLANS APPROVAL DATE

GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

KCG
05-31-23
REVISED BY
DATE REVISED
R. UHLMANN
G. GORDON
CALCULATED-DESIGNED BY
CHECKED BY
PROJECT ENGINEER
GARY M. GORDON



TYPICAL CROSS SECTION X-1
NO SCALE

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. PLACE GEOSYNTHETIC REINFORCED EMBANKMENT WHERE SLOPES ARE STEEPER THAN 2:1. PLACE IN TWO FOOT MAXIMUM LIFTS.

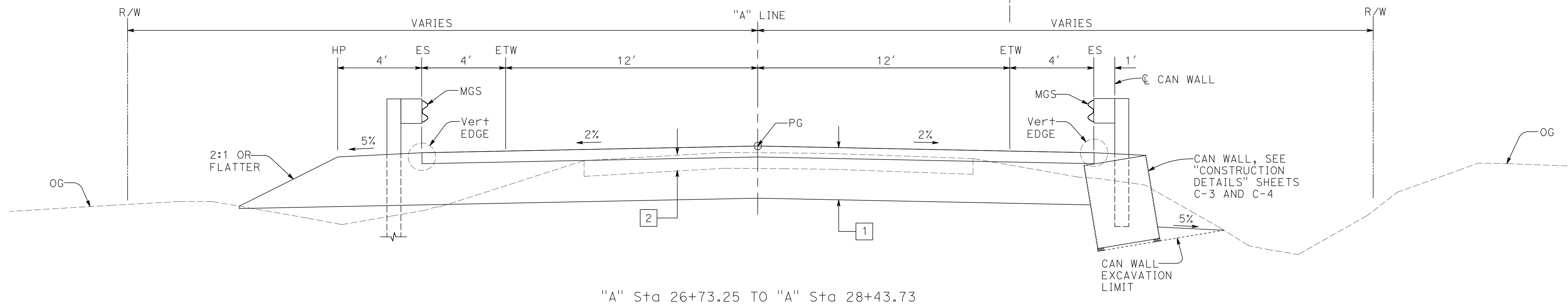
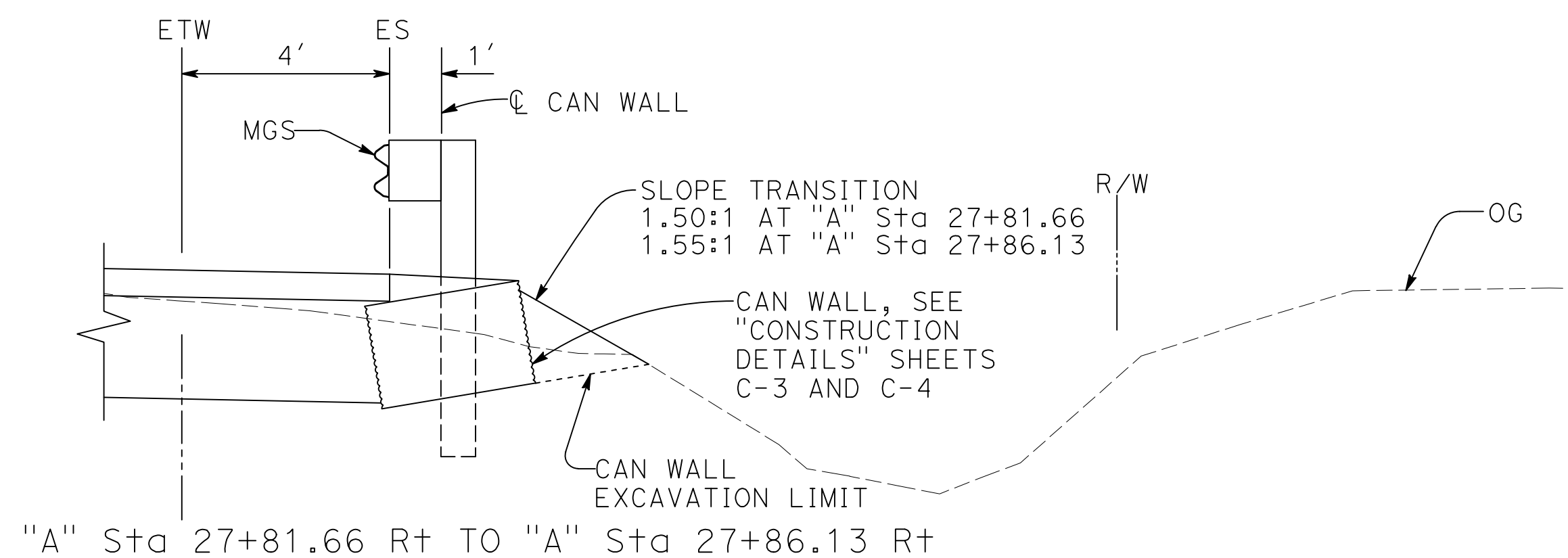
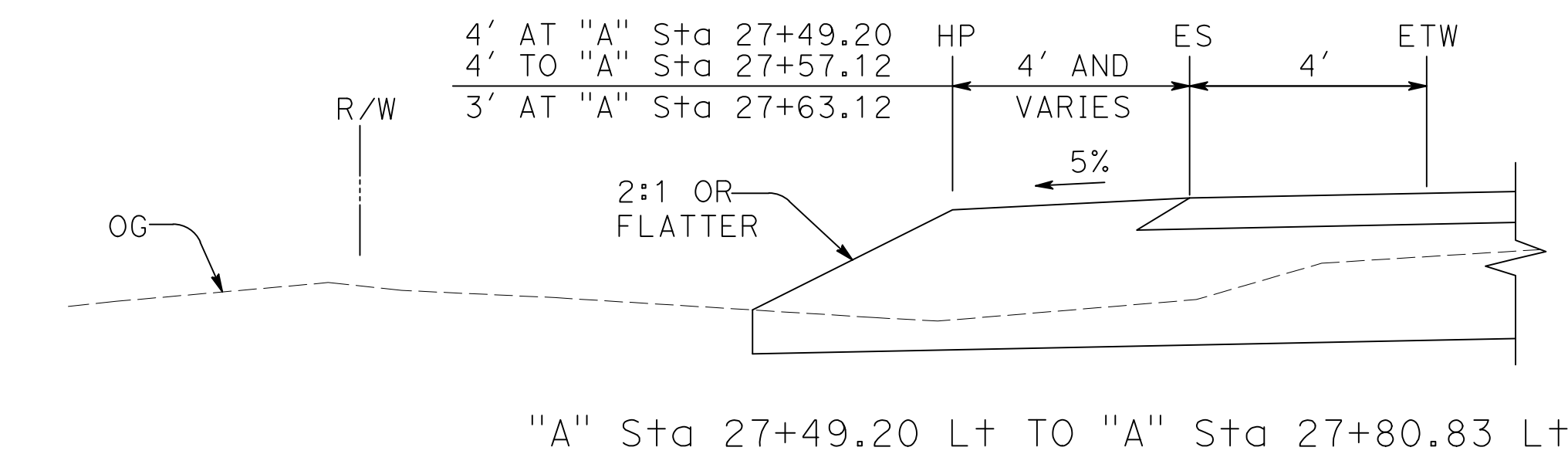
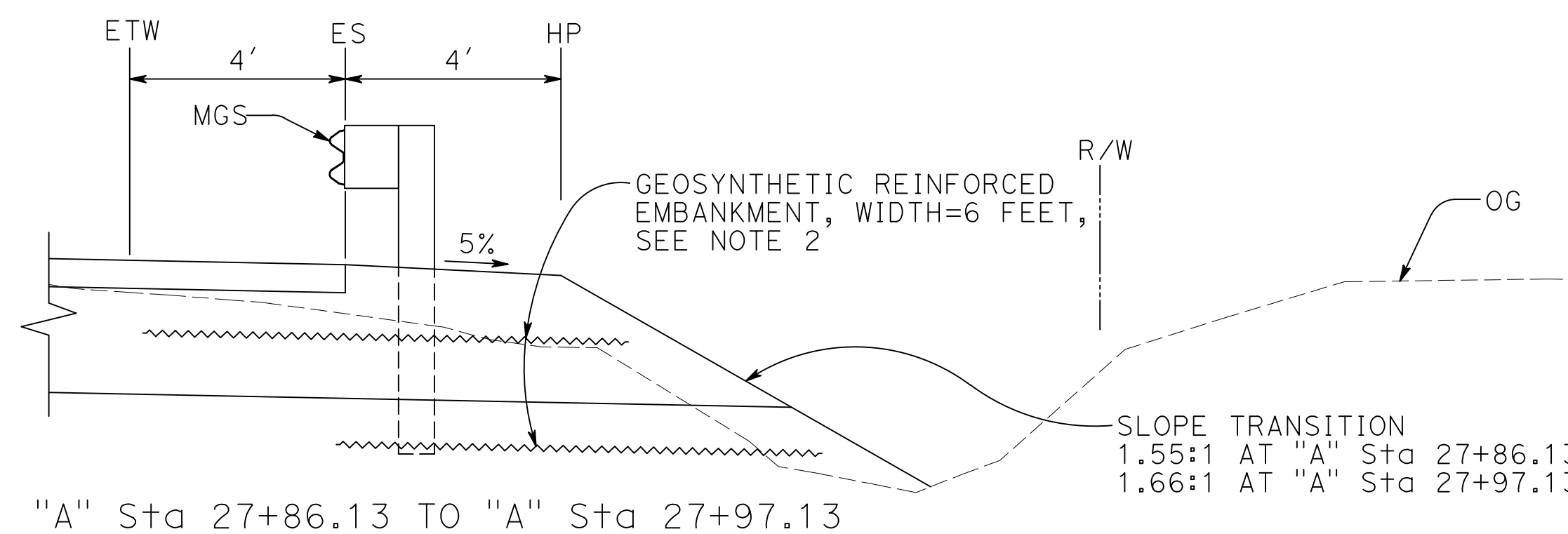
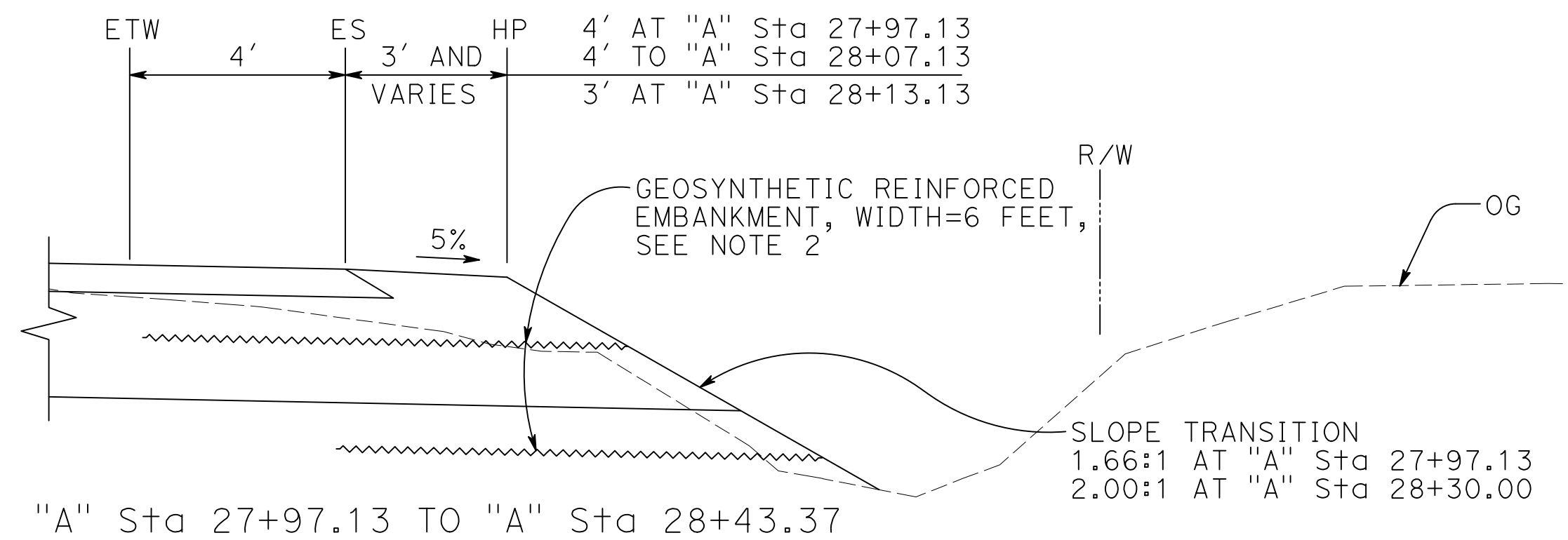
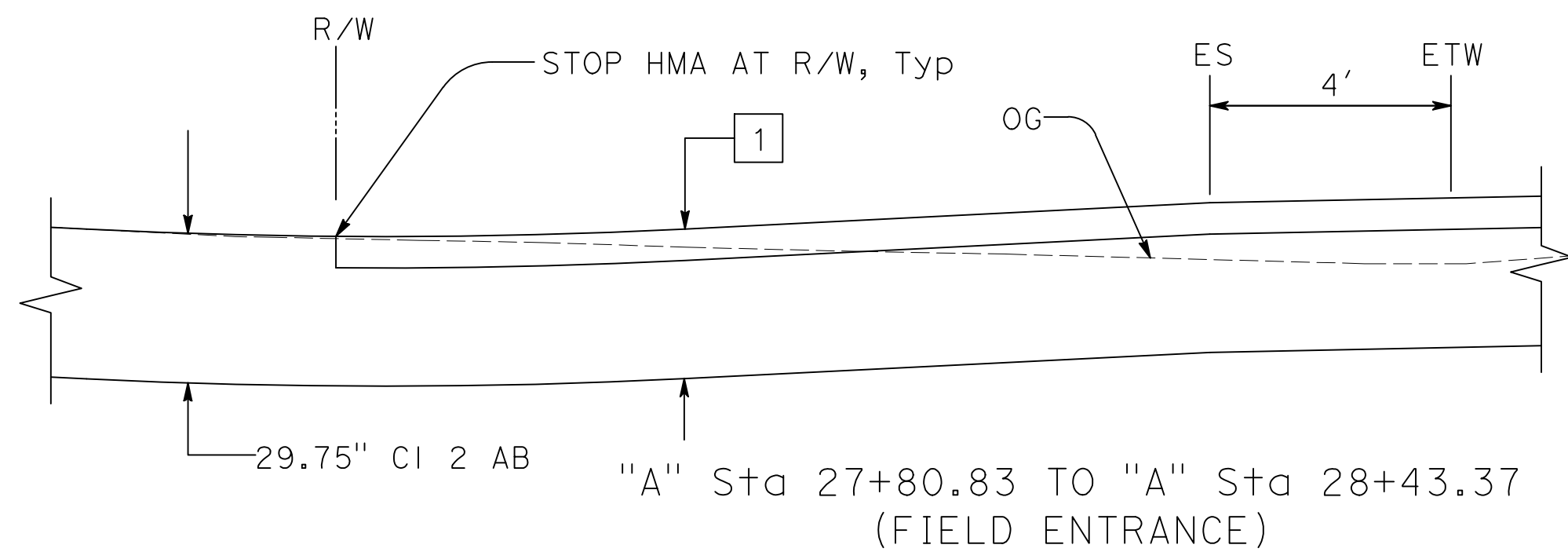
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	3	38

05-31-23
 REGISTERED CIVIL ENGINEER DATE
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



Co ROAD 67

TYPICAL CROSS SECTION
 NO SCALE
 X-2

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. PLACE GEOSYNTHETIC REINFORCED EMBANKMENT WHERE SLOPES ARE STEEPER THAN 2:1. PLACE IN TWO FOOT MAXIMUM LIFTS.

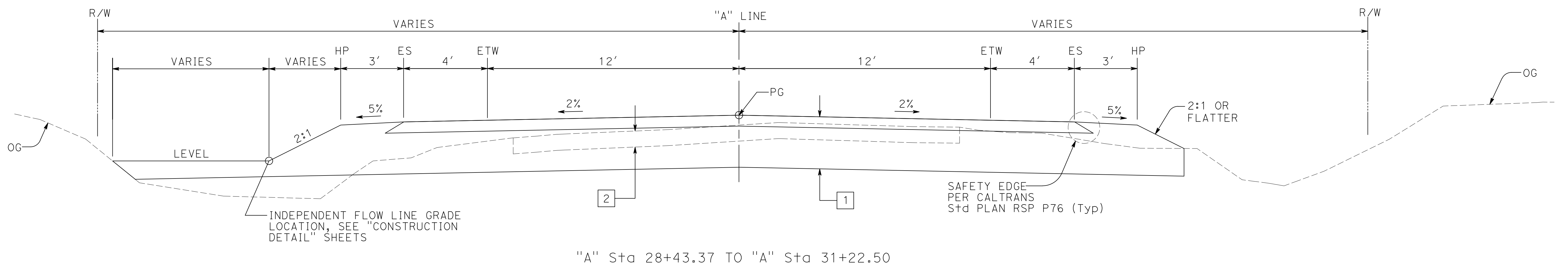
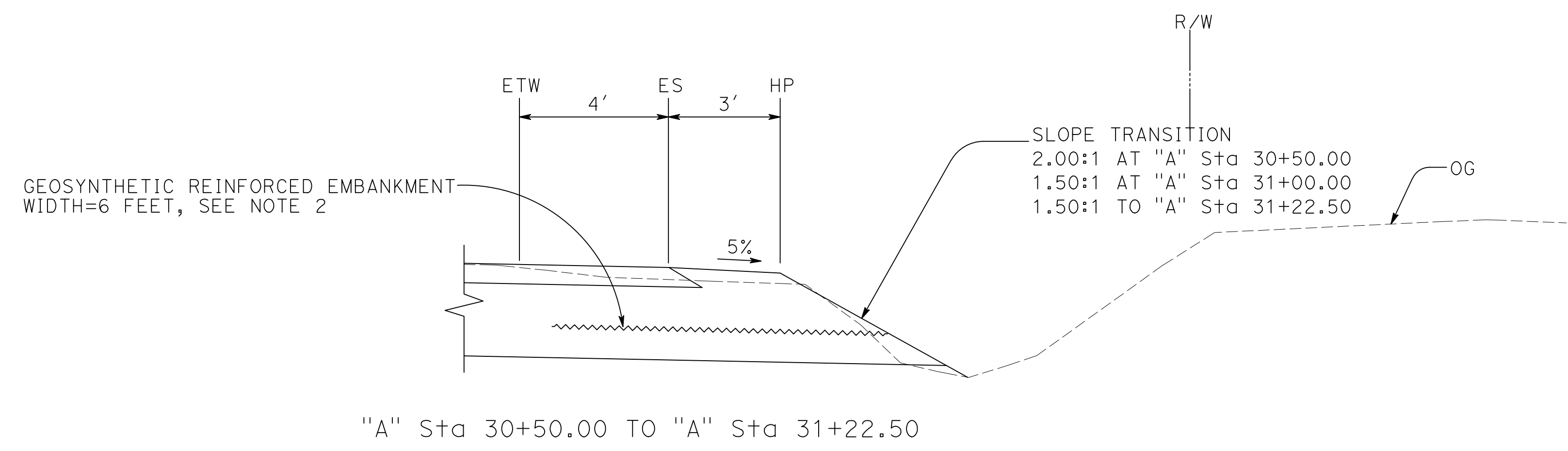
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	4	38

REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

KCG	05-31-23
REVISOR	DATE
R. UHLMANN	G. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
PROJECT ENGINEER	GARY M. GORDON



Co ROAD 67

TYPICAL CROSS SECTION X-3
NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	5	38

05-31-23
 REGISTERED CIVIL ENGINEER DATE
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

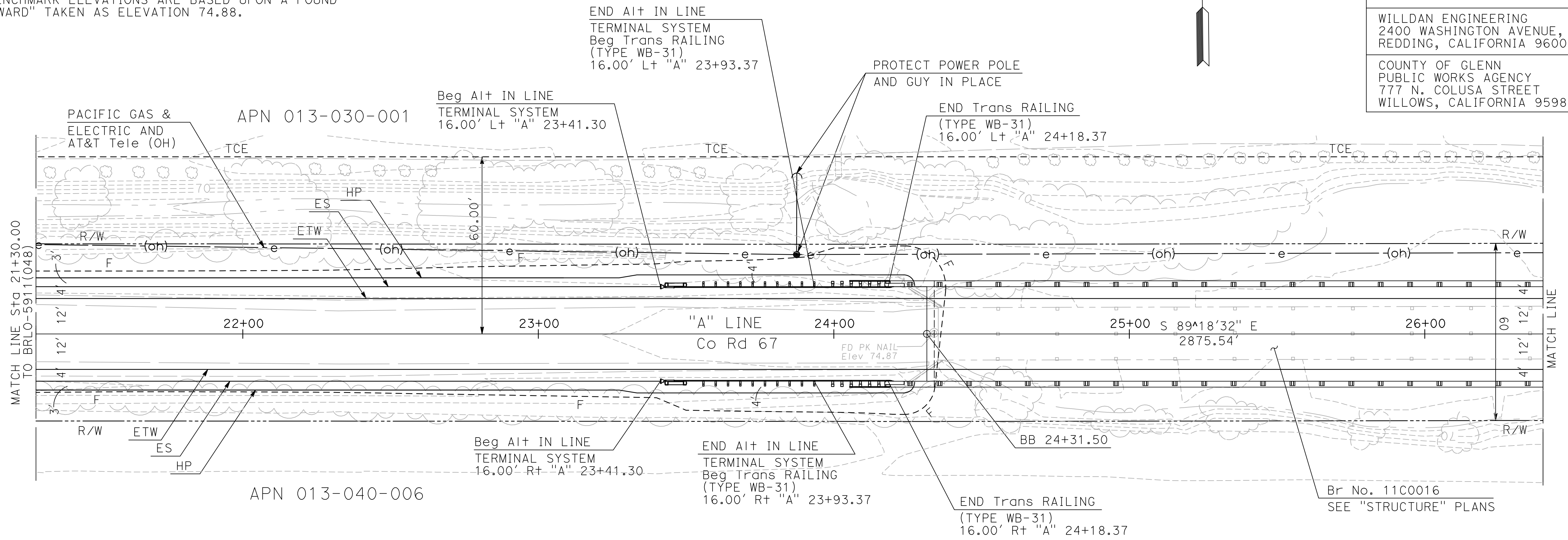
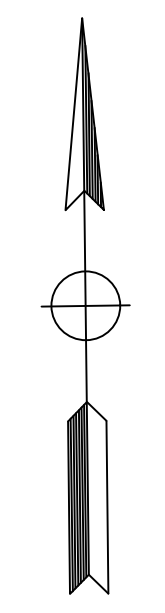
WILLDAN ENGINEERING
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 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
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 WILLOWS, CALIFORNIA 95988

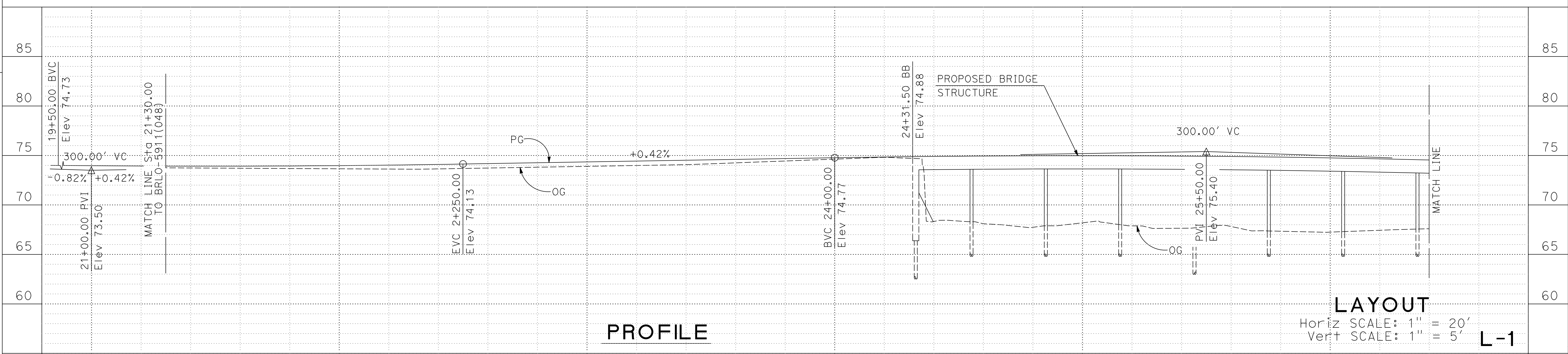
- NOTES:**
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT GLENN COUNTY PUBLIC WORKS AGENCY.
 - BASIS OF BEARING: TAKEN AS N87°6'59.47"E BETWEEN POINTS 5860 AND 5001 AS SHOWN ON THIS SHEET.
 - COORDINATES, DISTANCES AND BEARINGS ARE BASED ON CCS 1983, ZONE 2, DERIVED FROM GPS OBSERVATIONS. MULTIPLY DISTANCES SHOWN BY 1.000063654 TO OBTAIN GROUND LEVEL DISTANCES.
 - ELEVATIONS ARE BASED ON 1988 NATIONAL GEODETIC VERTICAL DATUM (NGVD). BENCHMARK ELEVATIONS ARE BASED UPON A FOUND BRONZE DISK "HOWARD" TAKEN AS ELEVATION 74.88.

CONTROL FOR DESIGN AND CONSTRUCTION

POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
5001	2279027.67	6590514.16	74.88	FOUND BRONZE DISK "HOWARD" IN TOP OF SOUTHEAST WINGWALL OF Br. No. 11C0017
5860	2279009.86	6590160.48	70.84	FOUND ALUMINUM CAP "465", SOUTHWEST OF Br. No. 11C0017 (37.28' R+ "A" 33+48.24)



PLAN



PROFILE

LAYOUT

Horiz SCALE: 1" = 20'
 Vert SCALE: 1" = 5'

L-1

STATION	Exc	Emb	TOTAL
21+00			
22+00			
23+00			
24+00			
25+00			
26+00			
TOTAL	811	30	811

USERNAME => KEVIN
 DGN FILE => 03-101783ed001



LAST REVISION DATE PLOTTED => 5/31/2023
 TIME PLOTTED => 11:36:22 AM

PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
R. UHLMANN	G. GORDON
REVISED BY	DATE REVISED
KCG	05-31-23

NOTES:
 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT COUNTY OF GLENN PUBLIC WORKS AGENCY.

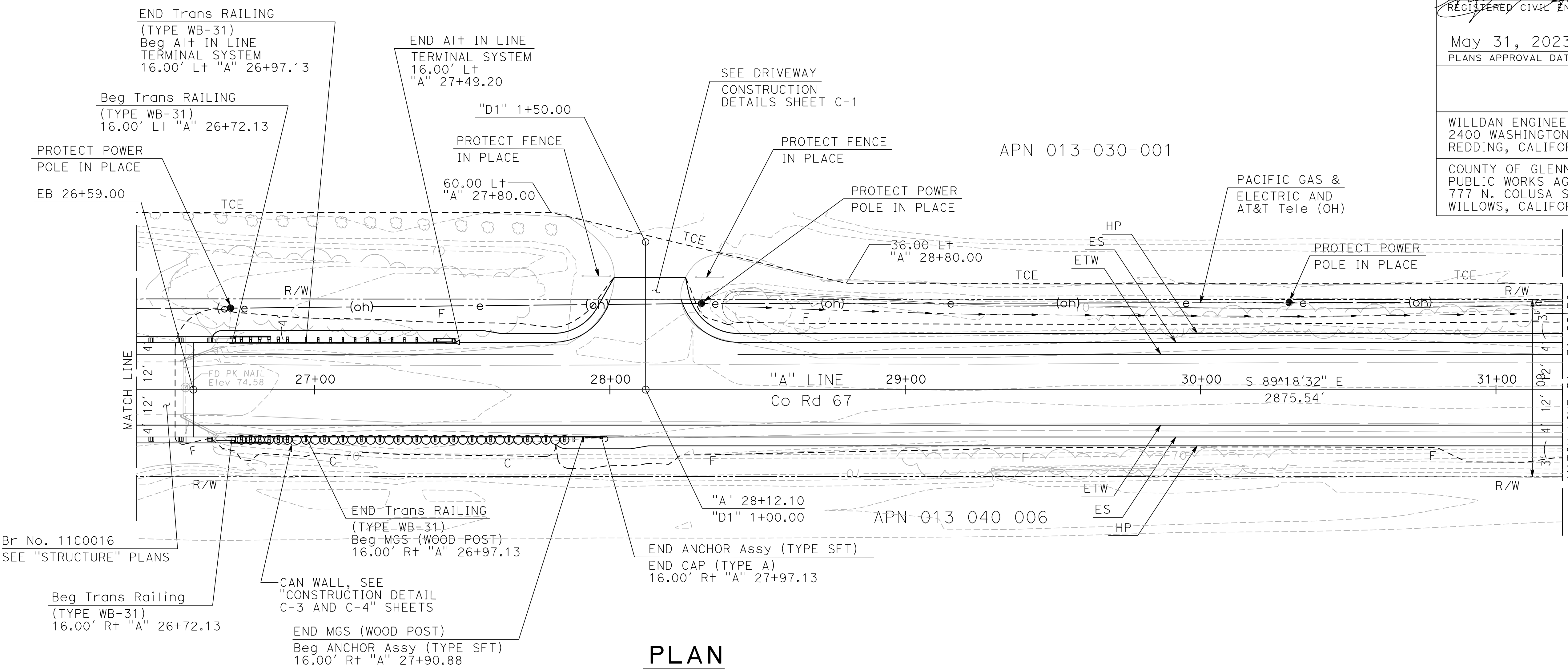
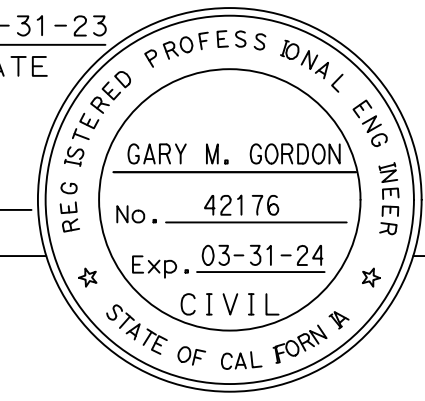
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	6	38

05-31-23
 REGISTERED CIVIL ENGINEER DATE

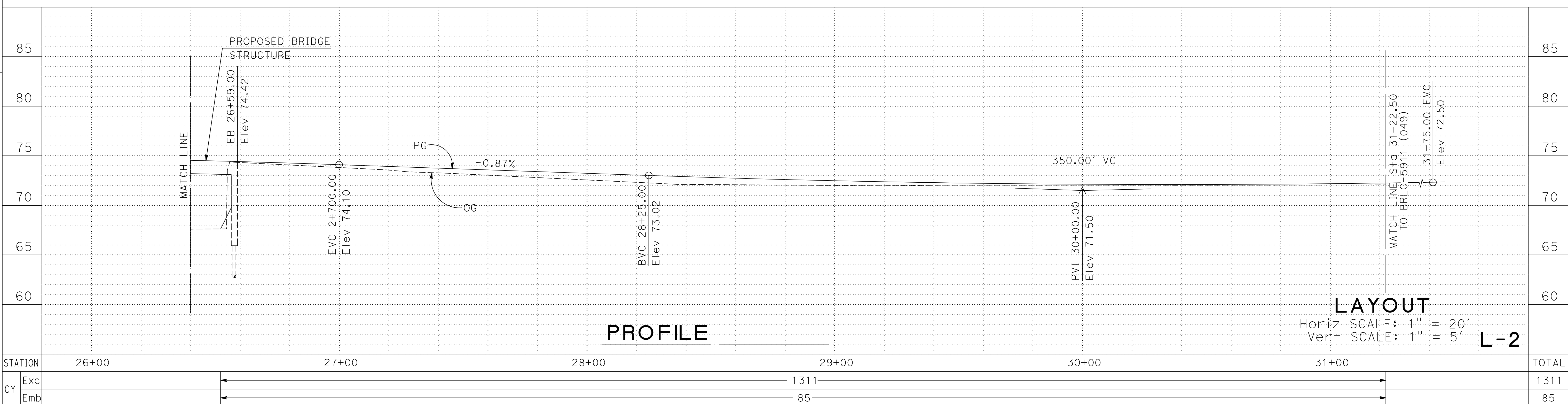
May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



PLAN



PROFILE

LAYOUT

Horiz SCALE: 1" = 20'
 Vert SCALE: 1" = 5'

L-2

STATION	26+00	27+00	28+00	29+00	30+00	31+00	TOTAL
CY Exc				1311			1311
CY Emb				85			85

USERNAME => KEVIN
 DGN FILE => 03-101783.dwg



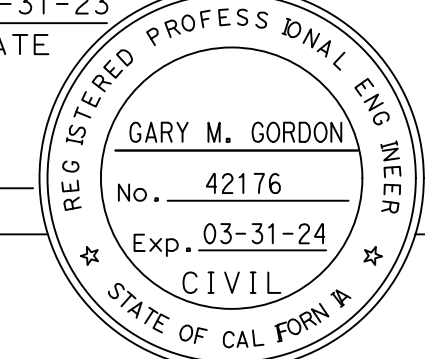
LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 11:53:21 AM

NOTES:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

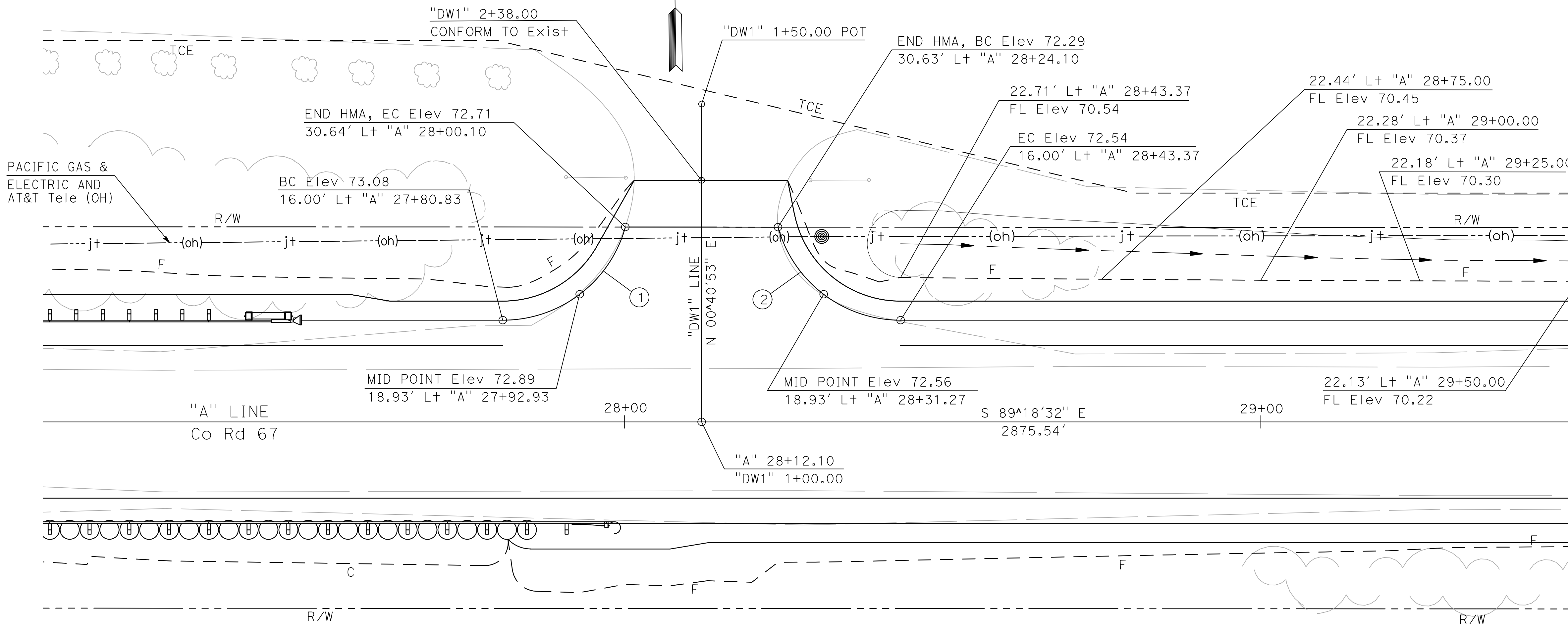
CURVE DATA

No. ①	R	Δ	T	L
1	20.00'	74°27'55"	15.20'	25.99'
2	20.00'	74°25'40"	15.19'	25.98'

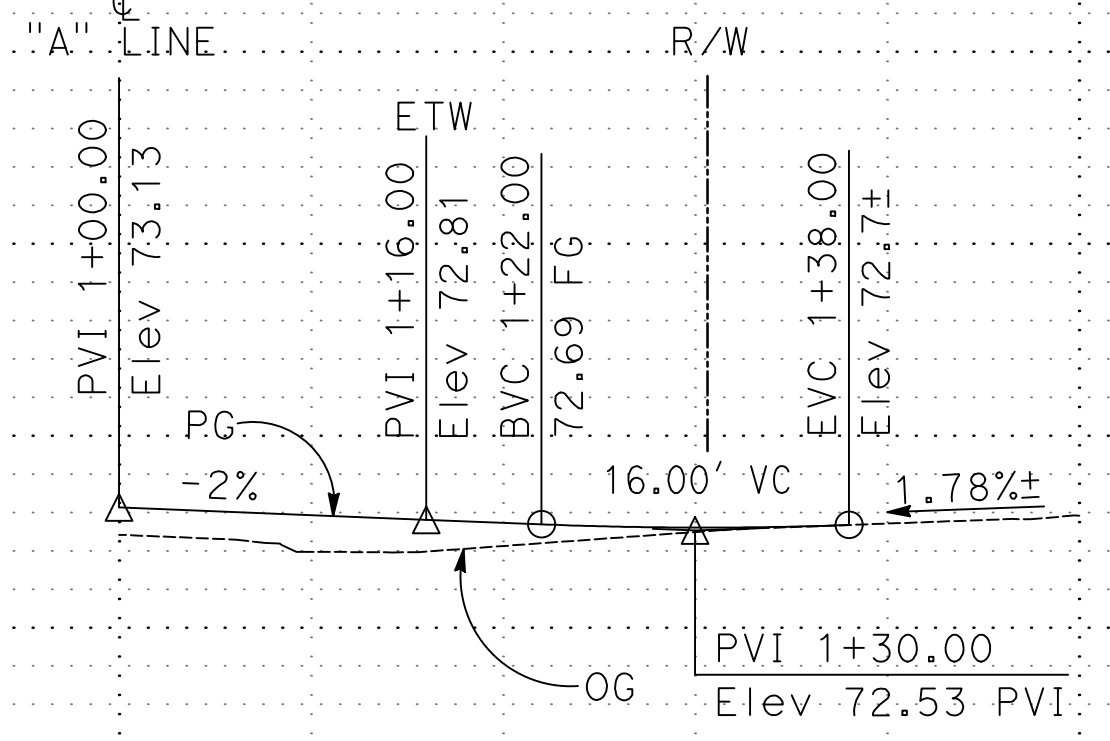
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	7	38


 REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001
 COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



PLAN



"DW1" PROFILE

CONSTRUCTION DETAILS

SCALE: Horiz 1"=10'
Vert SCALE: 1"=5'

C-1

PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
R. UHLMANN	G. GORDON
REVISED BY	DATE REVISED
KCG	05-31-23

STATION	Exc	Emb	TOTAL
1+00			
1+50			

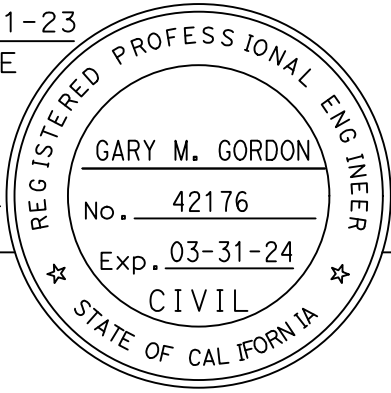
LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 12:02:50 PM

NOTES:
 FOR ACCURATE RIGHT OF WAY DATA,
 CONTACT COUNTY OF GLENN PUBLIC
 WORKS AGENCY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	8	38

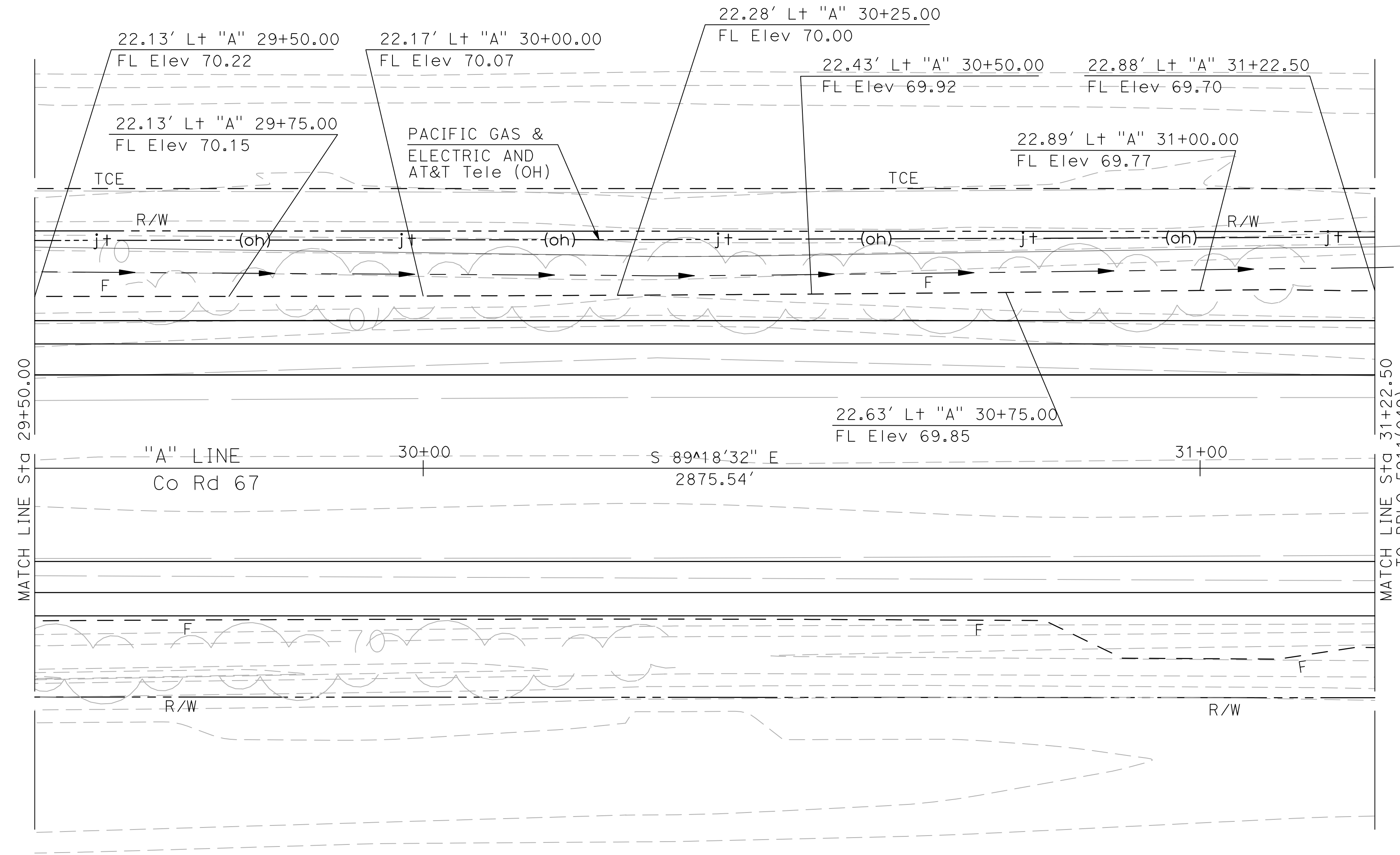
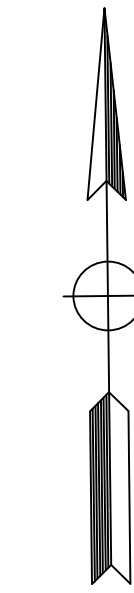
Gary M. Gordon 05-31-23
 REGISTERED CIVIL ENGINEER DATE

May 31, 2023
 PLANS APPROVAL DATE



WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



PLAN

CONSTRUCTION DETAILS

SCALE: 1"=10'

C-2

PROJECT ENGINEER GARY M. GORDON	CALCULATED- DESIGNED BY	REVISOR R. UHLMANN	DATE 05-31-23
	CHECKED BY	DATE REVISOR G. GORDON	

USERNAME => KEVIN
 DGN FILE => 03-101783gd002

RELATIVE BORDER SCALE
 IS IN INCHES



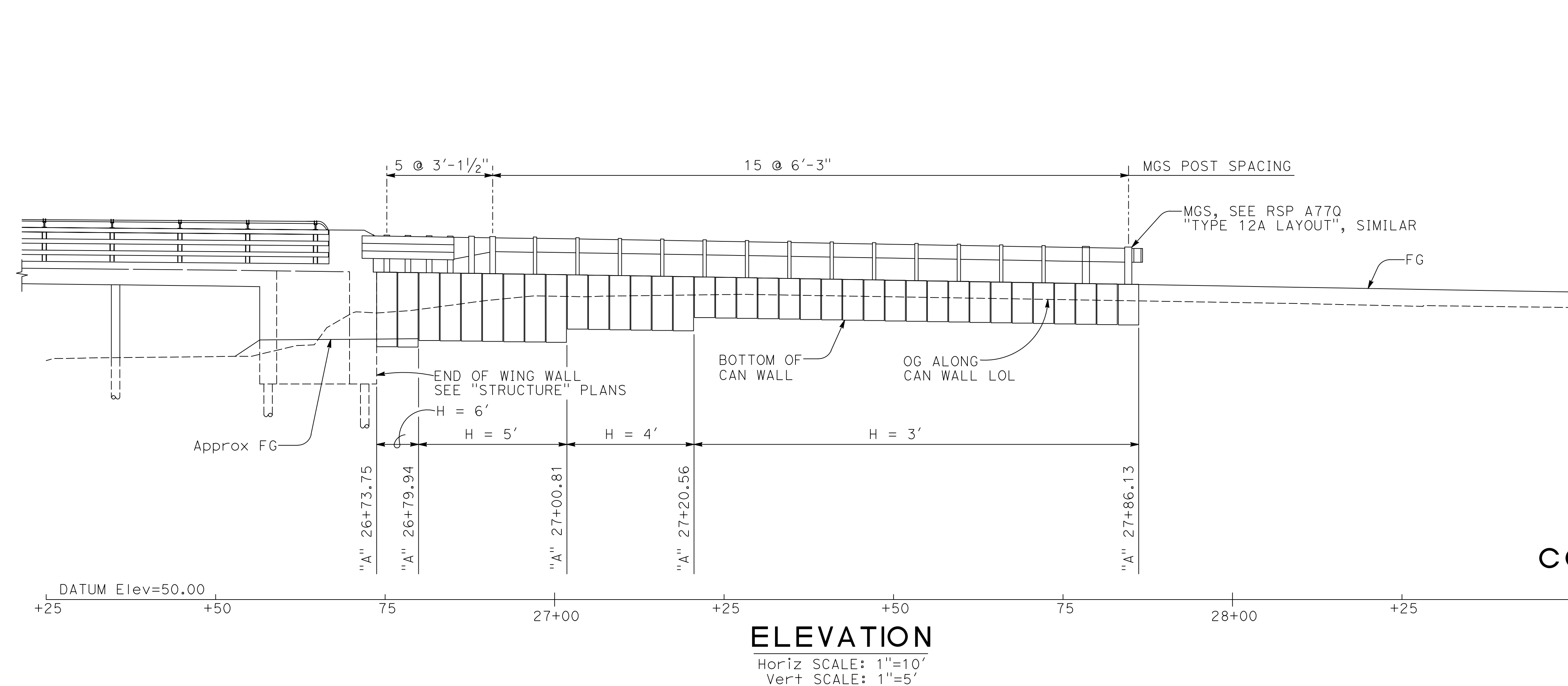
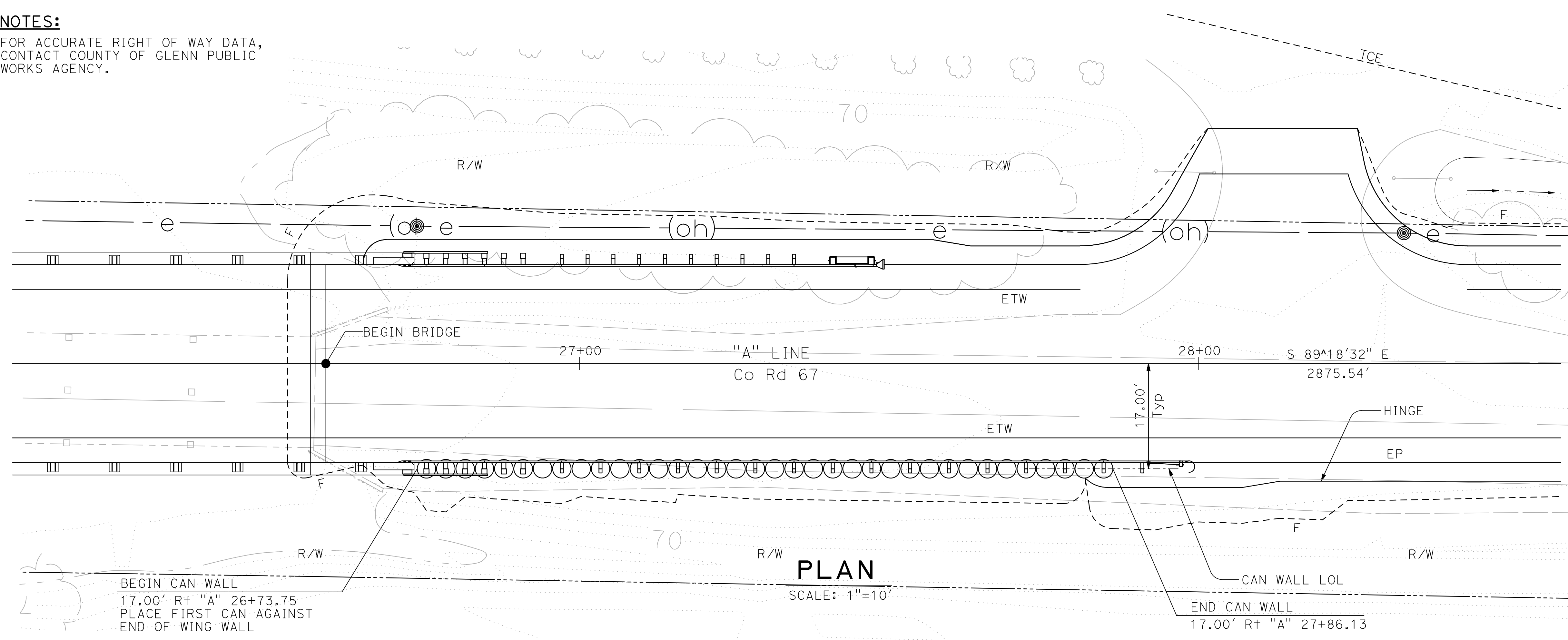
LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 12:21:18 PM

NOTES:
 FOR ACCURATE RIGHT OF WAY DATA,
 CONTACT COUNTY OF GLENN PUBLIC
 WORKS AGENCY.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	9	38

05-31-23
 REGISTERED CIVIL ENGINEER DATE
 May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001
 COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



CONSTRUCTION DETAILS
 SCALE AS SHOWN **C-3**

KCG	05-31-23	R. UHLMANN	G. GORDON	GARY M. GORDON
REVISOR	DATE	DESIGNER	CHECKER	PROJECT ENGINEER

USERNAME => KEVIN
 DGN FILE => 03-101783gd003



LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 3:58:35 PM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	10	38

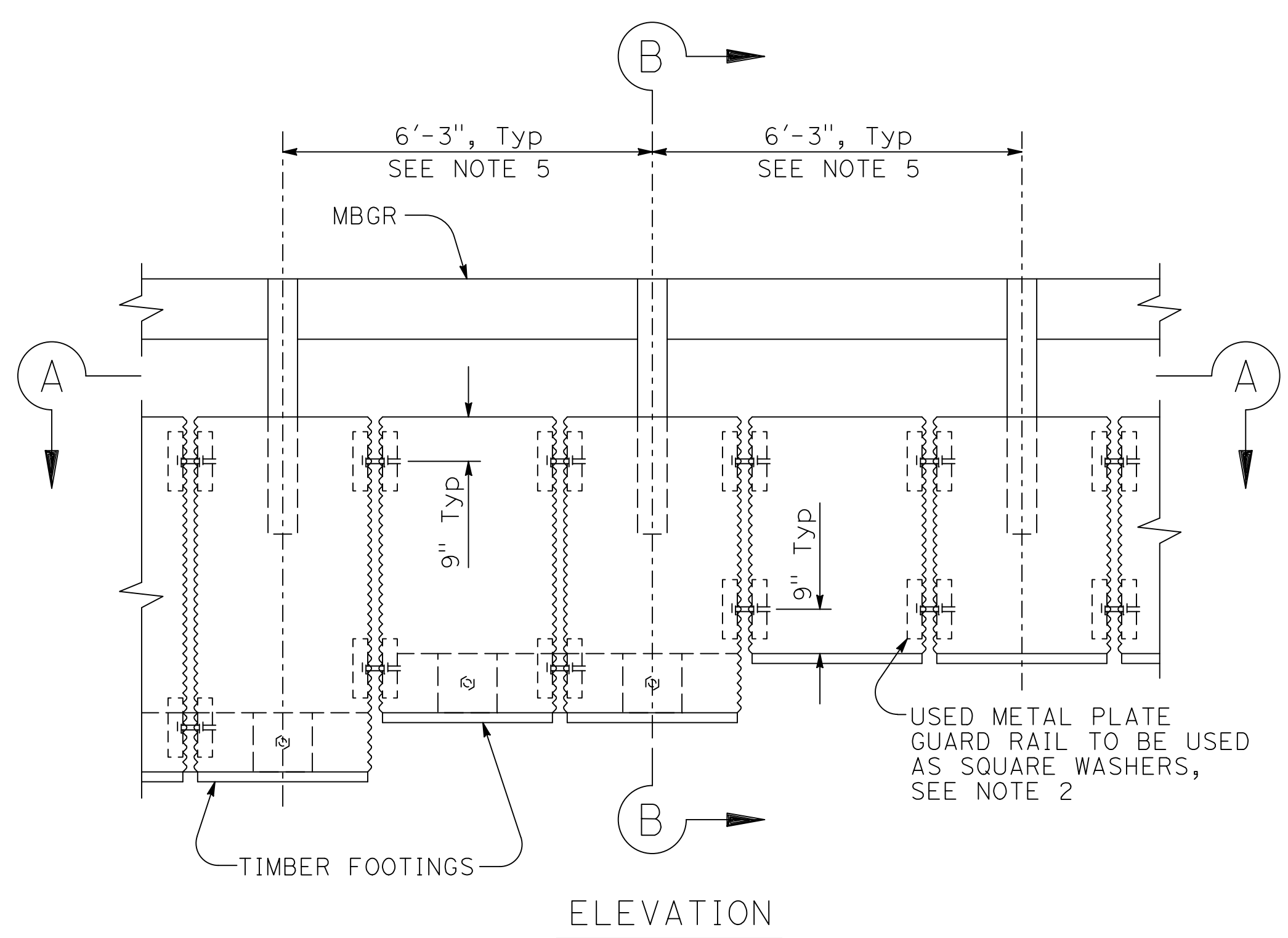
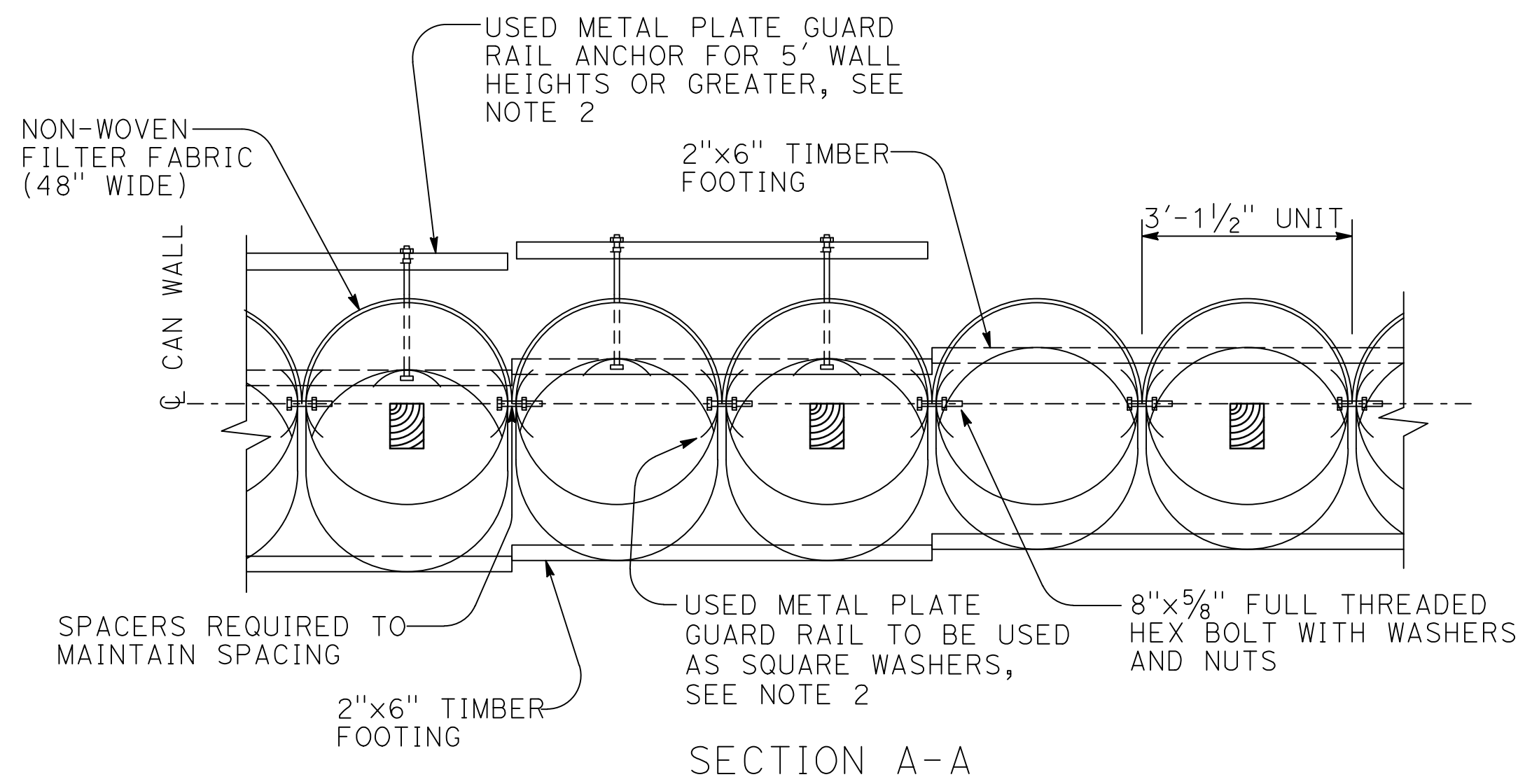
REGISTERED CIVIL ENGINEER DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

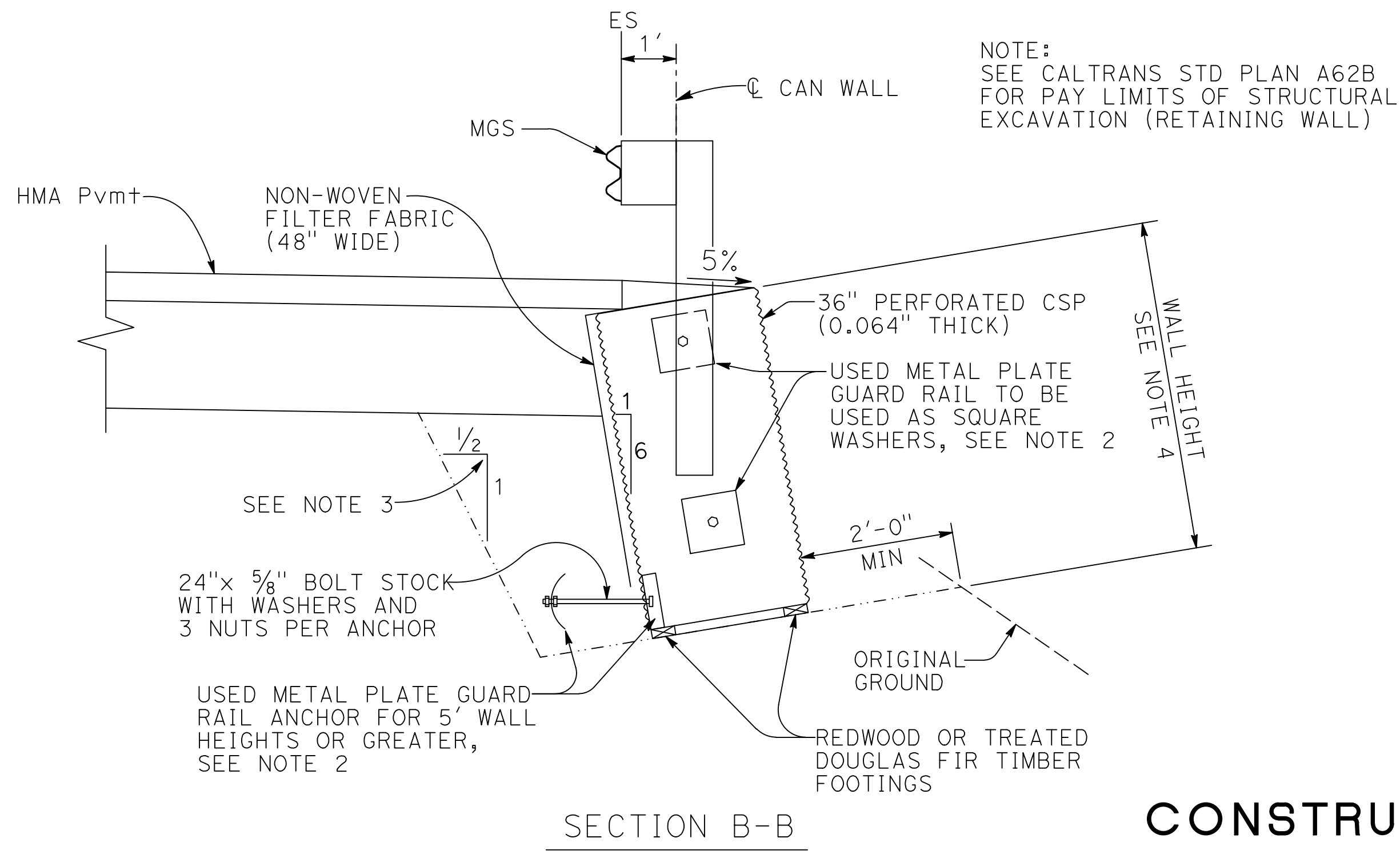
COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

- NOTES:**
- SLOPE SHOULDER AT 5% OR AS DIRECTED BY THE ENGINEER.
 - CONTRACTOR MAY SUBMIT ALTERNATIVE FOR ANCHOR PLATES AND OR WASHERS TO THE ENGINEER FOR APPROVAL.
 - BATTER SLOPE AS SHOWN WHEN EXCAVATION DEPTH EXCEEDS 5'-0" OR PROVIDE SHORING.
 - WALL HEIGHTS VARY IN 1 FOOT INCREMENTS. SEE PLANS FOR HEIGHTS AND LOCATIONS.
 - SPACING FOR MIDWEST GUARDRAIL SYSTEM WOOD POSTS SHALL BE 6'-3" EXCEPT FOR THE FIRST 6 WOOD POSTS BEGINNING AT THE BRIDGE RAIL CONNECTION WHICH SHALL BE SPACED AT 3'-1 1/2".

PROJECT ENGINEER GARY M. GORDON
 CALCULATED-DRAWN BY GARY M. GORDON
 R. UHLMANN G. GORDON
 REVISED BY DATE REVISED
 KCG 05-31-23



CAN WALL DETAILS
SCALE: 1/2"=1'-0"




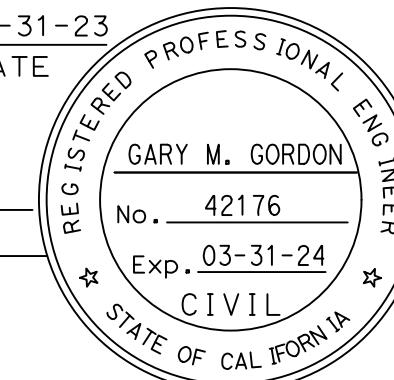
CONSTRUCTION DETAILS

SCALE AS SHOWN **C-4**

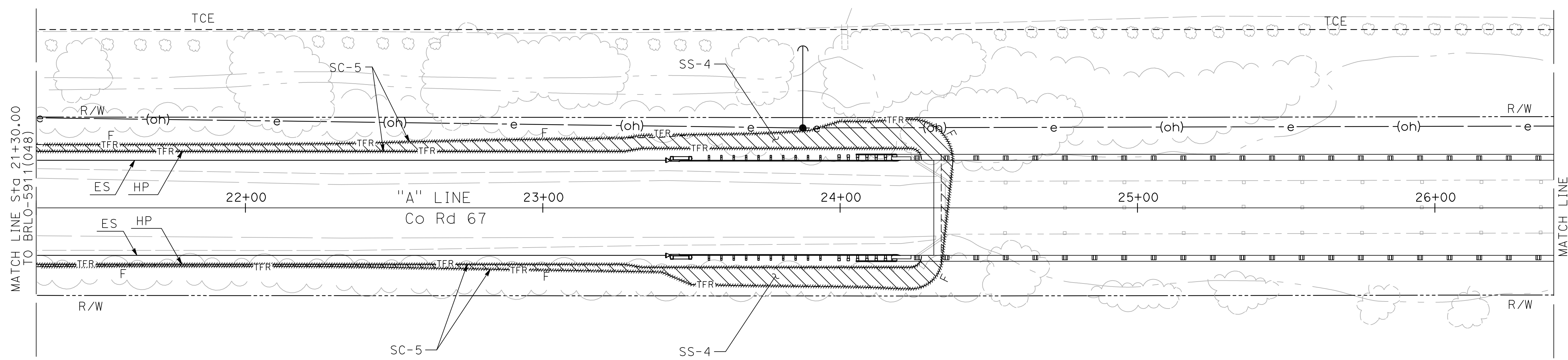
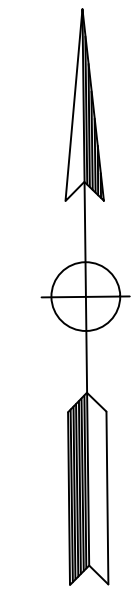
NOTE:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	11	38




 REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE



WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001
 COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



LEGEND:

-  TFR
-  SS-4: HYDROSEEDING FOR ALL PROPOSED SLOPES. MIX TO BE DETERMINED.
- SC-5: TEMPORARY FIBER ROLL CONTROL PER CALTRANS STANDARD T56

TEMPORARY BMP NOTES:

1. NOT ALL BEST MANAGEMENT PRACTICES (BMPs) SHOWN. CONTRACTOR SHALL USE ALL APPROPRIATE TEMPORARY WATER POLLUTION CONTROL BMPs AS INDICATED ON THE PLANS AND AS DIRECTED BY THE APPROVED PROJECT WPCP OR SWPPP.
2. BMPs WILL BE APPLIED TO AND MAINTAINED IN ACTIVE AND NON-ACTIVE DISTURBED SOIL AREAS (DSAs).
3. FIBER ROLLS SHALL BE PLACED ON DISTURBED SOIL AT THE COMPLETION OF GRADING.
4. CONTRACTOR TO ESTABLISH TEMPORARY CONSTRUCTION ENTRANCE PER CALTRANS STANDARD T58 AND TEMPORARY CONCRETE WASHOUT FACILITY PER CALTRANS STANDARD T59.
5. THE CHANNEL CAPACITY MUST BE MAINTAINED DURING THE RAINY SEASON OCTOBER 15 TO APRIL 15.
6. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES OR TO REPAIR ANY DAMAGED EROSION CONTROL MEASURES WHEN RAIN IS IMMINENT.

TEMPORARY BMP NOTES (CONTINUED):

7. DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE ENGINEER.
8. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT.
9. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERM'S, AND DESILTING BASINS AND THE BASINS PUMPED DRY. ANY GRADED SLOPE SURFACE PROTECTION MEASURES DAMAGED DURING A RAINSTORM SHALL ALSO BE IMMEDIATELY REPAIRED.
10. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE TO BE DIRECTED TOWARD DESILTING FACILITIES.
11. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREA WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.

PERMANENT BMP NOTES:

1. CONTRACTOR SHALL PROVIDE APPROPRIATE EROSION CONTROL BMPs AS INDICATED ON THE PLANS AND AS DIRECTED BY THE APPROVED PROJECT WPCP OR SWPPP.
2. SEED MIX FOR HYDROSEEDING SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
3. PROPERLY MAINTAINED FIBER ROLLS FROM TEMPORARY WATER POLLUTION CONTROL WORK MAY BE USED FOR EROSION CONTROL. MISSING, DEGRADED OR OTHERWISE DAMAGED FIBER ROLLS WILL BE REPLACED AS DIRECTED BY THE ENGINEER.

**TEMPORARY WATER POLLUTION/
EROSION CONTROL PLAN**

SCALE: 1" = 20'

WPC-1

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

USERNAME => KEVIN
DGN FILE => 03-101783gb001



LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 4:48:01 PM

PROJECT ENGINEER GARY M. GORDON	CALCULATED-DESIGNED BY GARY M. GORDON	REVISOR R. UHLMANN	DATE 05-31-23
	CHECKED BY GARY M. GORDON	REVISIONS G. GORDON	

NOTE:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

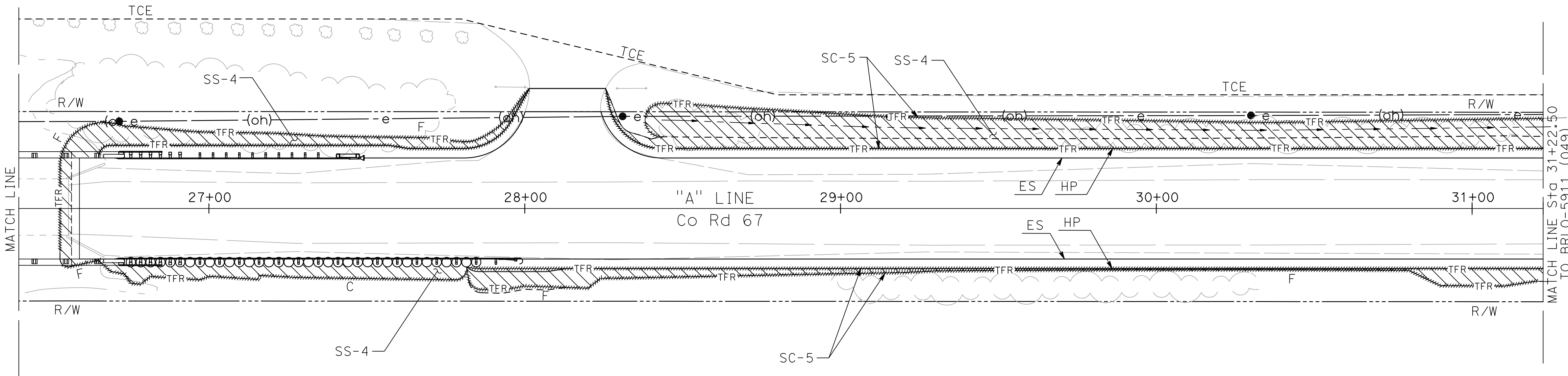
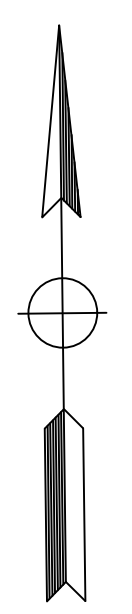
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	12	38

REGISTERED CIVIL ENGINEER DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



TEMPORARY WATER POLLUTION/ EROSION CONTROL PLAN

SCALE: 1" = 20'

WPC-2

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 4:58:54 PM

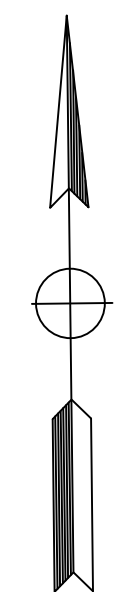
PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
B. BURCH	R. UHLMANN
REVISED BY	DATE REVISED
KCG	05-31-23

GENERAL NOTES:

- SIGNS SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
- SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- SIGNS WILL REMAIN IN PLACE FOR DURATION OF PROJECT.
- FOR ADDITIONAL TRAFFIC CONTROL SIGNS, SEE DETOUR PLAN DE-1.
- CONTRACTOR SHALL OBTAIN CALTRANS ENCROACHMENT PERMIT FOR SIGNS ON SR 162.
- CONTRACTOR SHALL OBTAIN BUTTE COUNTY ENCROACHMENT PERMIT FOR SIGNS ON AGUAS FRIAS ROAD, AFTON ROAD, AND COUNTY ROAD 67 EAST OF THE GLENN/BUTTE COUNTY LINE.

LEGEND

- TEMPORARY SIGN AND POST (ONE POST)
- TEMPORARY SIGN AND POST (TWO POST)
- CONSTRUCTION AREA
- AGRICULTURAL FIELD ACCESS POINT
LAT: 39°25'13"N, LONG: 121°54'4"W

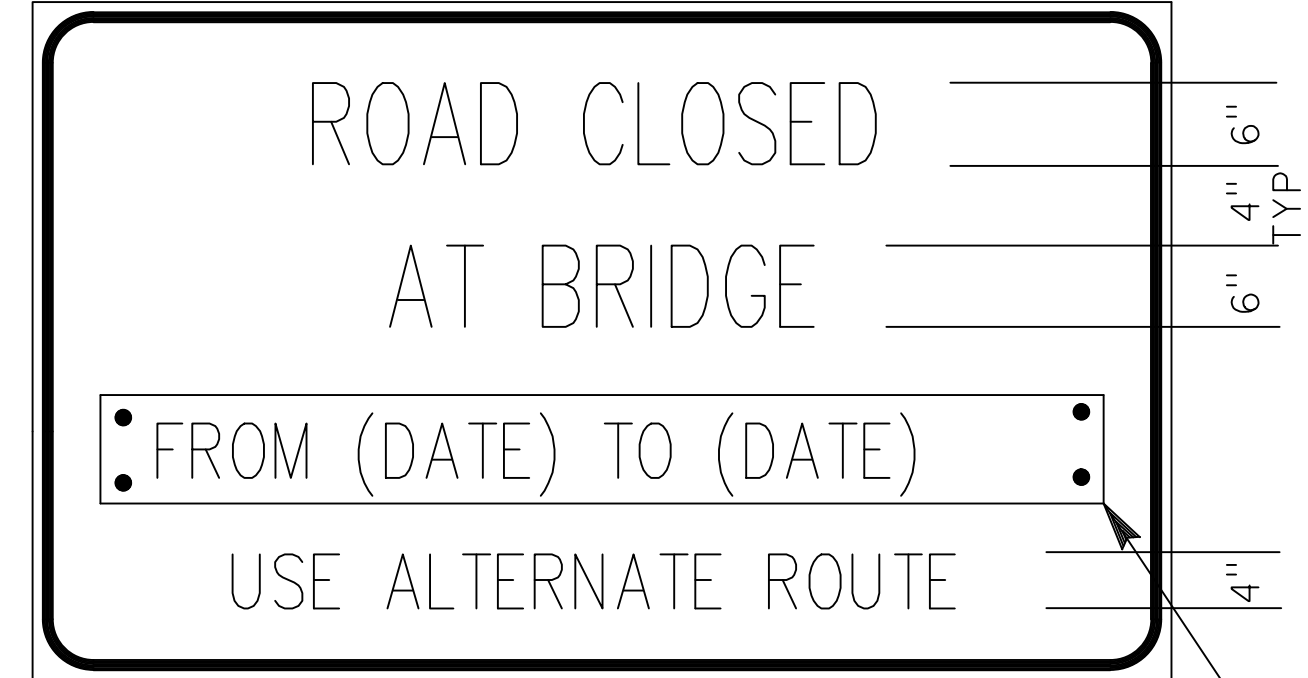
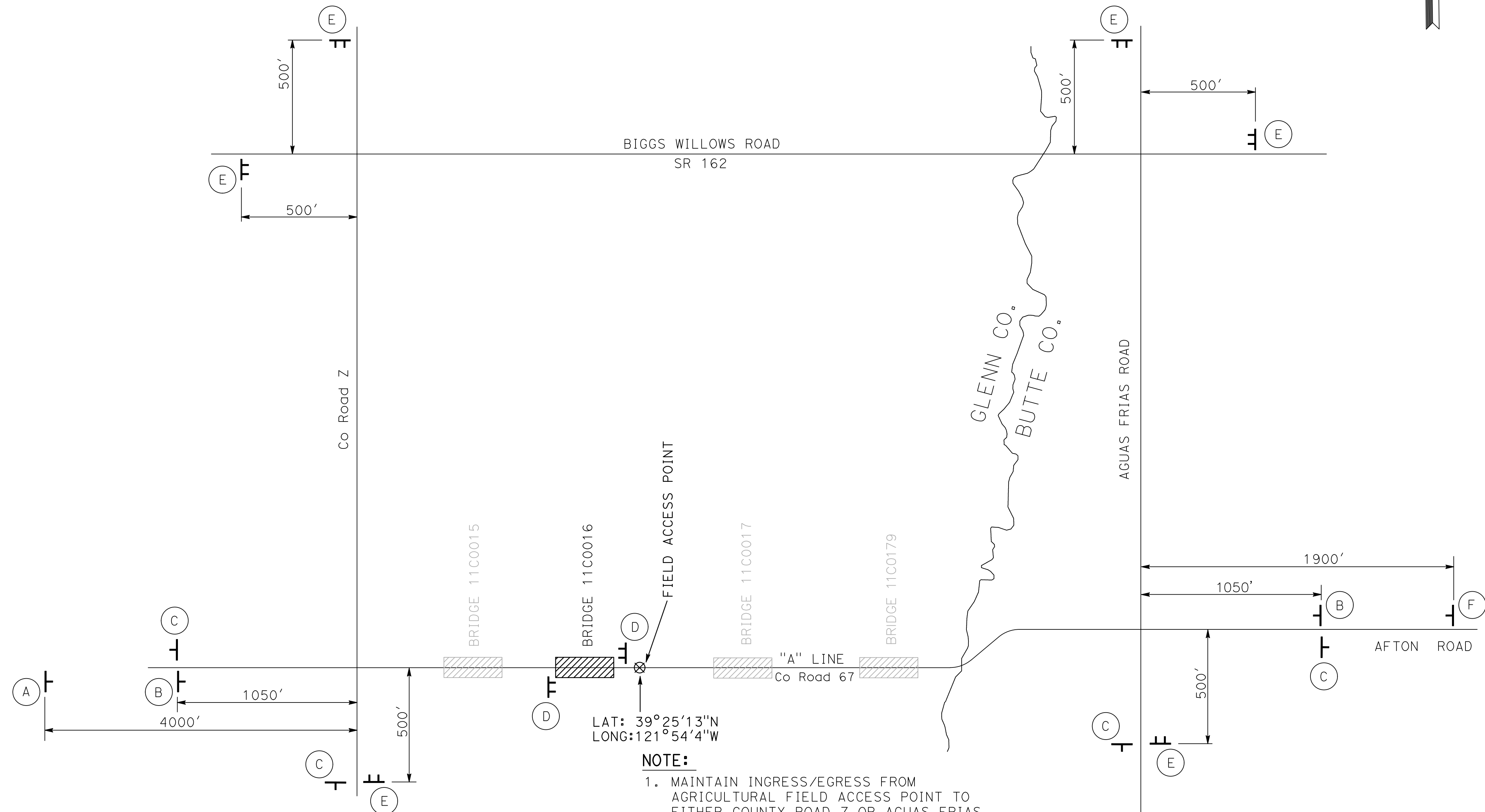


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	13	38

REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

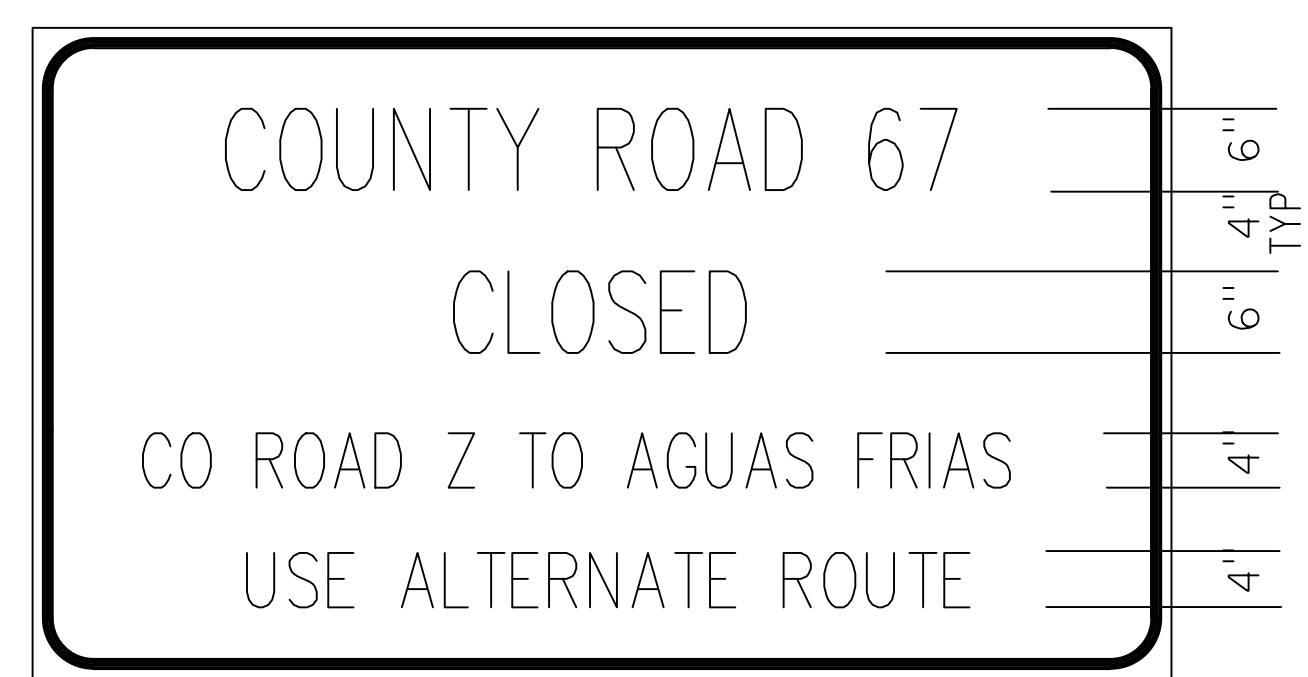
WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



NOTES:

- LETTERS - SERIES C.
- LETTERS AND BORDERS - BLACK ON ORANGE BACKGROUND.
- SIGN TO BE INSTALLED 2 WEEKS PRIOR TO CONSTRUCTION.



NOTES:

- LETTERS - SERIES C.
- LETTERS AND BORDERS - BLACK ON ORANGE BACKGROUND.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	POST		No. of SIGNS
				NO.	SIZE	
(A)	R11-3b	30" X 60"	BRIDGE OUT 2 MILES LOCAL TRAFFIC ONLY	1	4" X 4"	1
(B)	C19(CA)	48" X 48"	ROAD CLOSED AHEAD	1	4" X 4"	2
(C)	G20-2	36" X 18"	END ROAD WORK	1	4" X 4"	4
(D)	SPECIAL	84" X 42"	ROAD CLOSED INFORMATION	2	6" X 6"	2
(E)	SPECIAL	84" X 40"	ROAD CLOSED INFORMATION	2	6" X 6"	5
(F)	R11-3b	30" X 60"	BRIDGE OUT 3 MILES LOCAL TRAFFIC ONLY	1	4" X 4"	1

NOTE:

- MAINTAIN INGRESS/EGRESS FROM AGRICULTURAL FIELD ACCESS POINT TO EITHER COUNTY ROAD Z OR AGUAS FRIAS ROAD AT ALL TIMES.
- COORDINATE CONSTRUCTION PHASING OF ALL PROJECTS TO MAINTAIN ACCESS OR PROVIDE ALTERNATIVE MEANS OF INGRESS/EGRESS.
- IF MULTIPLE BRIDGES ARE UNDER CONSTRUCTION SIMULTANEOUSLY, THE CONTRACTOR SHALL COORDINATE SIGN PLACEMENT WITH THE ENGINEER.

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY



CONSTRUCTION AREA SIGNS
NO SCALE CS-1

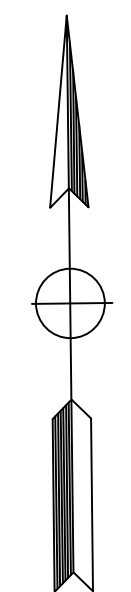
PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
B. BURCH	R. UHLMANN
REVISED BY	DATE REVISED
KCG	05-31-23

GENERAL NOTES:

- SIGNS SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
- SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- SIGNS WILL REMAIN IN PLACE FOR DURATION OF PROJECT.
- CONTRACTOR SHALL OBTAIN CALTRANS ENCROACHMENT PERMIT FOR SIGNS ON SR 162.
- CONTRACTOR SHALL OBTAIN BUTTE COUNTY ENCROACHMENT PERMIT FOR SIGNS ON AGUAS FRIAS ROAD, AFTON ROAD, AND COUNTY ROAD 67 EAST OF THE GLENN/BUTTE COUNTY LINE.
- MAINTAIN INGRESS/EGRESS FROM AGRICULTURAL FIELD ACCESS POINT TO EITHER COUNTY ROAD Z OR AGUAS FRIAS ROAD AT ALL TIMES. COORDINATE CONSTRUCTION PHASING OF ALL PROJECTS TO MAINTAIN ACCESS OR PROVIDE ALTERNATIVE MEANS OF INGRESS/EGRESS. IF MULTIPLE BRIDGES ARE UNDER CONSTRUCTION SIMULTANEOUSLY, THE CONTRACTOR SHALL COORDINATE SIGN PLACEMENT WITH THE ENGINEER.

LEGEND

- TEMPORARY SIGN AND POST
- TYPE III BARRICADE WITH SIGN
L=8.00', WITH THREE WARNING LIGHTS (TYPE B)
- CONSTRUCTION AREA
- DIRECTION OF TRAVEL
- AGRICULTURAL FIELD ACCESS POINT
LAT: 39°25'13"N, LONG: 121°54'4"W



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	14	38

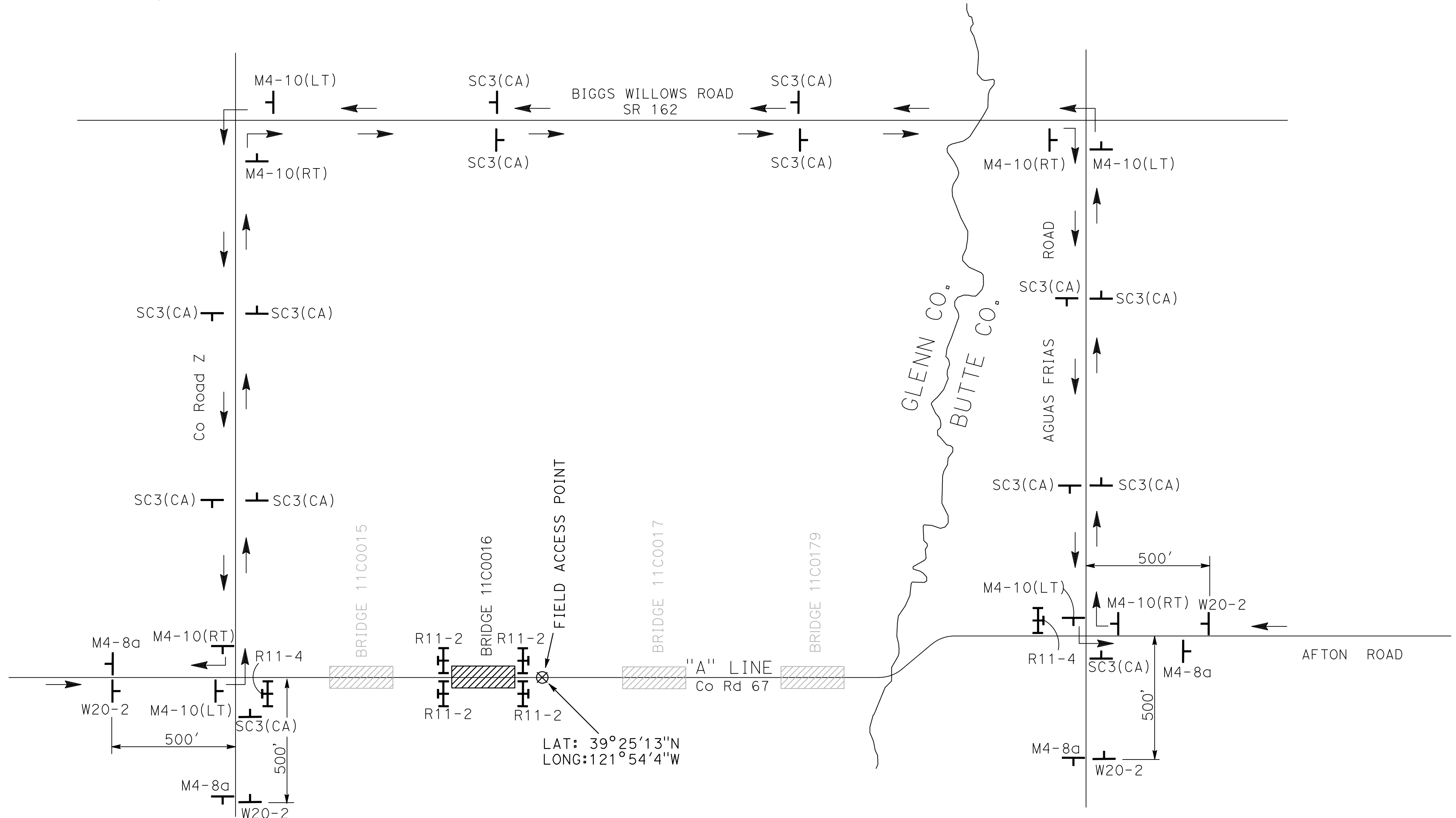
05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
PLANS APPROVAL DATE

GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988



DETOUR SIGNS

SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. of SIGNS
M4-10(RT)	18" X 48"	DETOUR (RIGHT)	4
M4-10(LT)	18" X 48"	DETOUR (LEFT)	4
SC-3(CA)	18" X 48"	DETOUR (STRAIGHT)	14
R11-4	30" X 48"	ROAD CLOSED TO THROUGH TRAFFIC	2
R11-2	30" X 48"	ROAD CLOSED	4
M4-8a	18" X 24"	END DETOUR	4
W20-2	36" X 36"	DETOUR AHEAD	4

APPROVED FOR DETOUR SIGN WORK ONLY



USERNAME => KEVIN
DGN FILE => 03-101783md001

DETOUR PLAN
NO SCALE
DE-1

LAST REVISION DATE PLOTTED => 5/31/2023
05-31-23 TIME PLOTTED => 8:12:57 AM

PROJECT ENGINEER: GARY M. GORDON
 CALCULATED/DESIGNED BY: GARY M. GORDON
 CHECKED BY: R. UHLMANN
 B. BURCH
 REVISED BY: KCG
 DATE REVISED: 05-31-23

GENERAL NOTES:

- ALL TRAFFIC LINES SHALL CONFORM TO THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
- LANE WIDTH SHALL BE MEASURED BETWEEN THE CENTERLINES OF EACH SINGLE STRIPE.
- ALL SIGNING TO BE INSTALLED SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).

LEGEND

- Prop SIGN AND POST
- Exist SIGN AND POST TO BE REMOVED
- TRAFFIC STRIPE DETAIL

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	15	38

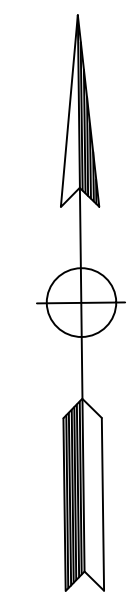
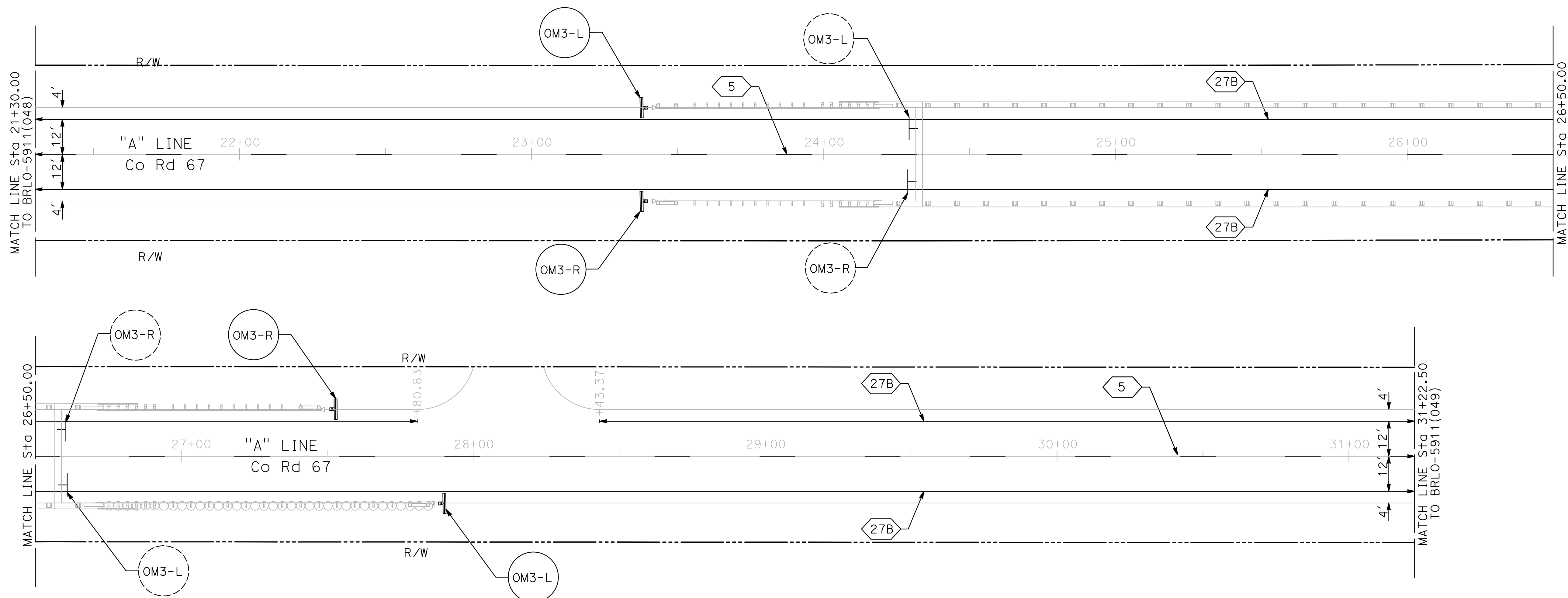
REGISTERED CIVIL ENGINEER DATE: 05-31-23
 GARY M. GORDON No. 42176 Exp. 03-31-24 CIVIL STATE OF CALIFORNIA
 May 31, 2023 PLANS APPROVAL DATE
 WILLDAN ENGINEERING 2400 WASHINGTON AVENUE, SUITE 101 REDDING, CALIFORNIA 96001
 COUNTY OF GLENN PUBLIC WORKS AGENCY 777 N. COLUSA STREET WILLOWS, CALIFORNIA 95988

PAVEMENT DELINEATION QUANTITIES

SHEET No.	LOCATION/STATIONING	DIRECTION	DETAIL No.	THERMOPLASTIC TRAFFIC STRIPE					COMMENTS
				4" WHITE SOLID	4" WHITE BROKEN	4" YELLOW BROKEN	8" WHITE SOLID	8" WHITE BROKEN	
				LF	LF	LF	LF	LF	
PD-1	21+30.00 TO 31+22.50	EB	27B	992.5					
PD-1	21+30.00 TO 27+80.83	WB	27B	650.8					
PD-1	28+43.37 TO 31+22.50	WB	27B	279.1					
PD-1	21+30.00 TO 31+22.50	WB	5			992.5			
TOTAL				1922.4		992.5			

ROADSIDE SIGN QUANTITIES

SIGN CODE	PANEL SIZE	REMOVE ROADSIDE SIGN (EA)	ROADSIDE SIGN	REMARKS
			ONE POST EA	
OM3-L	12" x 36"	2	2	8'-0" LONG METAL POST PER S+d PLAN A73B
OM3-R	12" x 36"	2	2	8'-0" LONG METAL POST PER S+d PLAN A73B



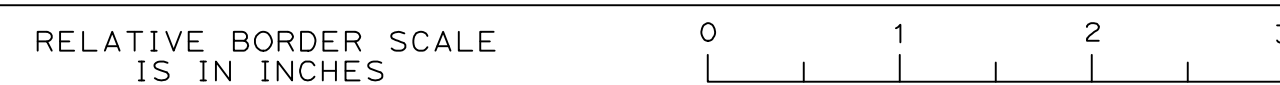
PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1" = 20'

PD-1

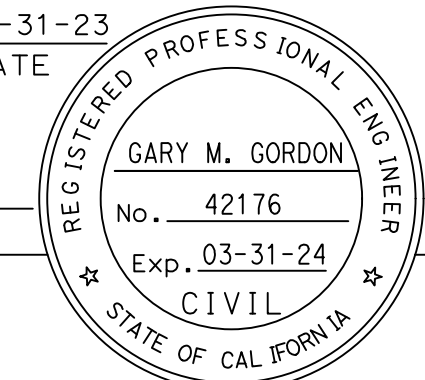
THIS PLAN IS ACCURATE FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

USERNAME => KEVIN
DGN FILE => 03-101783nd001



LAST REVISION: 05-31-23
 DATE PLOTTED => 5/31/2023
 TIME PLOTTED => 4:26:37 PM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	16	38


 05-31-23
 REGISTERED CIVIL ENGINEER DATE
 May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

EARTHWORK QUANTITIES

SHEET No.	STATION	ROADWAY EXCAVATION	EMBANKMENT (N)	IMPORTED BORROW	GEOSYNTHETIC REINFORCED EMBANKMENT
		CY	CY	CY	SQYD
L-1	"A" 21+30.00 TO "A" 24+36.22	811	30	30	
L-1	"A" 27+86.13 Rt TO "A" 28+43.37 Rt				76.3
L-1	"A" 30+50.00 Rt TO "A" 31+22.50 Rt				48.3
L-2	"A" 26+52.81 TO "A" 31+22.50	1,311	85	85	
TOTAL		2,122	115	115	124.6

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

MIDWEST GUARDRAIL SYSTEM

SHEET No.	STATION	TRANSITION RAILING (TYPE WB-31)	END CAP (TYPE A)	ALTERNATIVE IN-LINE TERMINAL SYSTEM	MIDWEST GUARDRAIL SYSTEM (WOOD POST)	END ANCHOR ASSEMBLY (TYPE SFT)
		EA	EA	EA	LF	EA
L-1	"A" 23+41.30 Lt TO "A" 23+93.37 Lt			1		
L-1	"A" 23+41.30 Rt TO "A" 23+93.37 Rt			1		
L-1	"A" 23+93.87 Lt TO "A" 24+18.37 Lt	1				
L-1	"A" 23+93.87 Rt TO "A" 24+18.37 Rt	1				
L-2	"A" 26+72.13 Lt TO "A" 26+97.13 Lt	1				
L-2	"A" 26+72.13 Rt TO "A" 26+97.13 Rt	1				
L-2	"A" 26+97.13 Lt TO "A" 27+49.20 Lt			1		
L-2	"A" 26+97.13 Rt TO "A" 27+90.88 Rt				93.75	
L-2	"A" 27+90.88 Rt TO "A" 27+97.13 Rt					1
L-2	"A" 27+97.13 Rt		1			
TOTAL		4	1	3	93.75	1

SAFETY EDGE

SHEET No.	STATION	DIRECTION	TOTAL THICKNESS OF SAFETY EDGE (N)	(N)	(N)
			FT	LF	TON
L-1	"A" 21+30.00 Lt TO "A" 23+41.30 Lt	WB	0.52	211.30	3.6
L-1	"A" 21+30.00 Rt TO "A" 23+41.30 Rt	EB	0.52	211.30	3.6
L-2	"A" 27+49.20 Lt TO "A" 27+80.83 Lt	WB	0.52	31.63	0.5
L-2	"A" 27+97.13 Rt TO "A" 31+22.50 Rt	EB	0.52	325.37	5.5
L-2	"A" 28+43.37 Lt TO "A" 31+22.50 Lt	WB	0.52	279.13	4.7
SUBTOTAL					17.9

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

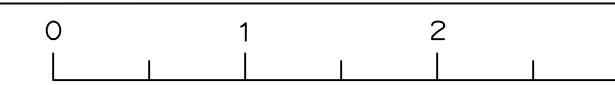
TEMPORARY WATER POLLUTION CONTROL AND EROSION CONTROL QUANTITIES

SHEET No.	STATION	TEMPORARY FIBER ROLLS	TEMPORARY CONCRETE WASHOUT FACILITY	EROSION CONTROL (HYDROSEED)
		LF	EA	SQFT
WPC-1 TO WPC-2		TO BE DETERMINED		
WPC-1	"A" 21+30.00 Lt TO "A" 24+36.22 Lt	632	1	1,553
WPC-1	"A" 21+30.00 Rt TO "A" 24+36.22 Rt	628		977
WPC-2	"A" 26+52.81 Lt TO "A" 28+01.51 Lt	326		827
WPC-2	"A" 28+25.63 Lt TO "A" 31+22.50 Lt	631		3,172
WPC-2	"A" 26+52.81 Rt TO "A" 31+22.50 Rt	843		1,440
TOTAL		3,060	1	7,969

PAVEMENT STRUCTURE QUANTITIES

SHEET No.	STATION	REMOVE ASPHALT CONCRETE PAVEMENT	HOT MIX ASPHALT (TYPE A)	CLASS 2 AGGREGATE BASE	TACK COAT
		SQFT	TON	CY	TON
L-1	"A" 21+30.00 TO "A" 24+24.50	5,636	363.6	1,002	0.67
L-2	"A" 26+59.00 TO "A" 31+22.50	9,175	578.2	1,519	1.06
L-1 TO L-2 SAFETY EDGE			17.9		
TOTAL		14,811	959.70	2,521	1.73

SUMMARY OF QUANTITIES



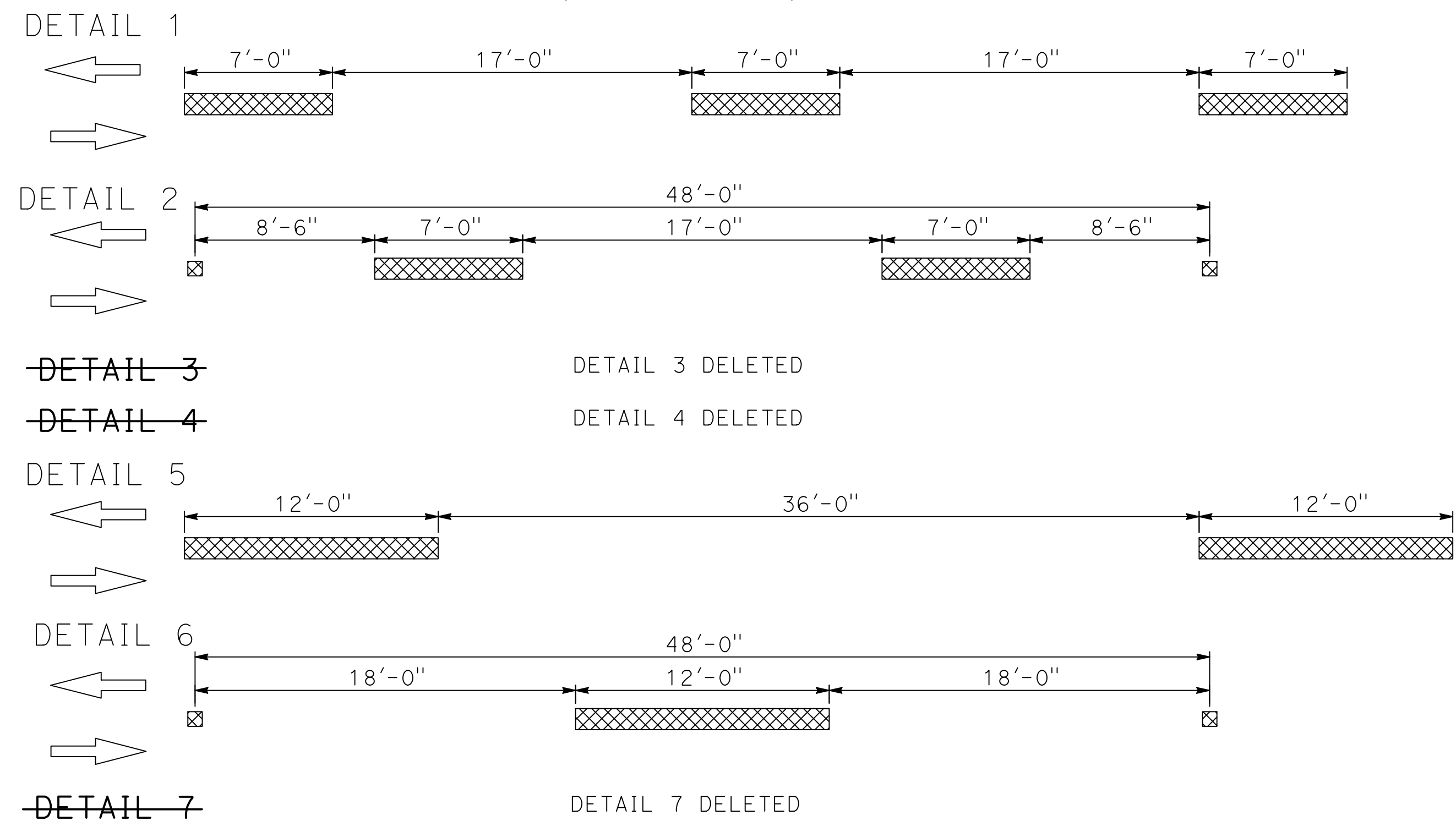
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	17	38

05-31-23
DATE
REGISTERED CIVIL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CAL FORM #

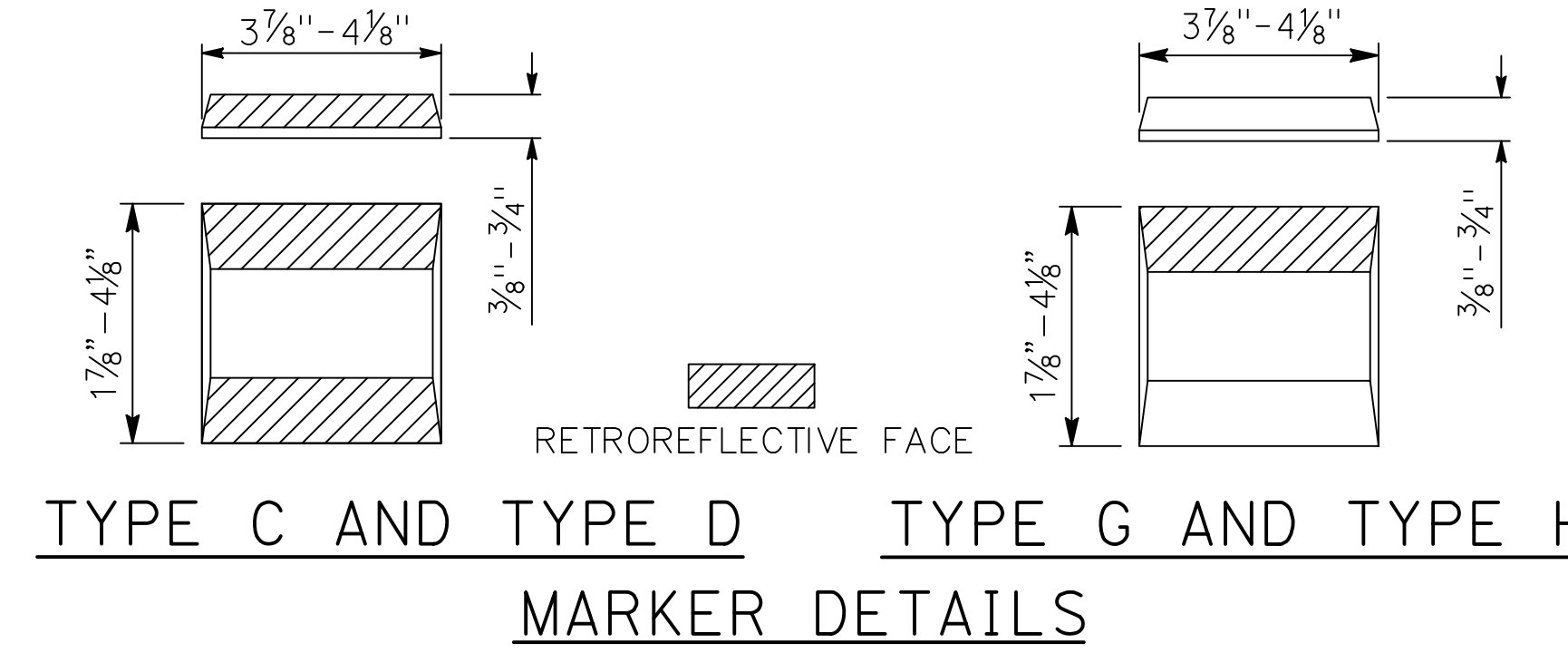
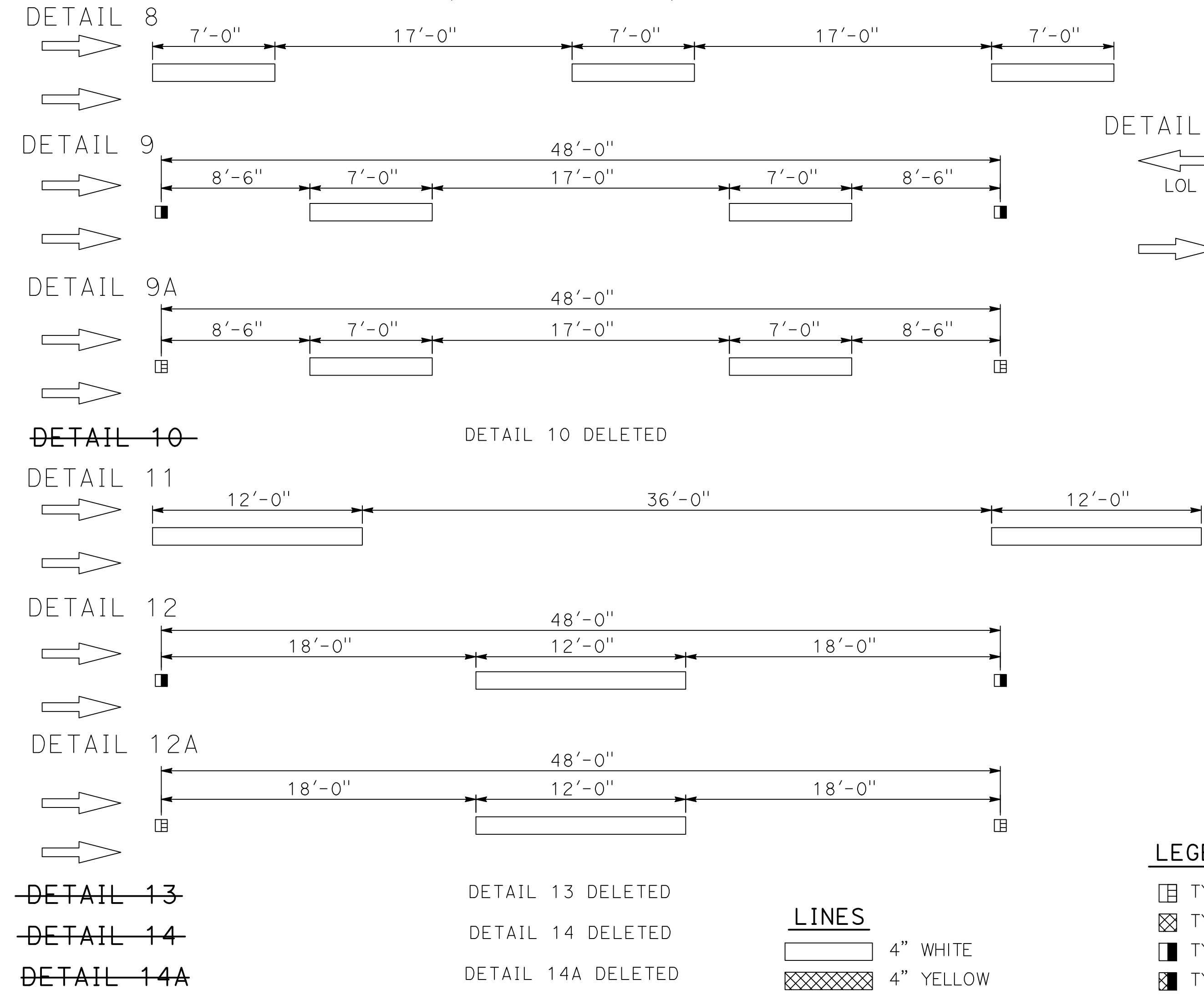
May 31, 2023
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

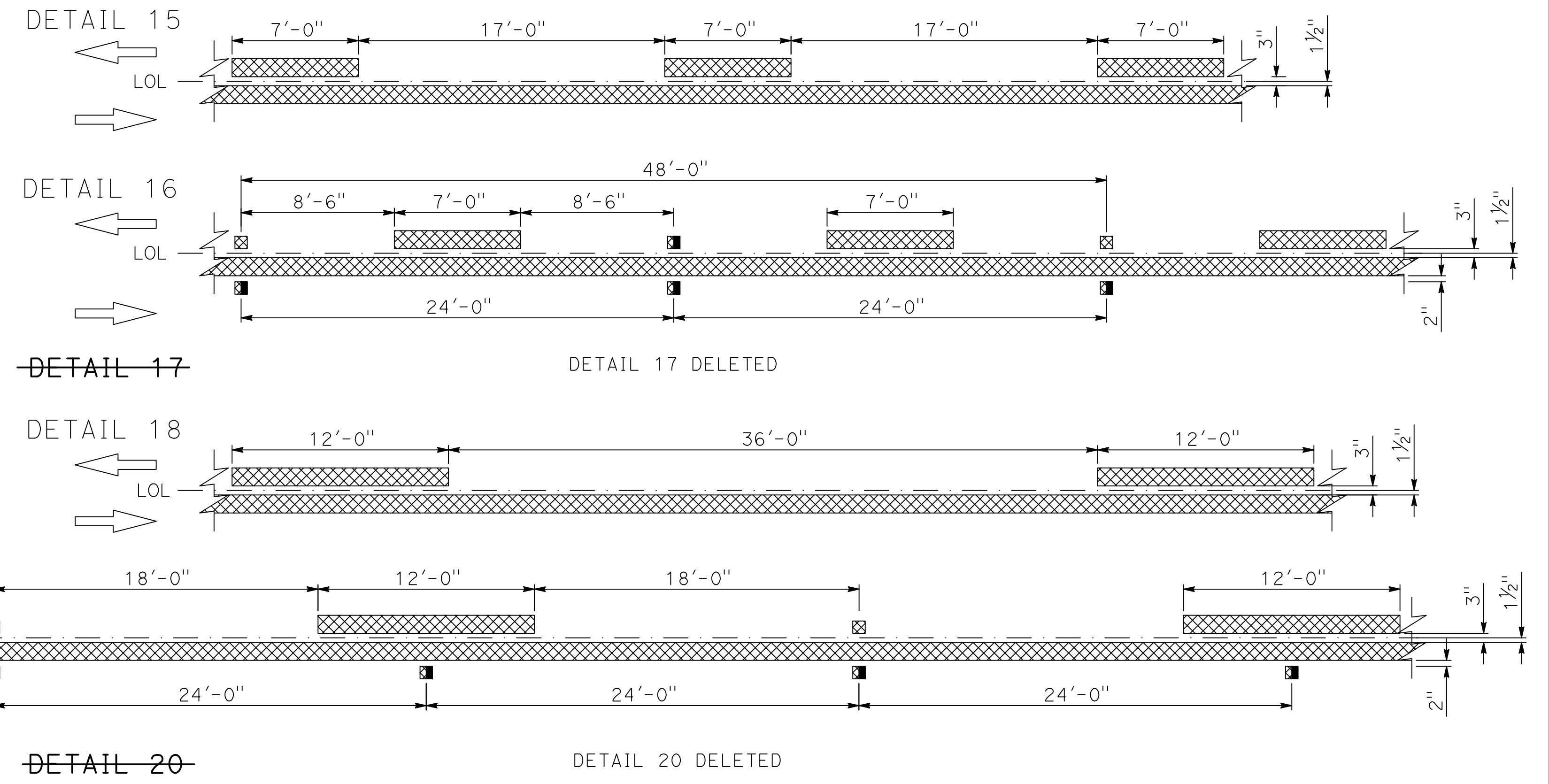
CENTERLINES
(2 LANE HIGHWAYS)



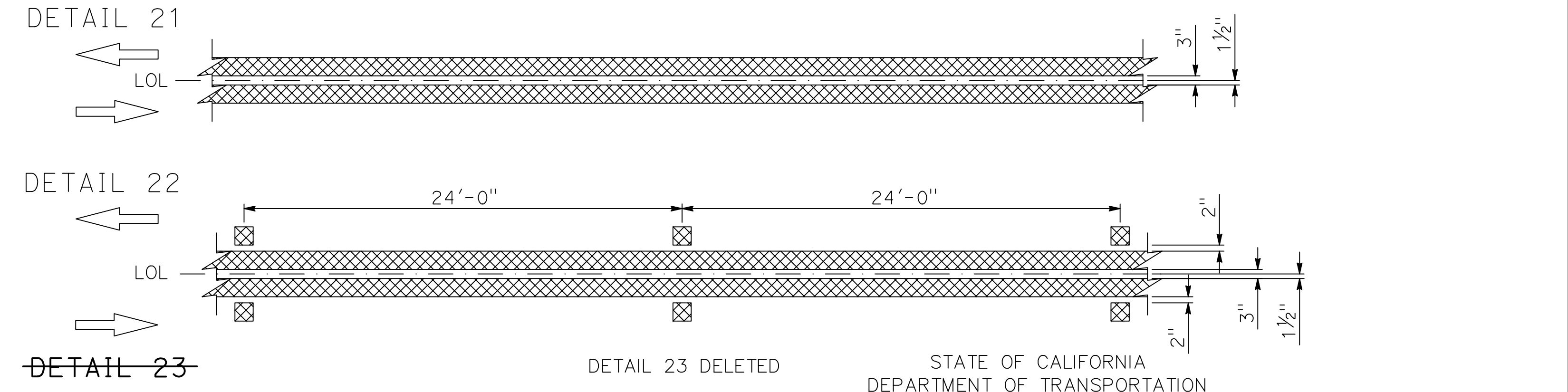
LANE LINES
(MULTILANE HIGHWAYS)



NO PASSING ZONES-ONE DIRECTION



NO PASSING ZONES-TWO DIRECTION



LEGEND

- ☐ TYPE C RED-CLEAR RETROREFLECTIVE MARKER
- ▣ TYPE D TWO-WAY YELLOW RETROREFLECTIVE MARKER
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE MARKER
- ▣ TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER

LINES

- ▭ 4" WHITE
- ▣ 4" YELLOW

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKERS AND TRAFFIC LINES
TYPICAL DETAILS

NO SCALE

RSP A20A DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A20A
DATED AUGUST 1, 2022 - PAGE 12 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A20A MOD

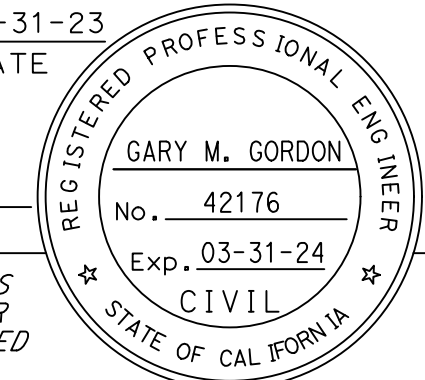
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DGN FILE = 03-101783-rspd20a

2022 REVISED STANDARD PLAN RSP A20A

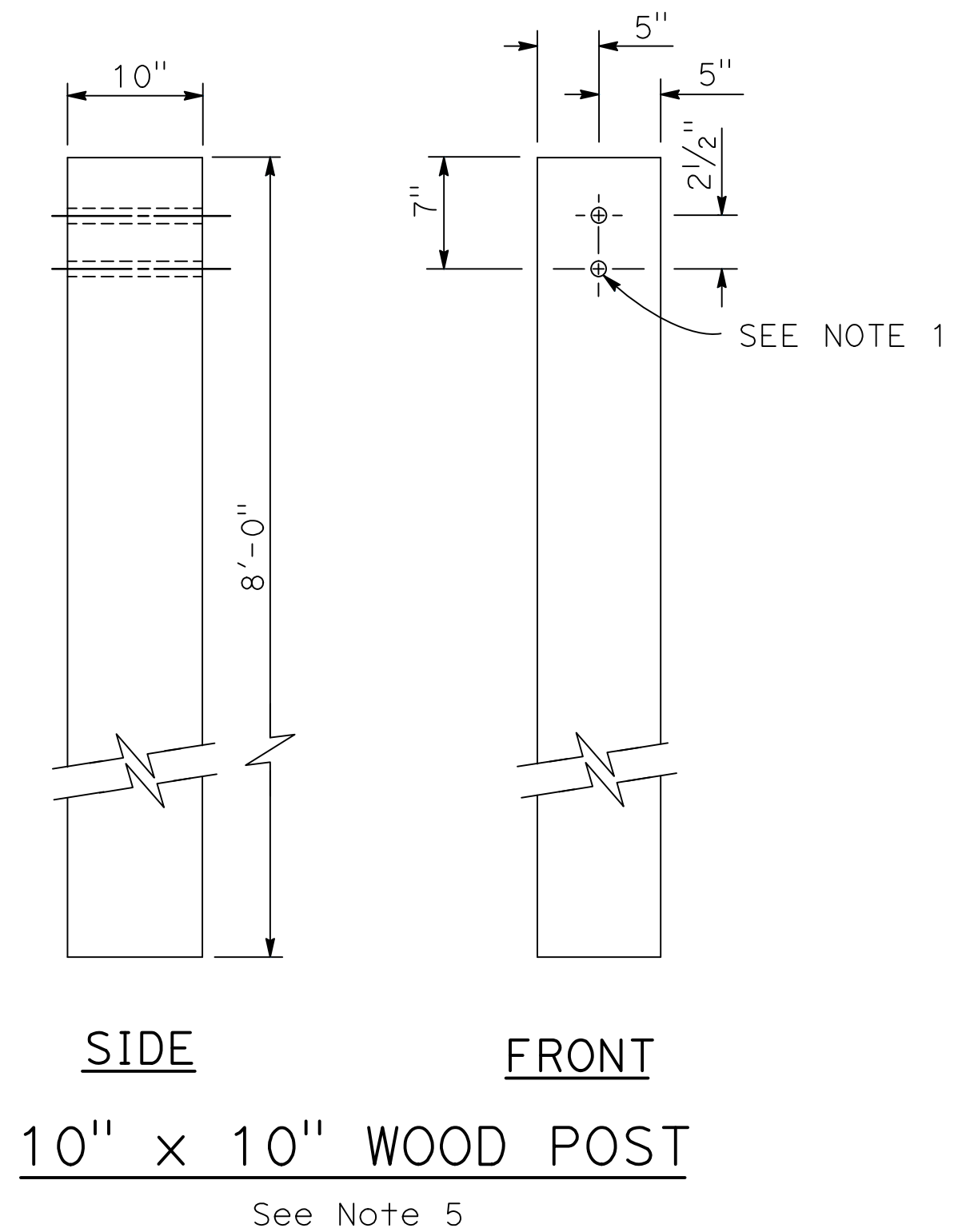
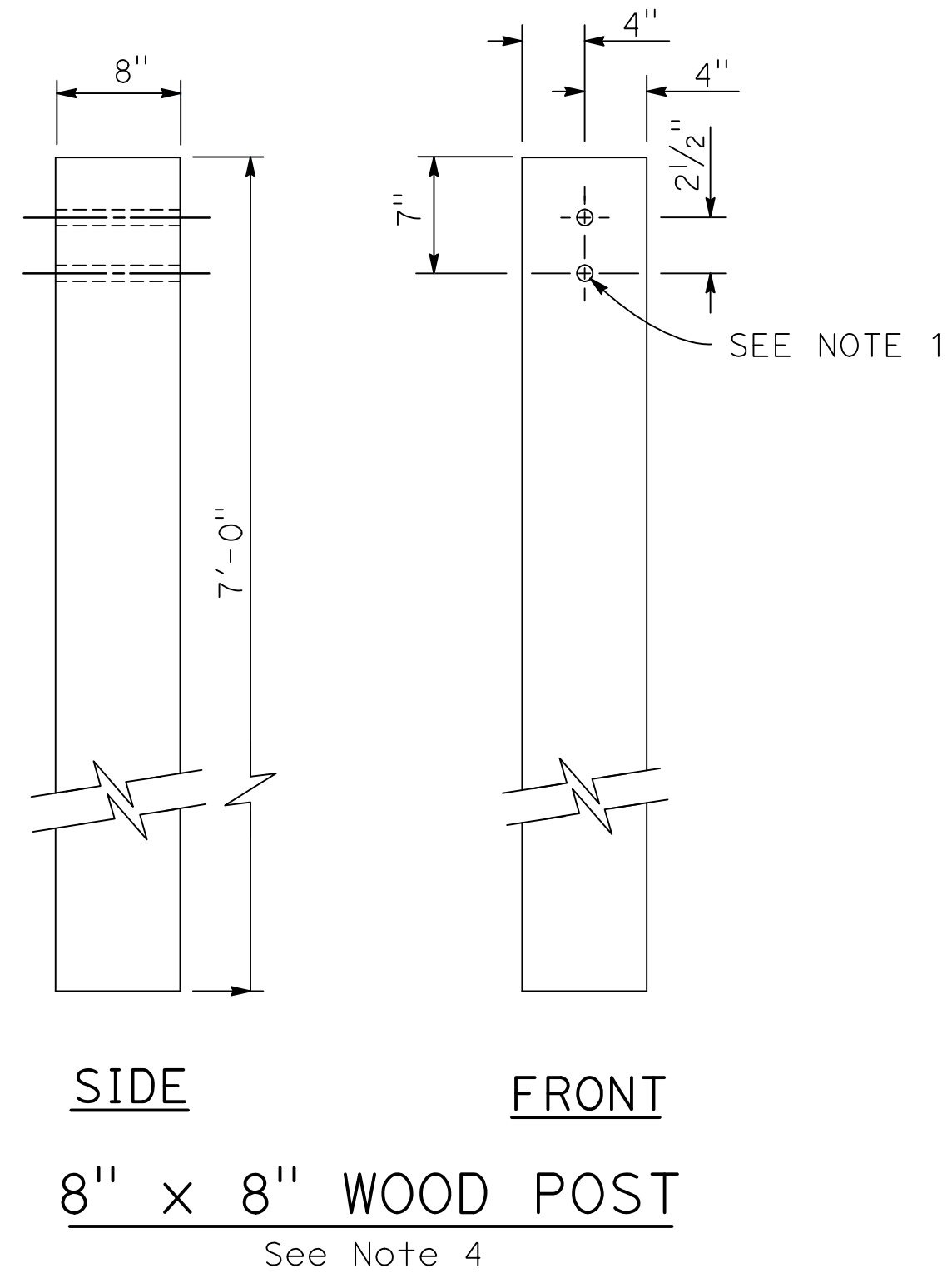
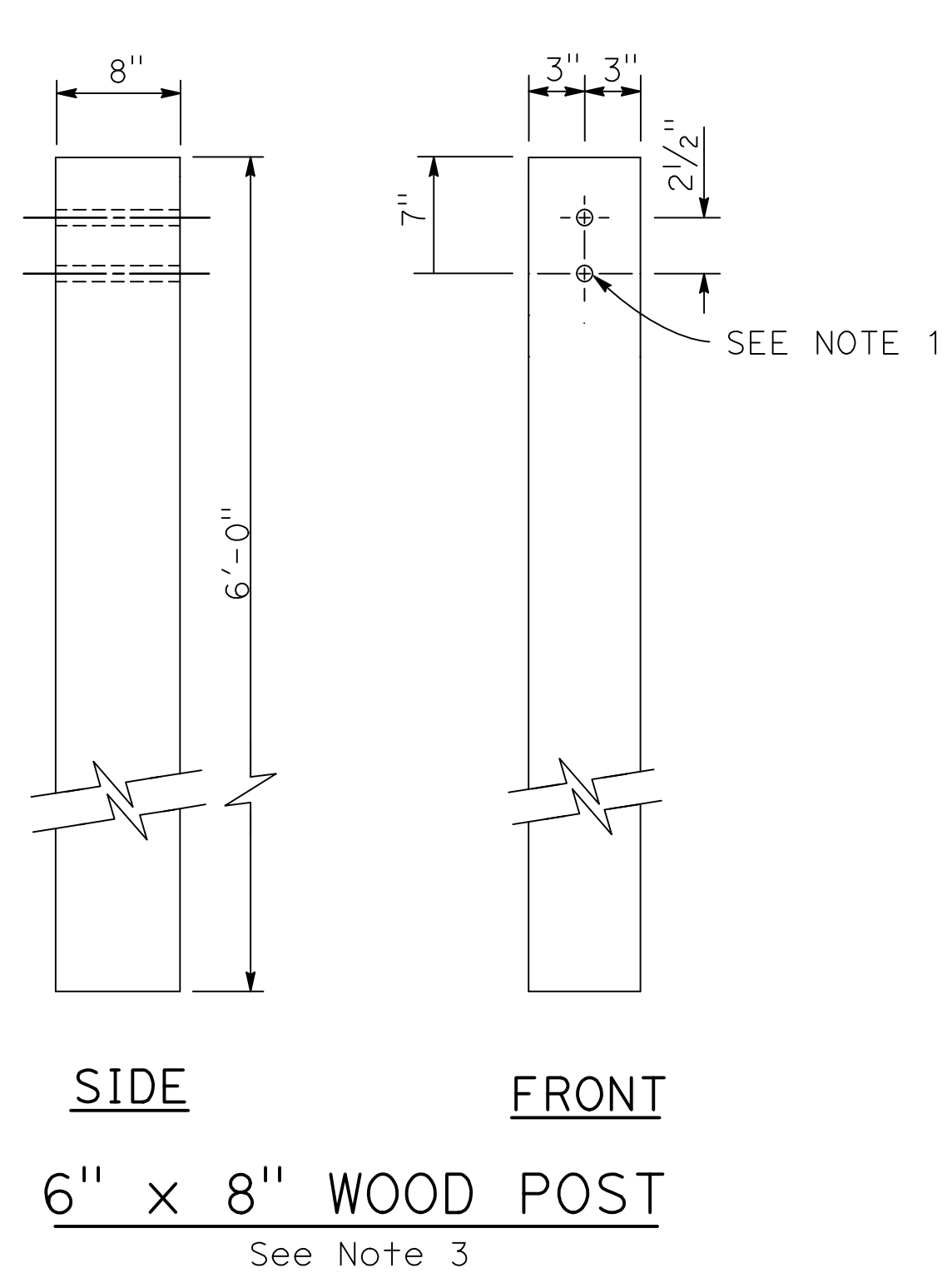
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TIME PLOTTED = 8:10:23 AM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	18	38

<i>Gary M. Gordon</i> REGISTERED CIVIL ENGINEER	05-31-23 DATE
May 31, 2023 PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	

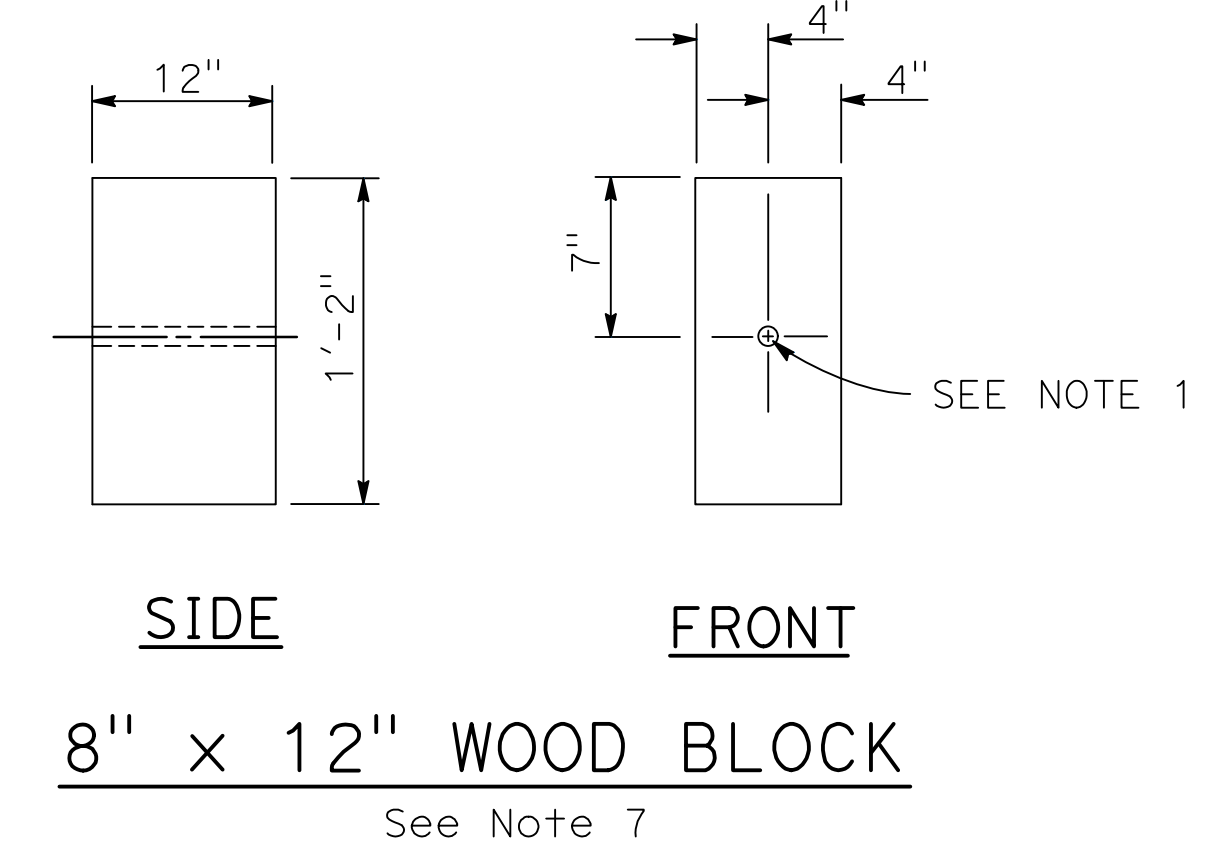
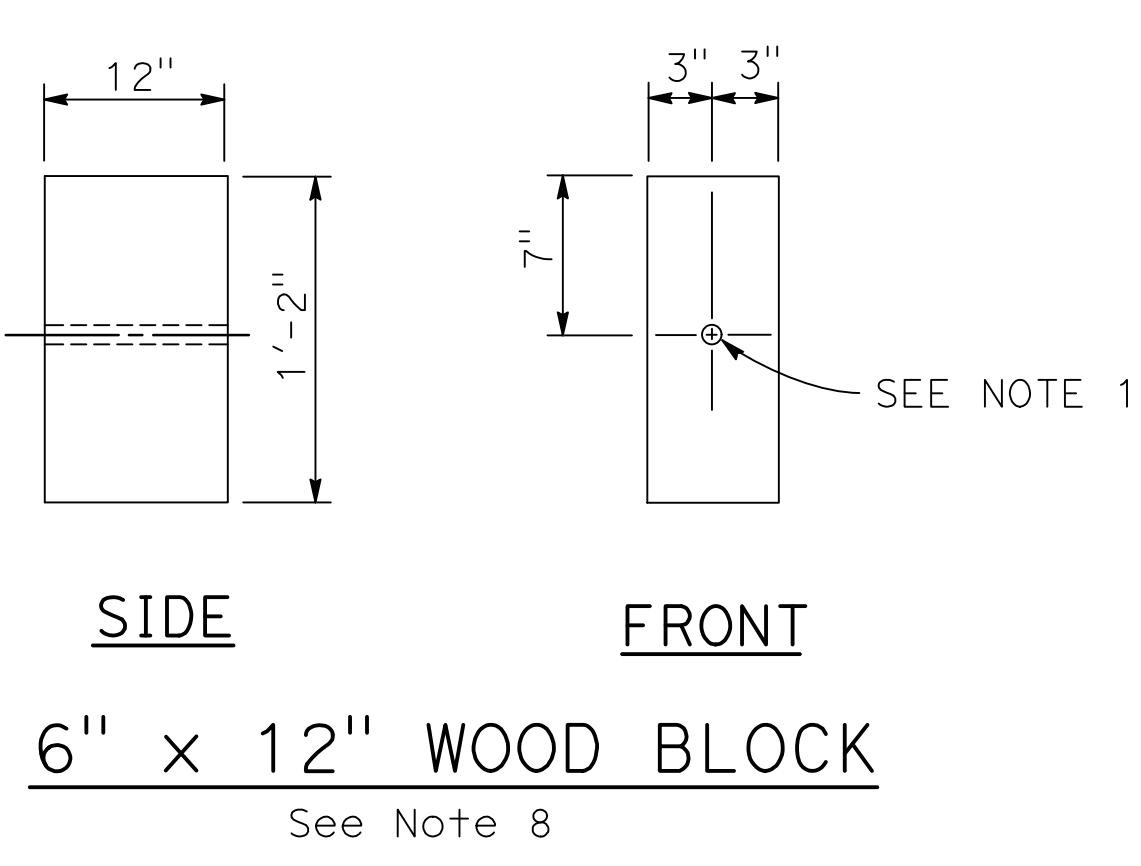
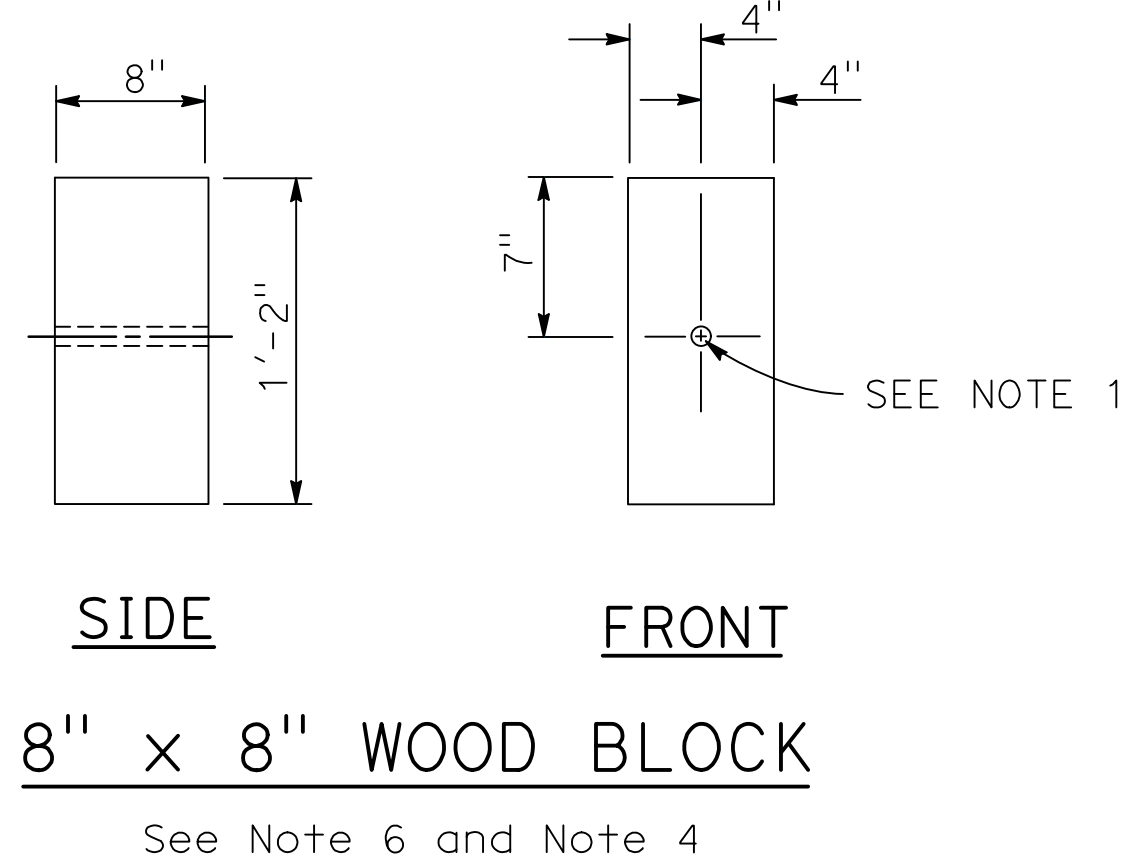
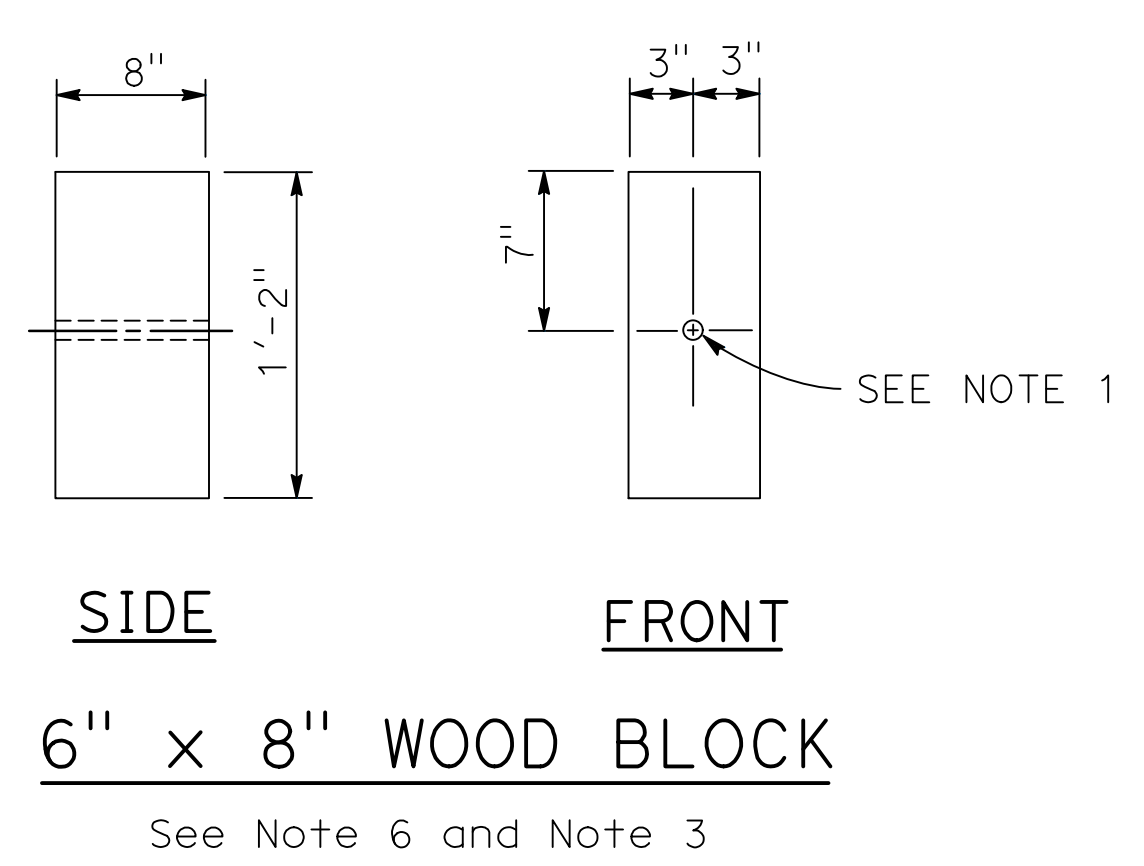


TO ACCOMPANY PLANS DATED 05-31-23



NOTES:

1. All holes in wood posts and blocks shall be 3/4" Dia ± 1/16".
2. Dimensions shown for wood post are nominal.
3. This post and block combination used for standard line post sections of MGS.
4. This post and 8" x 12" block combination used for line post sections of MGS on narrow roadways.
5. This post and 8" x 12" block combination is typically used where strengthened line post sections of MGS are warranted to shield fixed objects.
6. See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" wood blocks.
7. To be used with 8" x 8" x 7'-0" wood post if installed with 6" height dike.
8. To be used with 6" x 8" x 6'-0" wood post if installed with 6" height dike.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
WOOD POST AND
WOOD BLOCK DETAILS**

NO SCALE

RSP A77N1 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77N1
DATED AUGUST 1, 2022 - PAGE 67 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP N771

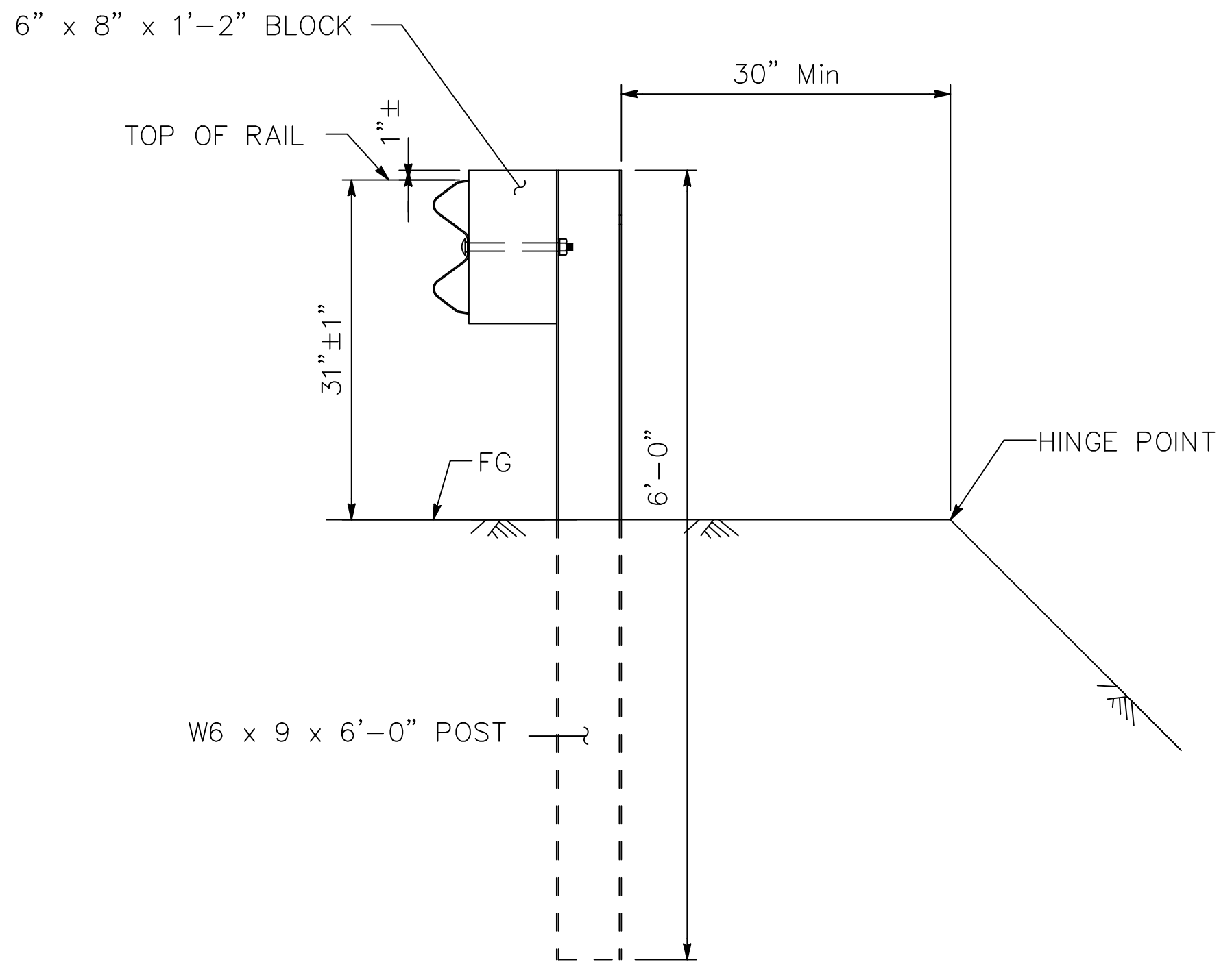
2022 REVISED STANDARD PLAN RSP A77N1

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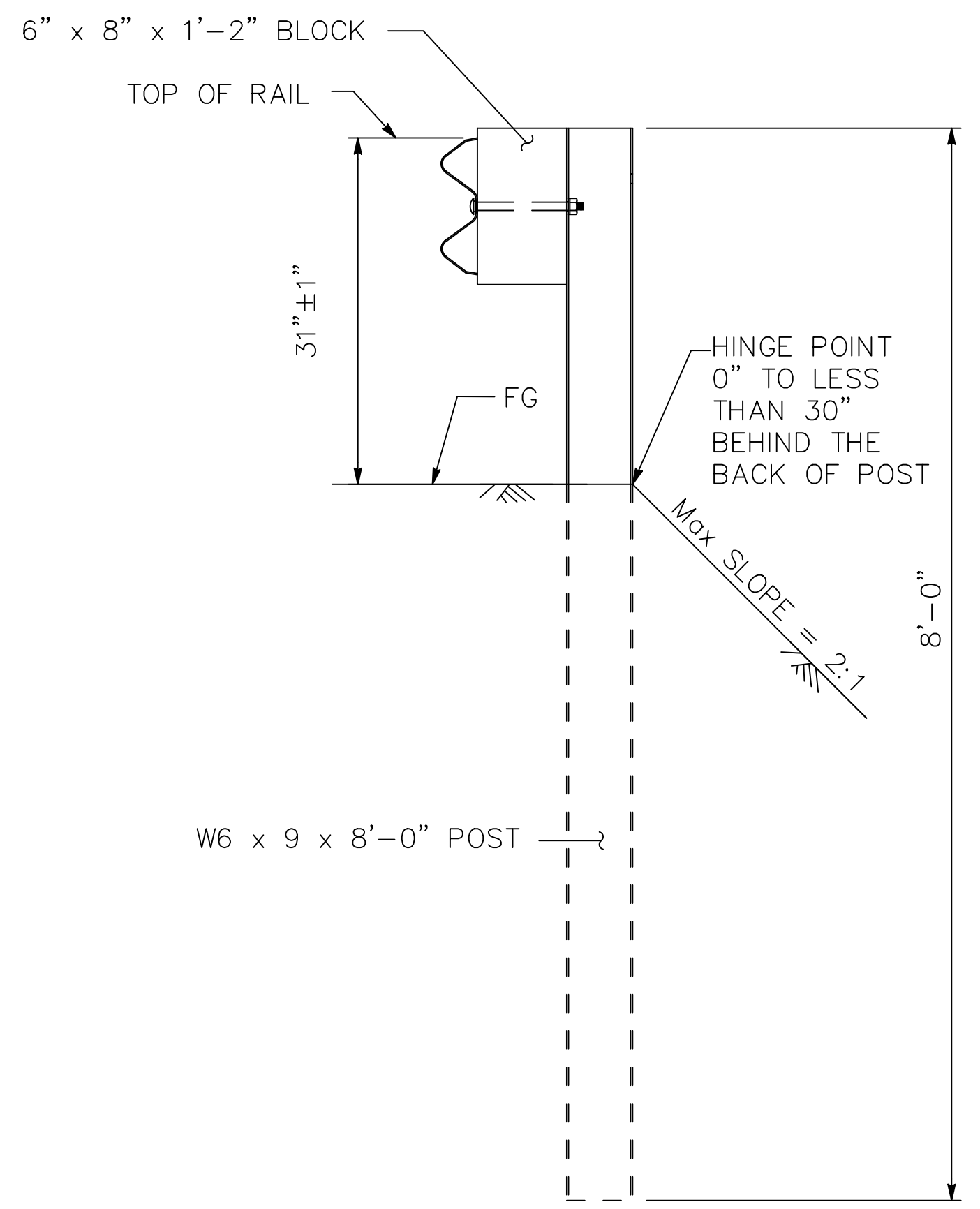
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	19	38

<i>Gary M. Gordon</i> REGISTERED CIVIL ENGINEER	05-31-23 DATE
May 31, 2023 PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	

TO ACCOMPANY PLANS DATED 05-31-23

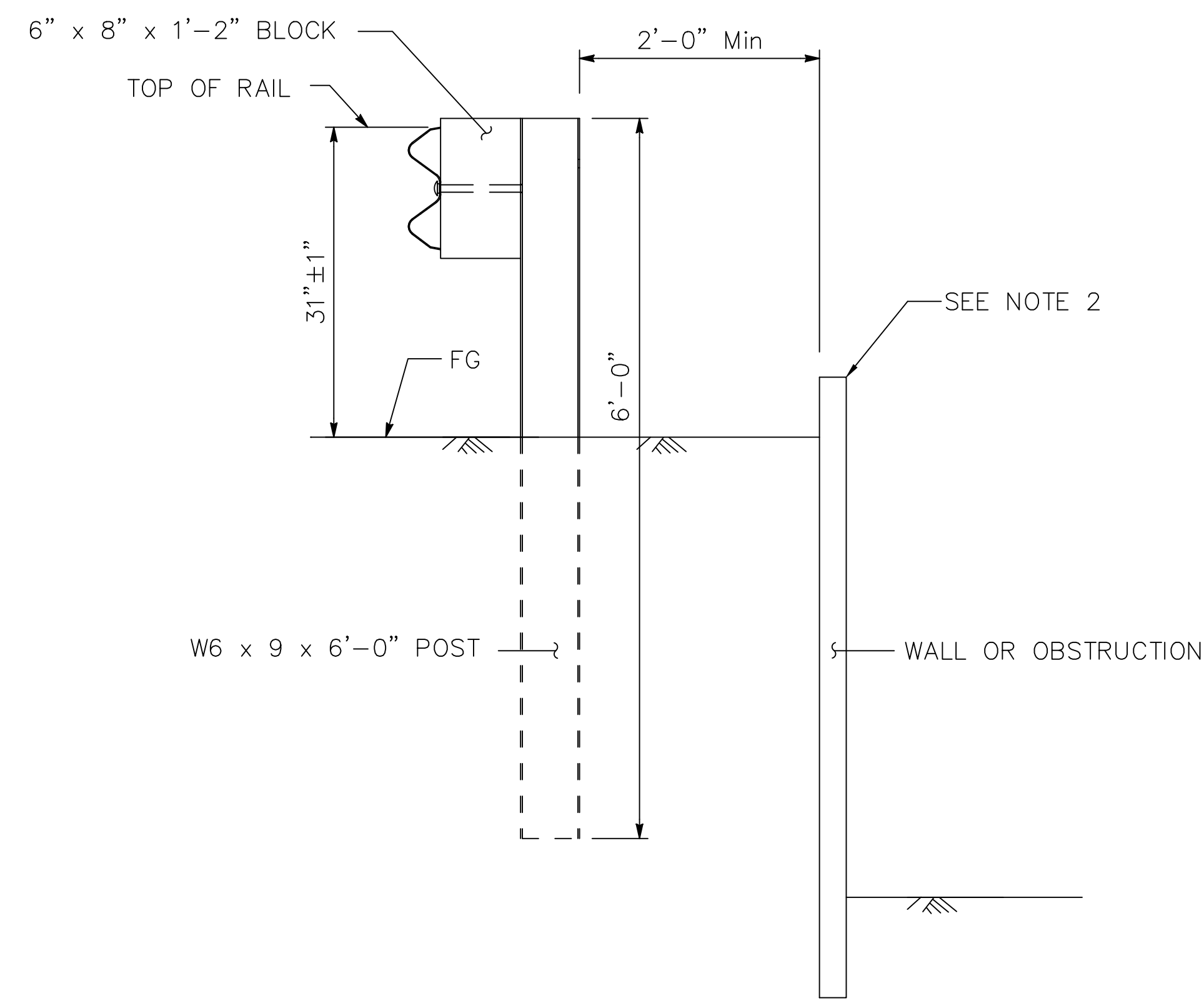


DETAIL A
TYPICAL ROADWAY INSTALLATION
See Note 1

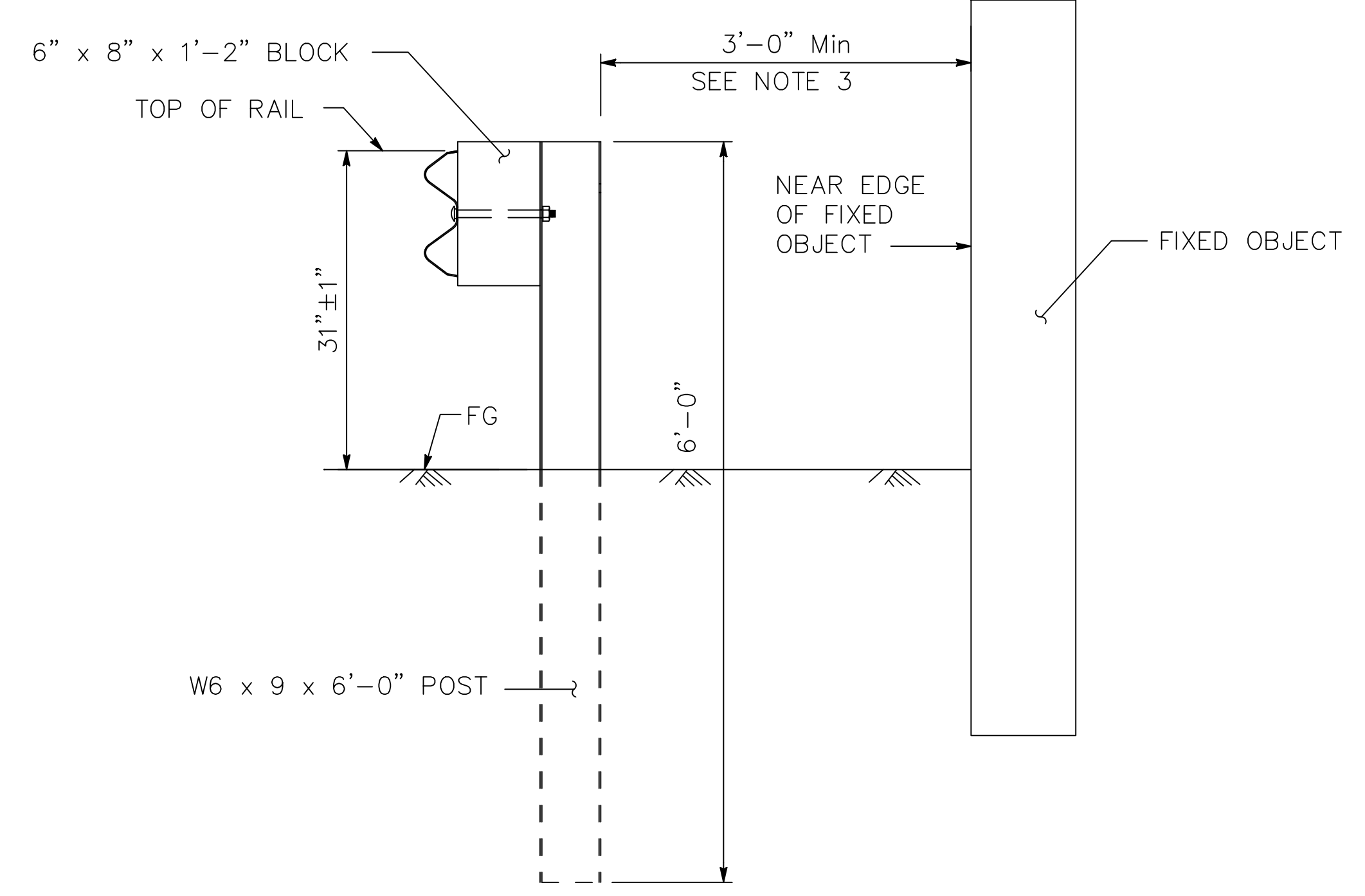


DETAIL B
NARROW ROADWAY INSTALLATION
See Note 1

POST EMBEDMENT



DETAIL C
AT OR BELOW GRADE



DETAIL D
ABOVE GRADE

INSTALLATION AT WALLS OR OBSTRUCTIONS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
MIDWEST GUARDRAIL SYSTEM
TYPICAL LINE POST EMBEDMENT
AND HINGE POINT OFFSET DETAILS

NO SCALE

RSP A77N3 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77N3
DATED AUGUST 1, 2022 - PAGE 69 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77N3

2022 REVISED STANDARD PLAN RSP A77N3

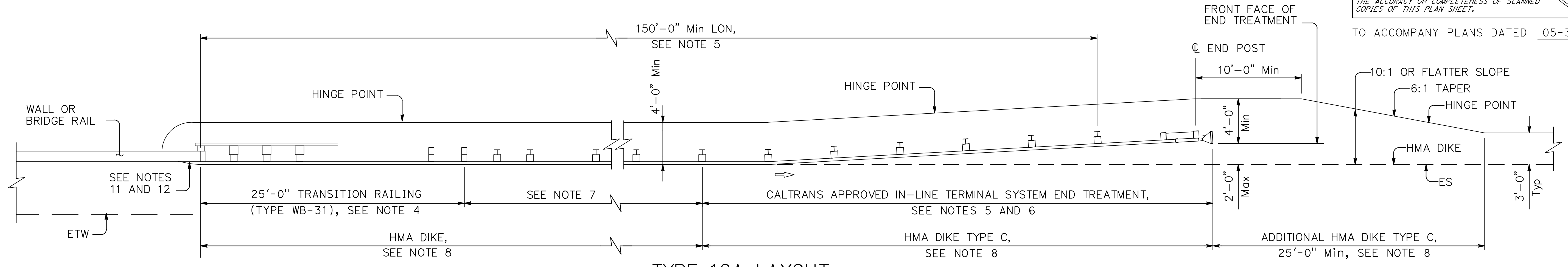
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	20	38

<i>Gary M. Gordon</i> REGISTERED CIVIL ENGINEER	05-31-23 DATE
May 31, 2023 PLANS APPROVAL DATE	

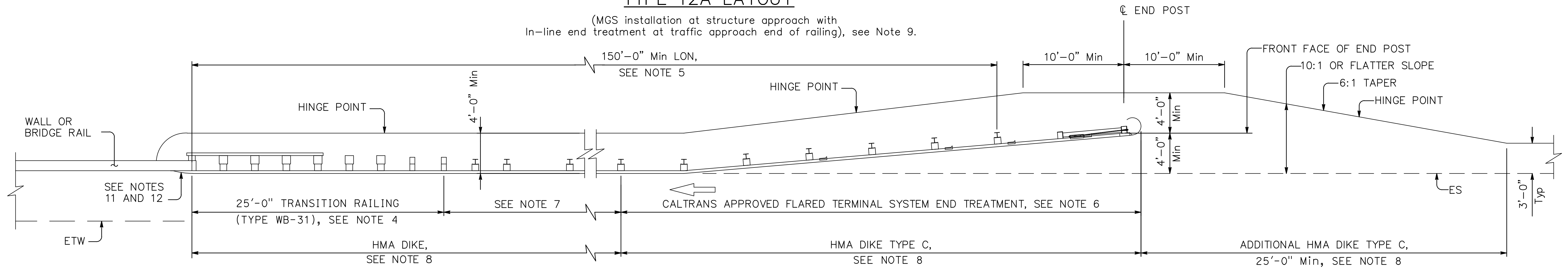
GARY M. GORDON No. 42176 Exp. 03-31-24 CIVIL STATE OF CALIFORNIA
--

TO ACCOMPANY PLANS DATED 05-31-23



TYPE 12A LAYOUT

(MGS installation at structure approach with
In-line end treatment at traffic approach end of railing), see Note 9.



TYPE 12B LAYOUT

(MGS installation at structure approach with
Flared end treatment at traffic approach end of railing), see Note 9.

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77L1, A77L2, A77M1, A77N2 and Revised Standard Plan RSP A77N1.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6'-0" long Steel W6 x 9 or W6 x 8.5 with blocks, or 6" x 8" x 6'-0" wood with blocks.
- For Transition Railing (Type WB-31) details for Types 12A and 12B Layouts, see Standard Plan A77U4.
- A minimum of 150'-0" of MGS is needed to develop Length of Need (LON).
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes or other fixed objects), it may be advisable to construct additional guard railing (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatment.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12A or Type 12B Layouts are typically used at the approach end of a structure, to the right or left on two-lane conventional highway where the roadbed width across the structure is 40 feet or less.
- See Revised Standard Plan RSP A77Q3 for typical layout used left of approaching traffic at the ends of each structure on multilane freeways or expressways with separate adjacent or parallel bridges.
- For additional details of typical connections to bridge rail, see Connection Detail AA on Standard Plans A77U1 and A77U2 and Connection Detail FF on Standard Plans A77V1 and A77V2.
- For additional details of a typical connection to walls or abutments, see Revised Standard Plans RSP A77U3A and RSP A77U3B.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE APPROACH**

NO SCALE
RSP A77Q1 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77Q1
DATED AUGUST 1, 2022 - PAGE 92 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77Q1

2022 REVISED STANDARD PLAN RSP A77Q1

DATE PLOTTED = 5/31/23
TIME PLOTTED = 10:34:24 AM

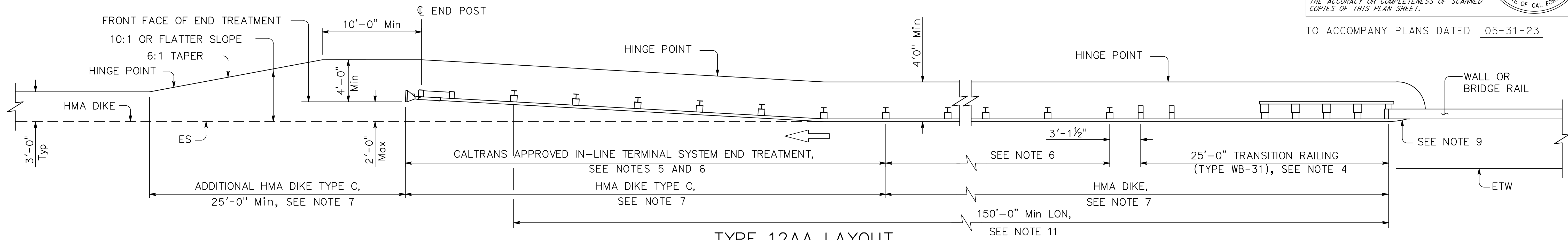
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	21	38

REGISTERED CIVIL ENGINEER DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CAL FORM #

May 31, 2023
 PLANS APPROVAL DATE

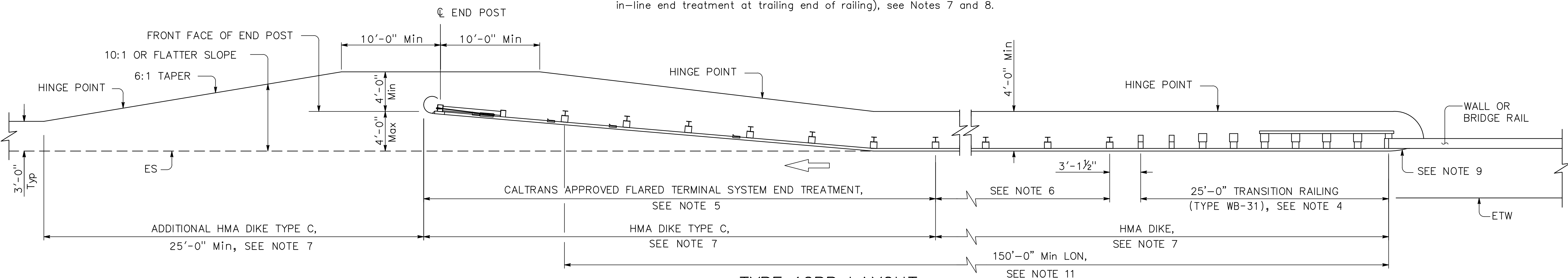
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TO ACCOMPANY PLANS DATED 05-31-23



TYPE 12AA LAYOUT

(MGS installation at structure departure with in-line end treatment at trailing end of railing), see Notes 7 and 8.



TYPE 12BB LAYOUT

(MGS installation at structure departure with Flared end treatment at trailing end of railing), see Notes 7 and 8.

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77L1, A77L2, A77M1, A77N2 and Revised Standard Plan RSP A77N1.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6'-0" long Steel W6 x 9 or W6 x 8.5 with blocks, or 6" x 8" x 6'-0" wood with blocks.
- For Transition Railing (Type WB-31) details for Types 12AA and 12BB Layouts, see Standard Plan A77U4.
- The type of terminal system to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes, other fixed objects), it may be advisable to construct additional MGS (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatments.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12AA or Type 12BB Layouts are typically used to the right or left of traffic departing a structure on two-way conventional highways where the roadbed width across the structure is less than 40 feet.
- For additional details of typical connections to bridge rail, see Connection Detail CC on Standard Plan A77U2 and Connection Detail HH on Standard Plan A77V2.
- For roadways with parallel structures and non traversable medians, the Type 12AA or Type 12BB layout may be used.
- A minimum of 150'-0" of MGS is needed to develop Length of Need (LON).

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE APPROACH**

NO SCALE

RSP A77Q4 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77Q4
DATED AUGUST 1, 2022 - PAGE 95 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77Q4

2022 REVISED STANDARD PLAN RSP A77Q4

DATE PLOTTED = 5/31/23
TIME PLOTTED = 10:36:09 AM

CALTRANS STANDARD PLANS, 2022 EDITION

- A10A ABBREVIATIONS (SHEET 1 OF 2)
- A10B ABBREVIATIONS (SHEET 2 OF 2)
- A10C LINES AND SYMBOLS (SHEET 1 OF 3)
- A10D LINES AND SYMBOLS (SHEET 2 OF 3)
- A10E LINES AND SYMBOLS (SHEET 3 OF 3)
- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
- B0-1 BRIDGE DETAILS

LEGEND

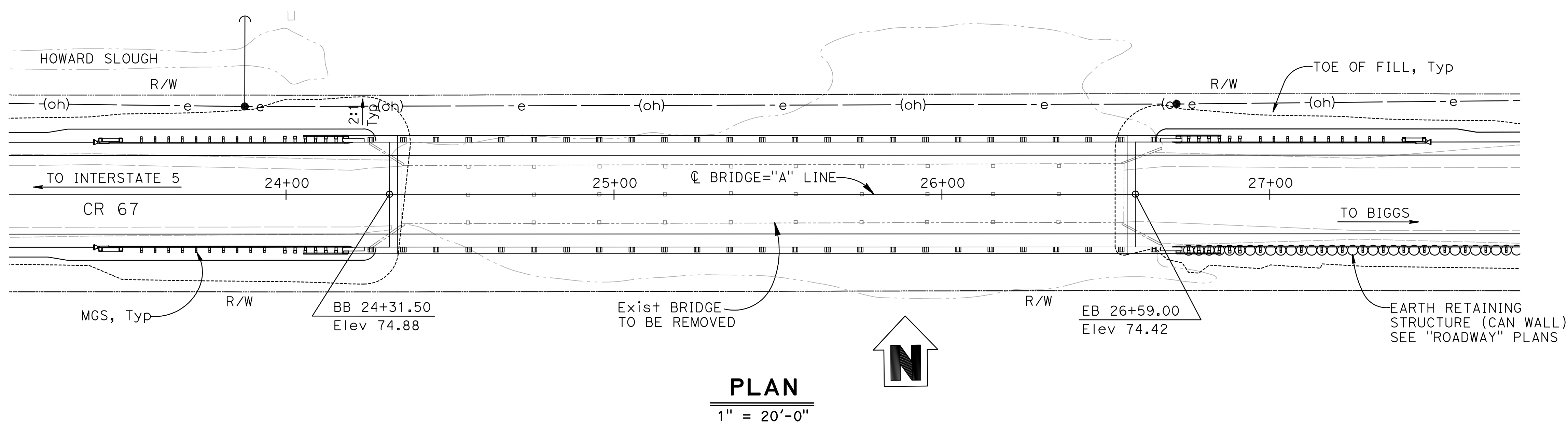
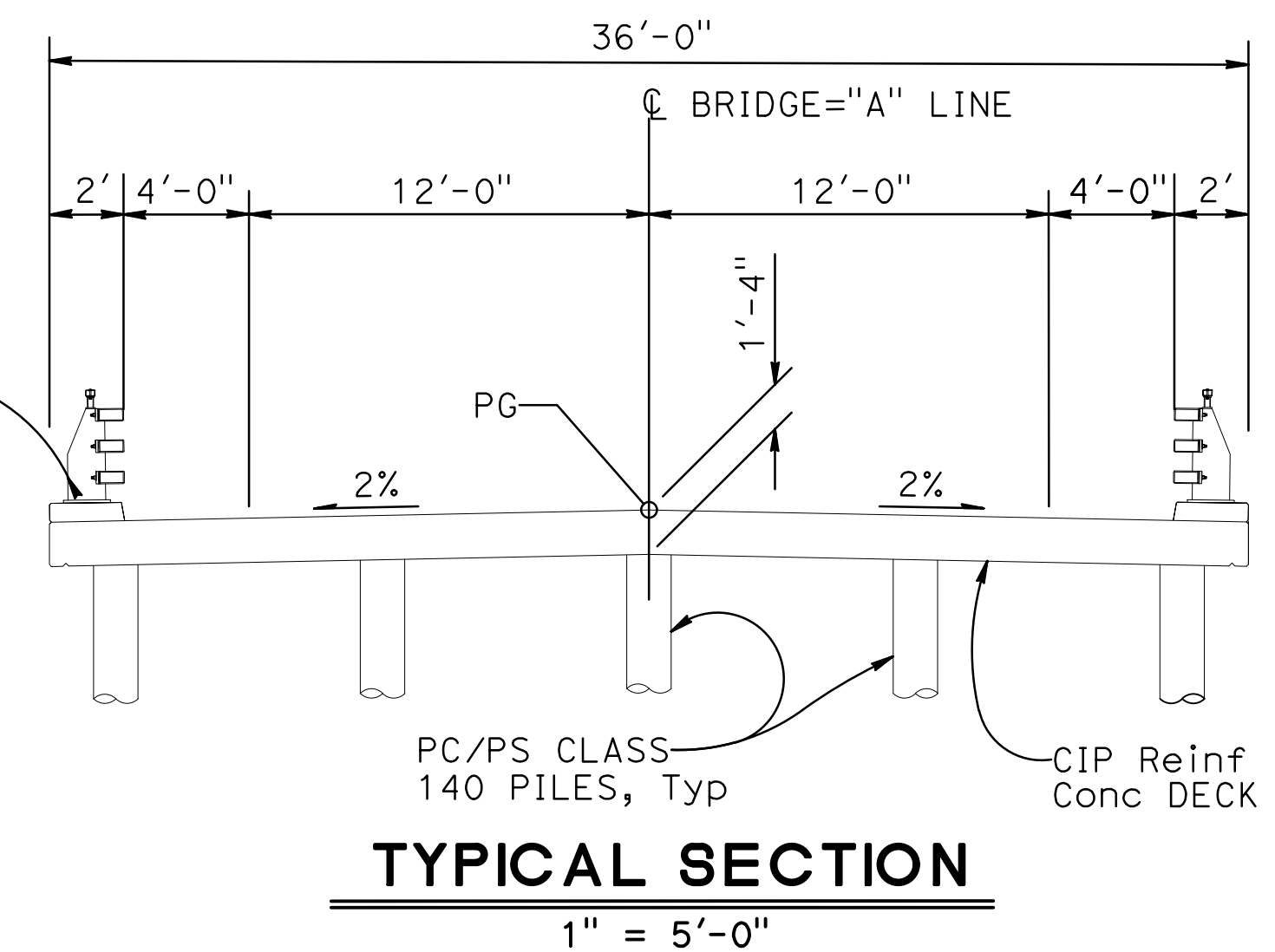
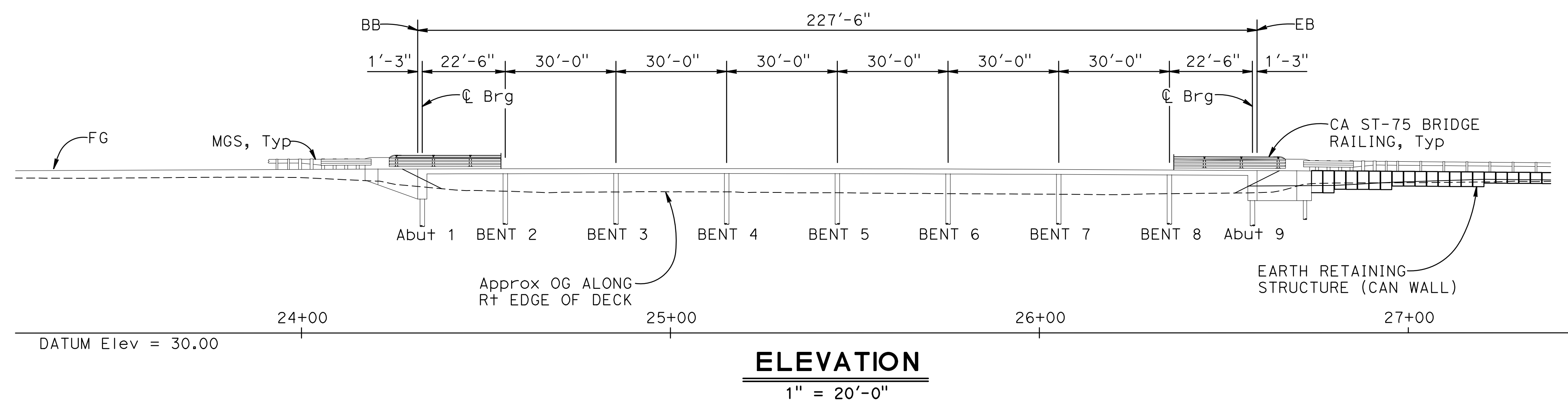
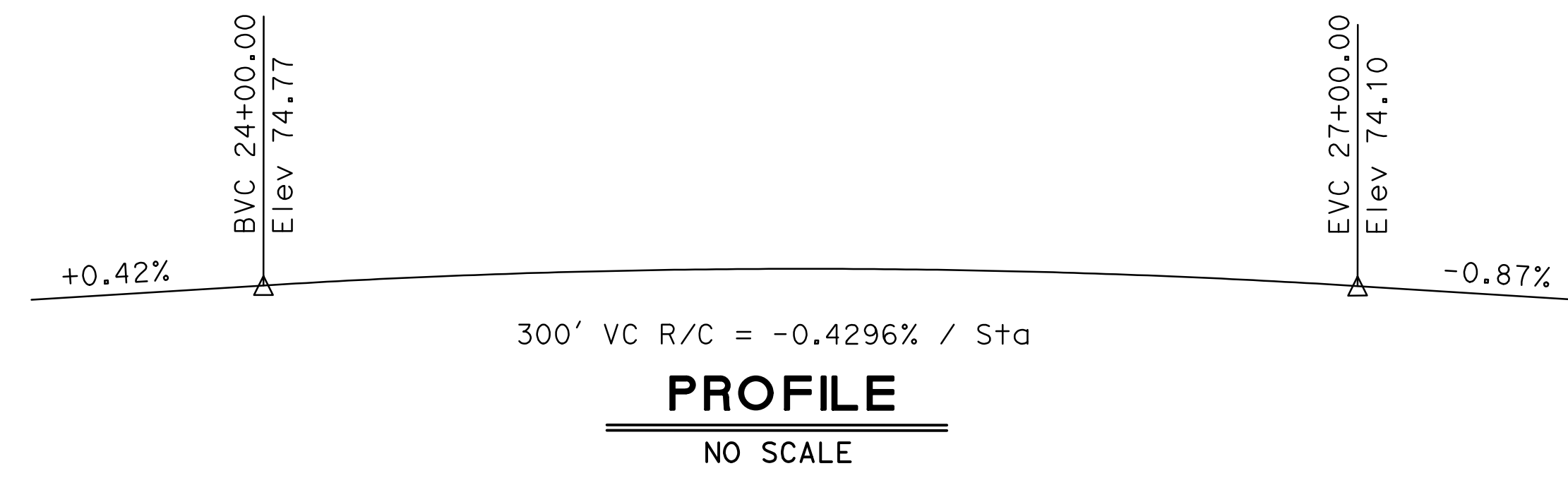
- Denotes Existing Structure
- Denotes Proposed Structure
- STANDARD PLAN SHEET No.
- DETAIL No.
- SECTION IDENTIFICATION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	22	38

REGISTERED CIVIL ENGINEER DATE 05-31-23

May 31, 2023
 PLANS APPROVAL DATE

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



INDEX TO BRIDGE PLANS

SHEET No.	TITLE
1	GENERAL PLAN
2	DECK CONTOURS
3	FOUNDATION PLAN
4	ABUTMENT LAYOUT
5	ABUTMENT DETAILS NO. 1
6	BENT LAYOUT
7	SLAB REINFORCEMENT DETAILS No. 1
8	SLAB REINFORCEMENT DETAILS No. 2
9	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 1
10	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 2
11	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 3
12	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 4
13	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 5
14	SOIL LEGEND 1 OF 2
15	SOIL LEGEND 2 OF 2
16	LOG OF TEST BORINGS 1 OF 2
17	LOG OF TEST BORINGS 2 OF 2

	DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO.	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)	
	DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI	LAYOUT	BY R. UHLMANN		PROJECT ENGINEER		11C0016
	QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN	SPECIFICATIONS	BY X		PLANS AND SPECS COMPARED X		POST MILES

GENERAL PLAN

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	11/10/14 07/28/17 05/31/23	1	17

DATE PLOTTED => 5/31/2023 12:31:00 PM USERNAME => KEVIN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	23	38

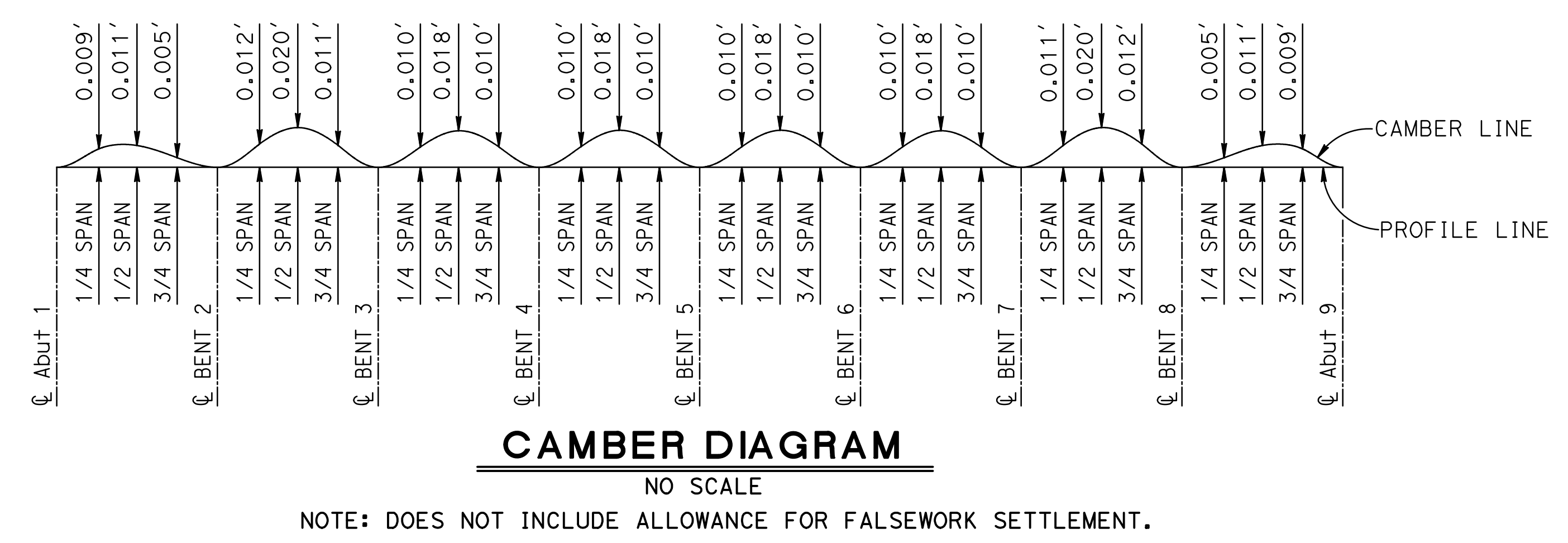
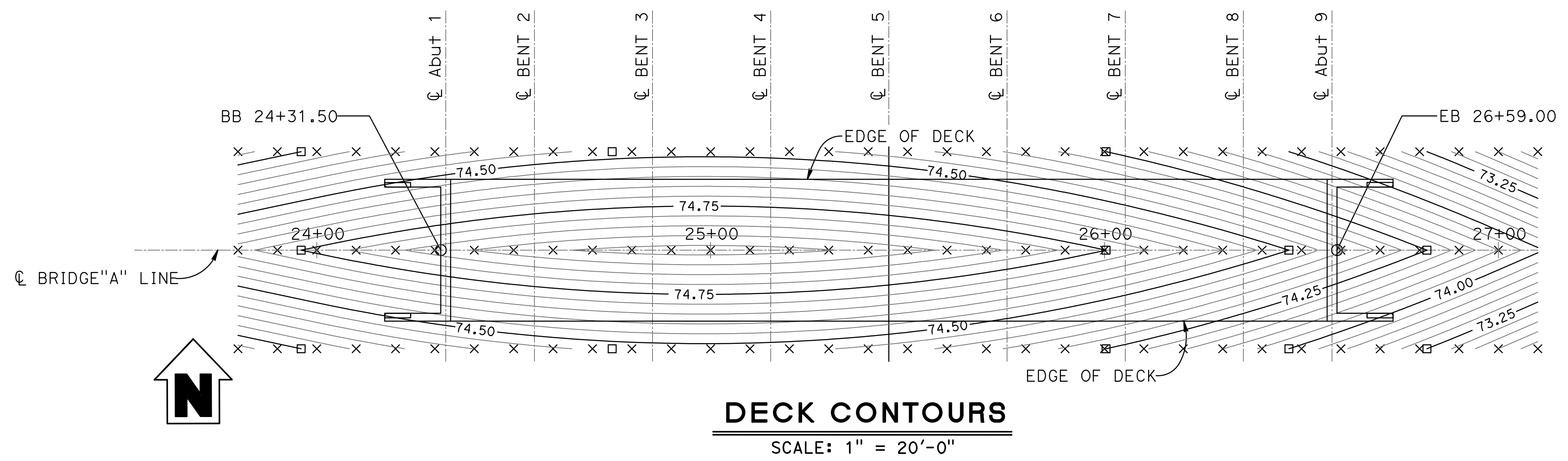
REGISTERED CIVIL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

05-31-23
 DATE

May 31, 2023
 PLANS APPROVAL DATE

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

- NOTES:**
1. Contour indicate top of deck elevation.
 2. □ Indicates even 0.25 foot contours.
 3. × Indicates 10' intervals measured along "A" Line.
 4. Contour interval = 0.05'
 5. Contours do not include allowances for camber or falsework settlement.



**GENERAL NOTES
 LOAD AND RESISTANCE FACTOR DESIGN**

DESIGN : AASHTO LRFD Bridge Design Specifications, 6th Edition and with Caltrans Amendments, preface dated September 2010.

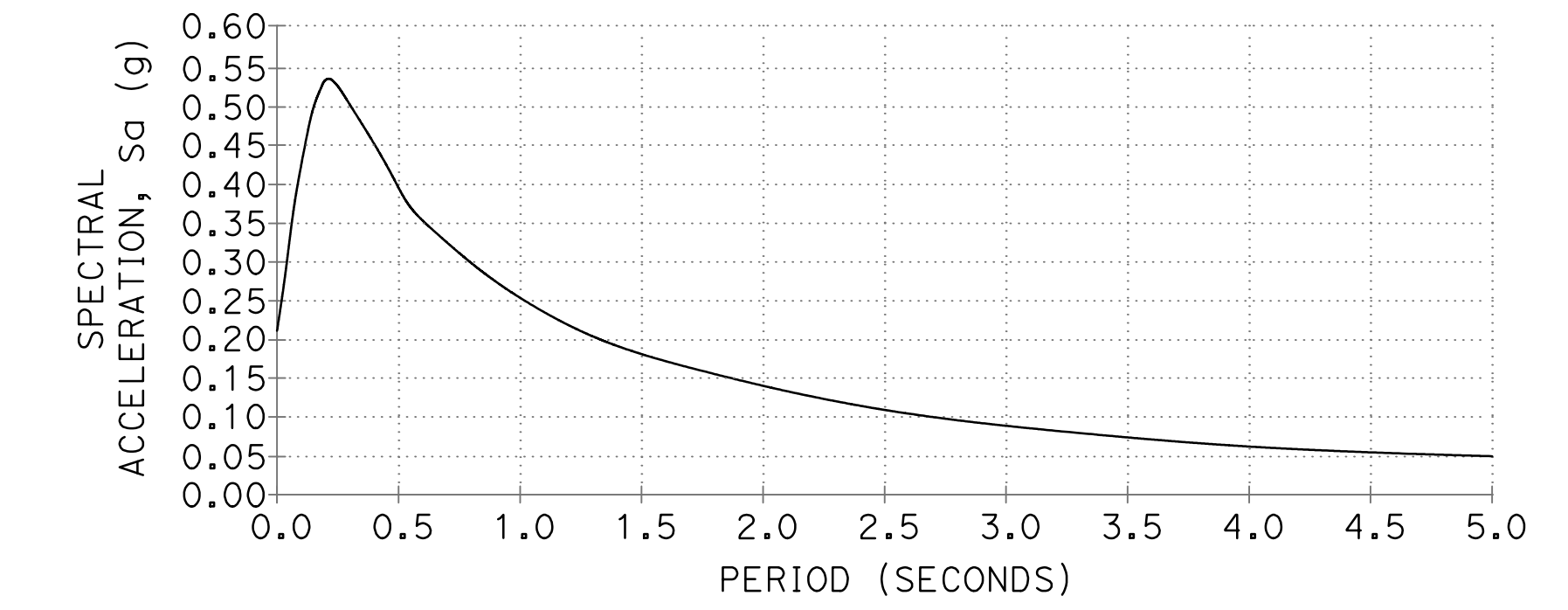
SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.7 dated April 2013.

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: HL93 and permit design load.

SEISMIC LOADING: Soil Profile: C
 Moment Magnitude: 6.7
 Peak Ground Acceleration = 0.22 g

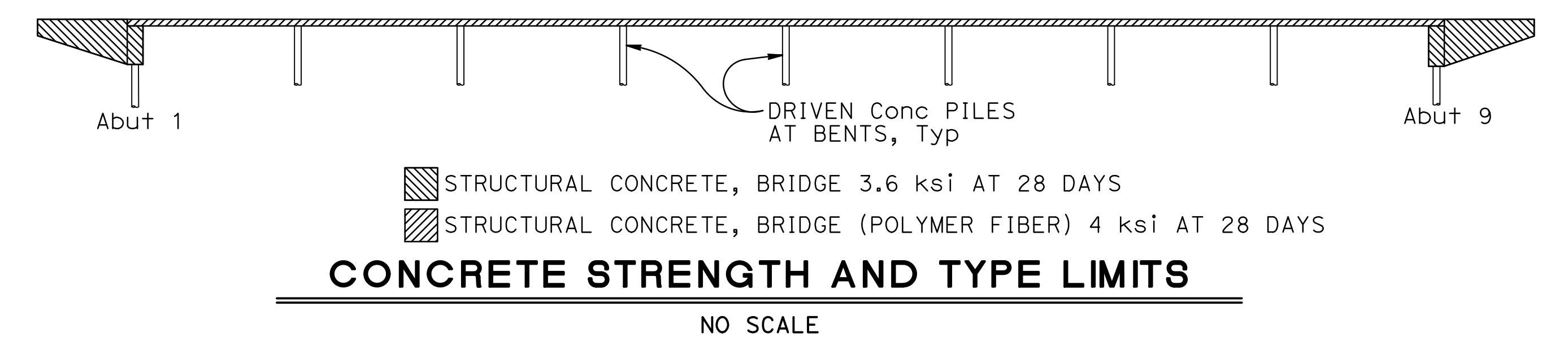
REINFORCED CONCRETE: $f_y = 60$ ksi
 $f'_c = 4.0$ ksi (Superstructure)
 $f'_c = 3.6$ ksi (Substructure)



ACCELERATION RESPONSE SPECTRUM CURVE

APPROXIMATE QUANTITIES

ITEM CODE	ITEM DESCRIPTION	QUANTITY	UNIT
157550	BRIDGE REMOVAL	1	LS
192020	STRUCTURE EXCAVATION (TYPE D)	59	CY
193003	STRUCTURE BACKFILL (BRIDGE)	56	CY
490736	FURNISH PILING (CLASS 90)	266	LF
490737	DRIVE PILE (CLASS 90)	10	EA
490746	FURNISH PILING (CLASS 140)	1,380	LF
490747	DRIVE PILE (CLASS 140)	35	EA
510053	STRUCTURAL CONCRETE, BRIDGE	67	CY
510054	STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	404	CY
520102	BAR REINFORCING STEEL (BRIDGE)	104,000	Lbs
048290	CALIFORNIA ST-75 BRIDGE RAILING	512.5	LF



DESIGN	BY J. DeMARTINI	CHECKED M. ILEY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER

BRIDGE NO. 11C0016
 POST MILES NA
BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
DECK CONTOURS

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



REVISION DATES	SHEET	OF
11/10/14 07/28/17 05/31/23	2	17

DATE PLOTTED => 5/31/2023 USERNAME => KEVIN TIME PLOTTED => 3:32:24 PM

HYDROLOGIC SUMMARY

DRAINAGE AREA 22.2 SQ MI

	DESIGN FLOOD	BASE FLOOD	OVERTOPPING FLOOD	RECORD FLOOD
FREQUENCY, YEARS	50	100	X	X
DISCHARGE CUBIC ft/sec.		1,594	X	X
WATER SURFACE ELEVATION AT BRIDGE		72.75	X	X

NOTE:
Flood Plain Data is based upon information available when the plans were prepared and are shown to meet Federal requirements. The accuracy of said information is not warranted by the Designer and interested or affected parties should make their own investigation.

LEGEND

- DENOTES EXISTING STRUCTURE
- DENOTES PROPOSED STRUCTURE
- DENOTES CLASS 140 PILES
- 66.36 DENOTES BOTTOM OF FOOTING ELEVATION

NOTES

- Utility relocation not shown. Utilities in conflict with piles will be relocated for bridge construction.
- For pile number locations, see "ABUTMENT LAYOUT" and "BENT LAYOUT" sheets.

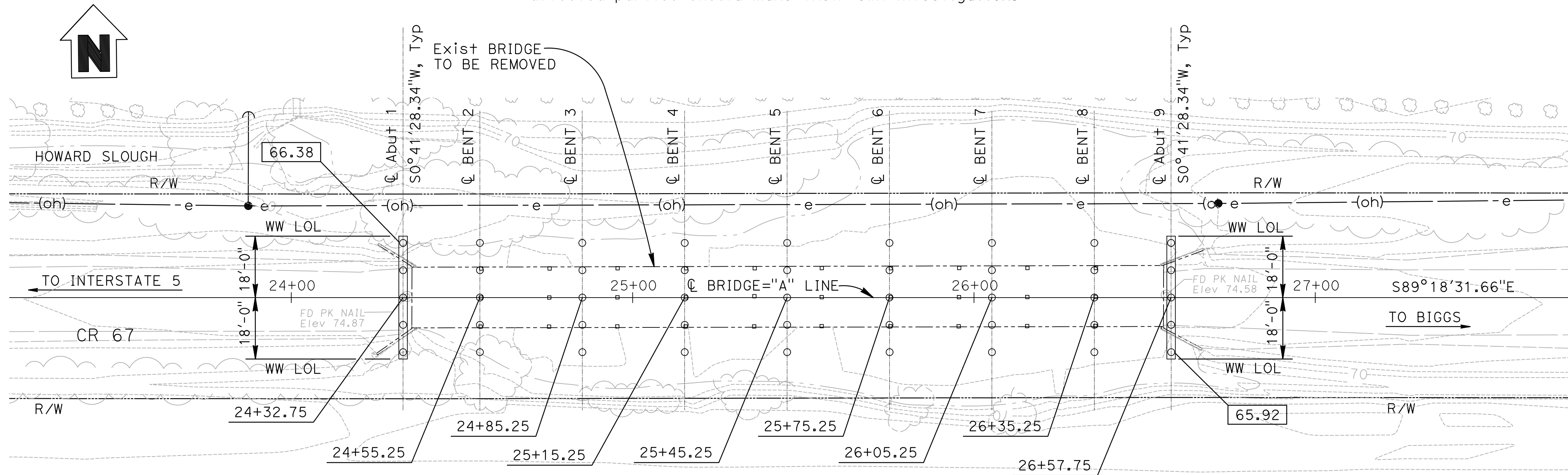
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	24	38

05-31-23
DATE

May 31, 2023
PLANS APPROVAL DATE



Prepared by:
WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001



PLAN
1" = 20'-0"

PILE DATA TABLE

LOCATION	PILE TYPE	DESIGN LOADING (SERVICE)	NOMINAL RESISTANCE		DESIGN TIP ELEV* (FEET)	SPECIFIED TIP ELEV (FEET)	PC/PS CONCRETE PILE CUT OFF ELEVATION (FEET)				
			COMPRESSION	TENSION			PILE No. 1	PILE No. 2	PILE No. 3	PILE No. 4	PILE No. 5
Abut 1	CLASS 90	90 kips	180 kips	90	40.00 (1)	40.00	66.63	66.63	66.63	66.63	66.63
BENT 2	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	73.40	73.54	73.68	73.54	73.40
BENT 3	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	73.44	73.58	73.72	73.58	73.44
BENT 4	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	73.44	73.58	73.72	73.58	73.44
BENT 5	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	73.40	73.54	73.68	73.54	73.40
BENT 6	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	73.32	73.46	73.60	73.46	73.32
BENT 7	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	73.20	73.34	73.48	73.34	73.20
BENT 8	CLASS 140	140 kips	280 kips	140	34.00 (1)	34.00	73.04	73.18	73.32	73.18	73.04
Abut 9	CLASS 90	90 kips	180 kips	90	40.00 (1)	40.00	66.17	66.17	66.17	66.17	66.17

* DESIGN TIP ELEVATION IS CONTROLLED BY THE FOLLOWING DEMANDS:
(1) COMPRESSION, (2) TENSION, (3) LATERAL LOADS, (4) SETTLEMENT

SCALE: 1"=30'	VERT. DATUM NAVD88	HORZ. DATUM NAD83
PHOTOGRAMMETRY AS OF: 06/12	ALIGNMENT TIES X	
SURVEYED BY S. ESPINOSA	DRAFTED BY J. JONES	
FIELD CHECKED BY B. STRATMAN	CHECKED BY P. ESPINOSA	

DESIGN BY J. DeMARTINI	CHECKED M. ILEY
DETAILS BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

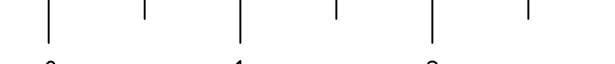
G. GORDON
PROJECT ENGINEER

BRIDGE NO.	11C0016
POST MILES	NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

FOUNDATION PLAN

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
11/10/14 07/28/17 05/31/23	3	17

FILE => 11-0016-e-fp101

DATE PLOTTED => 5/31/2023 3:56:08 PM USERNAME => KEVIN

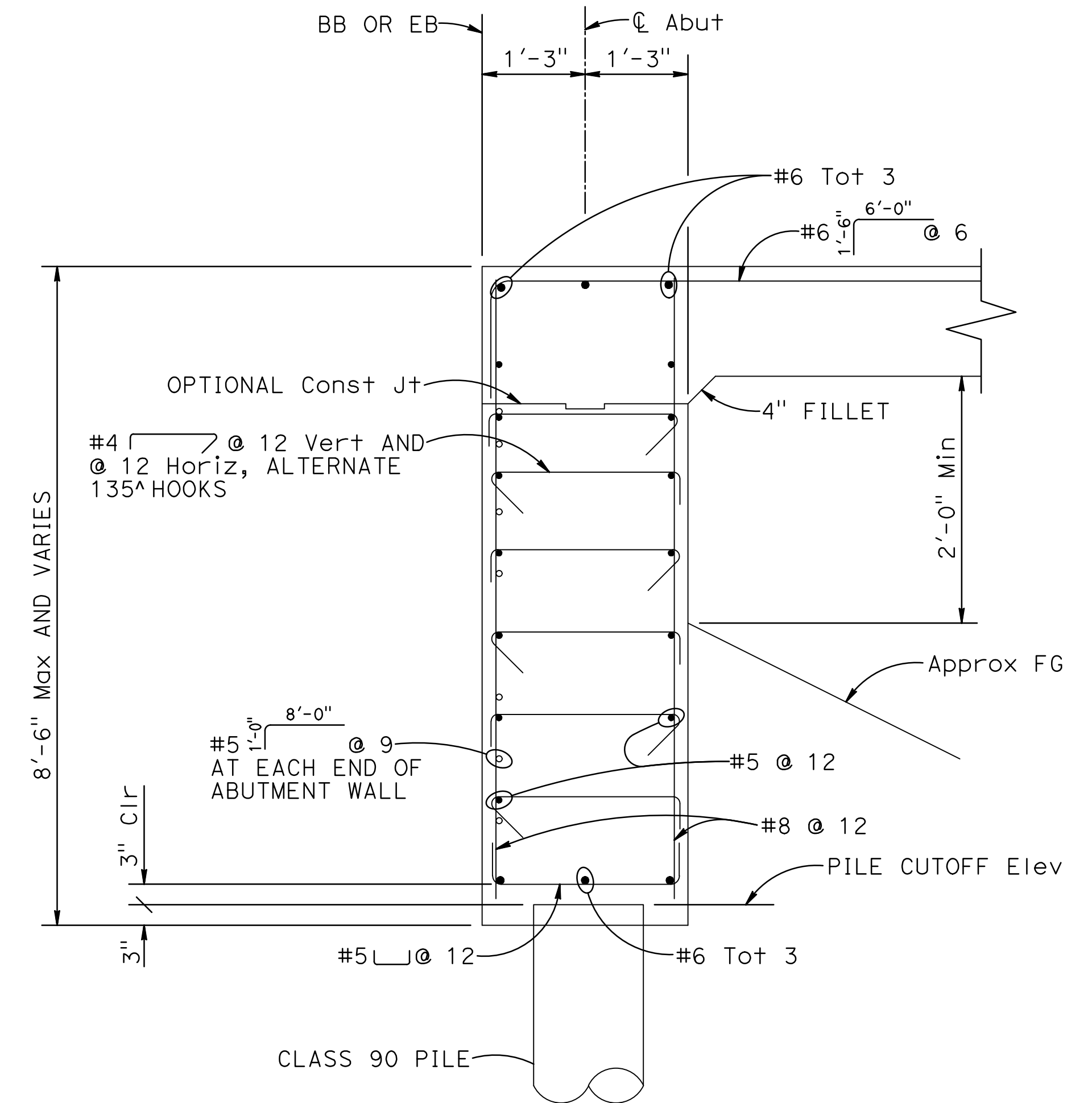
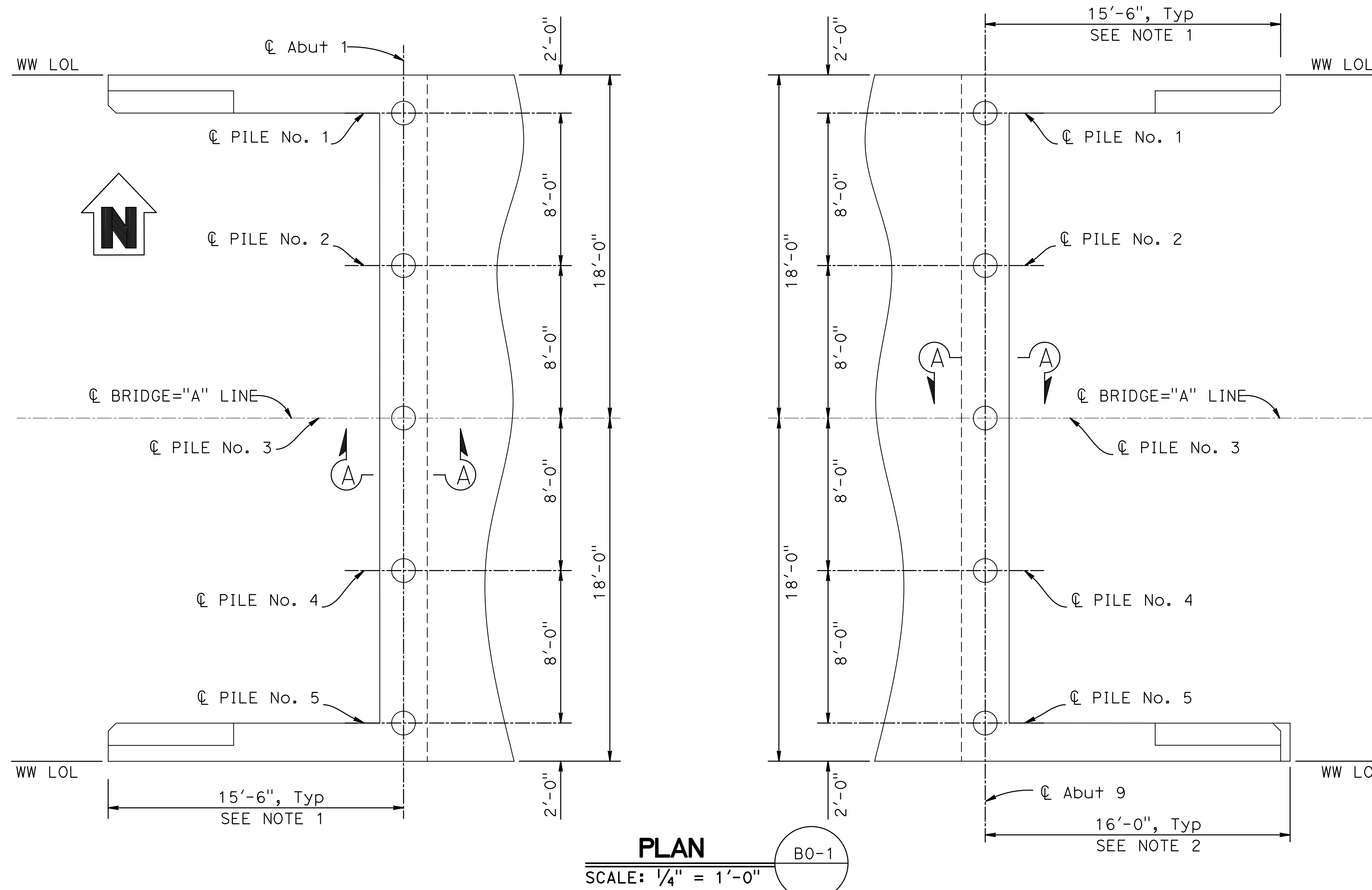
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	25	38

- NOTES:**
- For 'TYPICAL WINGWALL ELEVATION', see Caltrans Standard Plan B0-1.
 - For 'SOUTHEAST WINGWALL ELEVATION', see ABUTMENT DETAILS NO. 1 Sheet.

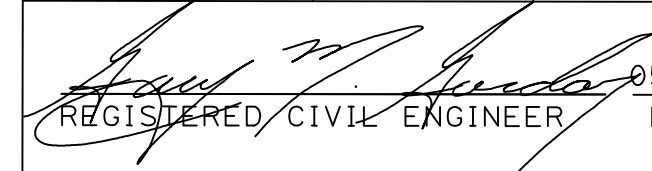
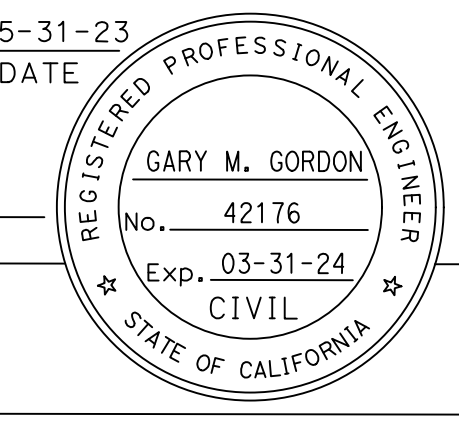
REGISTERED CIVIL ENGINEER
 DATE: 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

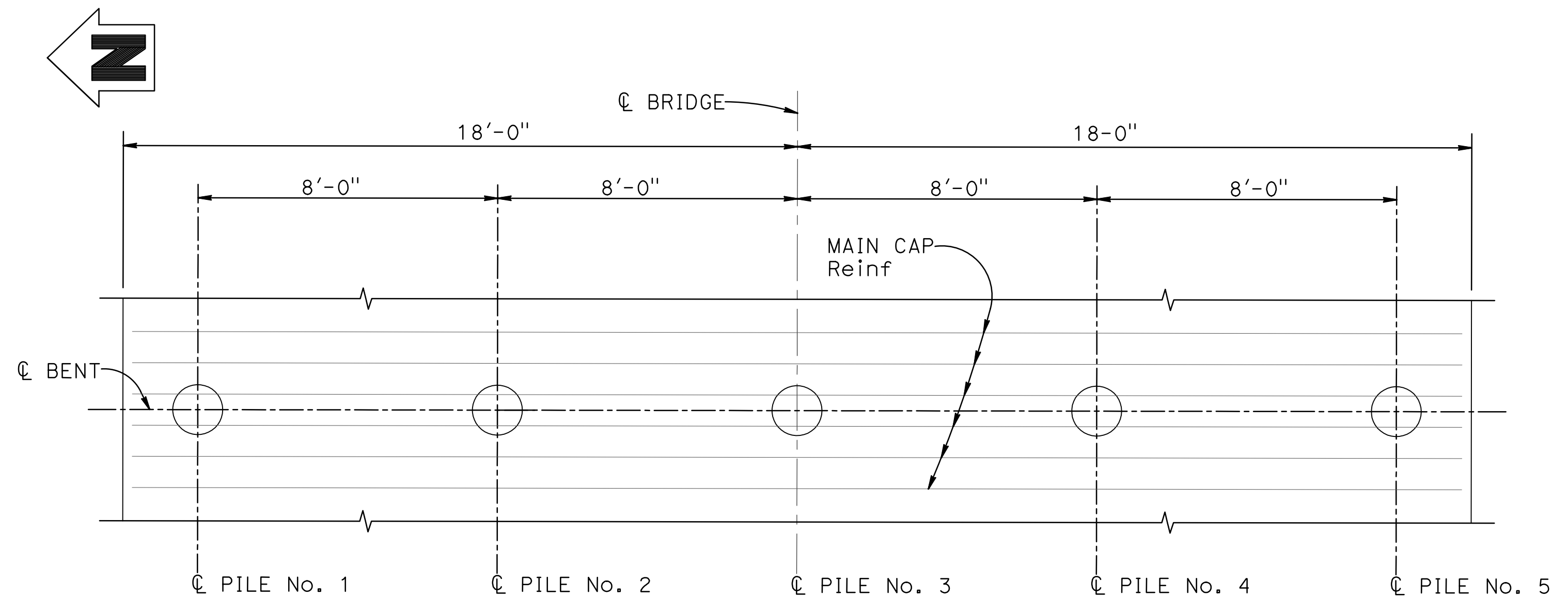
GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

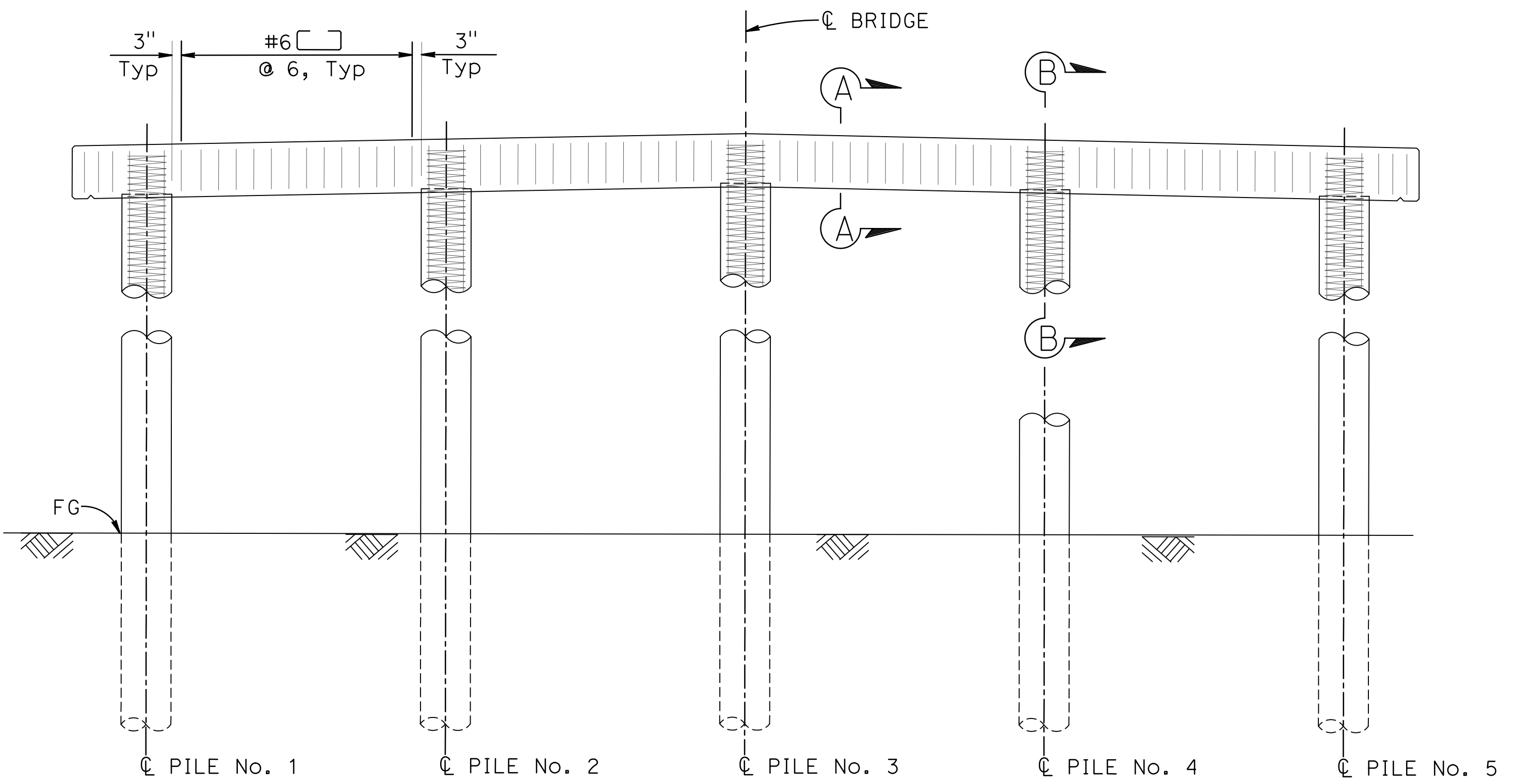


DESIGN	BY	J. DeMARTINI	CHECKED	M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO. 11C0016	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)											
	DETAILS	BY	R. UHLMANN	CHECKED				J. DeMARTINI	POST MILES NA	ABUTMENT LAYOUT								
	QUANTITIES	BY	J. DeMARTINI	CHECKED				R. UHLMANN										
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						0	1	2	3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	11/18/14	01/28/17	05/31/23	SHEET	4	OF	17

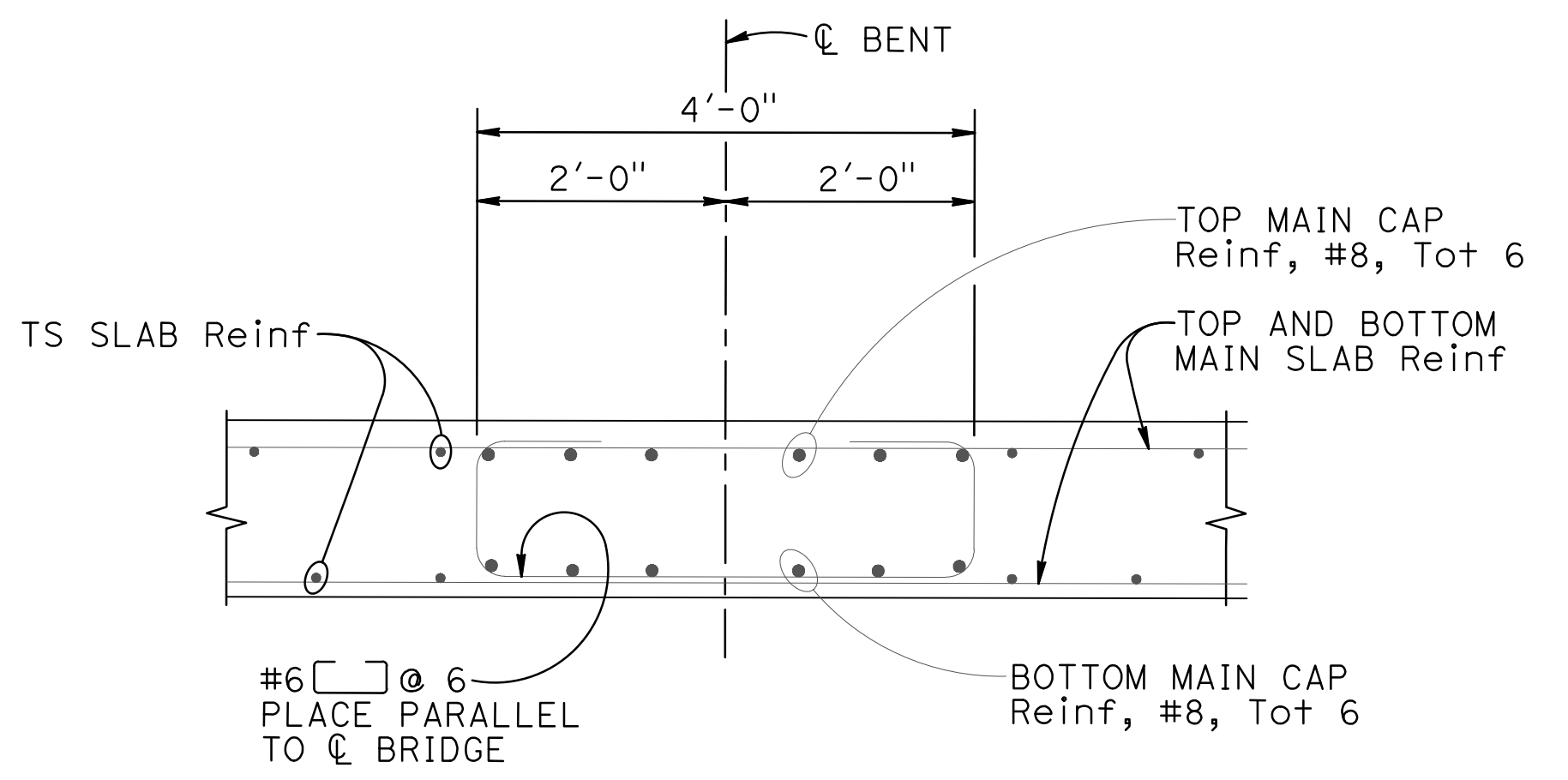
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	27	38
 REGISTERED CIVIL ENGINEER DATE 05-31-23					
May 31, 2023 PLANS APPROVAL DATE					
Prepared by: WILLDAN ENGINEERING 2400 WASHINGTON AVENUE, SUITE 101 REDDING, CALIFORNIA 96001					



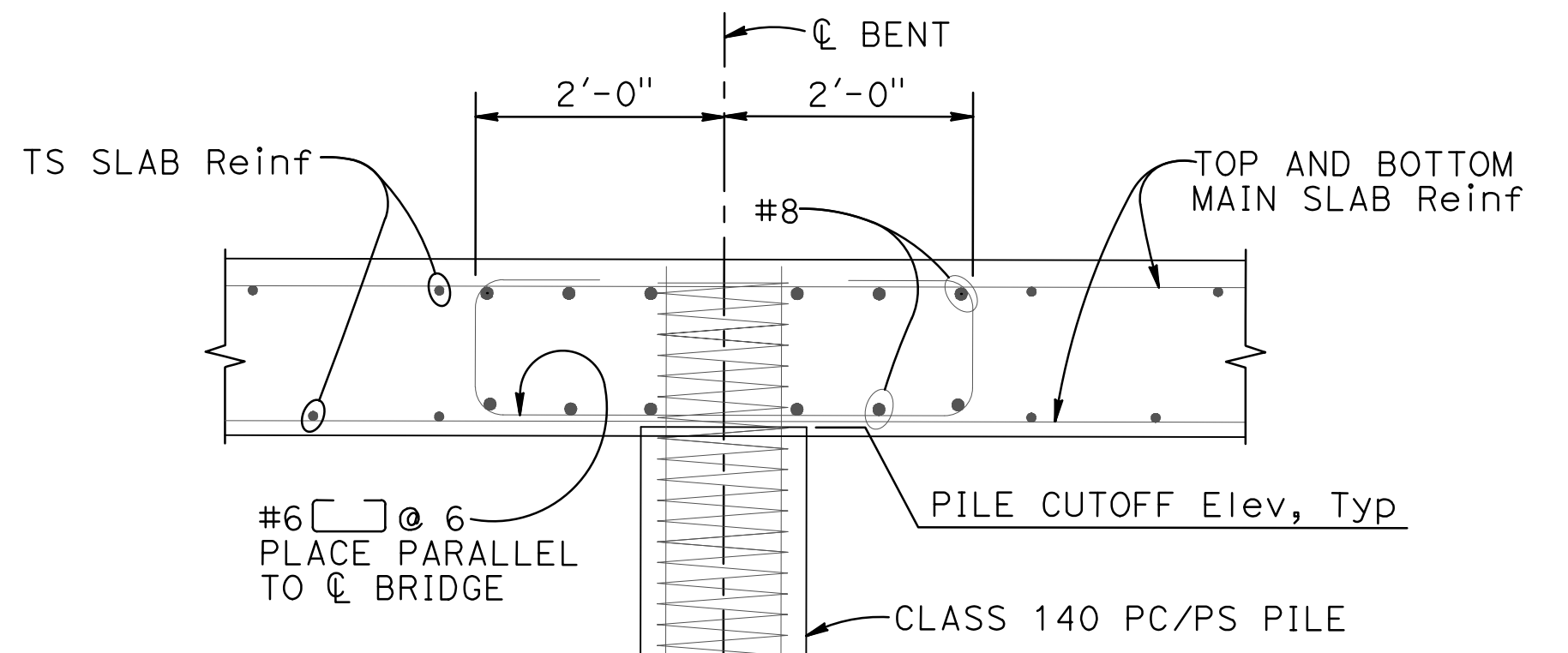
PLAN
SCALE: 3/8" = 1'-0"



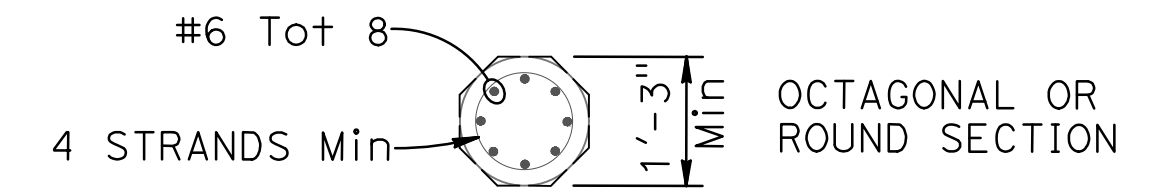
ELEVATION
SCALE: 3/8" = 1'-0"



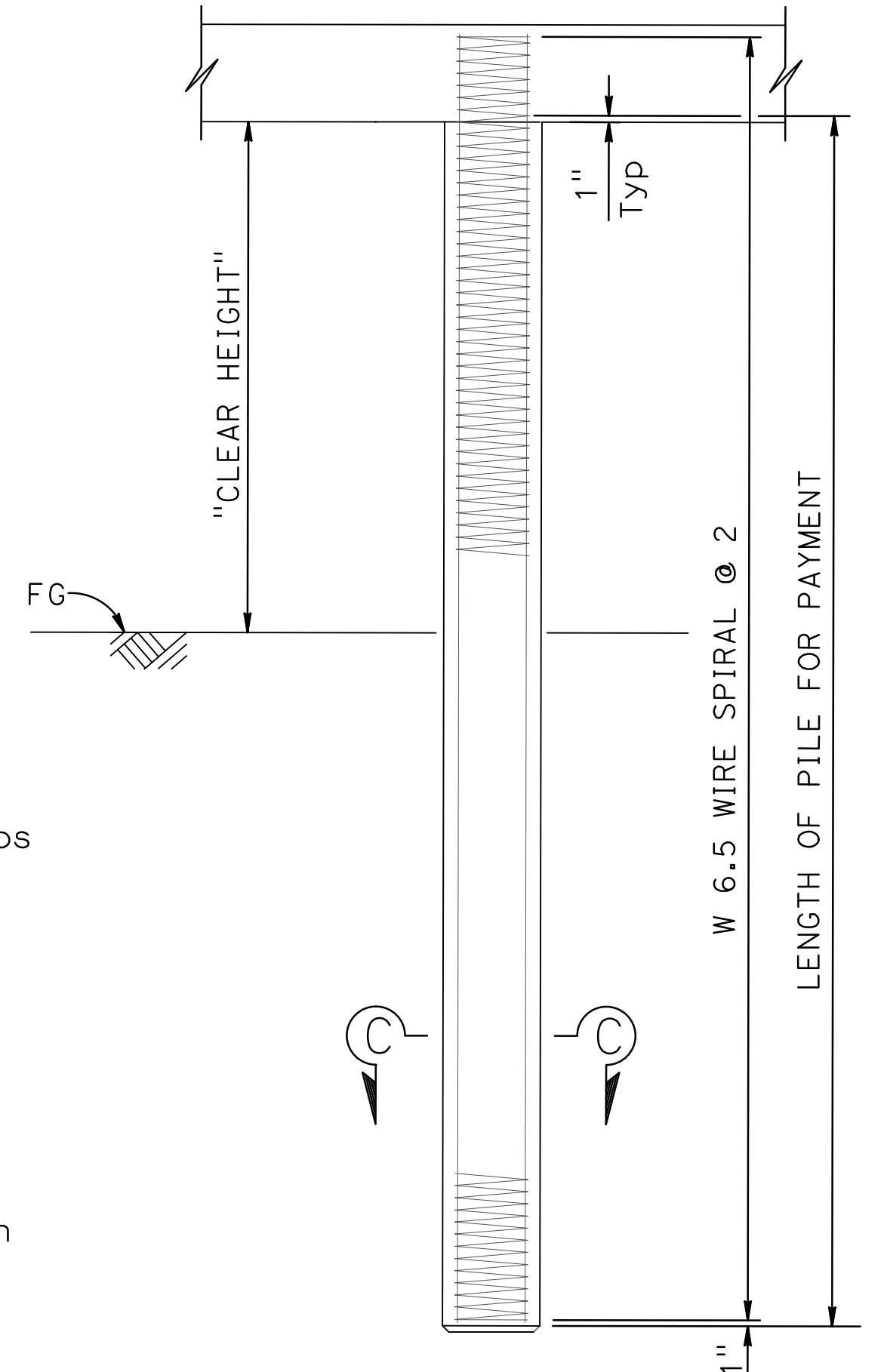
SECTION A-A
SCALE: 3/4" = 1'-0"



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



SECTION C-C



PRECAST PRESTRESSED CONCRETE PILE

- NOTES:**
- Design service level loading is 140 kips service and 280 kips nominal axial structural resistance or less as noted.
 - Maximum size of aggregate is 1".
 - For the prestressed concrete pile:
 - The prestress force after all losses shall provide 700 psi minimum stress.
 - The concrete strength shall not be less than 6000 psi at 28 days.
 - No splices allowed in the longitudinal reinforcement within the "CLEAR HEIGHT" or within 10' below the ground line.

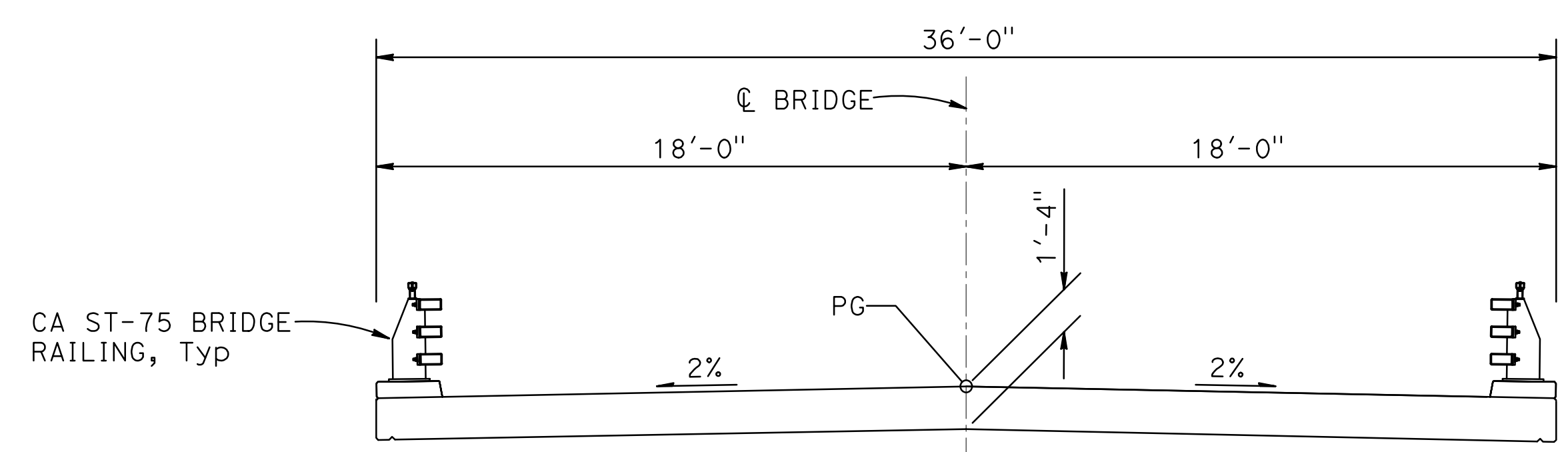
DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	BRIDGE NO.	11C0016	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI	POST MILES	NA	
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN			
PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY			G. GORDON PROJECT ENGINEER		BENT LAYOUT
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3			REVISION DATES 11/20/14 07/28/17 05/31/23		
FILE => 11-0016-h-b01_101				SHEET 6 OF 17	

DATE PLOTTED => 5/31/2023 TIME PLOTTED => 4:44:31 PM USERNAME => KEVIN

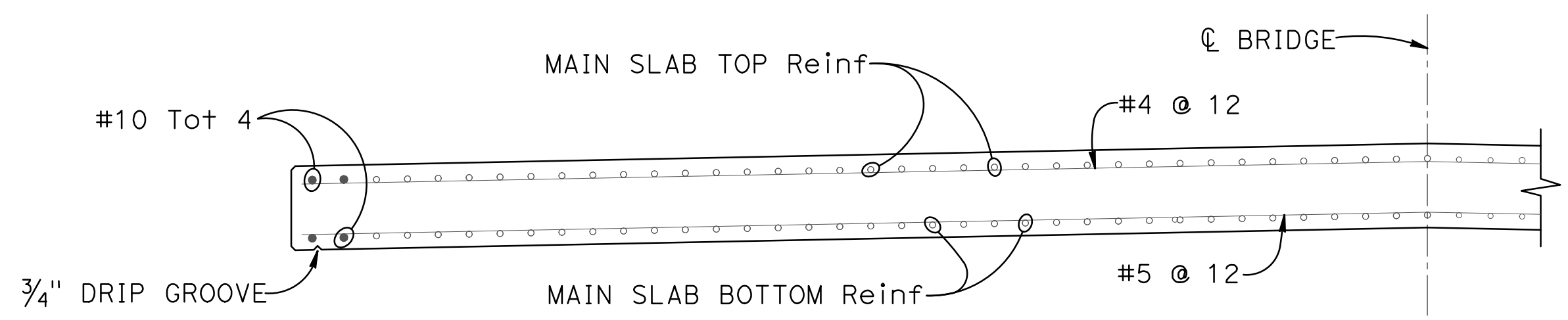
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	28	38

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

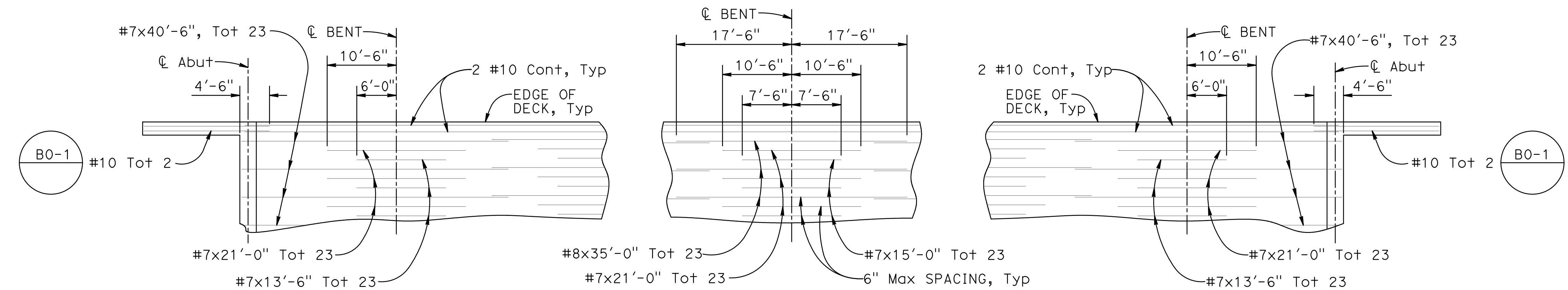


TYPICAL SECTION
SCALE: 1/4" = 1'-0"

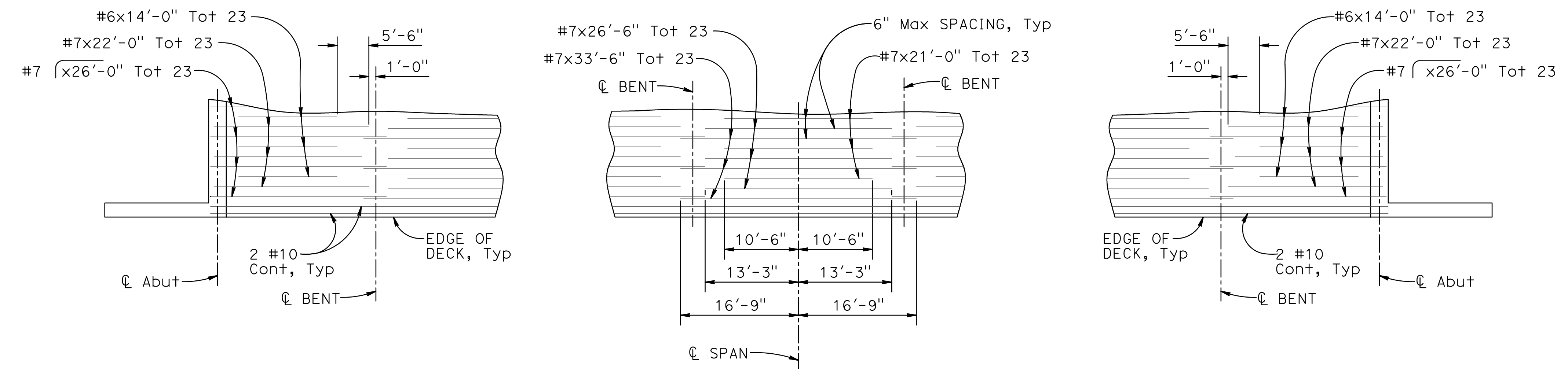


PART TYPICAL SECTION
SCALE: 1/2" = 1'-0"
NOTE: BAR CHAIRS NOT SHOWN.

NOTES:
1. FOR SLAB REINFORCING DETAILS NOT SHOWN SEE "SLAB REINFORCEMENT DETAILS NO. 2" SHEET.



REINFORCEMENT - TOP OF SLAB
NOT TO SCALE



REINFORCEMENT - BOTTOM OF SLAB
NOT TO SCALE

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER

BRIDGE NO.	11C0016
POST MILES	NA

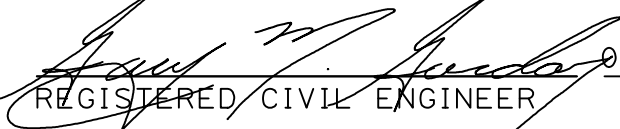
BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
SLAB REINFORCEMENT DETAILS NO. 1

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



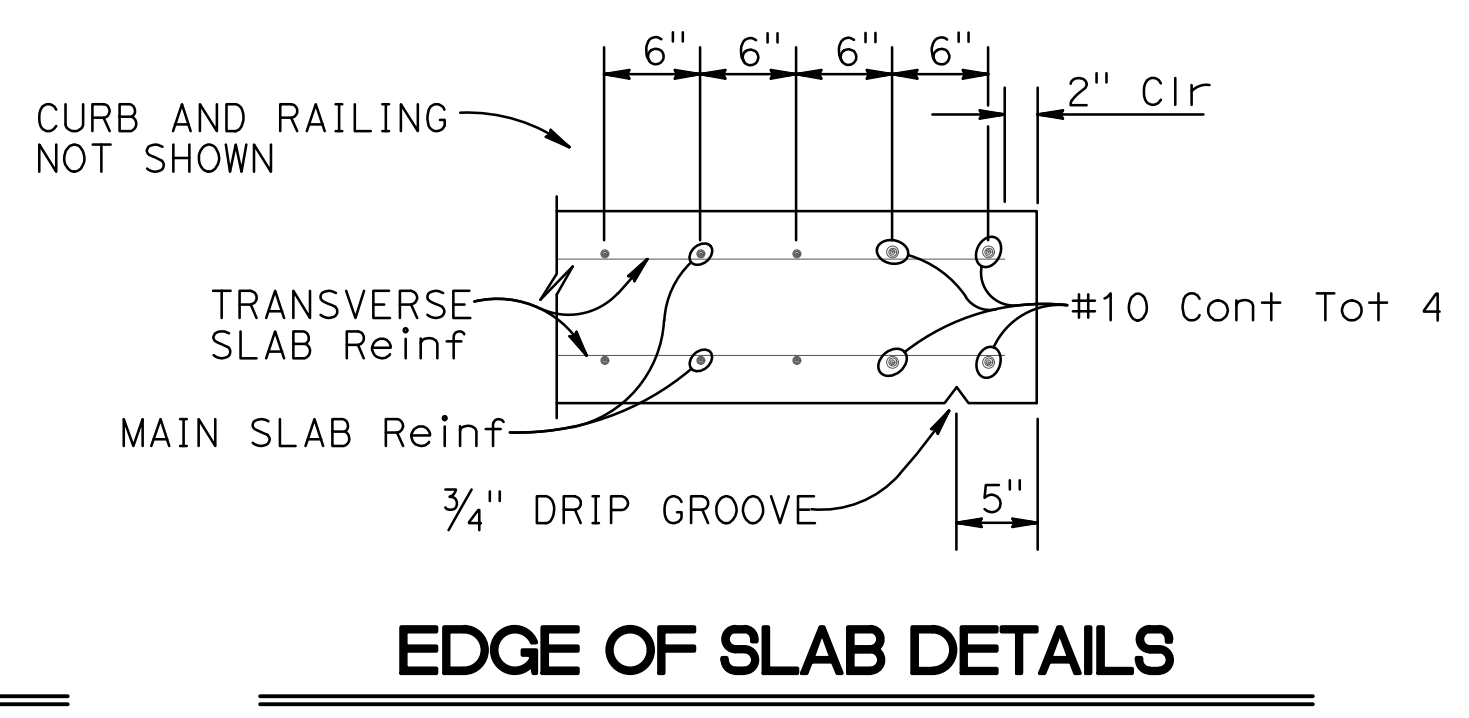
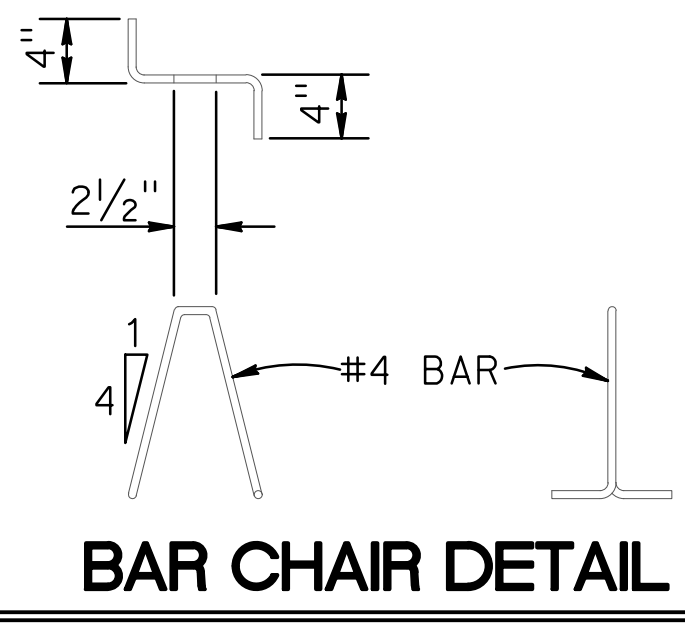
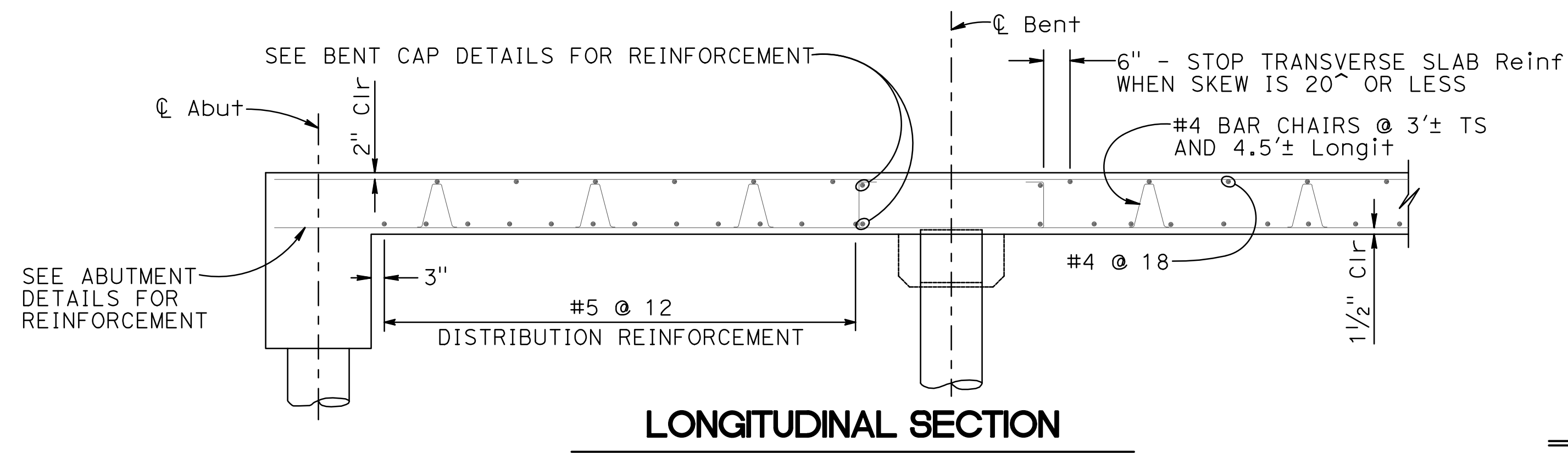
DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	11/10/14 07/28/17 05/31/23	7	17

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	29	38


 REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



BAR SPLICE LENGTH								
BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
ALL BARS, EXCEPT TOP BARS IN SPANS OVER 24'	23"	28"	34"	43"	56"	71"	90"	110"
TOP BARS IN SPANS OVER 24'	23"	28"	34"	58"	74"	80"	115"	155"

REINFORCEMENT NOTES:
 Splices in top main bars to be located near center of span.
 Splices in bottom main bars to be located near bent.
 Spacing of all transverse bars is measured along ϕ roadway.

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER

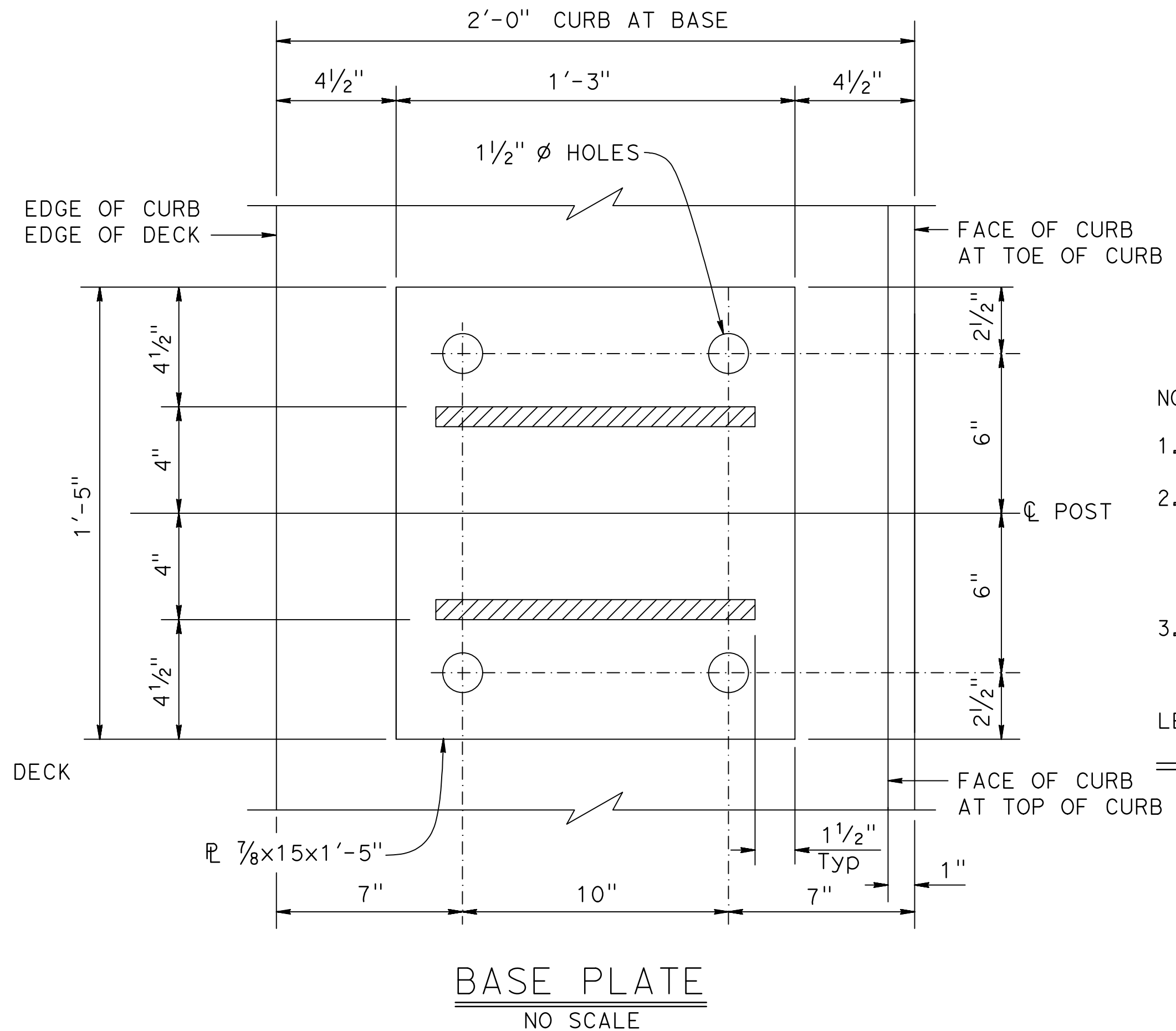
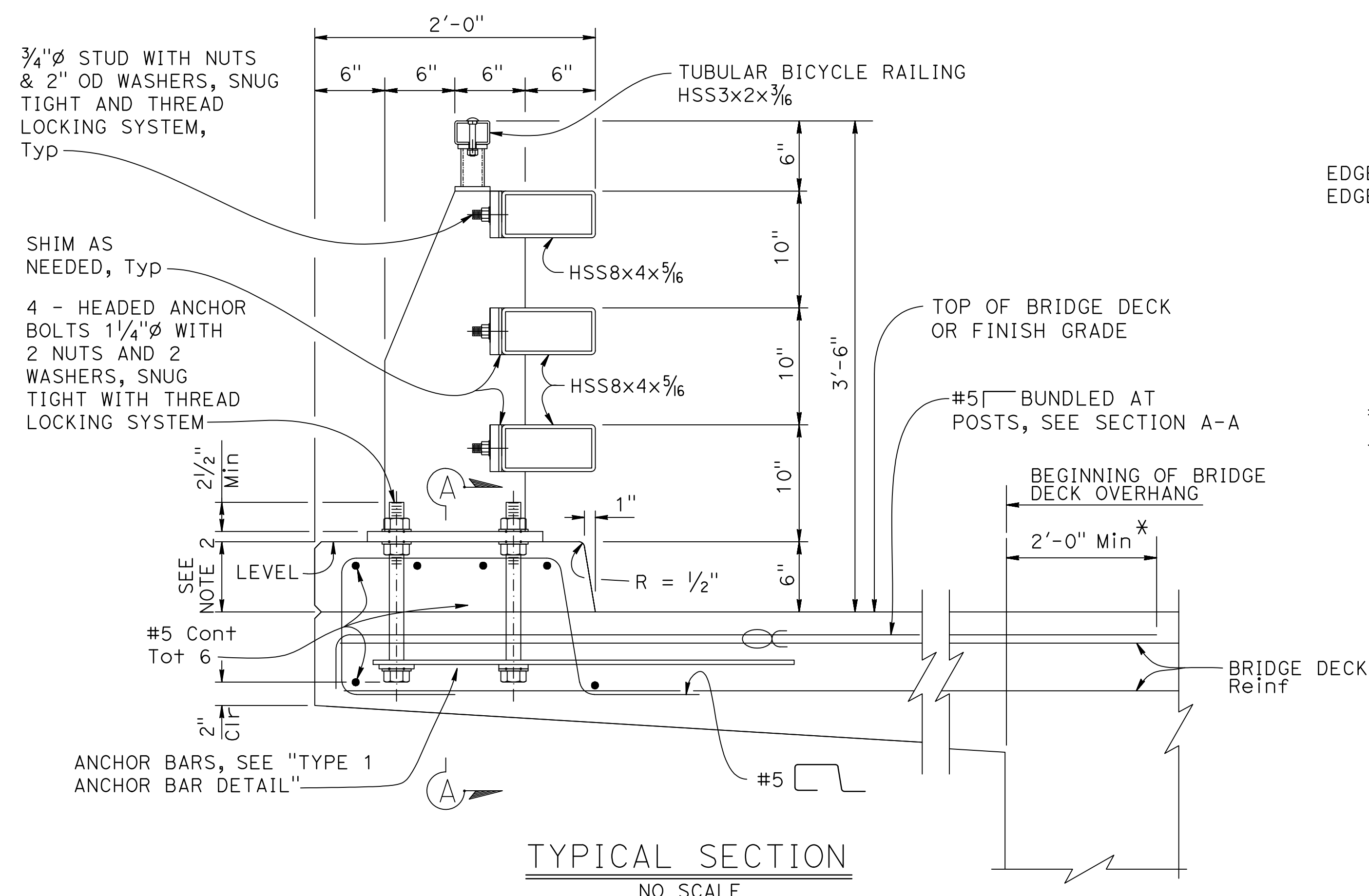
BRIDGE NO.	11C0016	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) SLAB REINFORCEMENT DETAILS NO. 2
POST MILES	NA	
NA		

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 11/10/14 07/28/17 05/31/23	SHEET	OF
		8	17

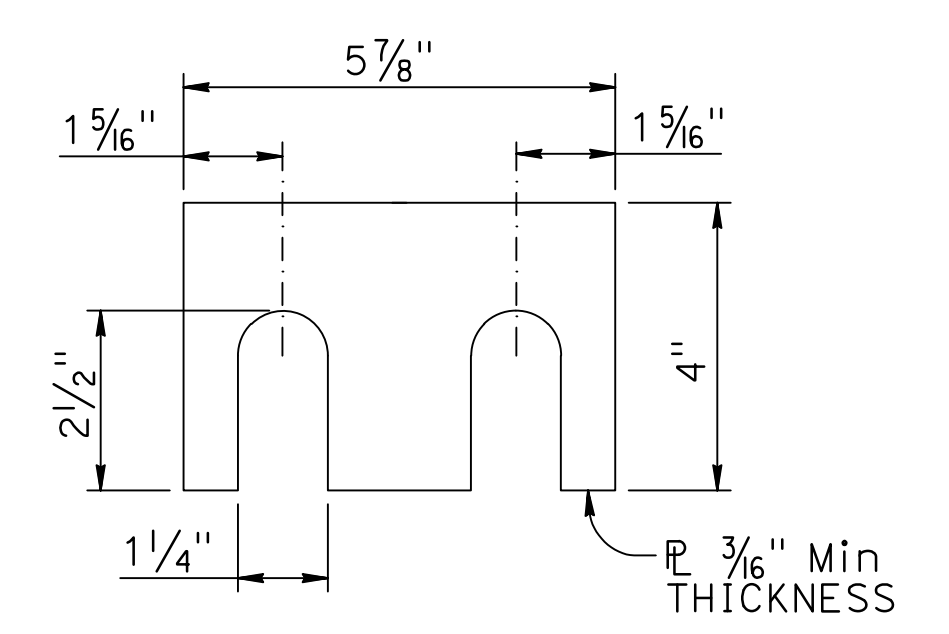
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	30	38
REGISTERED CIVIL ENGINEER GARY M. GORDON No. 42176 Exp. 03-31-24 CIVIL STATE OF CALIFORNIA				05-31-23 DATE May 31, 2023 PLANS APPROVAL DATE	



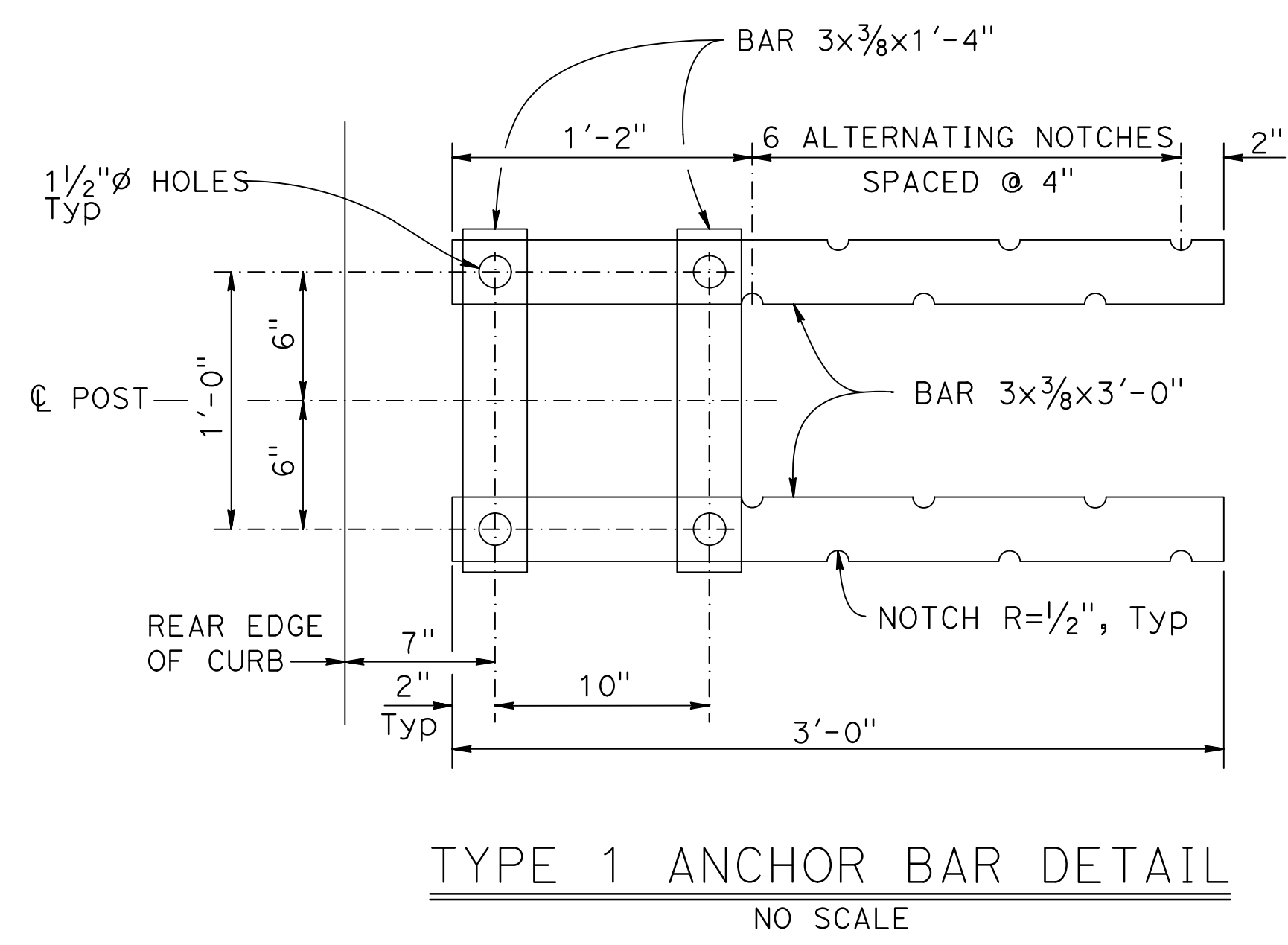
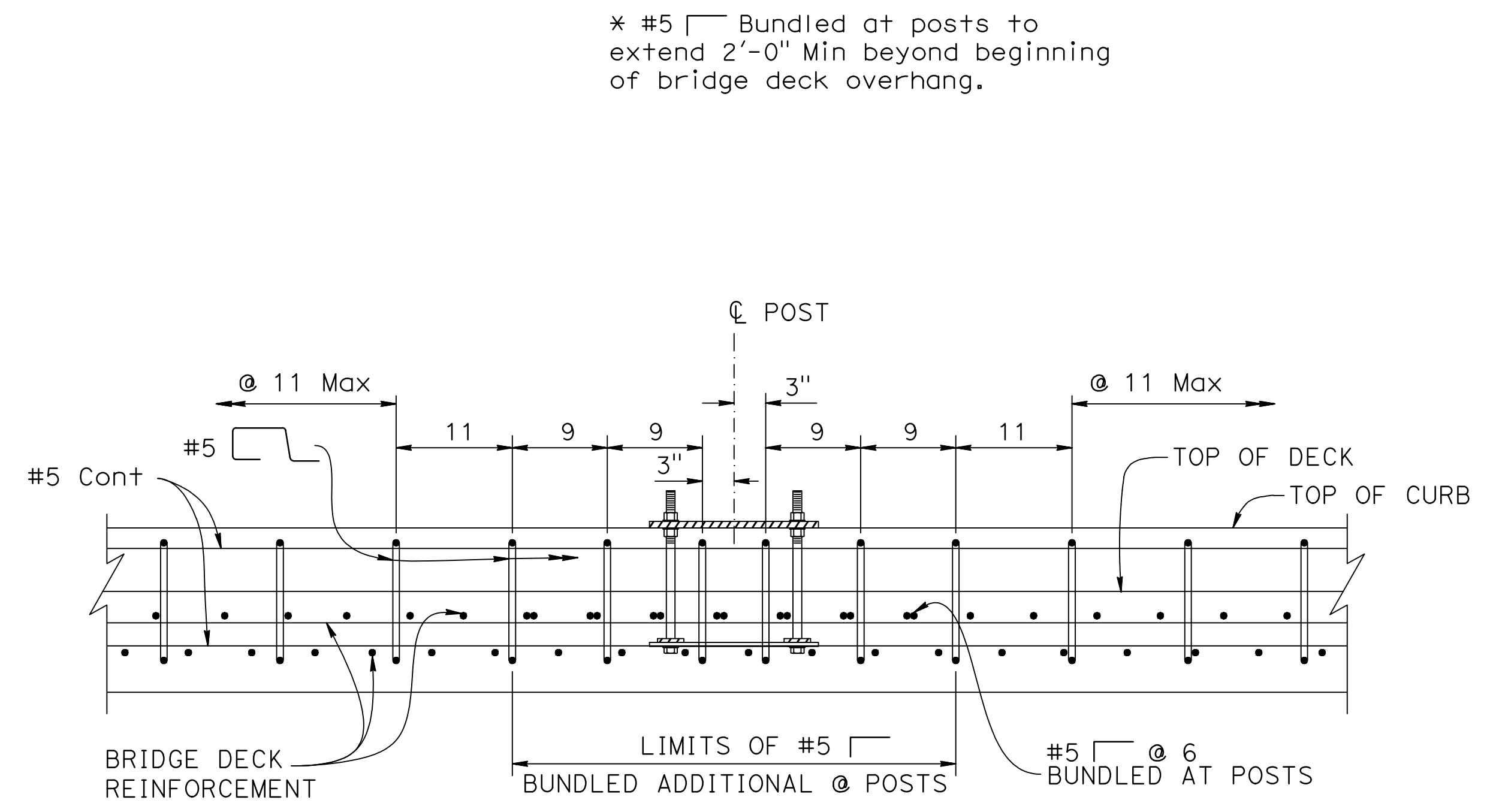
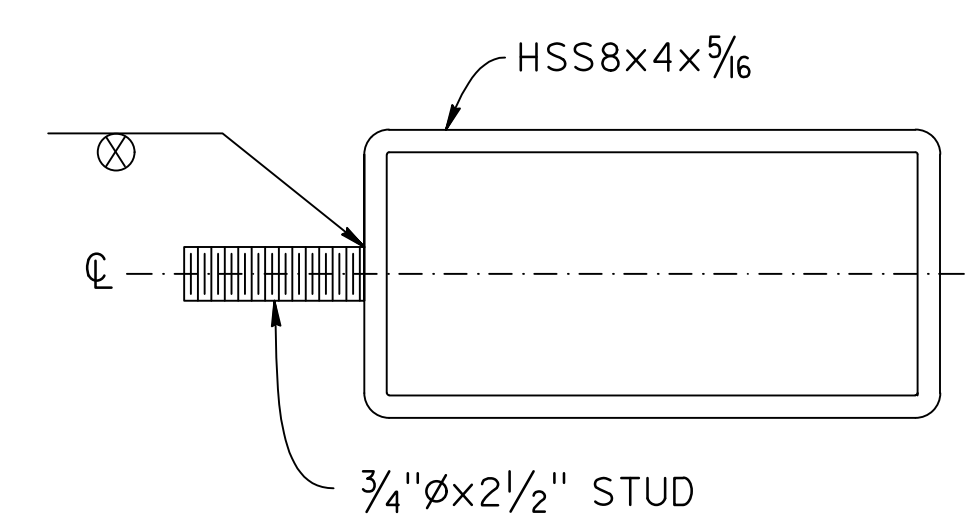
- NOTES:
- Anchor bolts may be tack welded to anchor bars.
 - Curb dimension at back side of rail will vary with bridge deck cross slope, and if overlay is placed on the bridge deck. For the same reasons, the anchor bolt lengths will vary.
 - Use extra thick washers for anchor bolts, with a minimum thickness of 0.305" and a maximum thickness of 0.375".

LEGEND:

Bundled reinforcement



NOTE:
Shim as needed between posts and HSS rail tubes.



NOTE: Post not shown for clarity.

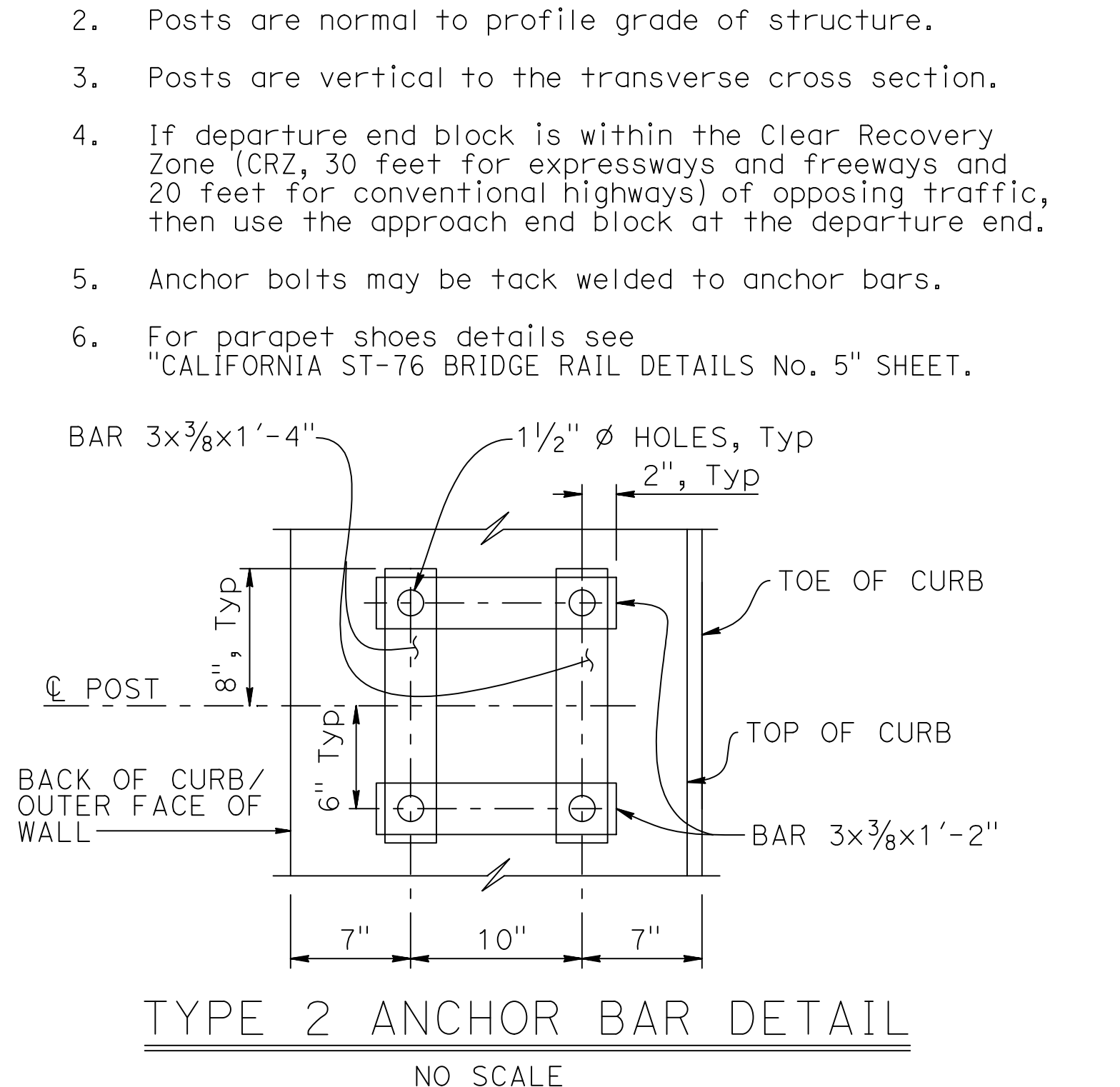
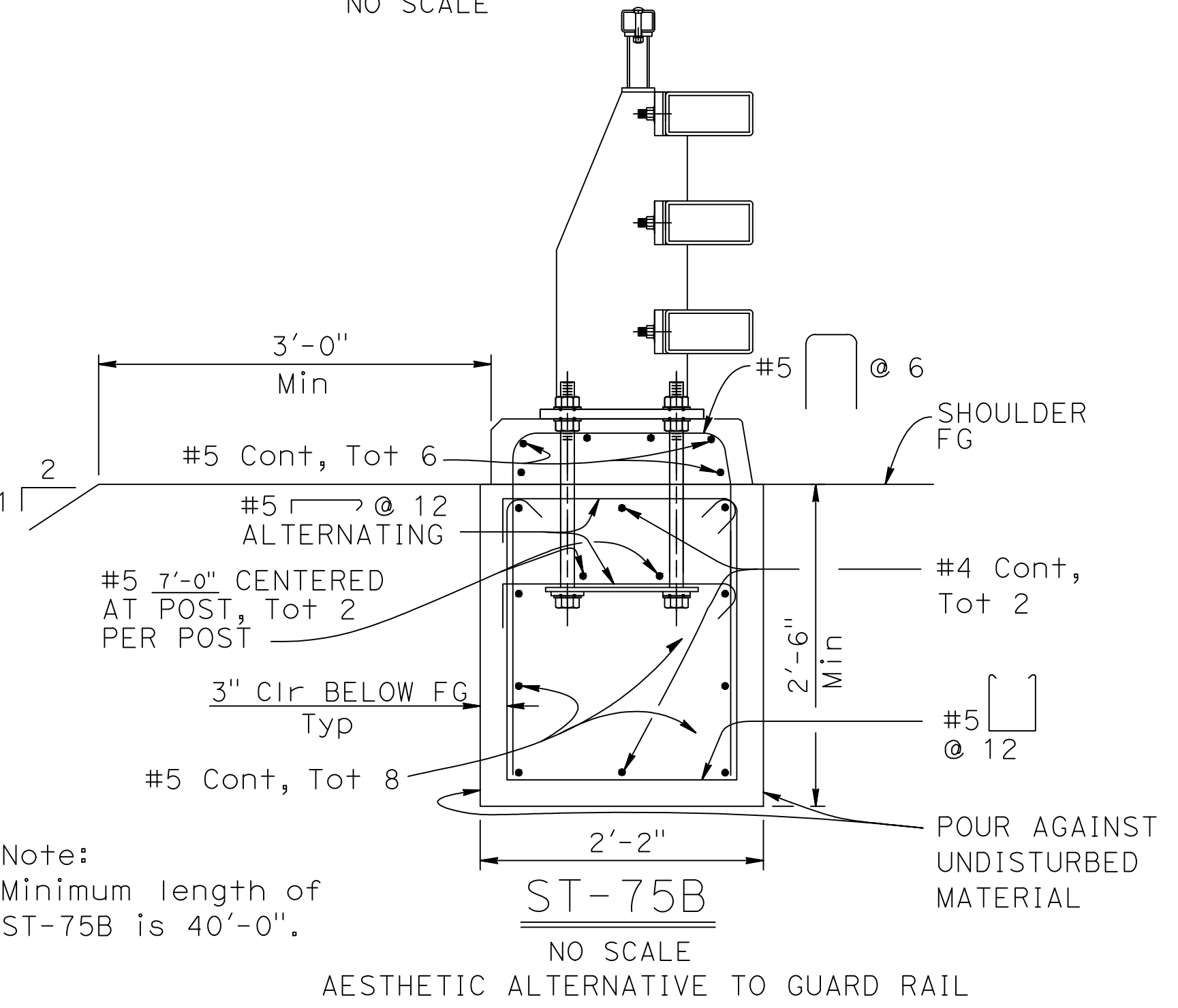
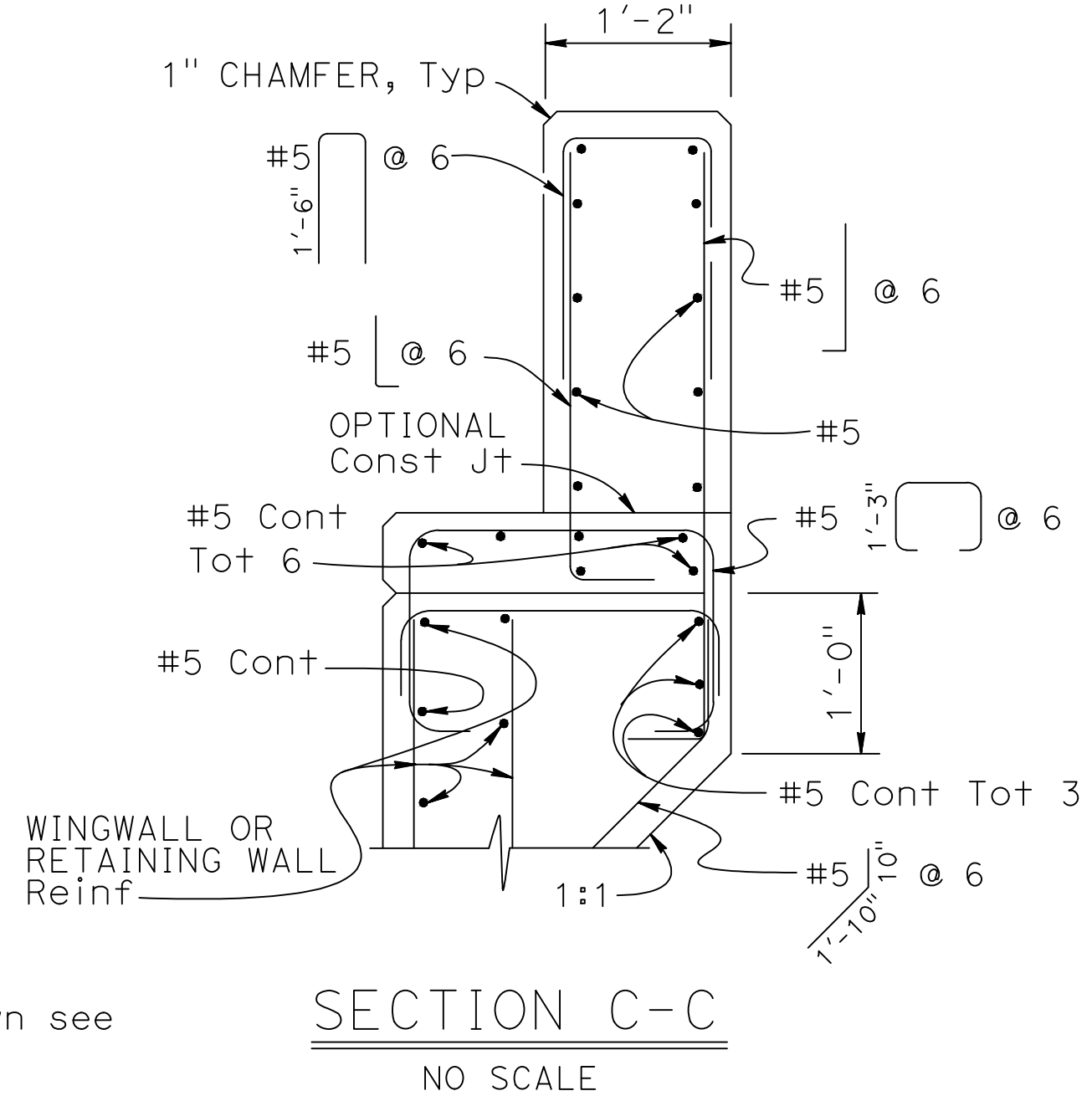
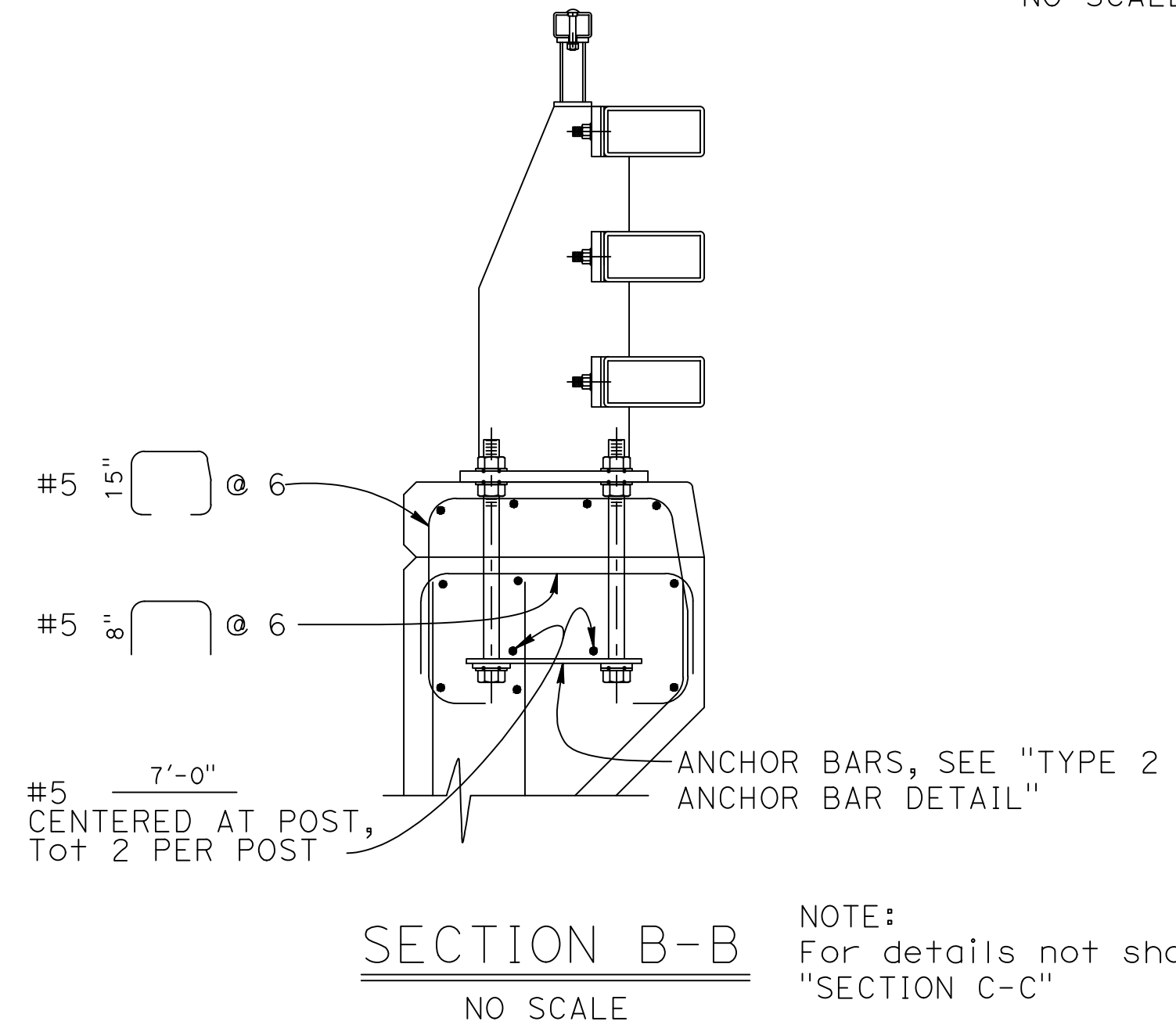
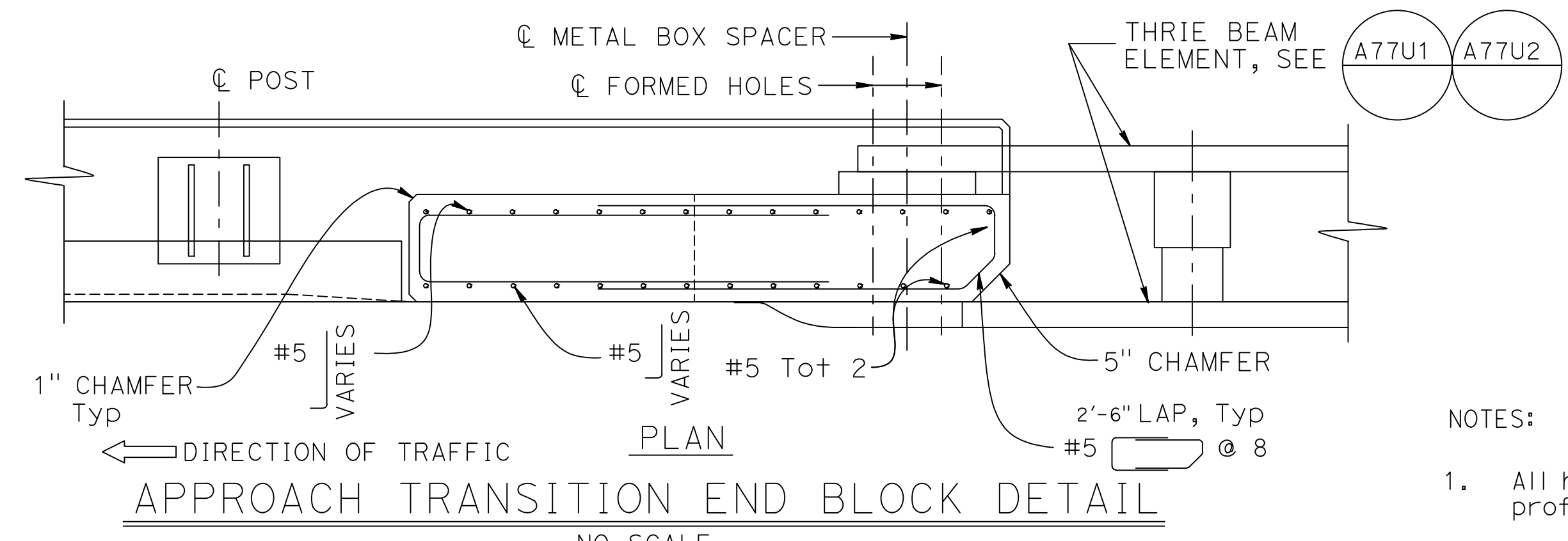
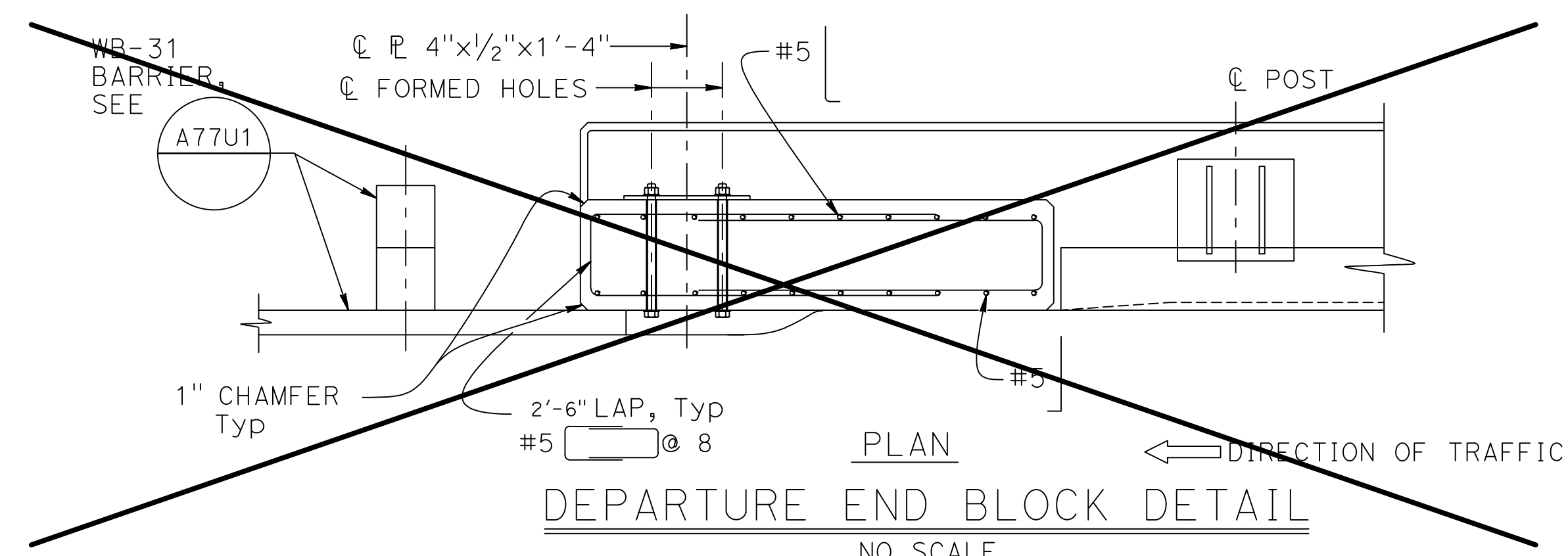
BRIDGE STANDARD DETAILS		DESIGN	BY	CHECKED	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO.	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 1		
xs16-116-1	JULY 2022	DETAILS	K. COOK-GUTERIEZ	G. GORDON		11C0016			
FILE NO.	APPROVAL DATE	QUANTITIES				NA			
The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			G. GORDON PROJECT ENGINEER	REVISION DATES 12/18/19 06/28/22 01/05/22	SHEET	OF	
Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html					FILE => 11-0016-r-rspxs16-116-1	DISREGARD PRINTS BEARING EARLIER REVISION DATES		9	17

2022 STANDARD PLAN XS-16-116-1 DATE PLOTTED => 05/31/2023 USERNAME => KEVIN

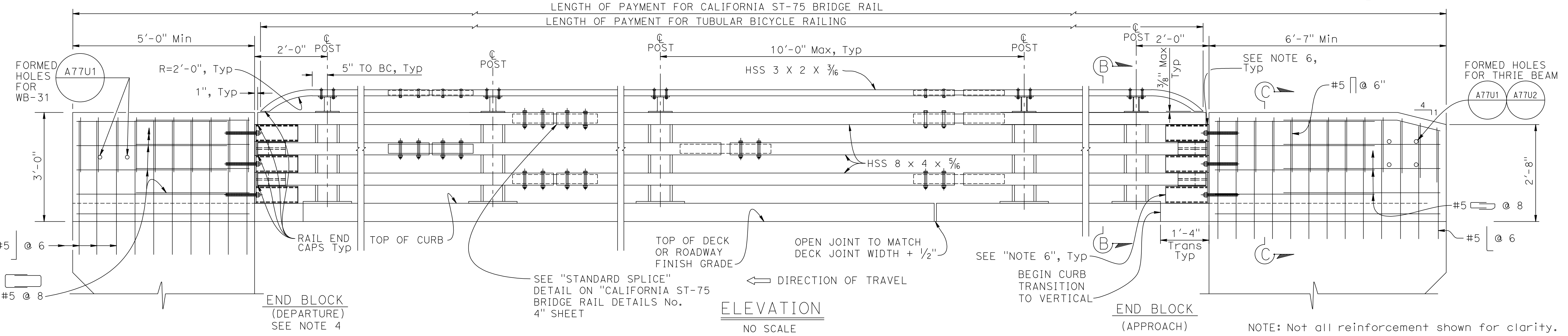
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	31	38

REGISTERED CIVIL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

DATE: 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE



- NOTES:
- All horizontal members are parallel to longitudinal profile grade.
 - Posts are normal to profile grade of structure.
 - Posts are vertical to the transverse cross section.
 - If departure end block is within the Clear Recovery Zone (CRZ, 30 feet for expressways and freeways and 20 feet for conventional highways) of opposing traffic, then use the approach end block at the departure end.
 - Anchor bolts may be tack welded to anchor bars.
 - For parapet shoes details see "CALIFORNIA ST-76 BRIDGE RAIL DETAILS No. 5" SHEET.



BRIDGE STANDARD DETAILS

xs16-116-2	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California
FILE NO.	APPROVAL DATE	

DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR

COUNTY OF GLENN

PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

BRIDGE NO.	11C0016	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
POST MILES	NA	
NA	NA	

CALIFORNIA ST-75 BRIDGE RAIL

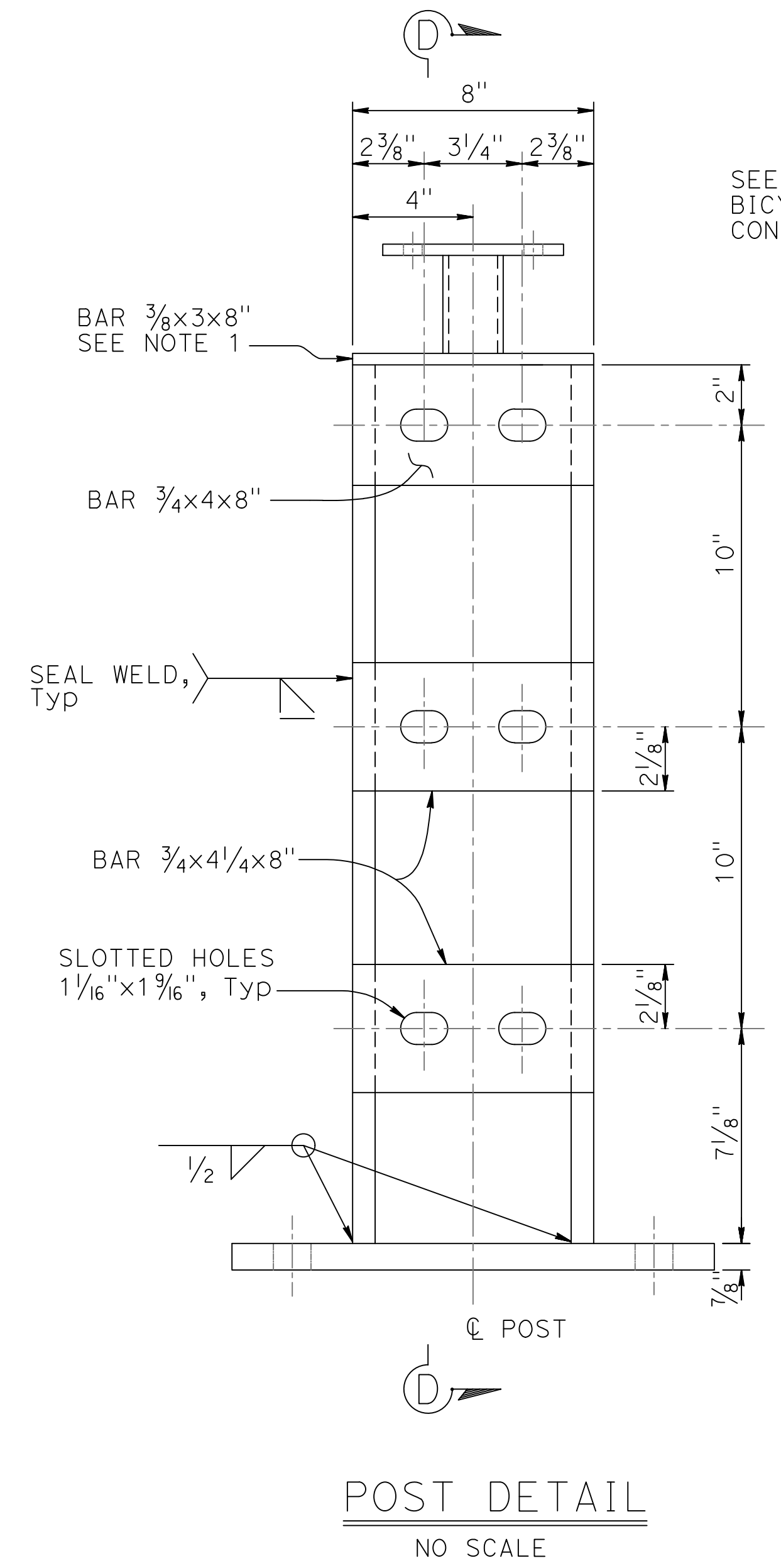
DETAILS No. 2

2022 STANDARD PLAN XS-16-116-2

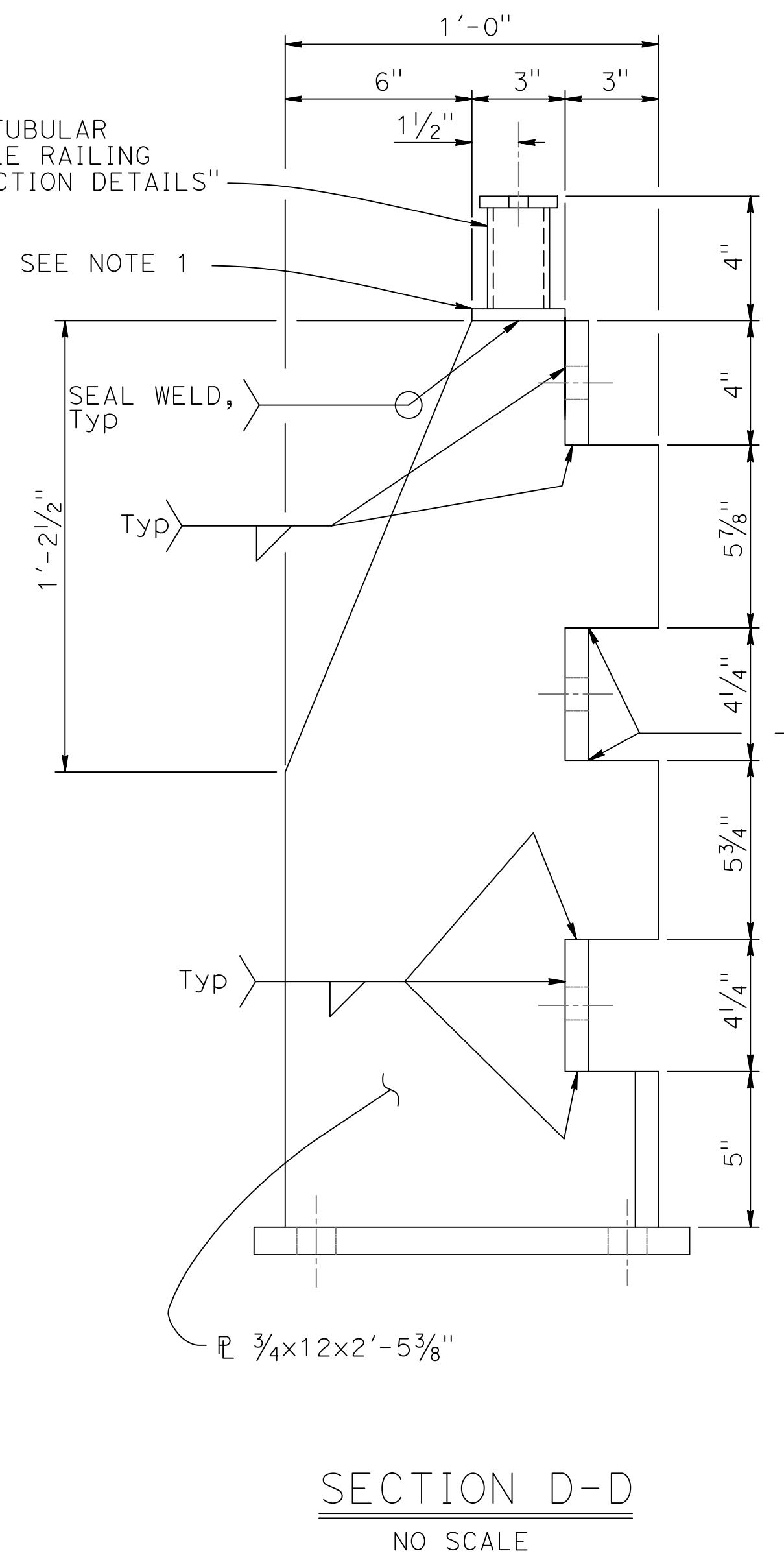
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	32	38

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

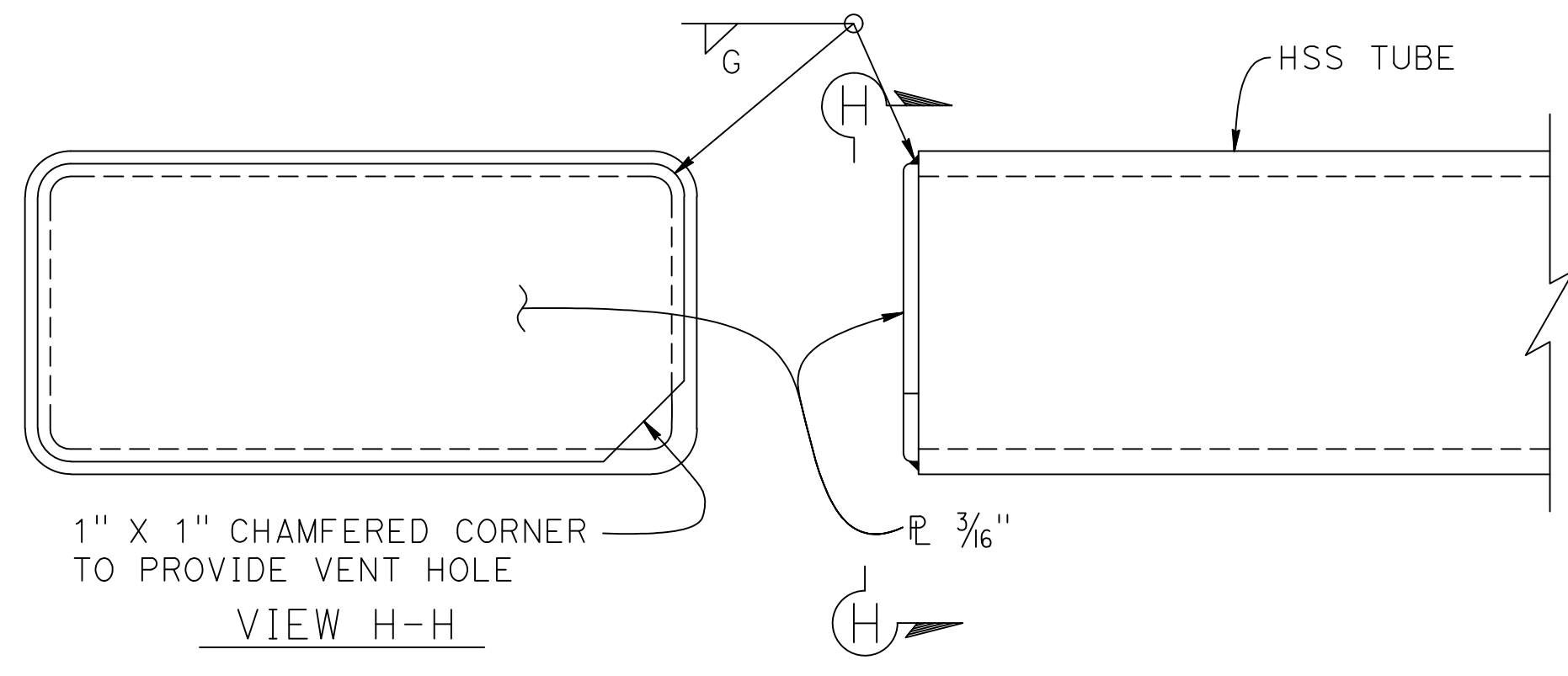
REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



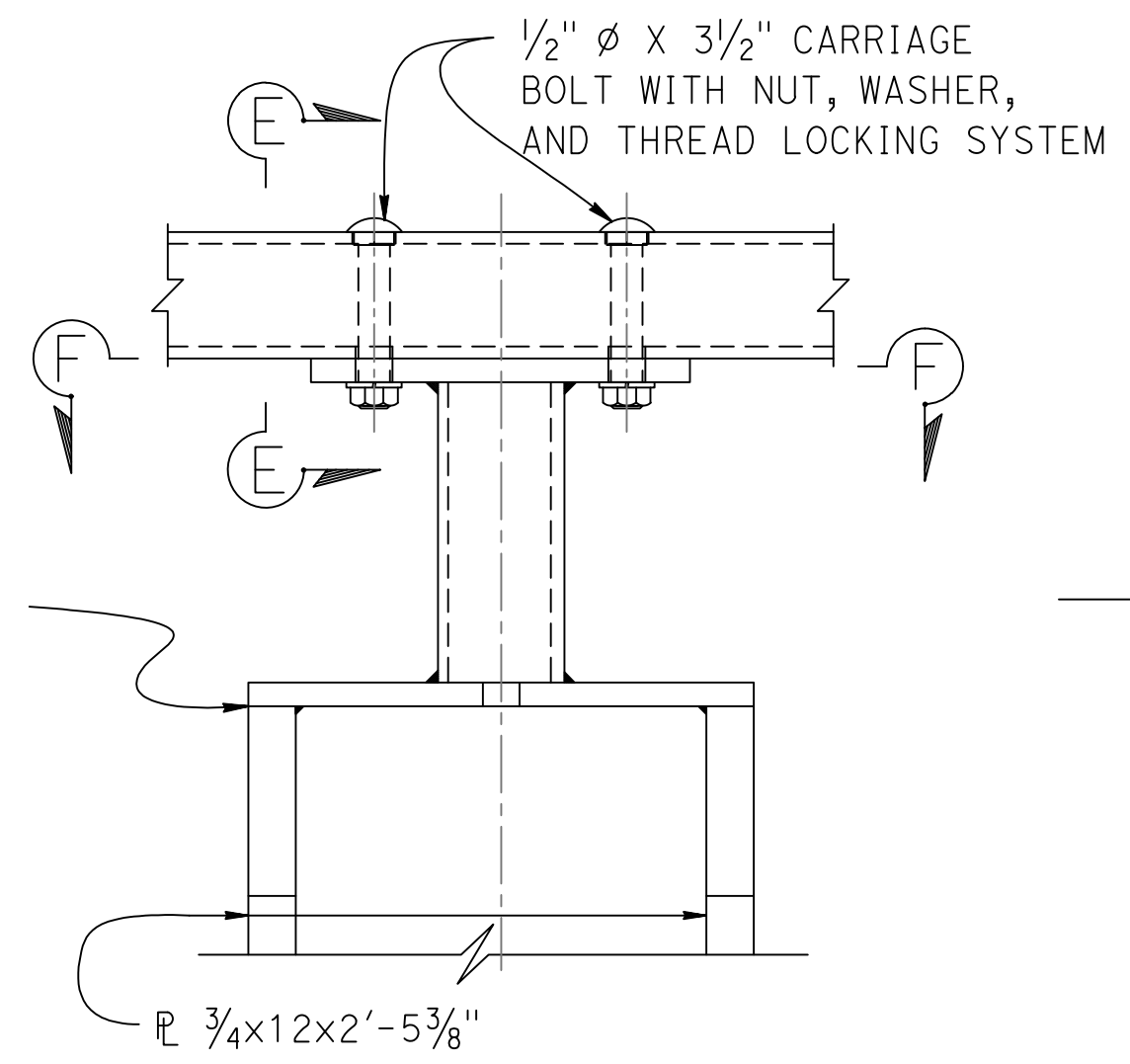
POST DETAIL
NO SCALE



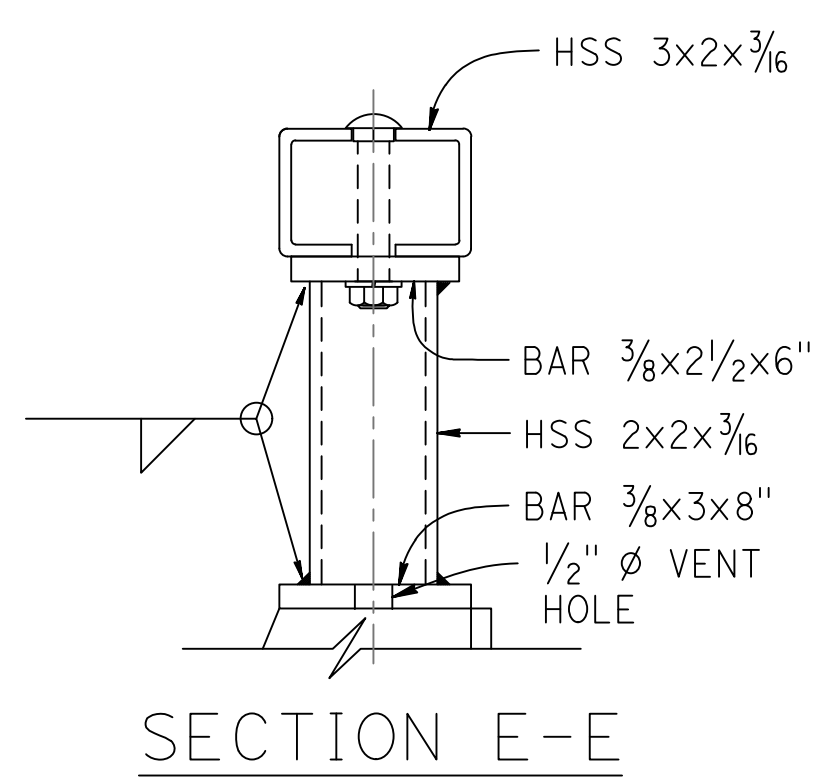
SECTION D-D
NO SCALE



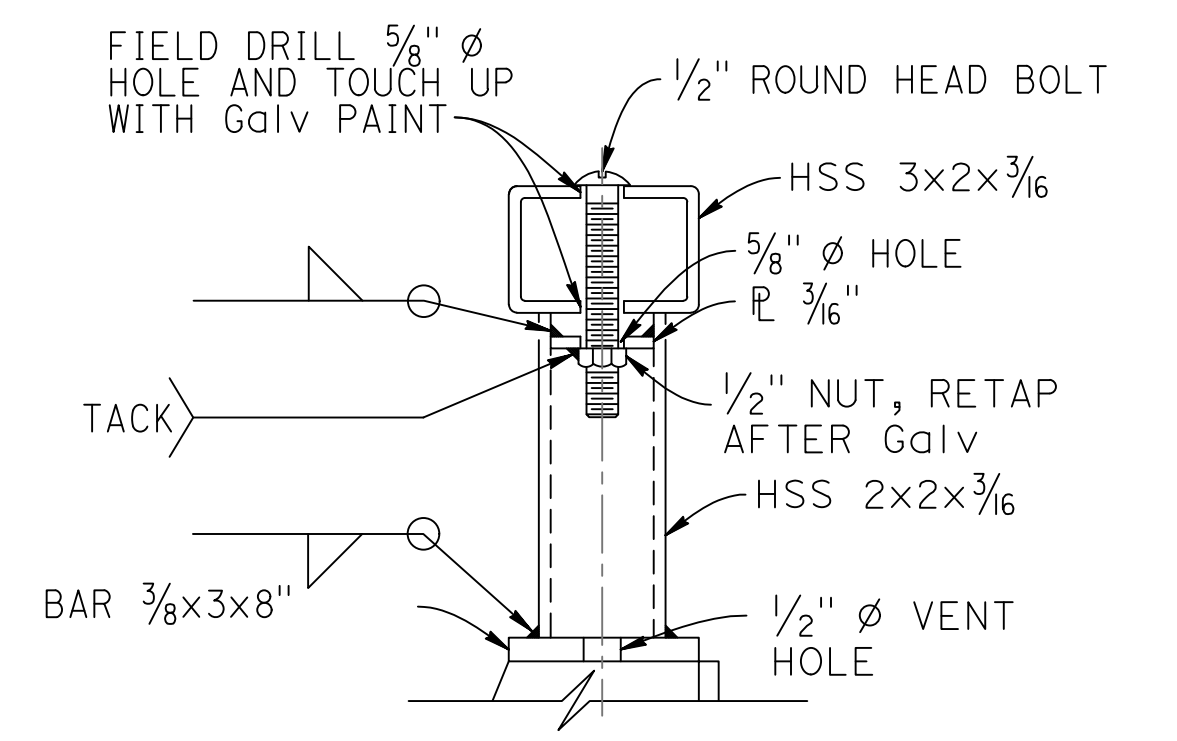
RAIL END CAP
NO SCALE
NOTE: For vehicular rail tube and bicycle railing tubes.



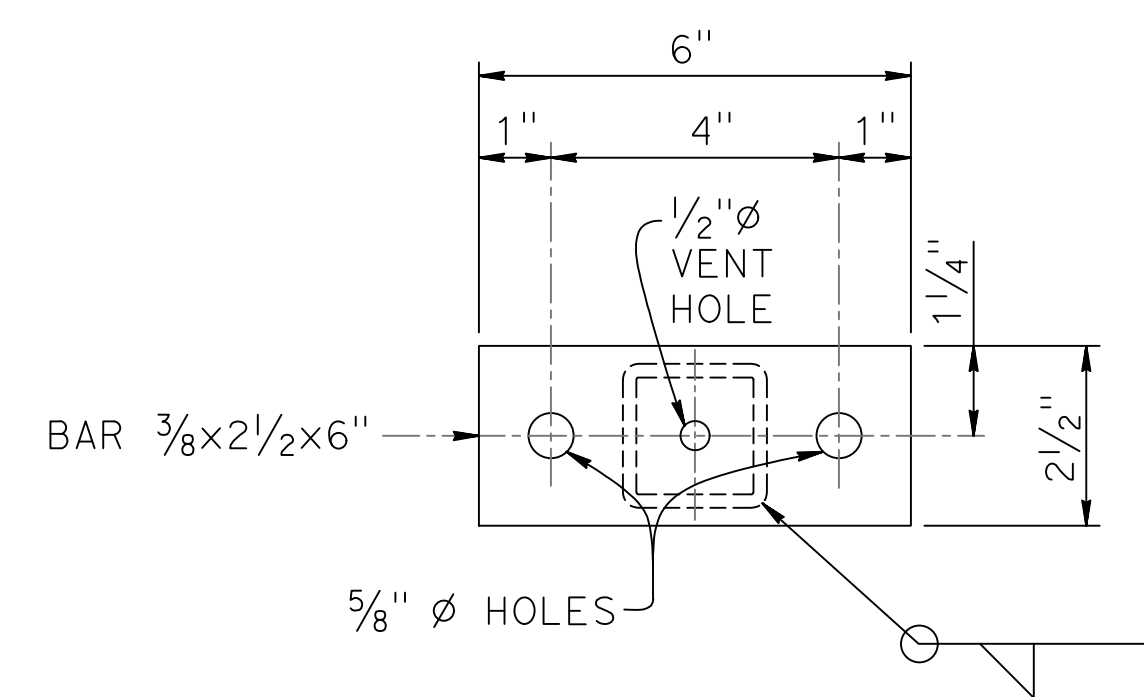
ELEVATION
NO SCALE



SECTION E-E
NO SCALE



SECTION E-E ALTERNATIVE
NO SCALE



SECTION F-F
TUBULAR BICYCLE RAILING CONNECTION DETAILS
NO SCALE

NOTE:
 1. For access controlled freeways and expressways where bicycle traffic is prohibited by signage on the on-ramps, the bicycle railing (includes bar 3/8x3x8" and above) may be omitted.

BRIDGE STANDARD DETAILS		
xs16-116-3 FILE NO.	JULY 2022 APPROVAL DATE	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California

DESIGN	BY	CHECKED
DETAILS	K. COOK-GUTERIEZ	G. GORDON
QUANTITIES		

PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0016	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 3
		POST MILES NA	

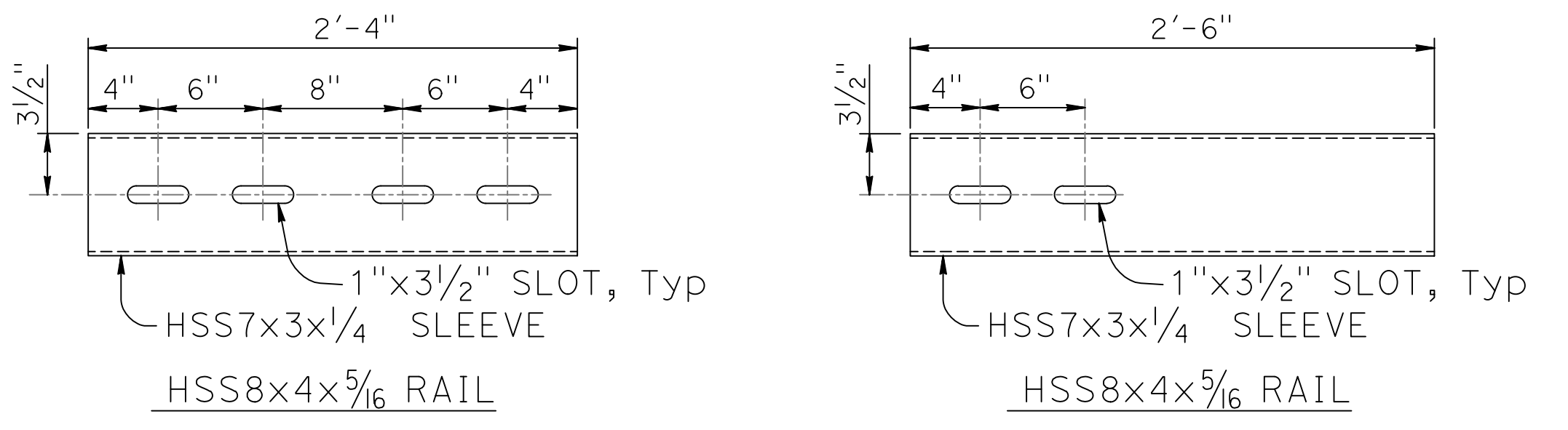
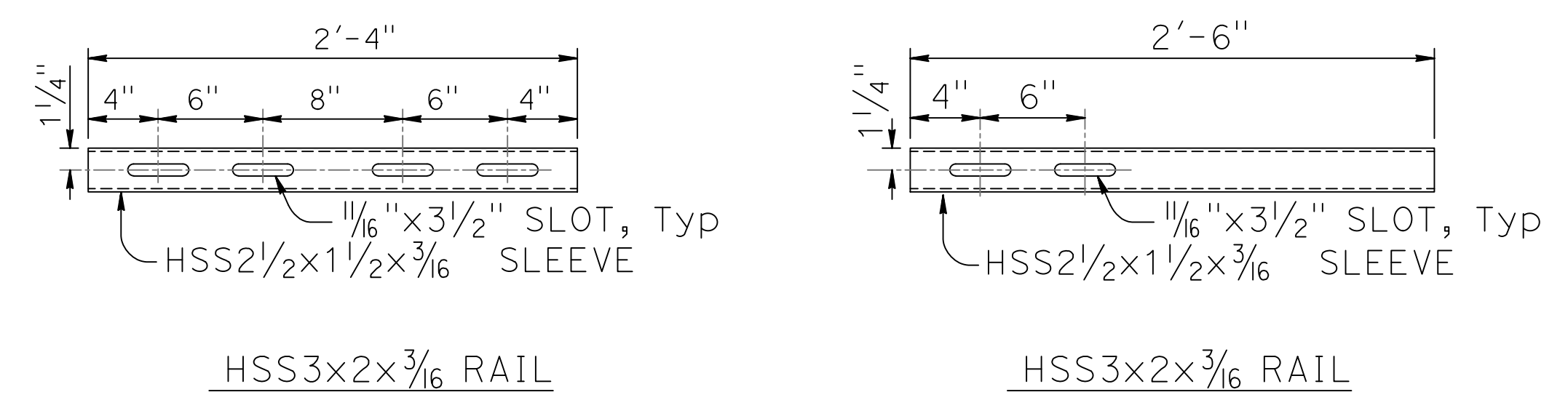
REVISION DATES	SHEET	OF
12/18/19 06/28/22 01/05/22	11	17

2022 STANDARD PLAN XS-16-116-3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	33	38

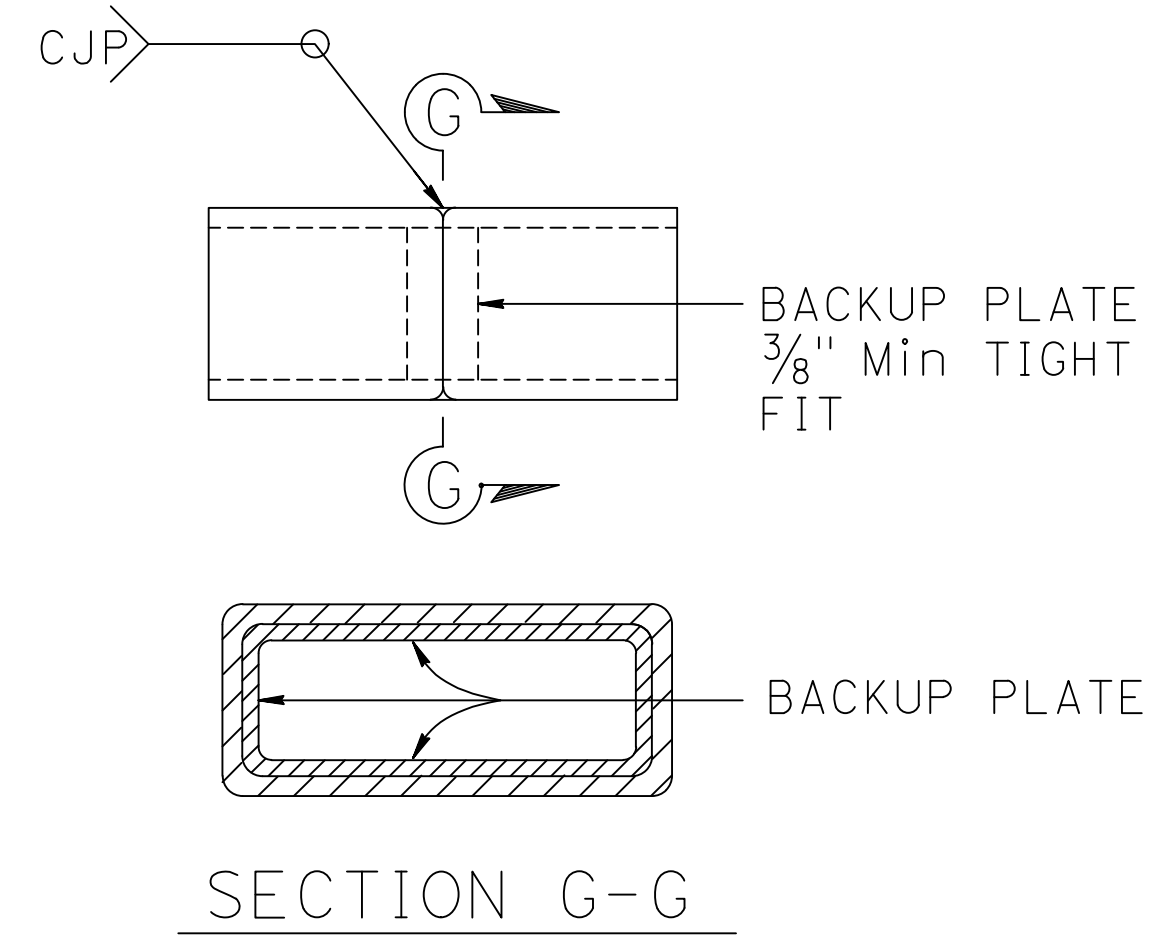
REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

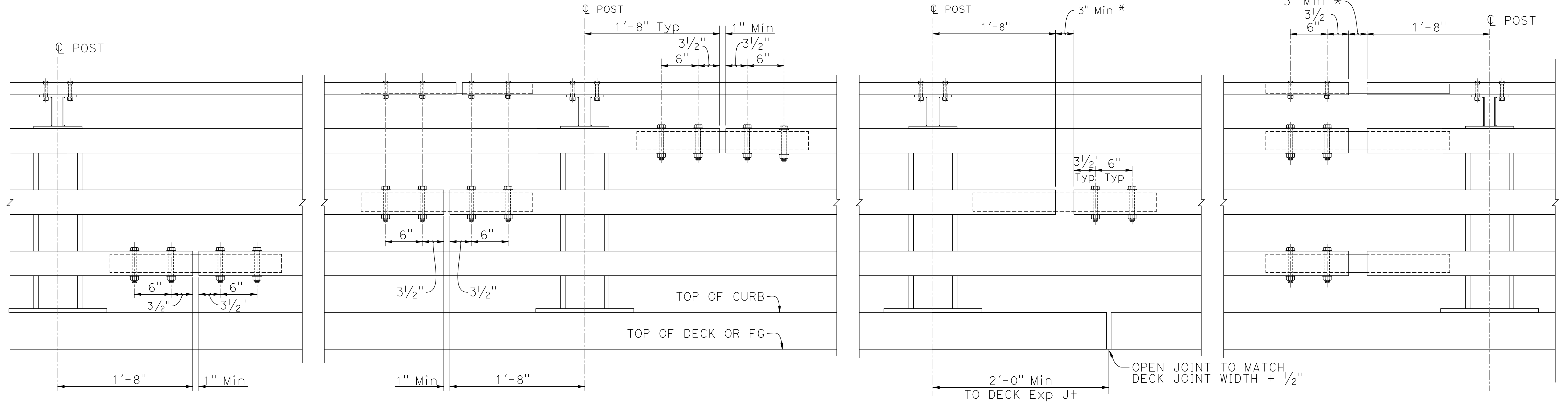


STANDARD SLEEVES
DETAILS
NO SCALE

EXPANSION SLEEVES
DETAILS
NO SCALE



- NOTES:
- HS bolts with nut and washers, snug tightened, and thread locking system.
 - Use 1/2" x 3/16 BOLTS (HSS3x2x3/16)
Use 3/4" x 5/16 BOLTS (HSS8x4x5/16)
 - Each rail length must be continuous over a minimum of two posts.
 - The fabricator must check that the tubular sleeve splices conform to the dimensions indicated to assure proper clearance.
 - Except for expansion splices, not more than one splice permitted per same side of post.



BRIDGE STANDARD DETAILS			DESIGN	BY	CHECKED	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO.	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 4
xs16-116-4	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California	DETAILS	K. COOK-GUTERIEZ	G. GORDON		11C0016	
FILE NO.	APPROVAL DATE		QUANTITIES				NA	

Refer to: <http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html>

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

DATE PLOTTED => 05/31/2023 10:55:30 AM
 USERNAME => KEVIN

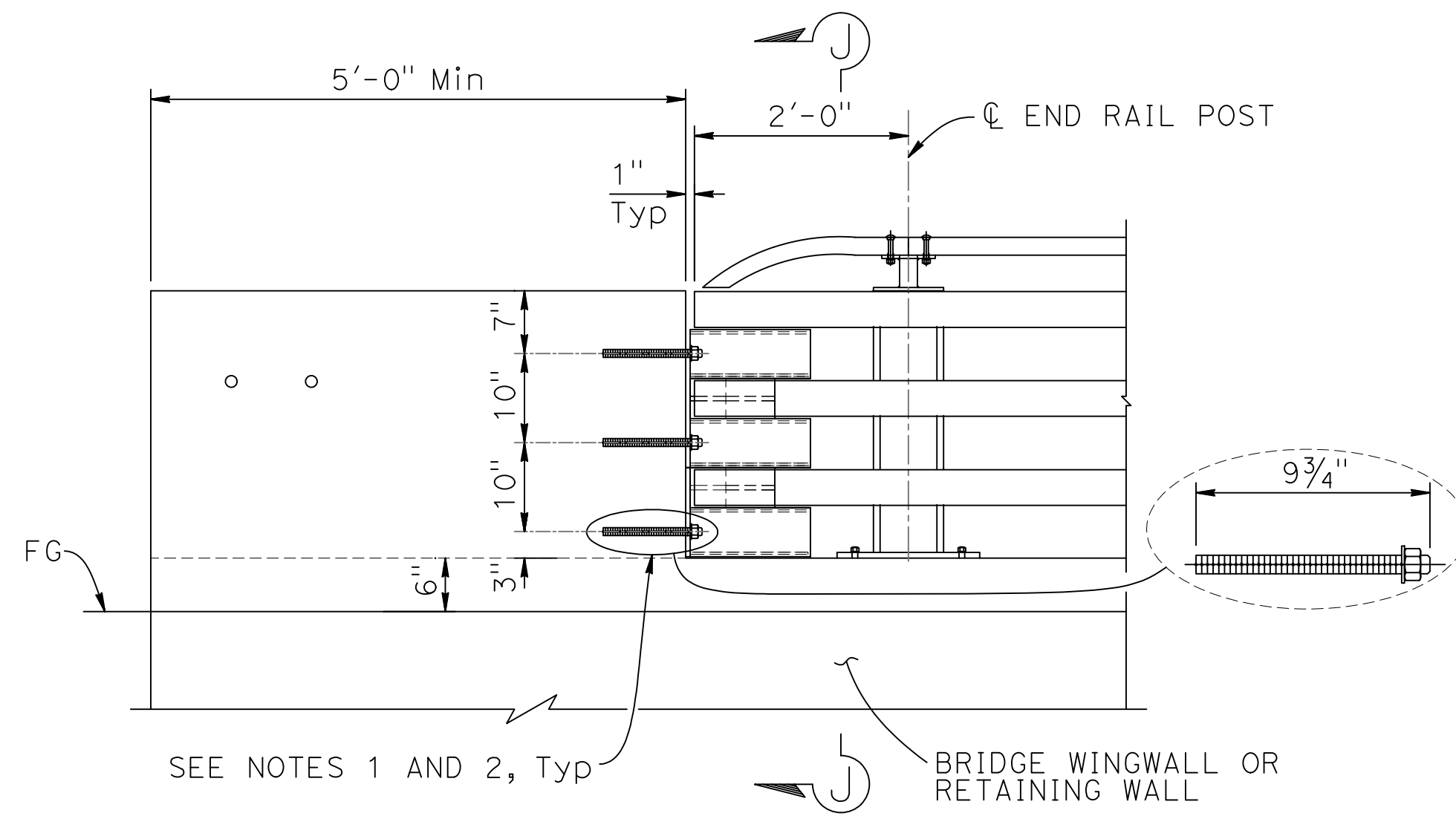
REVISION DATES: 12/21/19 06/20/22 01/05/22
 SHEET 12 OF 17

DISREGARD PRINTS BEARING EARLIER REVISION DATES

FILE => 11-0016-r-rspxs16-116-4

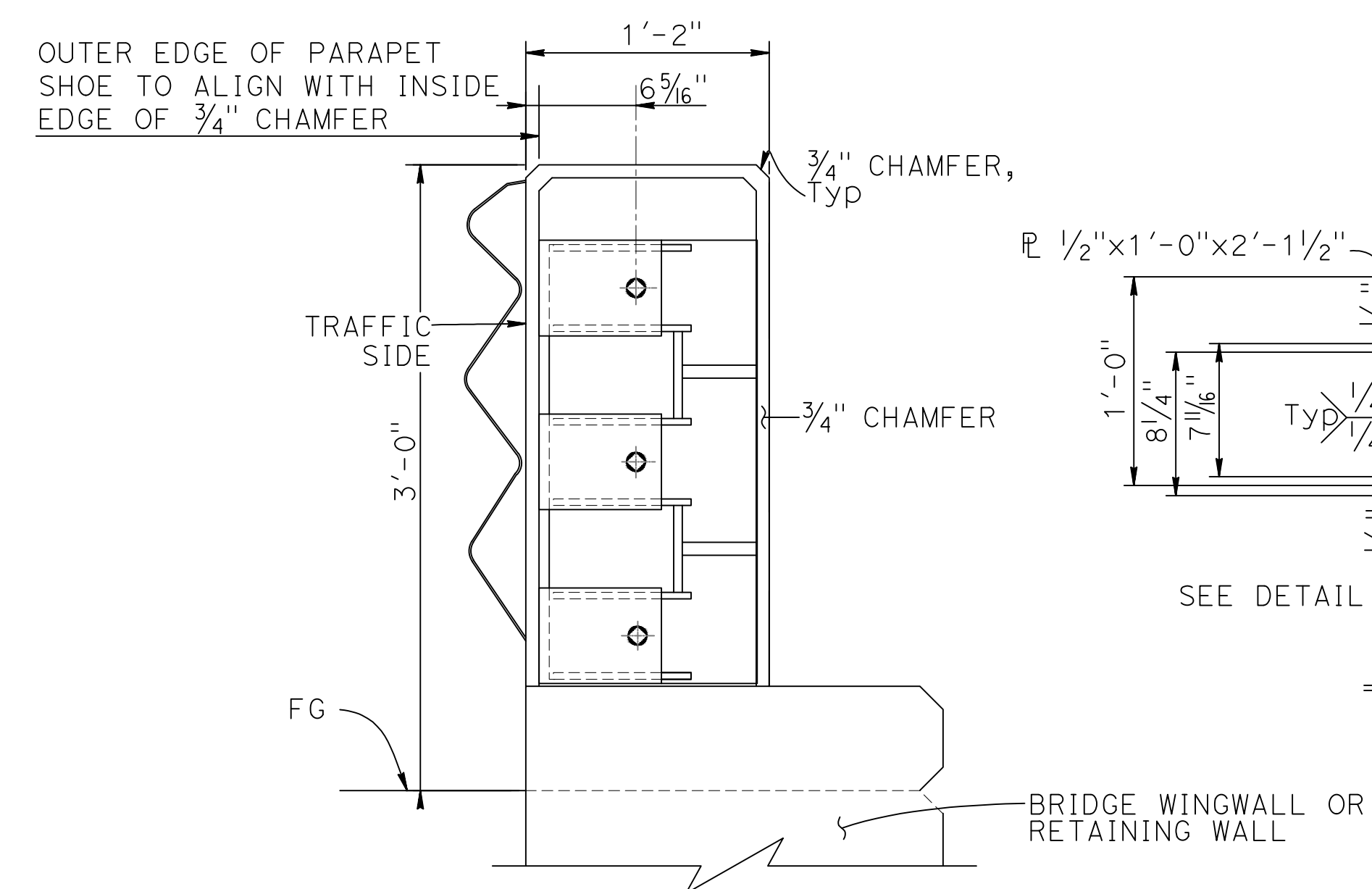
2022 STANDARD PLAN XS-16-116-4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	34	38
			DATE		
			05-31-23		
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
			May 31, 2023		
			REGISTERED PROFESSIONAL ENGINEER GARY M. GORDON No. 42176 Exp. 03-31-24 CIVIL STATE OF CALIFORNIA		



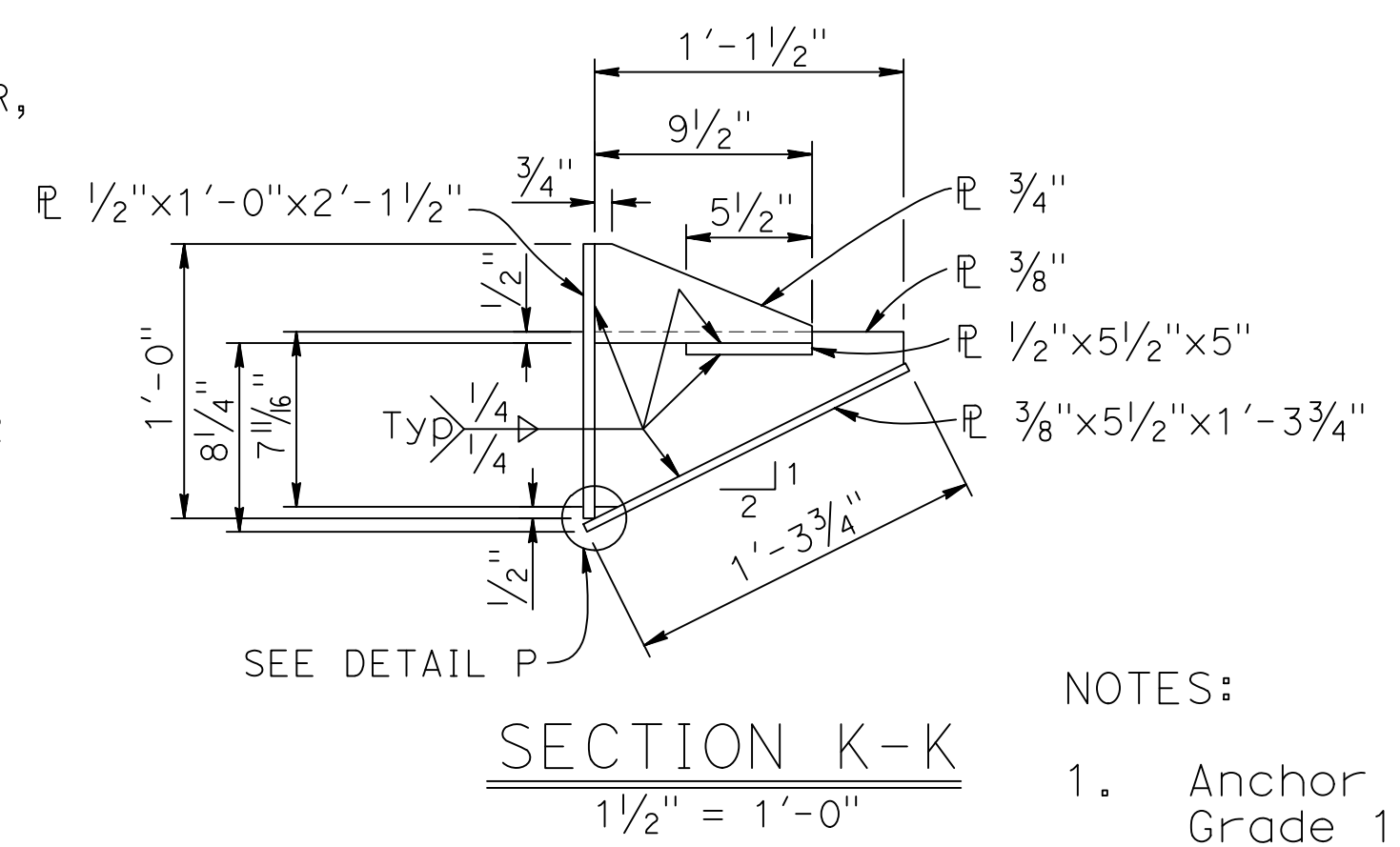
PARAPET SHOE AT DEPARTURE END BLOCK

NOTE: Parapet shoe connection to approach end block is similar.



SECTION J-J

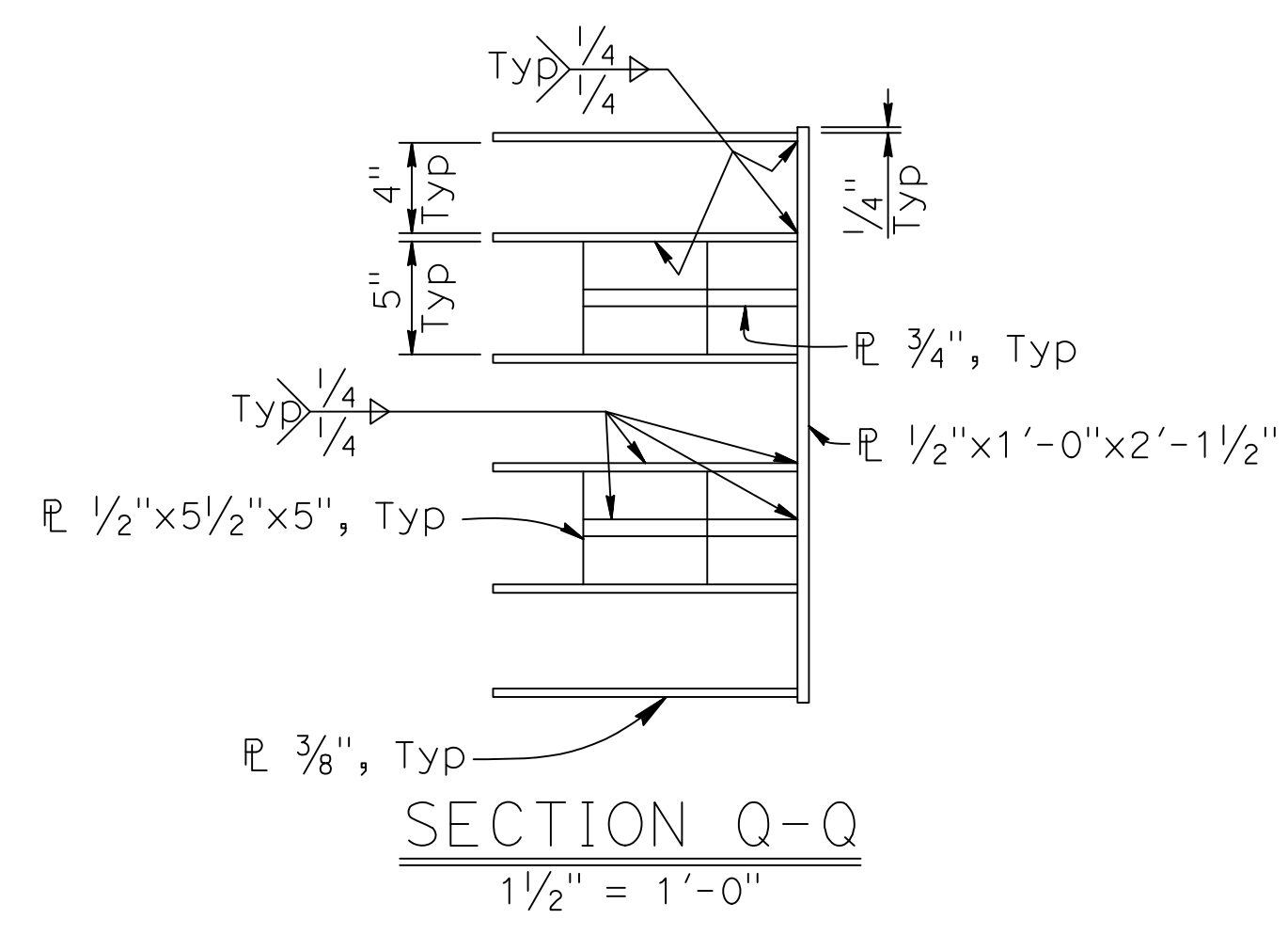
NOTE: Bridge railing not shown clarity.



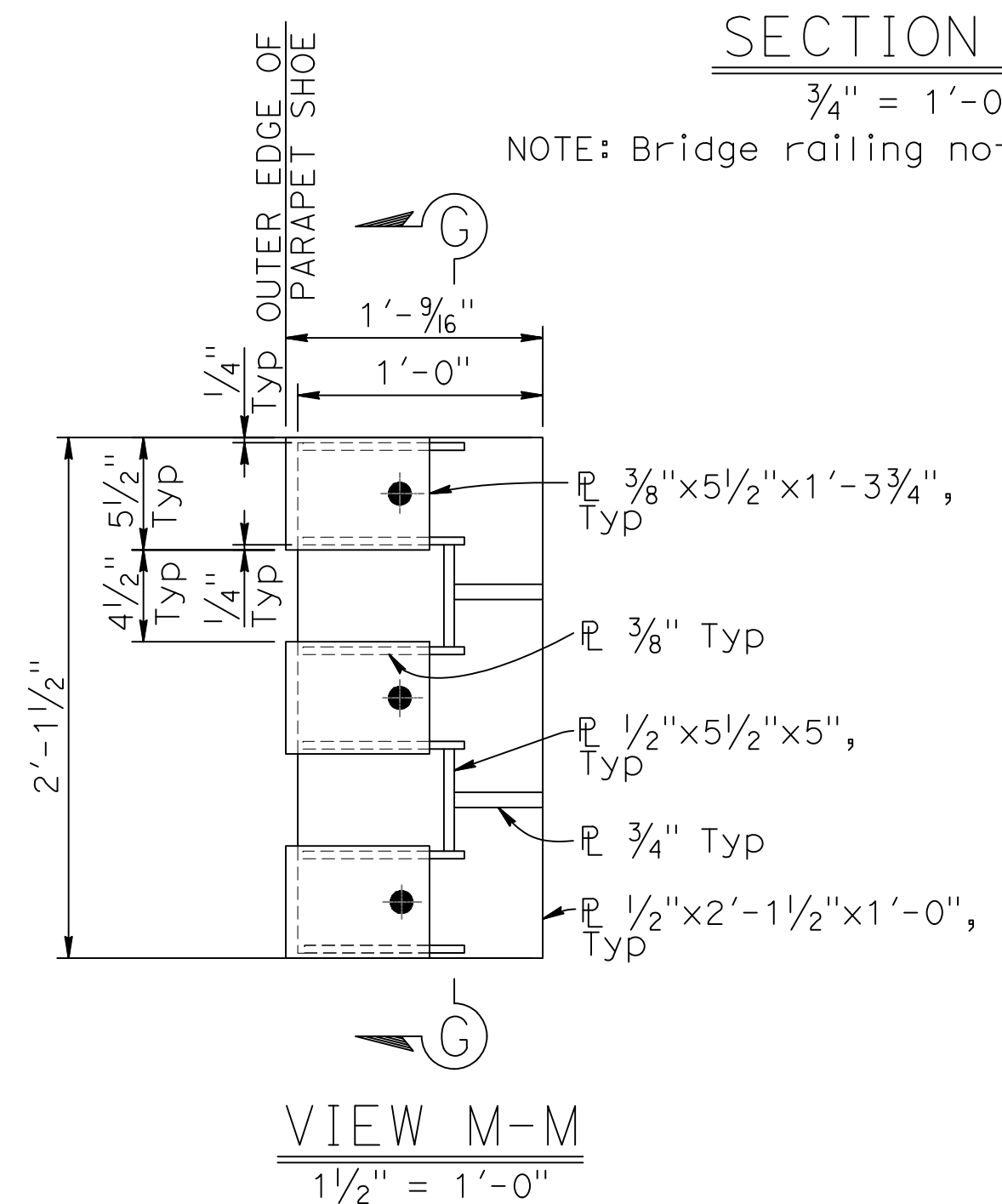
SECTION K-K

NOTES:

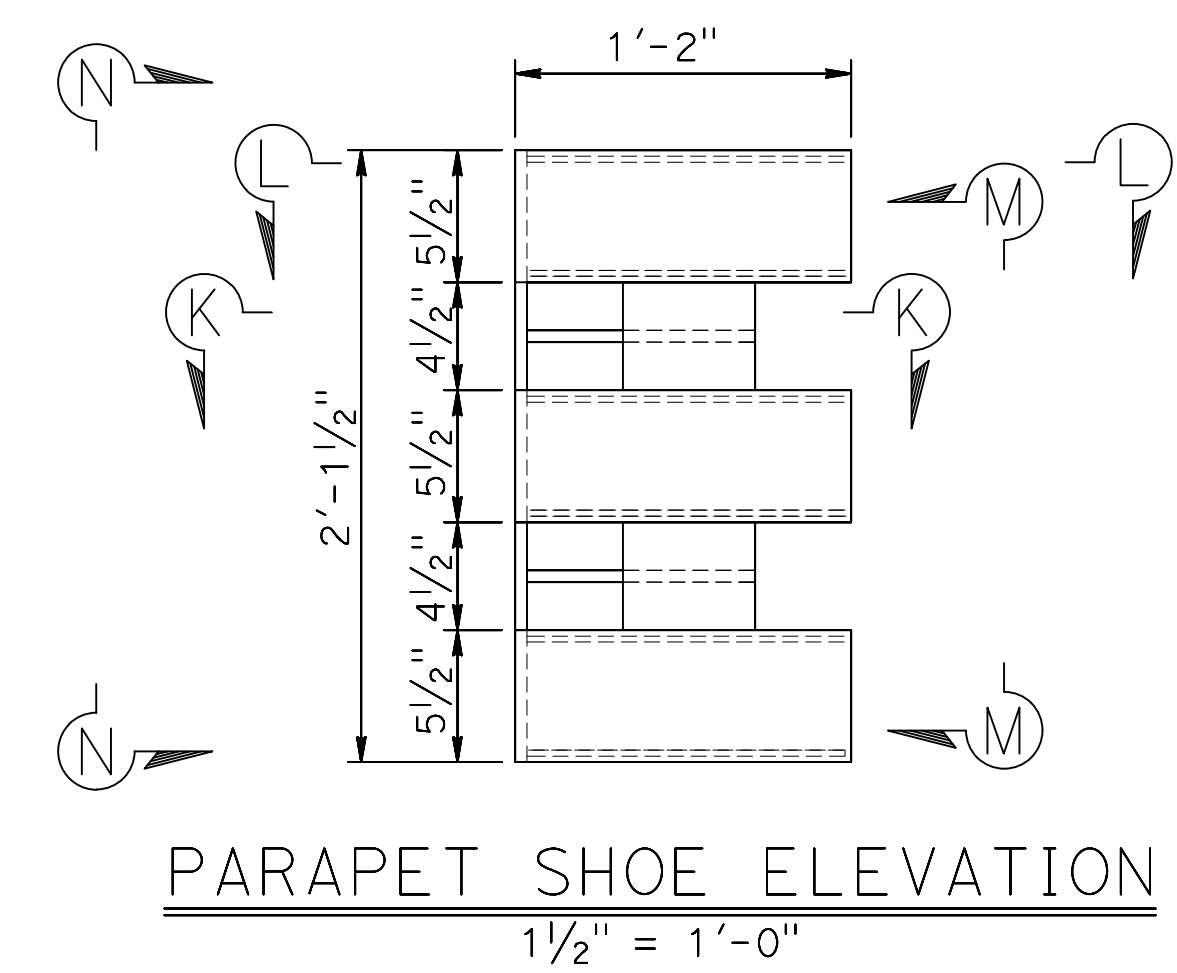
- Anchor bolts must be 7/8" Dia and ASTM F1554 Grade 105 fully threaded rods with heavy hex nut and one hardened washer (1 3/4" OD) each. Embed threaded rods 8" into concrete anchor block with DRILL AND BOND (CHEMICAL ADHESIVE) anchorage system.
- DRILL AND BOND (CHEMICAL ADHESIVE) anchorages is subjected to approval of Engineer. Installation procedure must comply with manufacture's instructions.



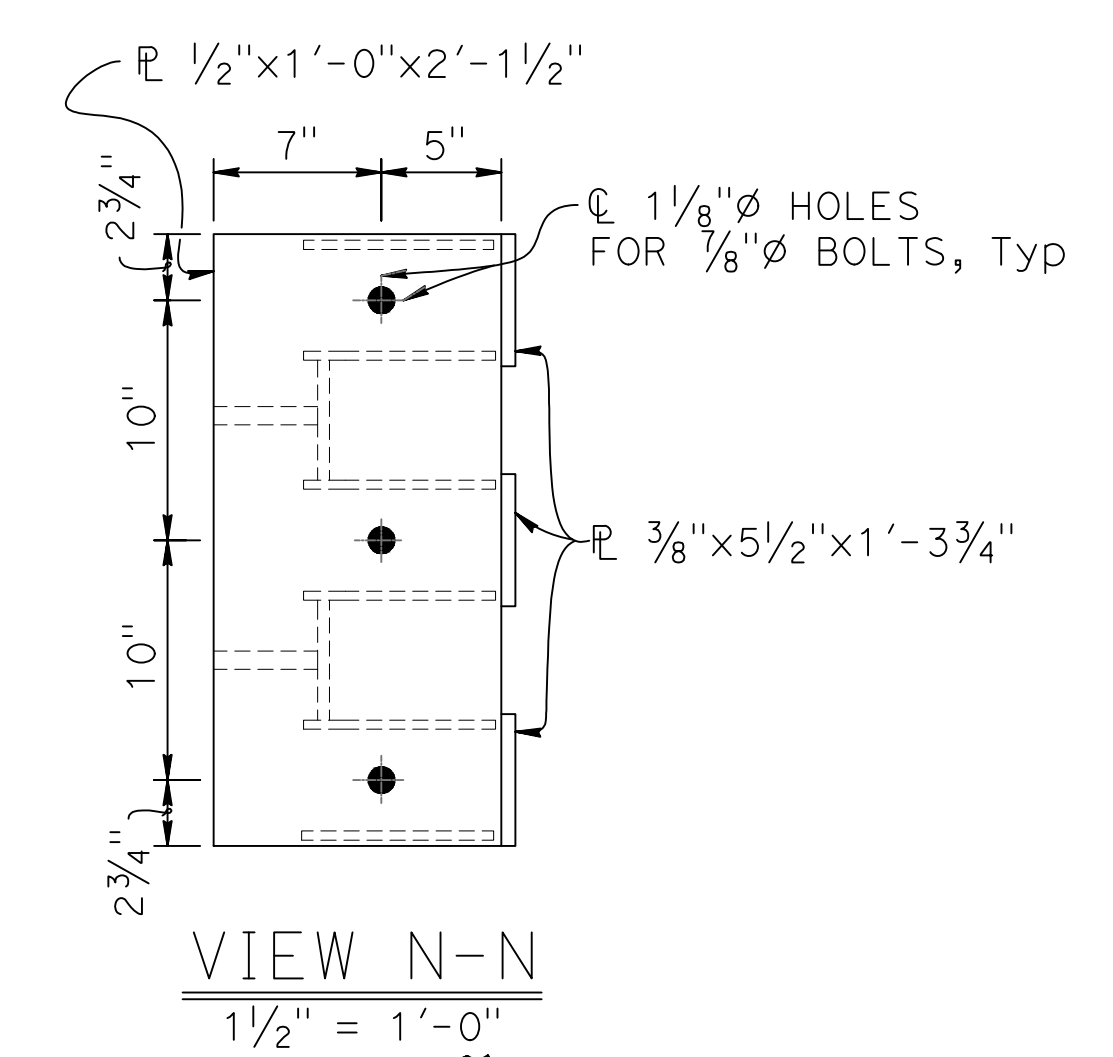
SECTION Q-Q



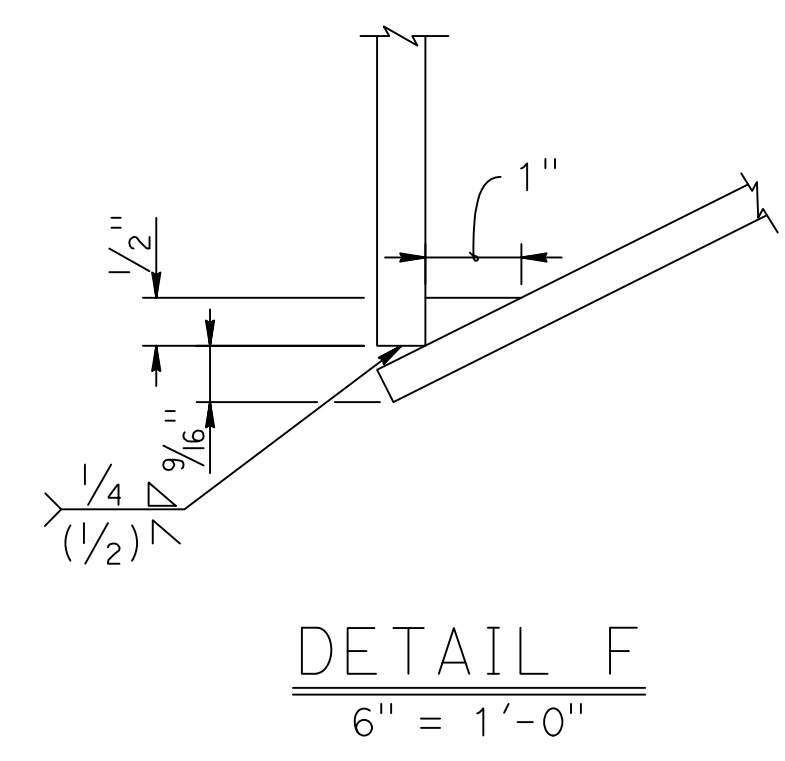
VIEW M-M



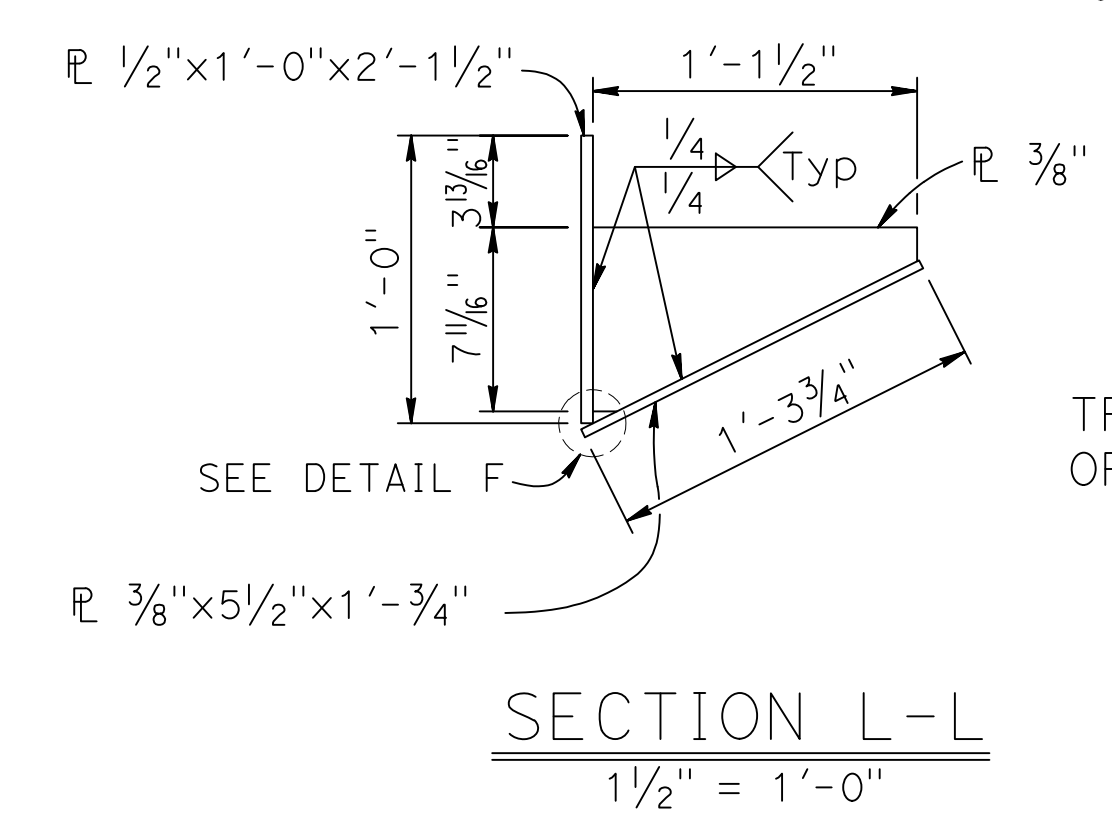
PARAPET SHOE ELEVATION



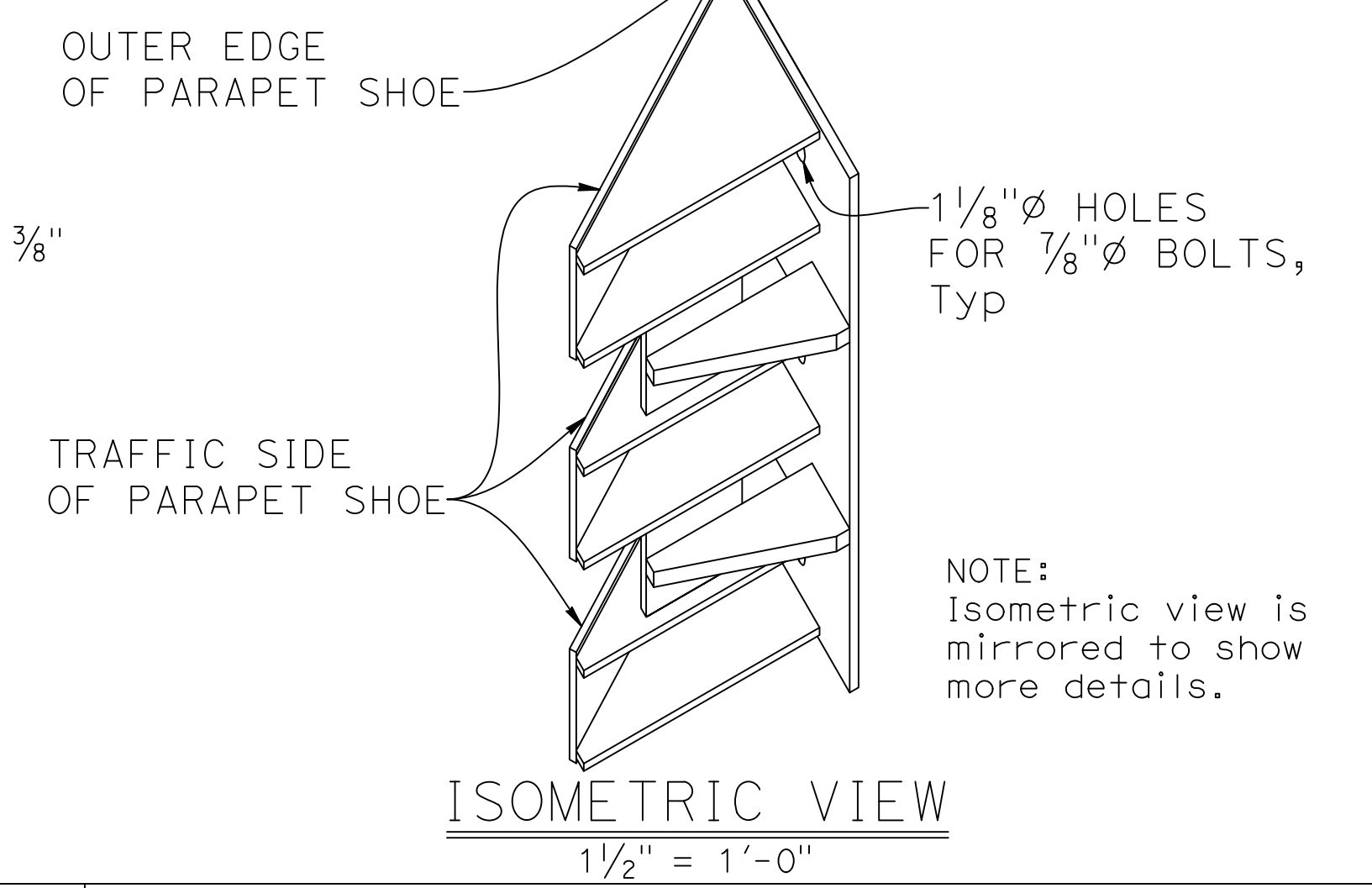
VIEW N-N



DETAIL F



SECTION L-L



ISOMETRIC VIEW

BRIDGE STANDARD DETAILS		
xs16-116-5	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California
FILE NO.	APPROVAL DATE	

DESIGN	BY	CHECKED
DETAILS	K. COOK-GUTERIEZ	G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR	G. GORDON	BRIDGE NO.	11C0016
COUNTY OF GLENN	PROJECT ENGINEER	POST MILES	NA
PUBLIC WORKS AGENCY			

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)			
CALIFORNIA ST-75 BRIDGE RAIL			
DETAILS No. 5			

2022 STANDARD PLAN XS-16-116-5

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	34	37

7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 ROSS KHIABANI
 No. GE2202
 Exp. 6/30/20
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806

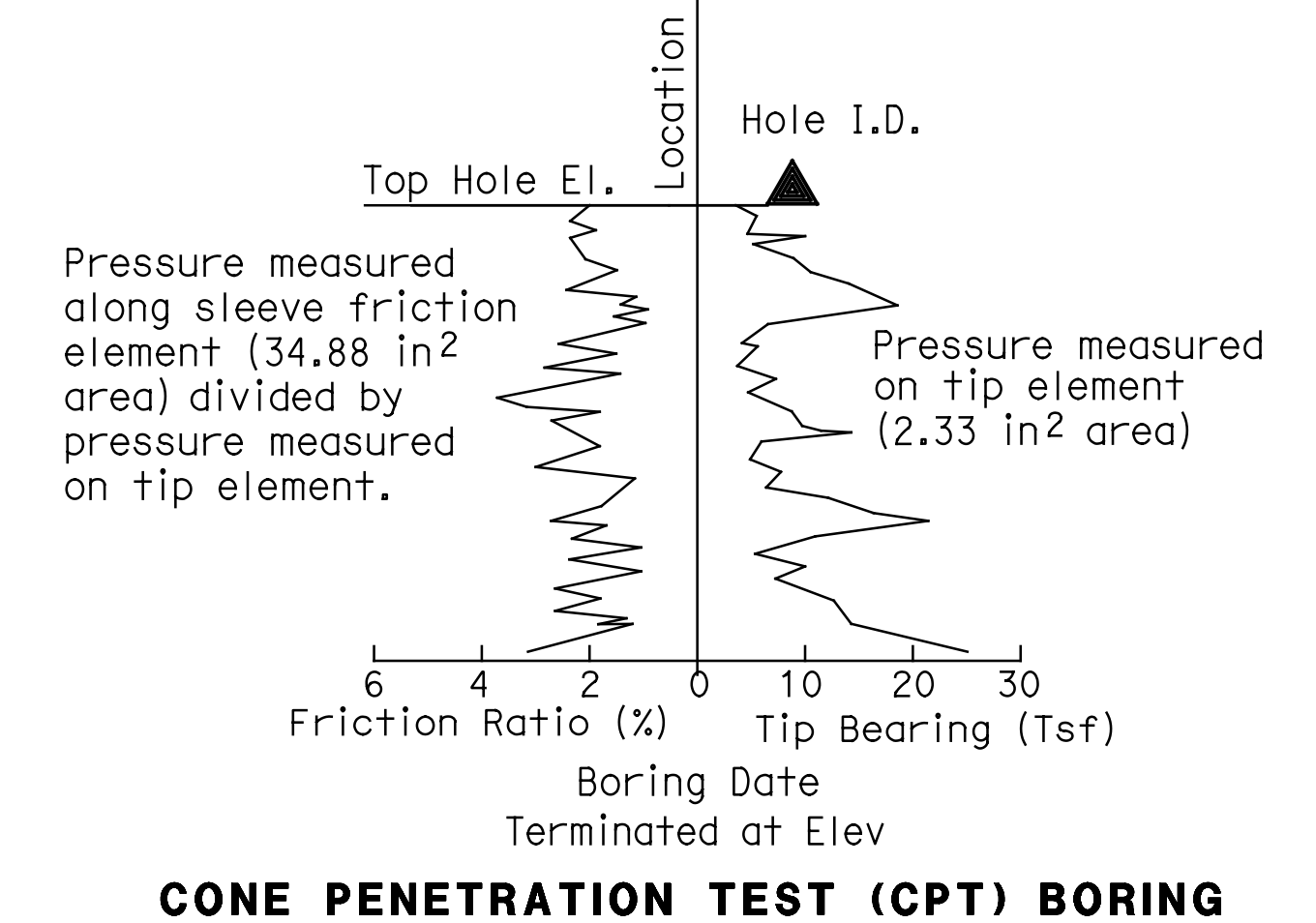
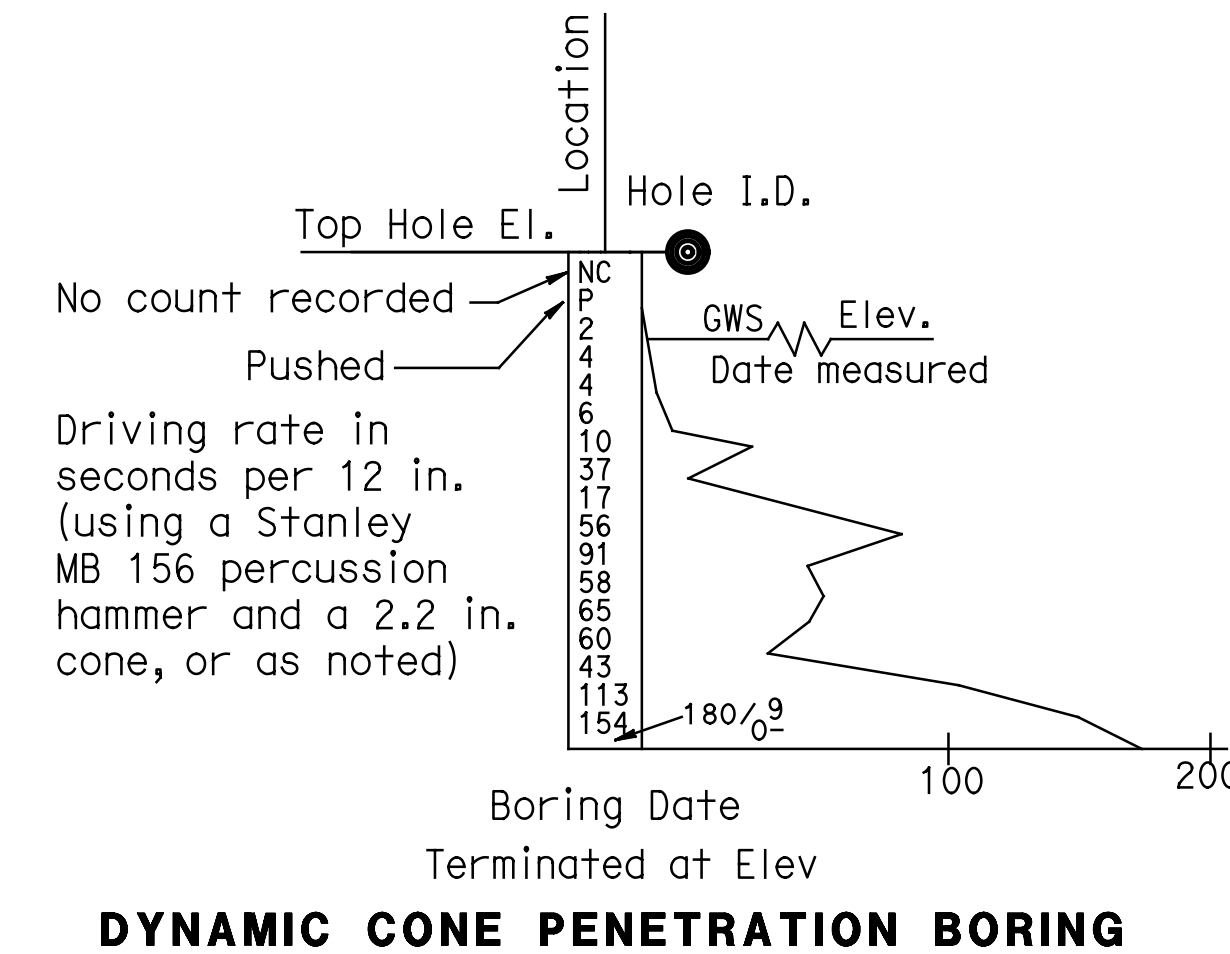
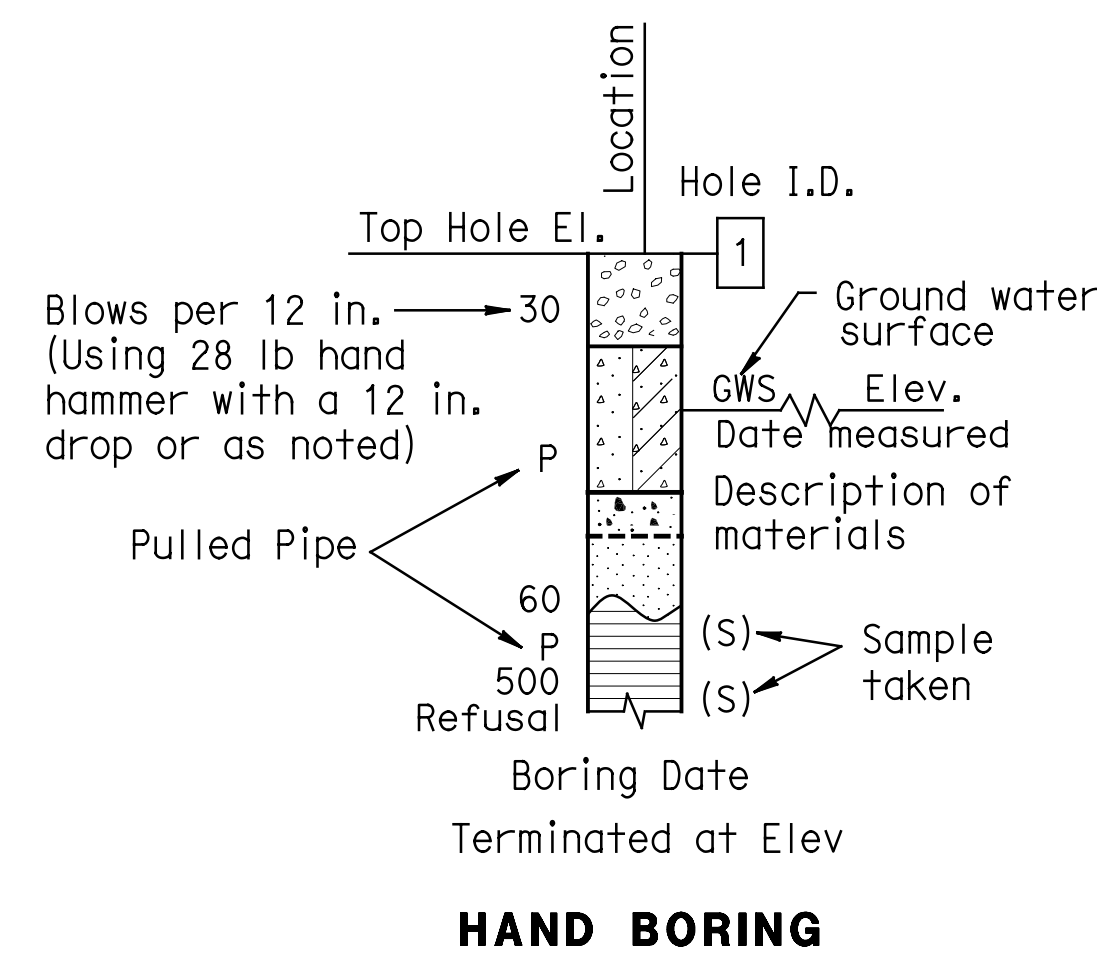
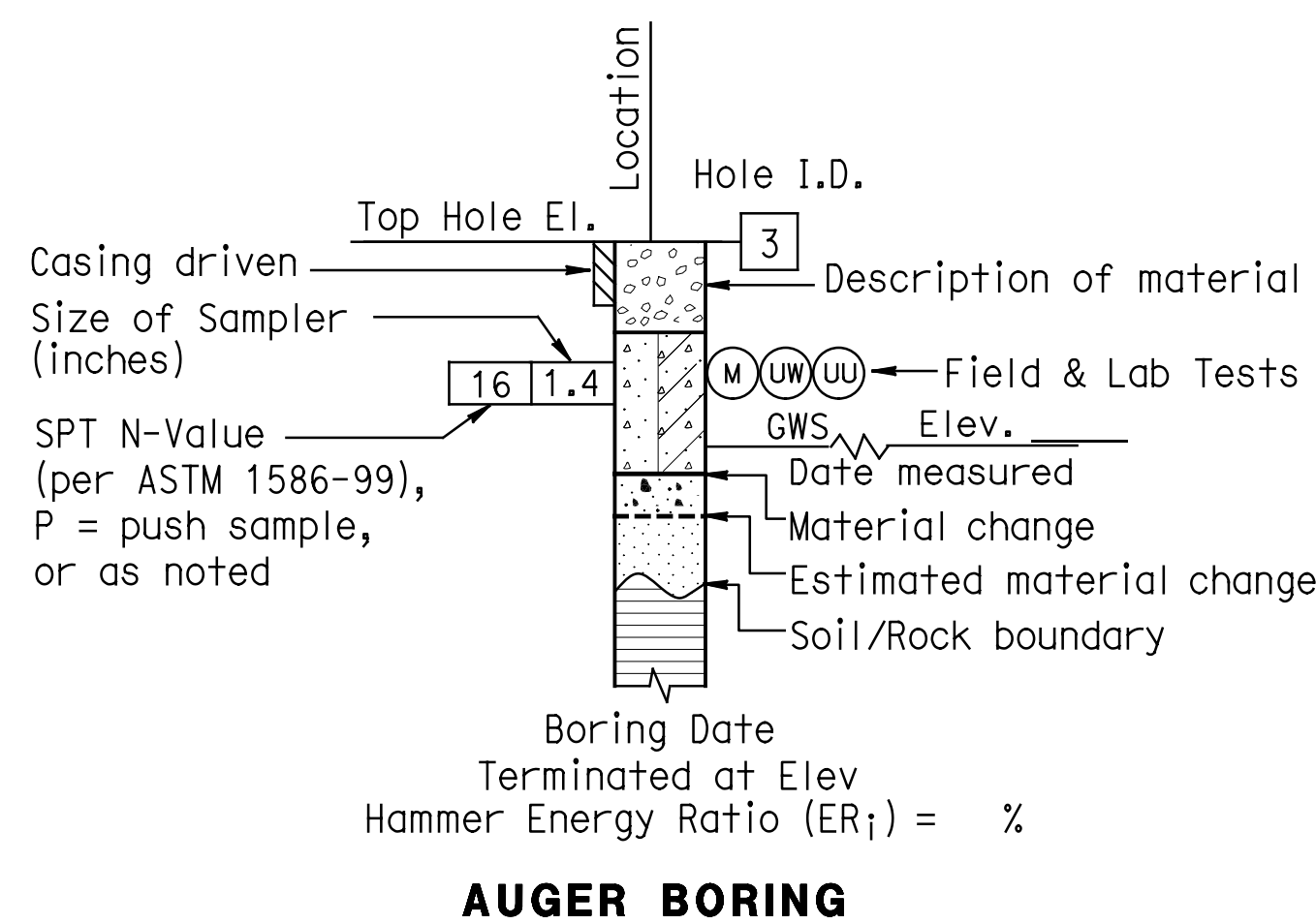
CEMENTATION	
Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

CONSISTENCY OF COHESIVE SOILS				
Description	Unconfined Compressive Strength (tsf)	Pocket Penetrometer Measurement (tsf)	Torvane Measurement (tsf)	Field Approximation
Very Soft	< 0.25	< 0.25	< 0.12	Easily penetrated several inches by fist
Soft	0.25 to 0.50	0.25 to 0.50	0.12 to 0.25	Easily penetrated several inches by thumb
Medium Stiff	0.50 to 1.0	0.50 to 1.0	0.25 to 0.50	Penetrated several inches by thumb with moderate effort
Stiff	1 to 2	1 to 2	0.50 to 1.0	Readily indented by thumb but penetrated only with great effort
Very Stiff	2 to 4	2 to 4	1.0 to 2.0	Readily indented by thumbnail
Hard	> 4.0	> 4.0	> 2.0	Indented by thumbnail with difficulty

BOREHOLE IDENTIFICATION		
Symbol	Hole Type	Description
	A	Auger Boring
	R	Rotary drilled boring
	P	Rotary percussion boring (air)
	R	Rotary drilled diamond core
	HD	Hand driven (1-inch soil tube)
	HA	Hand Auger
	D	Dynamic Cone Penetration Boring
	CPT	Cone Penetration Test (ASTM D 5778-95)
	O	Other

Note: Size in inches.

PLASTICITY OF FINE-GRAINED SOILS	
Description	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.



DRAWN BY	S. McCracken	B. KILLEEN
CHECKED BY	R. KHIABANI	FIELD INVESTIGATION BY:
		DATE: X

BRIDGE NO.	11C0016
POST MILES	NA
PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	
G. GORDON PROJECT ENGINEER	

HOWARD SLOUGH BRIDGE (REPLACE)	
SOIL LEGEND 1 OF 2	

USERNAME => Richard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:49:07 PM

GROUP SYMBOLS AND NAMES					
Graphic/Symbol	Group Names	Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
	GW	Well-graded GRAVEL		CL	Lean CLAY
		Well-graded GRAVEL with SAND			Lean CLAY with SAND
	GP	Poorly-graded GRAVEL		CL-ML	Lean CLAY with GRAVEL
		Poorly-graded GRAVEL with SAND			SANDY lean CLAY
	GW-GM	Well-graded GRAVEL with SILT		ML	SANDY lean CLAY with GRAVEL
		Well-graded GRAVEL with SILT and SAND			GRAVELLY lean CLAY
	GW-GC	Well-graded GRAVEL with CLAY (or SILTY CLAY)		OL	GRAVELLY lean CLAY with SAND
		Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)			SILTY CLAY
	GP-GM	Poorly-graded GRAVEL with SILT		OH	SILTY CLAY with SAND
		Poorly-graded GRAVEL with SILT and SAND			SILTY CLAY with GRAVEL
	GP-GC	Poorly-graded GRAVEL with CLAY (or SILTY CLAY)		MH	SANDY SILTY CLAY
		Poorly-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)			SANDY SILTY CLAY with GRAVEL
	GM	SILTY GRAVEL		CH	GRAVELLY SILTY CLAY
		SILTY GRAVEL with SAND			GRAVELLY SILTY CLAY with SAND
	GC	CLAYEY GRAVEL		OH	ORGANIC lean CLAY
		CLAYEY GRAVEL with SAND			ORGANIC lean CLAY with SAND
	GC-GM	SILTY, CLAYEY GRAVEL		OH	ORGANIC lean CLAY with GRAVEL
		SILTY, CLAYEY GRAVEL with SAND			SANDY ORGANIC lean CLAY
	SW	Well-graded SAND		OH	GRAVELLY ORGANIC lean CLAY
		Well-graded SAND with GRAVEL			GRAVELLY ORGANIC lean CLAY with SAND
	SP	Poorly-graded SAND		OH	ORGANIC silt
		Poorly-graded SAND with GRAVEL			ORGANIC silt with SAND
	SW-SM	Well-graded SAND with SILT		OH	ORGANIC silt with GRAVEL
		Well-graded SAND with SILT and GRAVEL			SANDY ORGANIC silt
	SW-SC	Well-graded SAND with CLAY (or SILTY CLAY)		OH	SANDY ORGANIC silt with GRAVEL
		Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)			GRAVELLY ORGANIC silt
	SP-SM	Poorly-graded SAND with SILT		OH	GRAVELLY ORGANIC silt with SAND
		Poorly-graded SAND with SILT and GRAVEL			ORGANIC fat CLAY
	SP-SC	Poorly-graded SAND with CLAY (or SILTY CLAY)		OH	ORGANIC fat CLAY with SAND
		Poorly-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)			ORGANIC fat CLAY with GRAVEL
	SM	SILTY SAND		OH	SANDY ORGANIC fat CLAY
		SILTY SAND with GRAVEL			SANDY ORGANIC fat CLAY with GRAVEL
	SC	CLAYEY SAND		OH	GRAVELLY ORGANIC fat CLAY
		CLAYEY SAND with GRAVEL			GRAVELLY ORGANIC fat CLAY with SAND
	SC-SM	SILTY, CLAYEY SAND		OH	ORGANIC elastic silt
		SILTY, CLAYEY SAND with GRAVEL			ORGANIC elastic silt with SAND
	PT	PEAT		OH/OH	ORGANIC elastic silt with GRAVEL
		COBBLES			SANDY ORGANIC elastic silt
		COBBLES and BOULDERS		OH/OH	GRAVELLY ORGANIC elastic silt
		BOULDERS			GRAVELLY ORGANIC elastic silt with SAND

FIELD AND LABORATORY TESTING

- (C) Collapse Potential (ASTM D 5333)
- (CL) Compaction Curve (CTM 216)
- (CP) Corrosivity Testing (CTM 643, CTM 422, CTM 417)
- (CR) Consolidated Undrained Triaxial (ASTM D 4767)
- (CU) Direct Shear (ASTM D 3080)
- (DS) Expansion Index (ASTM D 4829)
- (EI) Moisture Content (ASTM D 2216)
- (M) Organic Content-% (ASTM D 2974)
- (OC) Permeability (CTM 220)
- (P) Particle Size Analysis (ASTM D 422)
- (PA) Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89)
- (PI) Point Load Index (ASTM D 5731)
- (PL) Pressure Meter
- (PM) Passing # 200 (ASTM D 1140-00)
- (R) R-Value (CTM 301)
- (SE) Sand Equivalent (CTM 217)
- (SG) Specific Gravity (AASHTO T 100)
- (SL) Shrinkage Limit (ASTM D 427)
- (SW) Swell Potential (ASTM D 4546)
- (TV) Pocket Torvane
- (UC) Unconfined Compression-Soil (ASTM D 2166)
- (UC) Unconfined Compression-Rock (ASTM D 2938)
- (UU) Unconsolidated Undrained Triaxial (ASTM D 2850)
- (UW) Unit Weight (ASTM D 4767)
- (VS) Vane Shear (AASHTO T 223)

7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
 ROSS KHIABANI
 No. GE2202
 Exp. 6/30/20
 STATE OF CALIFORNIA
 PLANS APPROVAL DATE
 Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806

APPARENT DENSITY OF COHESIONLESS SOILS	
Description	SPT N ₆₀ (Blows / 12 in.)
Very Loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 31
Dense	30 - 50
Very Dense	> 50

MOISTURE	
Description	Criteria
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

PERCENT OR PROPORTION OF SOILS	
Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5% - 10%
Little	15% - 25%
Some	30% - 45%
Mostly	50% - 100%

PARTICLE SIZE		
Description	Size	
Boulder	> 12"	
Cobble	3" to 12"	
Gravel	Coarse	3/4" to 3"
	Fine	No. 4 to 3/4"
Sand	Coarse	No. 10 to No. 4
	Medium	No. 40 to No. 10
	Fine	No. 200 to No. 40
Silt and Clay	Less than 1/300	

DRAWN BY: S. McCracken
 CHECKED BY: R. Khiabani
 B. KILLEEN
 FIELD INVESTIGATION BY:
 DATE: X

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER
 BRIDGE NO. 11C0016
 POST MILES NA

HOWARD SLOUGH BRIDGE (REPLACE)
SOIL LEGEND 2 OF 2

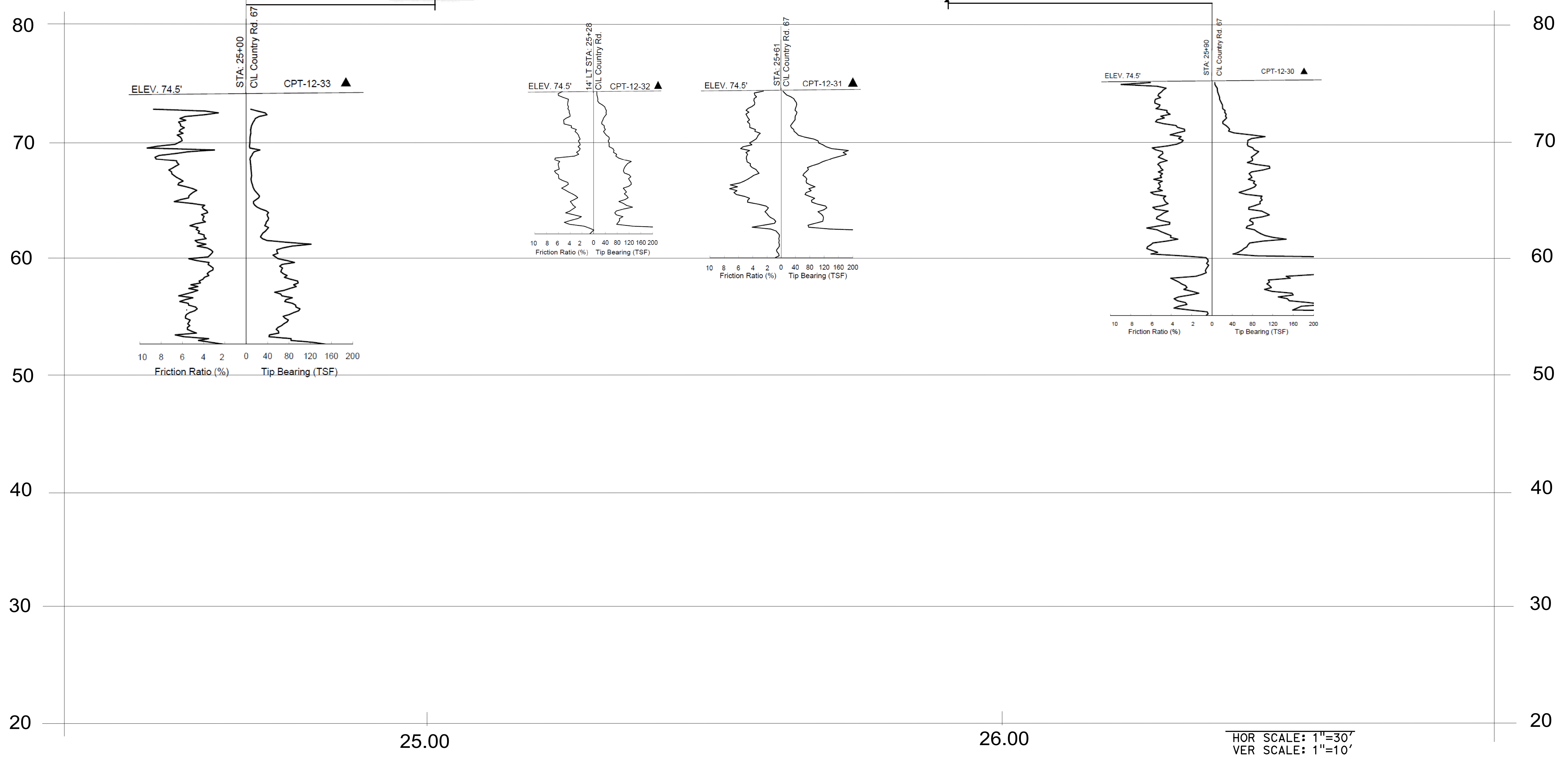
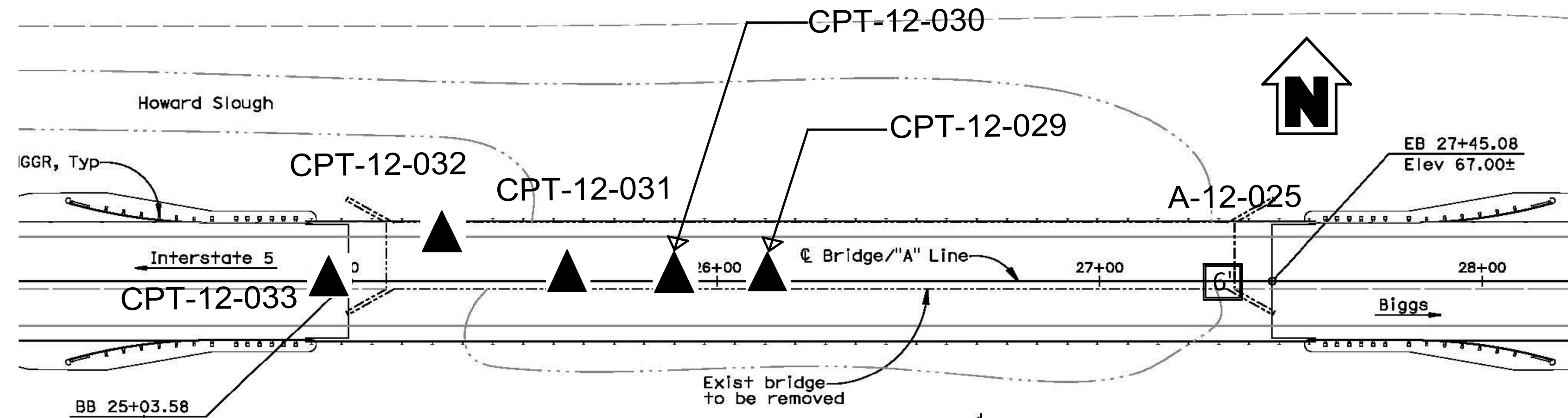
BENCH MARK

DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
Horizontal Datum is NAD83
Vertical Datum is NAVD88

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	36	37

ROSS KHIABANI 7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 No. GE2202
 Exp. 6/30/20
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806



25.00

26.00

HOR SCALE: 1"=30'
 VER SCALE: 1"=10'

DRAWN BY	S. McCracken	B. KILLEEN
CHECKED BY	R. KHIABANI	FIELD INVESTIGATION BY:
		DATE: X

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER

BRIDGE NO.	11C0016
POST MILES	NA

HOWARD SLOUGH BRIDGE (REPLACE)
LOG OF TEST BORINGS 1 OF 2



REVISION DATES	SHEET	OF
10/12/12	15	16

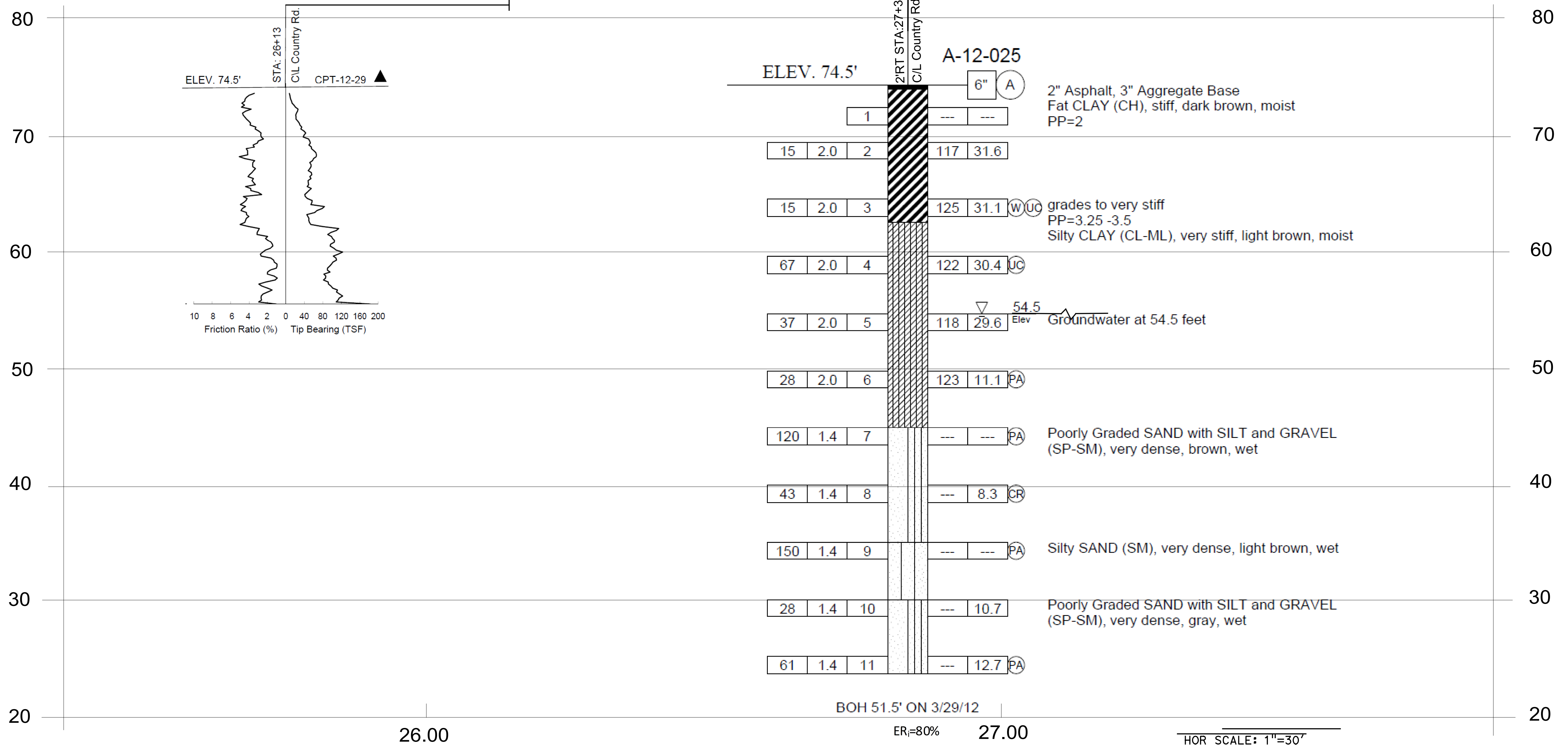
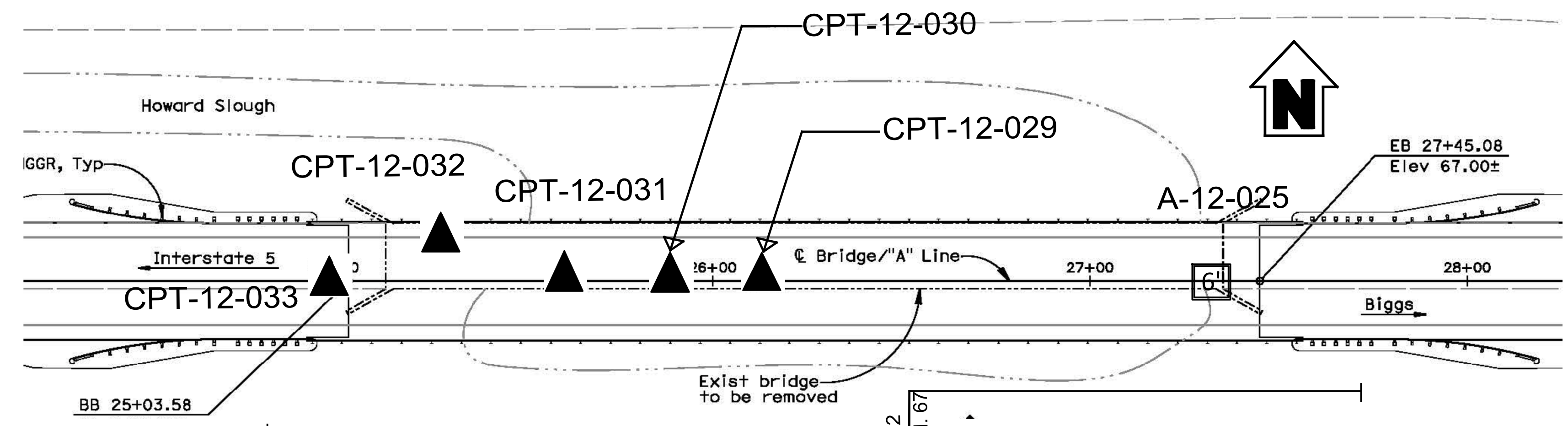
BENCH MARK

DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
Horizontal Datum is NAD83
Vertical Datum is NAVD88

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	37	37

ROSS KHIABANI 7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 No. GE2202
 Exp. 6/30/20
 STATE OF CALIFORNIA

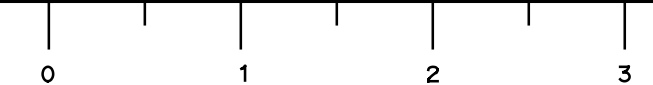
Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806



Friction Ratio (%) Tip Bearing (TSF)

DRAWN BY S. McCracken	B. KILLEEN FIELD INVESTIGATION BY: DATE: X	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0016 POST MILES NA	HOWARD SLOUGH BRIDGE (REPLACE) LOG OF TEST BORINGS 2 OF 2
--------------------------	--	---	-------------------------------	---	--

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 16 OF 16
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USERNAME => richard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:49:25 PM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	1	33



INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-4	TYPICAL CROSS SECTIONS
5-6	LAYOUTS
7	CONSTRUCTION DETAILS
8-9	TEMPORARY WATER POLLUTION/EROSION CONTROL PLANS
10	CONSTRUCTION AREA SIGNS PLAN
11	DETOUR PLAN
12	PAVEMENT DELINEATION AND SIGN PLAN
13	SUMMARY OF QUANTITIES
14-18	REVISED STANDARD PLANS

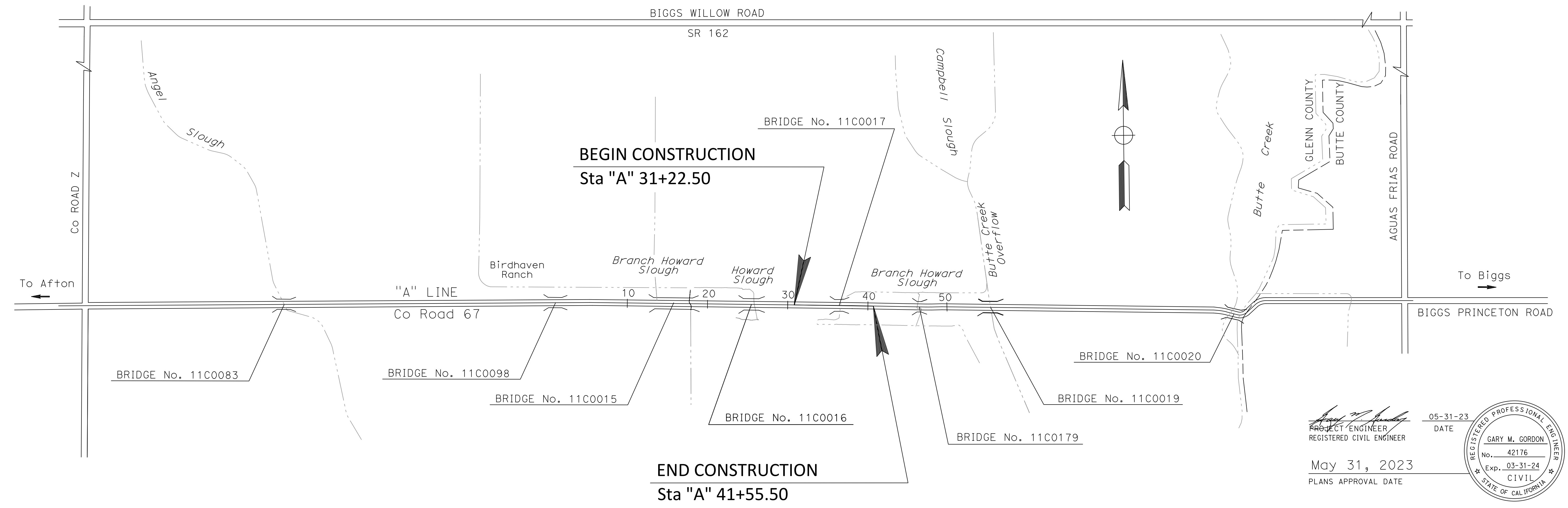
STATE OF CALIFORNIA
COUNTY OF GLENN
PUBLIC WORKS AGENCY


PROJECT PLANS FOR CONSTRUCTION ON
COUNTY ROAD 67
BRIDGE REPLACEMENT AT BRANCH HOWARD SLOUGH
ON COUNTY ROAD 67
FEDERAL AID PROJECT BRLO-5911 (049)
STATE BRIDGE No.11C0017

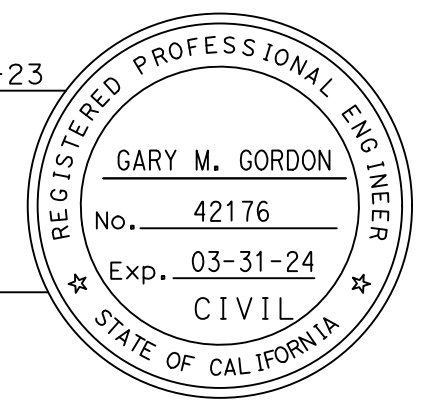
STRUCTURES
19-33 STRUCTURE PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2022





 PROJECT ENGINEER
 REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE



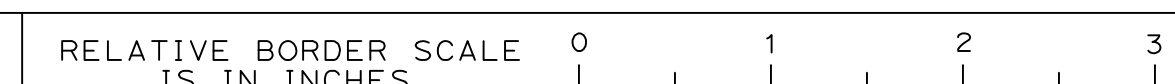
THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

COUNTY OF GLENN:


 Gary M. Gordon, PE
 County Engineer

05-31-23
 DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001
 COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



USERNAME = KEVIN
DGN FILE = 03-101784aa001

DATE PLOTTED = 5/31/2023 10:10:34 AM
 TIME PLOTTED = 10:10:34 AM
 LAST REVISION = 05-31-23

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. PLACE GEOSYNTHETIC REINFORCED EMBANKMENT WHERE SLOPES ARE STEEPER THAN 2:1. PLACE IN TWO FOOT MAXIMUM LIFTS.

STRUCTURAL SECTION NOTES:

- 1 Prop. SECTION
6.25" HMA TYPE A
23.5" CI 2 AB
- 2 EXISTING SECTION VARIES

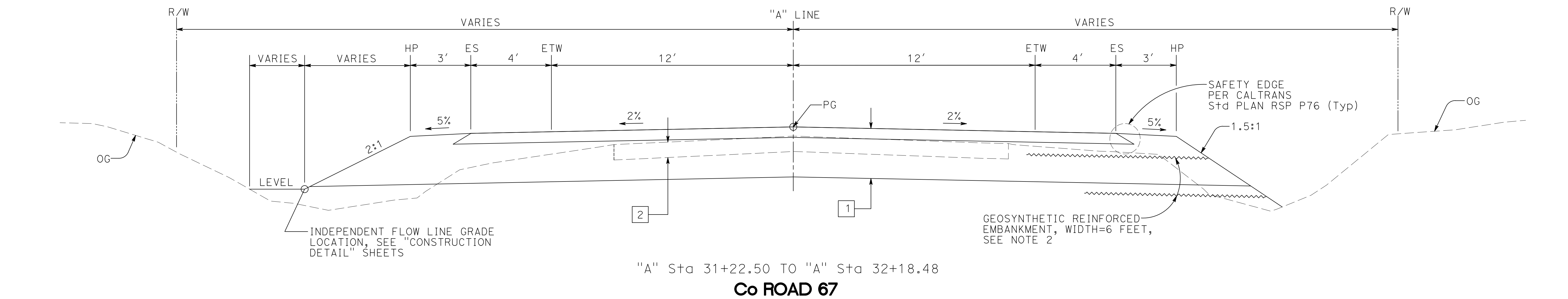
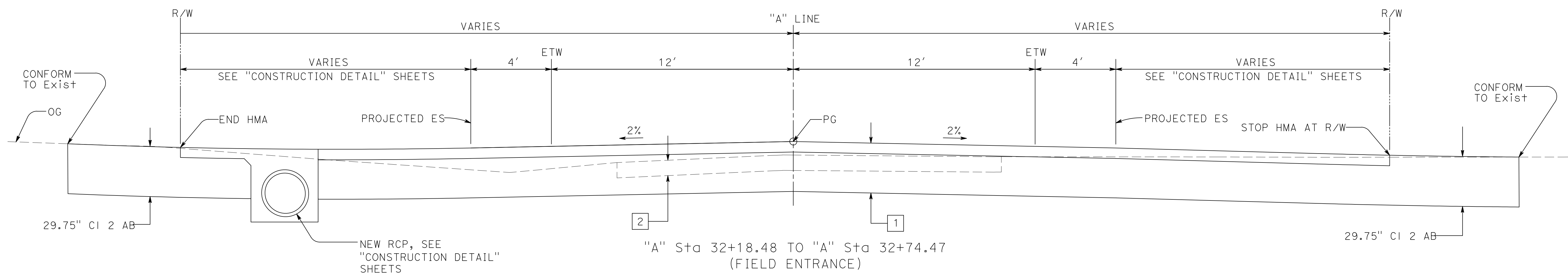
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	2	33

05-31-23
 REGISTERED CIVIL ENGINEER DATE
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

PROJECT ENGINEER GARY M. GORDON
 CALCULATED-DESIGNED BY GARY M. GORDON
 CHECKED BY G. GORDON
 REVISED BY R. UHLMANN
 DATE REVISED 05-31-23
 KCG



TYPICAL CROSS SECTION X-1
 NO SCALE



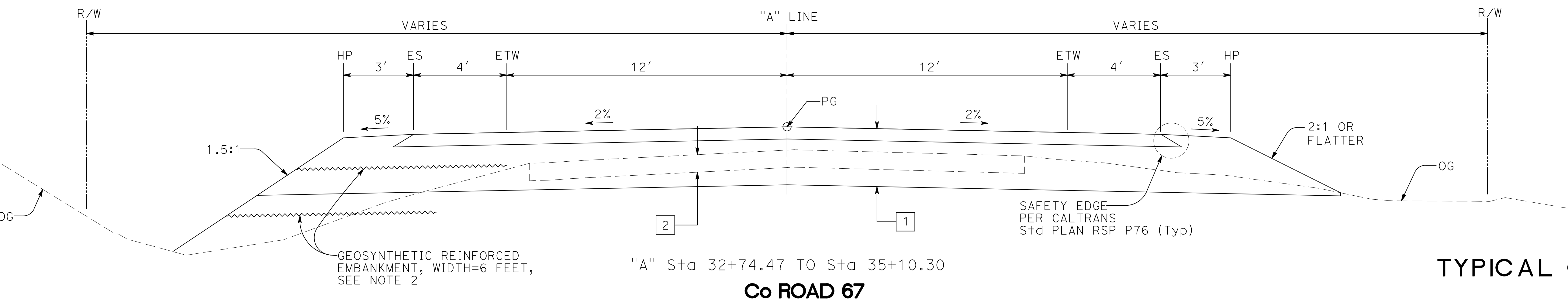
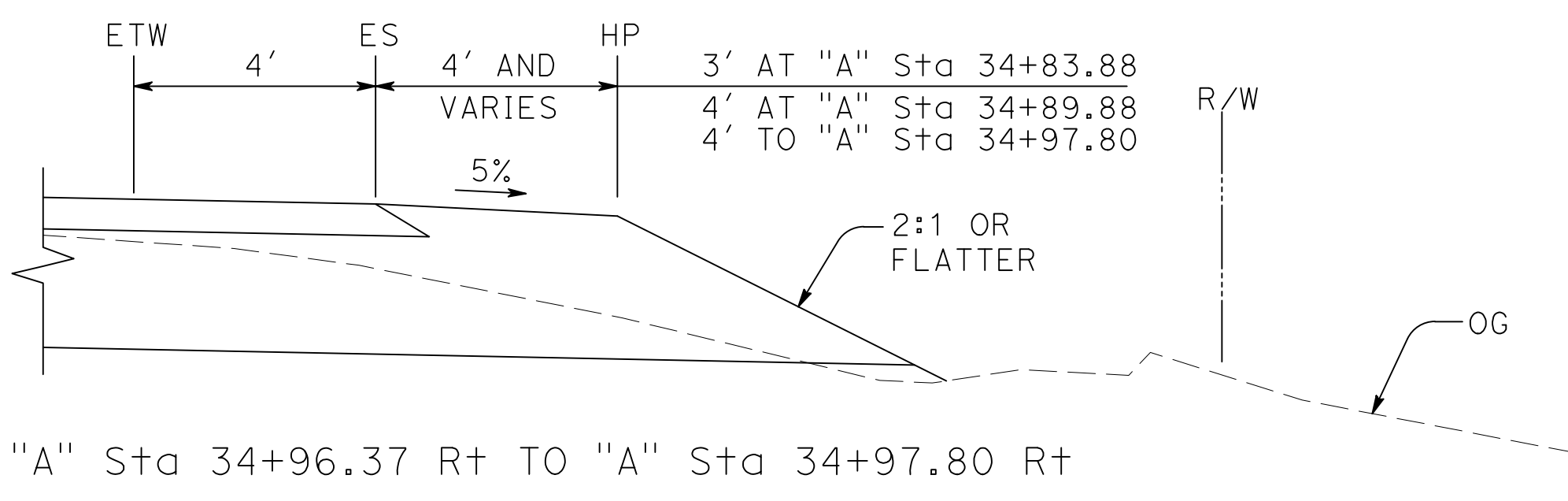
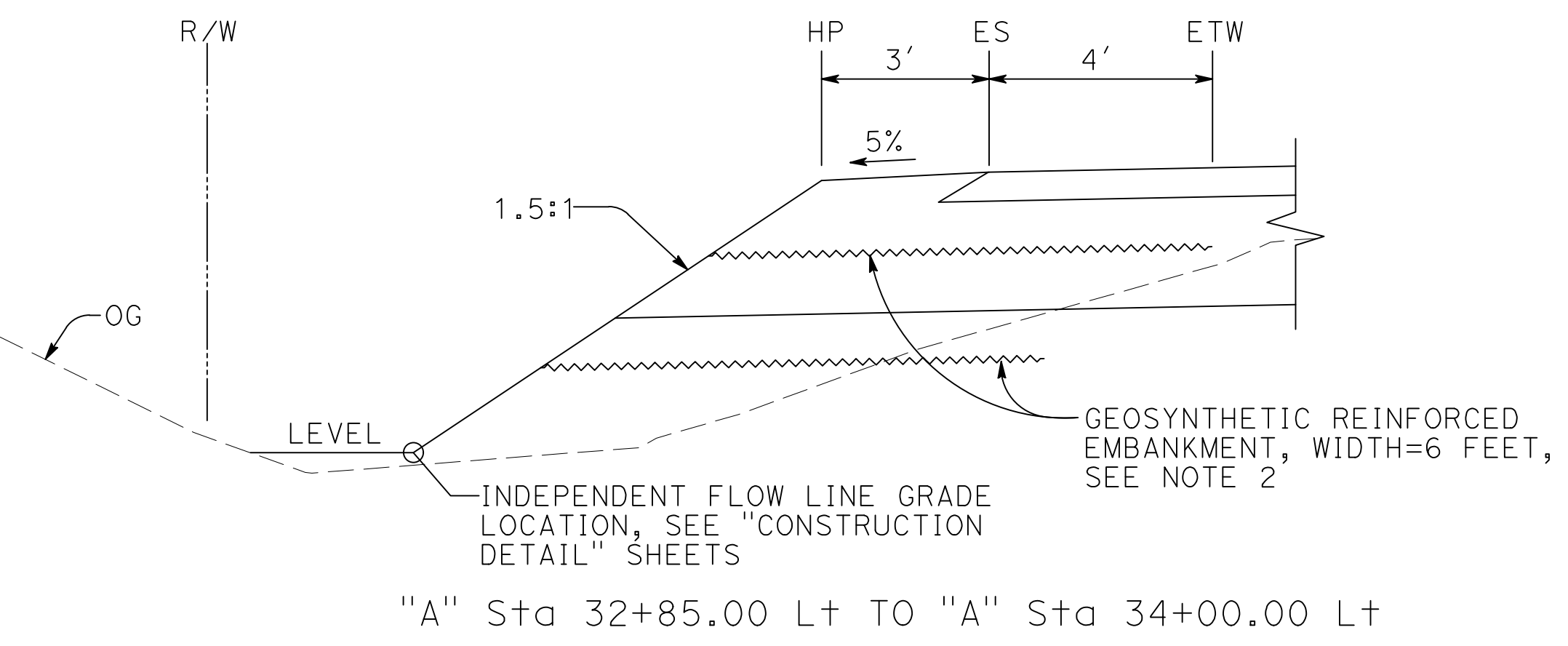
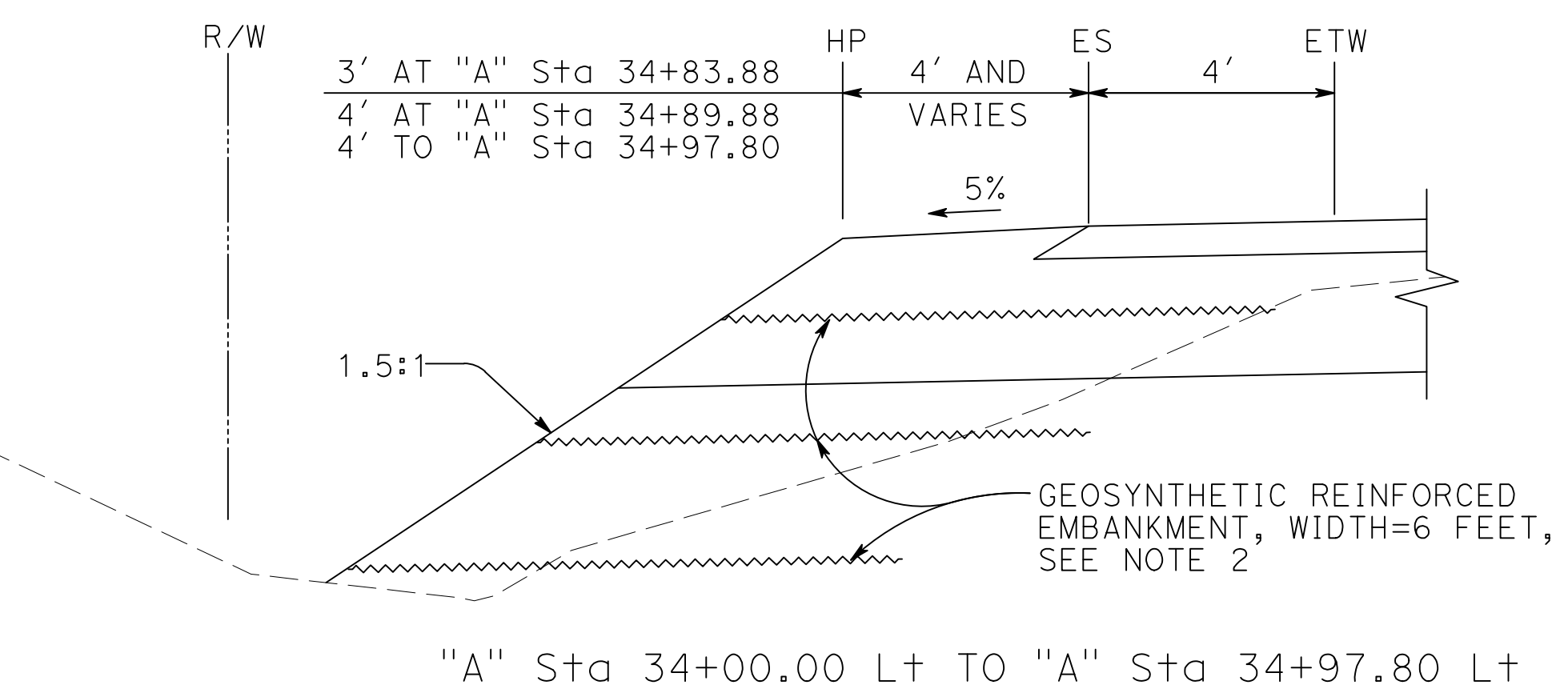
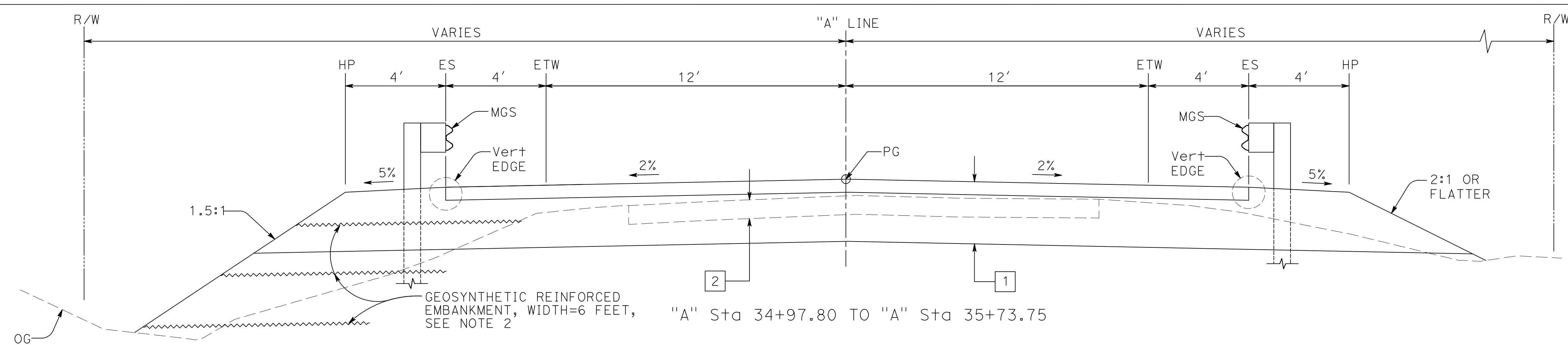
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	3	33

REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CAL FORM #



- NOTES:**
- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
 - PLACE GEOSYNTHETIC REINFORCED EMBANKMENT WHERE SLOPES ARE STEEPER THAN 2:1. PLACE IN TWO FOOT MAXIMUM LIFTS.

TYPICAL CROSS SECTION X-2
NO SCALE

NOTES:

- DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- PLACE GEOSYNTHETIC REINFORCED EMBANKMENT WHERE SLOPES ARE STEEPER THAN 2:1. PLACE IN TWO FOOT MAXIMUM LIFTS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	4	33

REGISTERED CIVIL ENGINEER DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

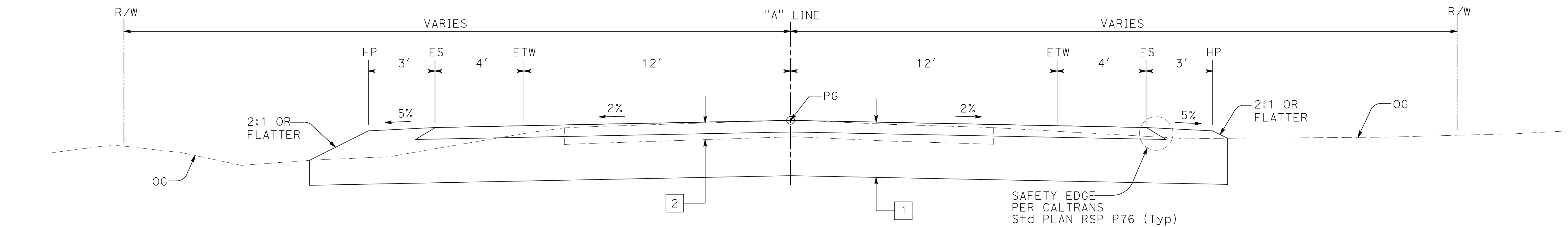
KCG
05-31-23

REVISED BY
DATE REVISED

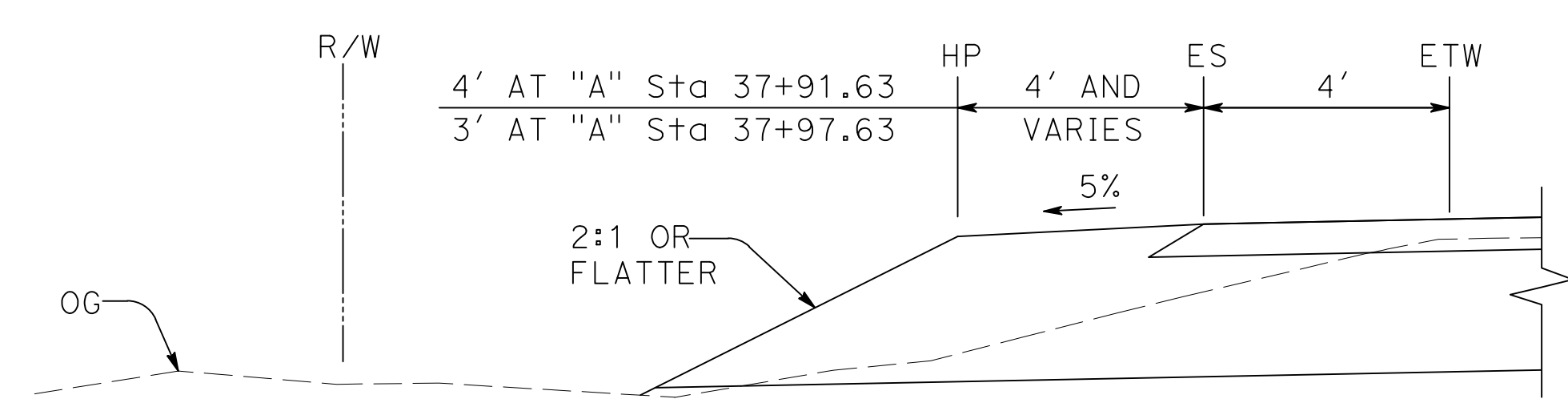
R. UHLMANN
G. GORDON

CALCULATED-DESIGNED BY
CHECKED BY

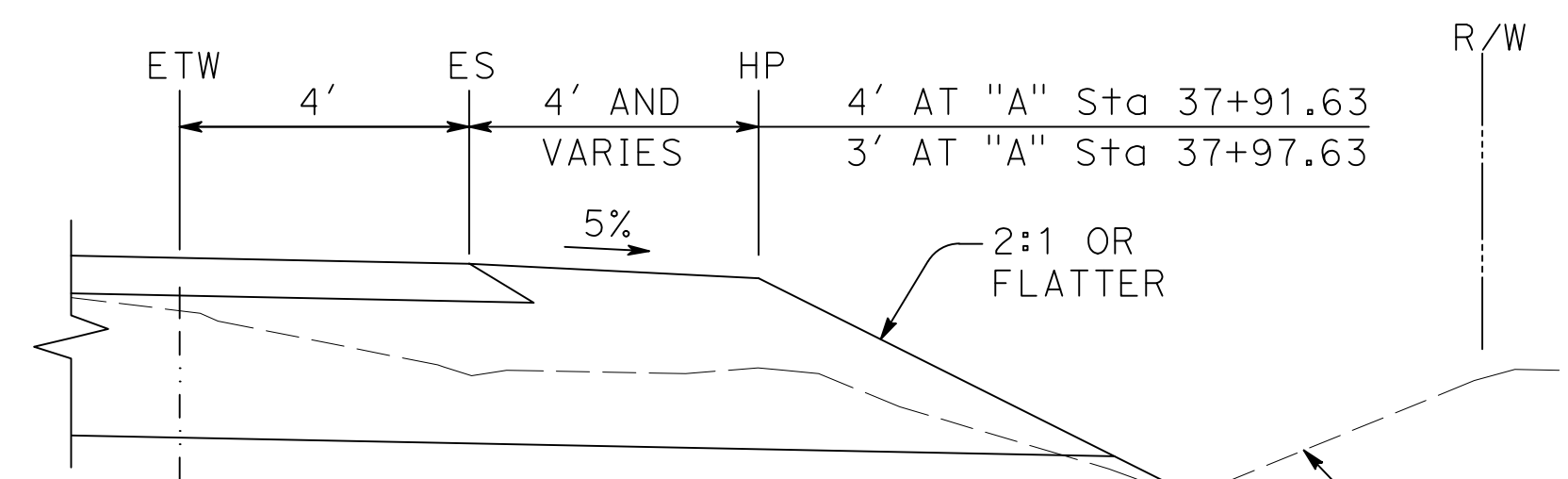
PROJECT ENGINEER
GARY M. GORDON



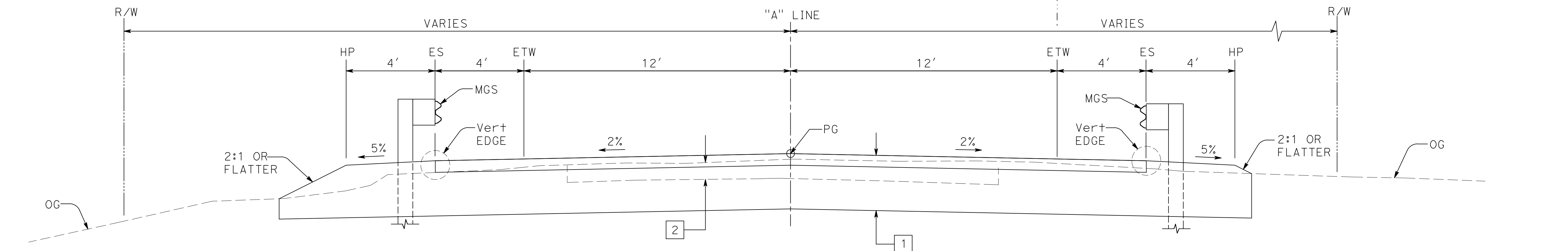
"A" Sta 37+97.63 TO "A" Sta 41+55.50



"A" Sta 37+83.70 Lt TO "A" Sta 37+97.63 Lt



"A" Sta 37+83.70 Rt TO "A" Sta 37+97.63 Rt



"A" Sta 37+07.75 TO "A" Sta 37+83.70

Co ROAD 67

TYPICAL CROSS SECTION X-3

NO SCALE

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT GLENN COUNTY PUBLIC WORKS AGENCY.
- BASIS OF BEARING: TAKEN AS N87°6'59.47"E BETWEEN POINTS 5860 AND 5001 AS SHOWN ON THIS SHEET.
- COORDINATES, DISTANCES AND BEARINGS ARE BASED ON CCS 1983, ZONE 2, DERIVED FROM GPS OBSERVATIONS. MULTIPLY DISTANCES SHOWN BY 1.000063654 TO OBTAIN GROUND LEVEL DISTANCES.
- ELEVATIONS ARE BASED ON 1988 NATIONAL GEODETIC VERTICAL DATUM (NGVD). BENCHMARK ELEVATIONS ARE BASED UPON A FOUND BRONZE DISK "HOWARD" TAKEN AS ELEVATION 74.88.

CONTROL FOR DESIGN AND CONSTRUCTION

POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
5001	2279027.67	6590514.16	74.88	FOUND BRONZE DISK "HOWARD" IN TOP OF SOUTHEAST WINGWALL OF Br. No. 11C0017
5860	2279009.86	6590160.48	70.84	FOUND ALUMINUM CAP "465", SOUTHWEST OF Br. No. 11C0017 (37.28' Rt "A" 33+48.24)

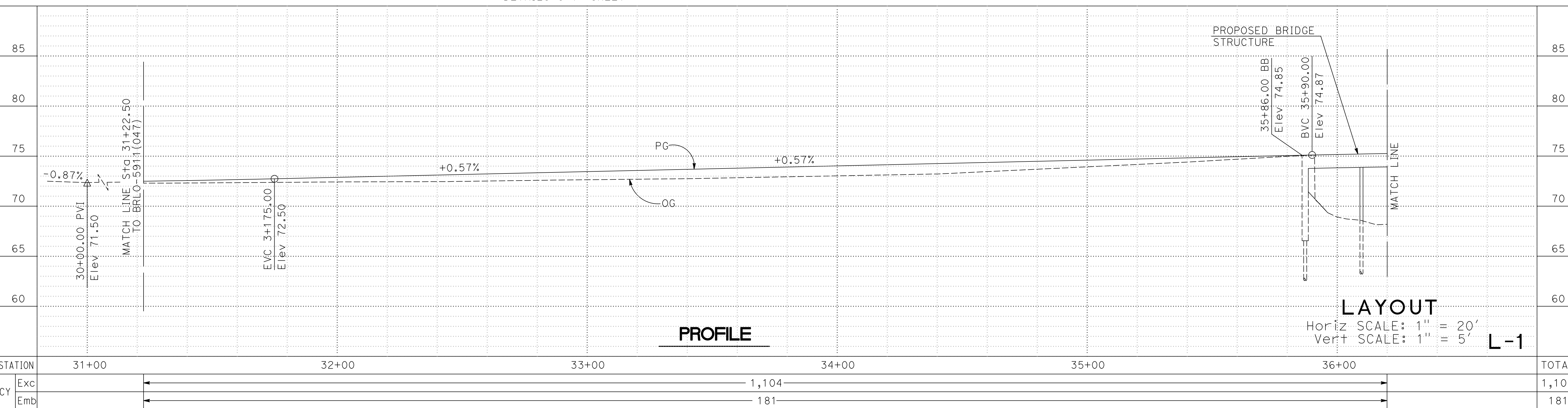
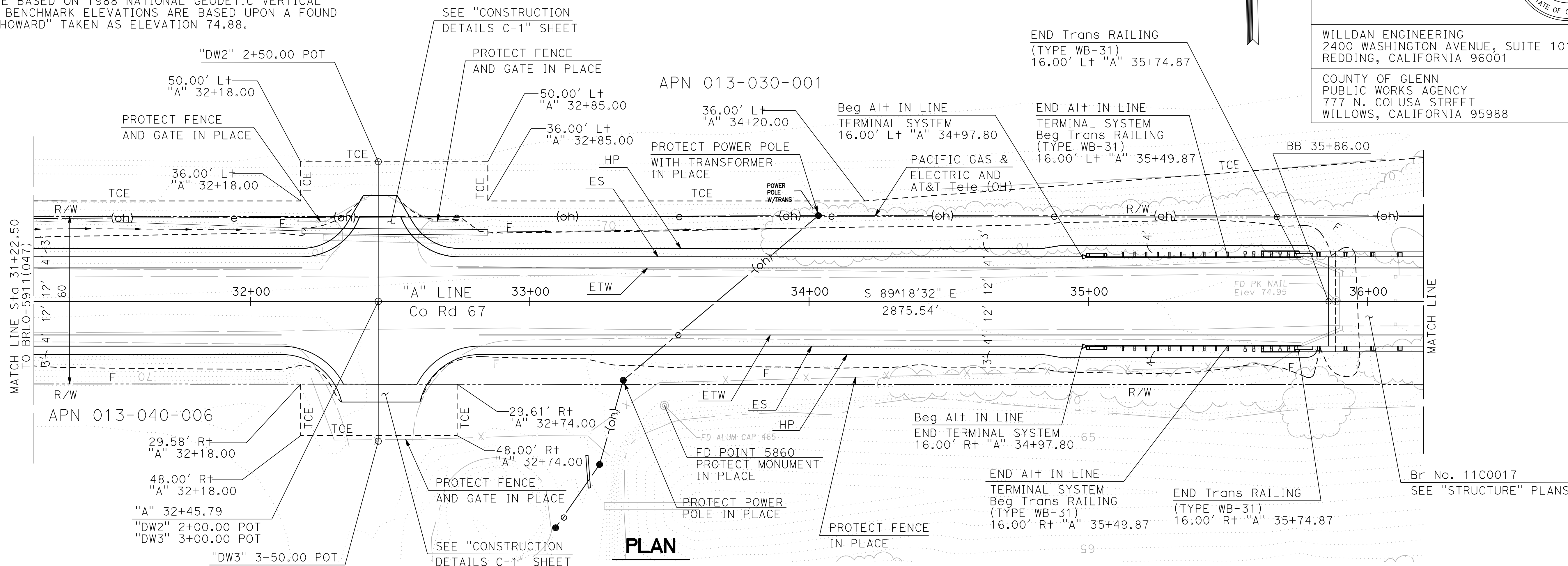
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	5	33

REGISTERED CIVIL ENGINEER DATE 05-31-23
 GARY M. GORDON No. 42176 Exp. 03-31-24 CIVIL
 STATE OF CALIFORNIA

May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

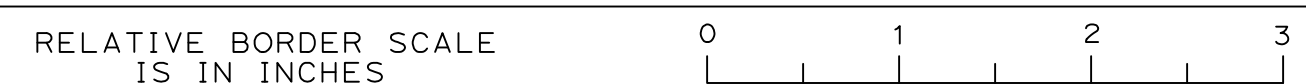
COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



PROFILE

LAYOUT
 Horiz SCALE: 1" = 20'
 Vert SCALE: 1" = 5' L-1

USERNAME => KEVIN
 DGN FILE => 03-101784e001



DATE PLOTTED => 5/31/2023
 TIME PLOTTED => 9:25:32 AM

NOTE:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

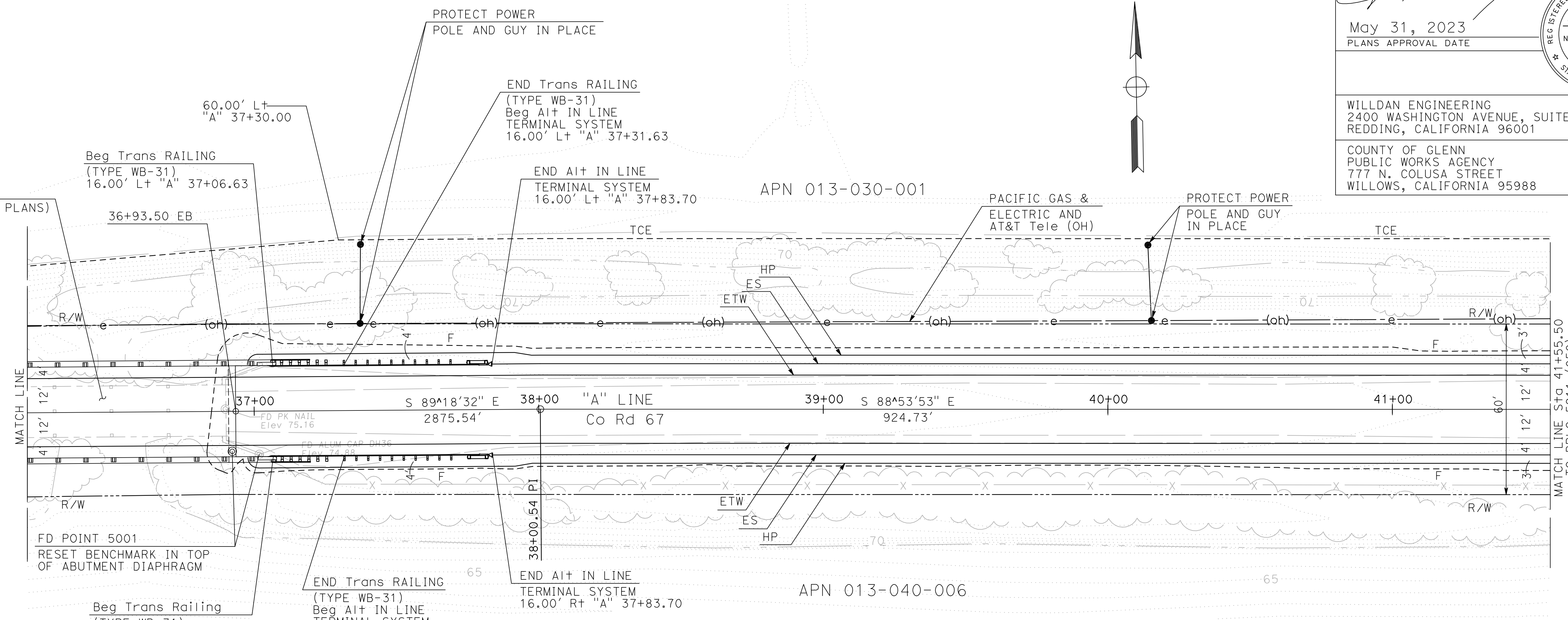
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	6	33

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

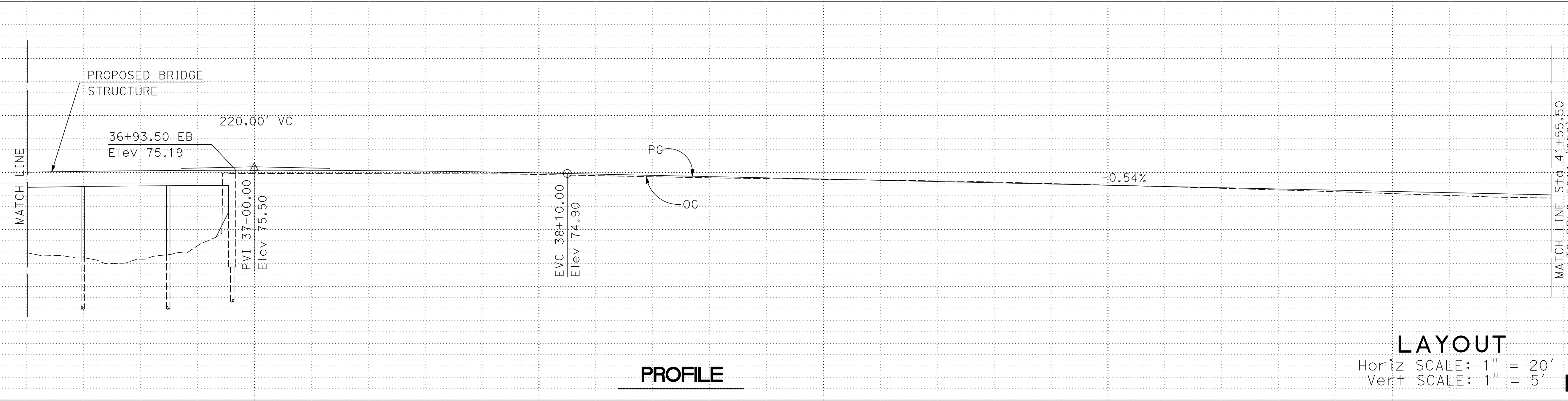
GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



PLAN



PROFILE

LAYOUT

Horiz SCALE: 1" = 20'
 Vert SCALE: 1" = 5'

L-2

STATION	Exc	Emb	TOTAL
36+00			
37+00			
38+00			
39+00			
40+00			
41+00			
TOTAL			1,476

USERNAME => KEVIN
 DGN FILE => 03-101784ed002



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 TIME PLOTTED => 9:00:39 AM

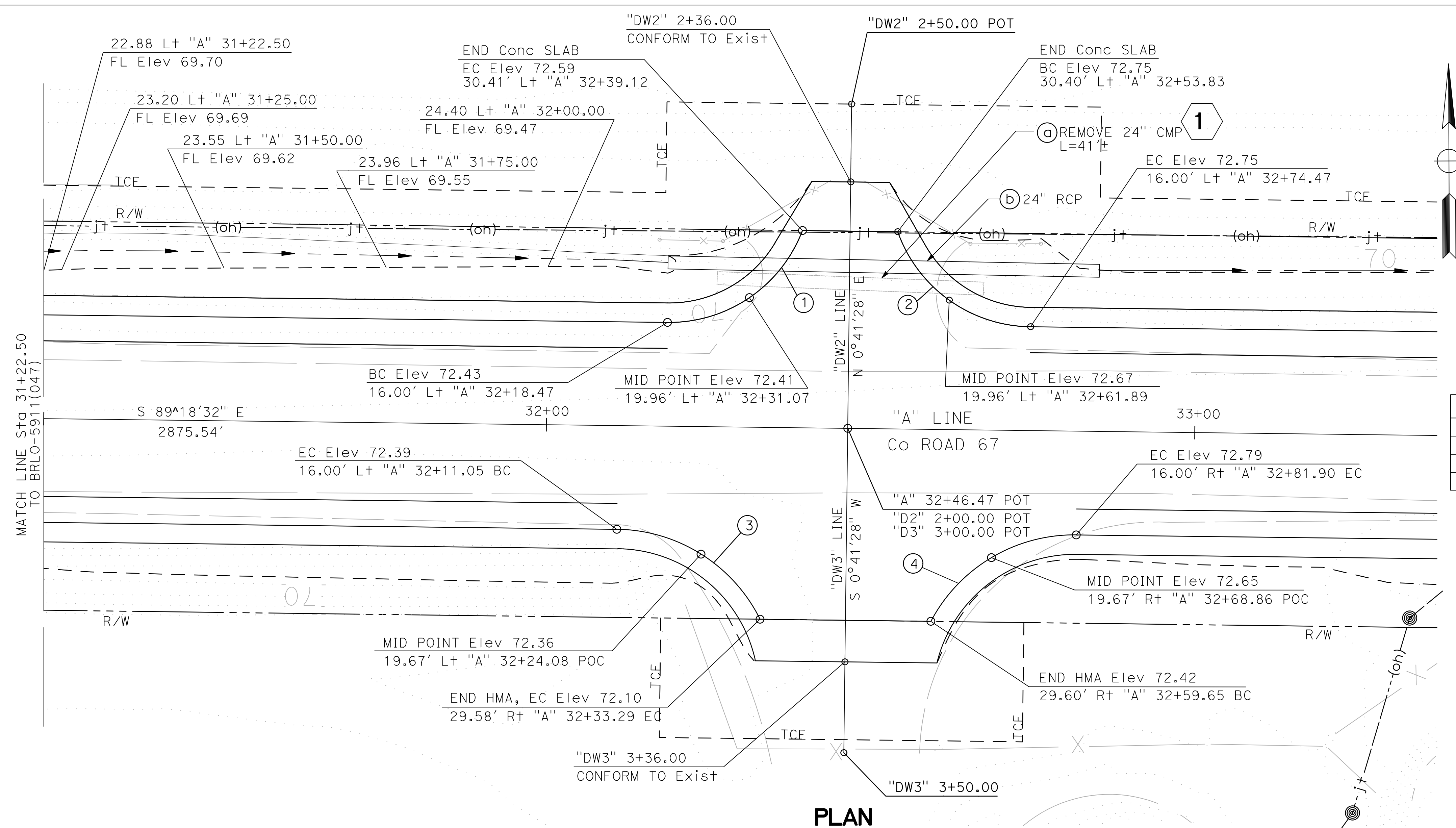
PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
R. UHLMANN	G. GORDON
REVISED BY	DATE REVISED
KCG	05-31-23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	7	33

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

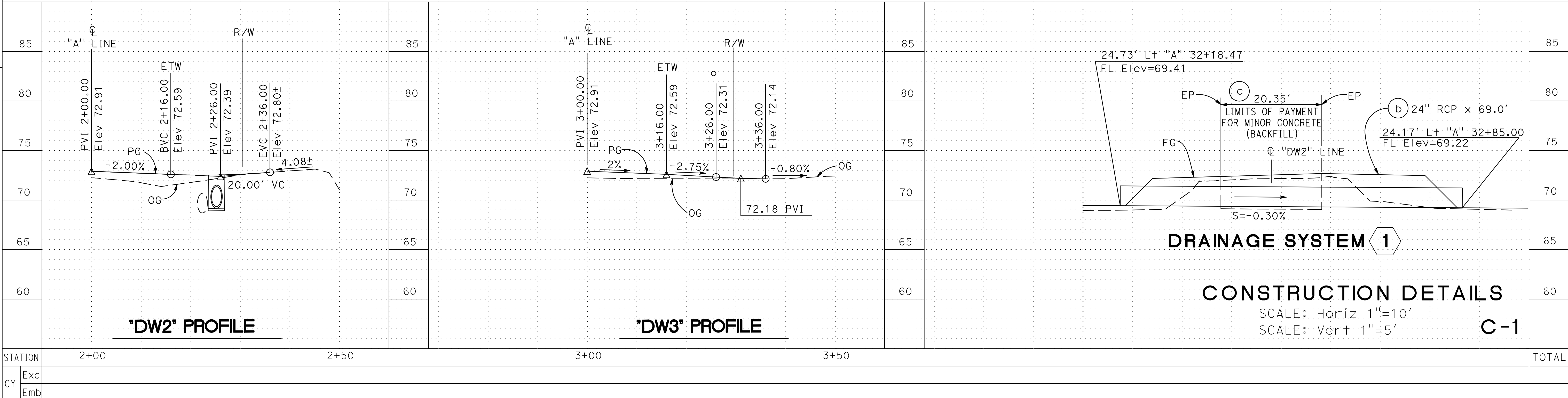
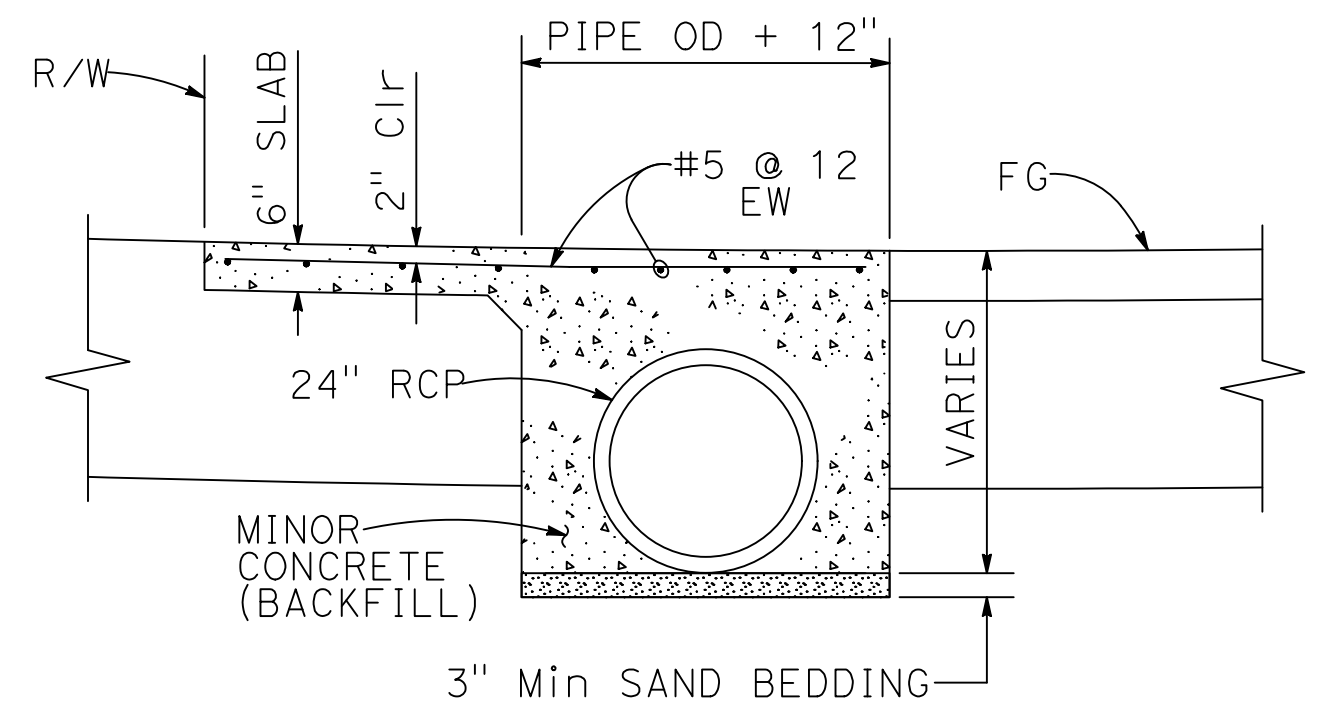
WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



CURVE DATA

No. @	R	Δ	T	L
1	22.00'	69°49'31"	15.35'	26.81'
2	22.00'	69°48'13"	15.35'	26.80'
3	25.00'	62°49'50"	15.27'	27.41'
4	25.00'	62°51'58"	15.28'	27.43'



LAST REVISION
 DATE PLOTTED => 5/31/2023
 TIME PLOTTED => 8:39:52 AM

PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	G. GORDON
CHECKED BY	R. UHLMANN
REVISOR	KCG
DATE	05-31-23

NOTE:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	8	33

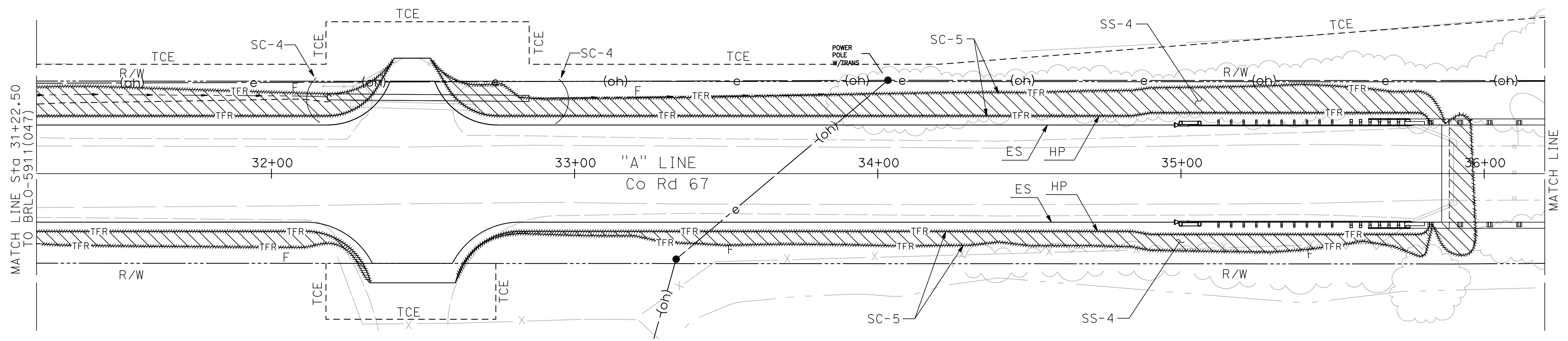
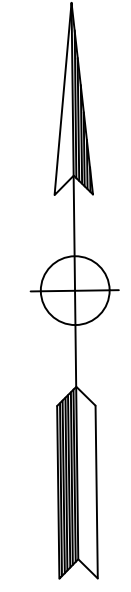
REGISTERED CIVIL ENGINEER DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988



LEGEND:

- ////// TFR ////
- SS-5: TEMPORARY FIBER ROLL CONTROL PER CALTRANS STANDARD T56
- SS-4: HYDROSEEDING FOR ALL PROPOSED SLOPES. MIX TO BE DETERMINED.
- SC-4: CHECK DAMS PER CALTRANS STANDARD T57

TEMPORARY BMP NOTES:

1. NOT ALL BEST MANAGEMENT PRACTICES (BMPs) SHOWN. CONTRACTOR SHALL USE ALL APPROPRIATE TEMPORARY WATER POLLUTION CONTROL BMPs AS INDICATED ON THE PLANS AND AS DIRECTED BY THE APPROVED PROJECT WPCP OR SWPPP.
2. BMPs WILL BE APPLIED TO AND MAINTAINED IN ACTIVE AND NON-ACTIVE DISTURBED SOIL AREAS (DSAs).
3. FIBER ROLLS SHALL BE PLACED ON DISTURBED SOIL AT THE COMPLETION OF GRADING.
4. CONTRACTOR TO ESTABLISH TEMPORARY CONSTRUCTION ENTRANCE PER CALTRANS STANDARD T58 AND TEMPORARY CONCRETE WASHOUT FACILITY PER CALTRANS STANDARD T59.
5. THE CHANNEL CAPACITY MUST BE MAINTAINED DURING THE RAINY SEASON OCTOBER 15 TO APRIL 15.
6. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES OR TO REPAIR ANY DAMAGED EROSION CONTROL MEASURES WHEN RAIN IS IMMINENT.

TEMPORARY BMP NOTES (CONTINUED):

7. DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE ENGINEER.
8. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT.
9. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERM'S, AND DESILTING BASINS AND THE BASINS PUMPED DRY. ANY GRADED SLOPE SURFACE PROTECTION MEASURES DAMAGED DURING A RAINSTORM SHALL ALSO BE IMMEDIATELY REPAIRED.
10. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE TO BE DIRECTED TOWARD DESILTING FACILITIES.
11. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREA WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.

PERMANENT BMP NOTES:

1. CONTRACTOR SHALL PROVIDE APPROPRIATE EROSION CONTROL BMPs AS INDICATED ON THE PLANS AND AS DIRECTED BY THE APPROVED PROJECT WPCP OR SWPPP.
2. SEED MIX FOR HYDROSEEDING SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
3. PROPERLY MAINTAINED FIBER ROLLS FROM TEMPORARY WATER POLLUTION CONTROL WORK MAY BE USED FOR EROSION CONTROL. MISSING, DEGRADED OR OTHERWISE DAMAGED FIBER ROLLS WILL BE REPLACED AS DIRECTED BY THE ENGINEER.

**TEMPORARY WATER POLLUTION/
EROSION CONTROL PLAN**

SCALE: 1" = 20' **WPC-1**

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

USERNAME => KEVIN
DGN FILE => 03-101784gb001



LAST REVISION DATE PLOTTED => 5/31/2023
05-31-23 TIME PLOTTED => 5:15:07 PM

PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
R. UHLMANN	G. GORDON
REVISED BY	DATE REVISED
KCG	05-31-23

NOTE:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

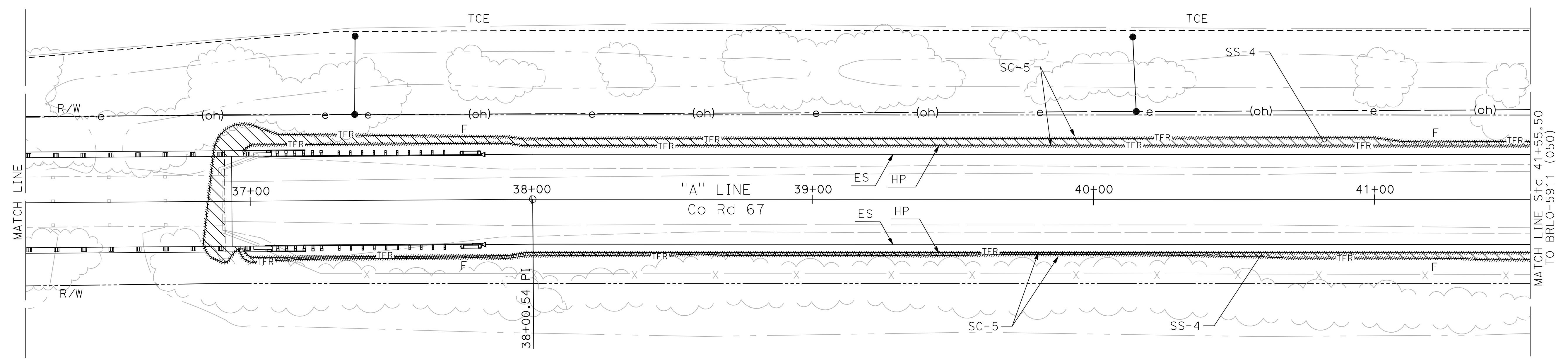
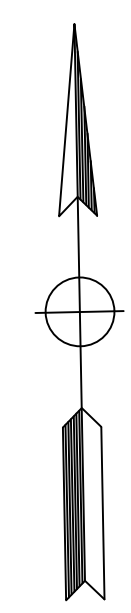
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	9	33

REGISTERED CIVIL ENGINEER DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



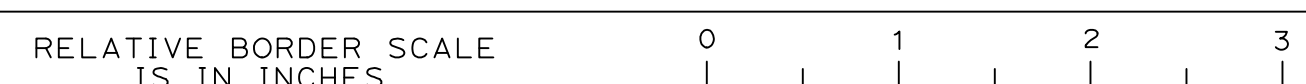
TEMPORARY WATER POLLUTION/ EROSION CONTROL PLAN

SCALE: 1" = 20'

WPC-2

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

USERNAME => KEVIN
DGN FILE => 03-101784gb002



LAST REVISION | DATE PLOTTED => 5/31/2023
05-31-23 | TIME PLOTTED => 7:51:31 AM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	10	33

REGISTERED CIVIL ENGINEER DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

May 31, 2023
 PLANS APPROVAL DATE

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

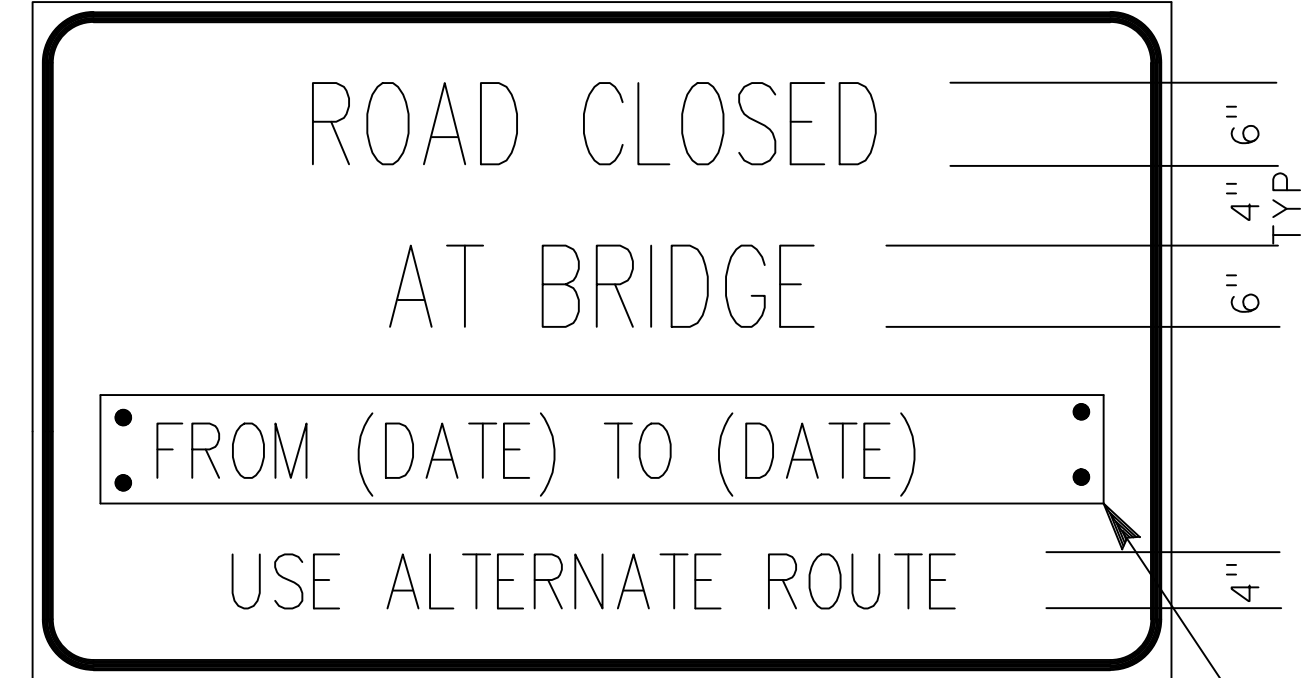
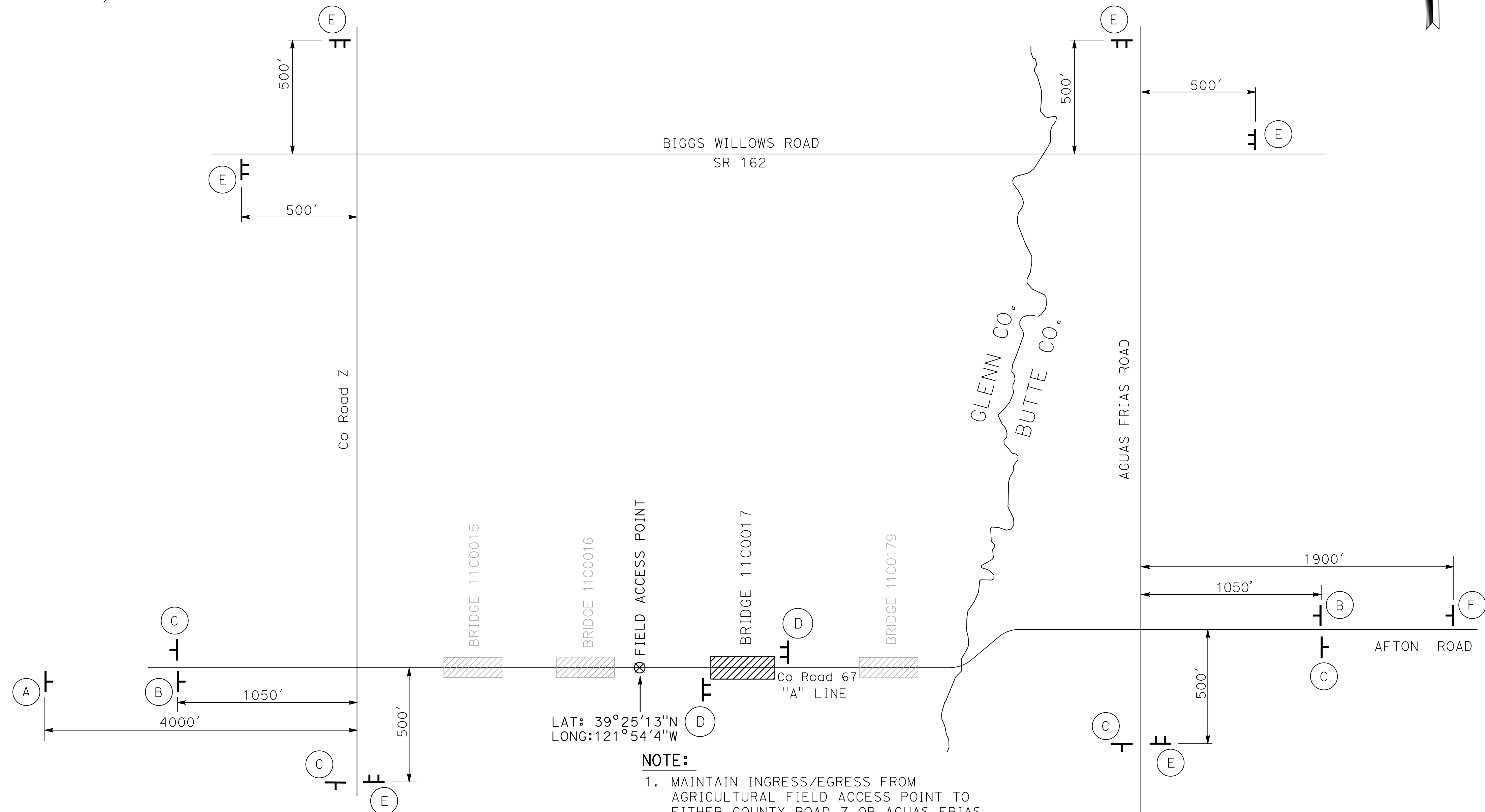
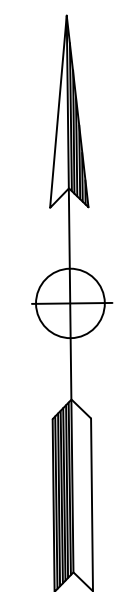
COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

GENERAL NOTES:

- SIGNS SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
- SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- SIGNS WILL REMAIN IN PLACE FOR DURATION OF PROJECT.
- FOR ADDITIONAL TRAFFIC CONTROL SIGNS, SEE DETOUR PLAN DE-1.
- CONTRACTOR SHALL OBTAIN CALTRANS ENCROACHMENT PERMIT FOR SIGNS ON SR 162.
- CONTRACTOR SHALL OBTAIN BUTTE COUNTY ENCROACHMENT PERMIT FOR SIGNS ON AGUAS FRIAS ROAD, AFTON ROAD, AND COUNTY ROAD 67 EAST OF THE GLENN/BUTTE COUNTY LINE.

LEGEND

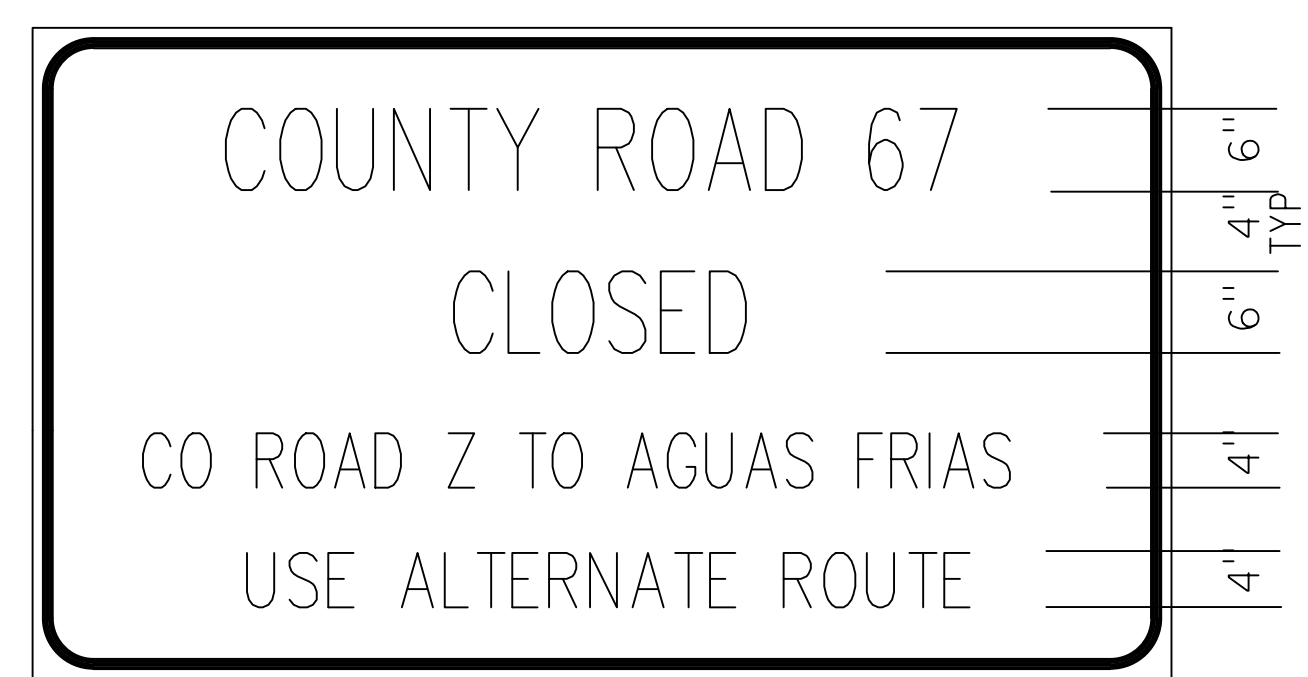
- TEMPORARY SIGN AND POST (ONE POST)
- TEMPORARY SIGN AND POST (TWO POST)
- CONSTRUCTION AREA
- AGRICULTURAL FIELD ACCESS POINT
LAT: 39°25'13"N, LONG: 121°54'4"W



SIGN (D) 6" OVERLAY PANEL WITH 4" LETTERING

NOTES:

- LETTERS - SERIES C.
- LETTERS AND BORDERS - BLACK ON ORANGE BACKGROUND.
- SIGN TO BE INSTALLED 2 WEEKS PRIOR TO CONSTRUCTION.



SIGN (E)

NOTES:

- LETTERS - SERIES C.
- LETTERS AND BORDERS - BLACK ON ORANGE BACKGROUND.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	POST		No. of SIGNS
				NO.	SIZE	
(A)	R11-3b	30" X 60"	BRIDGE OUT 2 MILES LOCAL TRAFFIC ONLY	1	4" X 4"	1
(B)	C19(CA)	48" X 48"	ROAD CLOSED AHEAD	1	4" X 4"	2
(C)	G20-2	36" X 18"	END ROAD WORK	1	4" X 4"	4
(D)	SPECIAL	84" X 42"	ROAD CLOSED INFORMATION	2	6" X 6"	2
(E)	SPECIAL	84" X 40"	ROAD CLOSED INFORMATION	2	6" X 6"	5
(F)	R11-3b	30" X 60"	BRIDGE OUT 3 MILES LOCAL TRAFFIC ONLY	1	4" X 4"	1

NOTE:

- MAINTAIN INGRESS/EGRESS FROM AGRICULTURAL FIELD ACCESS POINT TO EITHER COUNTY ROAD Z OR AGUAS FRIAS ROAD AT ALL TIMES.
- COORDINATE CONSTRUCTION PHASING OF ALL PROJECTS TO MAINTAIN ACCESS OR PROVIDE ALTERNATIVE MEANS OF INGRESS/EGRESS.
- IF MULTIPLE BRIDGES ARE UNDER CONSTRUCTION SIMULTANEOUSLY, THE CONTRACTOR SHALL COORDINATE SIGN PLACEMENT WITH THE ENGINEER.

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	11	33

05-31-23
 REGISTERED CIVIL ENGINEER DATE
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CAL FORM #

May 31, 2023
 PLANS APPROVAL DATE



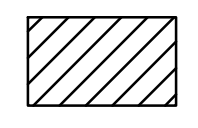


WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

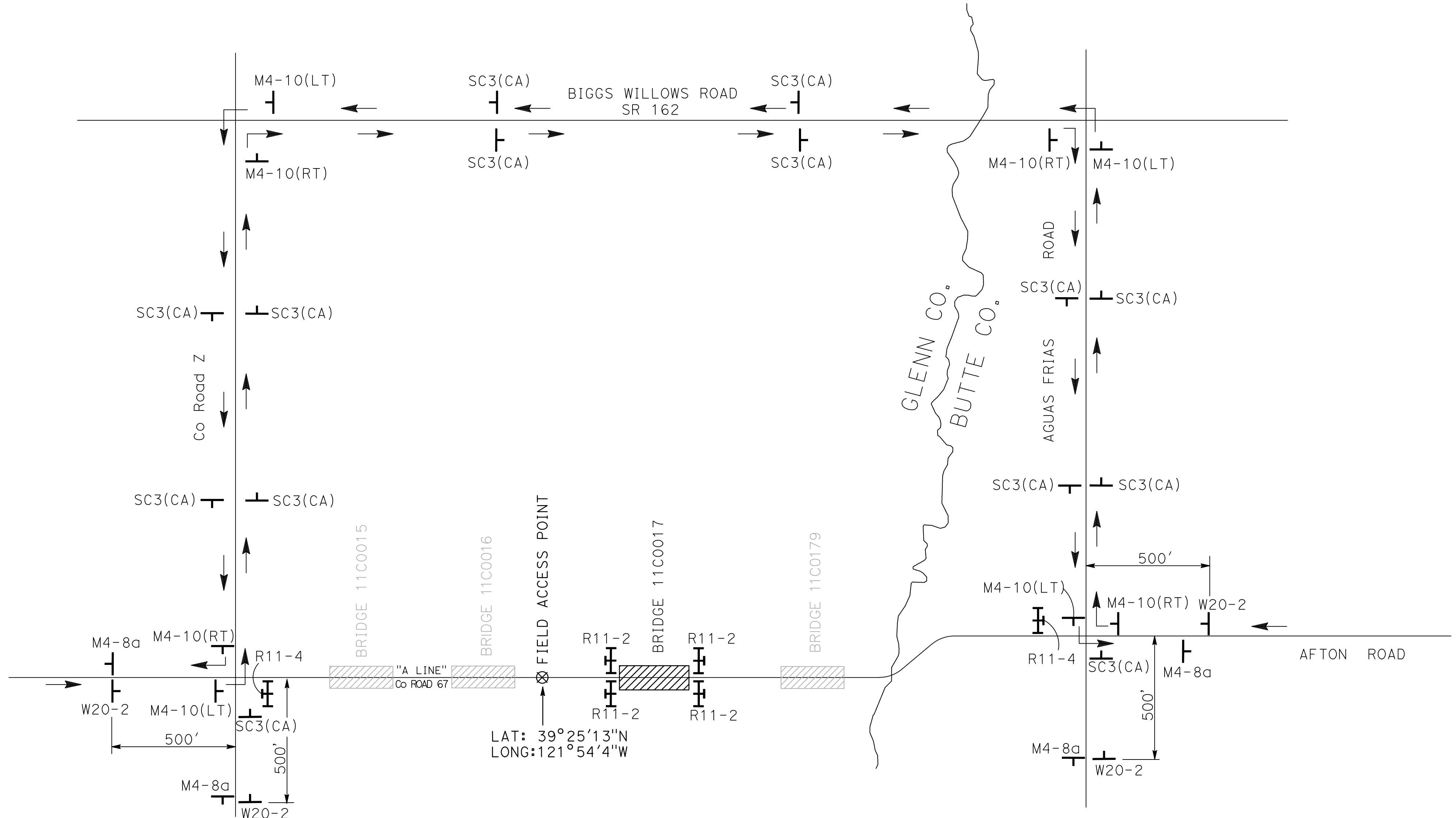
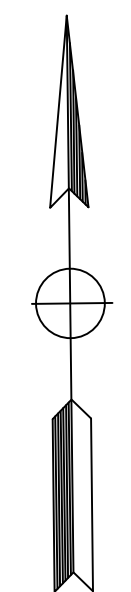
COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

GENERAL NOTES:

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LEGEND

-  TEMPORARY SIGN AND POST
-  TYPE III BARRICADE WITH SIGN
L=8.00', WITH THREE WARNING LIGHTS (TYPE B)
-  CONSTRUCTION AREA
-  DIRECTION OF TRAVEL
-  AGRICULTURAL FIELD ACCESS POINT
LAT: 39°25'13"N, LONG: 121°54'4"W



DETOUR SIGNS

SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. of SIGNS
M4-10(RT)	18" X 48"	DETOUR (RIGHT)	4
M4-10(LT)	18" X 48"	DETOUR (LEFT)	4
SC-3(CA)	18" X 48"	DETOUR (STRAIGHT)	14
R11-4	30" X 48"	ROAD CLOSED TO THROUGH TRAFFIC	2
R11-2	30" X 48"	ROAD CLOSED	4
M4-8a	18" X 24"	END DETOUR	4
W20-2	36" X 36"	DETOUR AHEAD	4

APPROVED FOR DETOUR SIGN WORK ONLY



USERNAME => KEVIN
DGN FILE => 03-101784md001

DETOUR PLAN

NO SCALE

DE-1

LAST REVISION | DATE PLOTTED => 5/31/2023
 05-31-23 | TIME PLOTTED => 5:42:03 PM

GENERAL NOTES:

1. ALL TRAFFIC LINES SHALL CONFORM TO THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
2. LANE WIDTH SHALL BE MEASURED BETWEEN THE CENTERLINES OF EACH SINGLE STRIPE.
3. ALL SIGNING TO BE INSTALLED SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).

LEGEND

- (X) Prop SIGN AND POST
- (X) Exist SIGN AND POST TO BE REMOVED
- (X) TRAFFIC STRIPE DETAIL

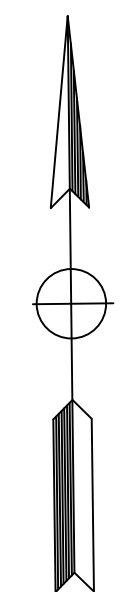
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	12	33

05-31-23
 REGISTERED CIVIL ENGINEER DATE
 May 31, 2023
 PLANS APPROVAL DATE

GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

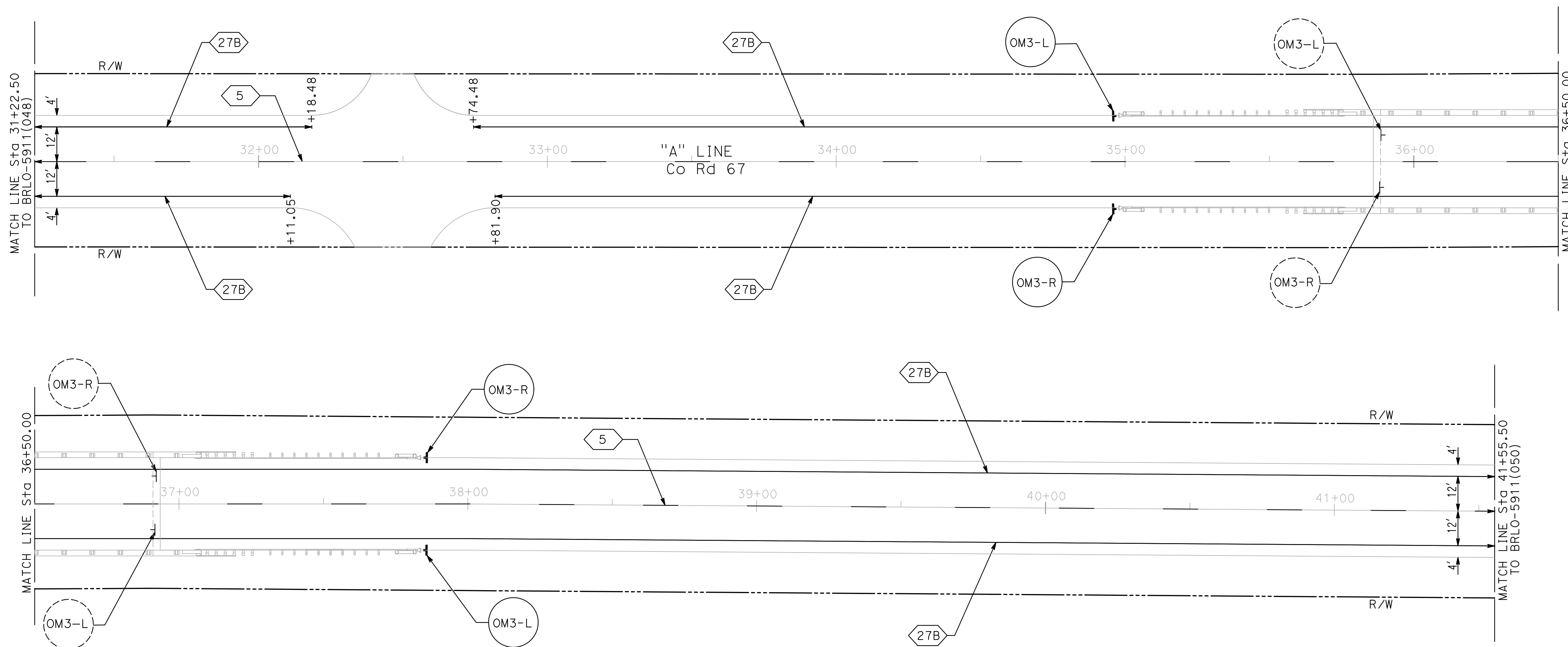


PAVEMENT DELINEATION QUANTITIES

SHEET No.	LOCATION/STATIONING	DIRECTION	DETAIL No.	THERMOPLASTIC TRAFFIC STRIPE					COMMENTS
				4" WHITE SOLID	4" WHITE BROKEN	4" YELLOW BROKEN	8" WHITE SOLID	8" WHITE BROKEN	
				LF	LF	LF	LF	LF	
PD-1	31+22.50 TO 32+11.05	EB	27B	88.6					
PD-1	31+22.50 TO 32+18.48	WB	27B	96.0					
PD-1	32+81.90 TO 41+55.50	EB	27B	873.6					
PD-1	32+74.48 TO 41+55.50	WB	27B	881.0					
PD-1	31+22.50 TO 41+55.50	WB	5			1033.0			
TOTAL				1939.2		1033.0			

ROADSIDE SIGN QUANTITIES

SIGN CODE	PANEL SIZE	REMOVE ROADSIDE SIGN (EA)	ROADSIDE SIGN	REMARKS
			ONE POST EA	
OM3-L	12" x 36"	2	2	8'-0" LONG METAL POST PER Std PLAN A73B
OM3-R	12" x 36"	2	2	8'-0" LONG METAL POST PER Std PLAN A73B



PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1" = 20'

PD-1

THIS PLAN IS ACCURATE FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

USERNAME => KEVIN
 DGN FILE => 03-101784nd001

RELATIVE BORDER SCALE IS IN INCHES



LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 5:11:02 PM

EARTHWORK QUANTITIES

SHEET No.	STATION	ROADWAY EXCAVATION	EMBANKMENT (N)	IMPORTED BORROW	GEOSYNTHETIC REINFORCED EMBANKMENT
		CY	CY	CY	SYDD
L-1	"A" 31+22.50 TO "A" 35+93.33	1,104	181	181	
L-1	"A" 31+22.50 R+ TO "A" 32+18.48 R+				128.0
L-1	"A" 32+74.47 L+ TO "A" 35+78.23 L+				405.0
L-2	"A" 36+85.00 TO "A" 41+55.50	1,476	4	4	
TOTAL		2,580	185	185	533.0

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

TEMPORARY WATER POLLUTION CONTROL AND EROSION CONTROL QUANTITIES

SHEET No.	STATION	TEMPORARY FIBER ROLLS	TEMPORARY CONCRETE WASHOUT FACILITY	EROSION CONTROL (HYDROSEED)
		LF	EA	SQFT
WPC-1 TO WPC-2		TO BE DETERMINED		
WPC-1	"A" 31+22.50 L+ TO "A" 32+40.48 L+	249		1,063
WPC-1	"A" 31+22.50 R+ TO "A" 32+32.67 R+	234		662
WPC-1	"A" 32+52.48 L+ TO "A" 35+93.33 L+	714		2,914
WPC-1	"A" 32+60.67 R+ TO "A" 35+93.33 R+	716		1,705
WPC-2	"A" 36+85.00 L+ TO "A" 41+55.50 L+	953		1,580
WPC-2	"A" 36+85.00 R+ TO "A" 41+55.50 R+	956		771
TOTAL		3,822	1	8,695

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	13	33

05-31-23
 REGISTERED CIVIL ENGINEER DATE
 May 31, 2023
 PLANS APPROVAL DATE

REG. NO. 42176
 Exp. 03-31-24
 CIVIL
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WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

SAFETY EDGE

SHEET No.	STATION	DIRECTION	TOTAL THICKNESS OF SAFETY EDGE (N)		HOT MIX ASPHALT (TYPE A)
			FT	LF	
L-1	"A" 31+22.50 L+ TO "A" 32+18.47 L+	WB	0.52	95.97	1.6
L-1	"A" 32+74.47 R+ TO "A" 34+97.90 R+	WB	0.52	223.43	3.8
L-1	"A" 31+22.50 R+ TO "A" 32+11.05 R+	EB	0.52	88.55	1.5
L-1	"A" 32+81.90 R+ TO "A" 34+97.90 R+	EB	0.52	216.00	3.7
L-2	"A" 37+83.70 L+ TO "A" 41+55.50 L+	WB	0.52	371.80	6.3
L-2	"A" 37+83.70 R+ TO "A" 41+55.50 R+	EB	0.52	371.80	6.3
SUBTOTAL					23.2

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

PAVEMENT STRUCTURE QUANTITIES

SHEET No.	STATION	REMOVE ASPHALT CONCRETE PAVEMENT	HOT MIX ASPHALT (TYPE A)	CLASS 2 AGGREGATE BASE	TACK COAT
		SQFT	TON	CY	TON
L-1	"A" 31+22.50 TO "A" 35+86.00	8,926	593.6	1,622	1.09
L-2	"A" 36+93.50 TO "A" 41+55.50	8,182	557.5	1,530	1.03
L-1 TO L-2	SAFETY EDGE	23.2	23.2		
TOTAL		17,108	1,174.3	3,152	2.12

MIDWEST GUARDRAIL SYSTEM

SHEET No.	STATION	TRANSITION RAILING (TYPE WB-31)	ALTERNATIVE IN-LINE TERMINAL SYSTEM
		EA	EA
L-1	"A" 34+97.80 L+ TO "A" 35+49.87 L+		1
L-1	"A" 34+97.80 R+ TO "A" 35+49.87 R+		1
L-1	"A" 35+49.87 L+ TO "A" 35+74.87 L+	1	
L-1	"A" 35+49.87 R+ TO "A" 35+74.87 R+	1	
L-2	"A" 37+06.63 L+ TO "A" 37+31.63 L+	1	
L-2	"A" 37+06.63 R+ TO "A" 37+31.63 R+	1	
L-2	"A" 37+31.63 L+ TO "A" 37+83.70 L+		1
L-2	"A" 37+31.63 R+ TO "A" 37+83.70 R+		1
TOTAL		4	4

DRAINAGE QUANTITIES

SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	REMOVE CULVERT	REINFORCED CONCRETE PIPE (CLASS 4)			MINOR CONCRETE (MINOR STRUCTURE)	DESCRIPTION
			LF	12"	18"	24"		
C-1	1	a	41.1					REMOVE 24" CULVERT
		b				69.0		24" RCP
		c					7.6	Conc BACKFILL AND APPROACH APRON
TOTAL			41.1			69.0	7.6	

SUMMARY OF QUANTITIES

Q-1



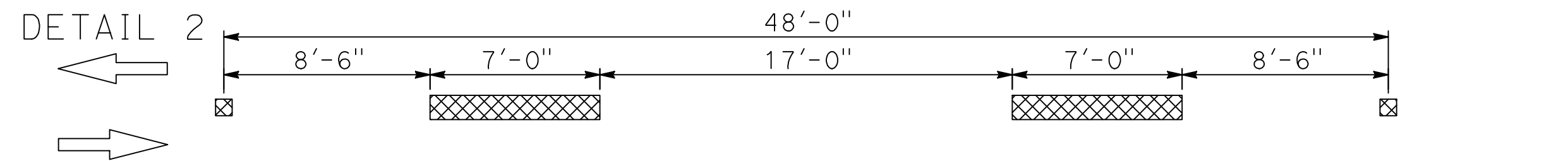
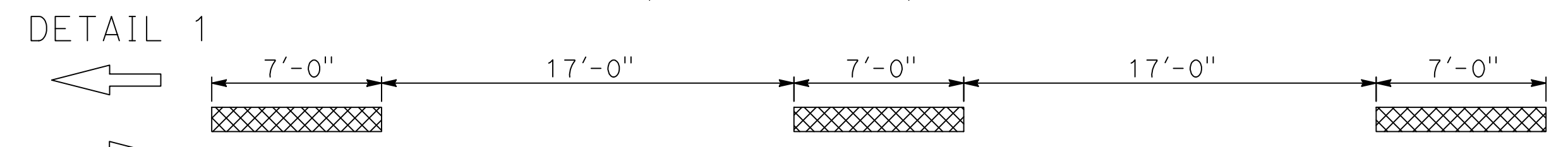
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	14	33

05-31-23
REGISTERED CIVIL ENGINEER DATE
GARY M. GORDON
No. 42176
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CIVIL
STATE OF CAL FORM #

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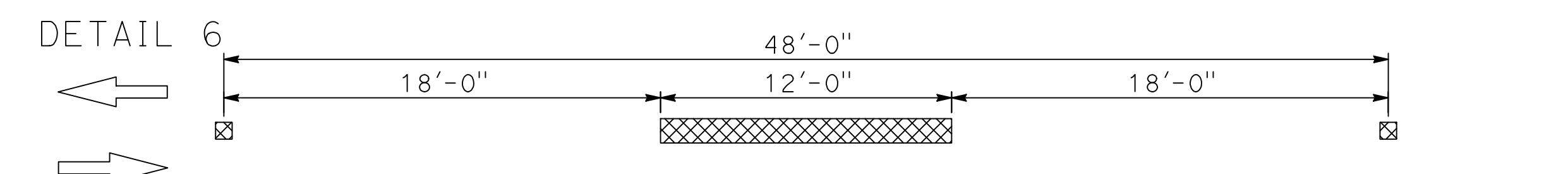
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CENTERLINES
(2 LANE HIGHWAYS)



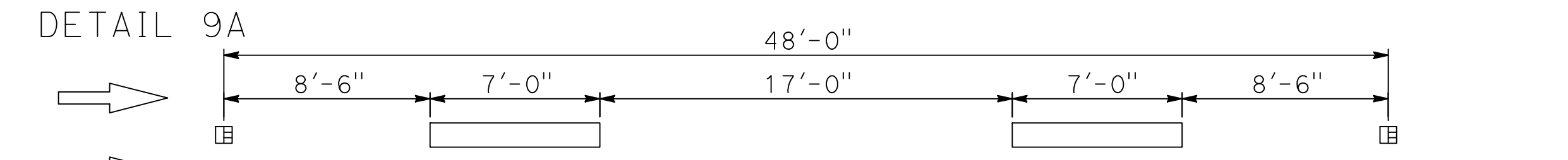
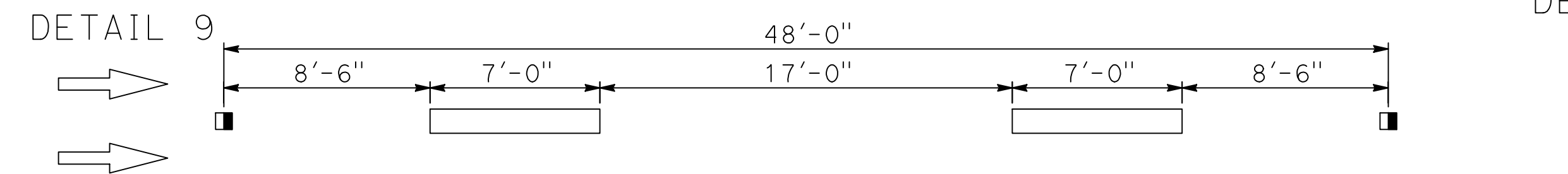
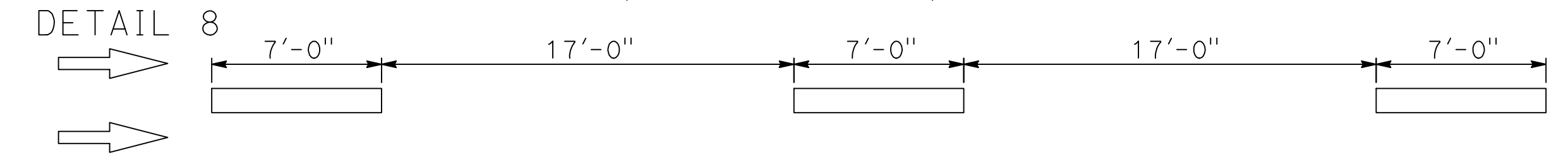
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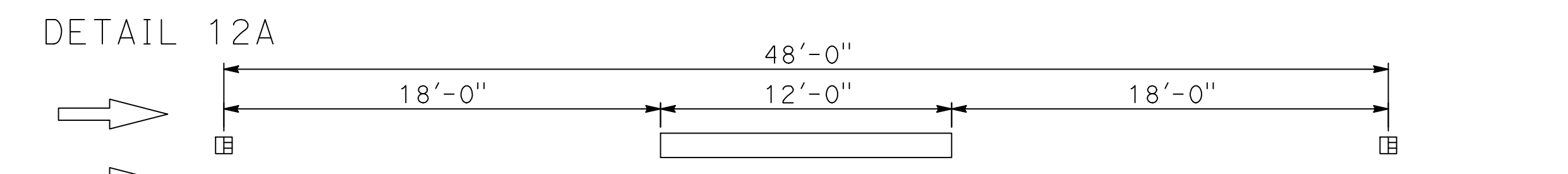
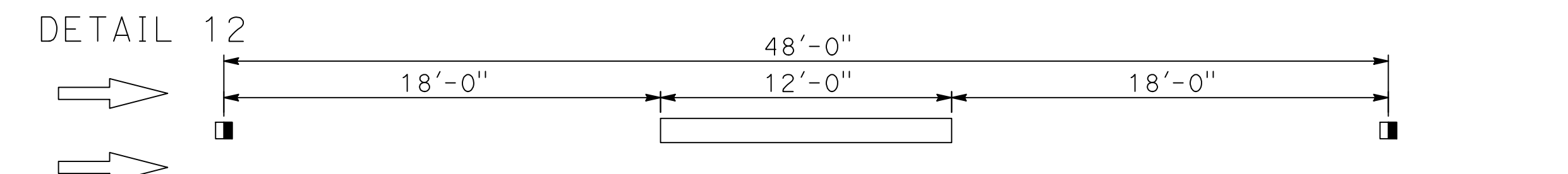


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LANE LINES
(MULTILANE HIGHWAYS)



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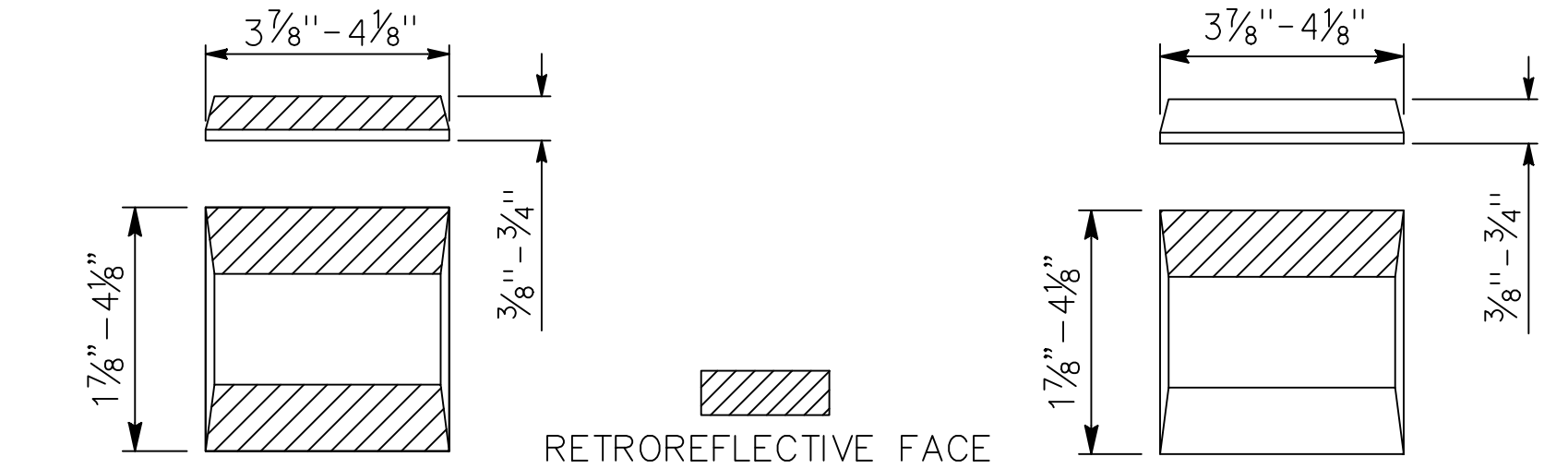
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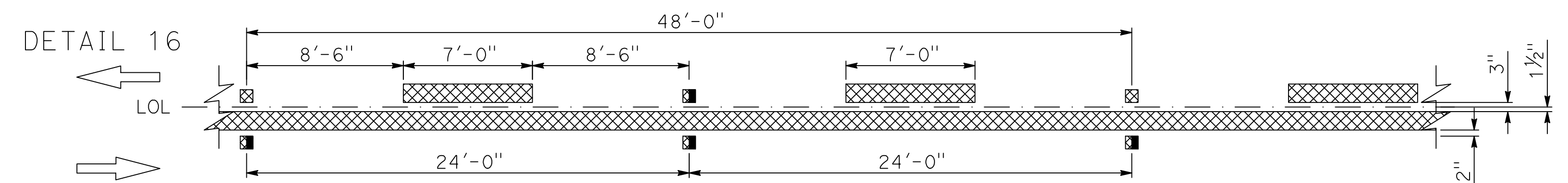
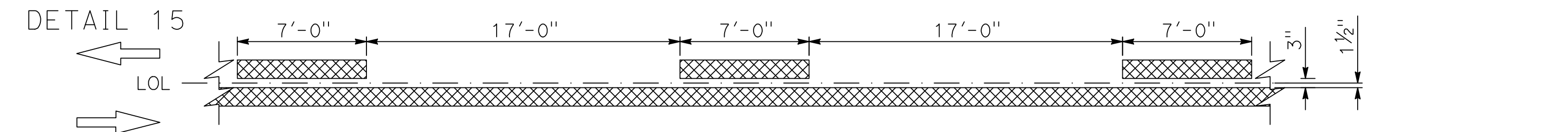
LINES

	4" WHITE
	4" YELLOW

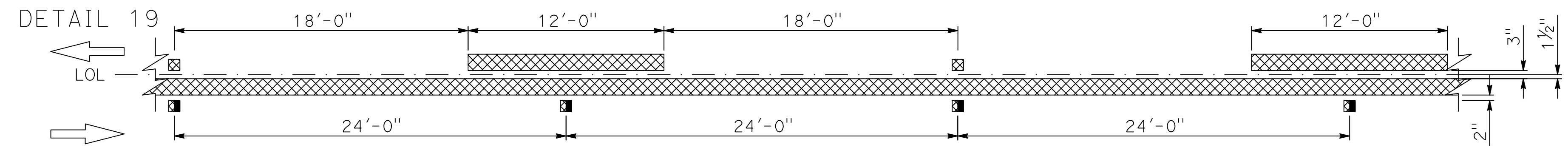
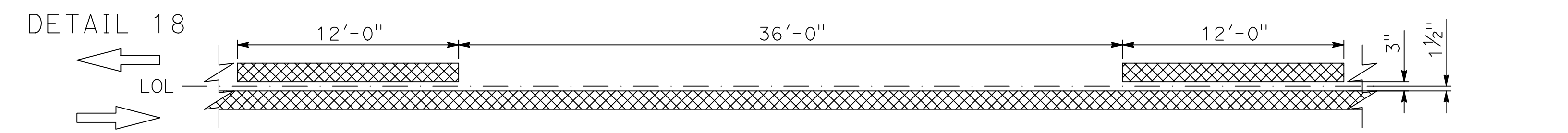


TYPE C AND TYPE D TYPE G AND TYPE H
MARKER DETAILS

NO PASSING ZONES-ONE DIRECTION

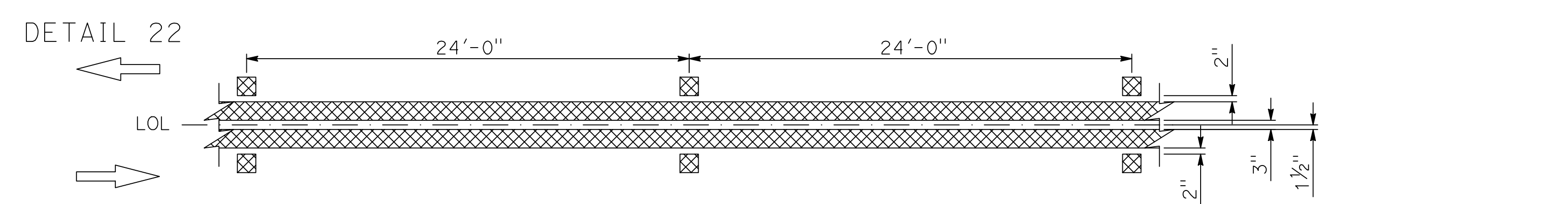
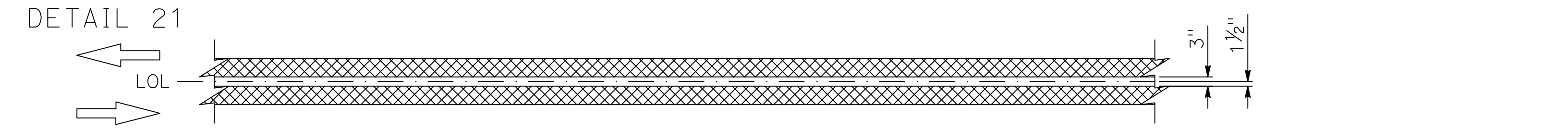


~~DETAIL 17~~ DETAIL 17 DELETED



~~DETAIL 20~~ DETAIL 20 DELETED

NO PASSING ZONES-TWO DIRECTION



~~DETAIL 23~~ DETAIL 23 DELETED

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKERS AND TRAFFIC LINES
TYPICAL DETAILS

NO SCALE

RSP A20A DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A20A
DATED AUGUST 1, 2022 - PAGE 12 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A20A MOD

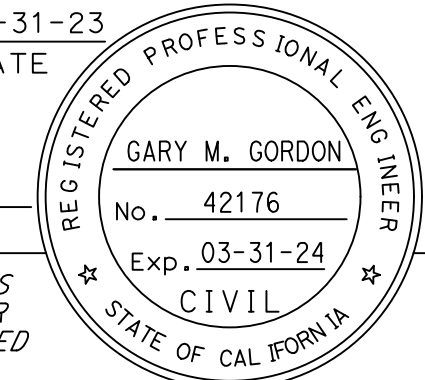
LEGEND

	TYPE C RED-CLEAR RETROREFLECTIVE MARKER
	TYPE D TWO-WAY YELLOW RETROREFLECTIVE MARKER
	TYPE G ONE-WAY CLEAR RETROREFLECTIVE MARKER
	TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER

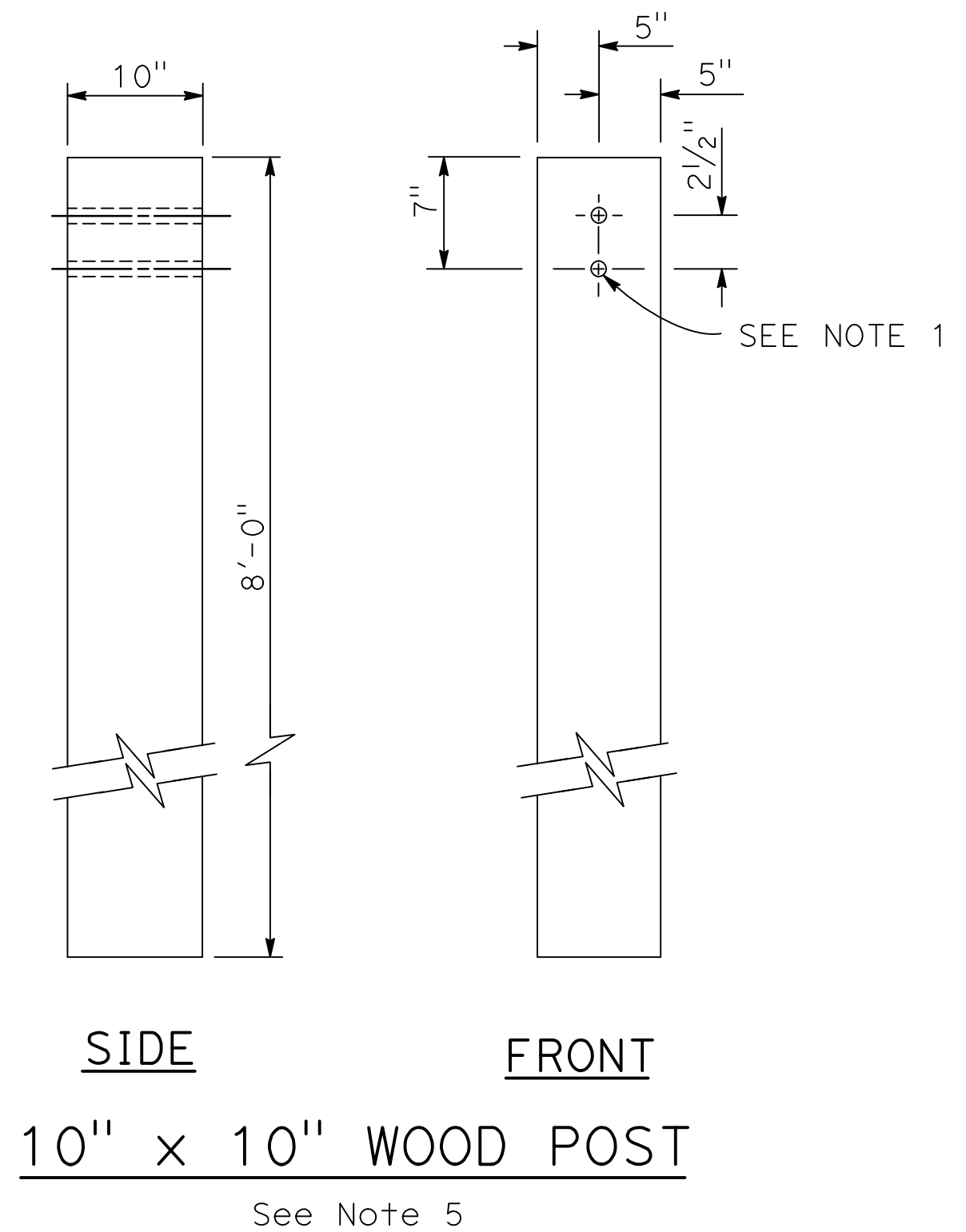
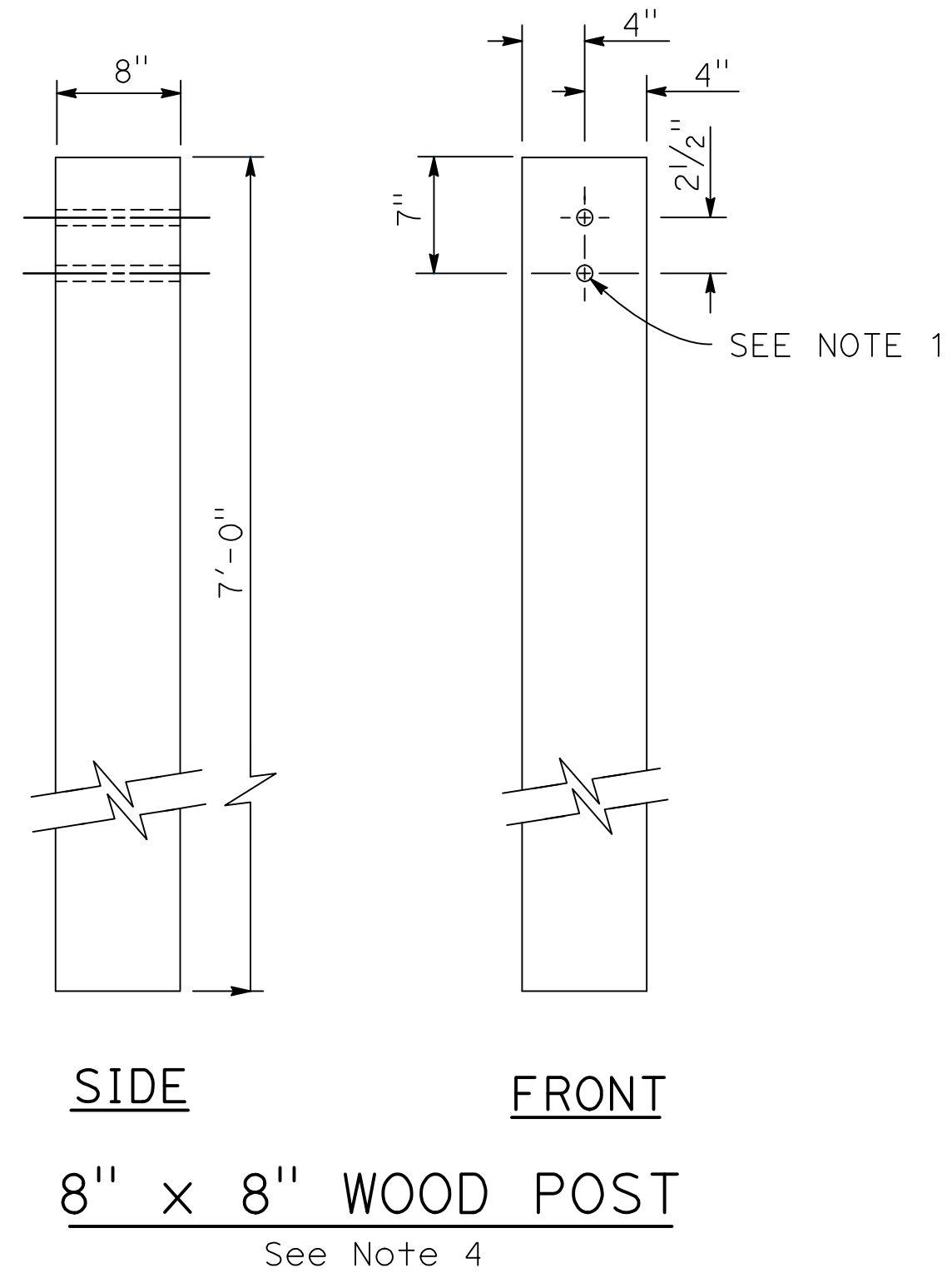
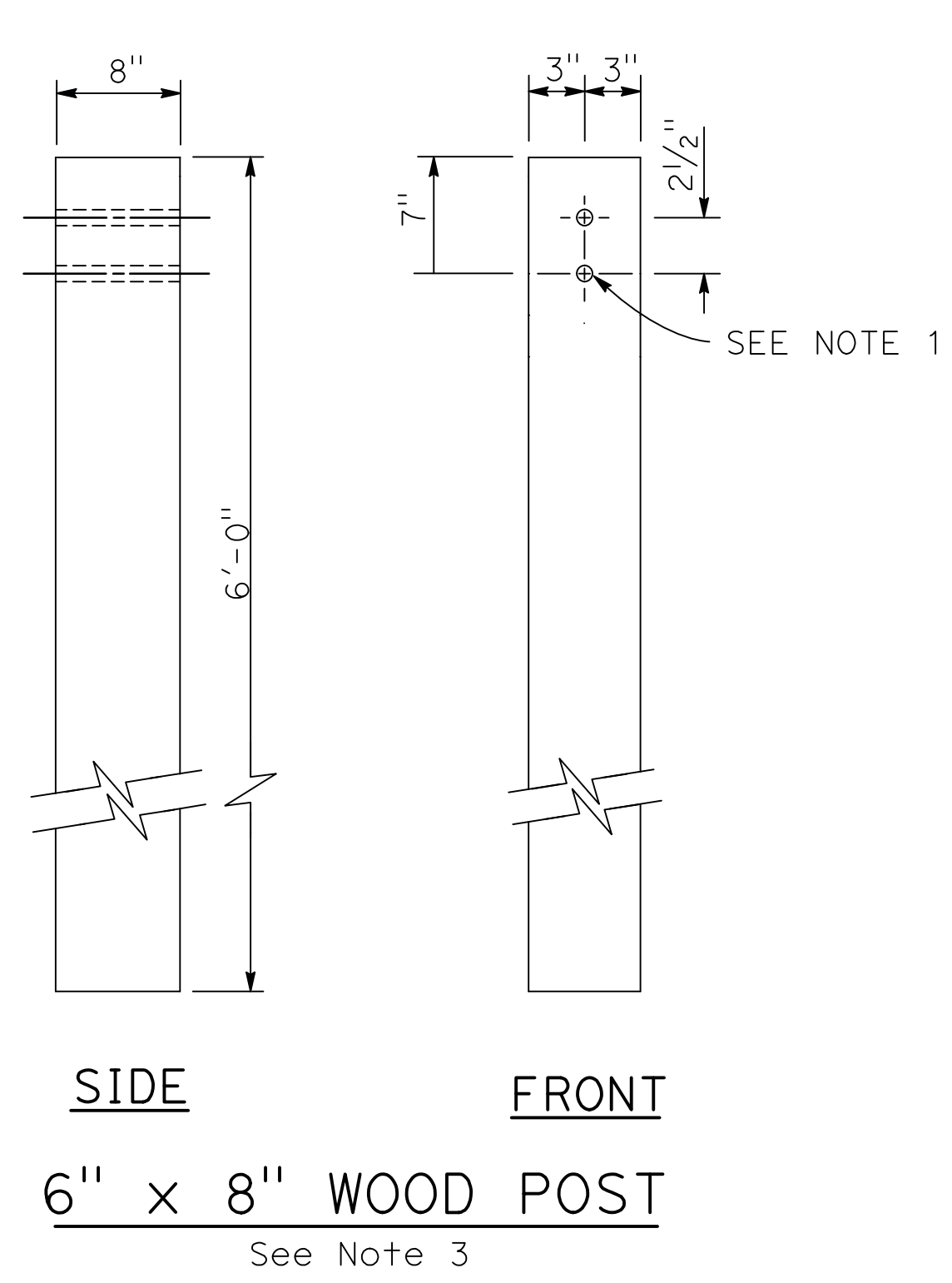
2022 REVISED STANDARD PLAN RSP A20A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	15	33

<i>Gary M. Gordon</i> REGISTERED CIVIL ENGINEER	05-31-23 DATE
May 31, 2023 PLANS APPROVAL DATE	
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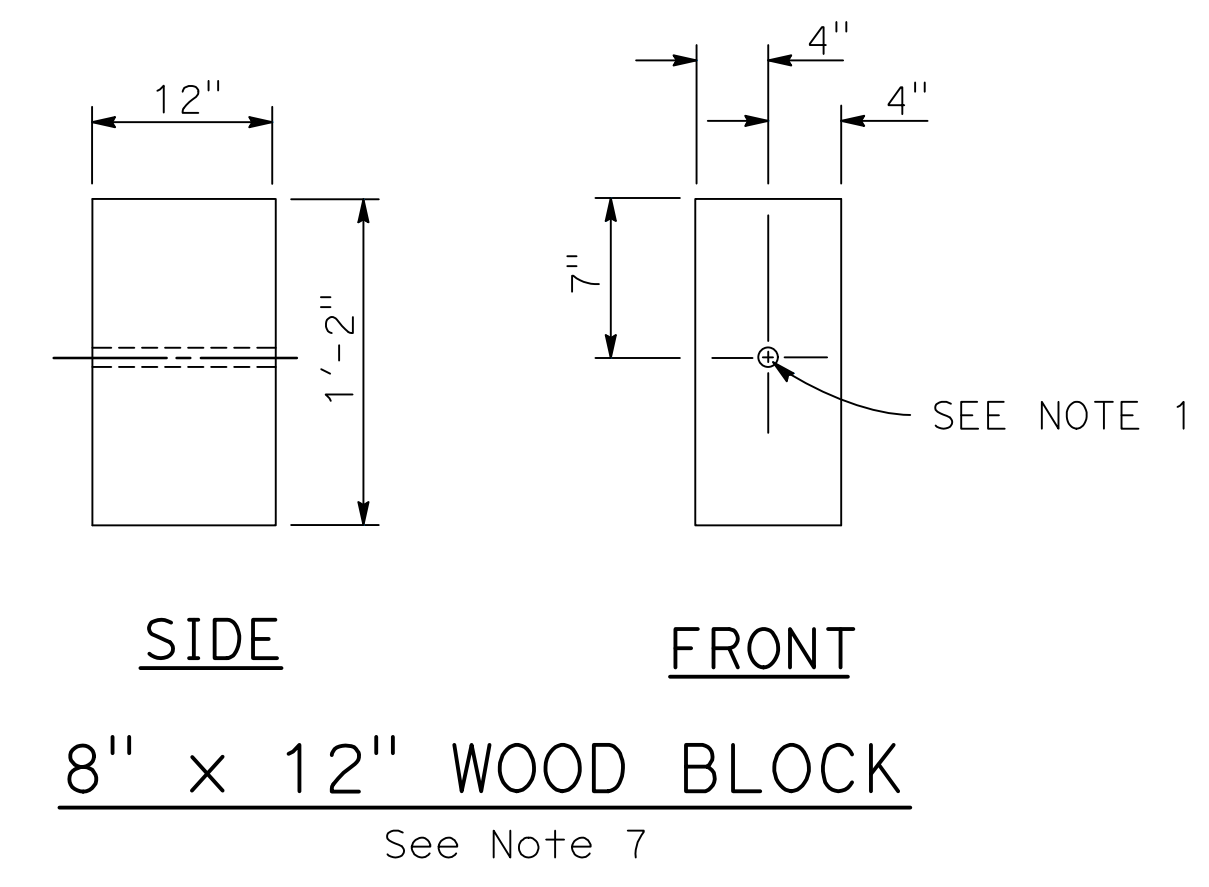
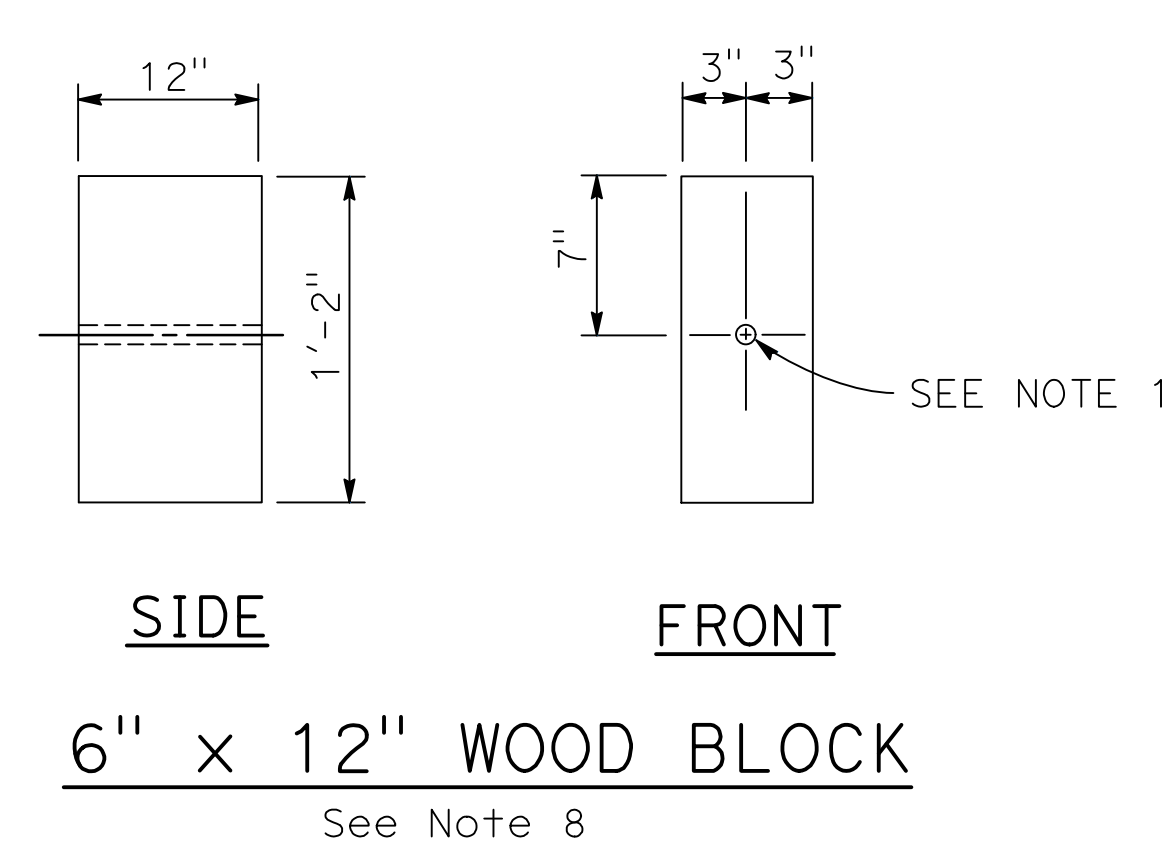
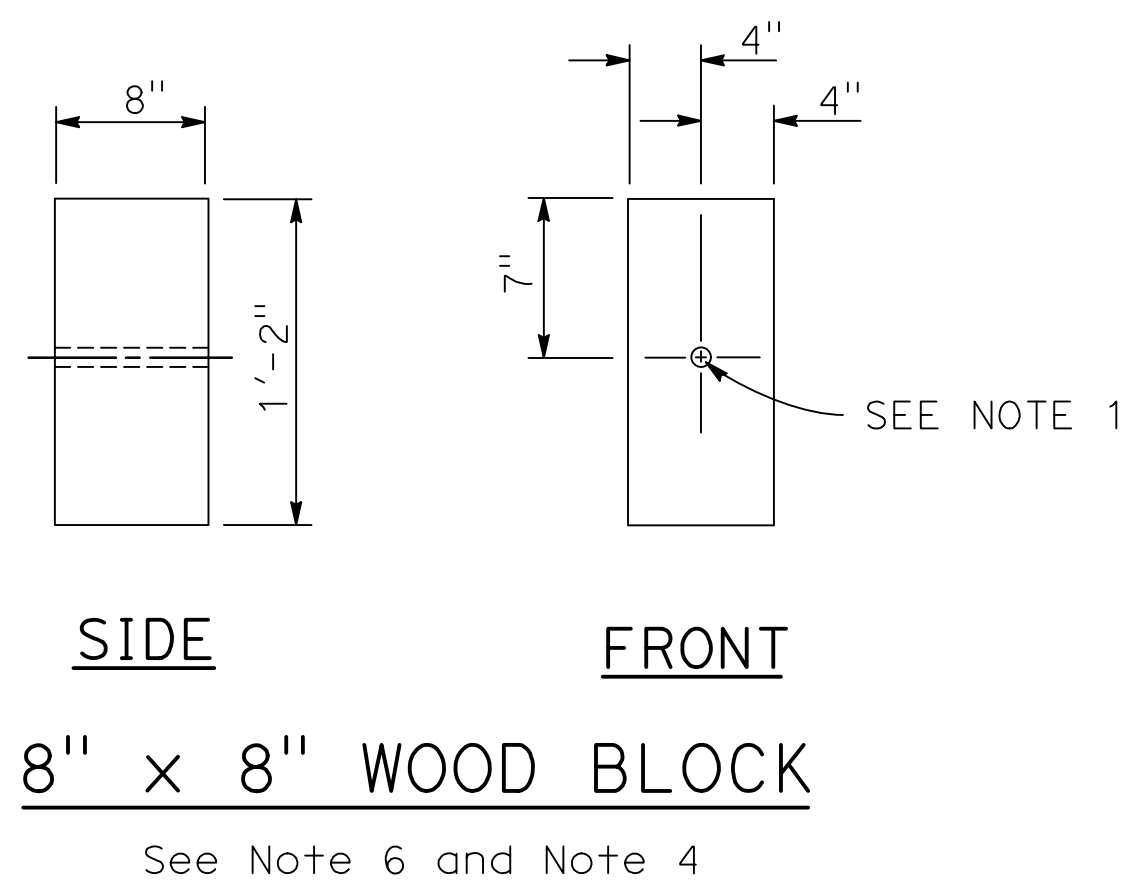
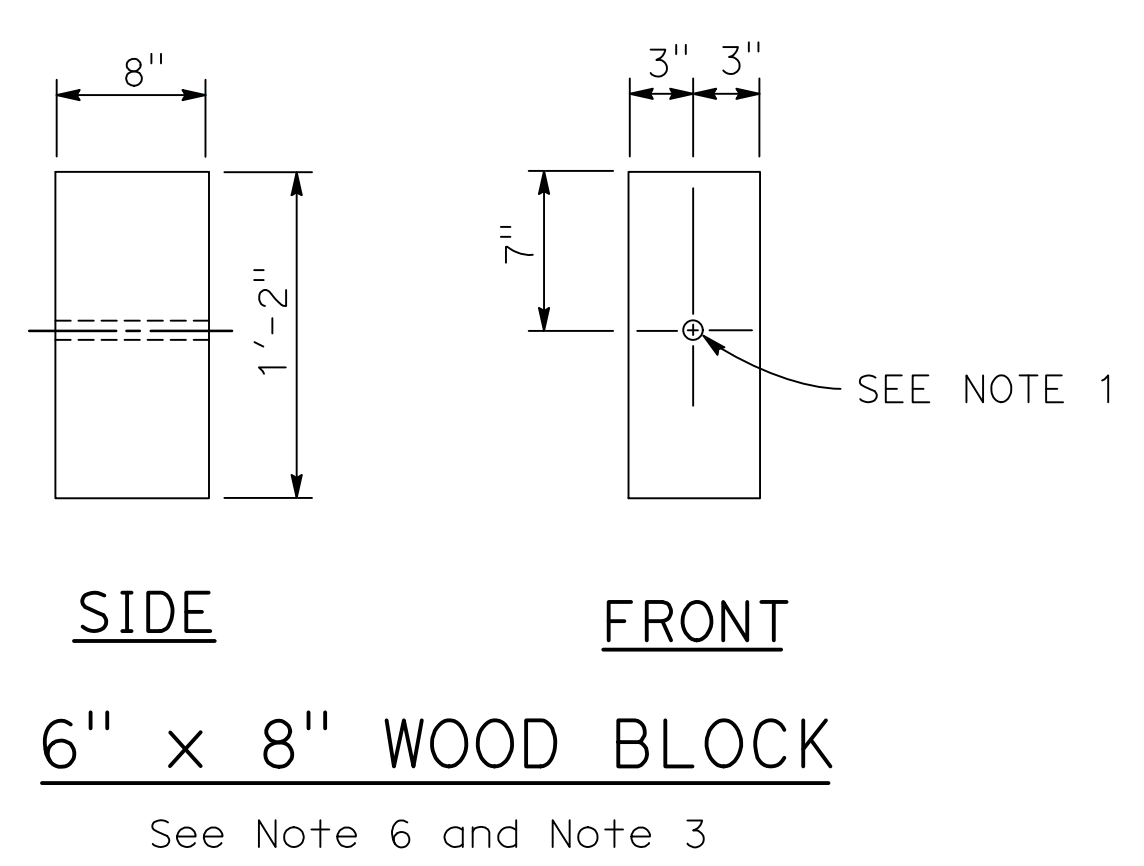


TO ACCOMPANY PLANS DATED 05-31-23



NOTES:

1. All holes in wood posts and blocks shall be 3/4" Dia ± 1/16".
2. Dimensions shown for wood post are nominal.
3. This post and block combination used for standard line post sections of MGS.
4. This post and 8" x 12" block combination used for line post sections of MGS on narrow roadways.
5. This post and 8" x 12" block combination is typically used where strengthened line post sections of MGS are warranted to shield fixed objects.
6. See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" wood blocks.
7. To be used with 8" x 8" x 7'-0" wood post if installed with 6" height dike.
8. To be used with 6" x 8" x 6'-0" wood post if installed with 6" height dike.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
WOOD POST AND
WOOD BLOCK DETAILS**

NO SCALE

RSP A77N1 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77N1
DATED AUGUST 1, 2022 - PAGE 67 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP N771

2022 REVISED STANDARD PLAN RSP A77N1

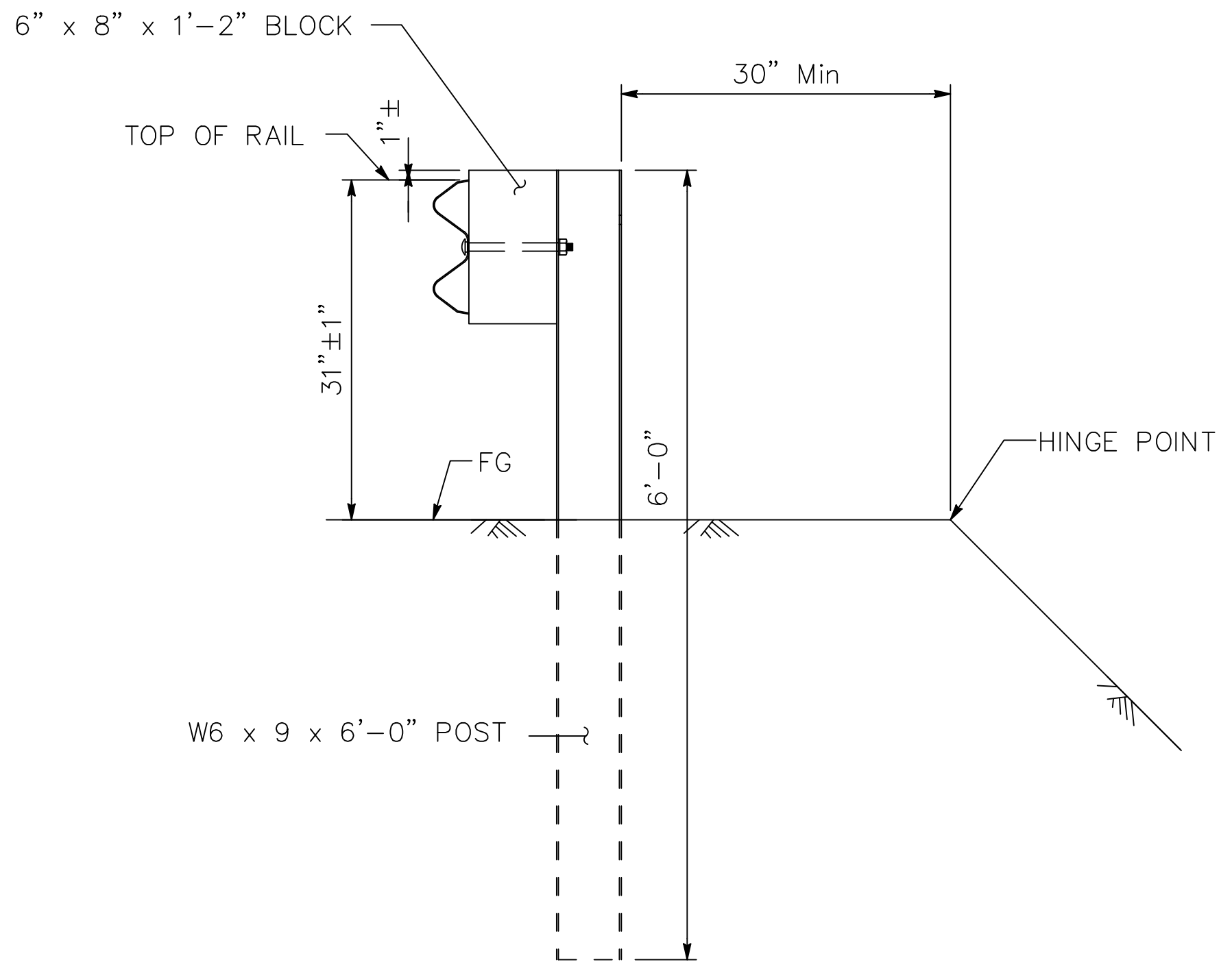
DATE PLOTTED = 5/31/23
TIME PLOTTED = 9:41:25 AM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	16	33

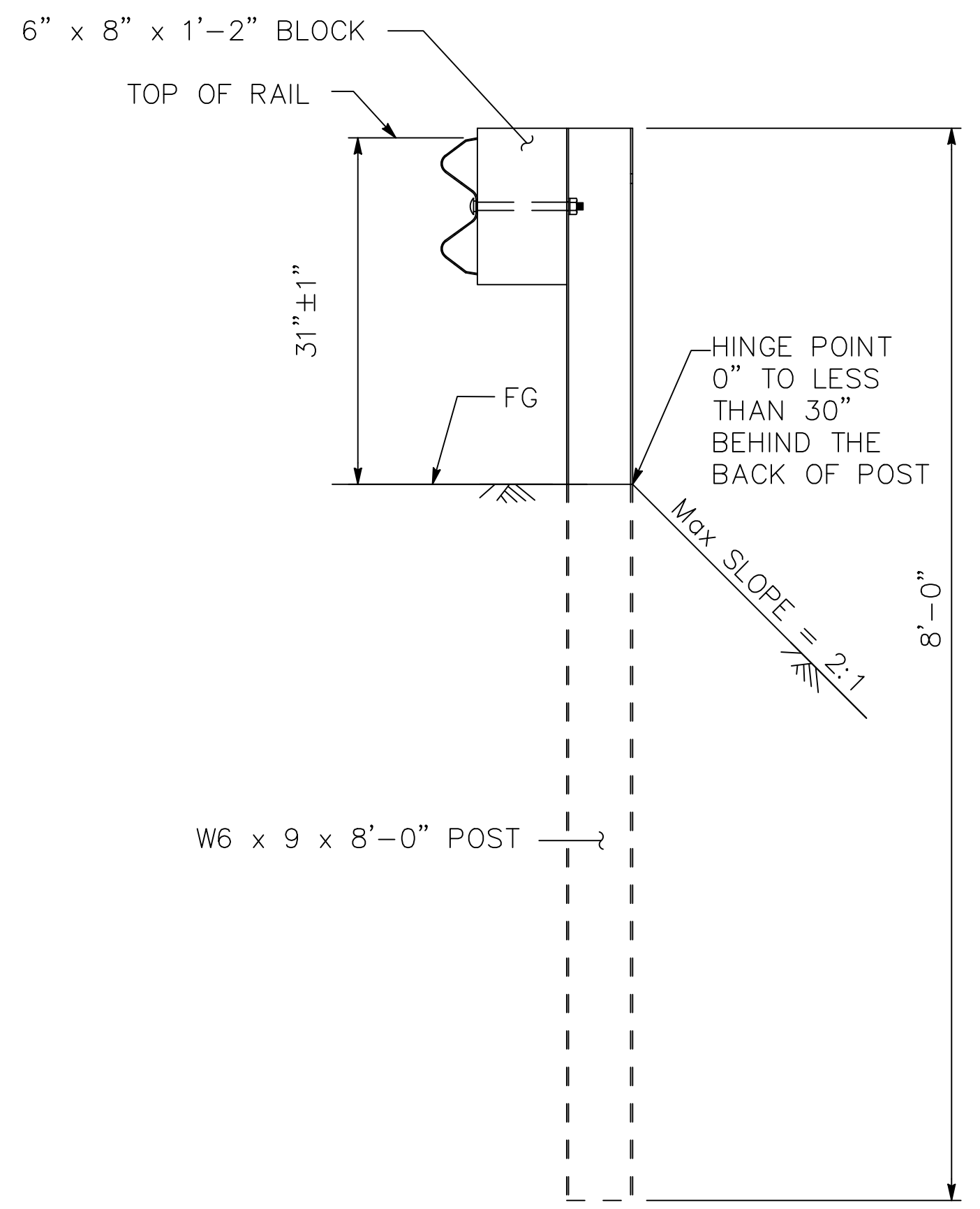
<i>Gary M. Gordon</i>	05-31-23
REGISTERED CIVIL ENGINEER	DATE
May 31, 2023	
PLANS APPROVAL DATE	

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	
REGISTERED PROFESSIONAL ENGINEER GARY M. GORDON No. 42176 Exp. 03-31-24 CIVIL STATE OF CAL FORM #	

TO ACCOMPANY PLANS DATED 05-31-23

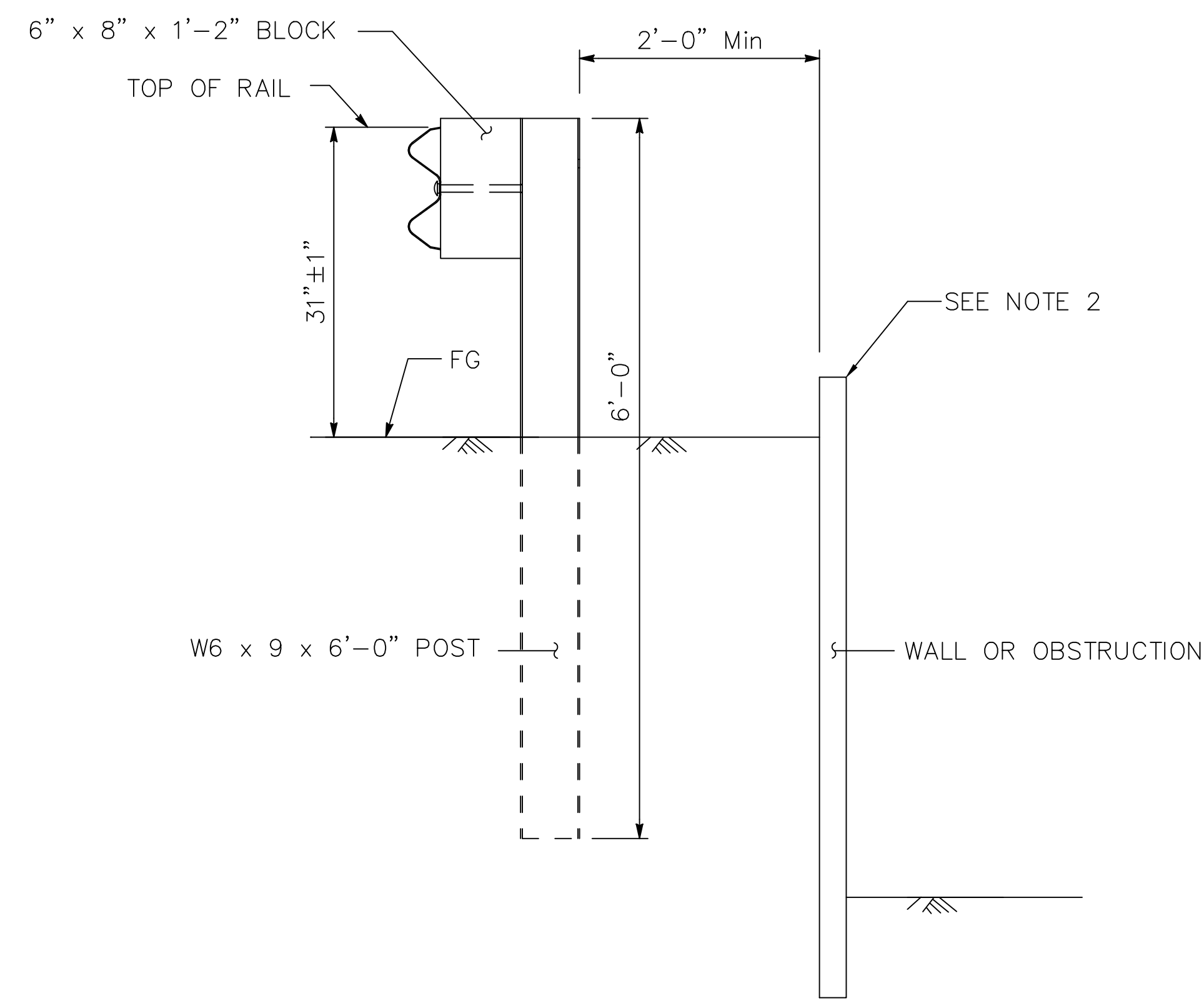


DETAIL A
TYPICAL ROADWAY INSTALLATION
See Note 1

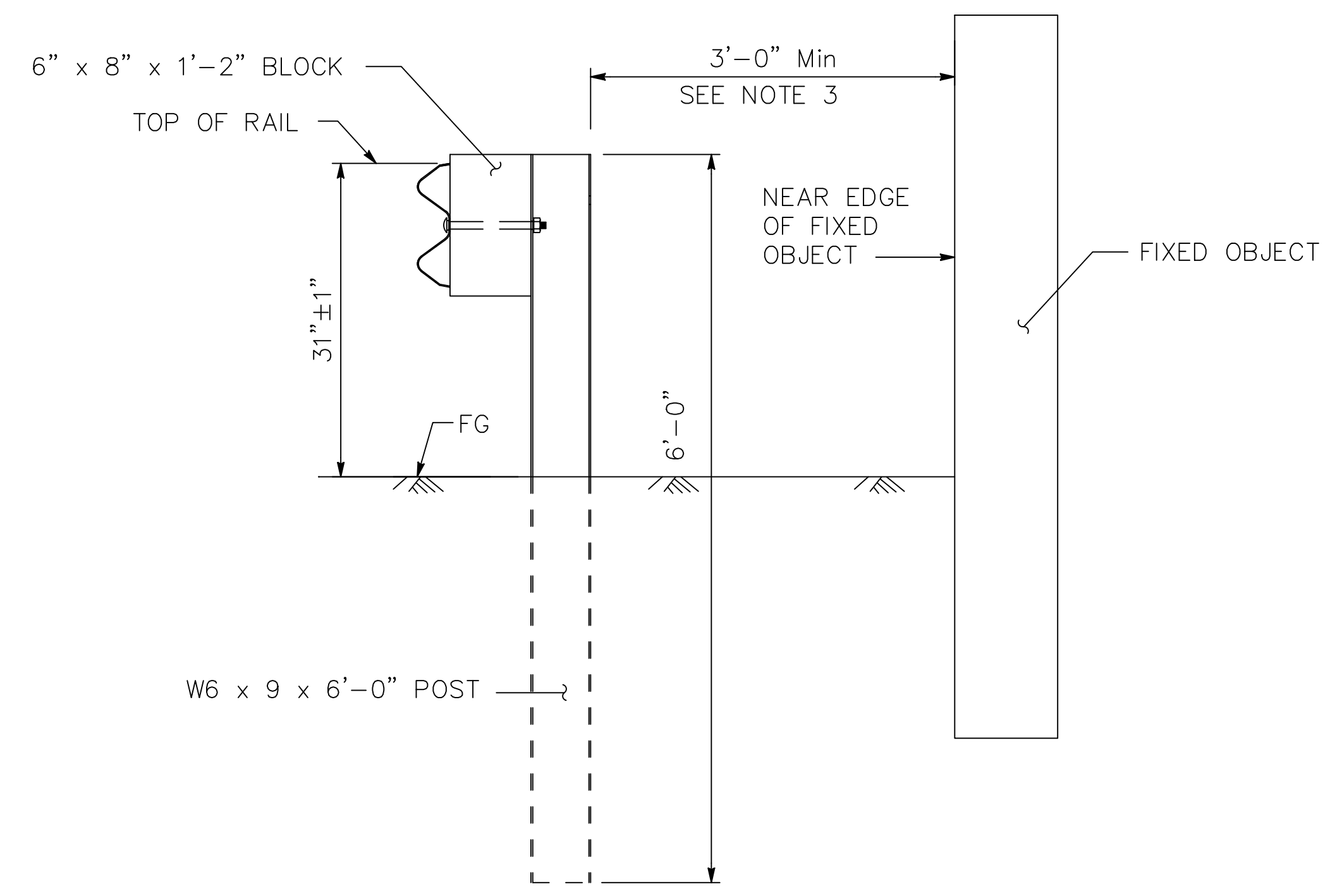


DETAIL B
NARROW ROADWAY INSTALLATION
See Note 1

POST EMBEDMENT



DETAIL C
AT OR BELOW GRADE



DETAIL D
ABOVE GRADE

INSTALLATION AT WALLS OR OBSTRUCTIONS

**MIDWEST GUARDRAIL SYSTEM
TYPICAL LINE POST EMBEDMENT
AND HINGE POINT OFFSET DETAILS**

NO SCALE
RSP A77N3 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77N3
DATED AUGUST 1, 2022 - PAGE 69 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77N3

2022 REVISED STANDARD PLAN RSP A77N3

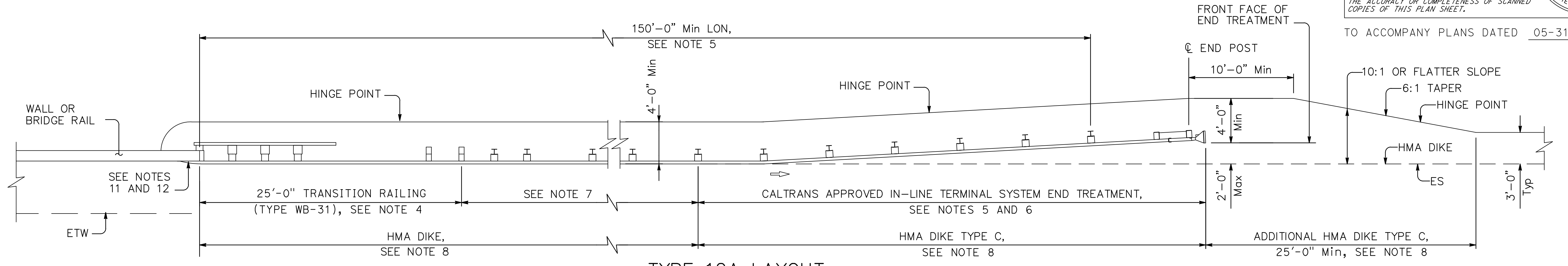
DATE PLOTTED = 5/31/23
TIME PLOTTED = 9:43:11 AM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	17	33

REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

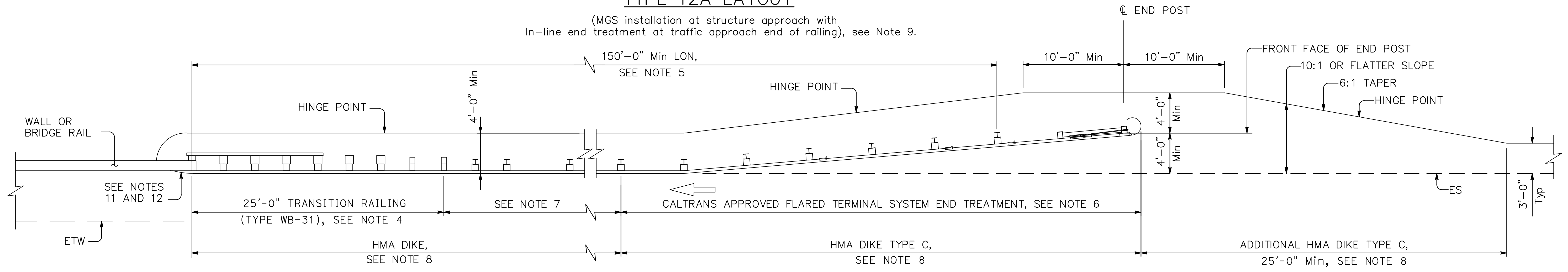
GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



TYPE 12A LAYOUT

(MGS installation at structure approach with
In-line end treatment at traffic approach end of railing), see Note 9.



TYPE 12B LAYOUT

(MGS installation at structure approach with
Flared end treatment at traffic approach end of railing), see Note 9.

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77L1, A77L2, A77M1, A77N2 and Revised Standard Plan RSP A77N1.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6'-0" long Steel W6 x 9 or W6 x 8.5 with blocks, or 6" x 8" x 6'-0" wood with blocks.
- For Transition Railing (Type WB-31) details for Types 12A and 12B Layouts, see Standard Plan A77U4.
- A minimum of 150'-0" of MGS is needed to develop Length of Need (LON).
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes or other fixed objects), it may be advisable to construct additional guard railing (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatment.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12A or Type 12B Layouts are typically used at the approach end of a structure, to the right or left on two-lane conventional highway where the roadbed width across the structure is 40 feet or less.
- See Revised Standard Plan RSP A77Q3 for typical layout used left of approaching traffic at the ends of each structure on multilane freeways or expressways with separate adjacent or parallel bridges.
- For additional details of typical connections to bridge rail, see Connection Detail AA on Standard Plans A77U1 and A77U2 and Connection Detail FF on Standard Plans A77V1 and A77V2.
- For additional details of a typical connection to walls or abutments, see Revised Standard Plans RSP A77U3A and RSP A77U3B.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE APPROACH**

NO SCALE
 RSP A77Q1 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77Q1
 DATED AUGUST 1, 2022 - PAGE 92 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77Q1

2022 REVISED STANDARD PLAN RSP A77Q1

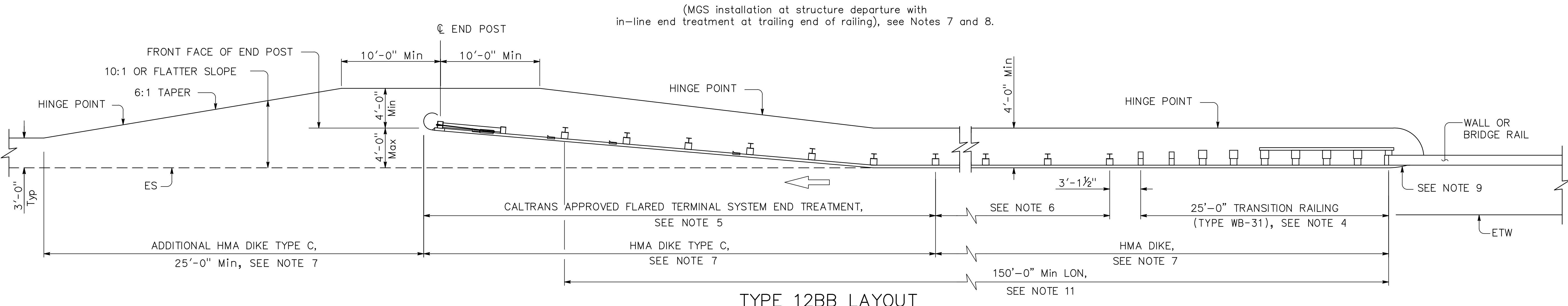
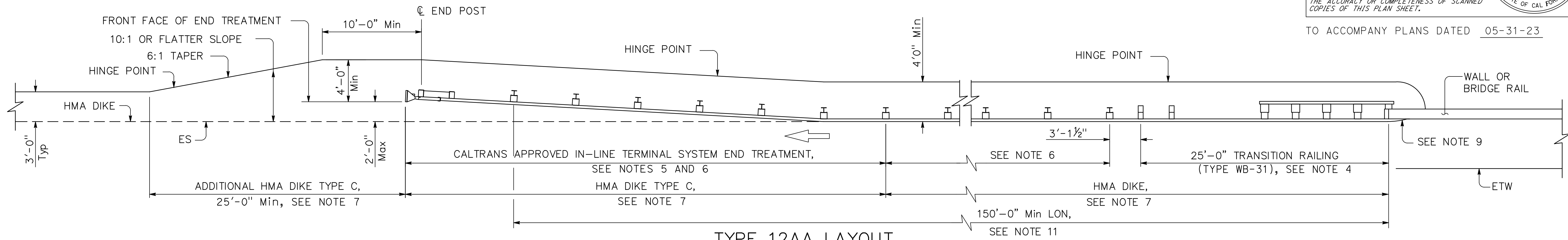
DATE PLOTTED = 5/31/23
TIME PLOTTED = 9:44:40 AM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	18	33

REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 05-31-23

2022 REVISED STANDARD PLAN RSP A77Q4



NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77L1, A77L2, A77M1, A77N2 and Revised Standard Plan RSP A77N1.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6'-0" long Steel W6 x 9 or W6 x 8.5 with blocks, or 6" x 8" x 6'-0" wood with blocks.
- For Transition Railing (Type WB-31) details for Types 12AA and 12BB Layouts, see Standard Plan A77U4.
- The type of terminal system to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes, other fixed objects), it may be advisable to construct additional MGS (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatments.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12AA or Type 12BB Layouts are typically used to the right or left of traffic departing a structure on two-way conventional highways where the roadbed width across the structure is less than 40 feet.
- For additional details of typical connections to bridge rail, see Connection Detail CC on Standard Plan A77U2 and Connection Detail HH on Standard Plan A77V2.
- For roadways with parallel structures and non traversable medians, the Type 12AA or Type 12BB layout may be used.
- A minimum of 150'-0" of MGS is needed to develop Length of Need (LON).

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE APPROACH**

NO SCALE
RSP A77Q4 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77Q4
DATED AUGUST 1, 2022 - PAGE 95 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77Q4

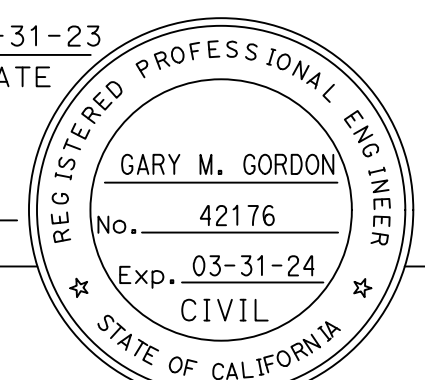
LEGEND

- Denotes Existing Structure
- Denotes Proposed Structure
- ⊕ STANDARD PLAN SHEET No.
- ⊕ DETAIL No.
- ⊕ SECTION IDENTIFICATION

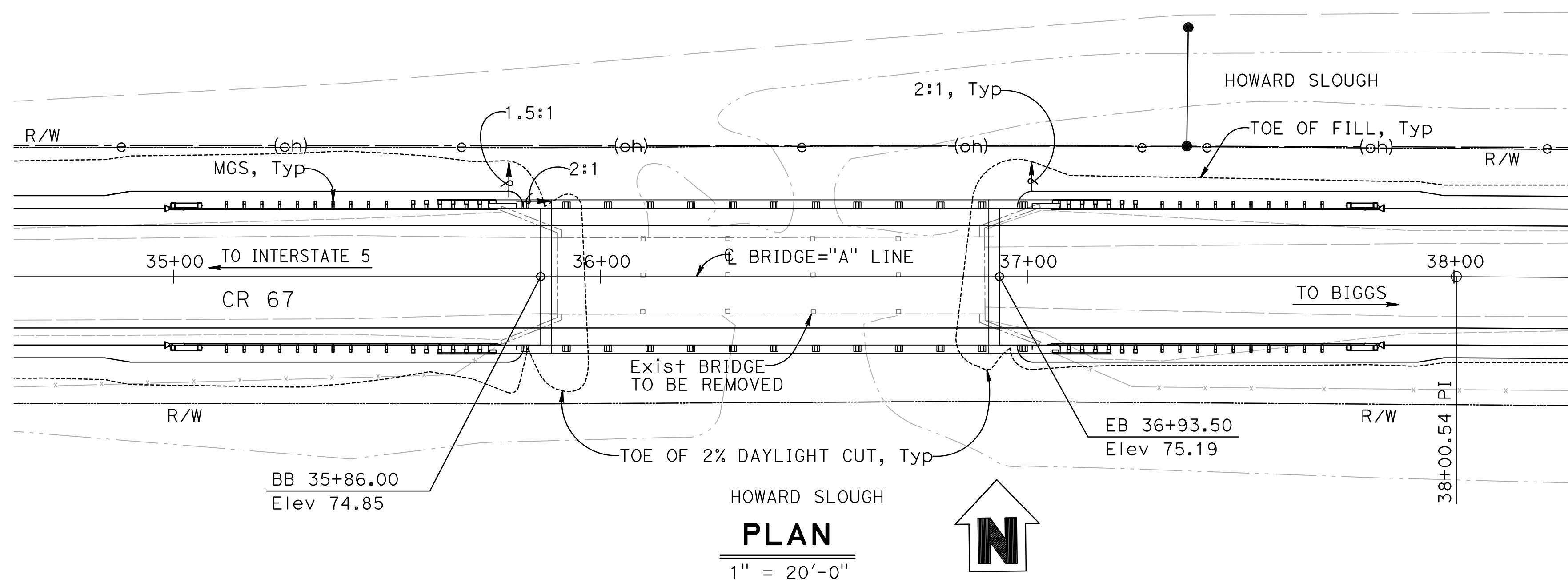
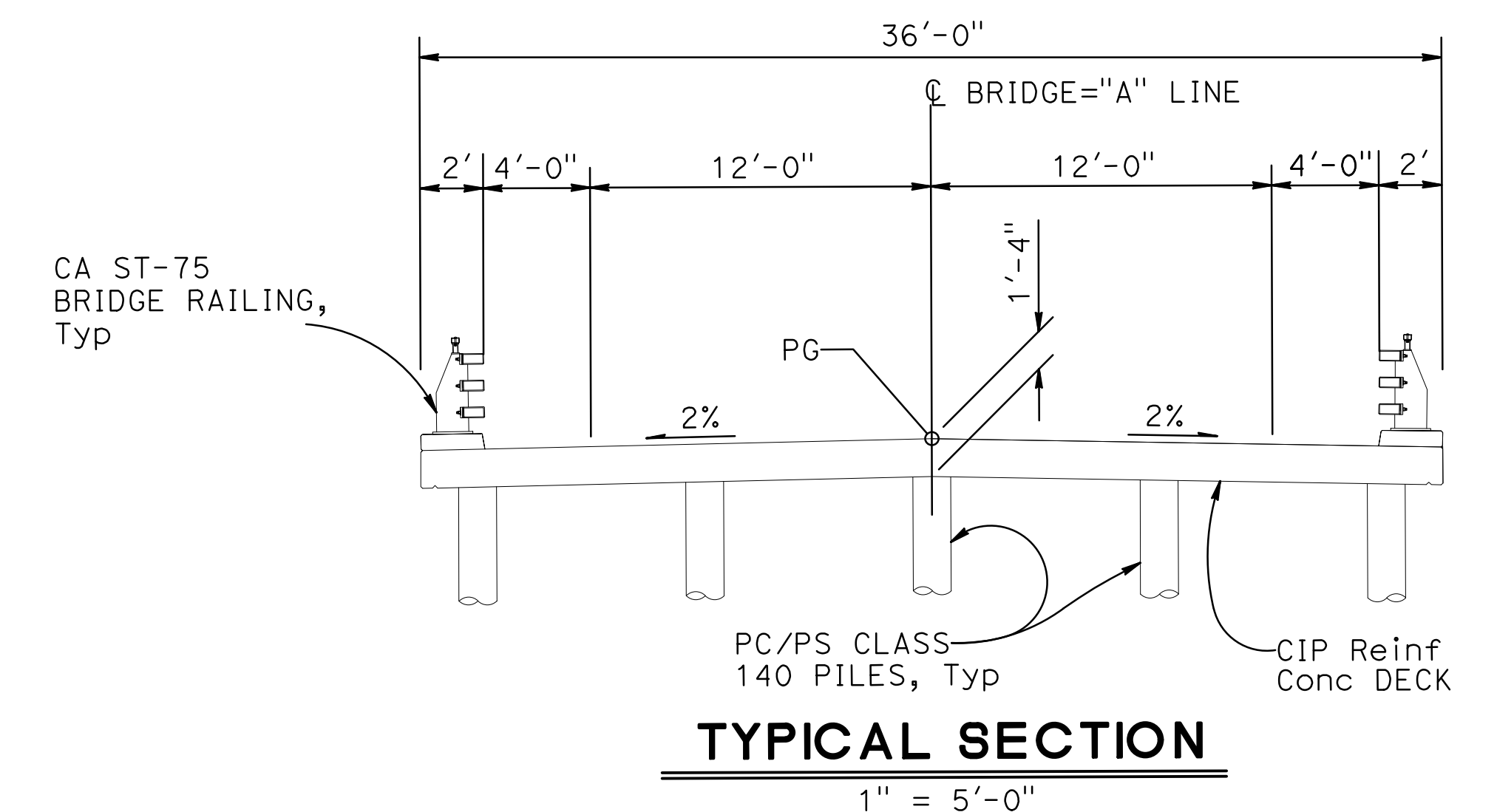
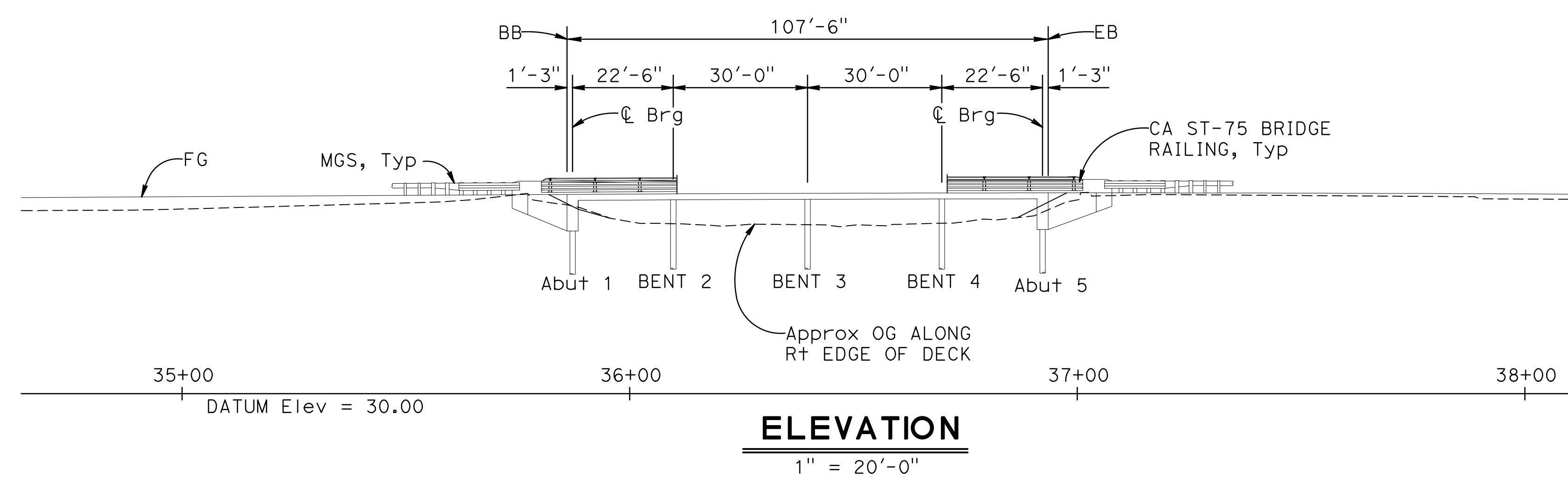
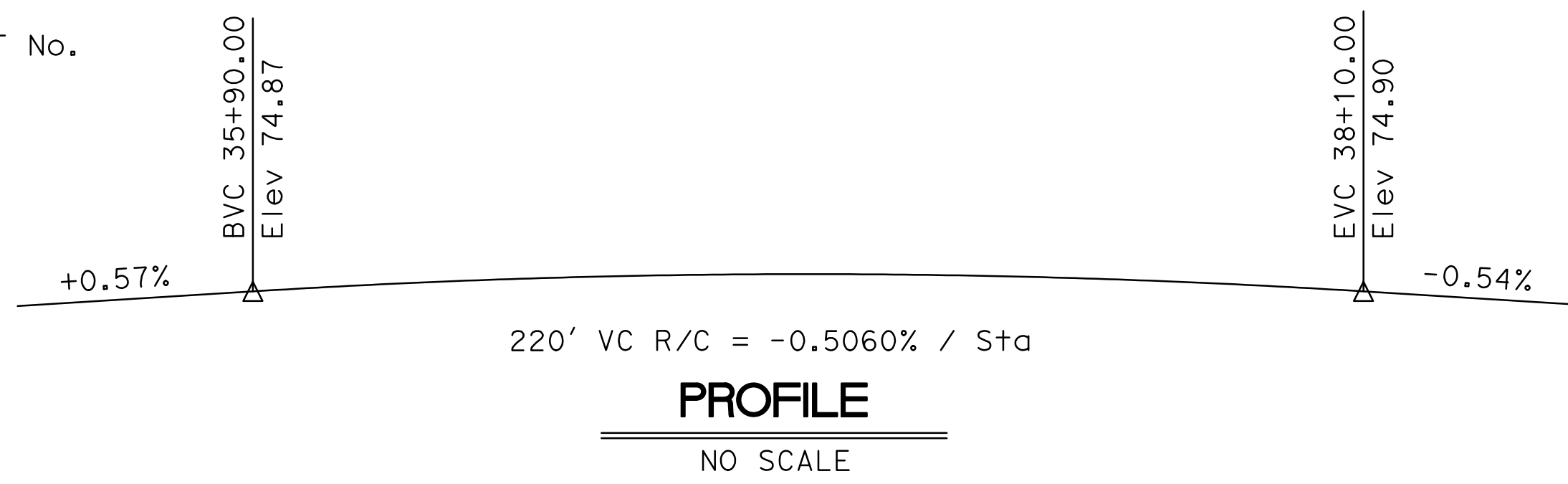
CALTRANS STANDARD PLANS, 2022 EDITION

- A10A ABBREVIATIONS (SHEET 1 OF 2)
- A10B ABBREVIATIONS (SHEET 2 OF 2)
- A10C LINES AND SYMBOLS (SHEET 1 OF 3)
- A10D LINES AND SYMBOLS (SHEET 2 OF 3)
- A10E LINES AND SYMBOLS (SHEET 3 OF 3)
- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
- B0-1 BRIDGE DETAILS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	19	33


 REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

Prepared by:
 WILL DAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



INDEX TO BRIDGE PLANS

SHEET No.	TITLE
1	GENERAL PLAN
2	DECK CONTOURS
3	FOUNDATION PLAN
4	ABUTMENT LAYOUT
5	BENT LAYOUT
6	SLAB REINFORCEMENT DETAILS No. 1
7	SLAB REINFORCEMENT DETAILS No. 2
8	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 1
9	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 2
10	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 3
11	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 4
12	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 5
13	SOIL LEGEND 1 OF 2
14	SOIL LEGEND 2 OF 2
15	LOG OF TEST BORINGS

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI	LAYOUT	BY R. UHLMANN
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN	SPECIFICATIONS	BY X

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER

BRIDGE NO. 11C0017
 POST MILES NA
BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
GENERAL PLAN

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



REVISION DATES	SHEET	OF
11/01/14 01/28/17 05/31/23	1	15

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	20	33

- NOTES:**
1. Contour indicate top of deck elevation.
 2. □ Indicates even 0.25 foot contours.
 3. × Indicates 10' intervals measured along "A" Line.
 4. Contour interval = 0.05'
 5. Contours do not include allowances for camber or falsework settlement.

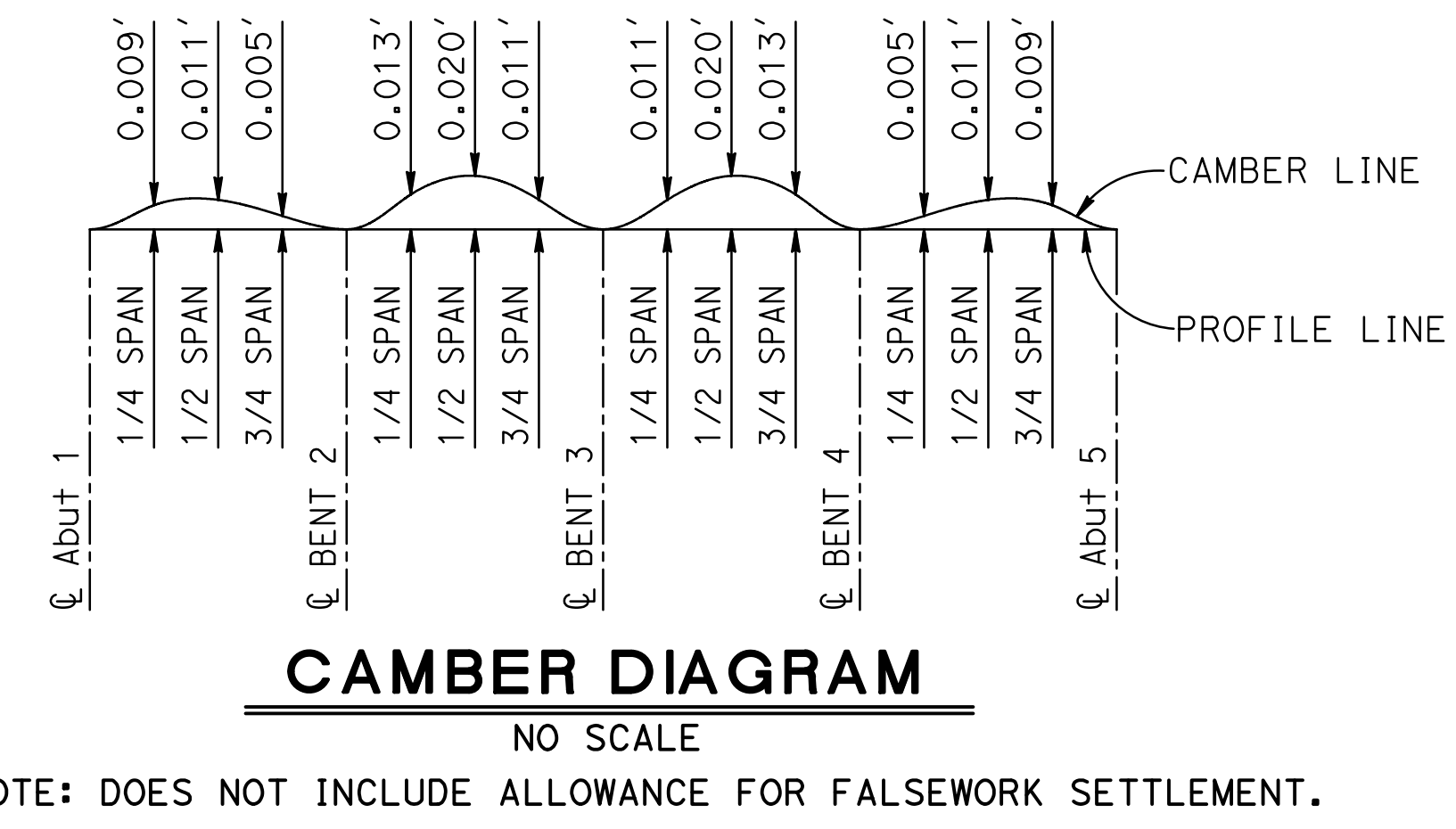
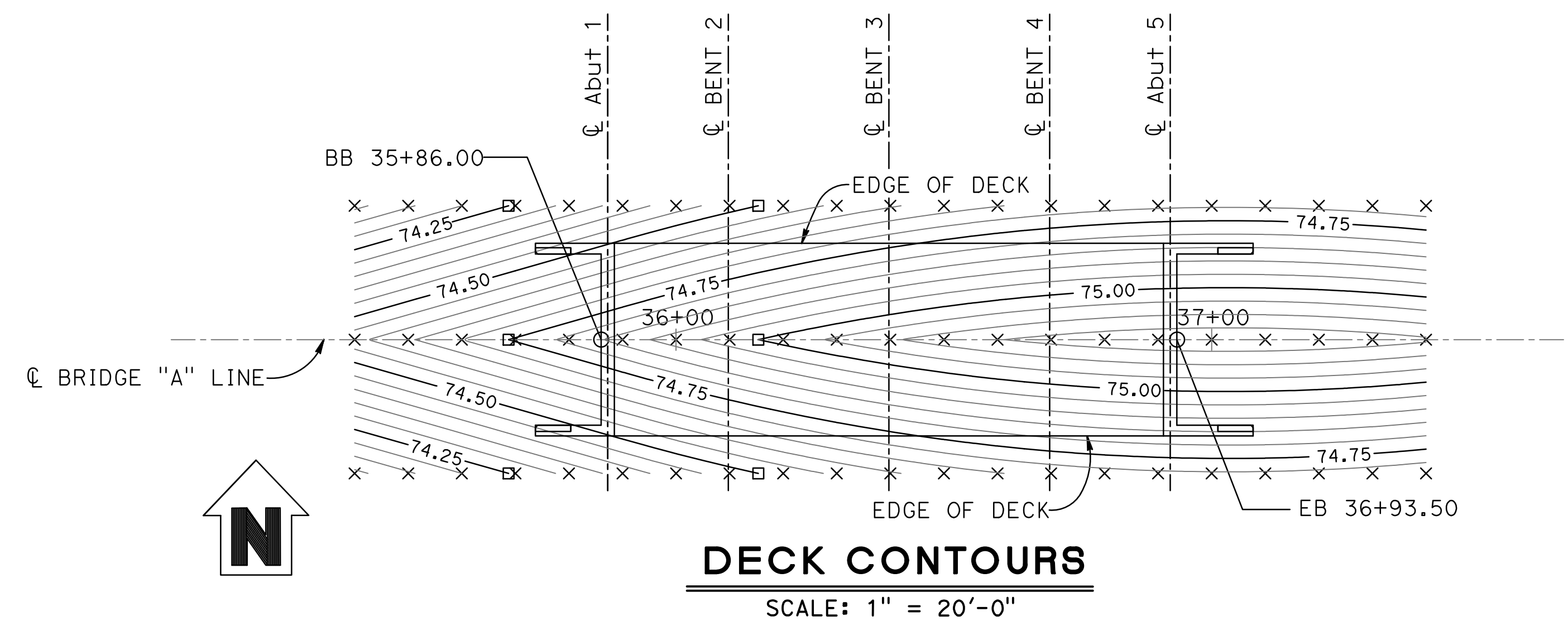
05-31-23
DATE

REGISTERED CIVIL ENGINEER

May 31, 2023
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

Prepared by:
WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001



**GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN**

DESIGN : AASHTO LRFD Bridge Design Specifications, 6th Edition and with Caltrans Amendments, preface dated September 2010.

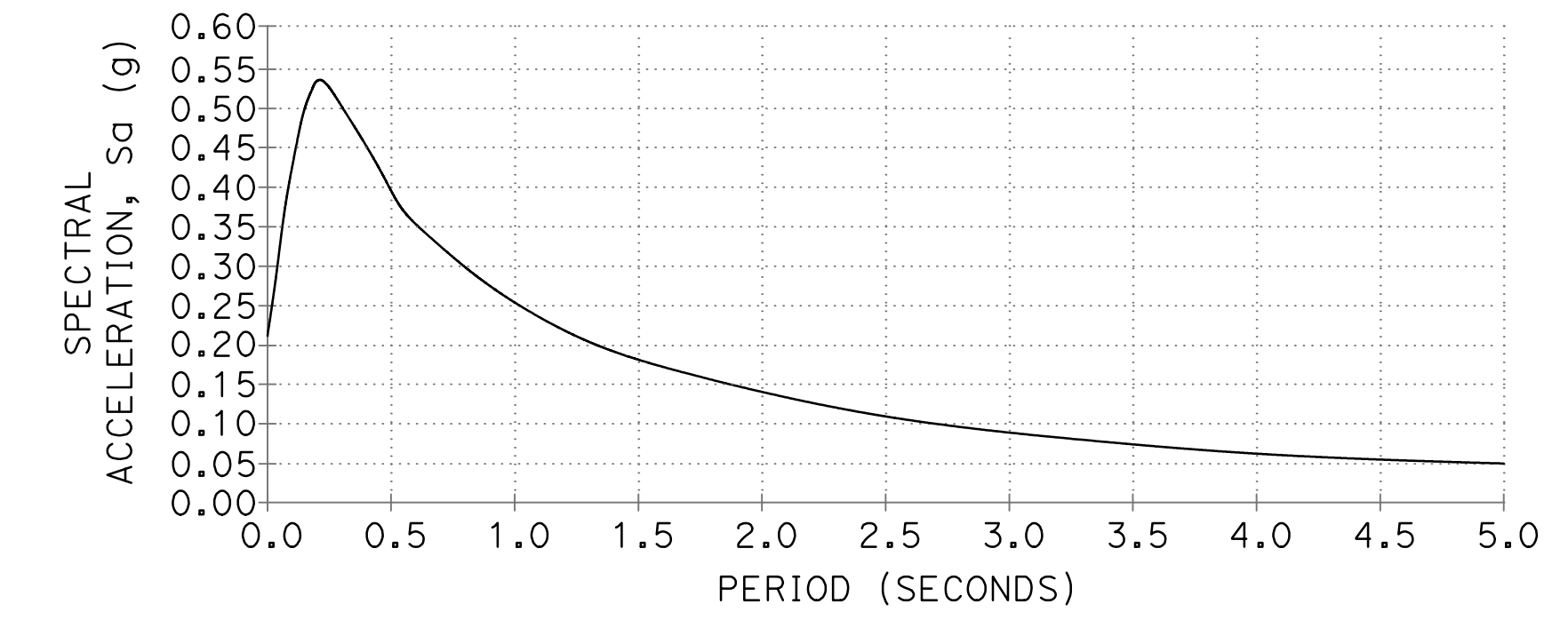
SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.7 dated April 2013.

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: HL93 and permit design load.

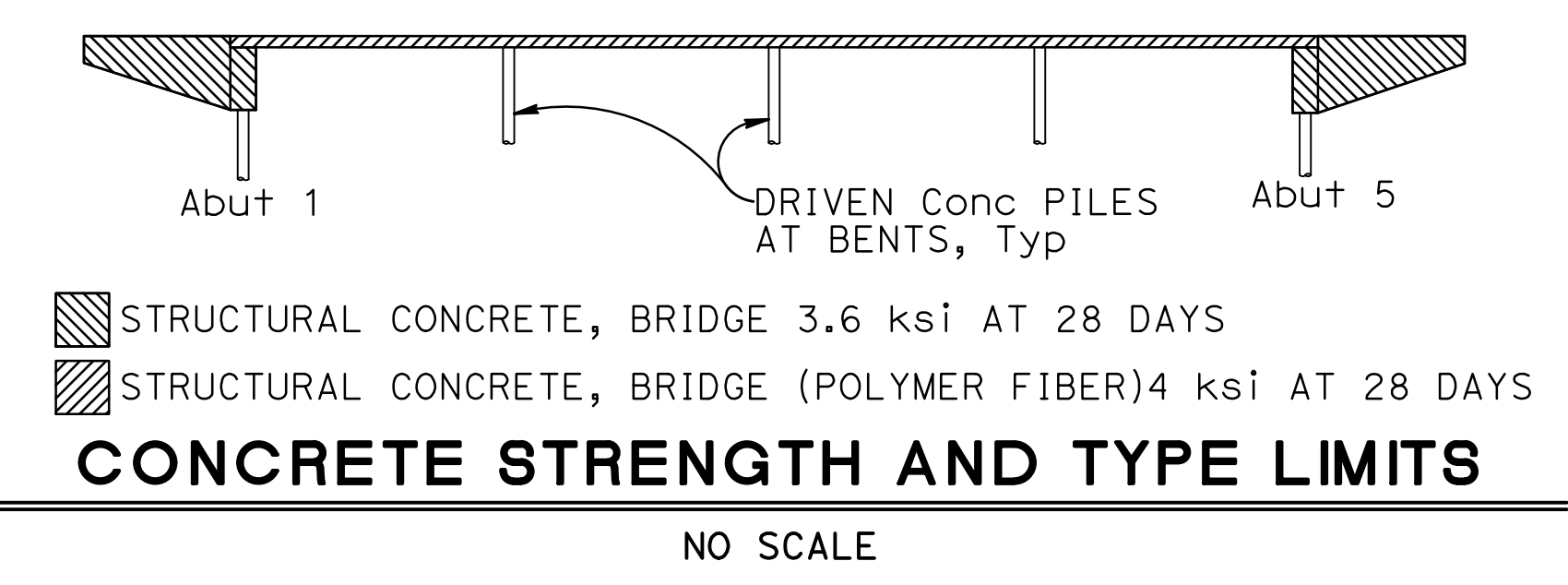
SEISMIC LOADING: Soil Profile: C
Moment Magnitude: 6.7
Peak Ground Acceleration = 0.22 g

REINFORCED CONCRETE: $f_y = 60$ ksi
 $f'_c = 4.0$ ksi (Superstructure)
 $f'_c = 3.6$ ksi (Substructure)



APPROXIMATE QUANTITIES

ITEM CODE	ITEM DESCRIPTION	QUANTITY	UNIT
157550	BRIDGE REMOVAL	1	LS
192020	STRUCTURE EXCAVATION (TYPE D)	92	CY
193003	STRUCTURE BACKFILL (BRIDGE)	54	CY
490736	FURNISH PILING (CLASS 90)	117	LF
490737	DRIVE PILE (CLASS 90)	10	EA
490746	FURNISH PILING (CLASS 140)	728	LF
490747	DRIVE PILE (CLASS 140)	15	EA
510053	STRUCTURAL CONCRETE, BRIDGE	63	CY
510054	STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	191	CY
520102	BAR REINFORCING STEEL (BRIDGE)	54,200	Lbs
048290	CALIFORNIA ST-75 BRIDGE RAIL	268	LF



DESIGN BY J. DeMARTINI CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO. 11C0017	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
DETAILS BY R. UHLMANN CHECKED J. DeMARTINI		PROJECT ENGINEER G. GORDON	
QUANTITIES BY J. DeMARTINI CHECKED R. UHLMANN		POST MILES NA	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	REVISION DATES	SHEET 2 OF 15

FILE => 11-0017-d-dc01

DATE PLOTTED => 5/31/2023 USERNAME => KEVIN TIME PLOTTED => 11:30:07 AM

BENCH MARK

Horizontal Datum NAD83

Vertical Datum NAVD88

HYDROLOGIC SUMMARY

DRAINAGE AREA	118 SQ ACRES			
	DESIGN FLOOD	BASE FLOOD	OVERTOPPING FLOOD	RECORD FLOOD
FREQUENCY, YEARS	50	100	X	X
DISCHARGE		14.00	X	X
CUBIC ft/sec.				
WATER SURFACE ELEVATION AT BRIDGE		68.14	X	X

NOTE:
Flood Plain Data is based upon information available when the plans were prepared and are shown to meet Federal requirements. The accuracy of said information is not warranted by the Designer and interested or affected parties should make their own investigation.

LEGEND

- DENOTES EXISTING STRUCTURE
- DENOTES PROPOSED STRUCTURE
- o DENOTES CLASS 140 PILES
- 66.31 DENOTES BOTTOM OF FOOTING ELEVATION

NOTES

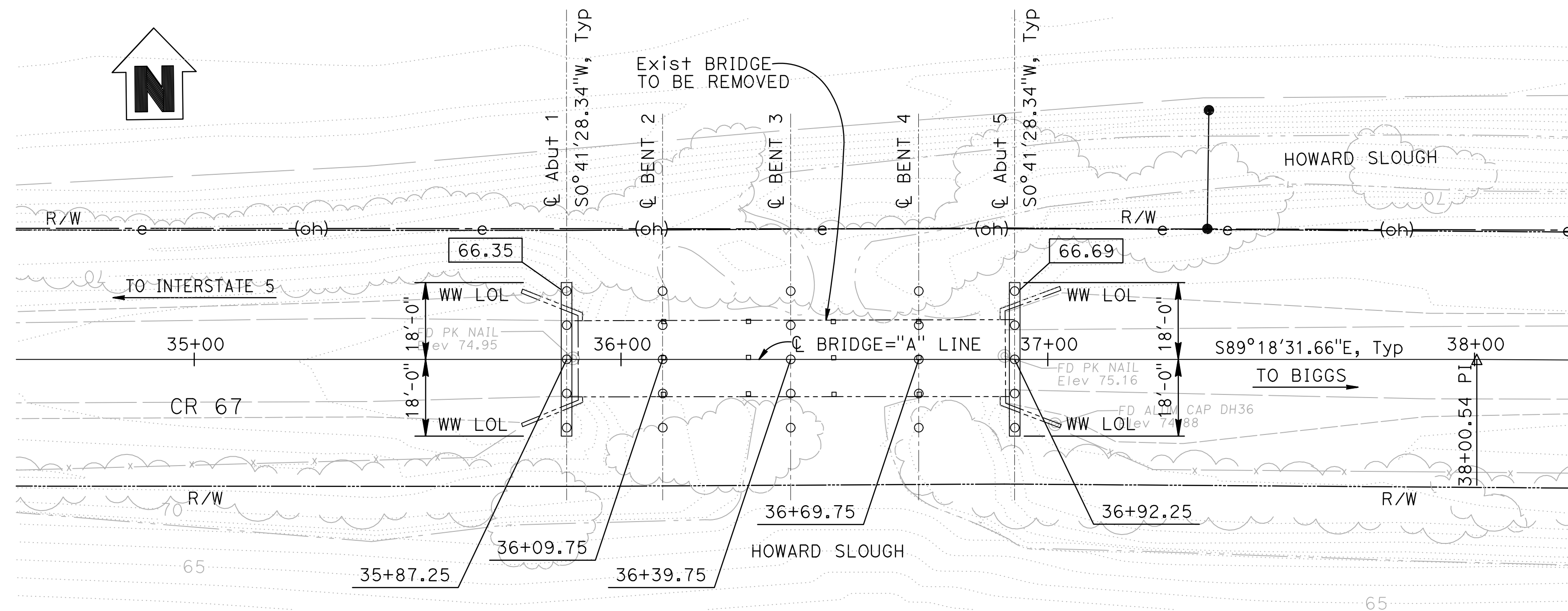
1. Utility relocation not shown. Utilities in conflict with piles will be relocated for bridge construction.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	21	33

REGISTERED CIVIL ENGINEER
DATE 05-31-23
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

May 31, 2023
PLANS APPROVAL DATE

Prepared by:
WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001



PLAN
1" = 20'-0"

PILE DATA TABLE

LOCATION	PILE TYPE	DESIGN LOADING (SERVICE)	NOMINAL RESISTANCE		DESIGN TIP ELEV* (FEET)	SPECIFIED TIP ELEV (FEET)	PC/PS CONCRETE PILE CUT OFF ELEVATION (FEET)				
			COMPRESSION	TENSION			PILE No. 1	PILE No. 2	PILE No. 3	PILE No. 4	PILE No. 5
Abut 1	CLASS 90	90 kips	180 kips	90	43.00 (1)	43.00	66.60	66.60	66.60	66.60	66.60
BENT 2	CLASS 140	140 kips	280 kips	140	33.00 (1)	33.00	73.44	73.58	73.72	73.58	73.44
BENT 3	CLASS 140	140 kips	280 kips	140	33.00 (1)	33.00	73.56	73.70	73.84	73.70	73.56
BENT 4	CLASS 140	140 kips	280 kips	140	33.00 (1)	33.00	73.64	73.78	73.92	73.78	73.64
Abut 5	CLASS 90	900 kips	180 kips	90	43.00 (1)	43.00	66.94	66.94	66.94	66.94	66.94

* DESIGN TIP ELEVATION IS CONTROLLED BY THE FOLLOWING DEMANDS:
(1) COMPRESSION, (2) TENSION, (3) LATERAL LOADS, (4) SETTLEMENT

SCALE: 1"=30'	VERT.DATUM NAVD88	HORZ.DATUM NAD83
PHOTOGRAMMETRY AS OF: 06/12	ALIGNMENT TIES X	
SURVEYED BY S. ESPINOSA	DRAFTED BY J. JONES	
FIELD CHECKED BY B. STRATMAN	CHECKED BY P. ESPINOSA	

DESIGN BY J. DeMARTINI	CHECKED M. ILEY
DETAILS BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

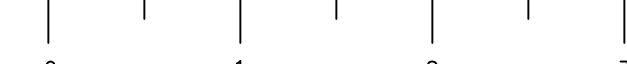
G. GORDON
PROJECT ENGINEER

BRIDGE NO.	11C0017
POST MILES	NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

FOUNDATION PLAN

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
11/28/14 07/28/17 05/31/23	3	15

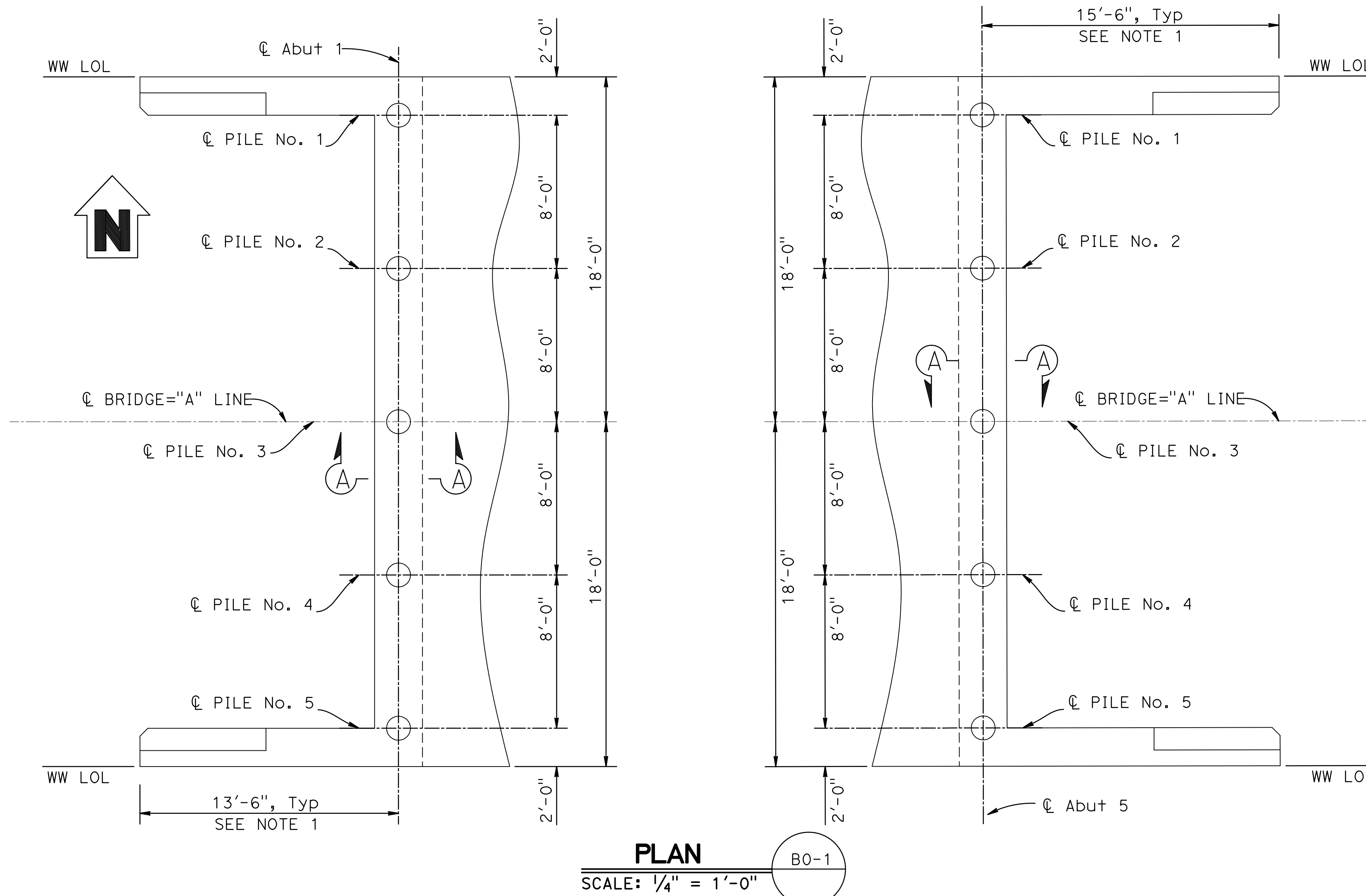
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	22	33

NOTES:
 1. For 'TYPICAL WINGWALL ELEVATION', see Caltrans Standard Plan B0-1.

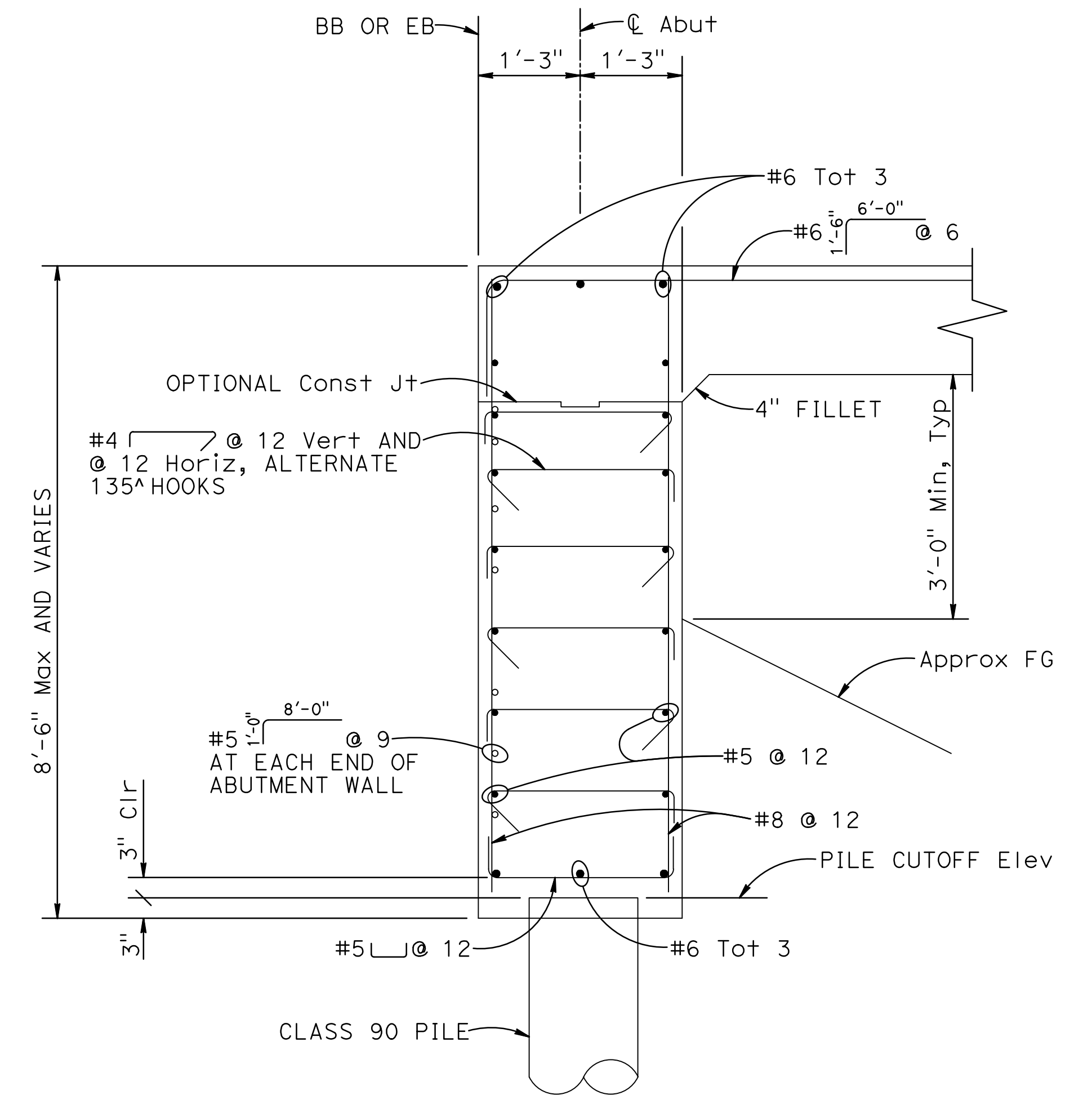
REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



PLAN
 SCALE: 1/4" = 1'-0"
 B0-1



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

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN

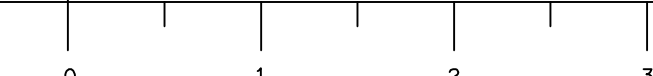
PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER

BRIDGE NO.	11C0017
POST MILES	NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
ABUTMENT LAYOUT

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



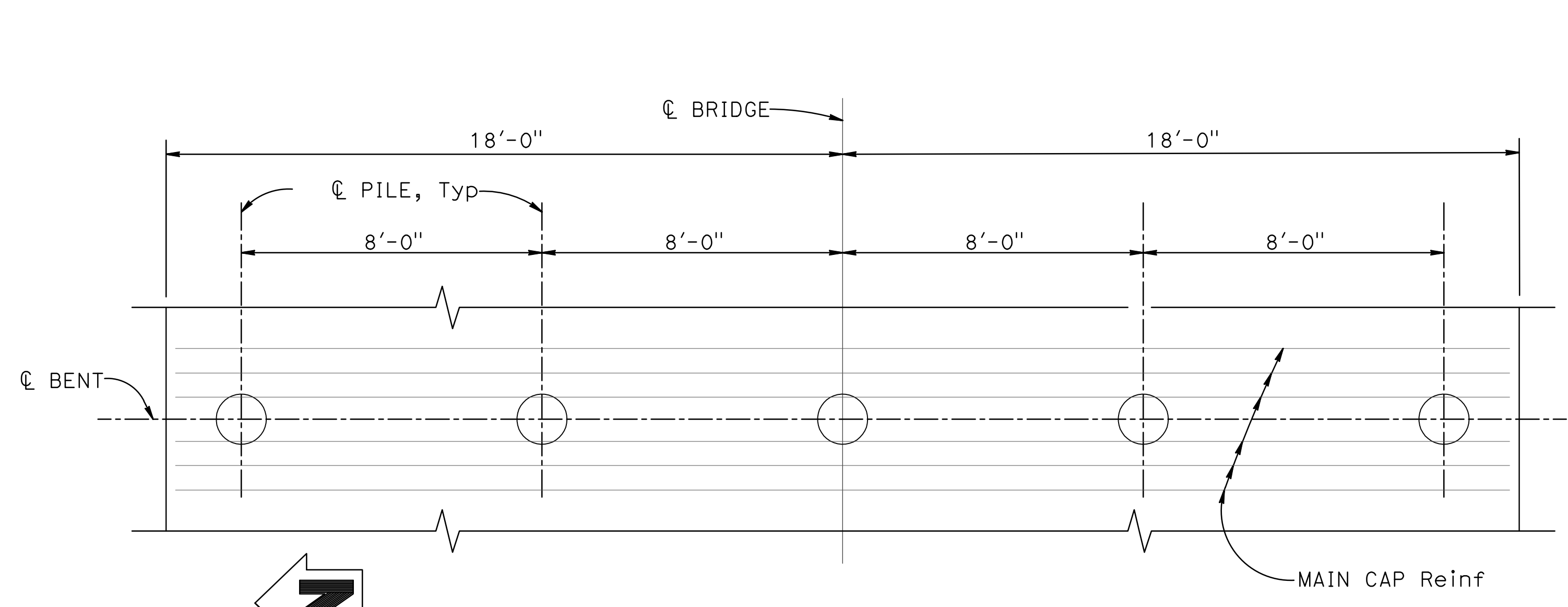
DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	11/06/14 07/28/17 05/31/23	4	15

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	23	33

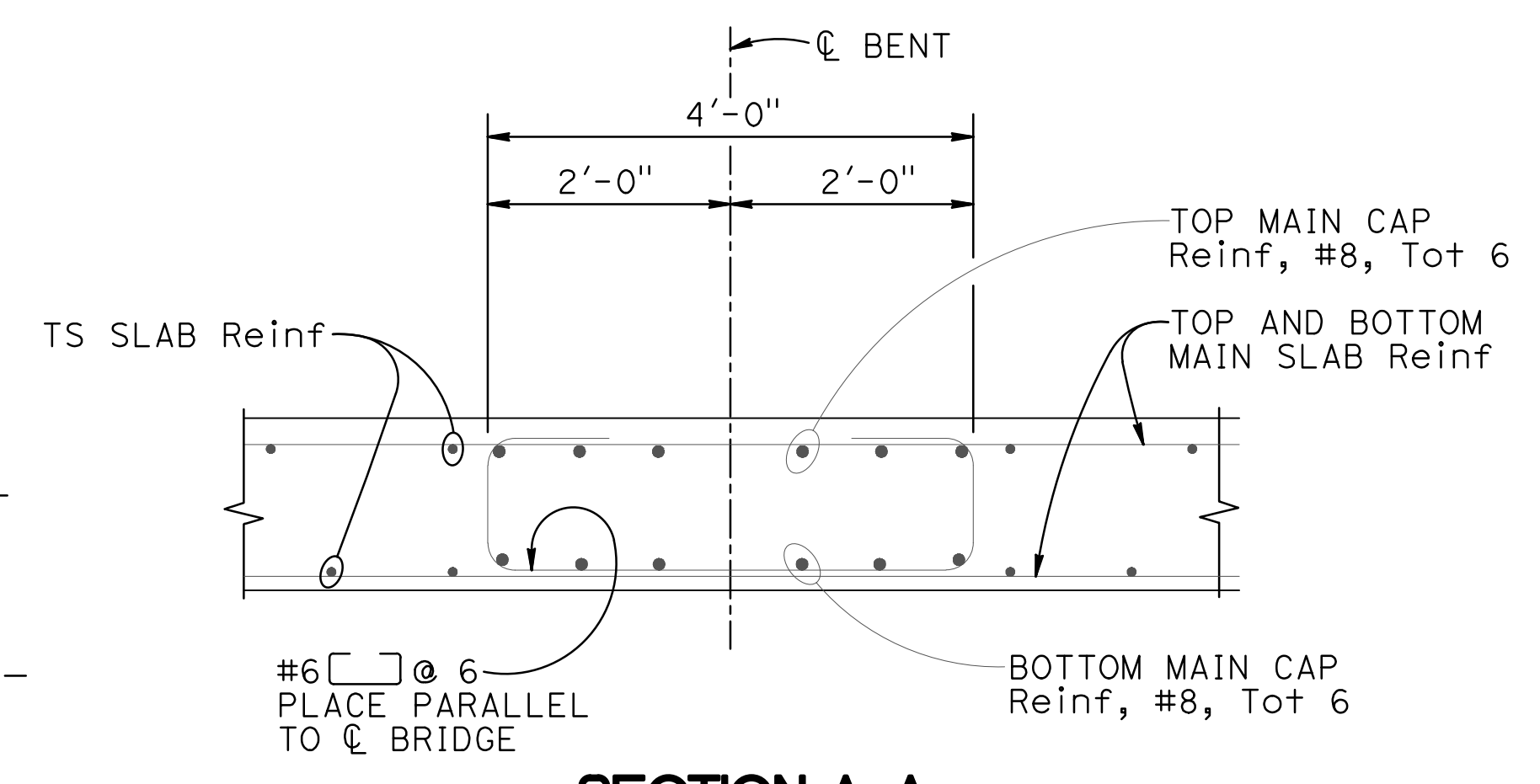
REGISTERED CIVIL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

05-31-23 DATE
 May 31, 2023
 PLANS APPROVAL DATE

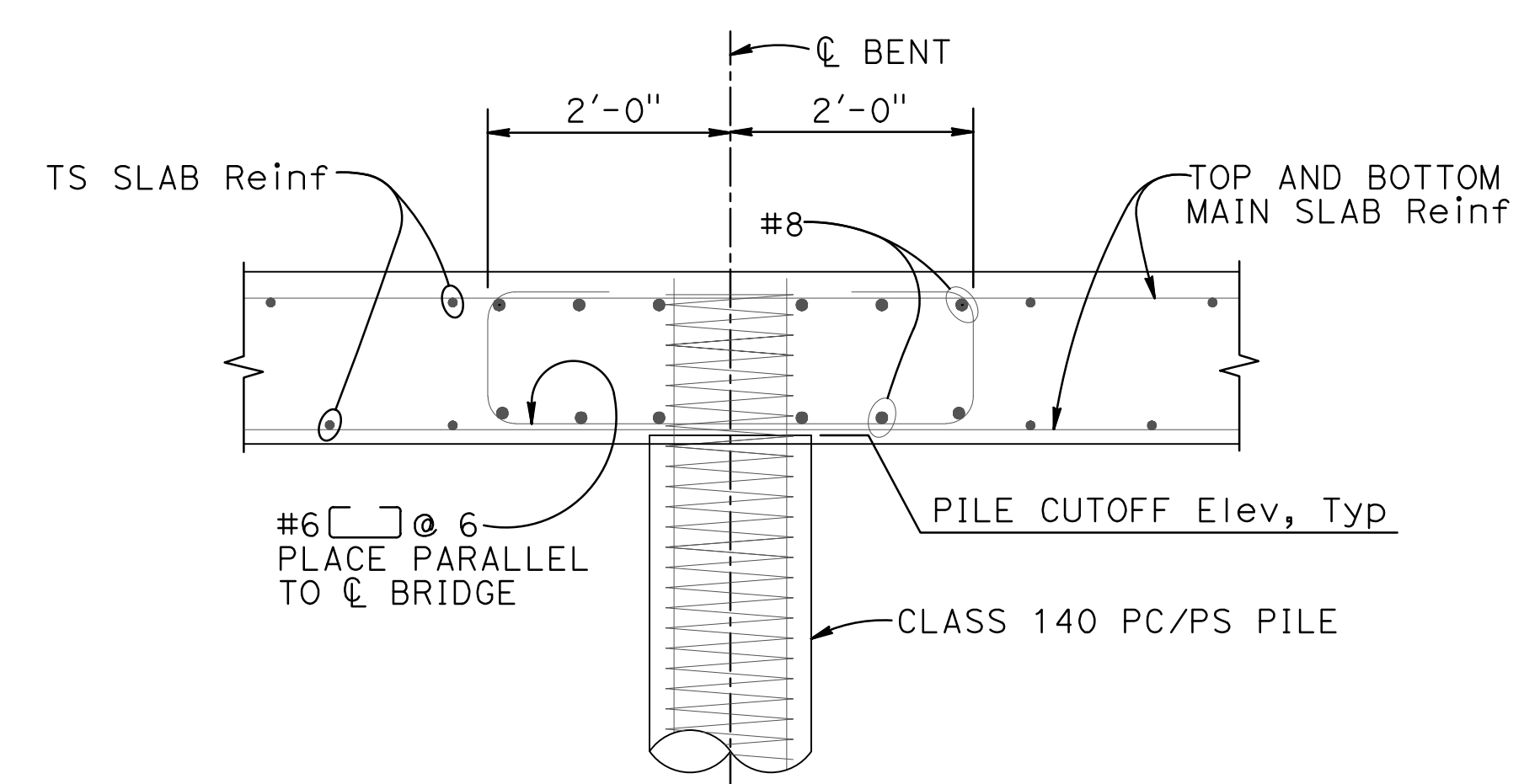
Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



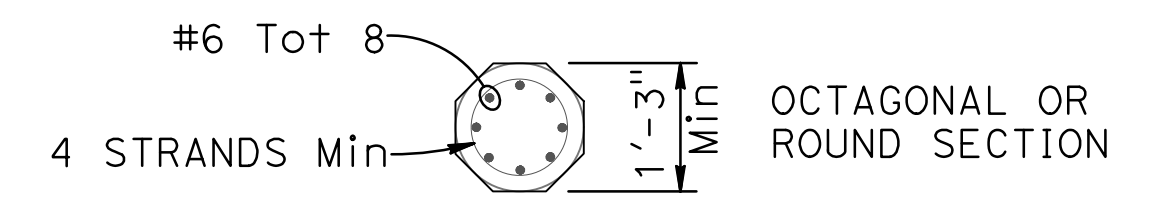
PLAN
 SCALE: 3/8" = 1'-0"



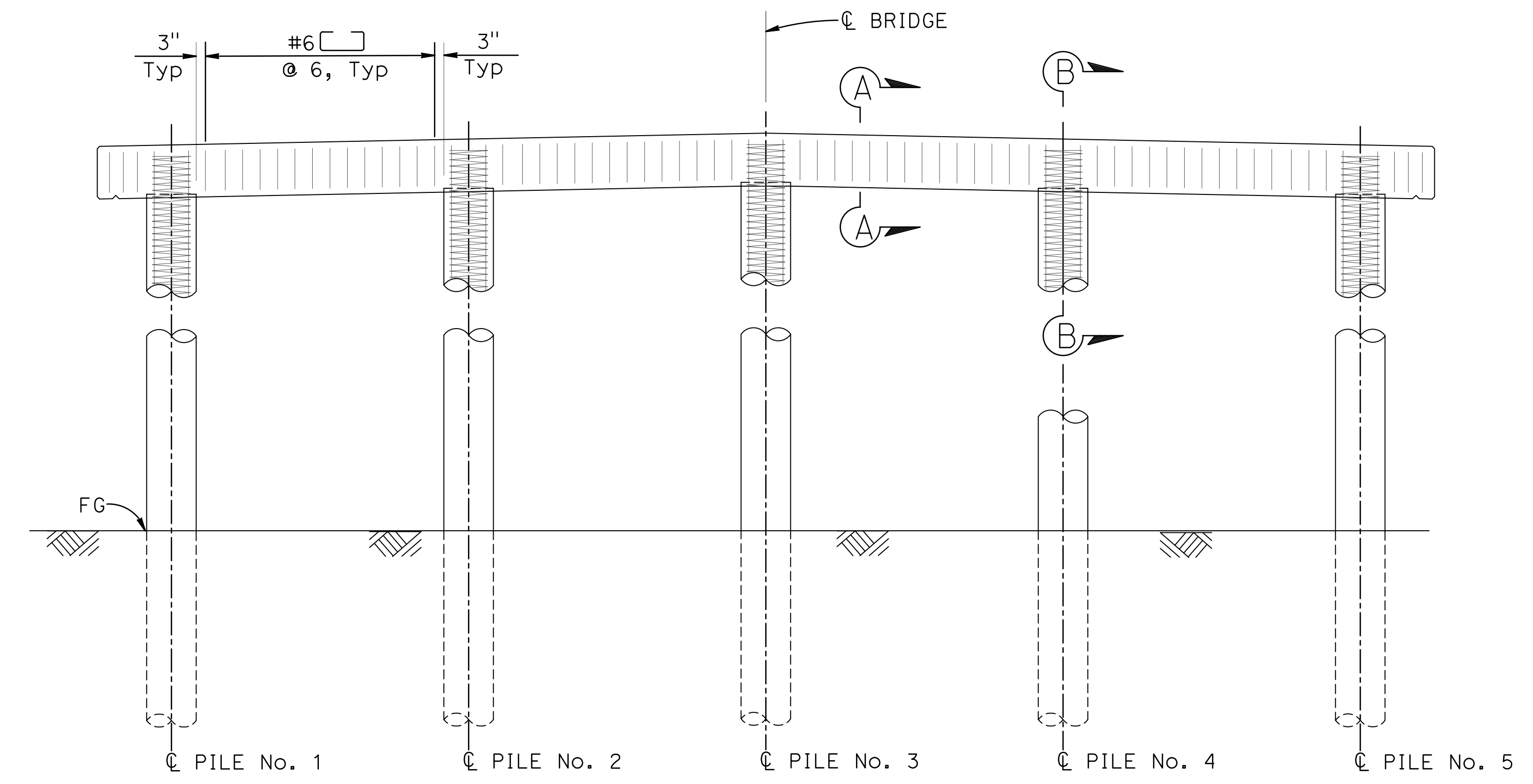
SECTION A-A
 SCALE: 3/4" = 1'-0"



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

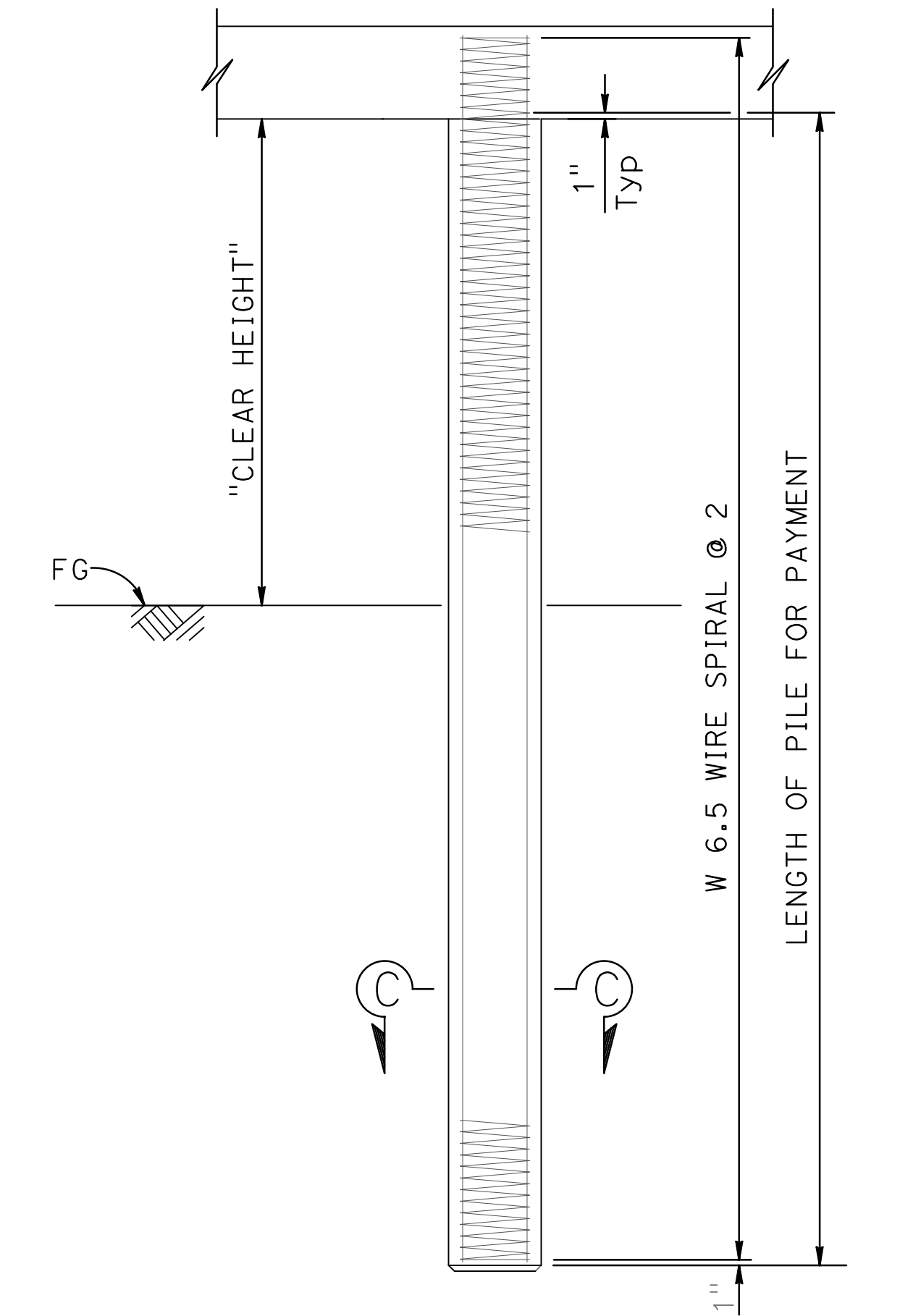


SECTION C-C



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

- NOTES:**
- Design service level loading is 140 kips service and 280 kips nominal axial structural resistance or less as noted.
 - Maximum size of aggregate is 1".
 - For the prestressed concrete pile:
 - The prestress force after all losses shall provide 700 psi minimum stress.
 - The concrete strength shall not be less than 6000 psi at 28 days.
 - No splices allowed in the longitudinal reinforcement within the "CLEAR HEIGHT" or within 10' below the ground line.



PRECAST PRESTRESSED CONCRETE PILE

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO.	11C0017	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)								
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI		POST MILES	NA									
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN												
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0	1	2	3	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	11/20/14	01/28/17	05/31/23	SHEET 5	OF 15

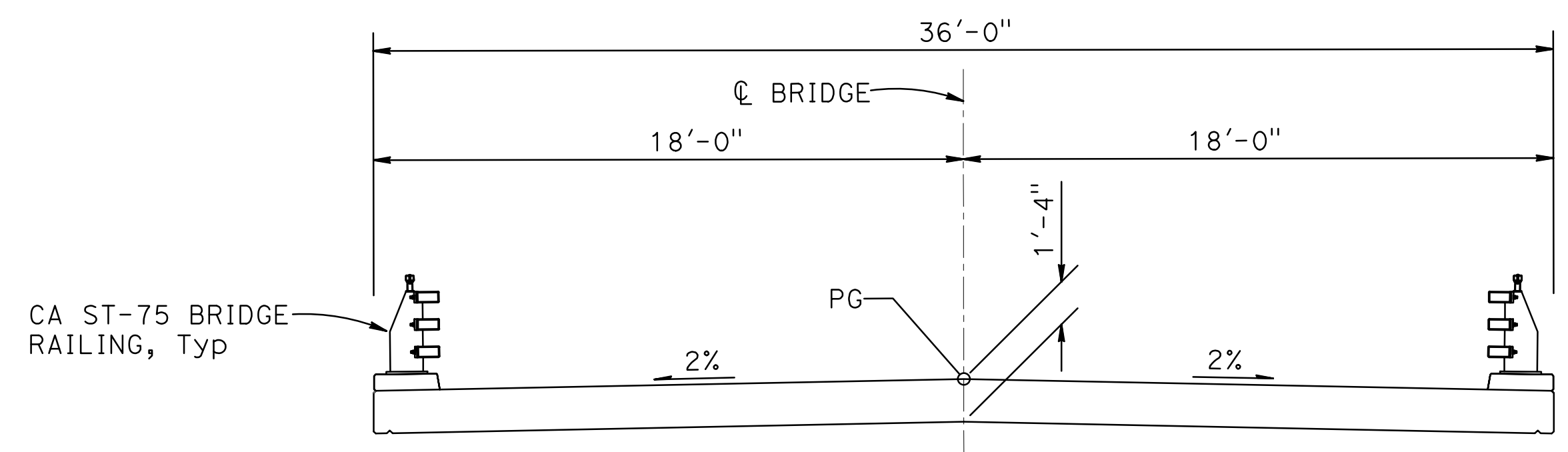
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DATE PLOTTED => 5/31/2023 TIME PLOTTED => 4:15:15 PM USERNAME => KEVIN

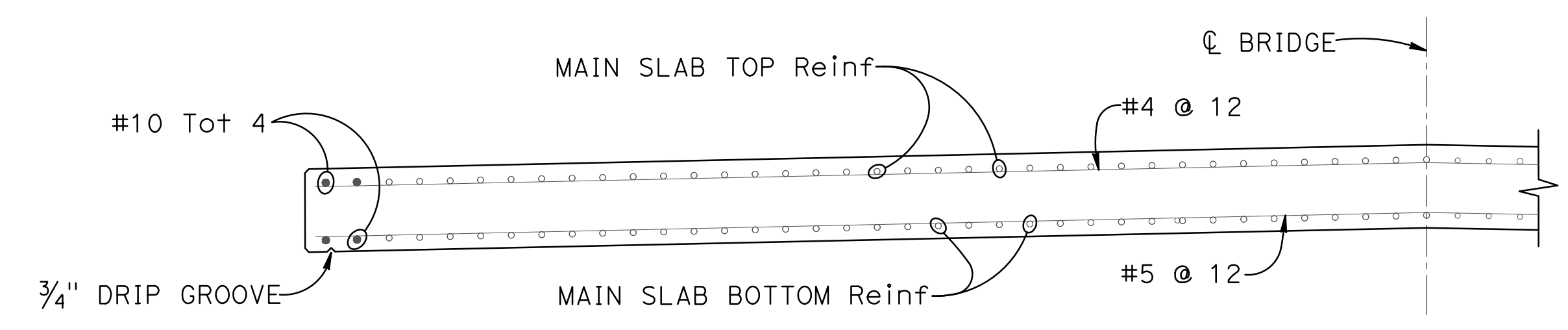
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	24	33

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

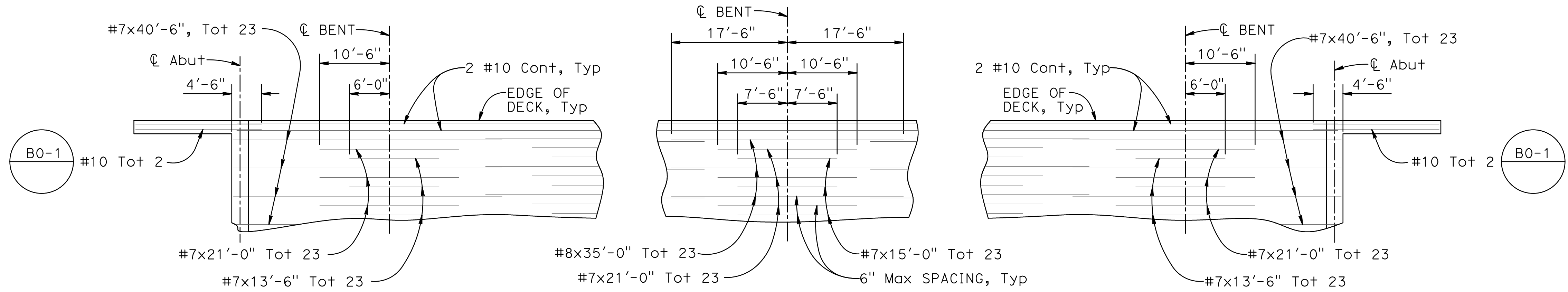


TYPICAL SECTION
 SCALE: 1/4" = 1'-0"

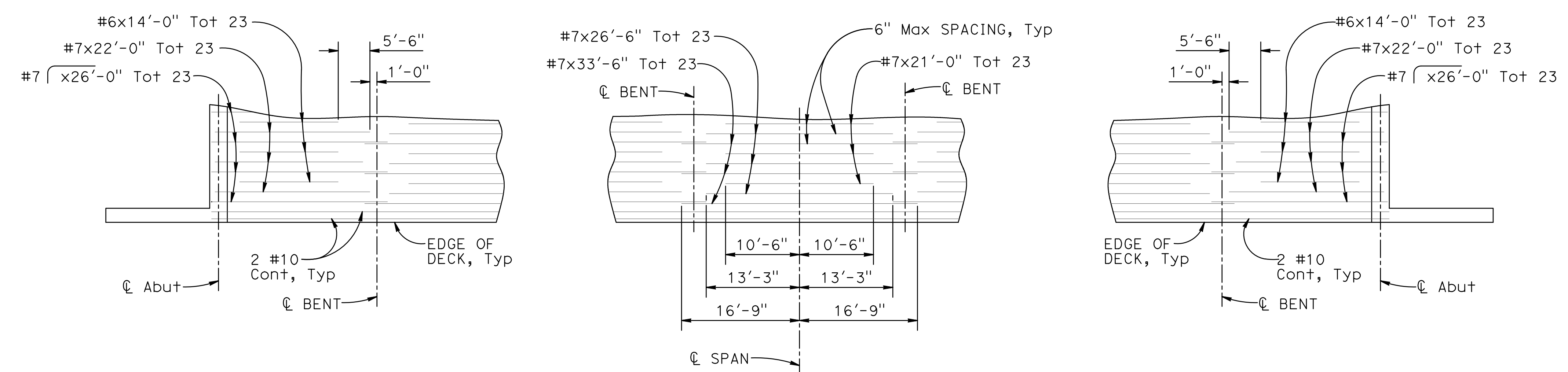


PART TYPICAL SECTION
 SCALE: 1/2" = 1'-0"
 NOTE: BAR CHAIRS NOT SHOWN.

NOTES:
 1. FOR SLAB REINFORCING DETAILS NOT SHOWN SEE "SLAB REINFORCEMENT DETAILS NO. 2" SHEET.



REINFORCEMENT - TOP OF SLAB
 NOT TO SCALE



REINFORCEMENT - BOTTOM OF SLAB
 NOT TO SCALE

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO.	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI		11C0017	
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN		NA	

BRIDGE NO.	11C0017	SLAB REINFORCEMENT DETAILS NO. 1
POST MILES	NA	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS




FILE => 11-0017-k1-Slab Reinf Details No 1

REVISION DATES	SHEET	OF
11/10/14 01/28/17 05/31/23	6	15

DISREGARD PRINTS BEARING EARLIER REVISION DATES

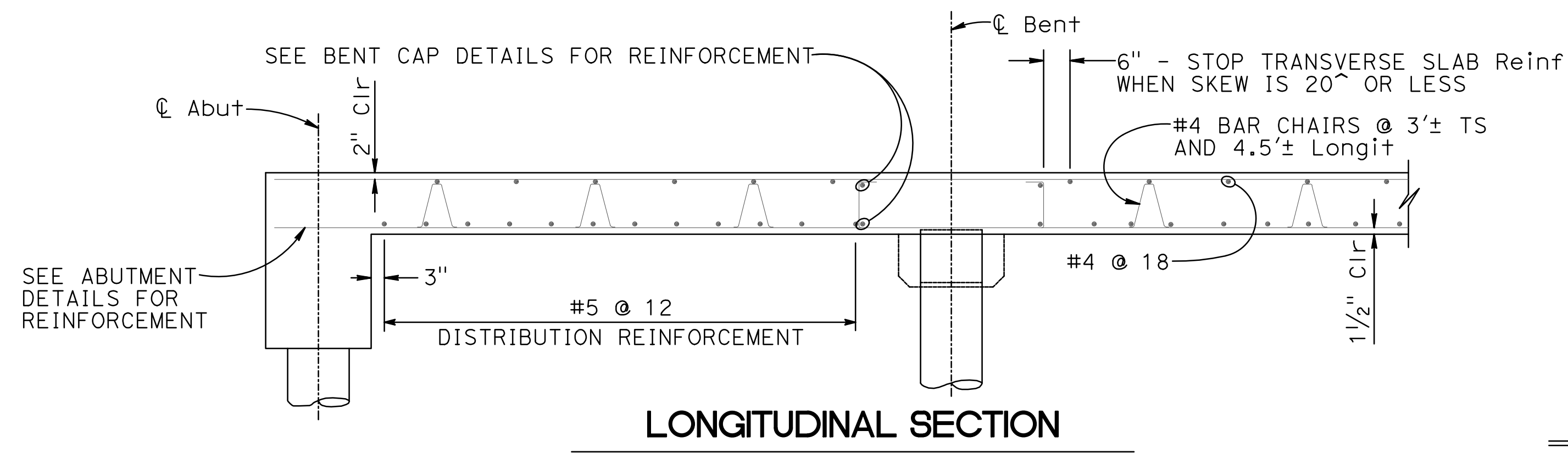
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	25	33

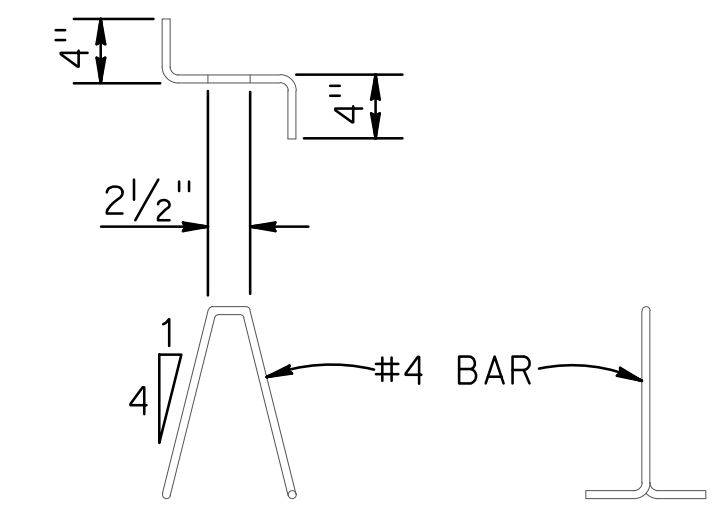

 REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

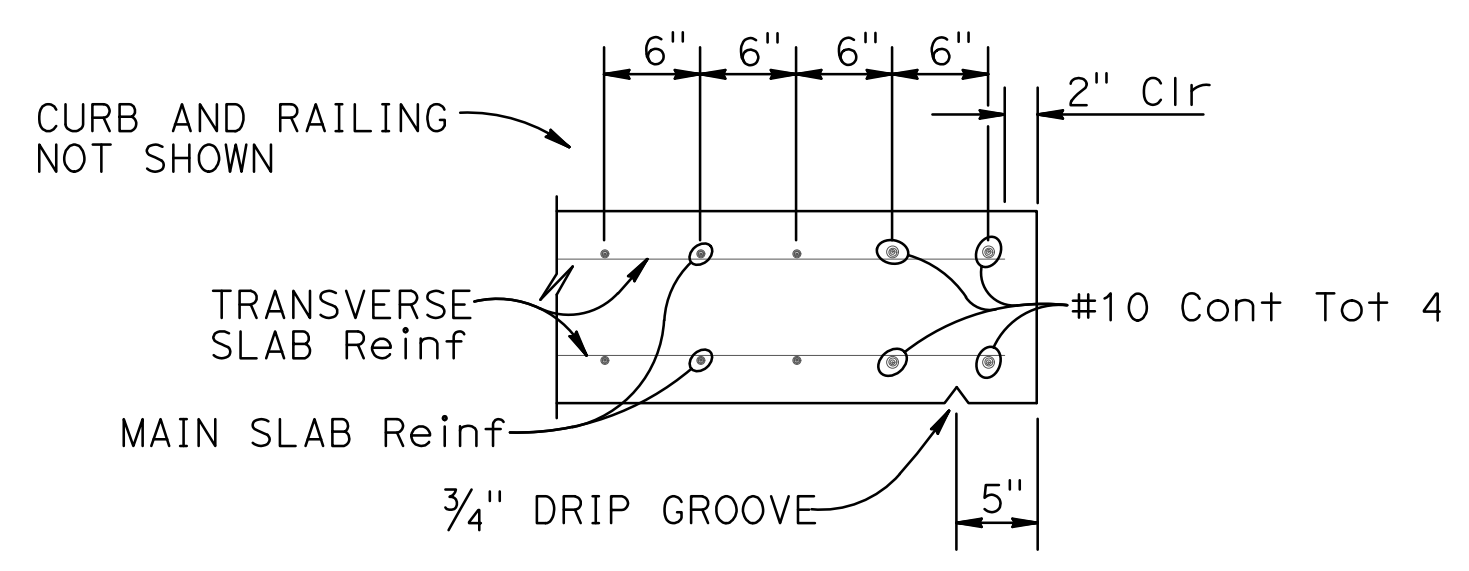
Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



LONGITUDINAL SECTION



BAR CHAIR DETAIL



EDGE OF SLAB DETAILS

BAR SPLICE LENGTH								
BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
ALL BARS, EXCEPT TOP BARS IN SPANS OVER 24'	23"	28"	34"	43"	56"	71"	90"	110"
TOP BARS IN SPANS OVER 24'	23"	28"	34"	58"	74"	80"	115"	155"

REINFORCEMENT NOTES:
 Splices in top main bars to be located near center of span.
 Splices in bottom main bars to be located near bent.
 Spacing of all transverse bars is measured along Cl roadway.

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER

BRIDGE NO.	11C0017	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
POST MILES	NA	
NA		

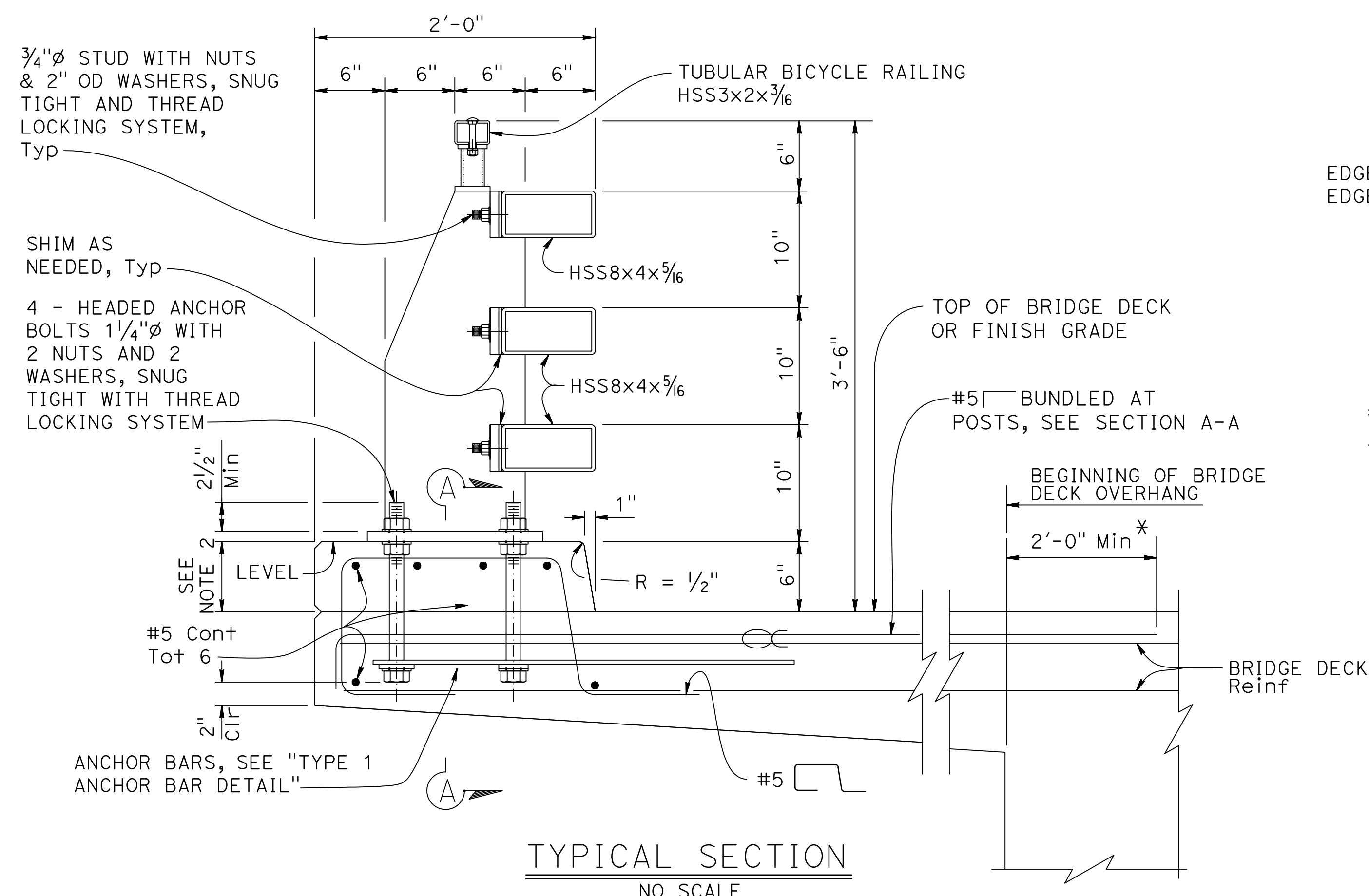
SLAB REINFORCEMENT DETAILS NO. 2



DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	11/28/14 01/28/17 05/31/23	7	15

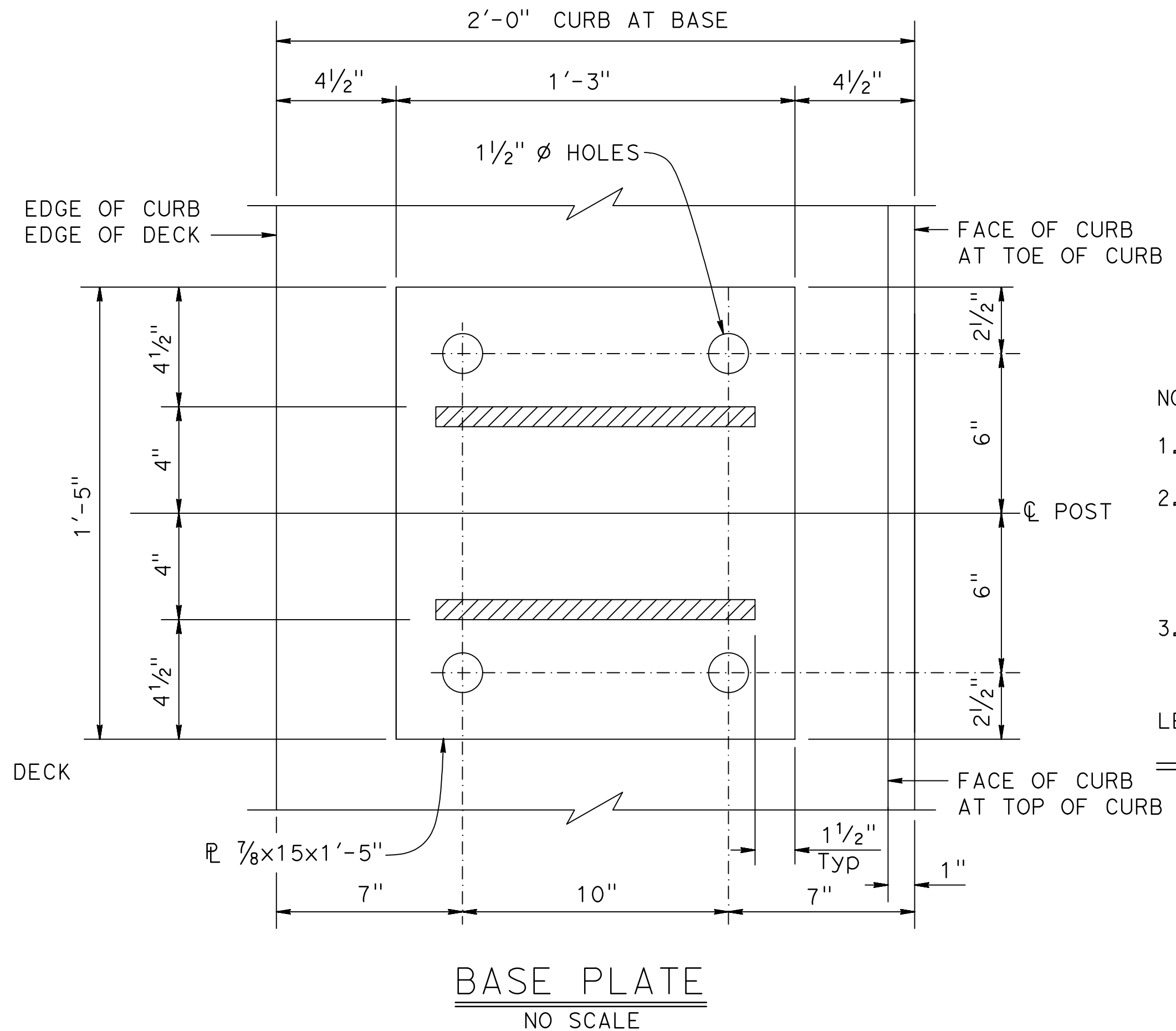
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	26	33

REGISTERED CIVIL ENGINEER
 DATE: 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



TYPICAL SECTION
NO SCALE

* #5 Bundled at posts to extend 2'-0" Min beyond beginning of bridge deck overhang.



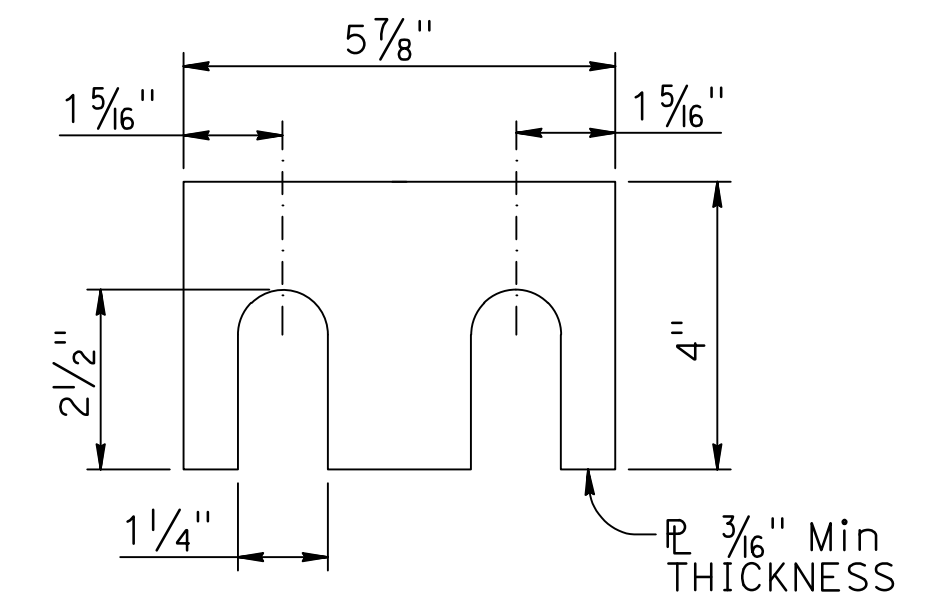
BASE PLATE
NO SCALE

NOTES:

- Anchor bolts may be tack welded to anchor bars.
- Curb dimension at back side of rail will vary with bridge deck cross slope, and if overlay is placed on the bridge deck. For the same reasons, the anchor bolt lengths will vary.
- Use extra thick washers for anchor bolts, with a minimum thickness of 0.305" and a maximum thickness of 0.375".

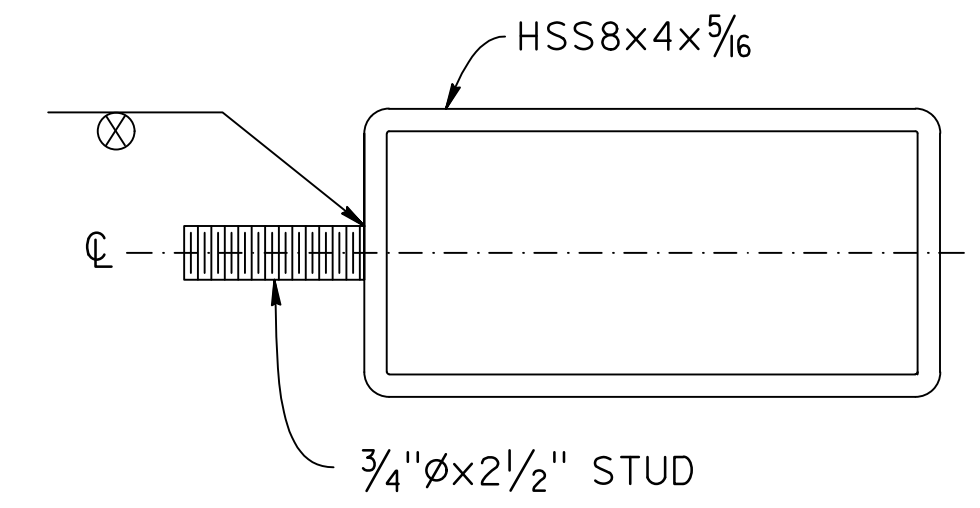
LEGEND:

⊞ Bundled reinforcement

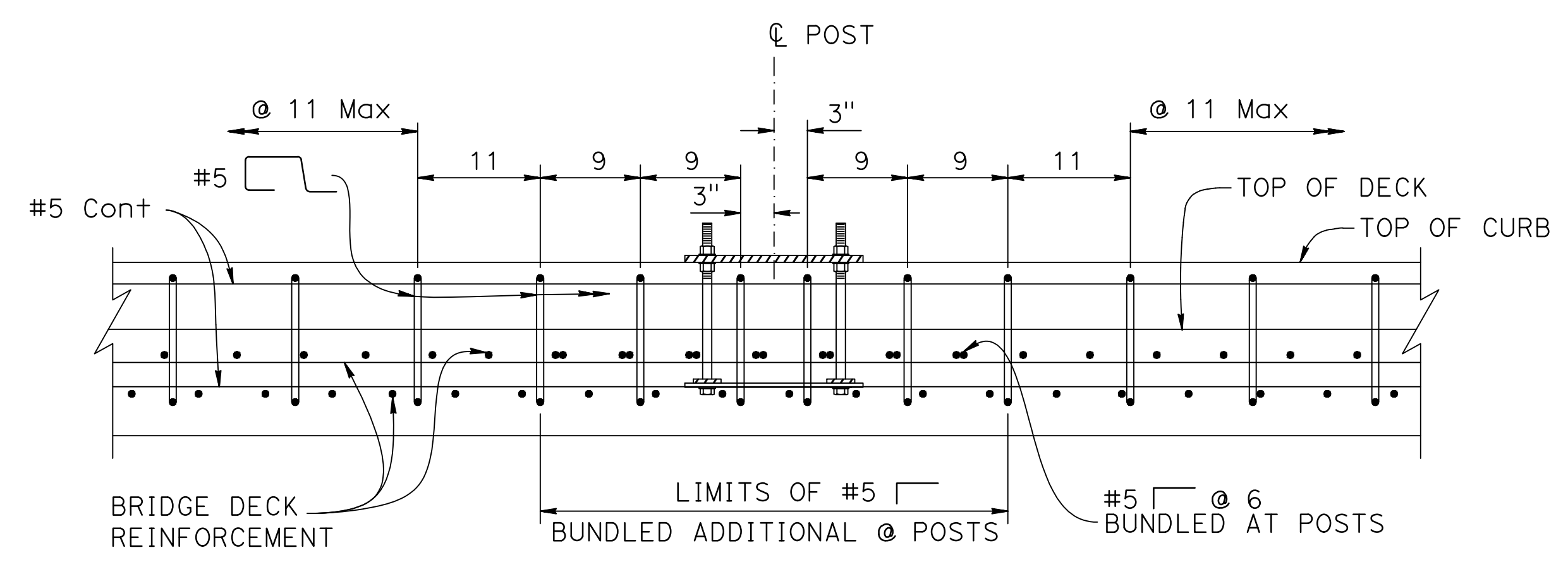


SHIM DETAIL
NO SCALE

NOTE:
Shim as needed between posts and HSS rail tubes.

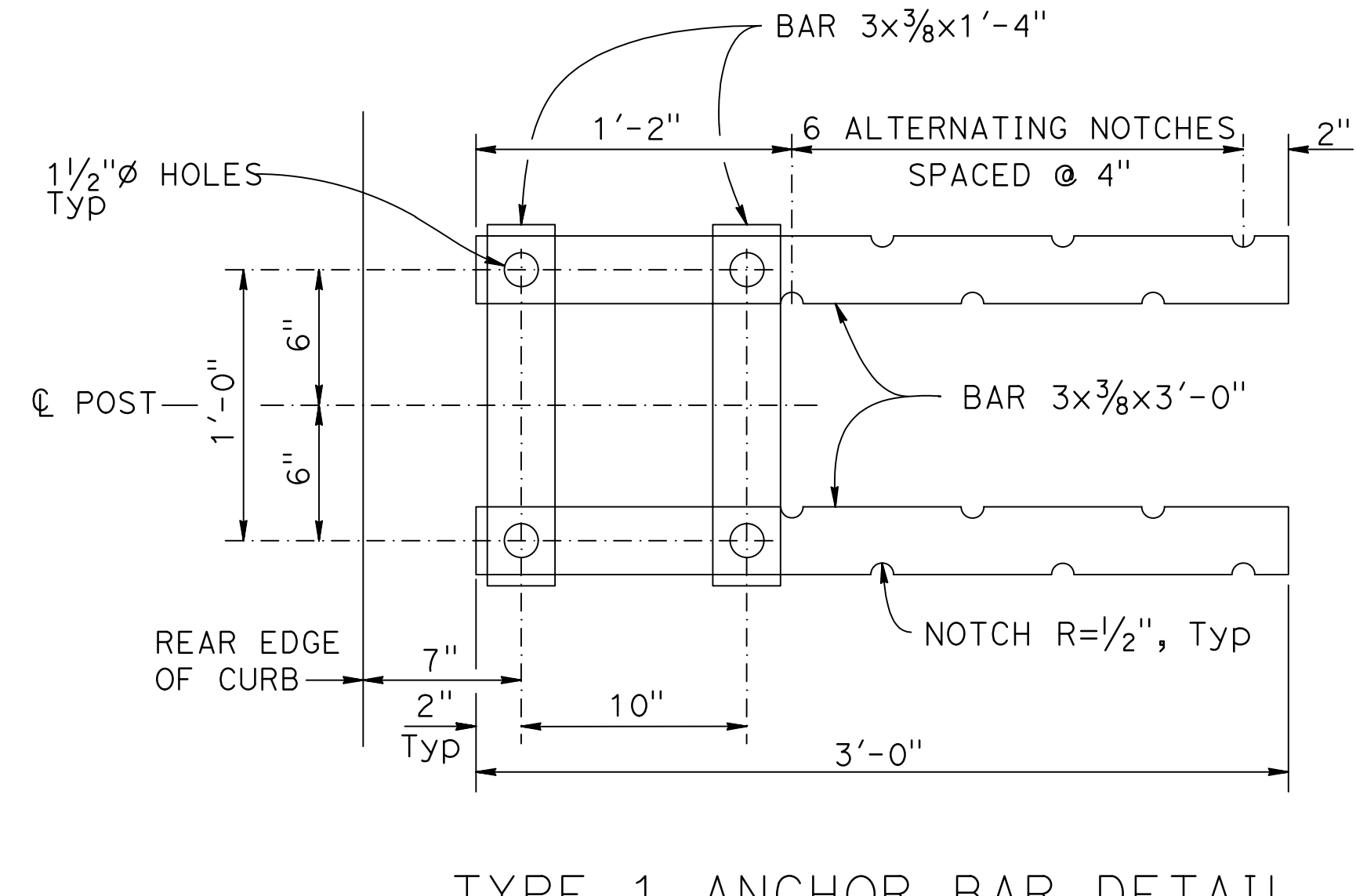


RAIL SECTION AT POST
NO SCALE



SECTION A-A
NO SCALE

NOTE: Post not shown for clarity.



TYPE 1 ANCHOR BAR DETAIL
NO SCALE

BRIDGE STANDARD DETAILS		DESIGN	BY	CHECKED	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO.	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 1
xs16-116-1	JULY 2022	DETAILS	K. COOK-GUTERIEZ	G. GORDON		11C0017	
FILE NO.	APPROVAL DATE	QUANTITIES				NA	

The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
12/19/19 06/20/22 01/05/22	8	15

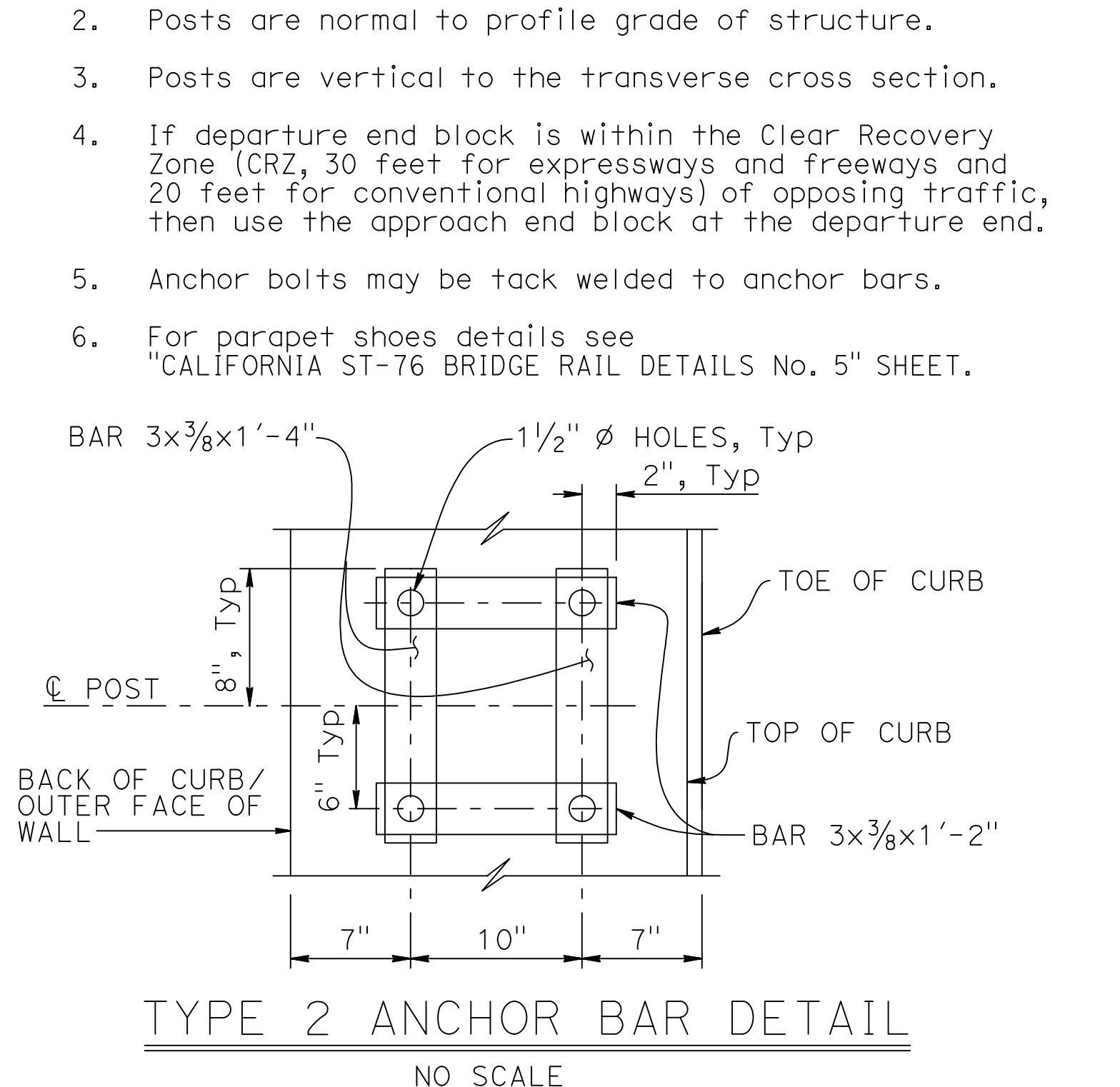
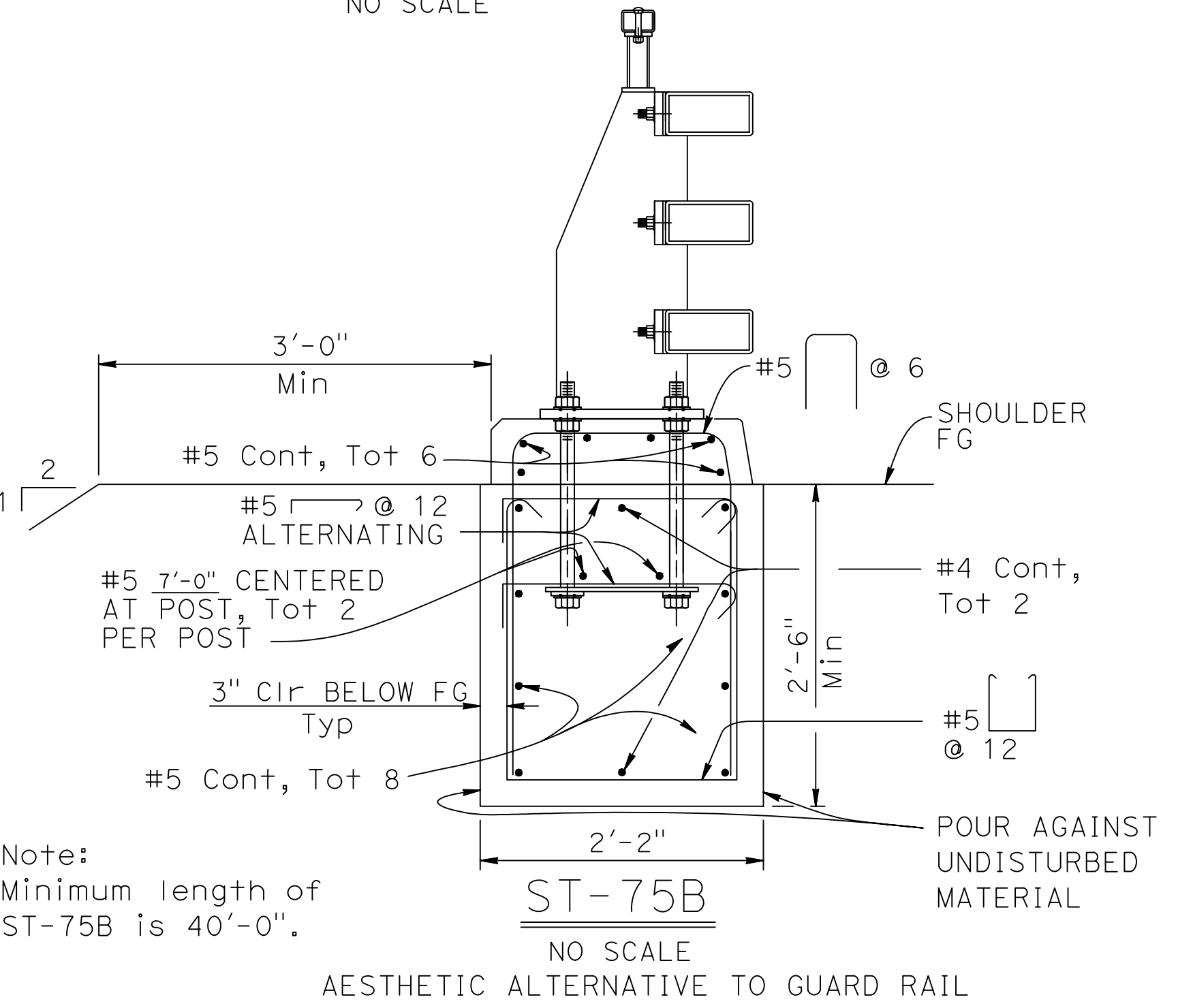
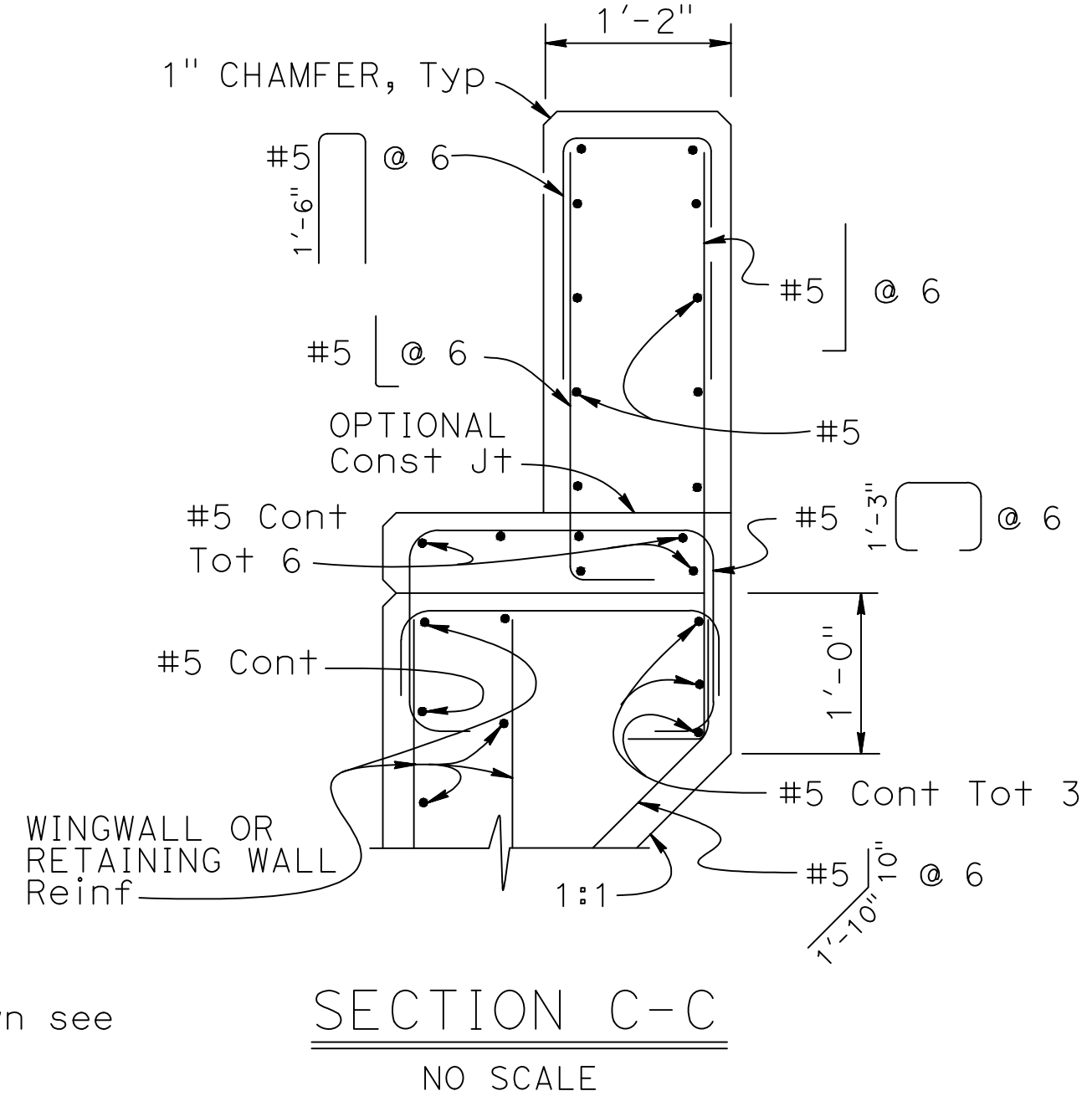
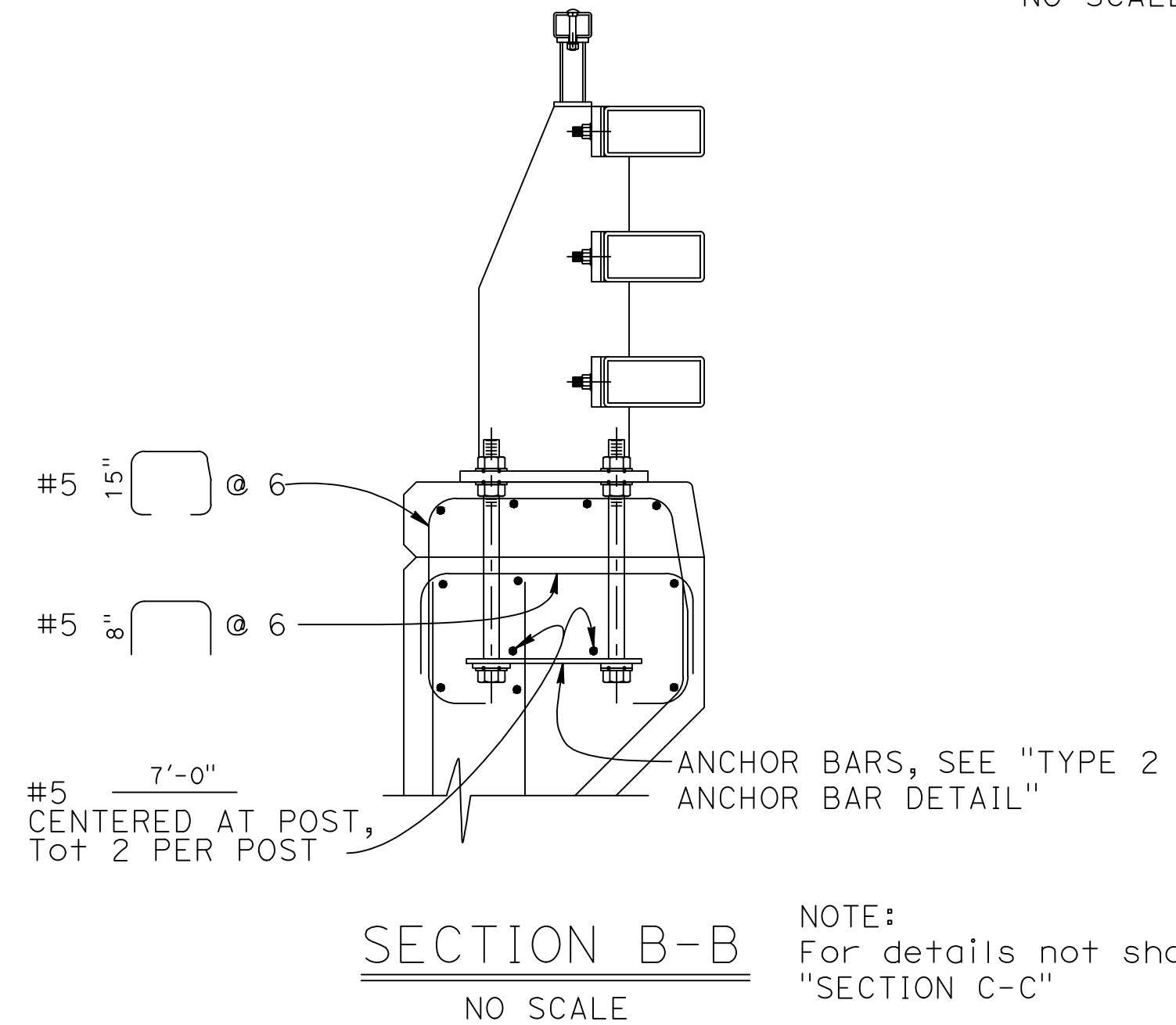
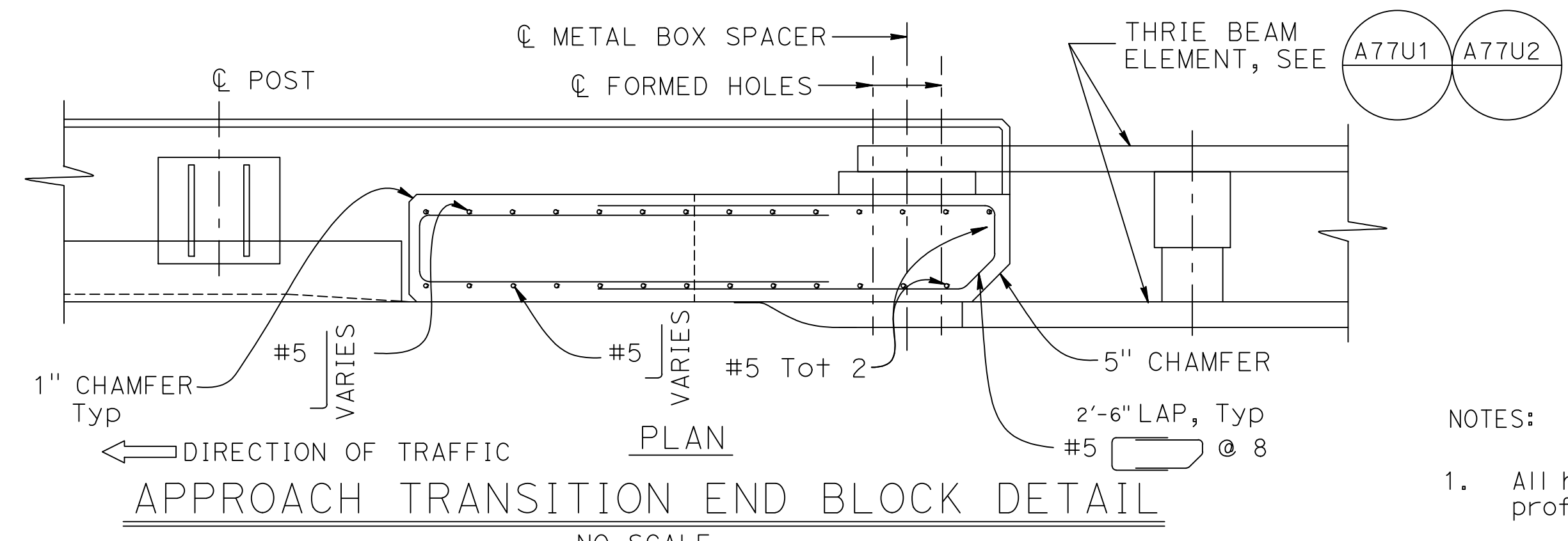
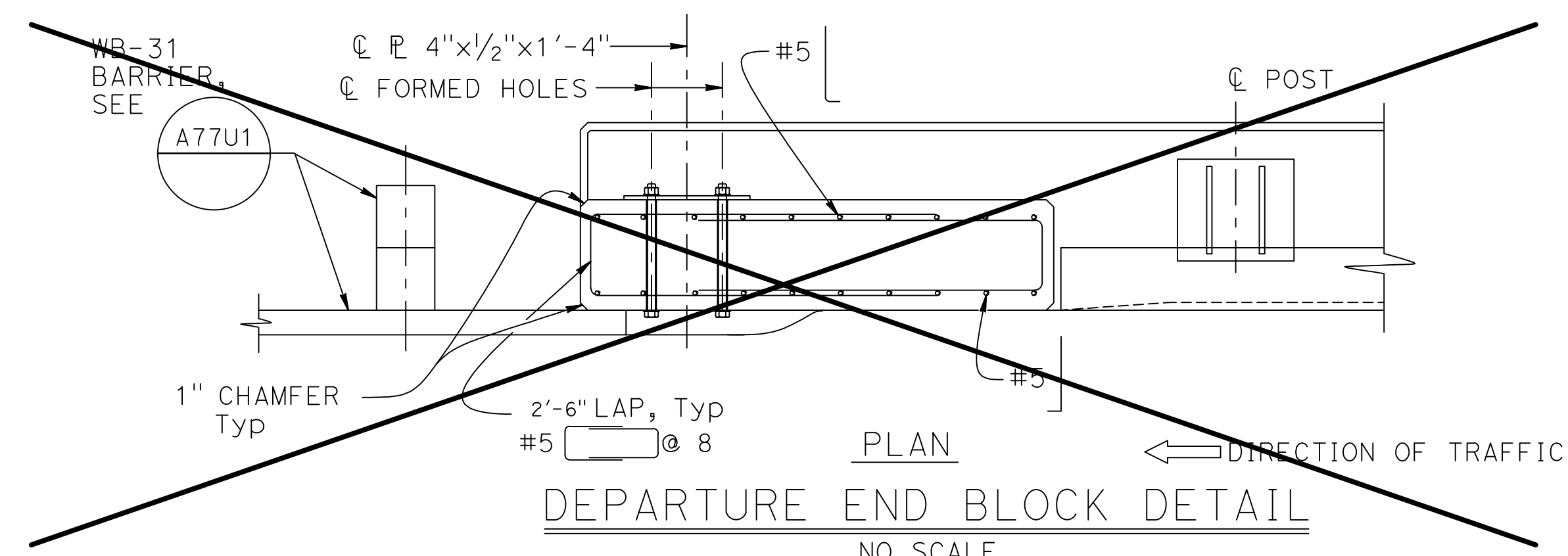
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 USERNAME => KEVIN
 FILE => 11-0017-r-rspxs16-116-1

2022 STANDARD PLAN XS-16-116-1

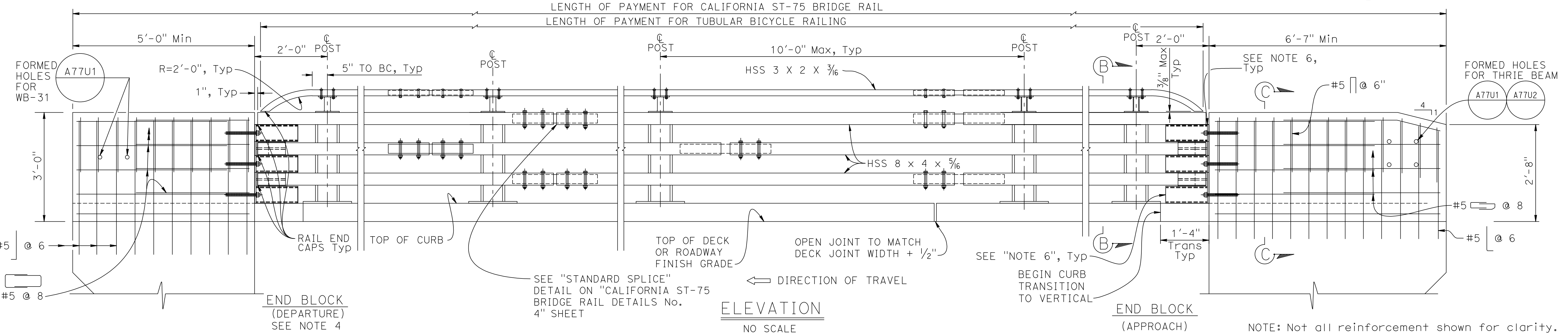
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	27	33

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



- NOTES:
- All horizontal members are parallel to longitudinal profile grade.
 - Posts are normal to profile grade of structure.
 - Posts are vertical to the transverse cross section.
 - If departure end block is within the Clear Recovery Zone (CRZ, 30 feet for expressways and freeways and 20 feet for conventional highways) of opposing traffic, then use the approach end block at the departure end.
 - Anchor bolts may be tack welded to anchor bars.
 - For parapet shoes details see "CALIFORNIA ST-76 BRIDGE RAIL DETAILS No. 5" SHEET.



BRIDGE STANDARD DETAILS

xs16-116-2	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.
FILE NO.	APPROVAL DATE	

DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR

COUNTY OF GLENN

PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

BRIDGE NO.	11C0017	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
POST MILES	NA	
NA	NA	

CALIFORNIA ST-75 BRIDGE RAIL

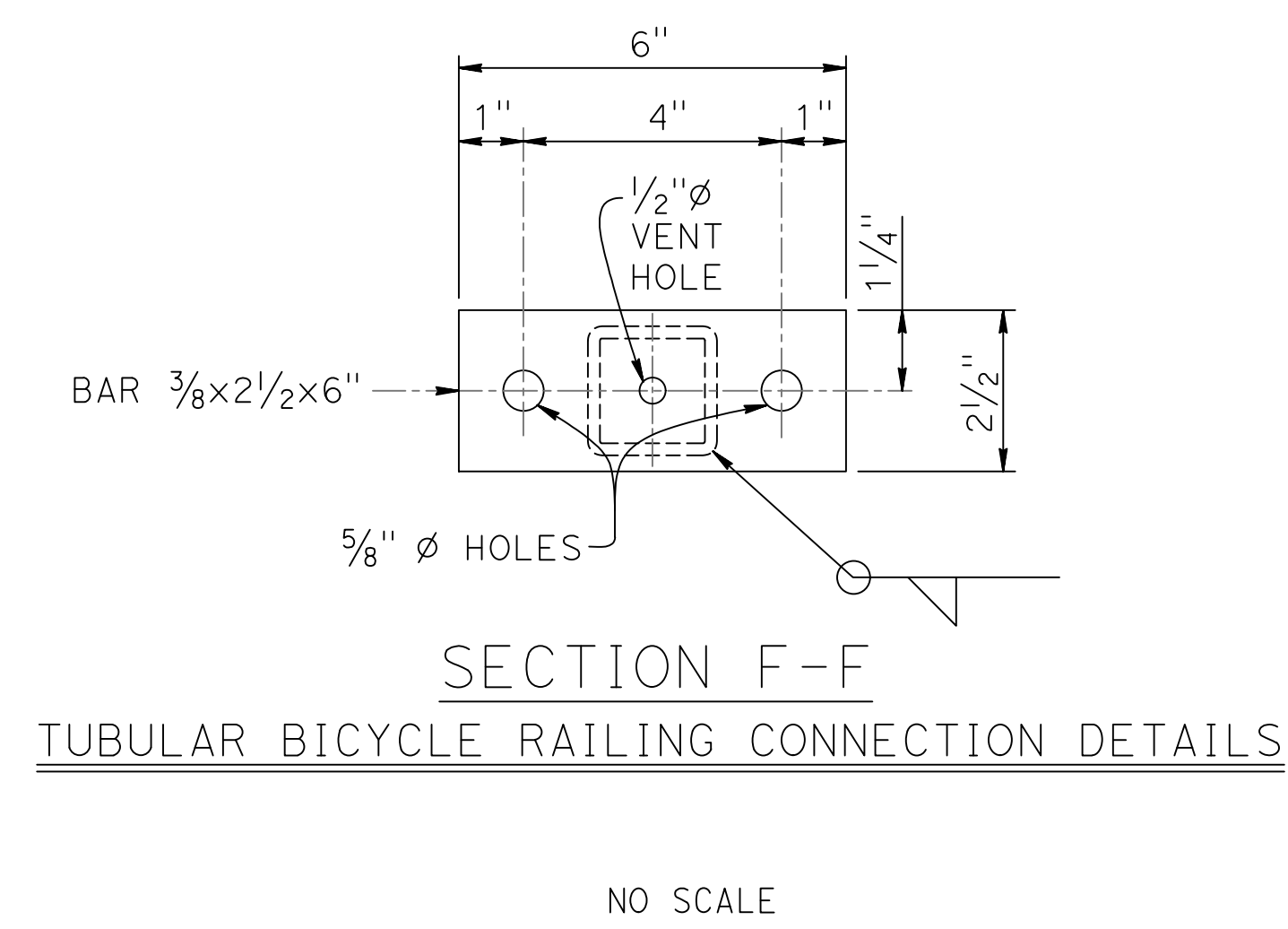
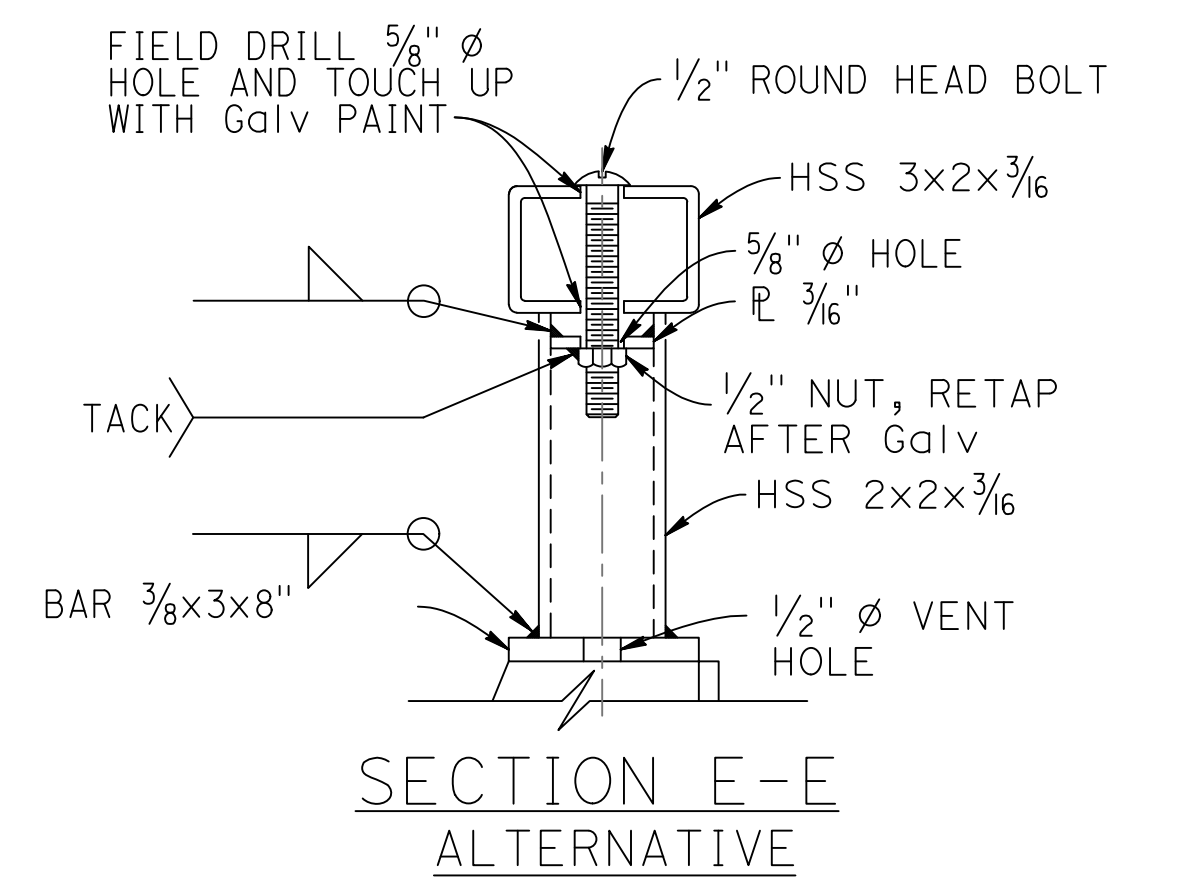
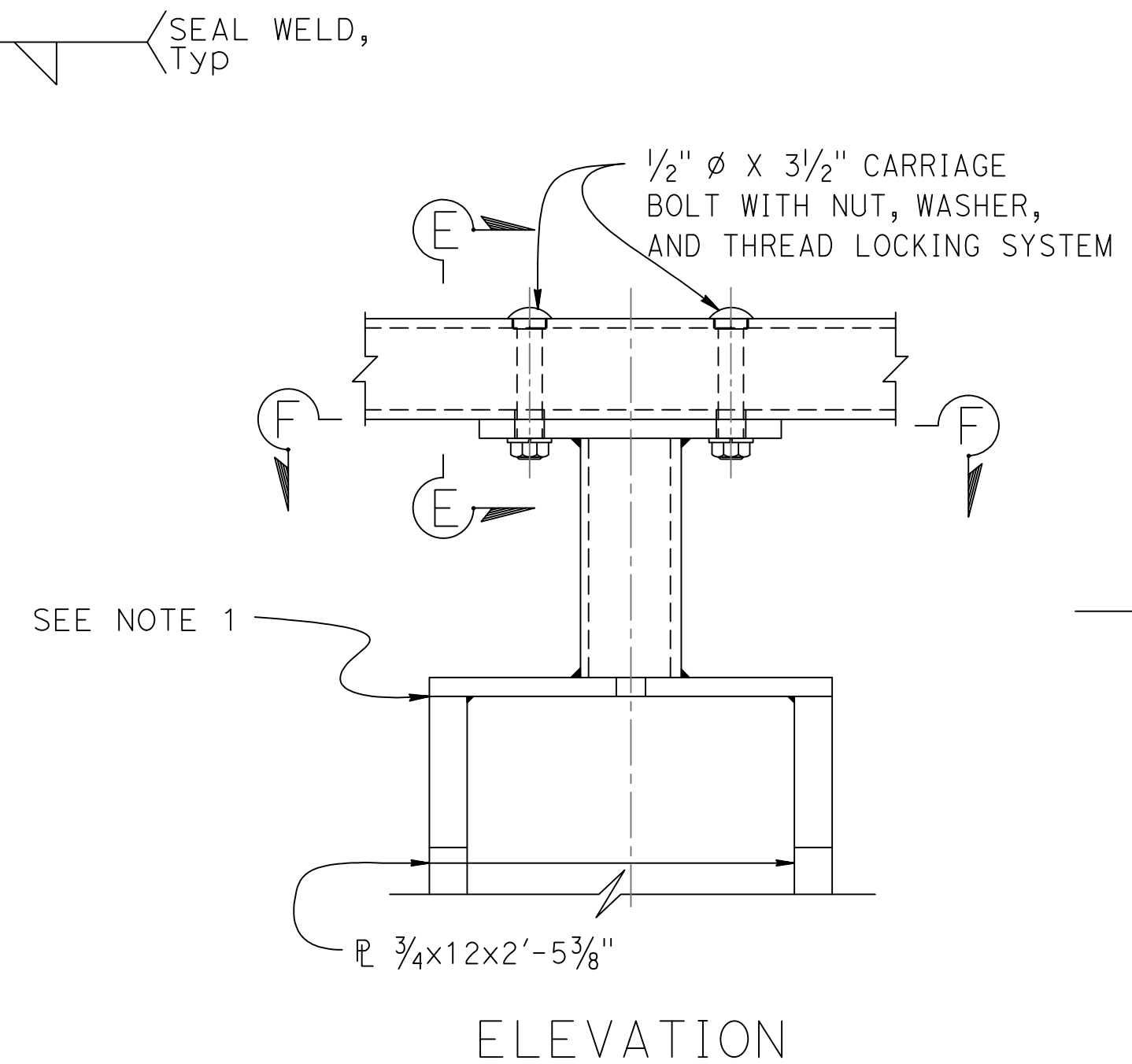
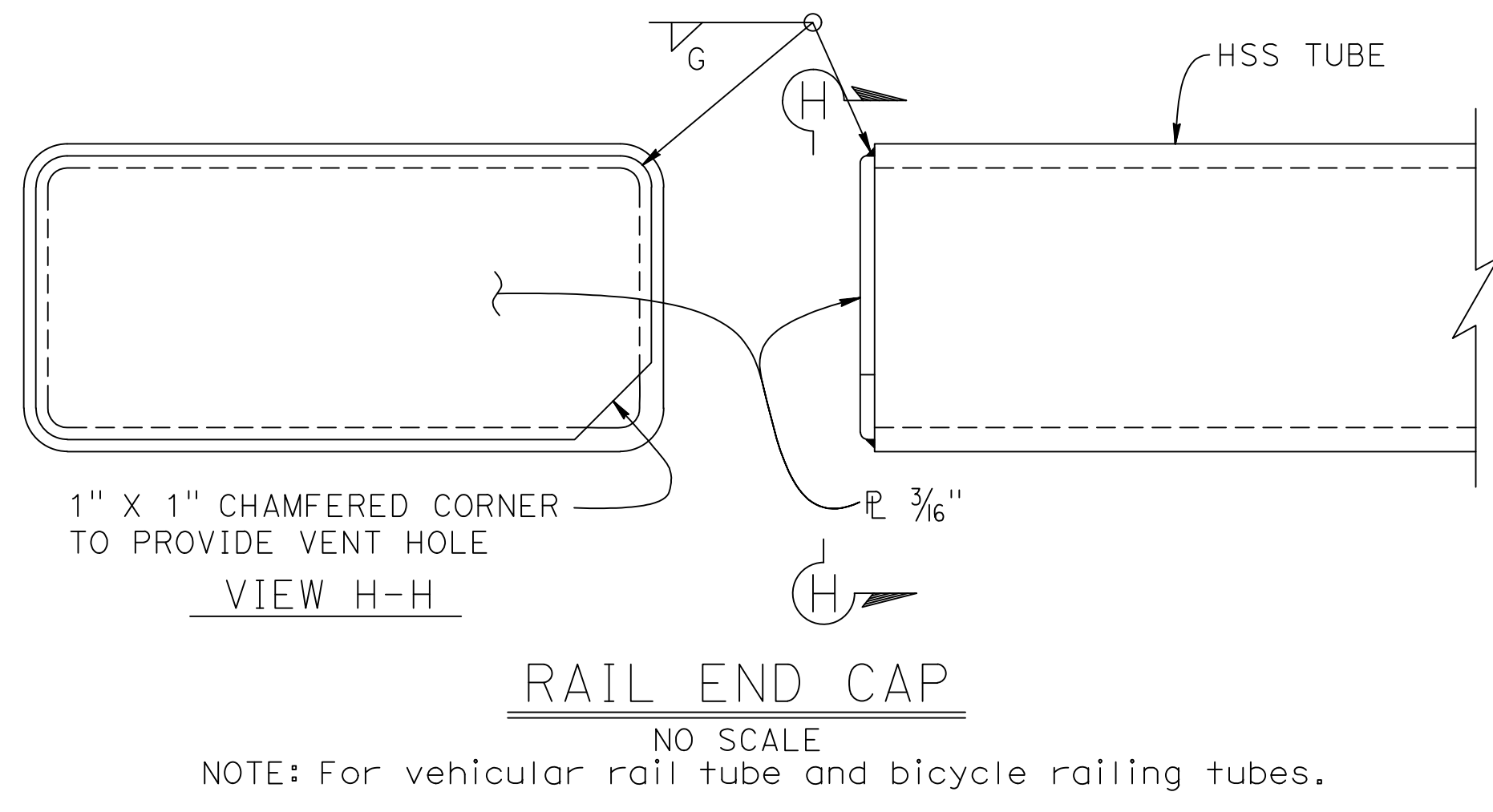
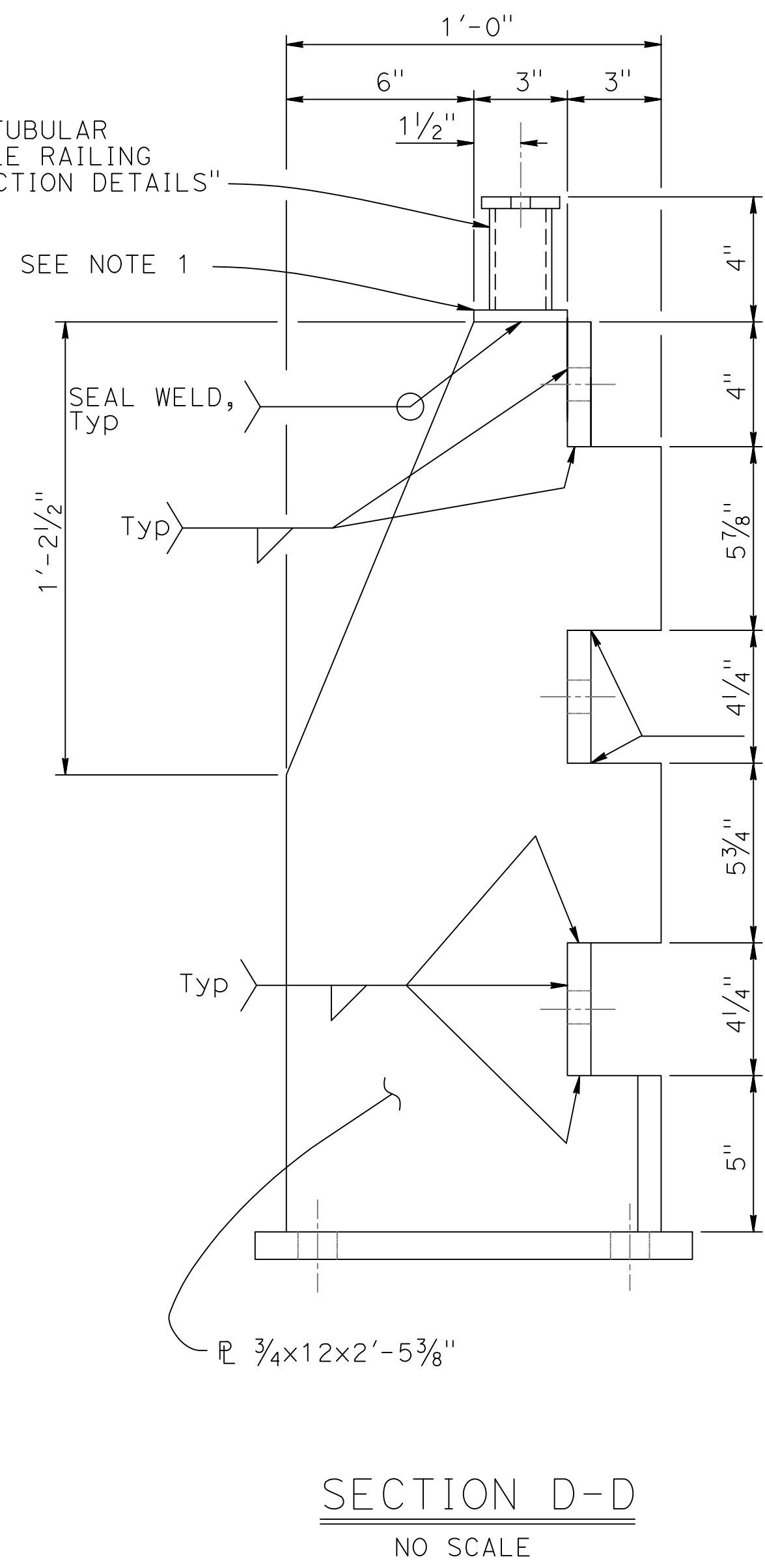
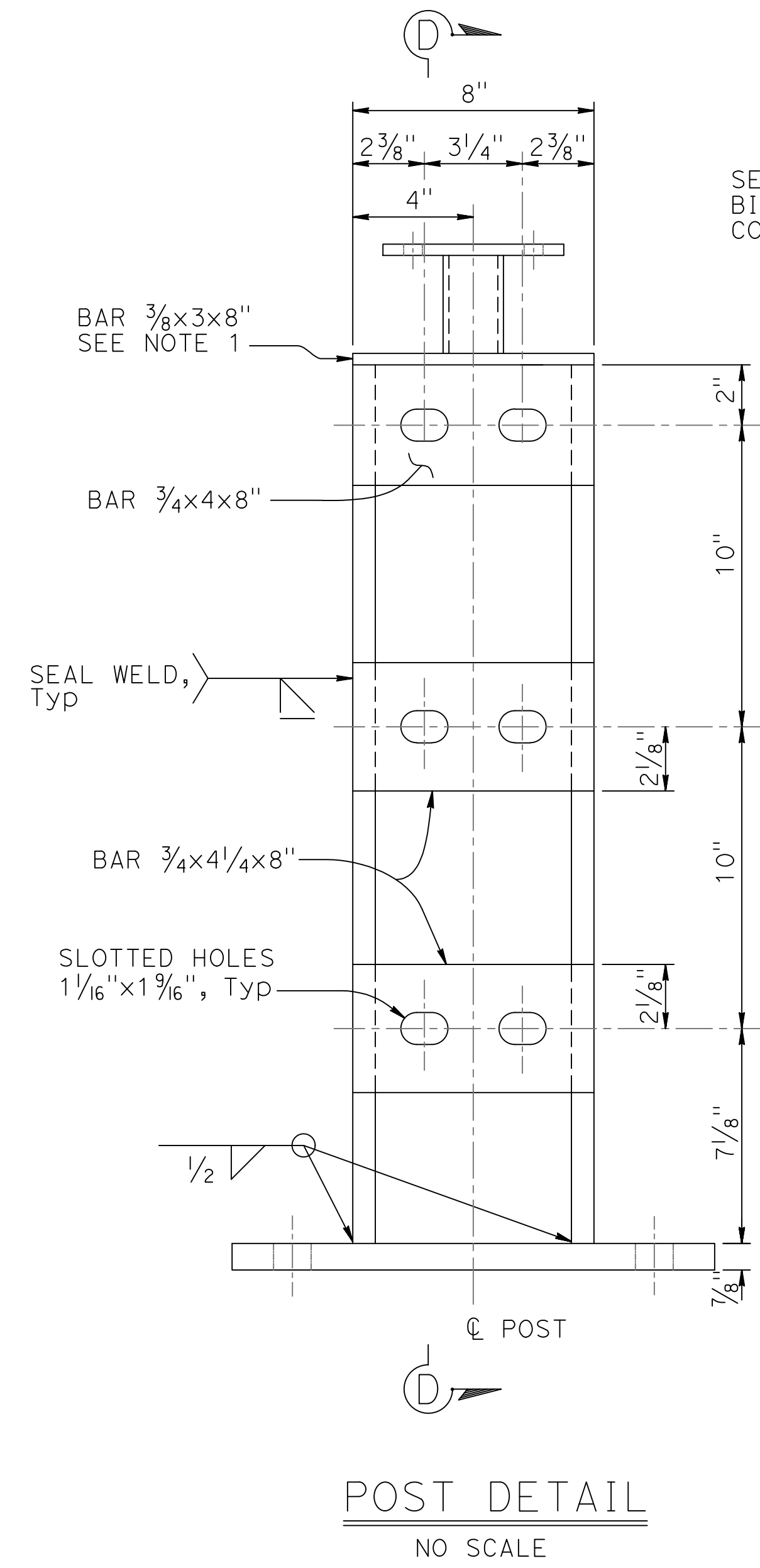
DETAILS No. 2

2022 STANDARD PLAN XS-16-116-2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	28	33

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



NOTE:
 1. For access controlled freeways and expressways where bicycle traffic is prohibited by signage on the on-ramps, the bicycle railing (includes bar 3/8x3x8" and above) may be omitted.

BRIDGE STANDARD DETAILS		
xs16-116-3 FILE NO.	JULY 2022 APPROVAL DATE	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California

DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0017	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 3
		POST MILES NA	

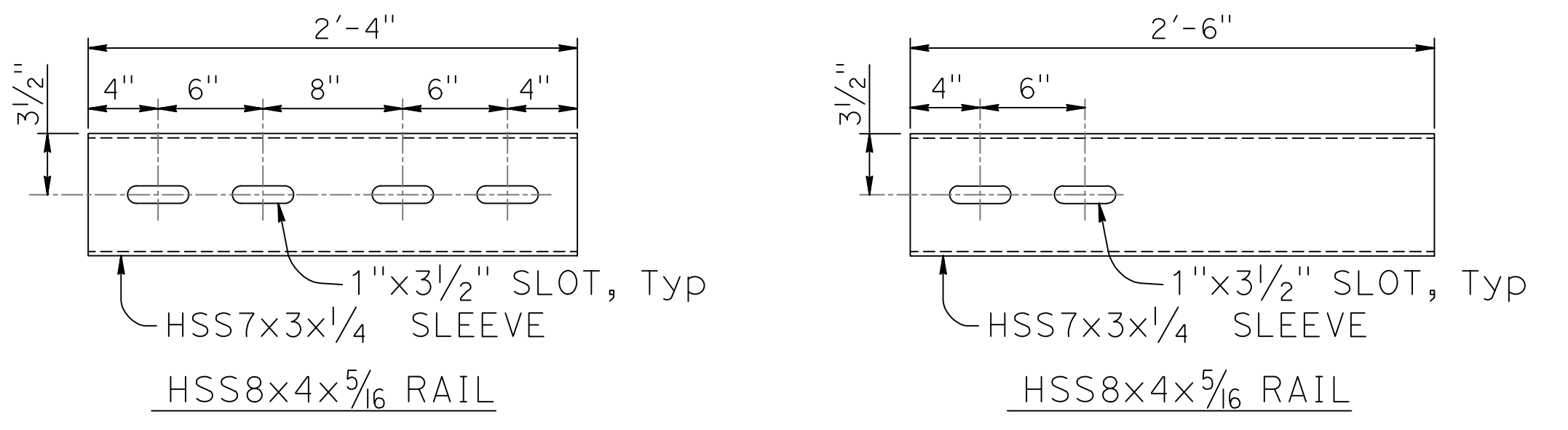
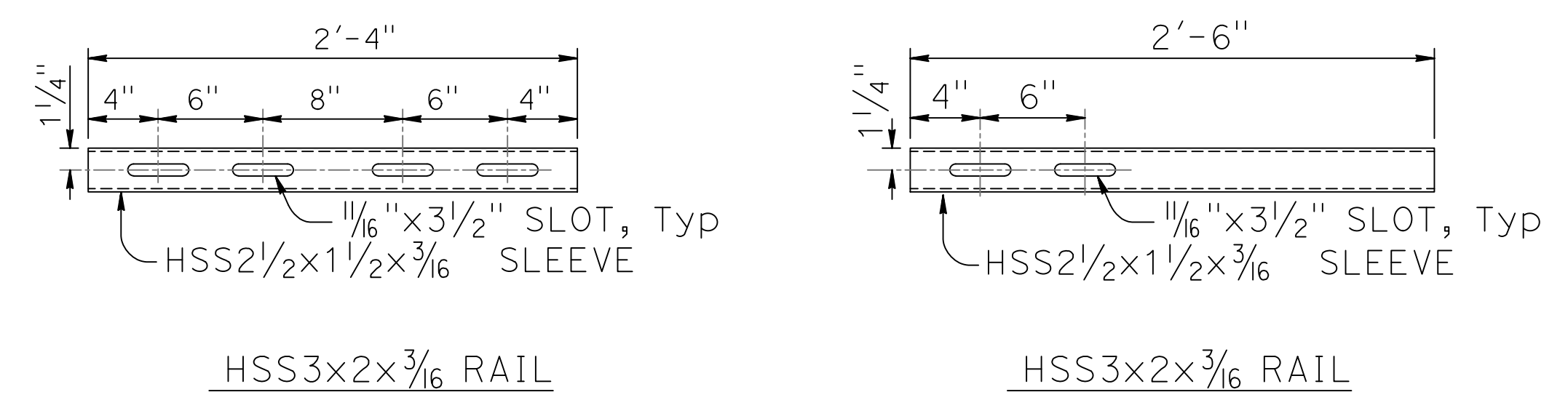
REVISION DATES	SHEET	OF
12/18/19 06/20/22 01/05/23	10	15

2022 STANDARD PLAN XS-16-116-3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	29	33

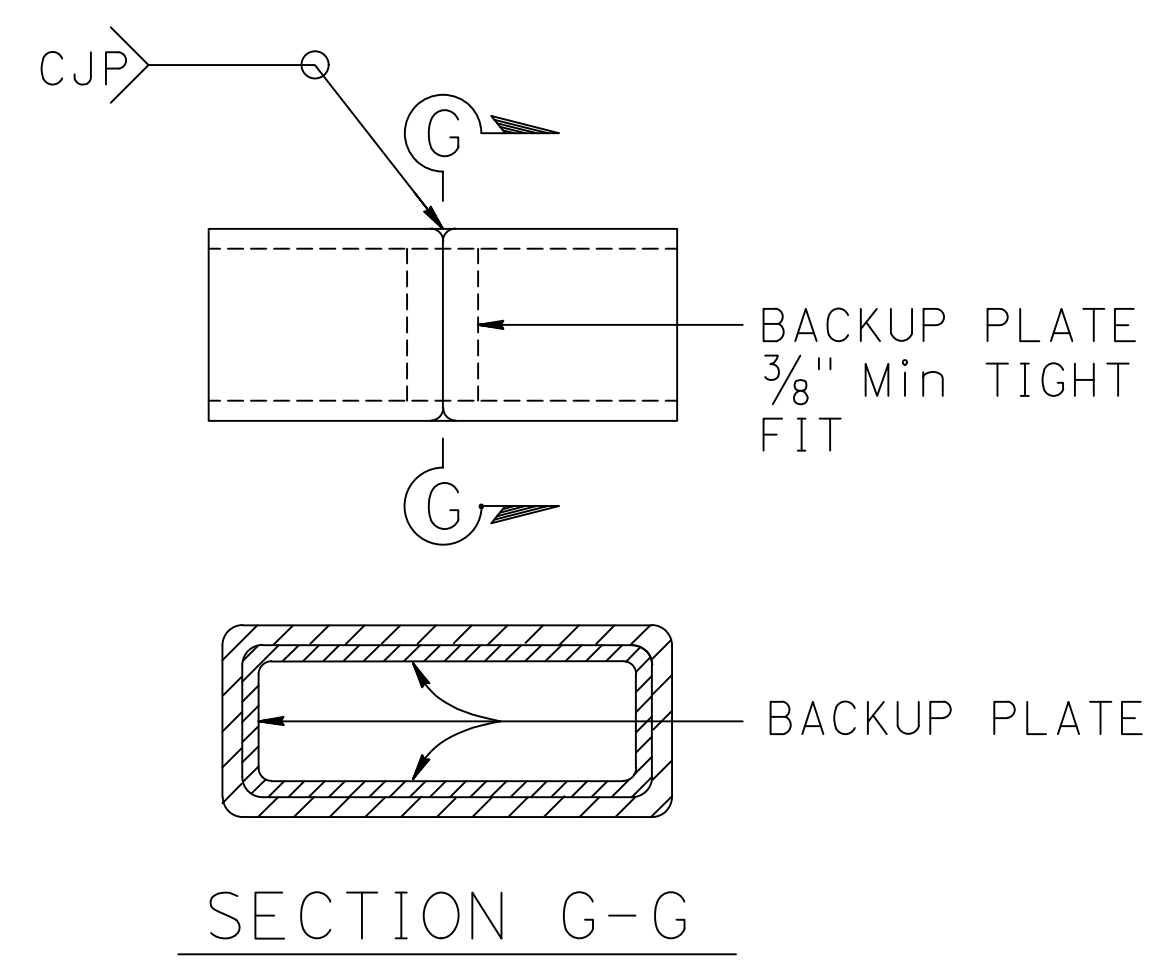
REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



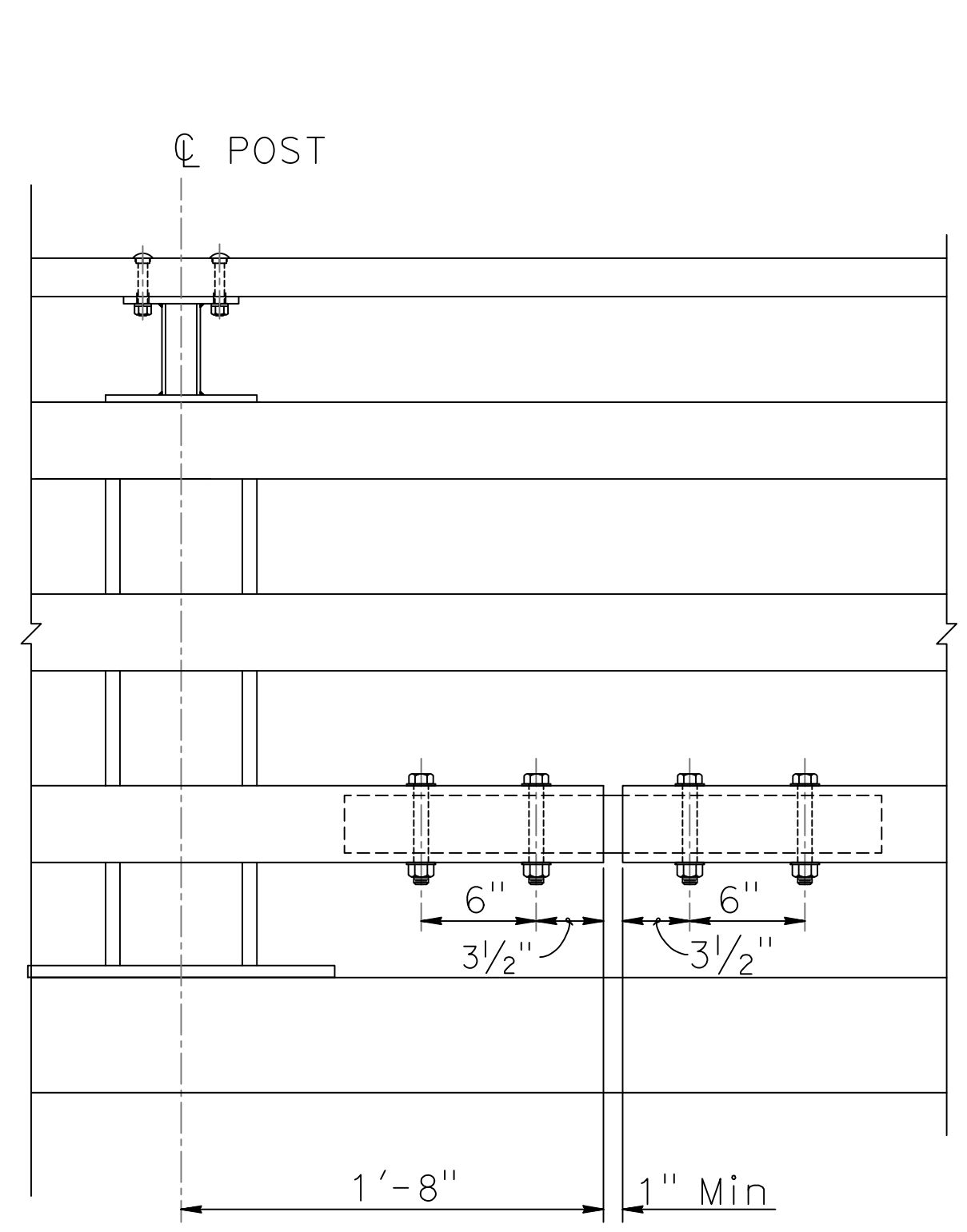
STANDARD SLEEVES
DETAILS
NO SCALE

EXPANSION SLEEVES
DETAILS
NO SCALE

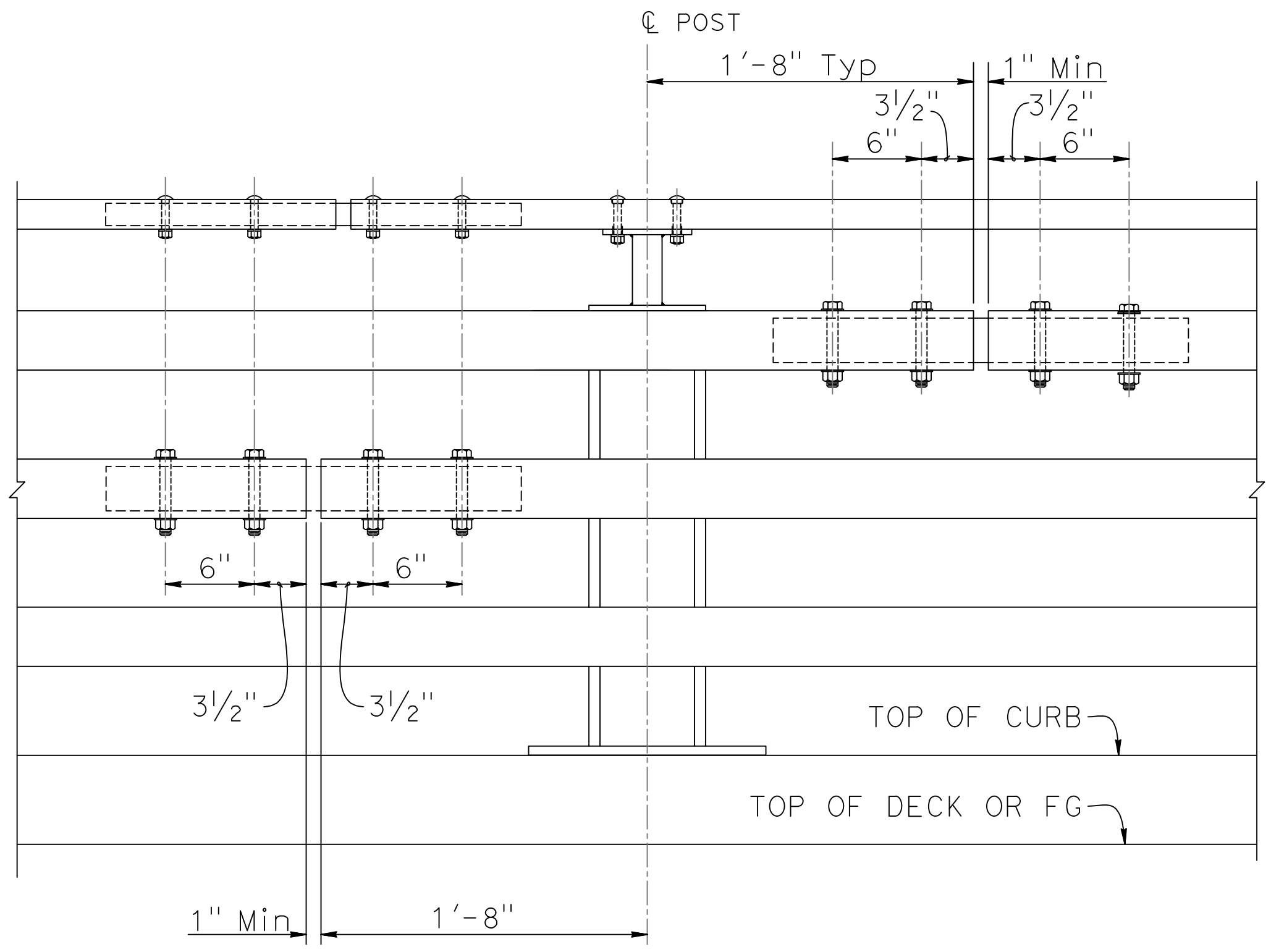


ALTERNATE TUBE WELDED STANDARD SPLICE
NO SCALE

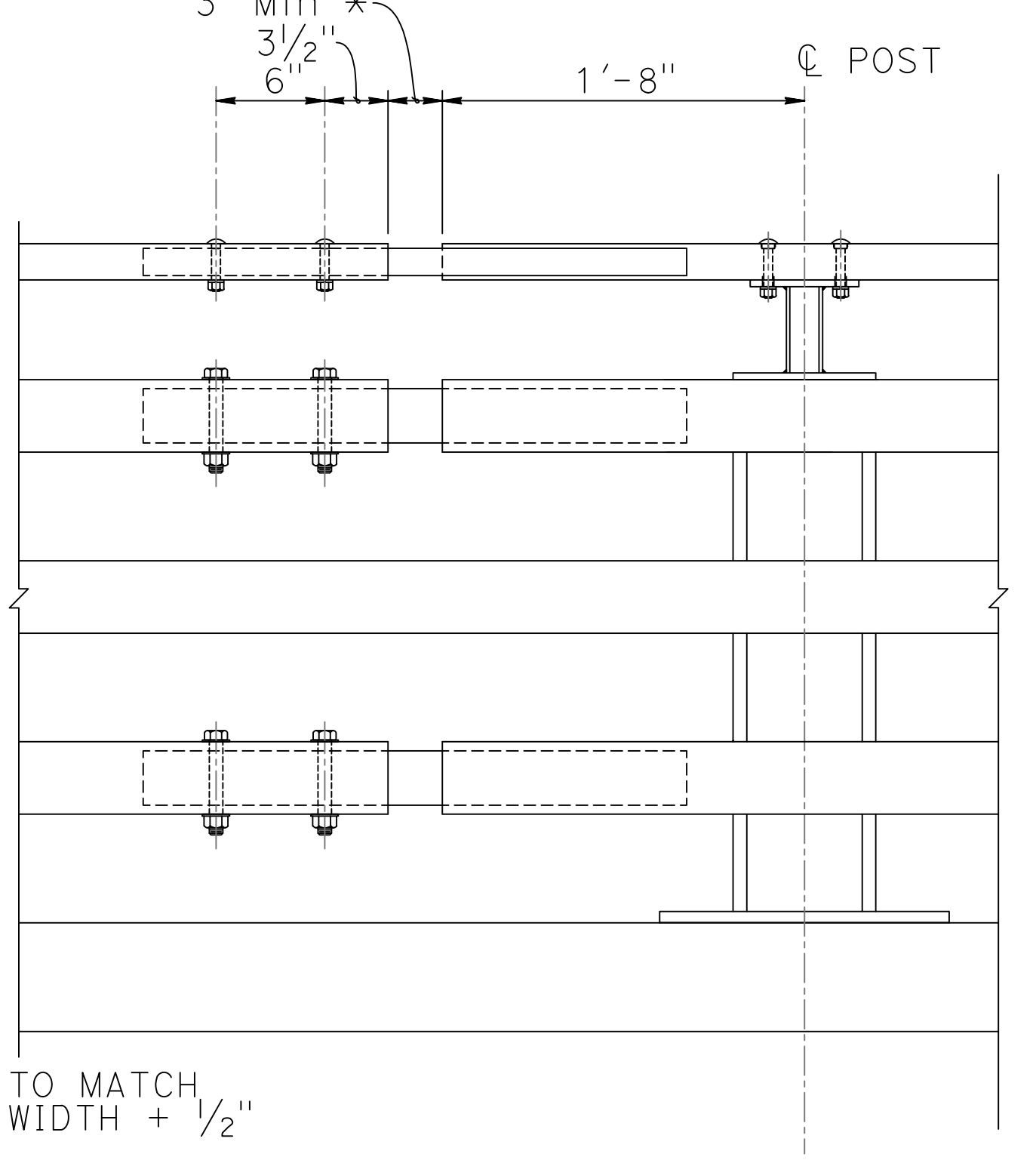
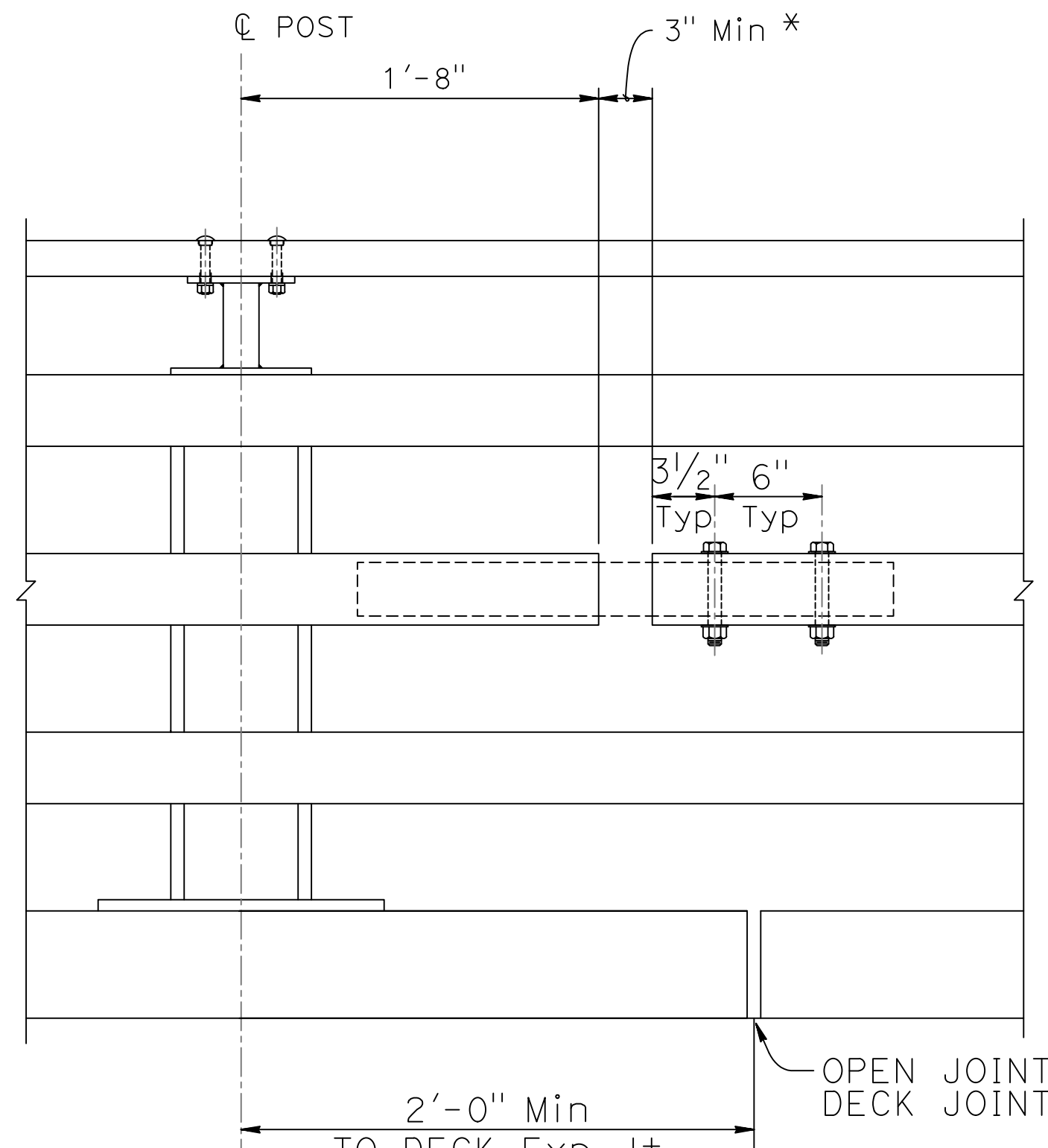
- NOTES:
1. HS bolts with nut and washers, snug tightened, and thread locking system.
 2. Use 1/2" ϕ x 3 5/16" BOLTS (HSS3x2x3/16)
Use 3/4" ϕ x 5 5/16" BOLTS (HSS8x4x5/16)
 3. Each rail length must be continuous over a minimum of two posts.
 4. The fabricator must check that the tubular sleeve splices conform to the dimensions indicated to assure proper clearance.
 5. Except for expansion splices, not more than one splice permitted per same side of post.



STANDARD SPLICE
NO SCALE



EXPANSION SPLICE
NO SCALE
* Match deck or wall joint



BRIDGE STANDARD DETAILS		
xs16-116-4	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California
FILE NO.	APPROVAL DATE	

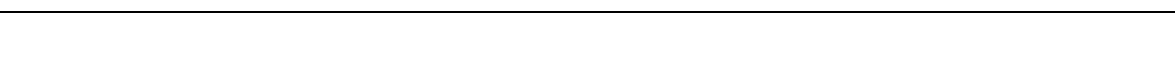
DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR	G. GORDON
COUNTY OF GLENN	PROJECT ENGINEER
PUBLIC WORKS AGENCY	

BRIDGE NO.	11C0017	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
POST MILES	NA	
NA		
		CALIFORNIA ST-75 BRIDGE RAIL
		DETAILS No. 4

Refer to: <http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html>

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

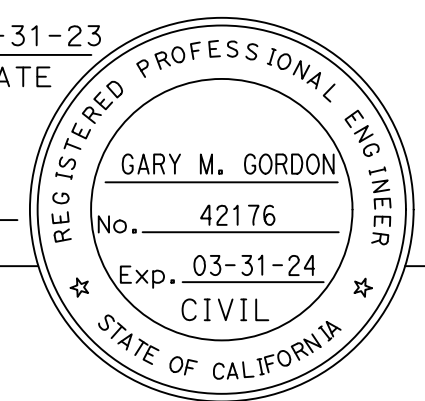


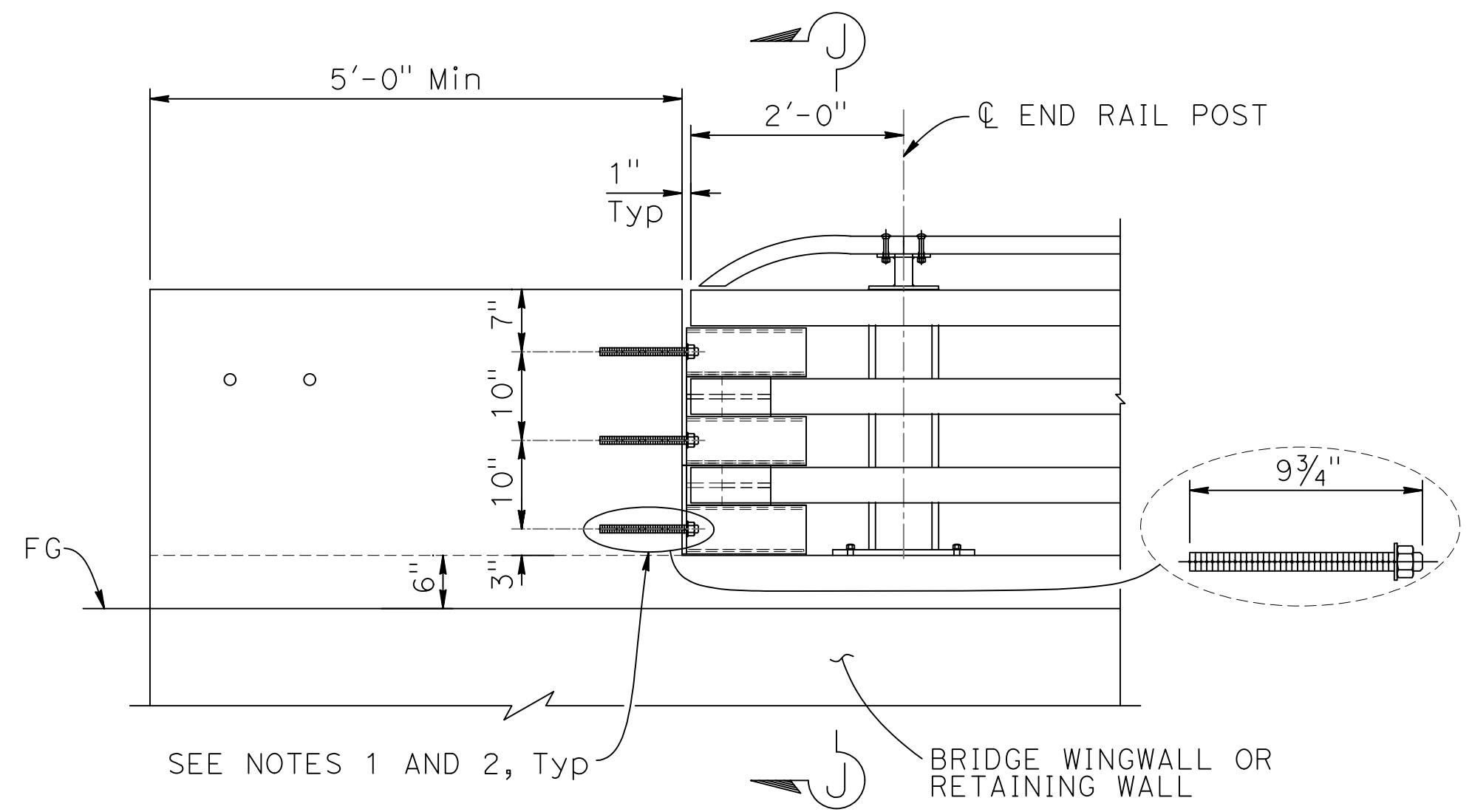
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DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	12/19/19 06/20/22 07/05/22	11	15

2022 STANDARD PLAN XS-16-116-4 DATE PLOTTED => 05/31/2023 AM 02:55:20 USERNAME => KEVIN

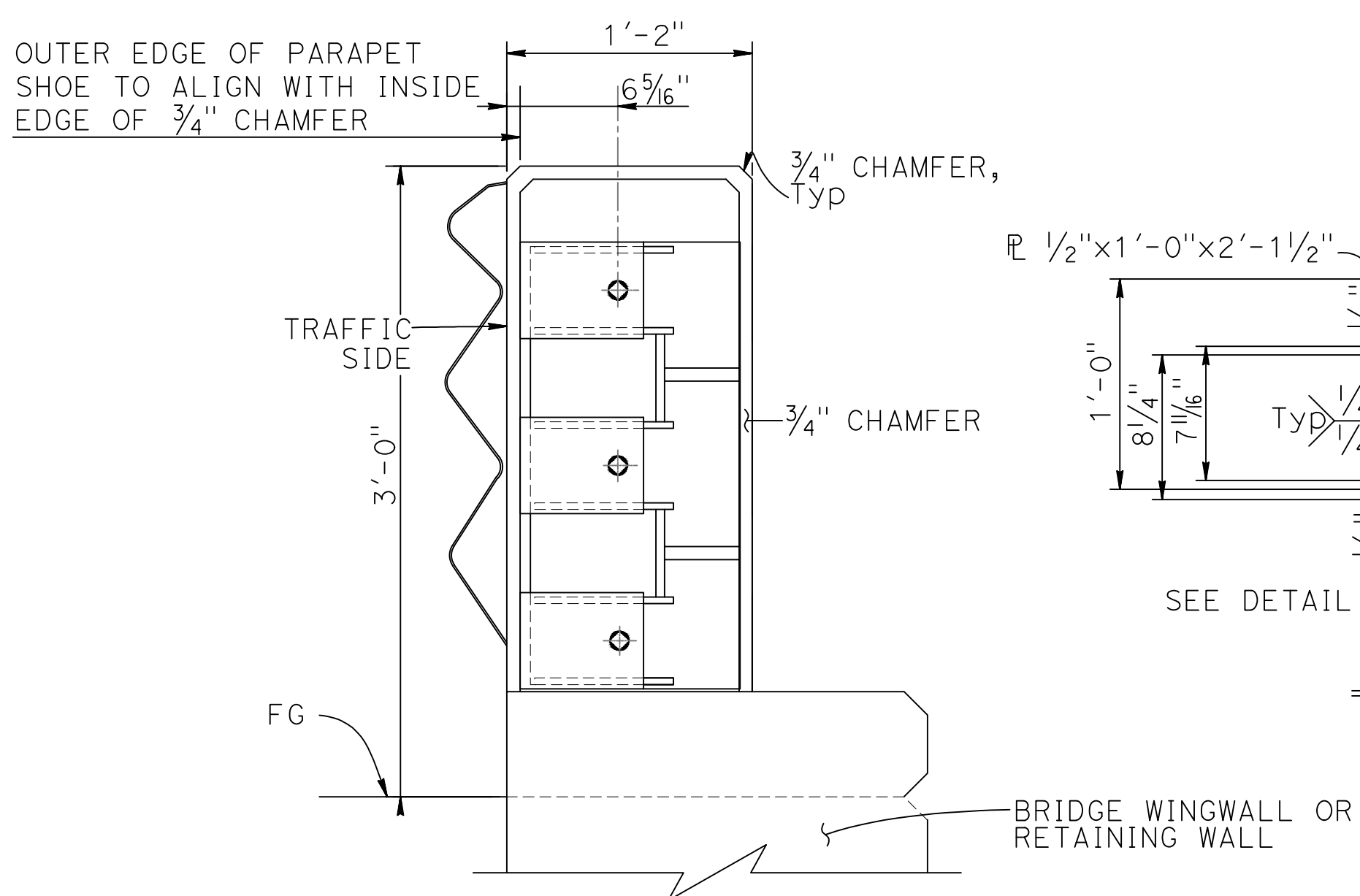
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	30	33

	05-31-23 DATE May 31, 2023 PLANS APPROVAL DATE
---	---



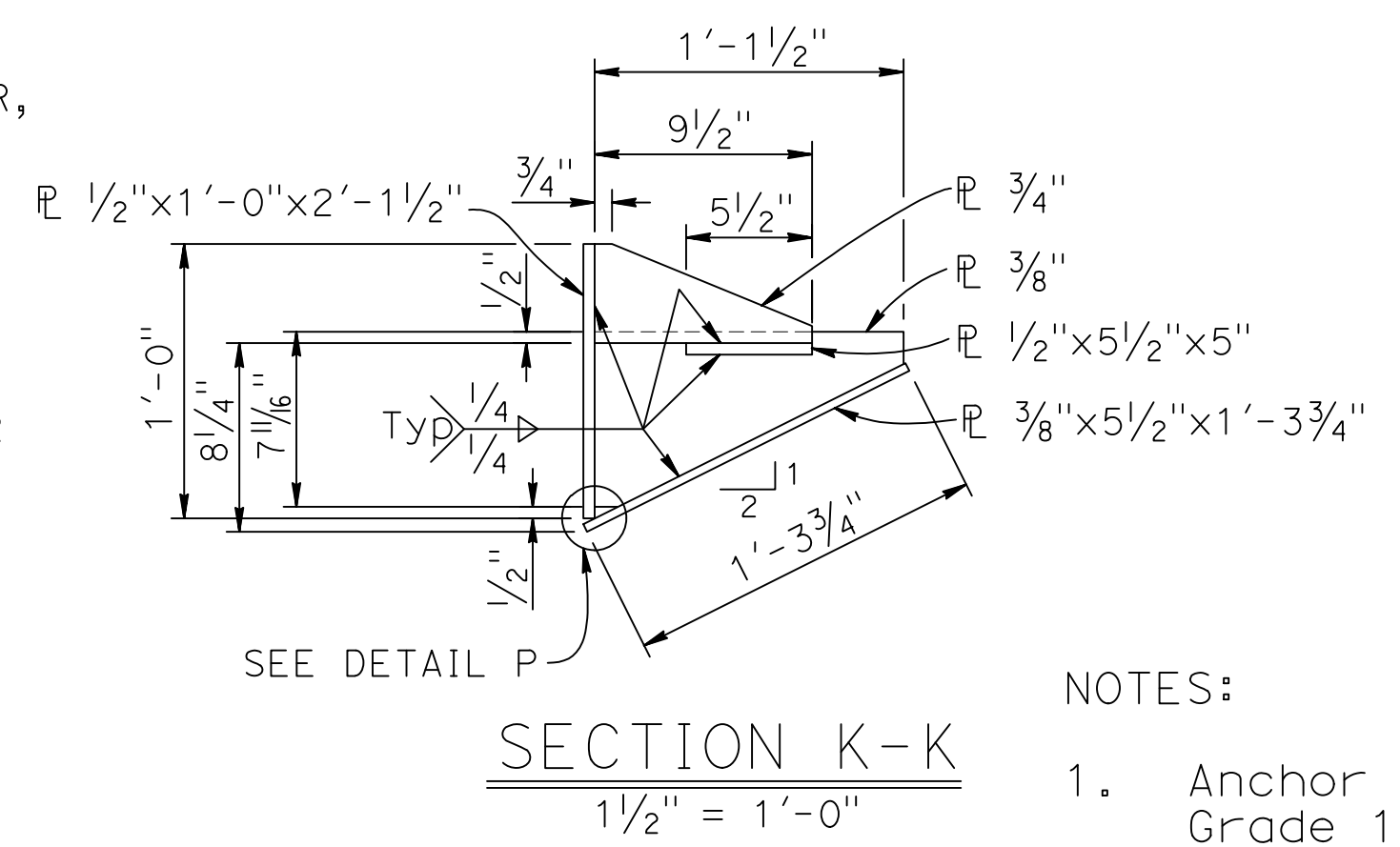
PARAPET SHOE AT DEPARTURE END BLOCK

NOTE: Parapet shoe connection to approach end block is similar.



SECTION J-J

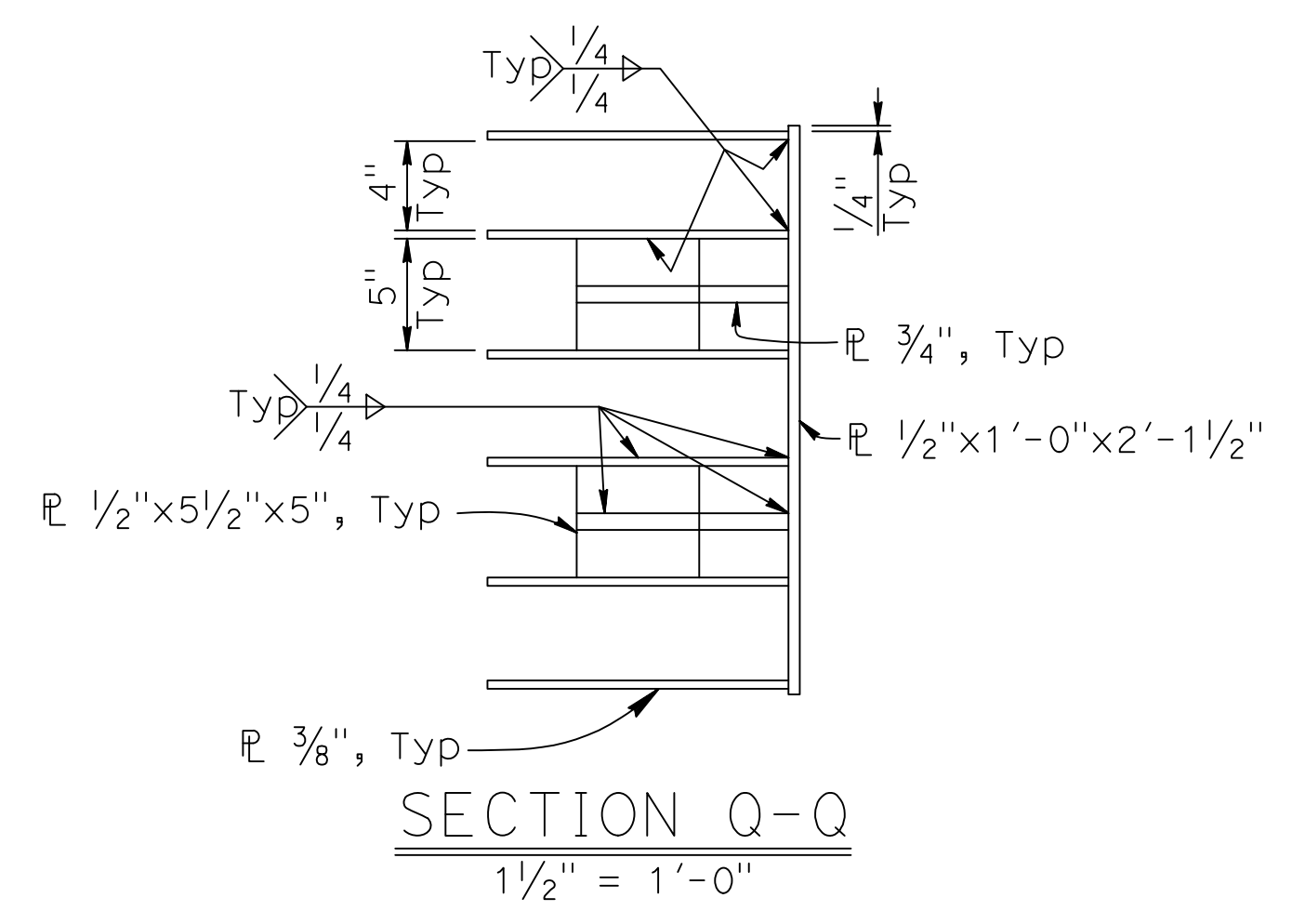
NOTE: Bridge railing not shown clarity.



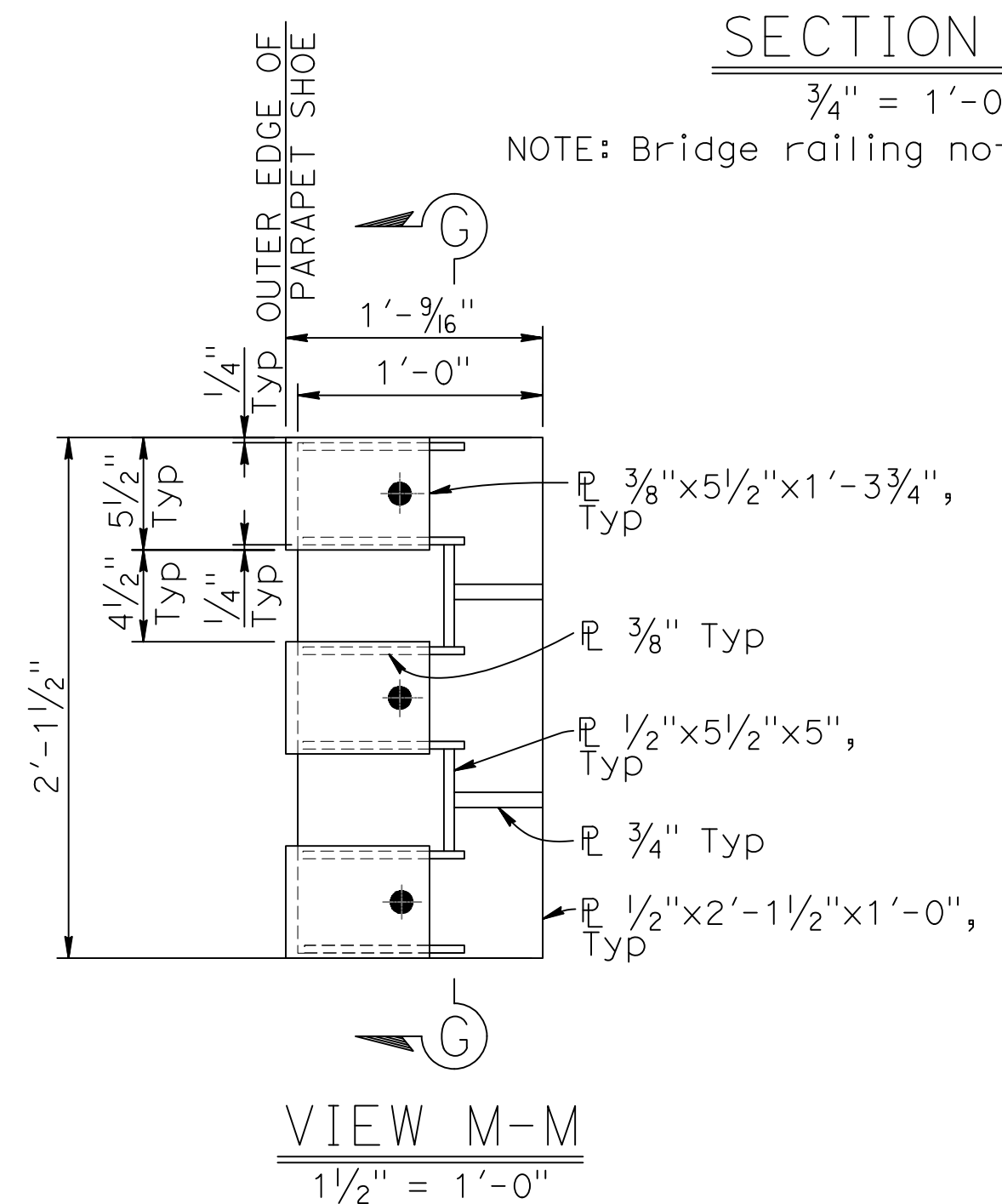
SECTION K-K

NOTES:

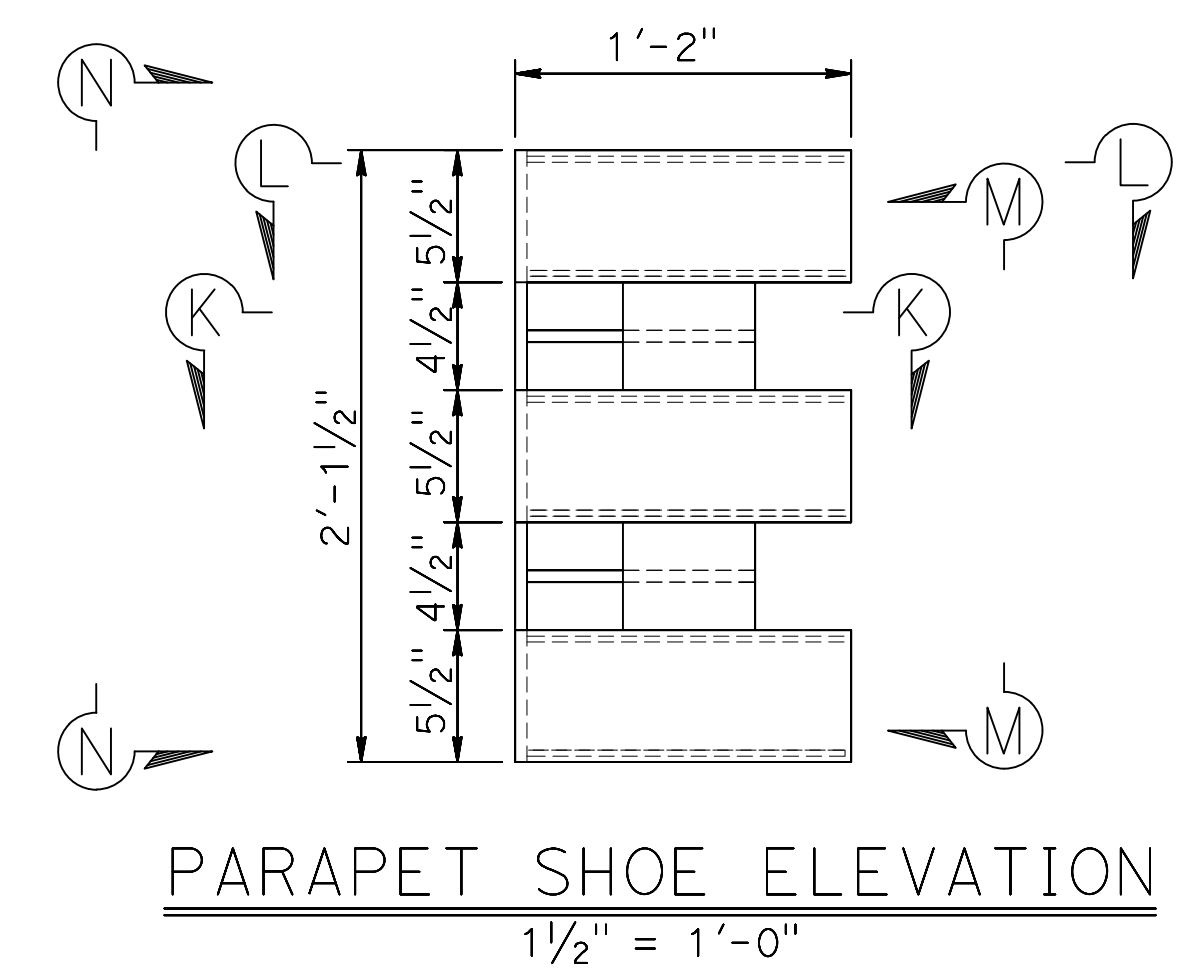
- Anchor bolts must be 7/8" Dia and ASTM F1554 Grade 105 fully threaded rods with heavy hex nut and one hardened washer (1 3/4" OD) each. Embed threaded rods 8" into concrete anchor block with DRILL AND BOND (CHEMICAL ADHESIVE) anchorage system.
- DRILL AND BOND (CHEMICAL ADHESIVE) anchorages is subjected to approval of Engineer. Installation procedure must comply with manufacture's instructions.



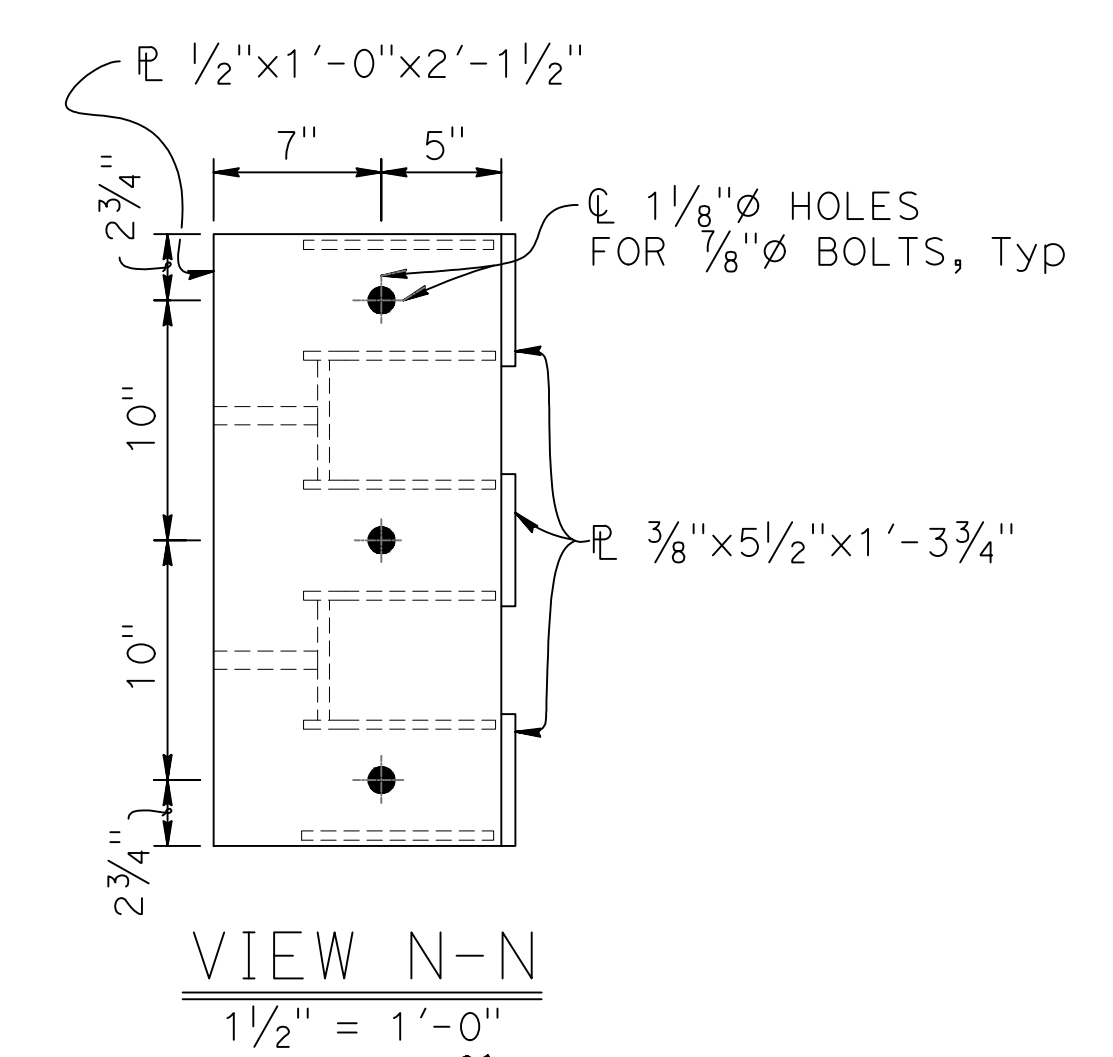
SECTION Q-Q



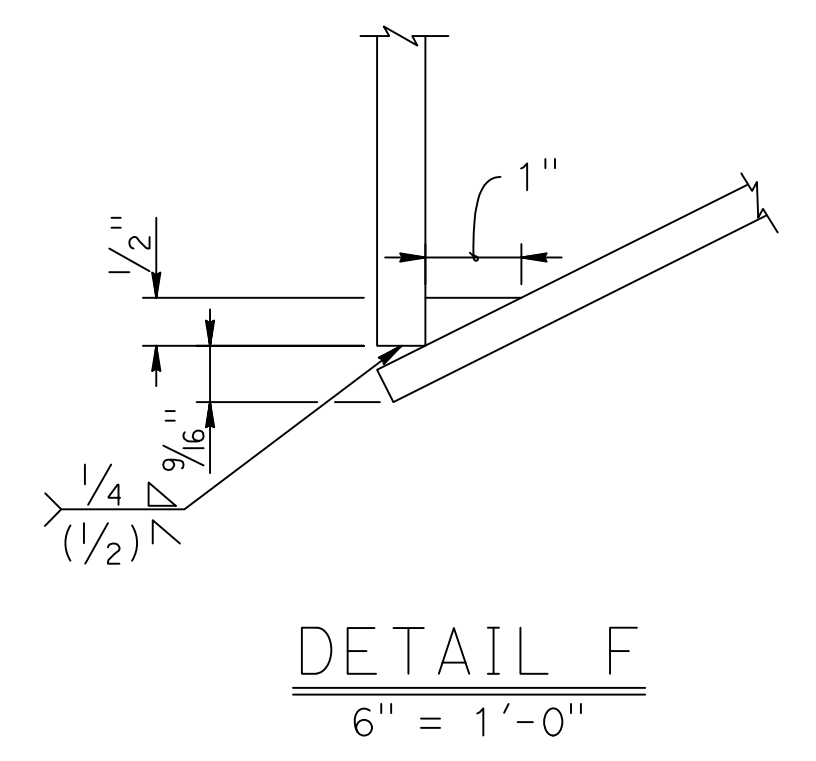
VIEW M-M



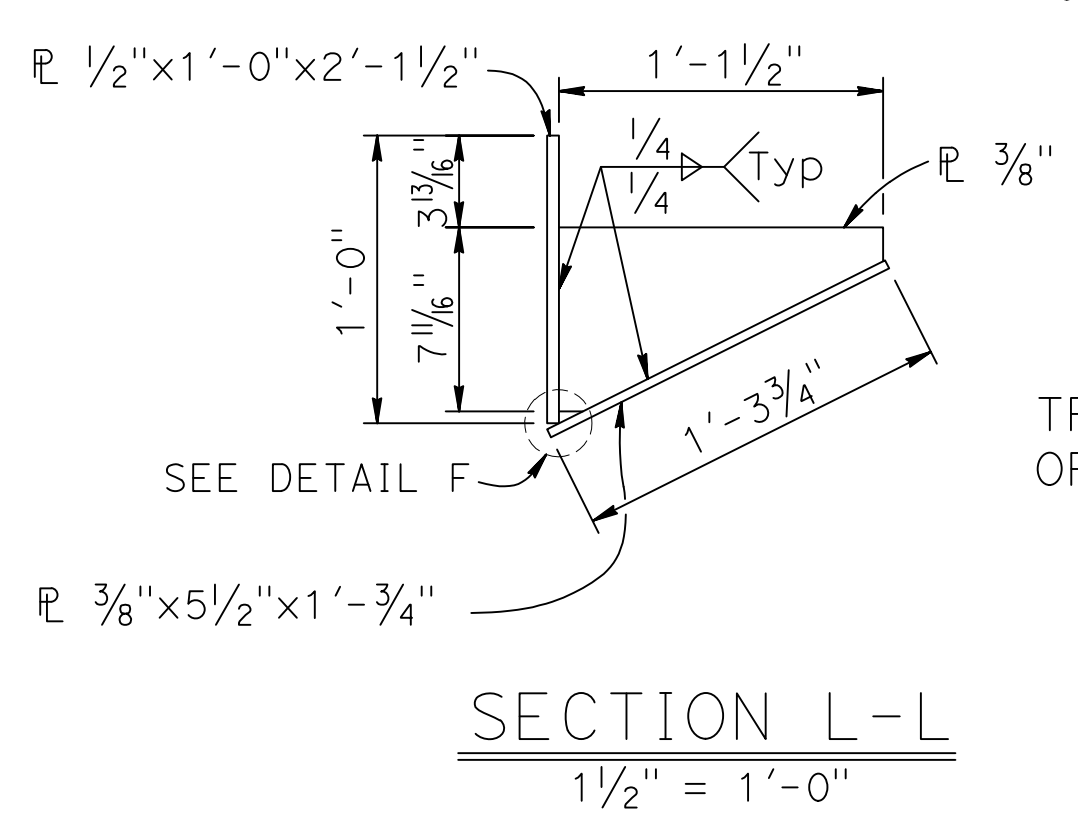
PARAPET SHOE ELEVATION



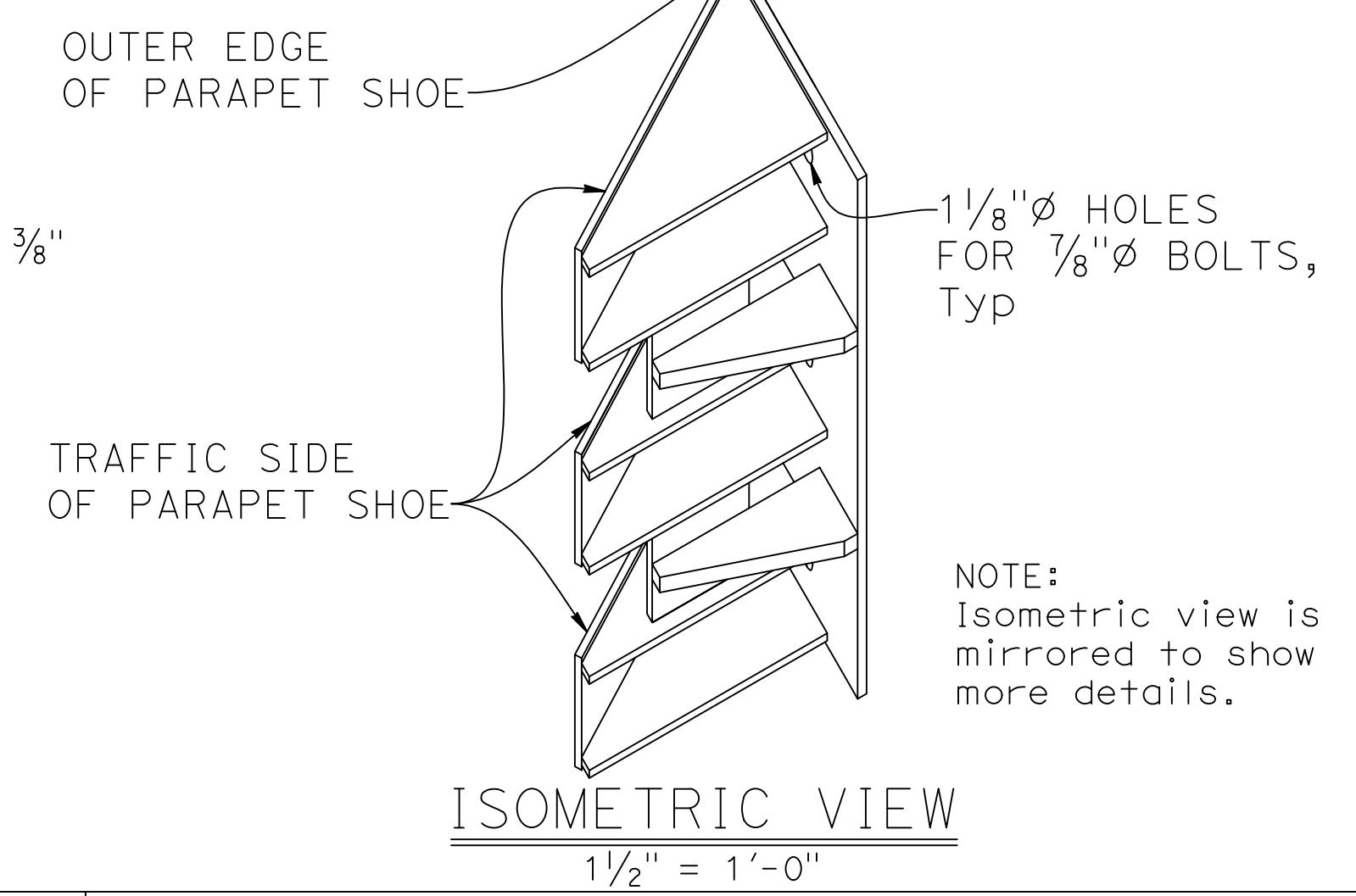
VIEW N-N



DETAIL F



SECTION L-L



ISOMETRIC VIEW

BRIDGE STANDARD DETAILS		
xs16-116-5	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California
FILE NO.	APPROVAL DATE	

DESIGN	BY	CHECKED
DETAILS	K. COOK-GUTERIEZ	G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR	
COUNTY OF GLENN	
PUBLIC WORKS AGENCY	
G. GORDON	BRIDGE NO. 11C0017
PROJECT ENGINEER	POST MILES NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)			
CALIFORNIA ST-75 BRIDGE RAIL			
DETAILS No. 5			

Refer to: <http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html>



FILE => 11-0017-r-rspxs16-116-5

REVISION DATES	SHEET	OF
12/19/19 06/30/22 01/05/22	12	15

2022 STANDARD PLAN XS-16-116-5 DATE PLOTTED => 05/31/2023 AM 5:56:56 USERNAME => KEVIN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	31	33

7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
 June 14, 2018
 PLANS APPROVAL DATE

Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806

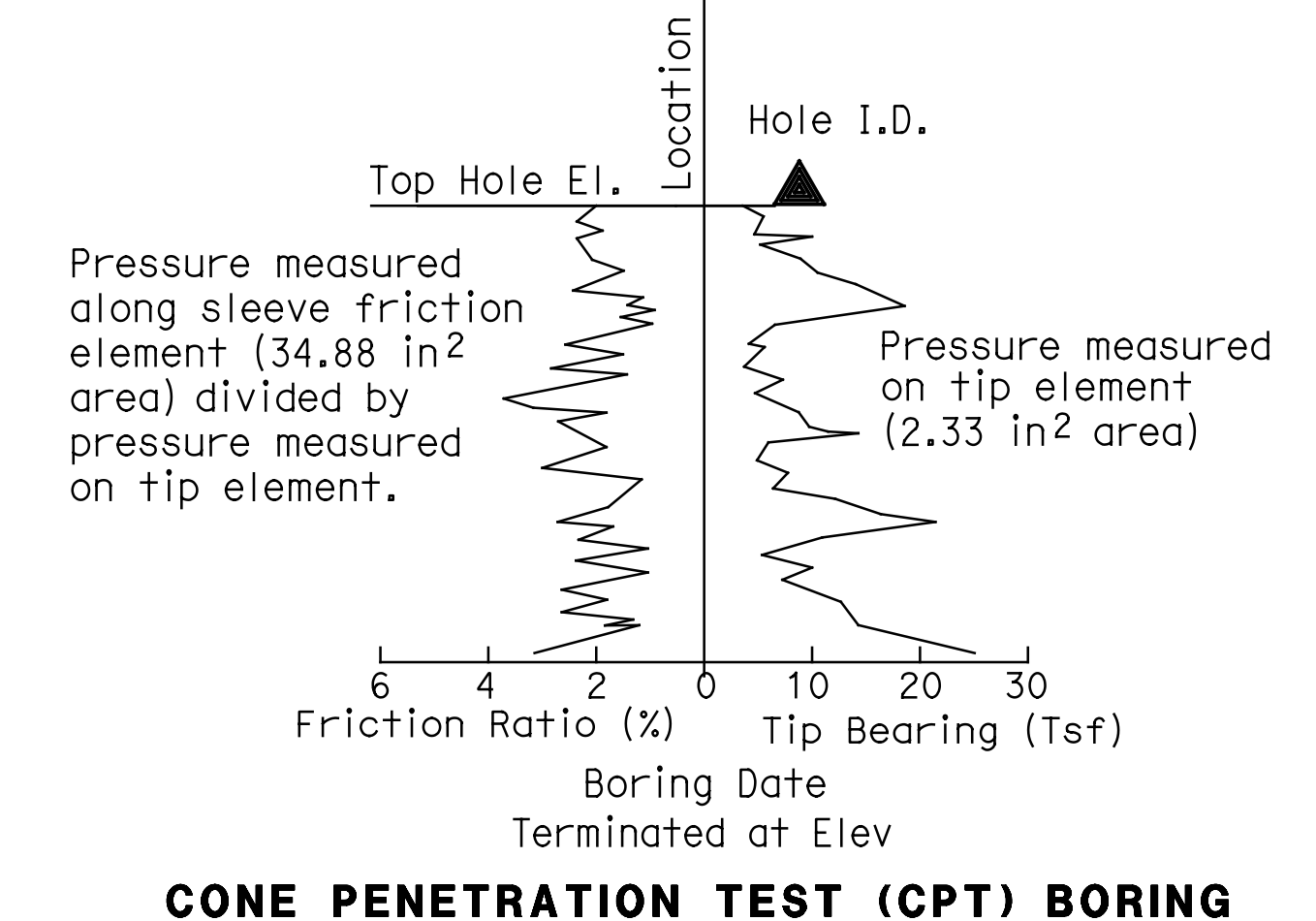
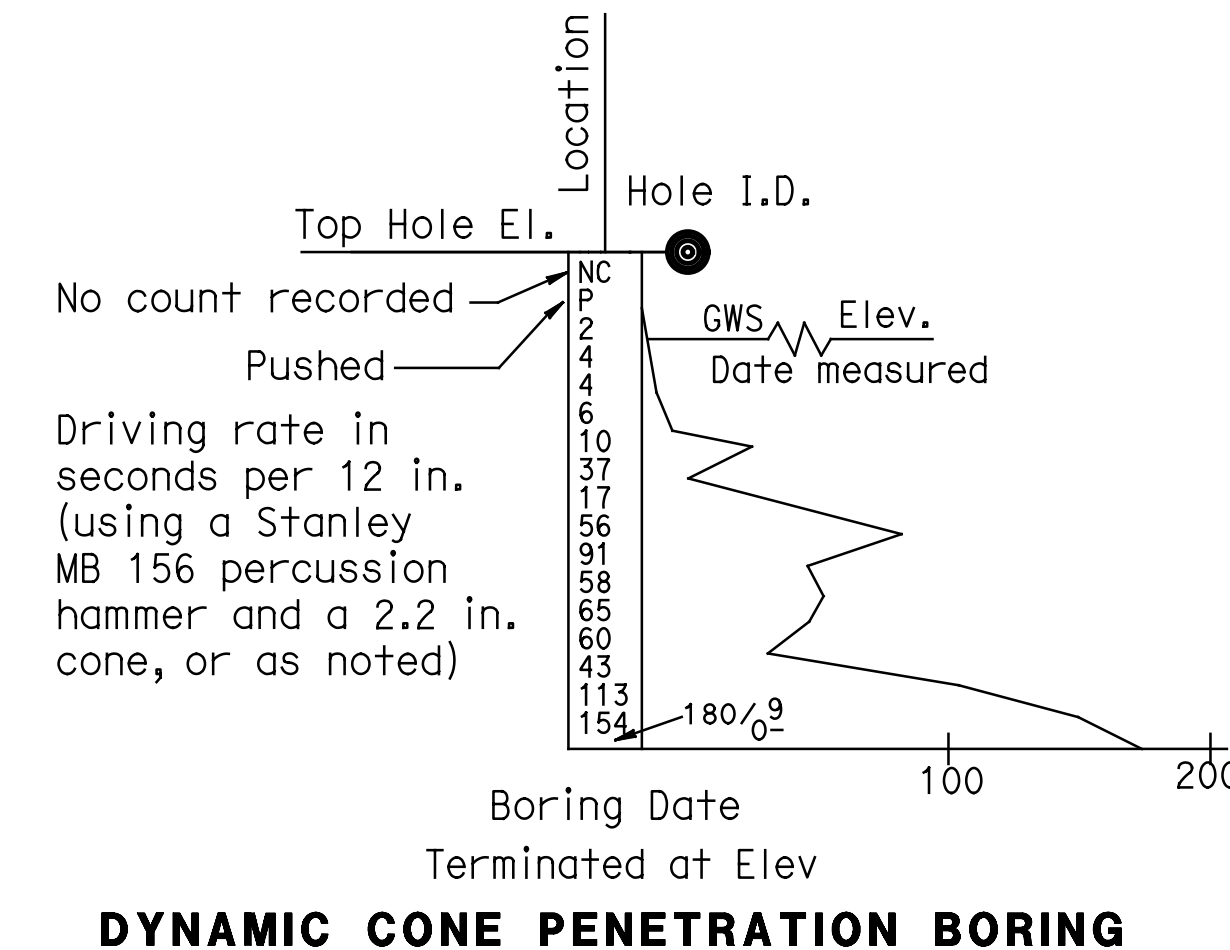
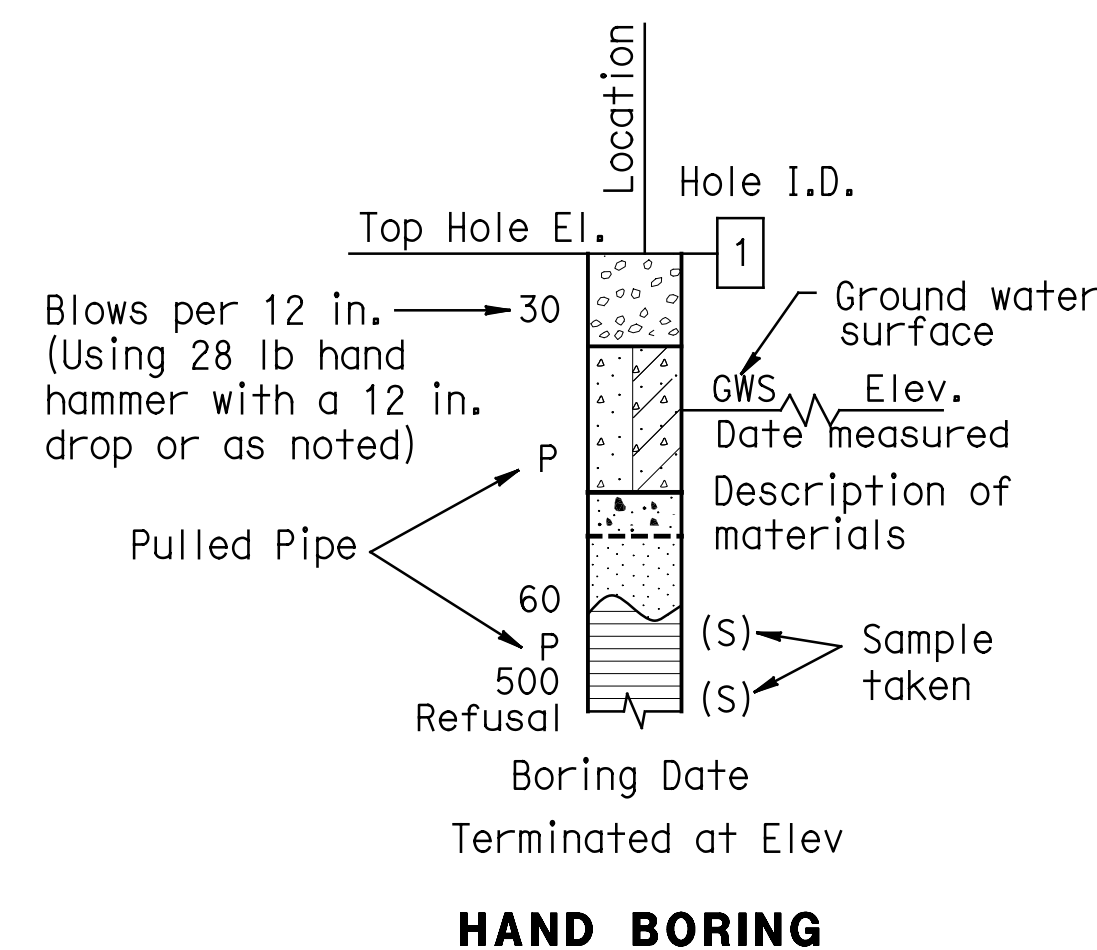
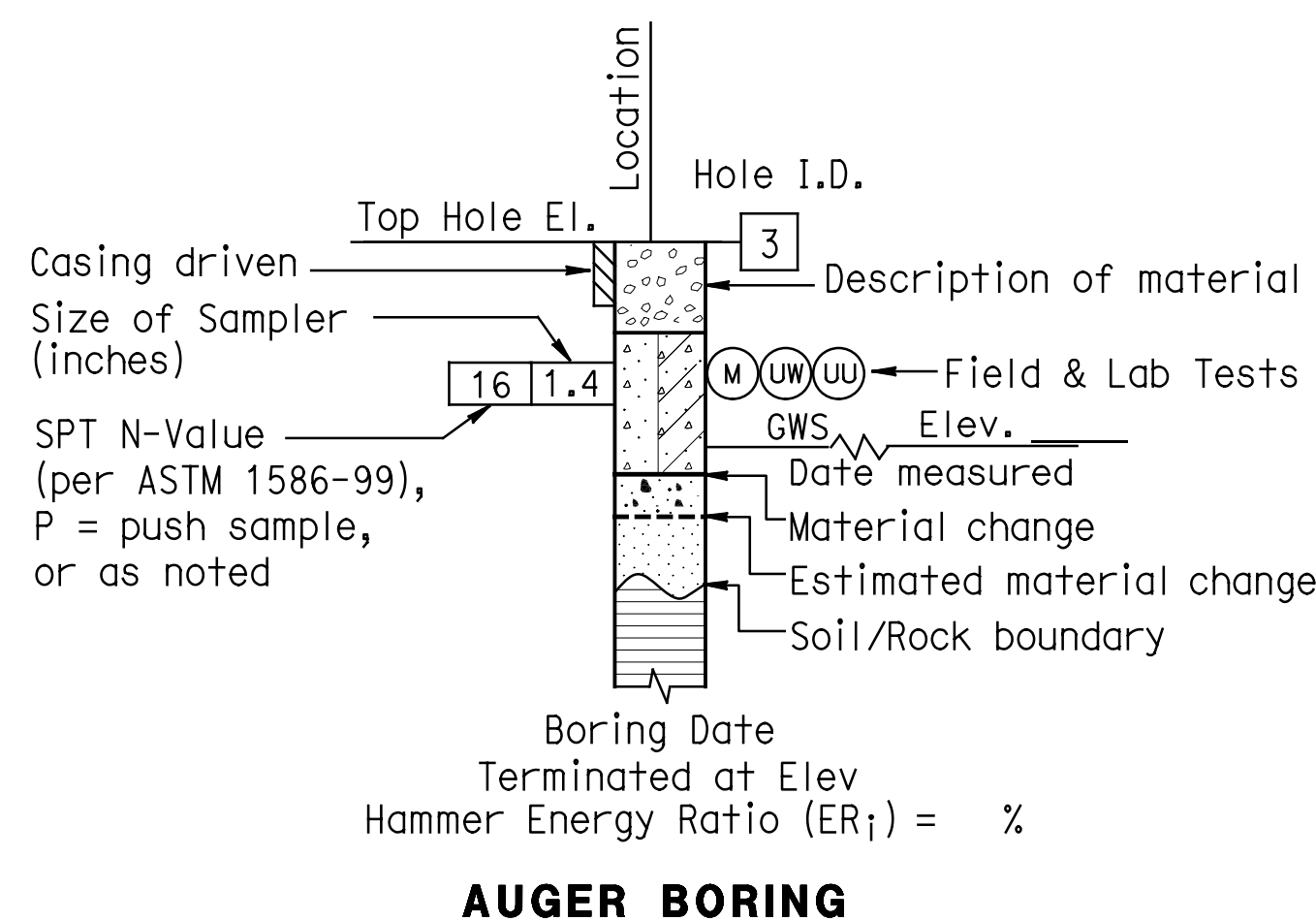
CEMENTATION	
Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

CONSISTENCY OF COHESIVE SOILS				
Description	Unconfined Compressive Strength (tsf)	Pocket Penetrometer Measurement (tsf)	Torvane Measurement (tsf)	Field Approximation
Very Soft	< 0.25	< 0.25	< 0.12	Easily penetrated several inches by fist
Soft	0.25 to 0.50	0.25 to 0.50	0.12 to 0.25	Easily penetrated several inches by thumb
Medium Stiff	0.50 to 1.0	0.50 to 1.0	0.25 to 0.50	Penetrated several inches by thumb with moderate effort
Stiff	1 to 2	1 to 2	0.50 to 1.0	Readily indented by thumb but penetrated only with great effort
Very Stiff	2 to 4	2 to 4	1.0 to 2.0	Readily indented by thumbnail
Hard	> 4.0	> 4.0	> 2.0	Indented by thumbnail with difficulty

BOREHOLE IDENTIFICATION		
Symbol	Hole Type	Description
	A	Auger Boring
	R	Rotary drilled boring
	P	Rotary percussion boring (air)
	R	Rotary drilled diamond core
	HD	Hand driven (1-inch soil tube)
	HA	Hand Auger
	D	Dynamic Cone Penetration Boring
	CPT	Cone Penetration Test (ASTM D 5778-95)
	O	Other

Note: Size in inches.

PLASTICITY OF FINE-GRAINED SOILS	
Description	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.



DRAWN BY	S. McCracken	B. KILLEEN
CHECKED BY	R. KHIABANI	FIELD INVESTIGATION BY: DATE: X

BRIDGE NO.	11C0017
POST MILES	NA

**PREPARED FOR
 COUNTY OF GLENN
 PUBLIC WORKS AGENCY**

**G. GORDON
 PROJECT ENGINEER**

**HOWARD SLOUGH BRIDGE (REPLACE)
 SOIL LEGEND 1 OF 2**

USERNAME => Richard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:52:33 PM

GROUP SYMBOLS AND NAMES					
Graphic/Symbol	Group Names	Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
	GW Well-graded GRAVEL		CL Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND		CL-ML SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
	GP Poorly-graded GRAVEL Poorly-graded GRAVEL with SAND				
	GW-GM Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND		ML SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND		OL ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
	GW-GC Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)				
	GP-GM Poorly-graded GRAVEL with SILT Poorly-graded GRAVEL with SILT and SAND		OL ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
	GP-GC Poorly-graded GRAVEL with CLAY (or SILTY CLAY) Poorly-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)				
	GM SILTY GRAVEL SILTY GRAVEL with SAND		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND		OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	GC CLAYEY GRAVEL CLAYEY GRAVEL with SAND				
	GC-GM SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND		OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	SW Well-graded SAND Well-graded SAND with GRAVEL				
	SP Poorly-graded SAND Poorly-graded SAND with GRAVEL		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND		OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	SW-SM Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL				
	SW-SC Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND		OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	SP-SM Poorly-graded SAND with SILT Poorly-graded SAND with SILT and GRAVEL				
	SP-SC Poorly-graded SAND with CLAY (or SILTY CLAY) Poorly-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND		OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	SM SILTY SAND SILTY SAND with GRAVEL				
	SC CLAYEY SAND CLAYEY SAND with GRAVEL		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND		OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	SC-SM SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL				
	PT PEAT		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND		OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	COBBLES COBBLES and BOULDERS BOULDERS				

FIELD AND LABORATORY TESTING

- (C) Collapse Potential (ASTM D 5333)
- (CL) Compaction Curve (CTM 216)
- (CP) Corrosivity Testing (CTM 643, CTM 422, CTM 417)
- (CR) Consolidated Undrained Triaxial (ASTM D 4767)
- (CU) Direct Shear (ASTM D 3080)
- (DS) Expansion Index (ASTM D 4829)
- (EI) Moisture Content (ASTM D 2216)
- (M) Organic Content-% (ASTM D 2974)
- (OC) Permeability (CTM 220)
- (P) Particle Size Analysis (ASTM D 422)
- (PA) Plasticity Index (AASHTO T 90)
Liquid Limit (AASHTO T 89)
- (PI) Point Load Index (ASTM D 5731)
- (PL) Pressure Meter
- (PM) Passing # 200 (ASTM D 1140-00)
- (R) R-Value (CTM 301)
- (SE) Sand Equivalent (CTM 217)
- (SG) Specific Gravity (AASHTO T 100)
- (SL) Shrinkage Limit (ASTM D 427)
- (SW) Swell Potential (ASTM D 4546)
- (TV) Pocket Torvane
- (UC) Unconfined Compression-Soil (ASTM D 2166)
Unconfined Compression-Rock (ASTM D 2938)
- (UU) Unconsolidated Undrained Triaxial (ASTM D 2850)
- (UW) Unit Weight (ASTM D 4767)
- (VS) Vane Shear (AASHTO T 223)

ROSS KHIABANI 7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
June 14, 2018
 PLANS APPROVAL DATE

Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806

APPARENT DENSITY OF COHESIONLESS SOILS

Description	SPT N ₆₀ (Blows / 12 in.)
Very Loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 31
Dense	30 - 50
Very Dense	> 50

MOISTURE

Description	Criteria
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

PERCENT OR PROPORTION OF SOILS

Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5% - 10%
Little	15% - 25%
Some	30% - 45%
Mostly	50% - 100%

PARTICLE SIZE

Description	Size
Boulder	> 12"
Cobble	3" to 12"
Gravel	Coarse 3/4" to 3"
	Fine No. 4 to 3/4"
Sand	Coarse No. 10 to No. 4
	Medium No. 40 to No. 10
	Fine No. 200 to No. 40
Silt and Clay	Less than 1/300

DRAWN BY: S. McCracken
 CHECKED BY: R. Khiabani
 B. KILLEEN
 FIELD INVESTIGATION BY:
 DATE: X

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

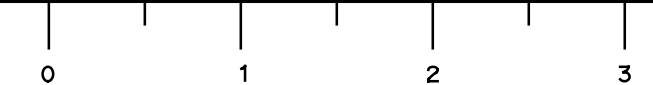
G. GORDON
 PROJECT ENGINEER

BRIDGE NO.
 11C0017
 POST MILES
 NA

HOWARD SLOUGH BRIDGE (REPLACE)

SOIL LEGEND 2 OF 2

ORIGINAL SCALE IN INCHES
 FOR REDUCED PLANS



DISREGARD PRINTS BEARING
 EARLIER REVISION DATES

REVISION DATES	SHEET	OF
10/12/12	14	15

BENCH MARK

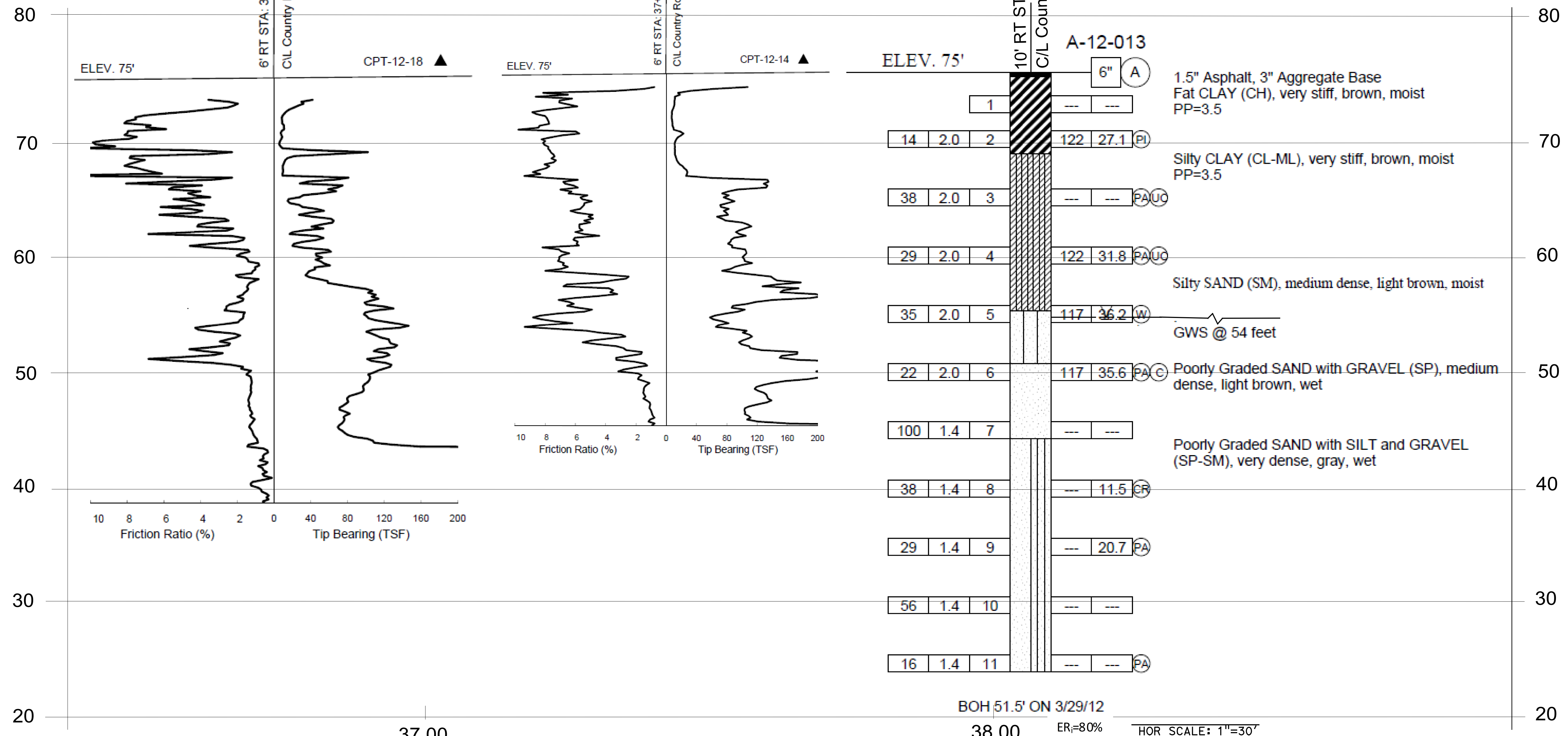
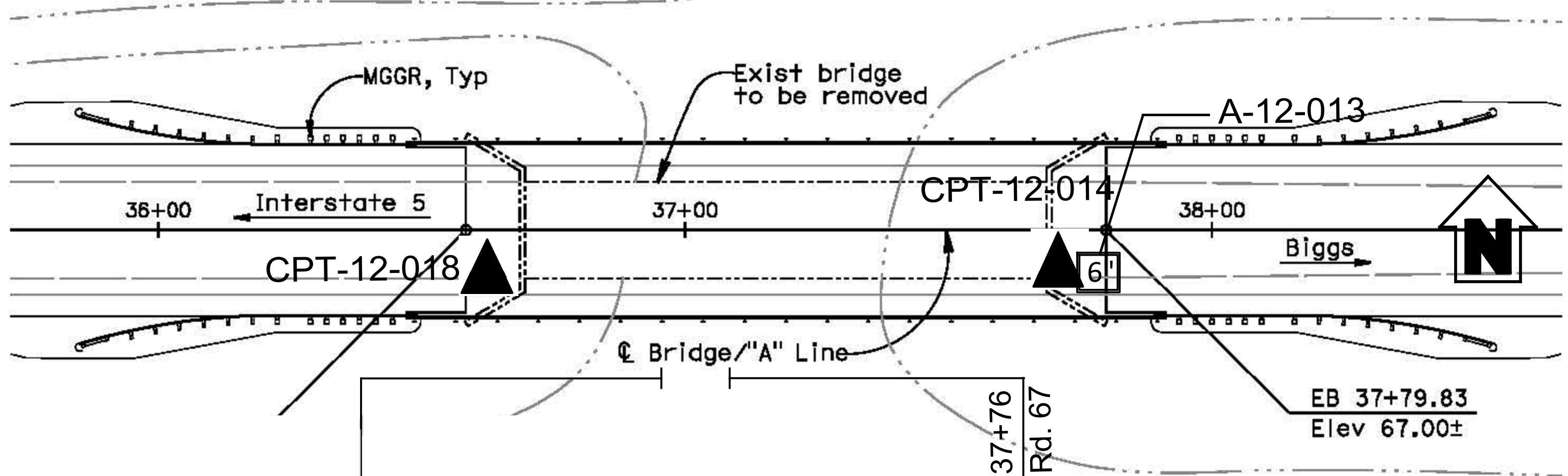
DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
Horizontal Datum is NAD83
Vertical Datum is NAVD88

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	33	33

7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
June 14, 2018
 PLANS APPROVAL DATE

ROSS KHIABANI
 No. GE2202
 Exp. 6/30/20
 GEOTECHNICAL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806



DRAWN BY S. McCracken	B. KILLEEN FIELD INVESTIGATION BY: DATE: X	BRIDGE NO. 11C0017	HOWARD SLOUGH BRIDGE (REPLACE)
CHECKED BY R. KHIABANI		POST MILES NA	
PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY		G. GORDON PROJECT ENGINEER	LOG OF TEST BORINGS

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-4	TYPICAL CROSS SECTIONS
5-6	LAYOUTS
7	CONSTRUCTION DETAILS
8-9	TEMPORARY WATER POLLUTION/EROSION CONTROL PLANS
10	CONSTRUCTION AREA SIGNS PLAN
11	DETOUR PLAN
12	PAVEMENT DELINEATION AND SIGN PLAN
13	SUMMARY OF QUANTITIES
14-18	REVISED STANDARD PLANS

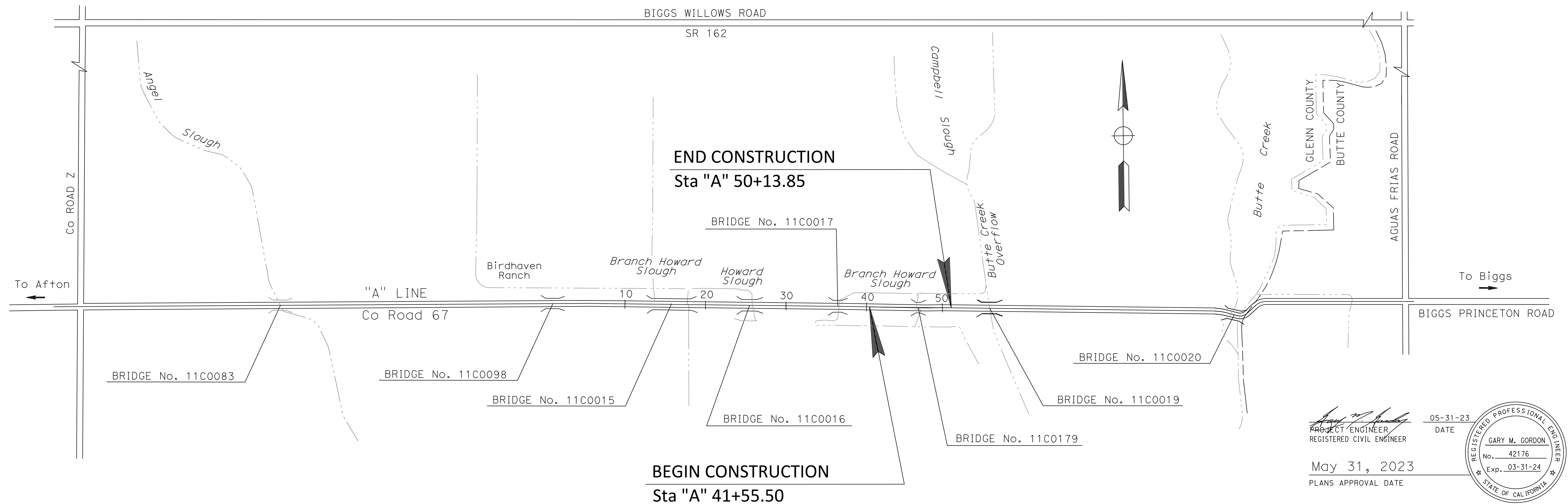
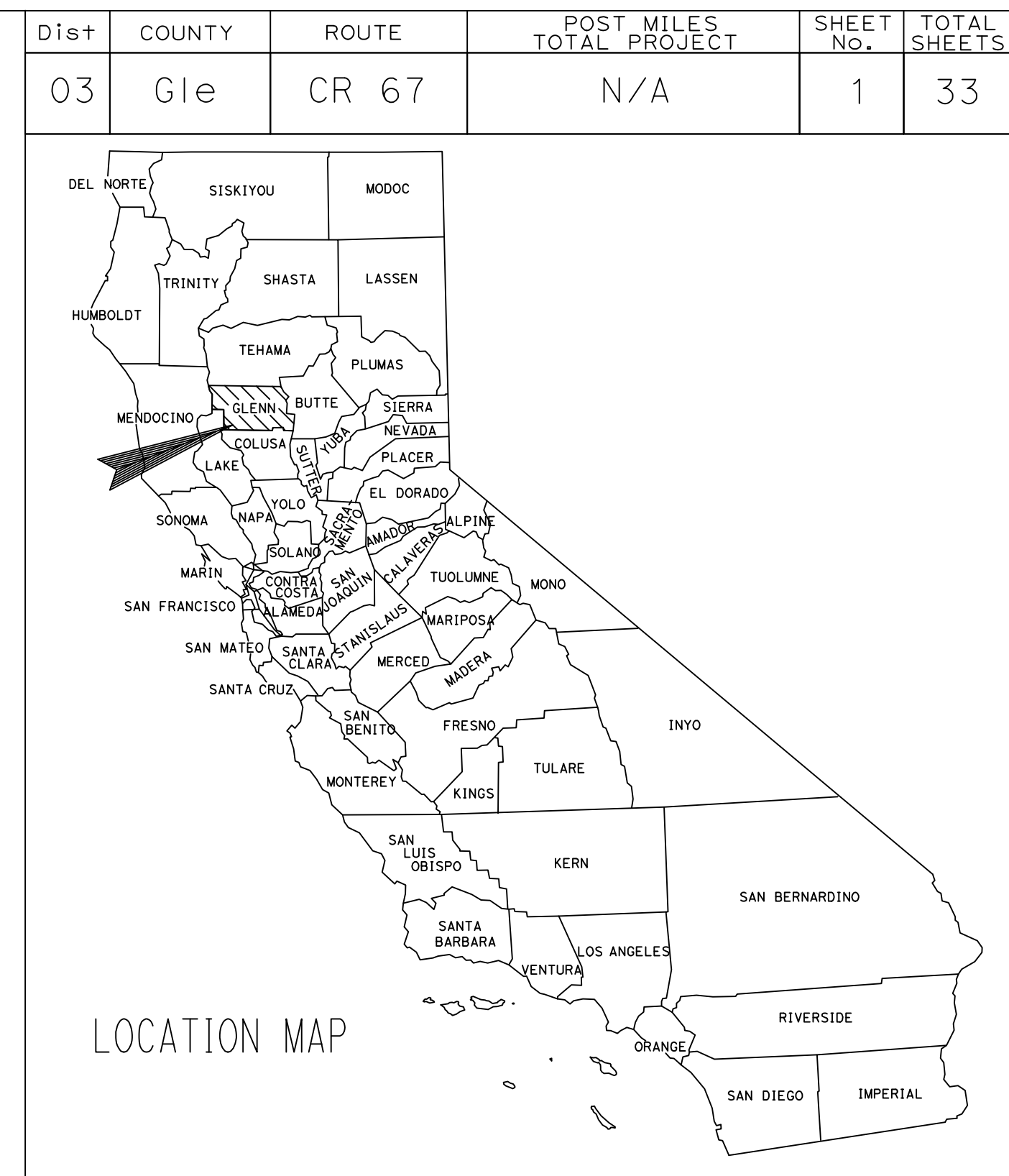
STRUCTURES
19-33 STRUCTURE PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

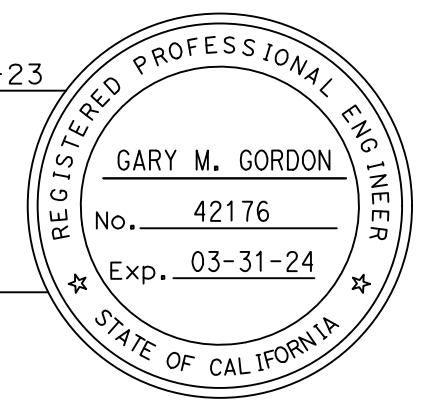
STATE OF CALIFORNIA
COUNTY OF GLENN
PUBLIC WORKS AGENCY

PROJECT PLANS FOR CONSTRUCTION ON
COUNTY ROAD 67
BRIDGE REPLACEMENT AT BRANCH HOWARD SLOUGH
ON COUNTY ROAD 67
FEDERAL AID PROJECT BRLO-5911 (050)
STATE BRIDGE No. 11C0179

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2022



Project Engineer
REGISTERED CIVIL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
DATE 05-31-23
PLANS APPROVAL DATE



COUNTY OF GLENN:
WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001
DATE 05-31-23
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.

STRUCTURAL SECTION NOTES:

1 Prop SECTION
6.25" HMA TYPE A
23.5" CI 2 AB

2 EXISTING SECTION VARIES

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	2	33

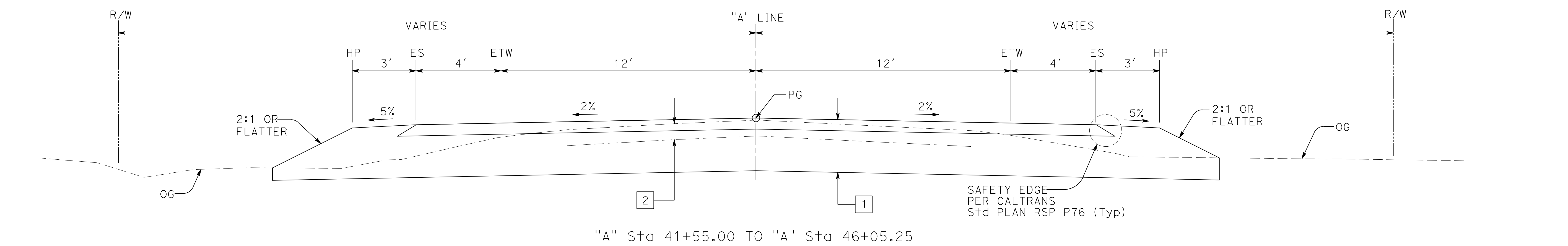
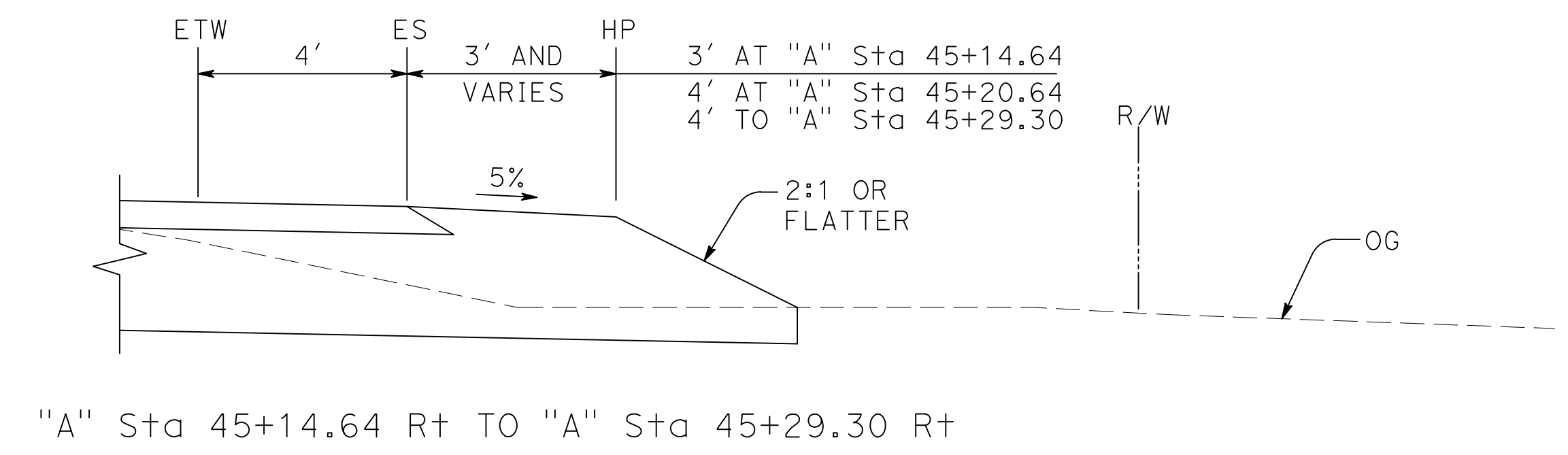
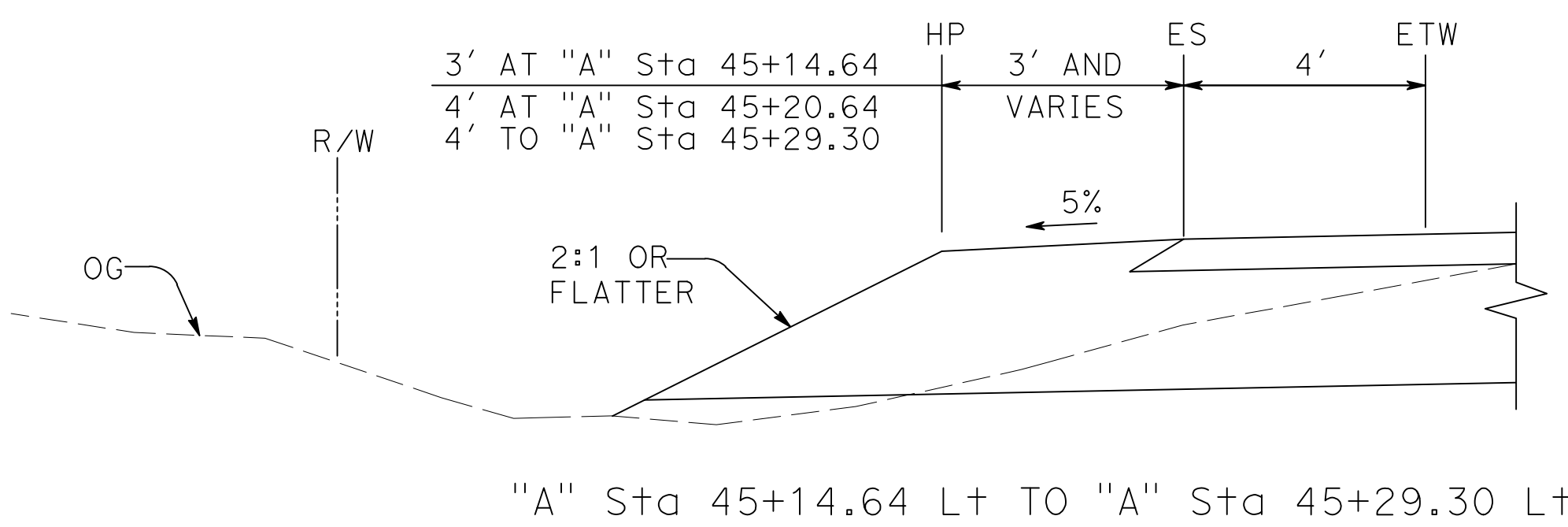
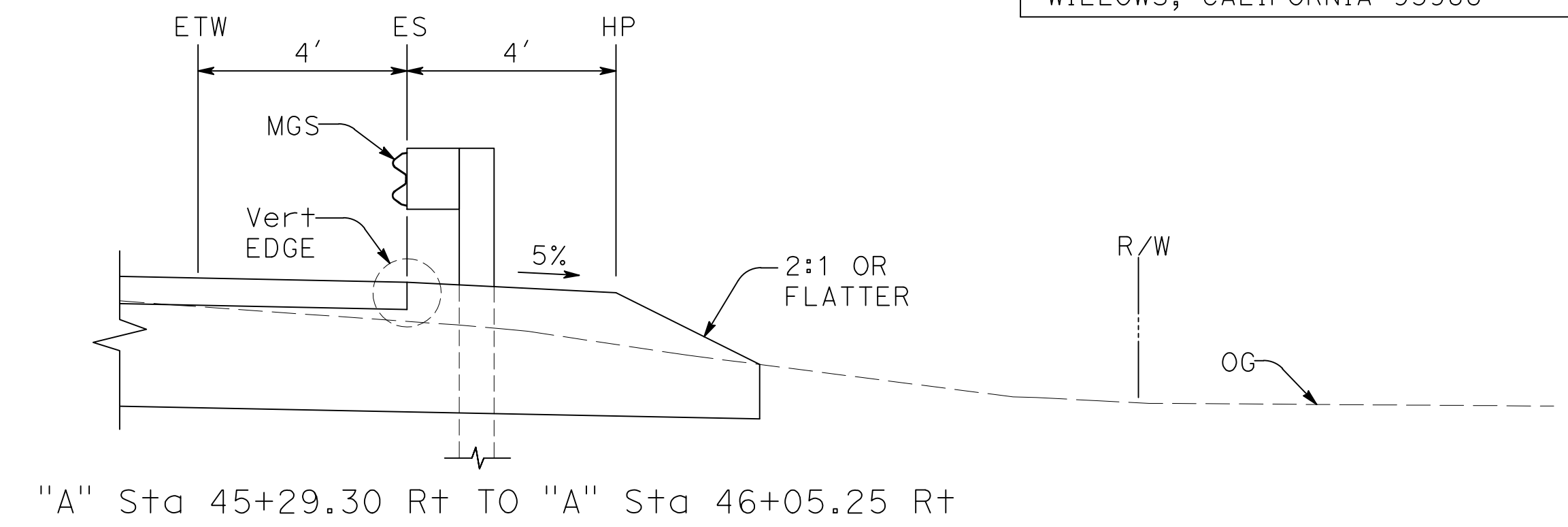
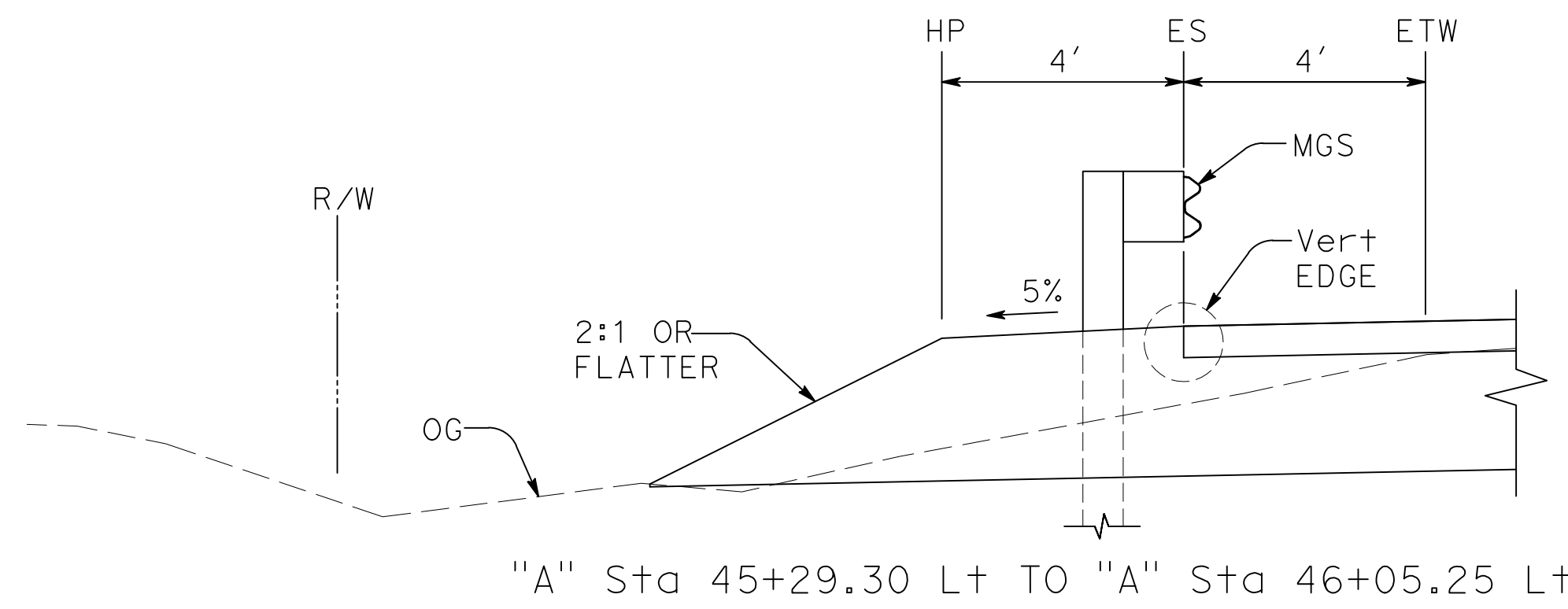
05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
PLANS APPROVAL DATE

GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

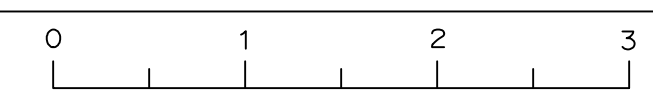
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988



Co ROAD 67

TYPICAL CROSS SECTION X-1

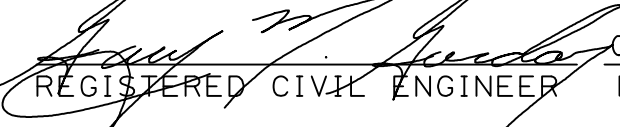
NO SCALE

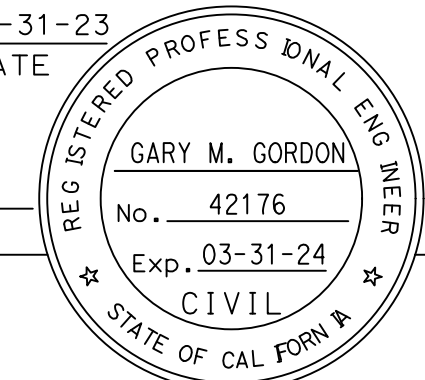


NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.

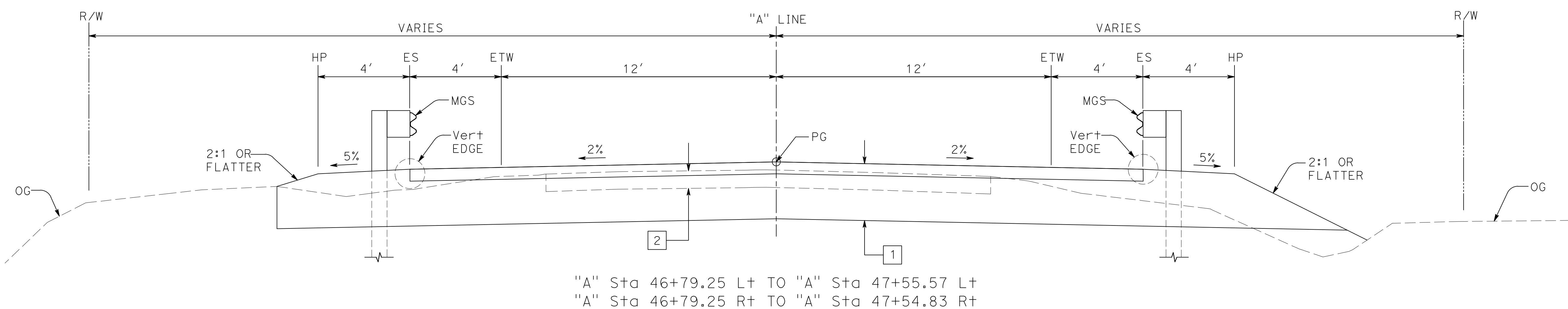
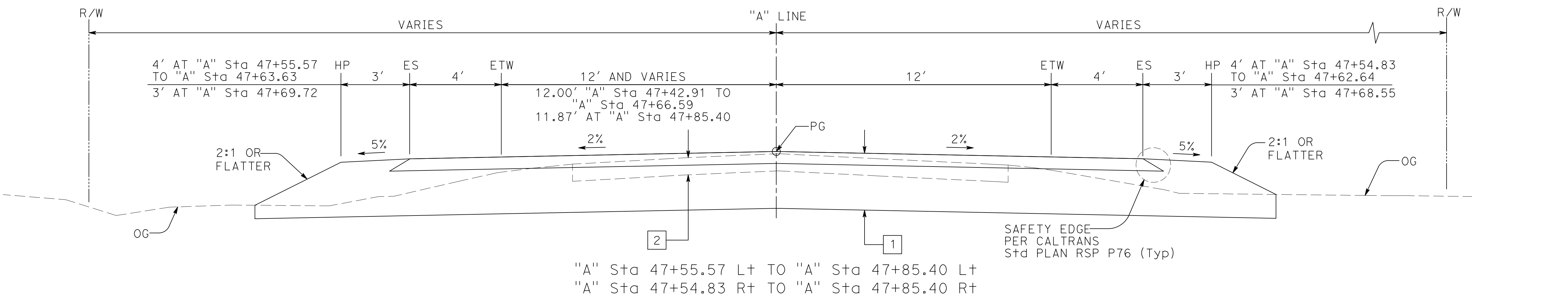
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	3	33


 REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE



WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001
 COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

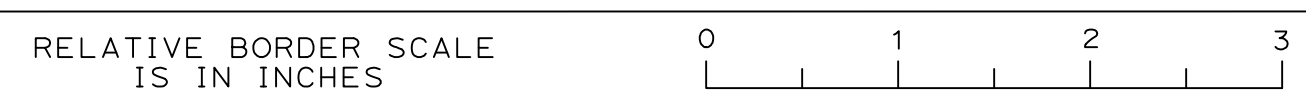
KCG	05-31-23
REVISOR	DATE
R. UHLMANN	G. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
PROJECT ENGINEER	GARY M. GORDON



Co ROAD 67

TYPICAL CROSS SECTION X-2
NO SCALE

USERNAME => KEVIN
DGN FILE => 03-101785ca002



LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 12:45:07 PM

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	4	33

REGISTERED CIVIL ENGINEER DATE 05-31-23

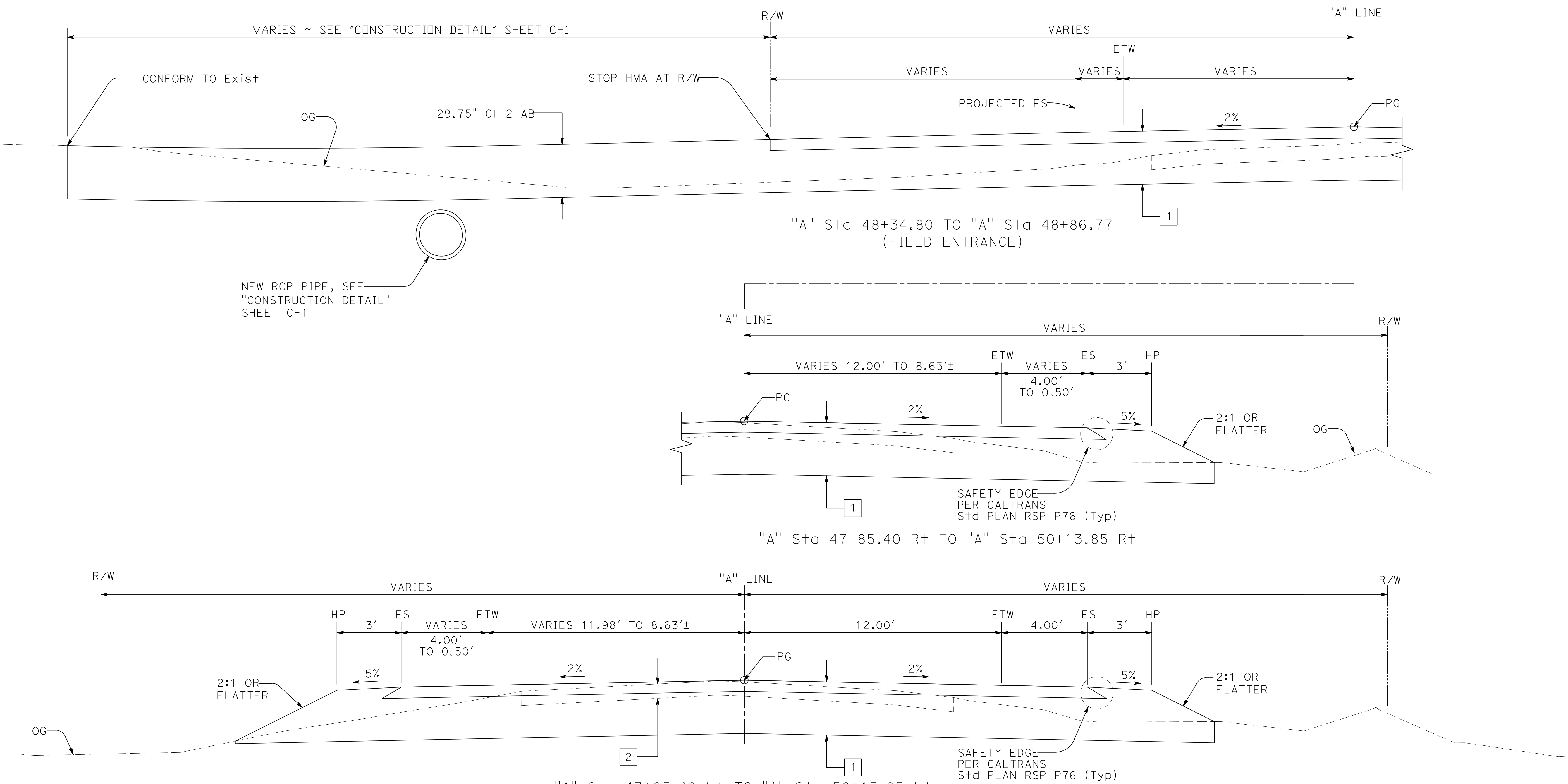
May 31, 2023
PLANS APPROVAL DATE

GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

KCG	05-31-23
REVISOR	DATE
R. UHLMANN	G. GORDON
CALCULATED-DRAWN	CHECKED BY
PROJECT ENGINEER	GARY M. GORDON



"A" Sta 47+85.40 Lt TO "A" Sta 50+13.85 Lt
"A" Sta 47+85.40 Rt TO "A" Sta 50+13.85 Rt

Co. ROAD 67

TYPICAL CROSS SECTION X-3
NO SCALE

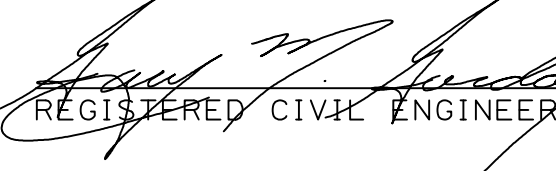
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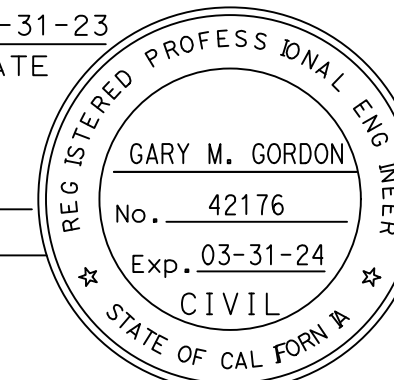
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT GLENN COUNTY PUBLIC WORKS AGENCY.
- BASIS OF BEARING: TAKEN AS N87°6'59.47"E BETWEEN POINTS 5860 AND 5001 AS SHOWN ON THIS SHEET.
- COORDINATES, DISTANCES AND BEARINGS ARE BASED ON CCS 1983, ZONE 2, DERIVED FROM GPS OBSERVATIONS. MULTIPLY DISTANCES SHOWN BY 1.000063654 TO OBTAIN GROUND LEVEL DISTANCES.
- ELEVATIONS ARE BASED ON 1988 NATIONAL GEODETIC VERTICAL DATUM (NGVD). BENCHMARK ELEVATIONS ARE BASED UPON A FOUND BRONZE DISK "HOWARD" TAKEN AS ELEVATION 74.88.

CONTROL FOR DESIGN AND CONSTRUCTION

POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
5001	2279027.67	6590514.16	74.88	FOUND BRONZE DISK "HOWARD" IN TOP OF SOUTHEAST WINGWALL OF Br. No. 11C0017
5860	2279009.86	6590160.48	70.84	FOUND ALUMINUM CAP "465", SOUTHWEST OF Br. No. 11C0017 (37.28' Rt "A" 33+48.24)

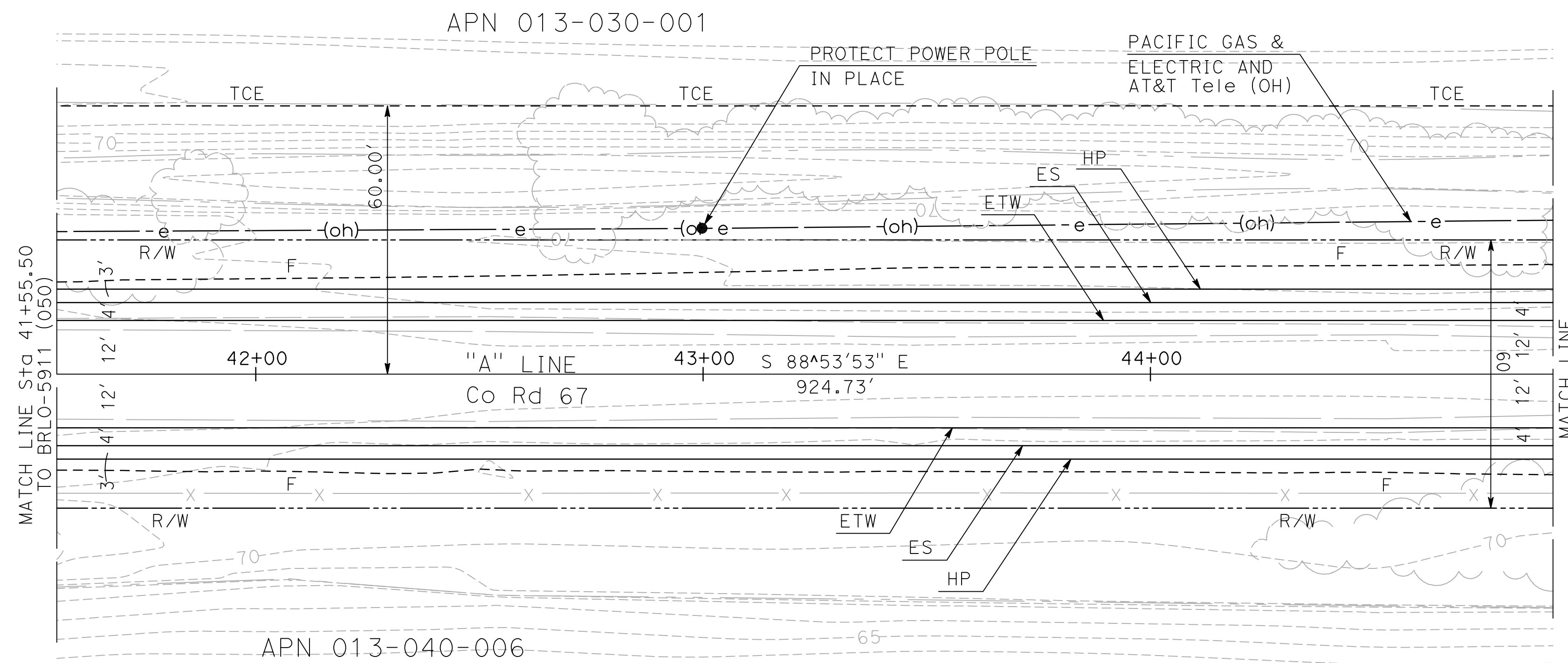
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	5	33


 REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

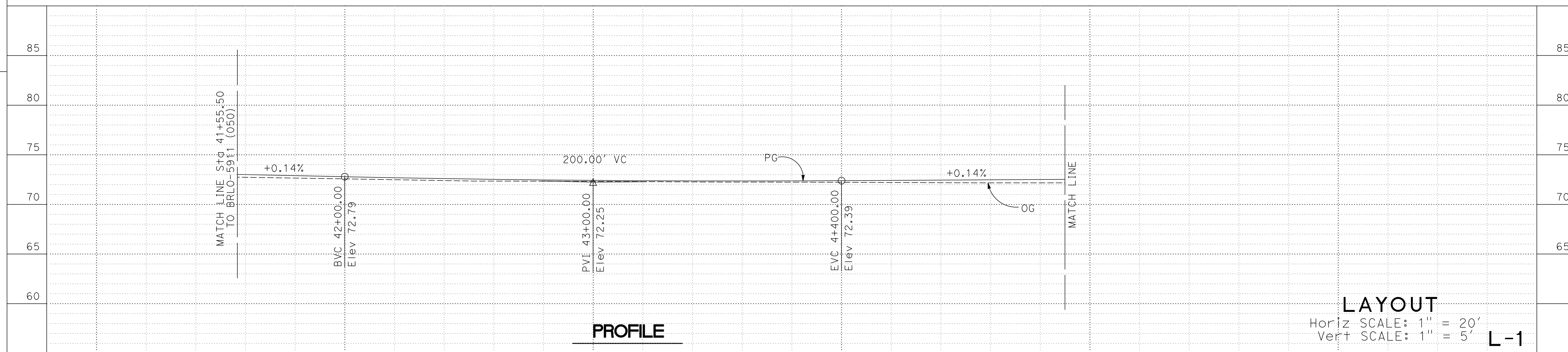


WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



PLAN



PROFILE

LAYOUT

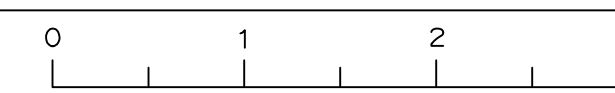
Horiz SCALE: 1" = 20'
 Vert SCALE: 1" = 5'

L-1

STATION	Exc	Emb	TOTAL
42+00			
43+00			
44+00			
	380	0	380
	0	0	0

USERNAME => KEVIN
 DGN FILE => 03-101785e001

RELATIVE BORDER SCALE
 IS IN INCHES



LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 1:52:45 PM

NOTE:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

CURVE DATA

No. @	R	Δ	T	L
1	1300.00'	2°39'01"	30.07'	60.13'
2	1300.00'	2°14'41"	25.47'	50.93'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	6	33

05-31-23
REGISTERED CIVIL ENGINEER DATE

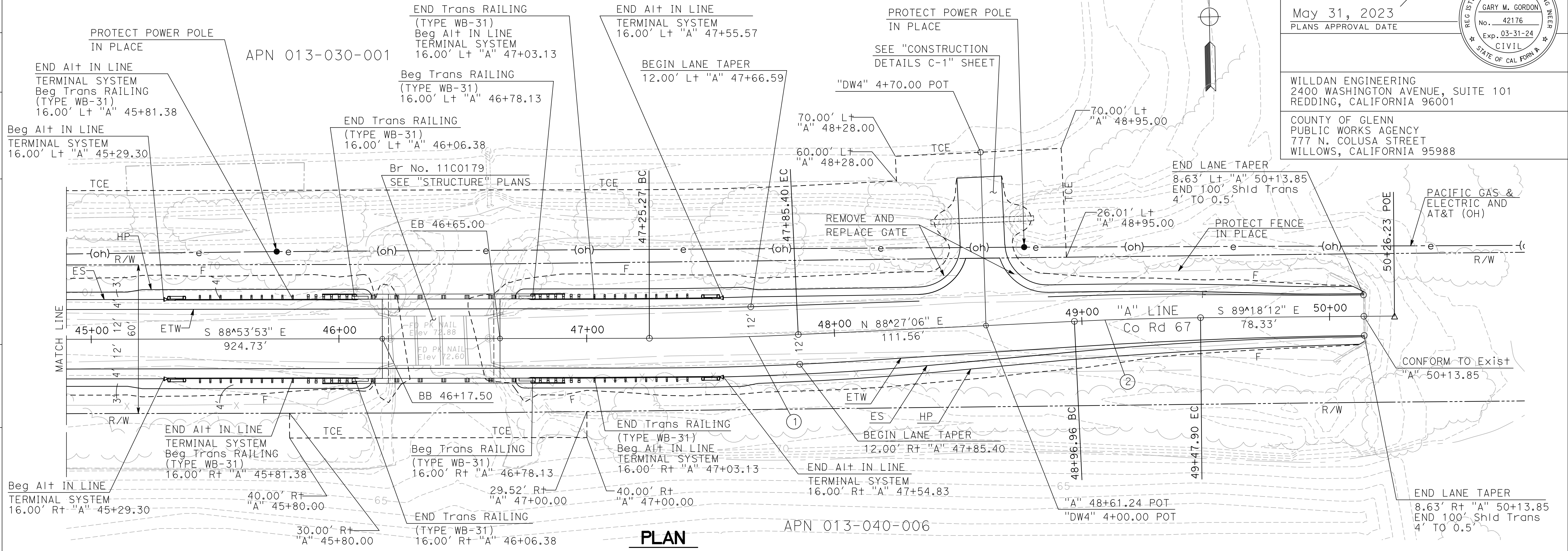
May 31, 2023
PLANS APPROVAL DATE

GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

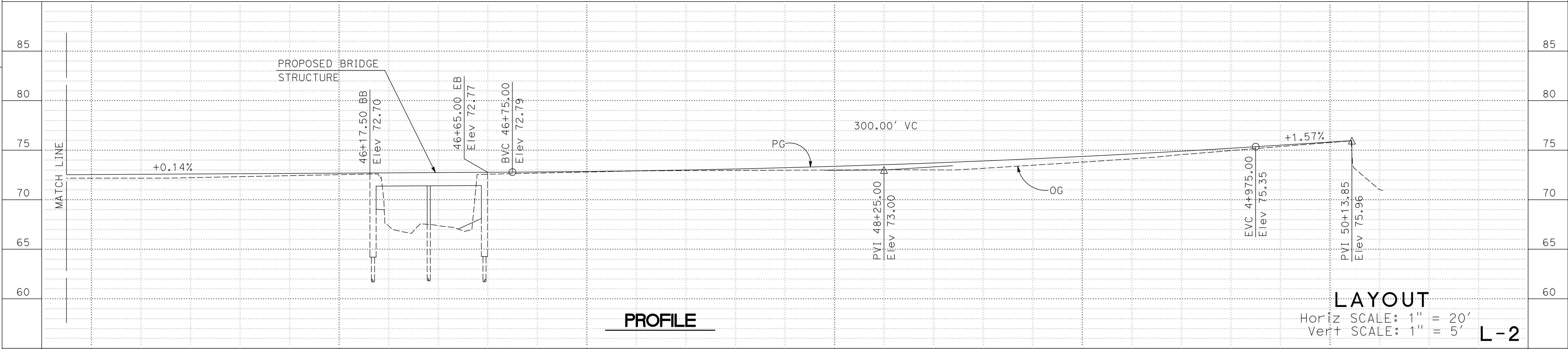
WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

PROJECT ENGINEER: GARY M. GORDON
CALCULATED-DESIGNED BY: G. GORDON
CHECKED BY: R. UHLMANN
REVISED BY: KCG
DATE REVISED: 05-31-23



PLAN



PROFILE

LAYOUT

Horiz SCALE: 1" = 20'
Vert SCALE: 1" = 5'

L-2

STATION	45+00	46+00	47+00	48+00	49+00	50+00	TOTAL
Exc		291		756			1,047
Emb		24		63			87

USERNAME => KEVIN
DGN FILE => 03-101785e002

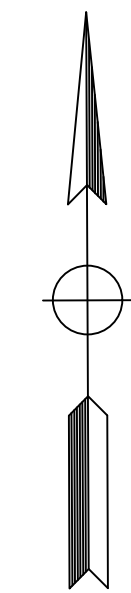
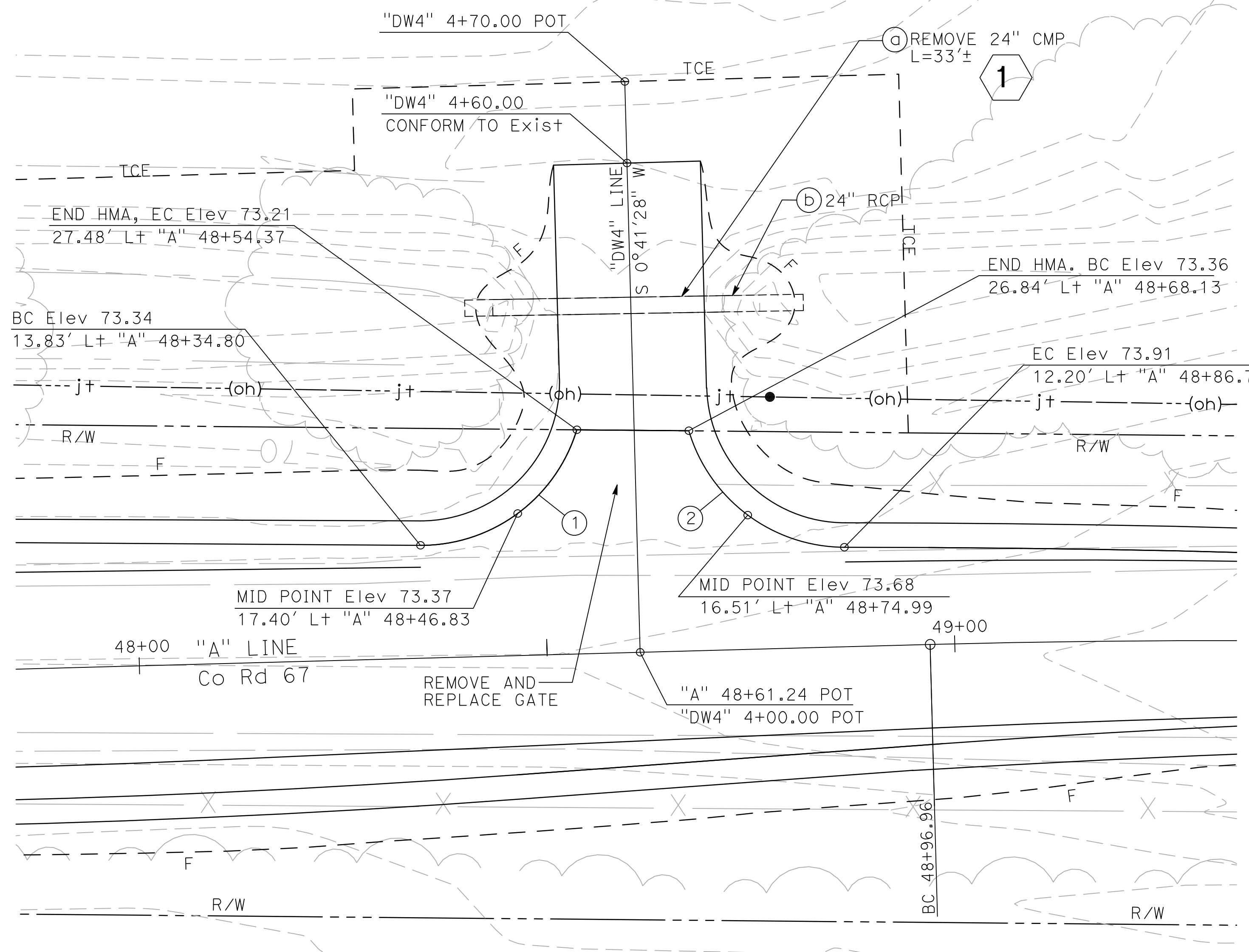


LAST REVISION DATE PLOTTED => 5/31/2023
05-31-23 TIME PLOTTED => 2:19:17 PM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	7	33

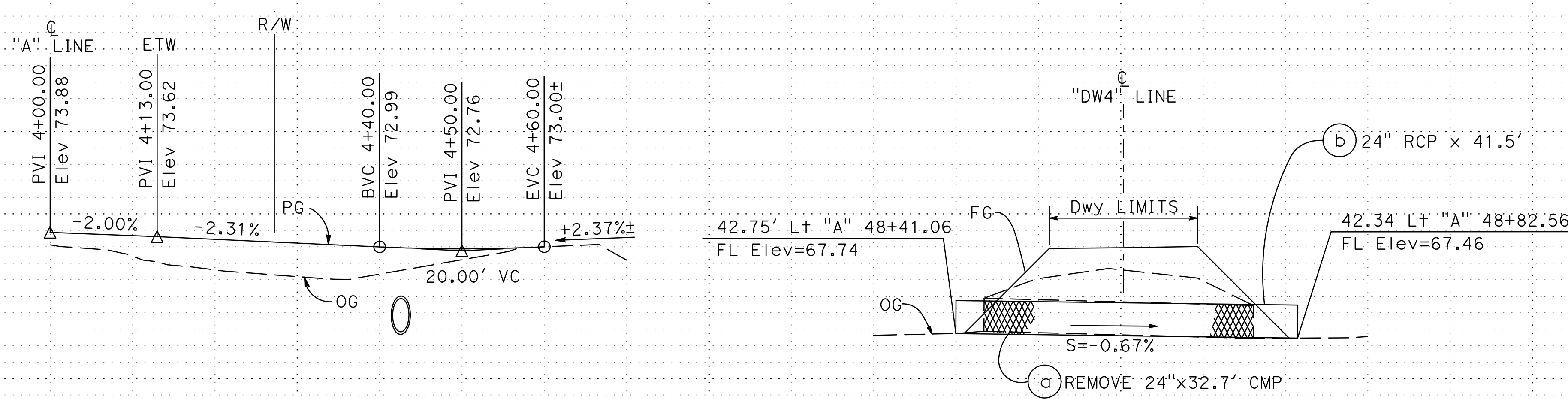
REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001
 COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



CURVE DATA

No. Ⓢ	R	Δ	T	L
1	20.00'	73°21'17"	14.90'	25.61'
2	20.00'	73°06'34"	14.83'	25.52'



"DW4" PROFILE

DRAINAGE SYSTEM 1

CONSTRUCTION DETAILS

SCALE: Horiz 1"=10'
 SCALE: Vert 1"=5'

C-1

PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
R. UHLMANN	G. GORDON
REVISED BY	DATE REVISED
KCG	05-31-23

STATION	4+00	4+50	TOTAL
Exc			
Emb			

NOTE:
FOR ACCURATE RIGHT OF WAY DATA,
CONTACT COUNTY OF GLENN PUBLIC
WORKS AGENCY.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	8	33

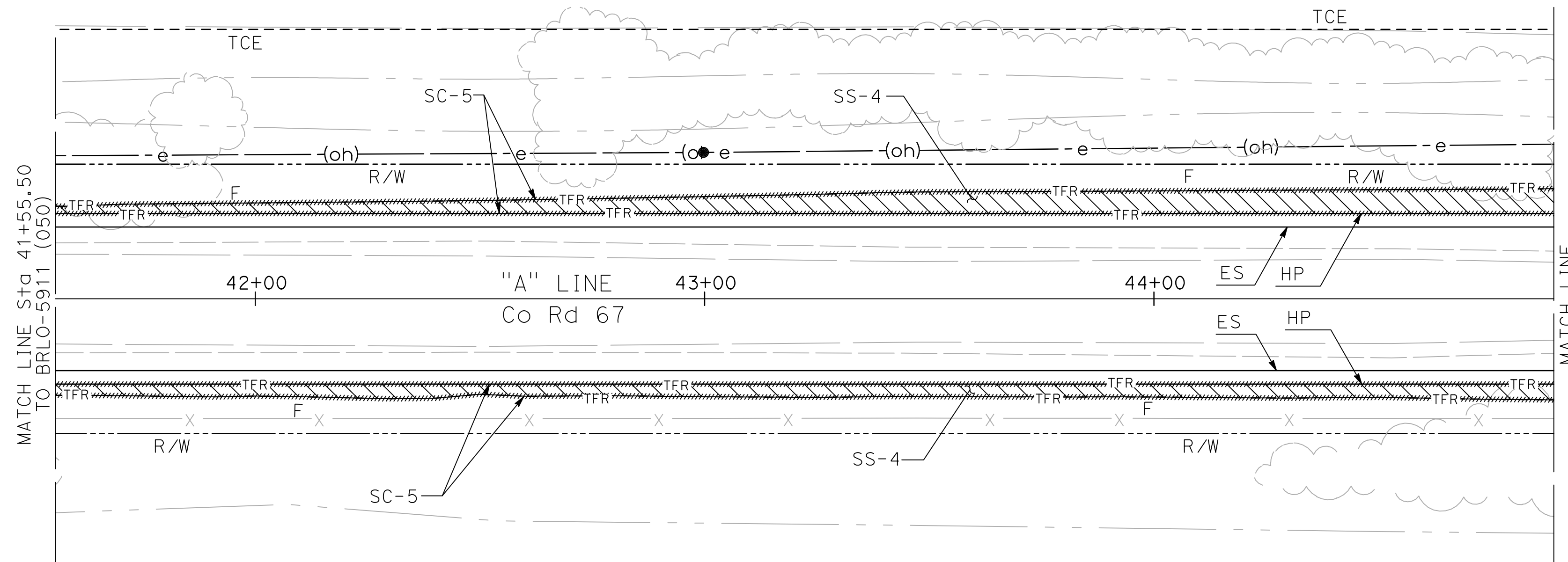
05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
PLANS APPROVAL DATE

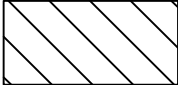

REG. NO. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988



LEGEND:

- ////// TFR //// SC-5: TEMPORARY FIBER ROLL CONTROL PER CALTRANS STANDARD T56
-  SS-4: HYDROSEEDING FOR ALL PROPOSED SLOPES. MIX TO BE DETERMINED.
-  SC-4: CHECK DAMS PER CALTRANS STANDARD T57

TEMPORARY BMP NOTES:

1. NOT ALL BEST MANAGEMENT PRACTICES (BMPs) SHOWN. CONTRACTOR SHALL USE ALL APPROPRIATE TEMPORARY WATER POLLUTION CONTROL BMPs AS INDICATED ON THE PLANS AND AS DIRECTED BY THE APPROVED PROJECT WPCP OR SWPPP.
2. BMPs WILL BE APPLIED TO AND MAINTAINED IN ACTIVE AND NON-ACTIVE DISTURBED SOIL AREAS (DSAs).
3. FIBER ROLLS SHALL BE PLACED ON DISTURBED SOIL AT THE COMPLETION OF GRADING.
4. CONTRACTOR TO ESTABLISH TEMPORARY CONSTRUCTION ENTRANCE PER CALTRANS STANDARD T58 AND TEMPORARY CONCRETE WASHOUT FACILITY PER CALTRANS STANDARD T59.
5. THE CHANNEL CAPACITY MUST BE MAINTAINED DURING THE RAINY SEASON OCTOBER 15 TO APRIL 15.
6. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES OR TO REPAIR ANY DAMAGED EROSION CONTROL MEASURES WHEN RAIN IS IMMINENT.

TEMPORARY BMP NOTES (CONTINUED):

7. DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE ENGINEER.
8. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT.
9. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERM'S, AND DESILTING BASINS AND THE BASINS PUMPED DRY. ANY GRADED SLOPE SURFACE PROTECTION MEASURES DAMAGED DURING A RAINSTORM SHALL ALSO BE IMMEDIATELY REPAIRED.
10. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE TO BE DIRECTED TOWARD DESILTING FACILITIES.
11. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREA WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.

PERMANENT BMP NOTES:

1. CONTRACTOR SHALL PROVIDE APPROPRIATE EROSION CONTROL BMPs AS INDICATED ON THE PLANS AND AS DIRECTED BY THE APPROVED PROJECT WPCP OR SWPPP.
2. SEED MIX FOR HYDROSEEDING SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
3. PROPERLY MAINTAINED FIBER ROLLS FROM TEMPORARY WATER POLLUTION CONTROL WORK MAY BE USED FOR EROSION CONTROL. MISSING, DEGRADED OR OTHERWISE DAMAGED FIBER ROLLS WILL BE REPLACED AS DIRECTED BY THE ENGINEER.

**TEMPORARY WATER POLLUTION/
EROSION CONTROL PLAN**

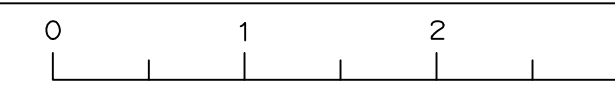
SCALE: 1" = 20'

WPC-1

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

USERNAME => KEVIN
DGN FILE => 03-101785gb001

RELATIVE BORDER SCALE
IS IN INCHES



LAST REVISION DATE PLOTTED => 5/31/2023
05-31-23 TIME PLOTTED => 3:15:32 PM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	9	33

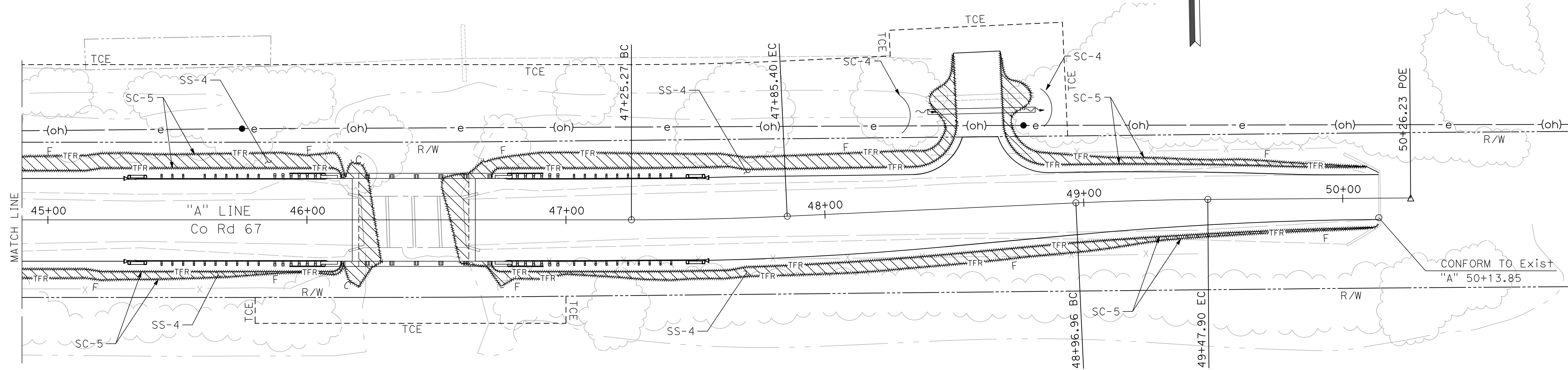
REGISTERED CIVIL ENGINEER DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988

NOTE:
 FOR ACCURATE RIGHT OF WAY DATA,
 CONTACT COUNTY OF GLENN PUBLIC
 WORKS AGENCY.

PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	GARY M. GORDON
CHECKED BY	G. GORDON
REVISOR	R. UHLMANN
DATE REVISOR	05-31-23
REVISOR	G. GORDON
DATE REVISOR	05-31-23



TEMPORARY WATER POLLUTION/ EROSION CONTROL PLAN

SCALE: 1" = 20'
WPC-2

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

USERNAME => KEVIN
 DGN FILE => 03-101785gb002



LAST REVISION DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 3:27:48 PM

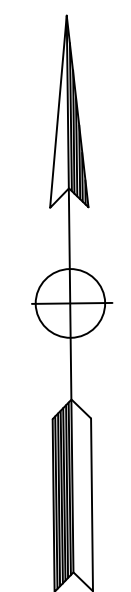
PROJECT ENGINEER	GARY M. GORDON
CALCULATED-DESIGNED BY	CHECKED BY
B. BURCH	R. UHLMANN
REVISED BY	DATE REVISED
KCG	05-31-23

GENERAL NOTES:

- SIGNS SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
- SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- SIGNS WILL REMAIN IN PLACE FOR DURATION OF PROJECT.
- FOR ADDITIONAL TRAFFIC CONTROL SIGNS, SEE DETOUR PLAN DE-1.
- CONTRACTOR SHALL OBTAIN CALTRANS ENCROACHMENT PERMIT FOR SIGNS ON SR 162.
- CONTRACTOR SHALL OBTAIN BUTTE COUNTY ENCROACHMENT PERMIT FOR SIGNS ON AGUAS FRIAS ROAD, AFTON ROAD, AND COUNTY ROAD 67 EAST OF THE GLENN/BUTTE COUNTY LINE.

LEGEND

- TEMPORARY SIGN AND POST (ONE POST)
- TEMPORARY SIGN AND POST (TWO POST)
- CONSTRUCTION AREA
- AGRICULTURAL FIELD ACCESS POINT
LAT: 39°25'13"N, LONG: 121°54'4"W



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	10	33

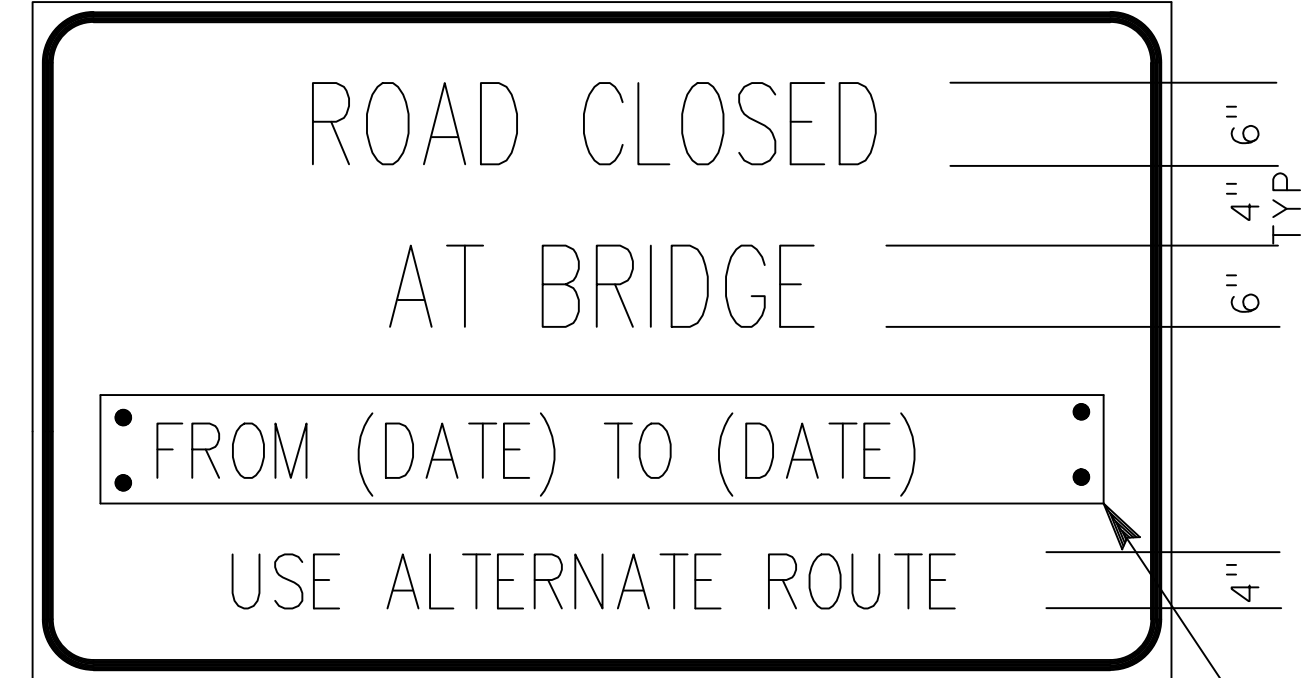
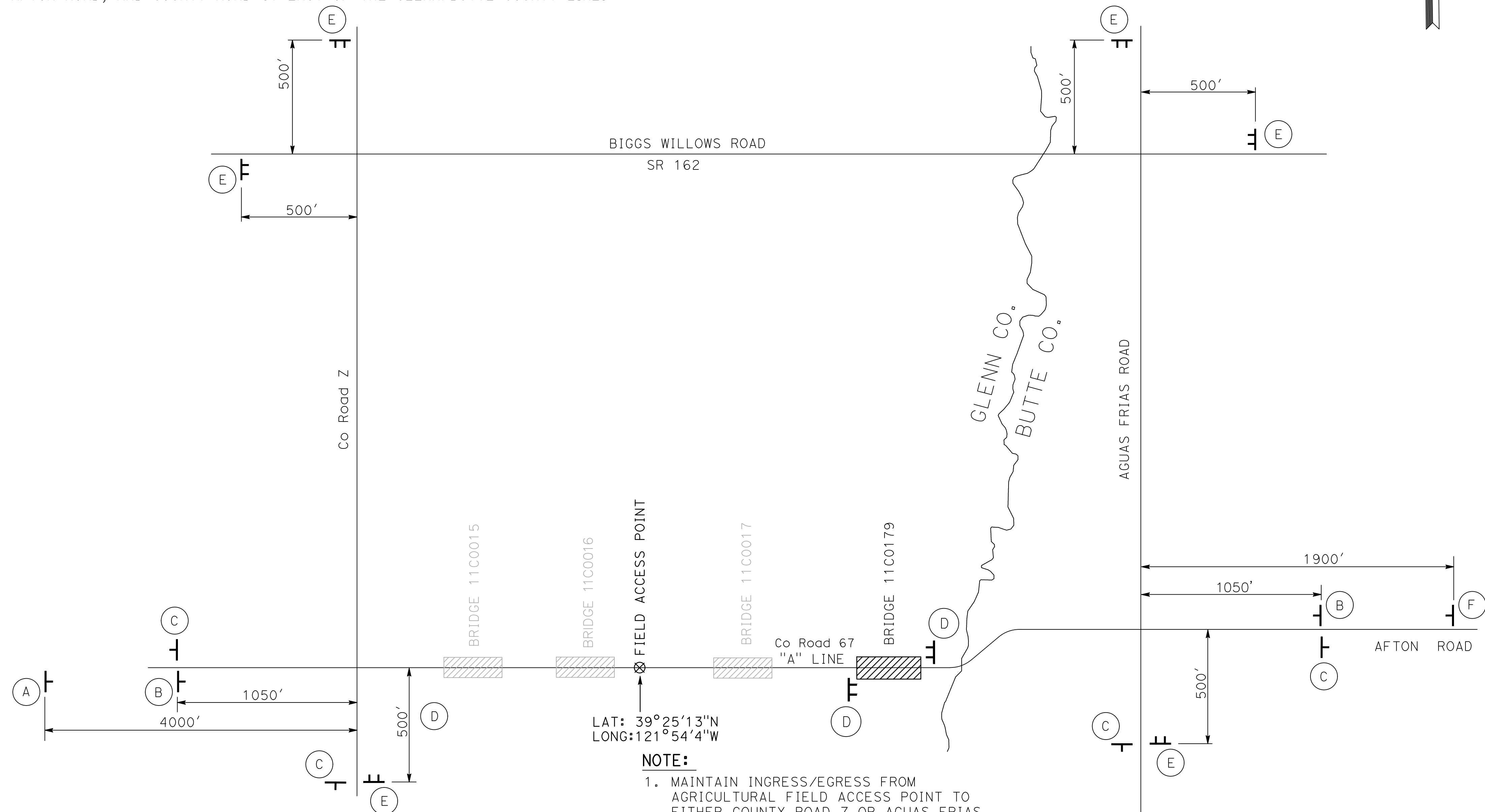
05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
PLANS APPROVAL DATE

GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

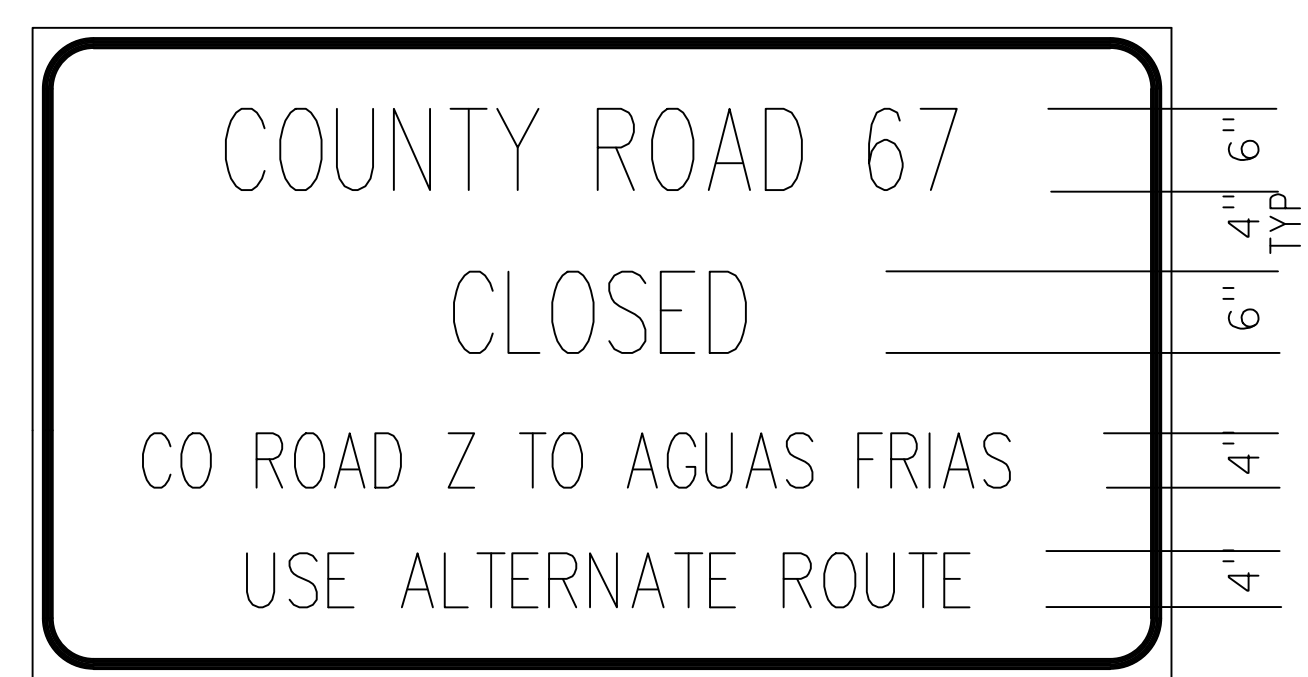
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988



SIGN D 6" OVERLAY PANEL WITH 4" LETTERING

NOTES:

- LETTERS - SERIES C.
- LETTERS AND BORDERS - BLACK ON ORANGE BACKGROUND.
- SIGN TO BE INSTALLED 2 WEEKS PRIOR TO CONSTRUCTION.



SIGN E

NOTES:

- LETTERS - SERIES C.
- LETTERS AND BORDERS - BLACK ON ORANGE BACKGROUND.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	POST		No. of SIGNS
				NO.	SIZE	
A	R11-3b	30" X 60"	BRIDGE OUT 2 MILES LOCAL TRAFFIC ONLY	1	4" X 4"	1
B	C19(CA)	48" X 48"	ROAD CLOSED AHEAD	1	4" X 4"	2
C	G20-2	36" X 18"	END ROAD WORK	1	4" X 4"	4
D	SPECIAL	84" X 42"	ROAD CLOSED INFORMATION	2	6" X 6"	2
E	SPECIAL	84" X 40"	ROAD CLOSED INFORMATION	2	6" X 6"	5
F	R11-3b	30" X 60"	BRIDGE OUT 3 MILES LOCAL TRAFFIC ONLY	1	4" X 4"	1

NOTE:

- MAINTAIN INGRESS/EGRESS FROM AGRICULTURAL FIELD ACCESS POINT TO EITHER COUNTY ROAD Z OR AGUAS FRIAS ROAD AT ALL TIMES.
- COORDINATE CONSTRUCTION PHASING OF ALL PROJECTS TO MAINTAIN ACCESS OR PROVIDE ALTERNATIVE MEANS OF INGRESS/EGRESS.
- IF MULTIPLE BRIDGES ARE UNDER CONSTRUCTION SIMULTANEOUSLY, THE CONTRACTOR SHALL COORDINATE SIGN PLACEMENT WITH THE ENGINEER.



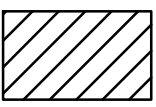
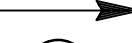

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

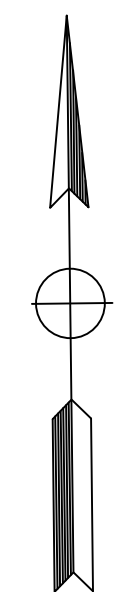
CONSTRUCTION AREA SIGNS
NO SCALE CS-1

GENERAL NOTES:

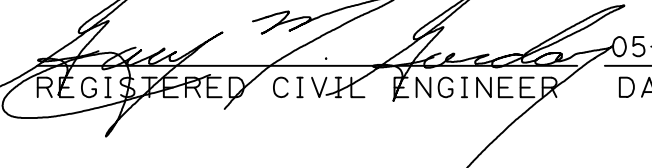
- SIGNS SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
- SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- SIGNS WILL REMAIN IN PLACE FOR DURATION OF PROJECT.
- CONTRACTOR SHALL OBTAIN CALTRANS ENCROACHMENT PERMIT FOR SIGNS ON SR 162.
- CONTRACTOR SHALL OBTAIN BUTTE COUNTY ENCROACHMENT PERMIT FOR SIGNS ON AGUAS FRIAS ROAD, AFTON ROAD, AND COUNTY ROAD 67 EAST OF THE GLENN/BUTTE COUNTY LINE.
- MAINTAIN INGRESS/EGRESS FROM AGRICULTURAL FIELD ACCESS POINT TO EITHER COUNTY ROAD Z OR AGUAS FRIAS ROAD AT ALL TIMES. COORDINATE CONSTRUCTION PHASING OF ALL PROJECTS TO MAINTAIN ACCESS OR PROVIDE ALTERNATIVE MEANS OF INGRESS/EGRESS. IF MULTIPLE BRIDGES ARE UNDER CONSTRUCTION SIMULTANEOUSLY, THE CONTRACTOR SHALL COORDINATE SIGN PLACEMENT WITH THE ENGINEER.

LEGEND

-  TEMPORARY SIGN AND POST
-  TYPE III BARRICADE WITH SIGN
L=8.00', WITH THREE WARNING LIGHTS (TYPE B)
-  CONSTRUCTION AREA
-  DIRECTION OF TRAVEL
-  AGRICULTURAL FIELD ACCESS POINT
LAT: 39°25'13"N, LONG: 121°54'4"W



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	11	33

 05-31-23
 REGISTERED CIVIL ENGINEER DATE

May 31, 2023
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER

GARY M. GORDON

No. 42176

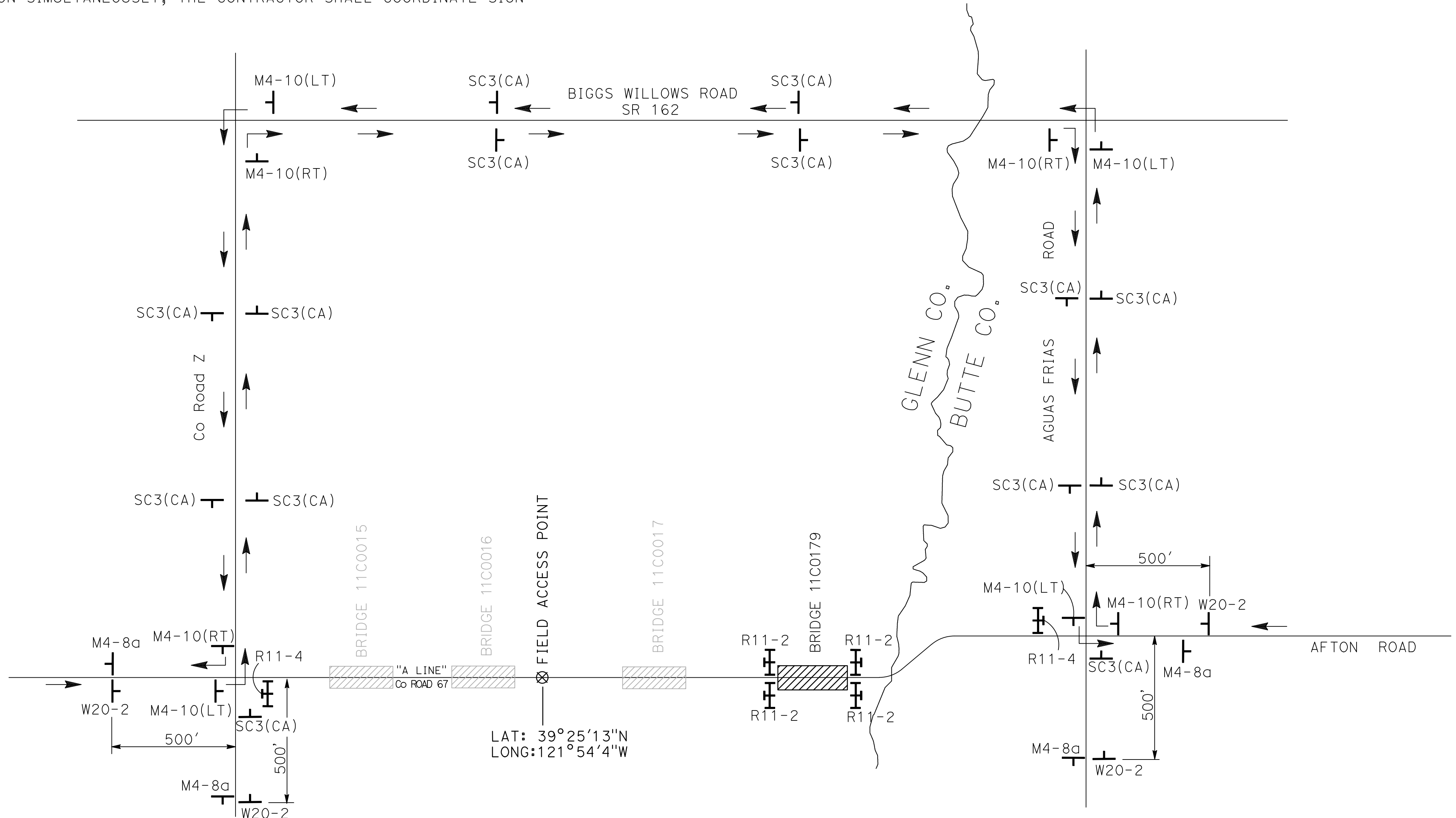
Exp. 03-31-24

CIVIL

STATE OF CALIFORNIA

WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

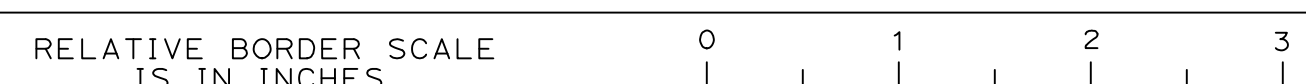
COUNTY OF GLENN
 PUBLIC WORKS AGENCY
 777 N. COLUSA STREET
 WILLOWS, CALIFORNIA 95988



DETOUR SIGNS

SIGN CODE	PANEL SIZE	SIGN MESSAGE	No. of SIGNS
M4-10(RT)	18" X 48"	DETOUR (RIGHT)	4
M4-10(LT)	18" X 48"	DETOUR (LEFT)	4
SC-3(CA)	18" X 48"	DETOUR (STRAIGHT)	14
R11-4	30" X 48"	ROAD CLOSED TO THROUGH TRAFFIC	2
R11-2	30" X 48"	ROAD CLOSED	4
M4-8a	18" X 24"	END DETOUR	4
W20-2	36" X 36"	DETOUR AHEAD	4

APPROVED FOR DETOUR SIGN WORK ONLY



DETOUR PLAN
NO SCALE
DE-1

USERNAME => KEVIN
DGN FILE => 03-101785md001

LAST REVISION | DATE PLOTTED => 5/31/2023
 05-31-23 | TIME PLOTTED => 4:16:11 PM

KCG
05-31-23
REVISED BY
DATE REVISED
B. BURCH
R. UHLMANN
CALCULATED-DESIGNED BY
CHECKED BY
PROJECT ENGINEER
GARY M. GORDON

GENERAL NOTES:

1. ALL TRAFFIC LINES SHALL CONFORM TO THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
2. LANE WIDTH SHALL BE MEASURED BETWEEN THE CENTERLINES OF EACH SINGLE STRIPE.
3. ALL SIGNING TO BE INSTALLED SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).

LEGEND

- (X) Prop SIGN AND POST
- (X) Exist SIGN AND POST TO BE REMOVED
- (X) TRAFFIC STRIPE DETAIL

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Glenn	CR 67	N/A	12	33

05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
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GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
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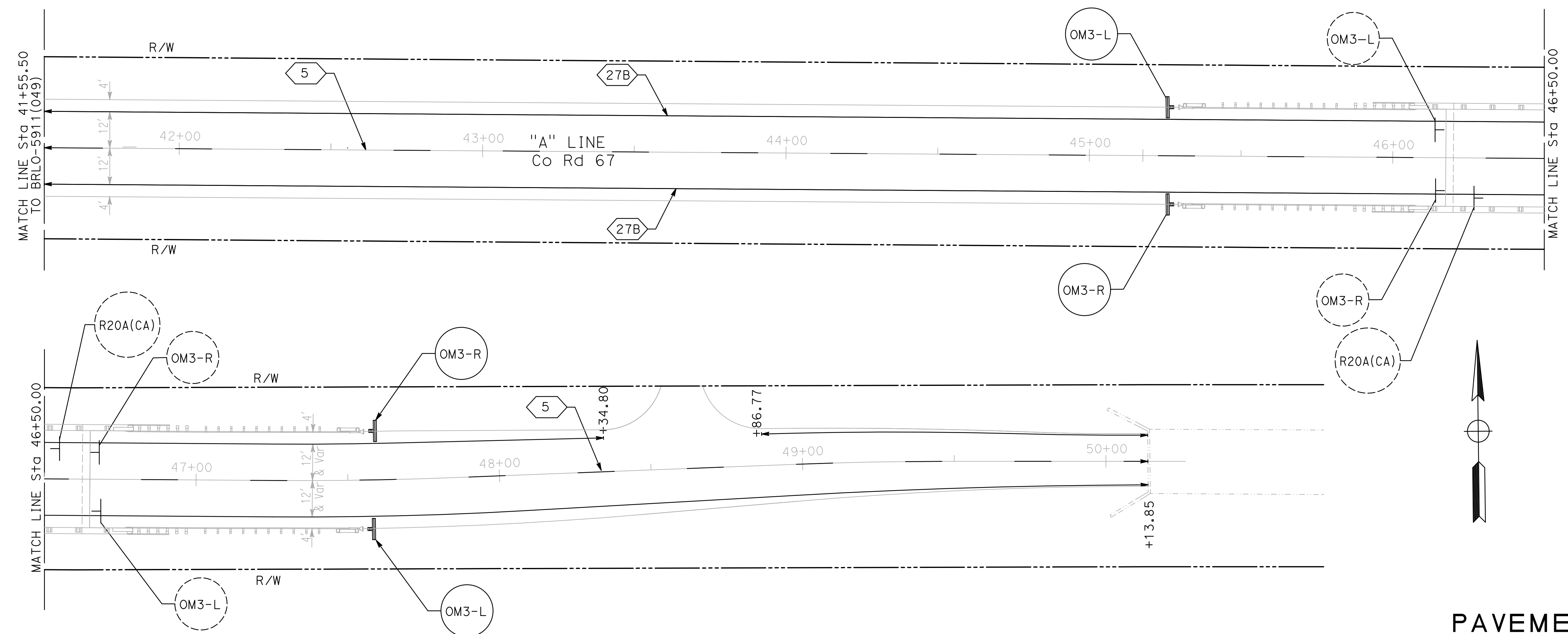
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

PAVEMENT DELINEATION QUANTITIES

SHEET No.	LOCATION/STATIONING	DIRECTION	DETAIL No.	THERMOPLASTIC TRAFFIC STRIPE					COMMENTS
				4" WHITE SOLID	4" WHITE BROKEN	4" YELLOW BROKEN	8" WHITE SOLID	8" WHITE BROKEN	
				LF	LF	LF	LF	LF	
PD-1	41+55.50 TO 50+13.85	EB	27B	858.4					
PD-1	41+55.50 TO 48+34.80	WB	27B	679.3					
PD-1	48+86.77 TO 50+13.85	WB	27B	127.1					
PD-1	41+55.50 TO 50+13.85	WB	5			857.5			
TOTAL				1664.8		857.5			

ROADSIDE SIGN QUANTITIES

SIGN CODE	PANEL SIZE	POST SIZE AND LENGTH		ROADSIDE SIGN		BRIDGE MOUNT (EA)	REMOVE ROADSIDE SIGN (EA)	REMARKS
		4' X 4'	4' X 6'	ONE POST	TWO POST			
		EA	EA	EA	EA			
OM3-L	12" x 36"					2	2	
OM3-R	12" x 36"					2	2	
RC20A(CA)	30" x 36"						2	



PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1" = 20'

PD-1

THIS PLAN IS ACCURATE FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

USERNAME => KEVIN
DGN FILE => 03-101785nd001

RELATIVE BORDER SCALE IS IN INCHES

LAST REVISION: DATE PLOTTED => 5/31/2023
05-31-23 TIME PLOTTED => 4:30:38 PM

PROJECT ENGINEER: GARY M. GORDON
 CALCULATED-DESIGNED BY: G. GORDON
 CHECKED BY: R. UHLMANN
 REVISED BY: KCG
 DATE REVISED: 05-31-23
 USERNAME => KEVIN
 DGN FILE => 03-101785pd001

EARTHWORK QUANTITIES

SHEET No.	STATION	ROADWAY EXCAVATION	EMBANKMENT (N)	IMPORTED BORROW
		CY	CY	CY
L-1 TO L-2	"A" 41+55.50 TO "A" 46+28.66	1,208	25	25
L-2	"A" 46+53.19 TO "A" 50+13.85	756	73	73
TOTAL		1,964	98	98

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

TEMPORARY WATER POLLUTION CONTROL AND EROSION CONTROL QUANTITIES

SHEET No.	STATION	TEMPORARY FIBER ROLLS	TEMPORARY CONCRETE WASHOUT FACILITY	EROSION CONTROL (HYDROSEED)
		LF	EA	SQFT
WPC-1 TO WPC-2		TO BE DETERMINED		
WPC-1	"A" 41+55.50 L+ TO "A" 46+28.66 L+	983		2,440
WPC-1	"A" 41+55.50 R+ TO "A" 46+28.66 R+	974		1,618
WPC-2	"A" 46+53.19 L+ TO "A" 48+52.41 L+	471		1,481
WPC-2	"A" 48+70.41 L+ TO "A" 50+13.85 L+	358		546
WPC-2	"A" 46+53.19 R+ TO "A" 50+13.85 R+	720		1,154
TOTAL		3,506	1	7,239

SAFETY EDGE

SHEET No.	STATION	DIRECTION	TOTAL THICKNESS OF SAFETY EDGE	LENGTH SAFETY EDGE	HOT MIX ASPHALT (TYPE A)
			(N)	(N)	
L-1 TO L-2	"A" 41+55.50 L+ TO "A" 45+29.30 L+	WB	0.52	373.80	6.4
L-1 TO L-2	"A" 41+55.50 R+ TO "A" 45+29.30 R+	EB	0.52	373.80	6.4
L-2	"A" 47+55.57 L+ TO "A" 48+34.80 L+	WB	0.52	79.23	1.4
L-2	"A" 48+86.77 L+ TO "A" 50+13.85 L+	WB	0.52	127.08	2.2
L-2	"A" 47+54.83 R+ TO "A" 50+13.85 R+	EB	0.52	259.02	4.4
SUBTOTAL					20.8

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

PAVEMENT STRUCTURE QUANTITIES

SHEET No.	STATION	REMOVE ASPHALT CONCRETE SURFACING	HOT MIX ASPHALT (TYPE A)	CLASS 2 AGGREGATE BASE	TACK COAT
		SQFT	TON	CY	TON
L-1 TO L-2	"A" 41+55.50 TO "A" 46+17.50	8,553	557.7	1,549	1.04
L-2	"A" 46+65.00 TO "A" 50+13.85	6,596	364.5	1,115	0.67
L-1 TO L-2	SAFETY EDGE		20.8		
TOTAL		15,149	943.00	2,664	1.53

MIDWEST GUARDRAIL SYSTEM

SHEET No.	STATION	TRANSITION RAILING (TYPE WB-31)	ALTERNATIVE IN-LINE TERMINAL SYSTEM
		EA	EA
L-2	"A" 45+29.30 L+ TO "A" 45+81.38 L+		1
L-2	"A" 45+29.30 R+ TO "A" 45+81.38 R+		1
L-2	"A" 45+81.38 L+ TO "A" 46+06.38 L+	1	
L-2	"A" 45+81.38 R+ TO "A" 46+06.38 R+	1	
L-2	"A" 46+78.13 L+ TO "A" 47+03.13 L+	1	
L-2	"A" 46+78.13 R+ TO "A" 47+03.13 R+	1	
L-2	"A" 47+03.13 L+ TO "A" 47+55.87 L+		1
L-2	"A" 47+03.13 R+ TO "A" 47+54.83 R+		1
TOTAL		4	4

DRAINAGE QUANTITIES

SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	REMOVE CULVERT	REINFORCED CONCRETE PIPE (CLASS 4)			MINOR CONCRETE (MINOR STRUCTURE)	DESCRIPTION
			LF	12"	18"	24"		
C-1	1	□	32.7			41.5		REMOVE 24" CULVERT 24" RCP
TOTAL			32.7			41.5		

SUMMARY OF QUANTITIES

Q-1

RELATIVE BORDER SCALE IS IN INCHES

LAST REVISION: DATE PLOTTED => 5/31/2023
 05-31-23 TIME PLOTTED => 4:57:39 PM

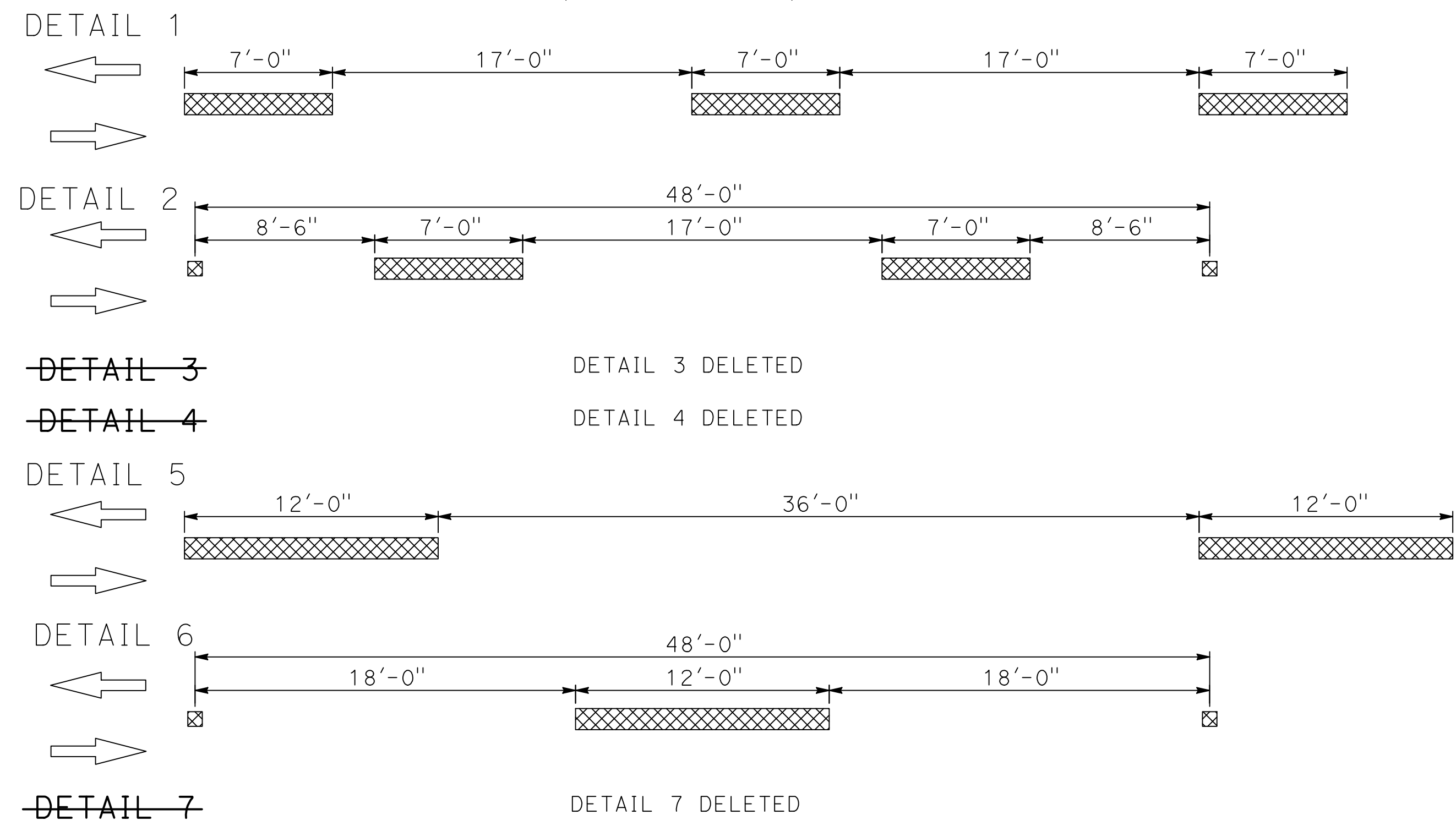
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	14	33

05-31-23
DATE
REGISTERED CIVIL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

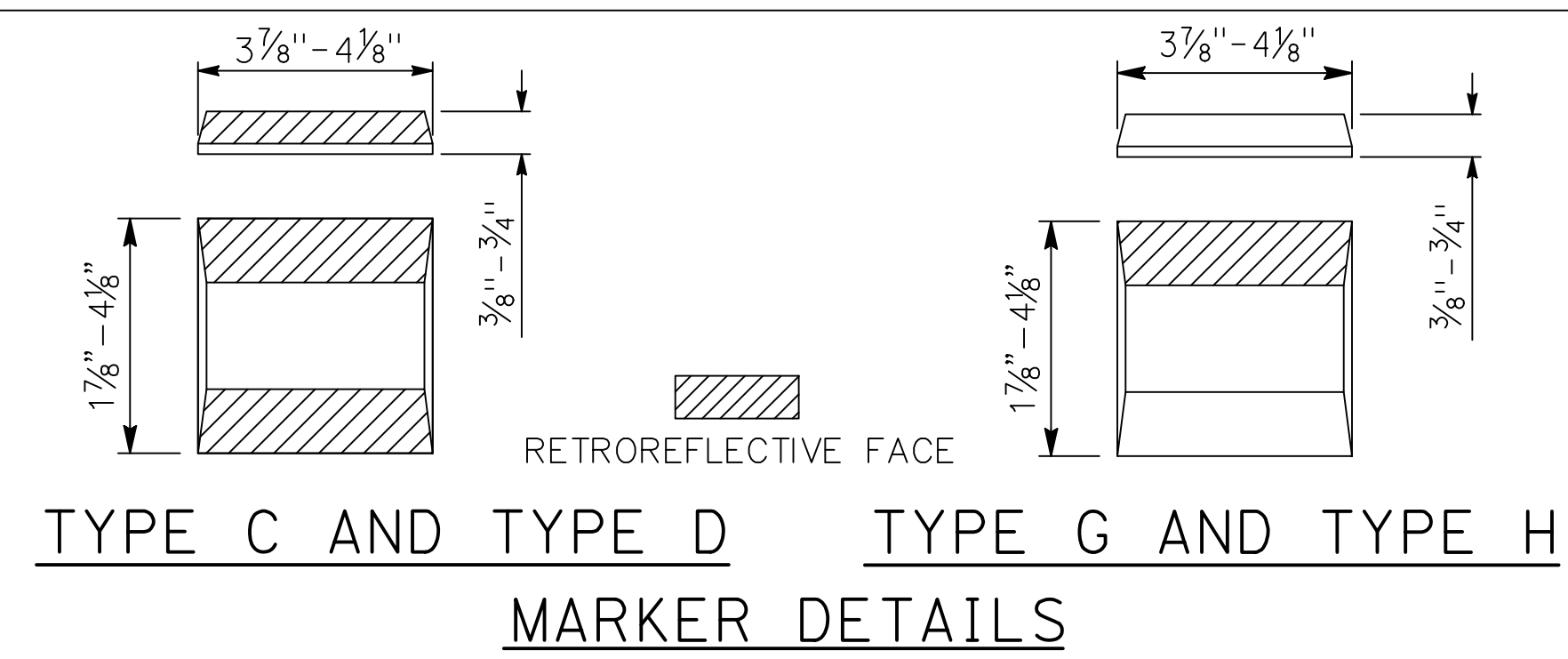
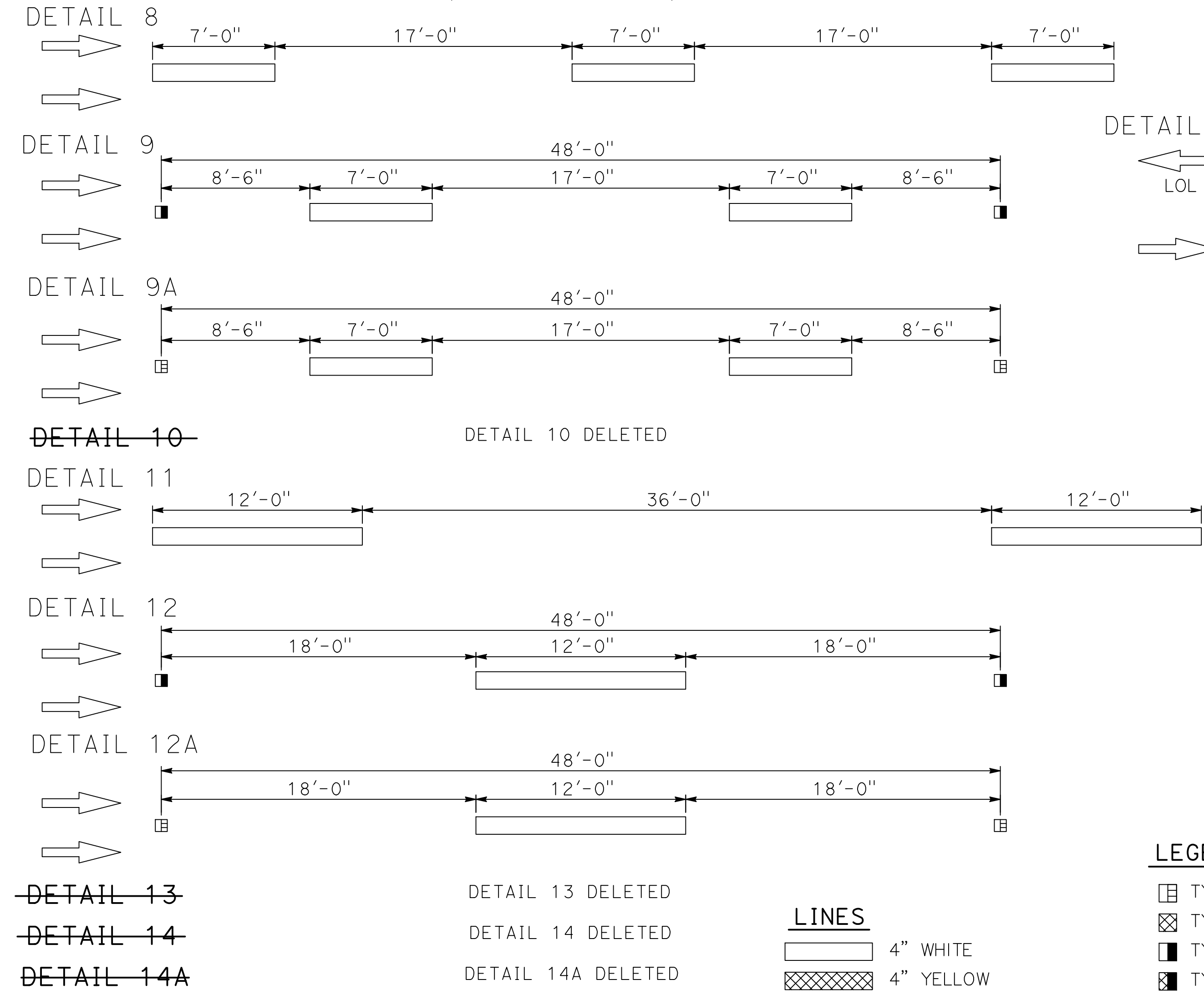
May 31, 2023
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

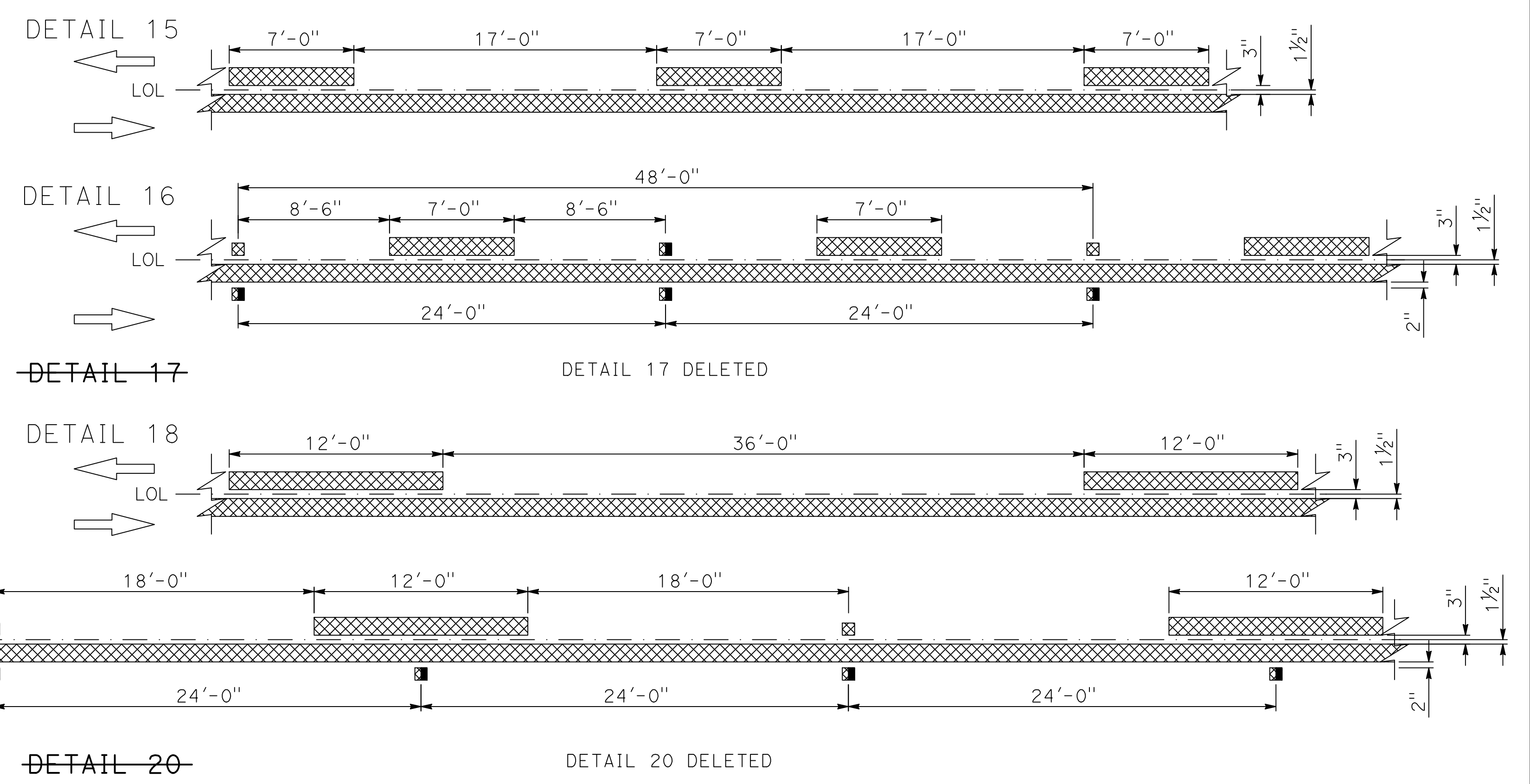
CENTERLINES
(2 LANE HIGHWAYS)



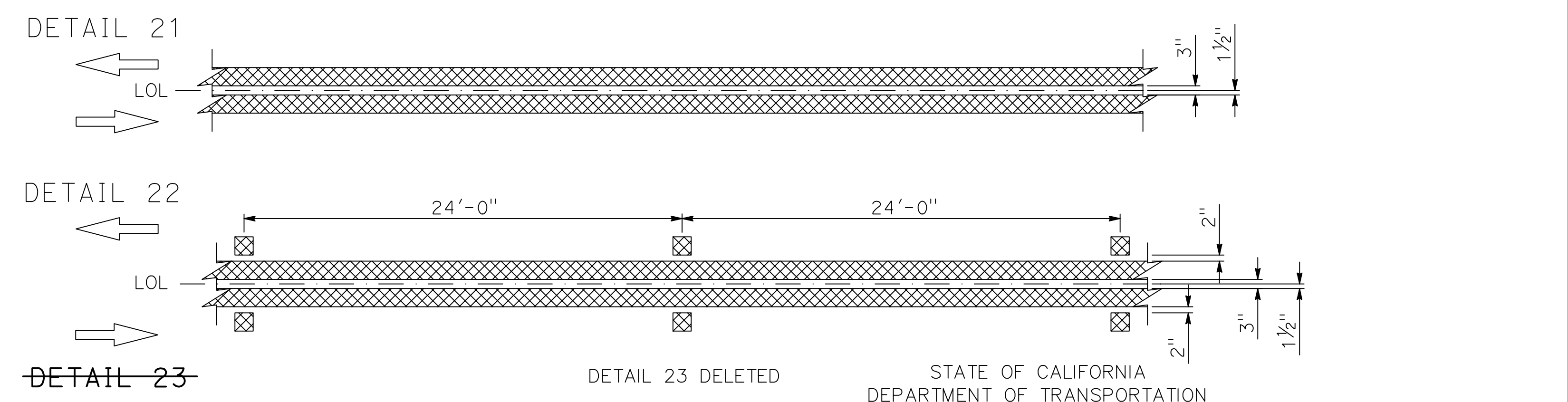
LANE LINES
(MULTILANE HIGHWAYS)



NO PASSING ZONES-ONE DIRECTION



NO PASSING ZONES-TWO DIRECTION



PAVEMENT MARKERS AND TRAFFIC LINES
TYPICAL DETAILS

- LEGEND**
- ☐ TYPE C RED-CLEAR RETROREFLECTIVE MARKER
 - ▣ TYPE D TWO-WAY YELLOW RETROREFLECTIVE MARKER
 - TYPE G ONE-WAY CLEAR RETROREFLECTIVE MARKER
 - ▣ TYPE H ONE-WAY YELLOW RETROREFLECTIVE MARKER

- LINES**
- ▭ 4" WHITE
 - ▣ 4" YELLOW

NO SCALE

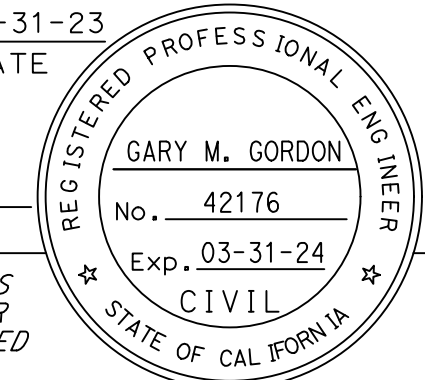
RSP A20A DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A20A
DATED AUGUST 1, 2022 - PAGE 12 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A20A MOD

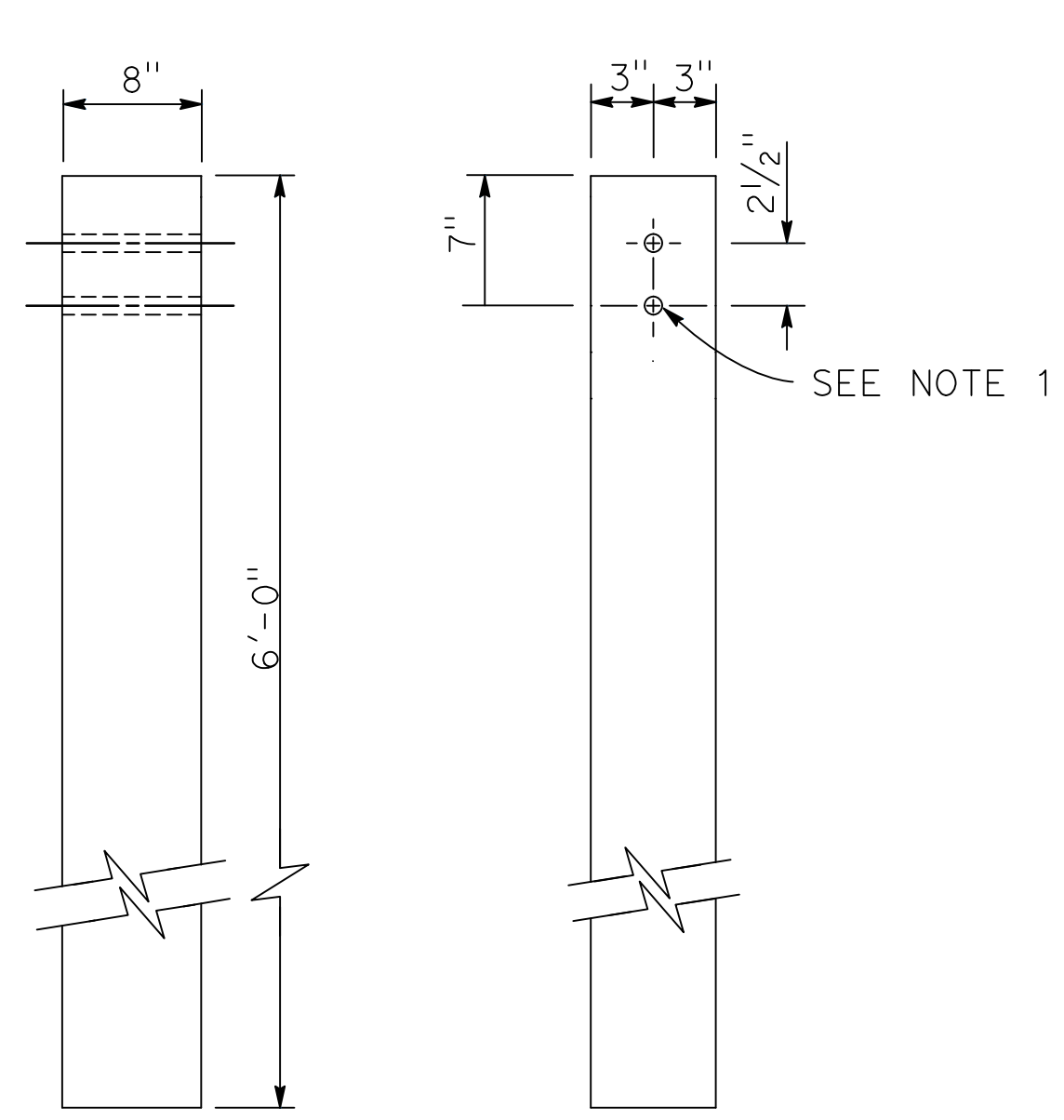
2022 REVISED STANDARD PLAN RSP A20A

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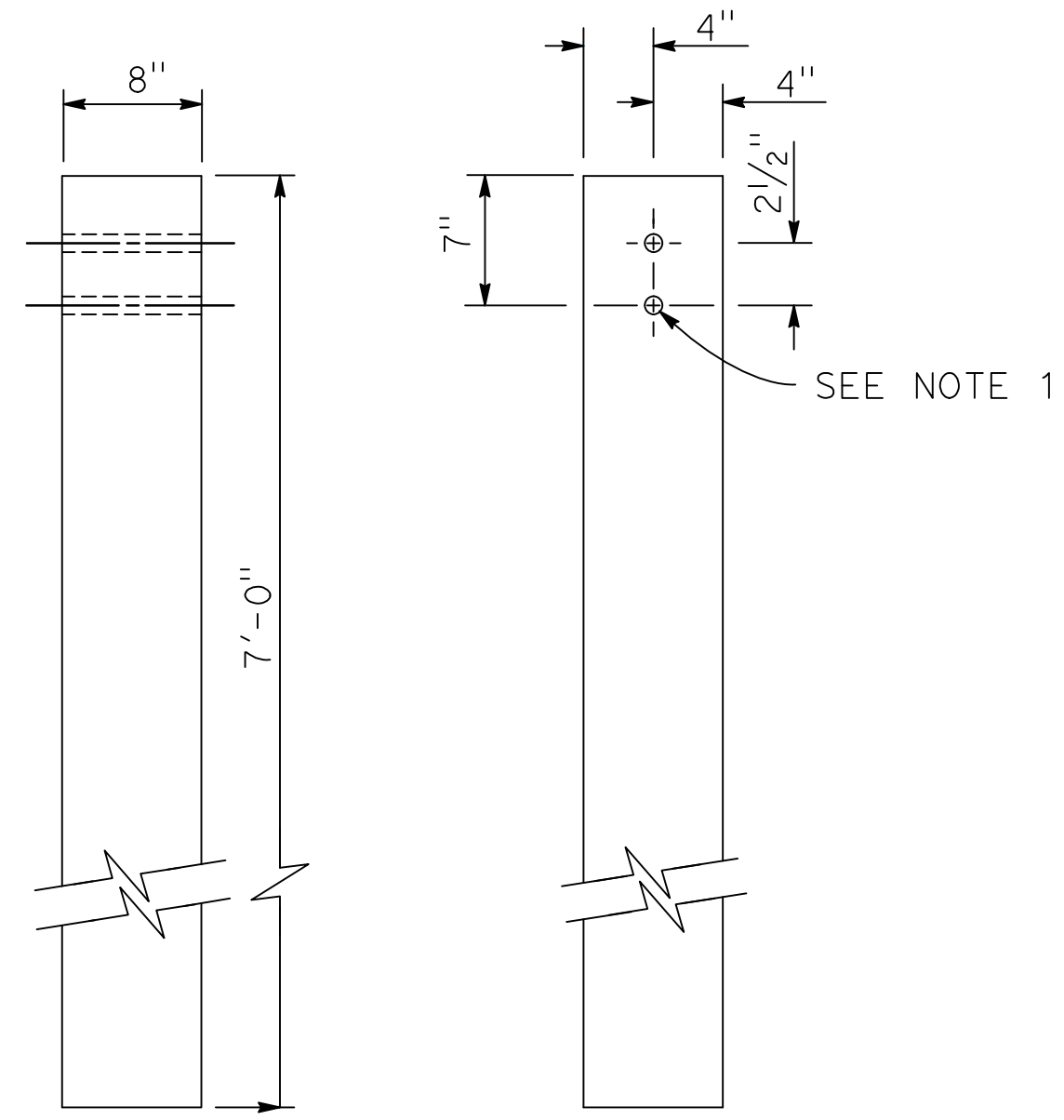
<i>Gary M. Gordon</i> REGISTERED CIVIL ENGINEER	05-31-23 DATE
May 31, 2023 PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	



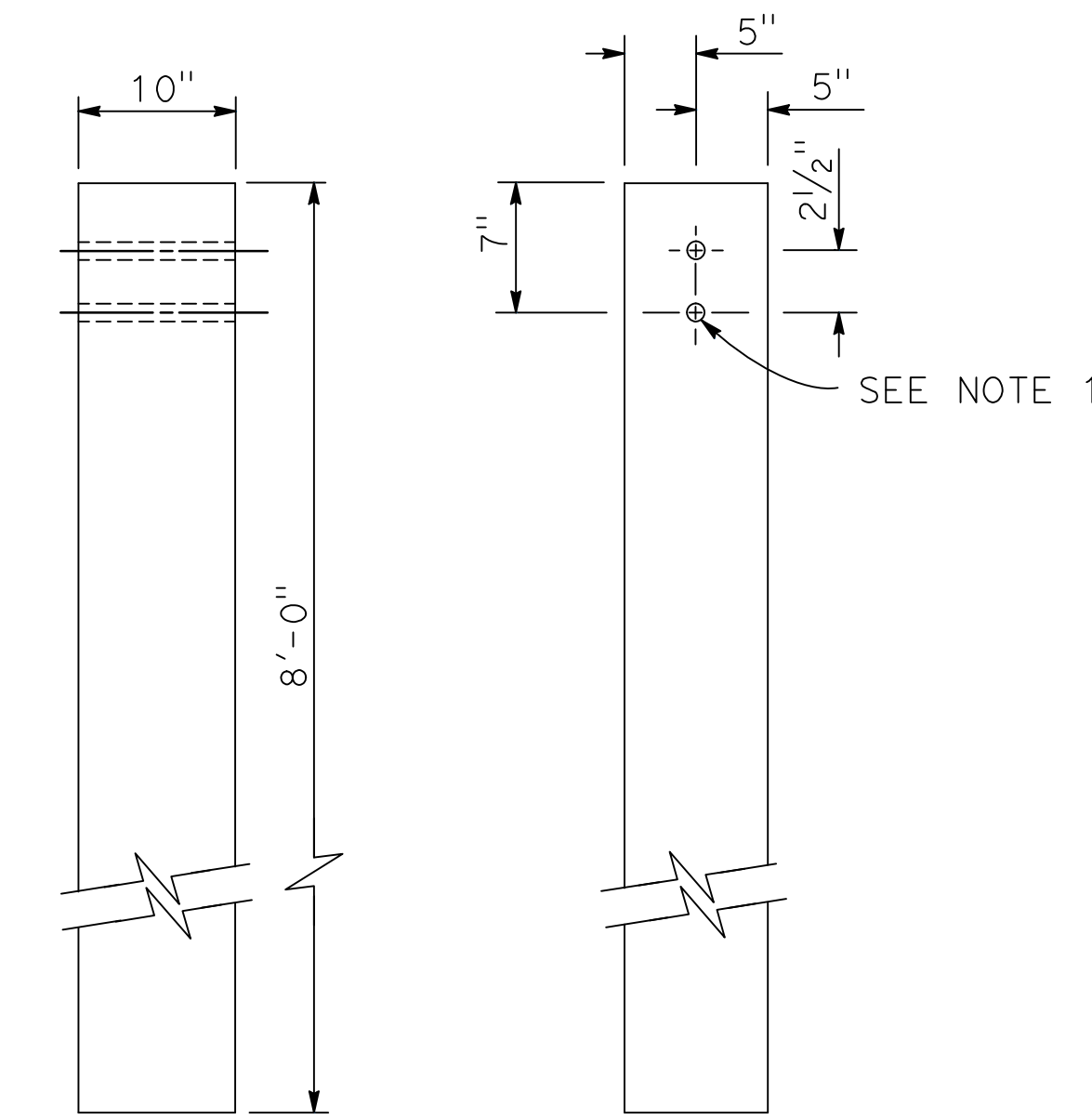
TO ACCOMPANY PLANS DATED 05-31-23



SIDE FRONT
6" x 8" WOOD POST
See Note 3



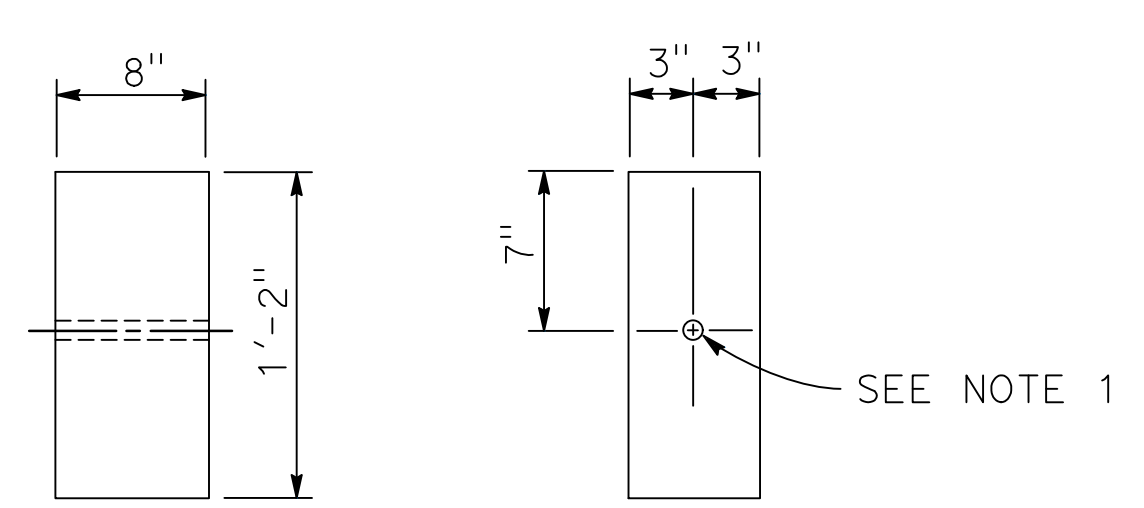
SIDE FRONT
8" x 8" WOOD POST
See Note 4



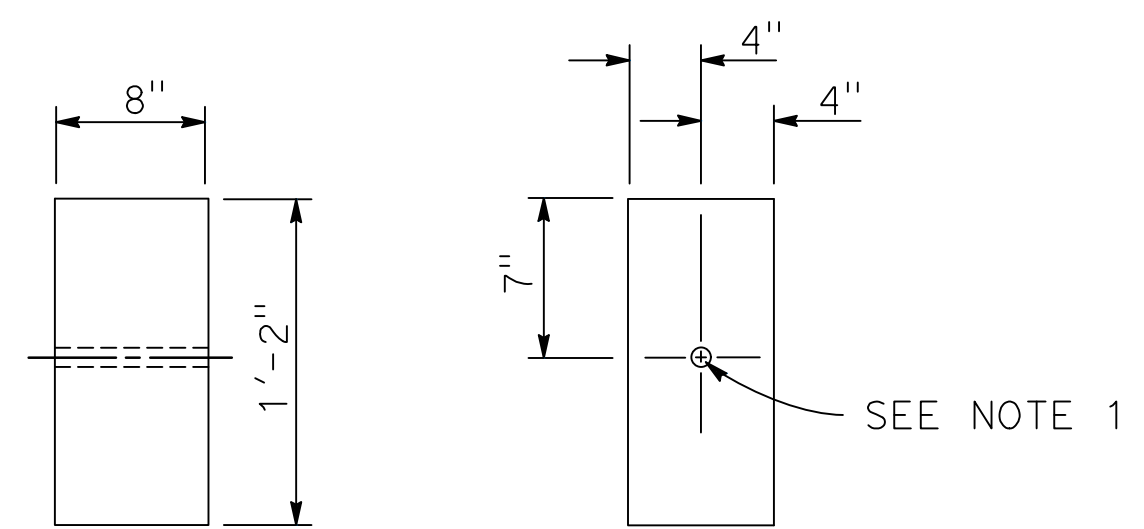
SIDE FRONT
10" x 10" WOOD POST
See Note 5

NOTES:

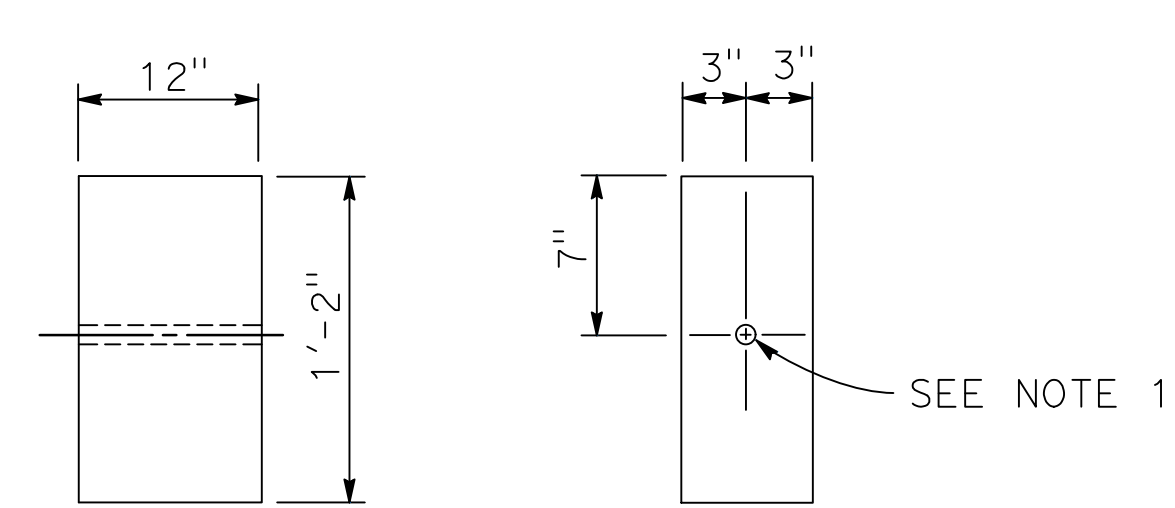
1. All holes in wood posts and blocks shall be 3/4" Dia ± 1/16".
2. Dimensions shown for wood post are nominal.
3. This post and block combination used for standard line post sections of MGS.
4. This post and 8" x 12" block combination used for line post sections of MGS on narrow roadways.
5. This post and 8" x 12" block combination is typically used where strengthened line post sections of MGS are warranted to shield fixed objects.
6. See Revised Standard Plan RSP A77L3 for use of 6" x 8" and 8" x 8" wood blocks.
7. To be used with 8" x 8" x 7'-0" wood post if installed with 6" height dike.
8. To be used with 6" x 8" x 6'-0" wood post if installed with 6" height dike.



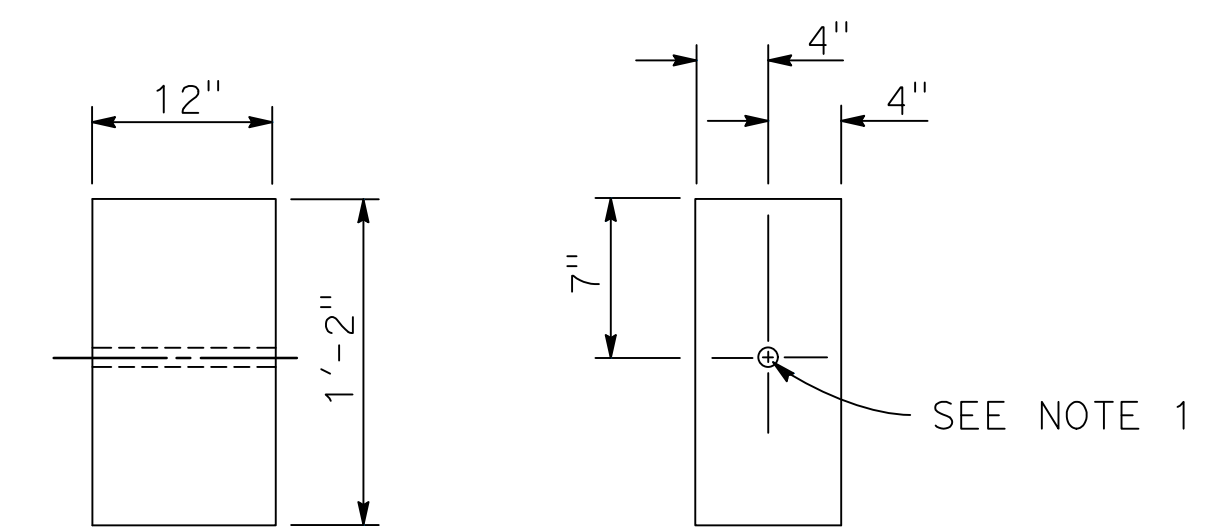
SIDE FRONT
6" x 8" WOOD BLOCK
See Note 6 and Note 3



SIDE FRONT
8" x 8" WOOD BLOCK
See Note 6 and Note 4



SIDE FRONT
6" x 12" WOOD BLOCK
See Note 8



SIDE FRONT
8" x 12" WOOD BLOCK
See Note 7

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
WOOD POST AND
WOOD BLOCK DETAILS**

NO SCALE

RSP A77N1 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77N1
DATED AUGUST 1, 2022 - PAGE 67 OF THE STANDARD PLANS BOOK DATED 2022.

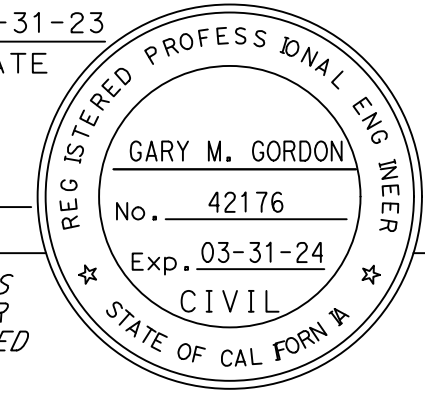
REVISED STANDARD PLAN RSP N771

2022 REVISED STANDARD PLAN RSP A77N1

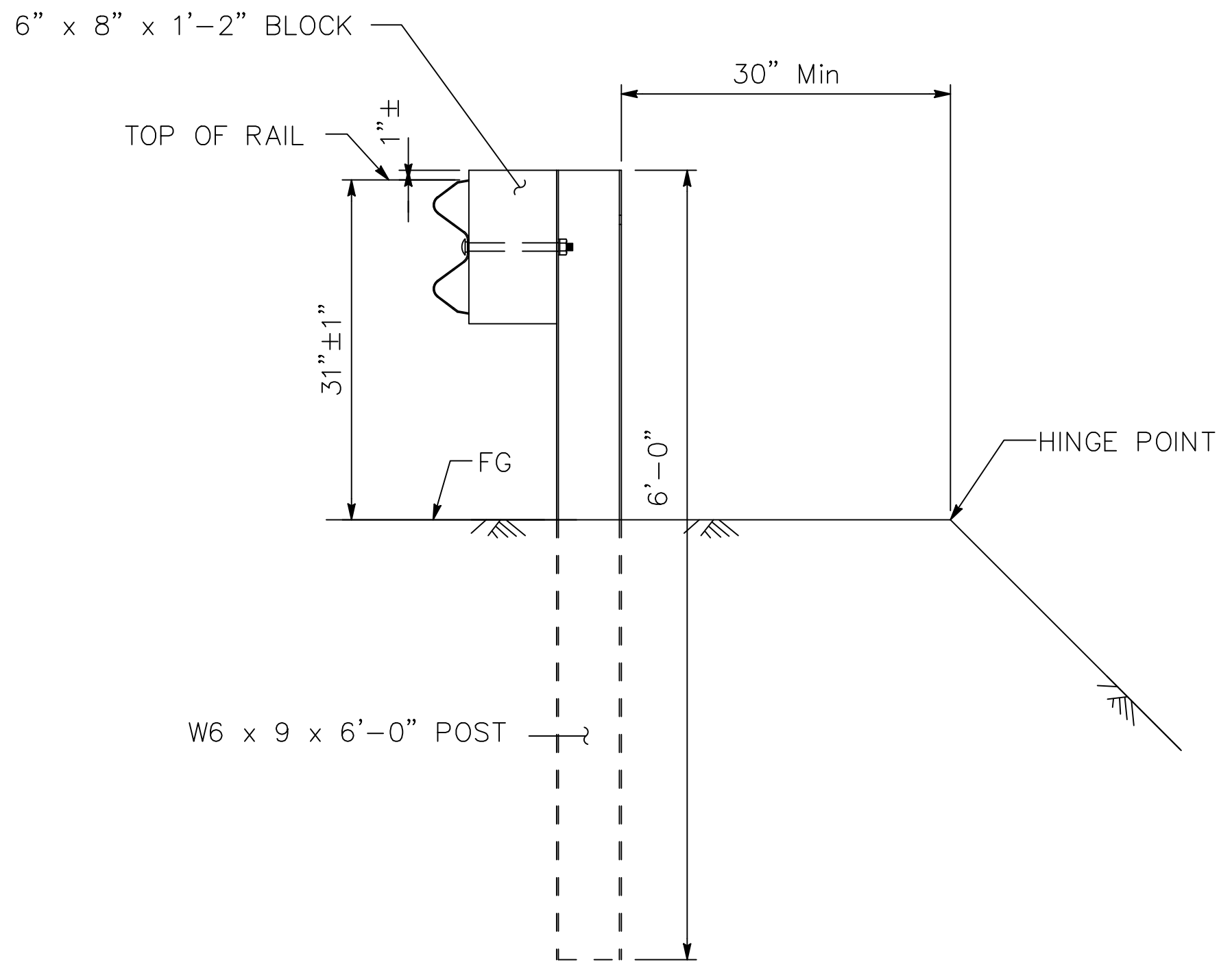
DATE PLOTTED = 5/31/23
TIME PLOTTED = 8:16:13 AM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	16	33

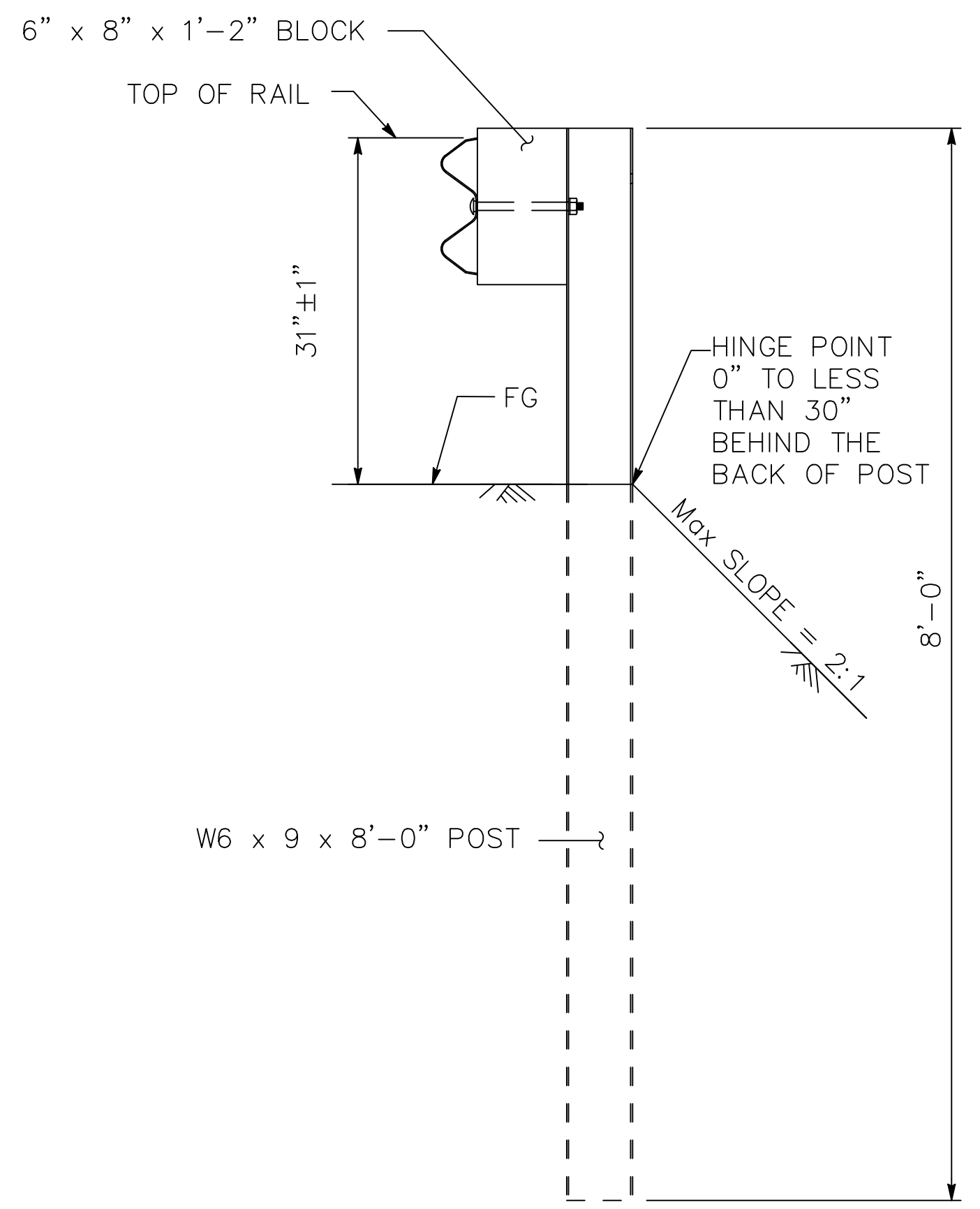
<i>Gary M. Gordon</i> REGISTERED CIVIL ENGINEER	05-31-23 DATE
May 31, 2023 PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.	



TO ACCOMPANY PLANS DATED 05-31-23

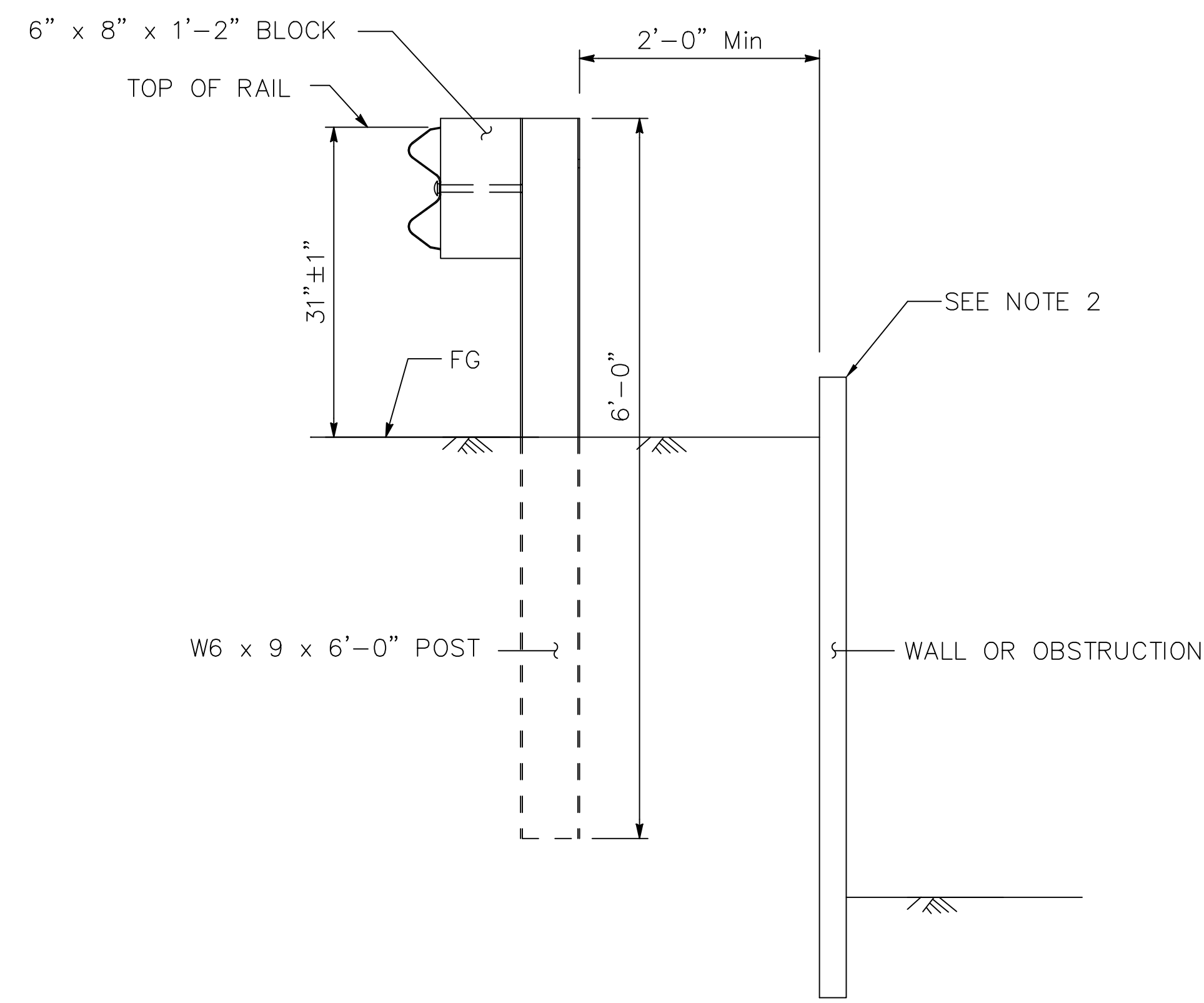


DETAIL A
TYPICAL ROADWAY INSTALLATION
See Note 1

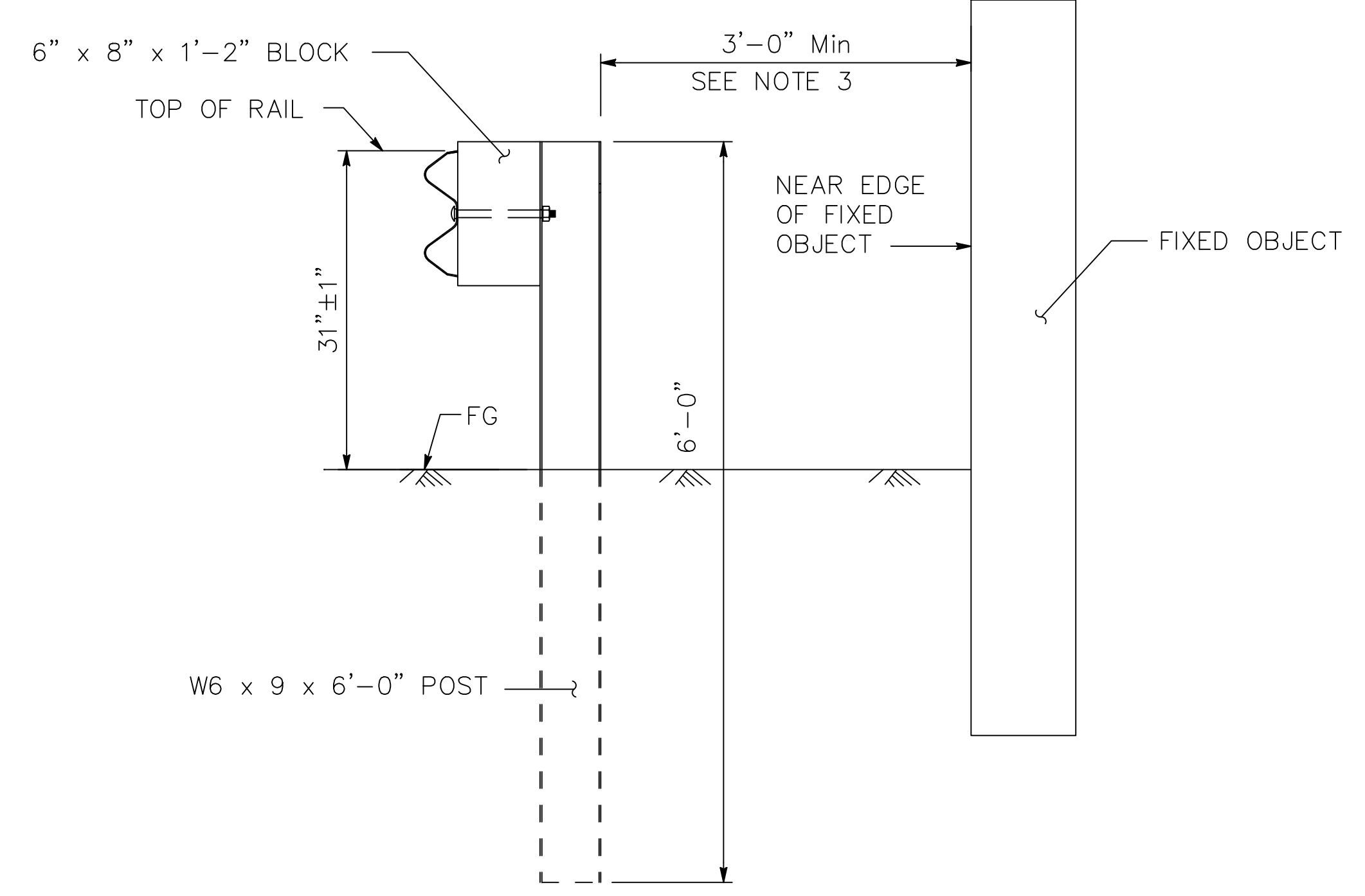


DETAIL B
NARROW ROADWAY INSTALLATION
See Note 1

POST EMBEDMENT



DETAIL C
AT OR BELOW GRADE



DETAIL D
ABOVE GRADE

INSTALLATION AT WALLS OR OBSTRUCTIONS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
MIDWEST GUARDRAIL SYSTEM
TYPICAL LINE POST EMBEDMENT
AND HINGE POINT OFFSET DETAILS

NO SCALE

RSP A77N3 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77N3
DATED AUGUST 1, 2022 - PAGE 69 OF THE STANDARD PLANS BOOK DATED 2022.

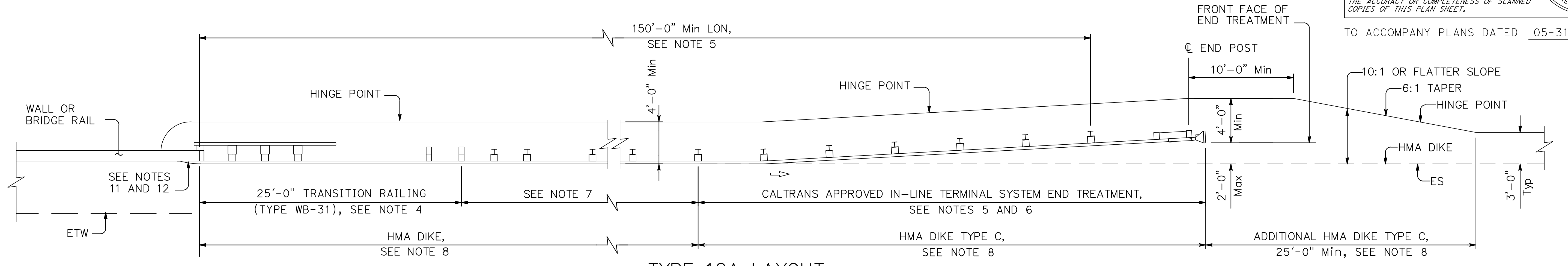
REVISED STANDARD PLAN RSP A77N3

2022 REVISED STANDARD PLAN RSP A77N3

DATE PLOTTED = 5/31/23
TIME PLOTTED = 3:25:50 PM

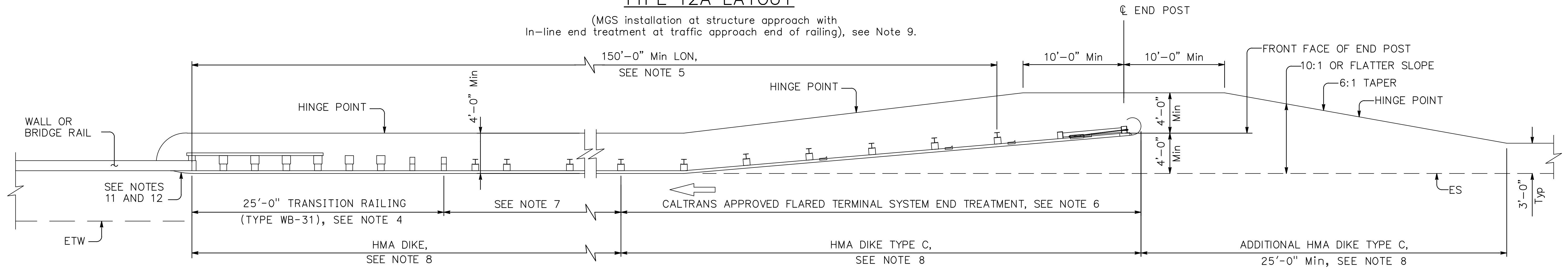
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Gle	CR 67	N/A	17	33

REGISTERED CIVIL ENGINEER DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



TYPE 12A LAYOUT

(MGS installation at structure approach with
In-line end treatment at traffic approach end of railing), see Note 9.



TYPE 12B LAYOUT

(MGS installation at structure approach with
Flared end treatment at traffic approach end of railing), see Note 9.

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77L1, A77L2, A77M1, A77N2 and Revised Standard Plan RSP A77N1.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6'-0" long Steel W6 x 9 or W6 x 8.5 with blocks, or 6" x 8" x 6'-0" wood with blocks.
- For Transition Railing (Type WB-31) details for Types 12A and 12B Layouts, see Standard Plan A77U4.
- A minimum of 150'-0" of MGS is needed to develop Length of Need (LON).
- The type of terminal system end treatment to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes or other fixed objects), it may be advisable to construct additional guard railing (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatment.
- Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12A or Type 12B Layouts are typically used at the approach end of a structure, to the right or left on two-lane conventional highway where the roadbed width across the structure is 40 feet or less.
- See Revised Standard Plan RSP A77Q3 for typical layout used left of approaching traffic at the ends of each structure on multilane freeways or expressways with separate adjacent or parallel bridges.
- For additional details of typical connections to bridge rail, see Connection Detail AA on Standard Plans A77U1 and A77U2 and Connection Detail FF on Standard Plans A77V1 and A77V2.
- For additional details of a typical connection to walls or abutments, see Revised Standard Plans RSP A77U3A and RSP A77U3B.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE APPROACH**

NO SCALE
RSP A77Q1 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77Q1
DATED AUGUST 1, 2022 - PAGE 92 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77Q1

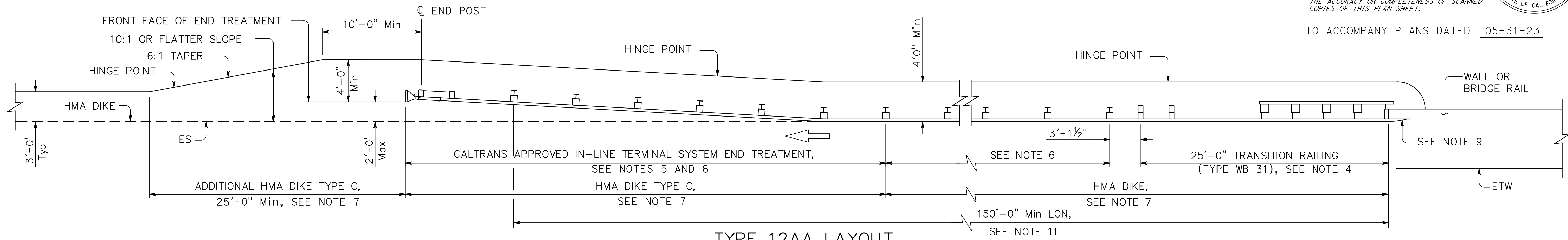
2022 REVISED STANDARD PLAN RSP A77Q1

DATE PLOTTED = 5/31/23
TIME PLOTTED = 3:24:11 PM

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03	Gle	CR 67	N/A	18	33

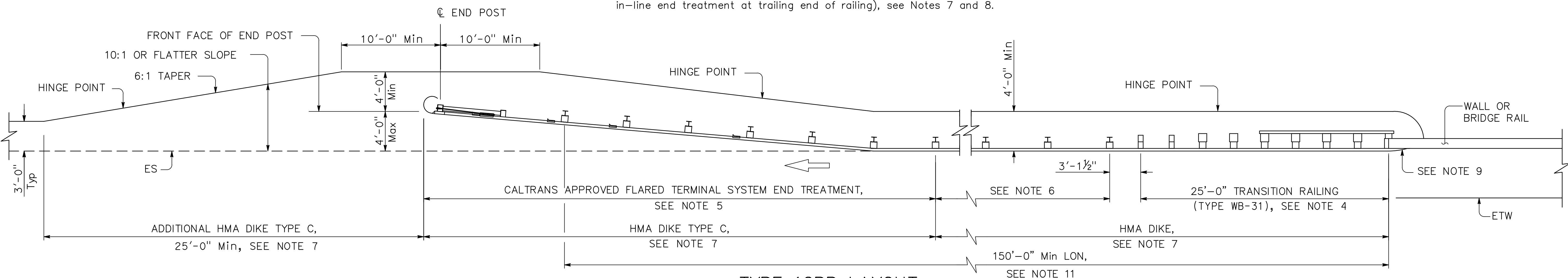
REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CAL FORM #

TO ACCOMPANY PLANS DATED 05-31-23



TYPE 12AA LAYOUT

(MGS installation at structure departure with in-line end treatment at trailing end of railing), see Notes 7 and 8.



TYPE 12BB LAYOUT

(MGS installation at structure departure with Flared end treatment at trailing end of railing), see Notes 7 and 8.

NOTES:

- Line post, blocks and hardware to be used are shown on Standard Plans A77L1, A77L2, A77M1, A77N2 and Revised Standard Plan RSP A77N1.
- MGS post spacing to be 6'-3" center to center, except as otherwise noted.
- Except as noted, line posts are 6'-0" long Steel W6 x 9 or W6 x 8.5 with blocks, or 6" x 8" x 6'-0" wood with blocks.
- For Transition Railing (Type WB-31) details for Types 12AA and 12BB Layouts, see Standard Plan A77U4.
- The type of terminal system to be used will be shown on the Project Plans.
- Dependent on site conditions (embankment height, side slopes, other fixed objects), it may be advisable to construct additional MGS (a length equal to multiples of 12'-6" with 6'-3" post spacing) between the transition railing and end treatments.
- Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
- Type 12AA or Type 12BB Layouts are typically used to the right or left of traffic departing a structure on two-way conventional highways where the roadbed width across the structure is less than 40 feet.
- For additional details of typical connections to bridge rail, see Connection Detail CC on Standard Plan A77U2 and Connection Detail HH on Standard Plan A77V2.
- For roadways with parallel structures and non traversable medians, the Type 12AA or Type 12BB layout may be used.
- A minimum of 150'-0" of MGS is needed to develop Length of Need (LON).

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**MIDWEST GUARDRAIL SYSTEM
TYPICAL LAYOUTS FOR
STRUCTURE APPROACH**

NO SCALE

RSP A77Q4 DATED OCTOBER 21, 2022 SUPERSEDES STANDARD PLAN A77Q4
DATED AUGUST 1, 2022 - PAGE 95 OF THE STANDARD PLANS BOOK DATED 2022.

REVISED STANDARD PLAN RSP A77Q4

2022 REVISED STANDARD PLAN RSP A77Q4

DATE PLOTTED = 5/31/23
TIME PLOTTED = 3:22:36 PM

LEGEND

- Denotes Existing Structure
- Denotes Proposed Structure
- STANDARD PLAN SHEET No.
- DETAIL No.
- Ⓐ SECTION IDENTIFICATION

CALTRANS STANDARD PLANS, 2022 EDITION

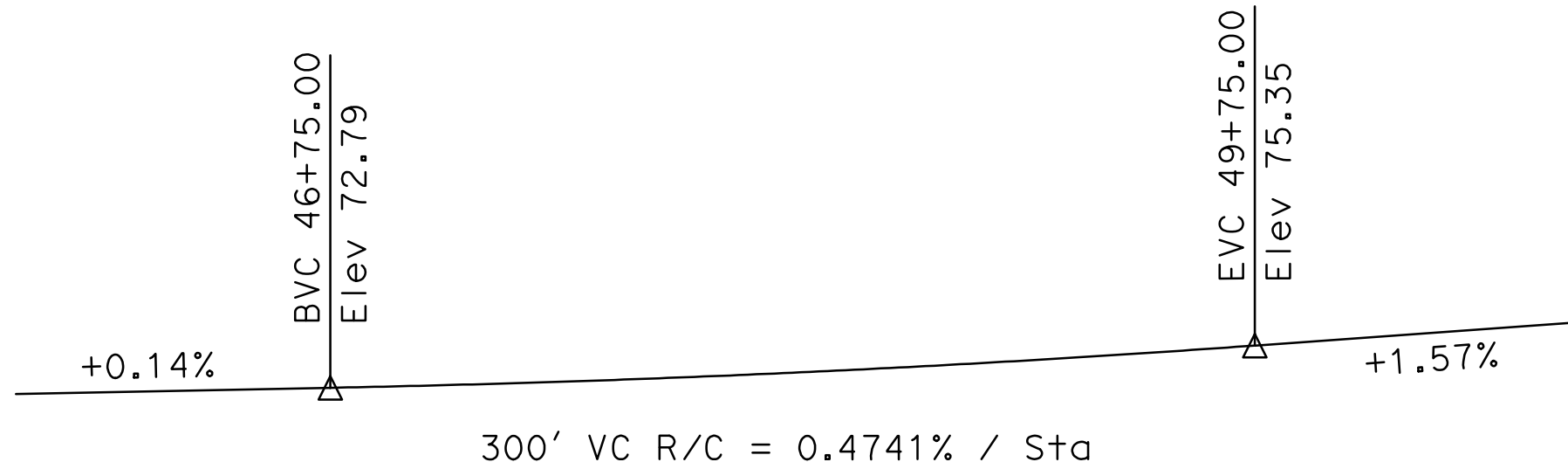
- A10A ABBREVIATIONS (SHEET 1 OF 2)
- A10B ABBREVIATIONS (SHEET 2 OF 2)
- A10C LINES AND SYMBOLS (SHEET 1 OF 3)
- A10D LINES AND SYMBOLS (SHEET 2 OF 3)
- A10E LINES AND SYMBOLS (SHEET 3 OF 3)
- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
- B0-1 BRIDGE DETAILS

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	19	33

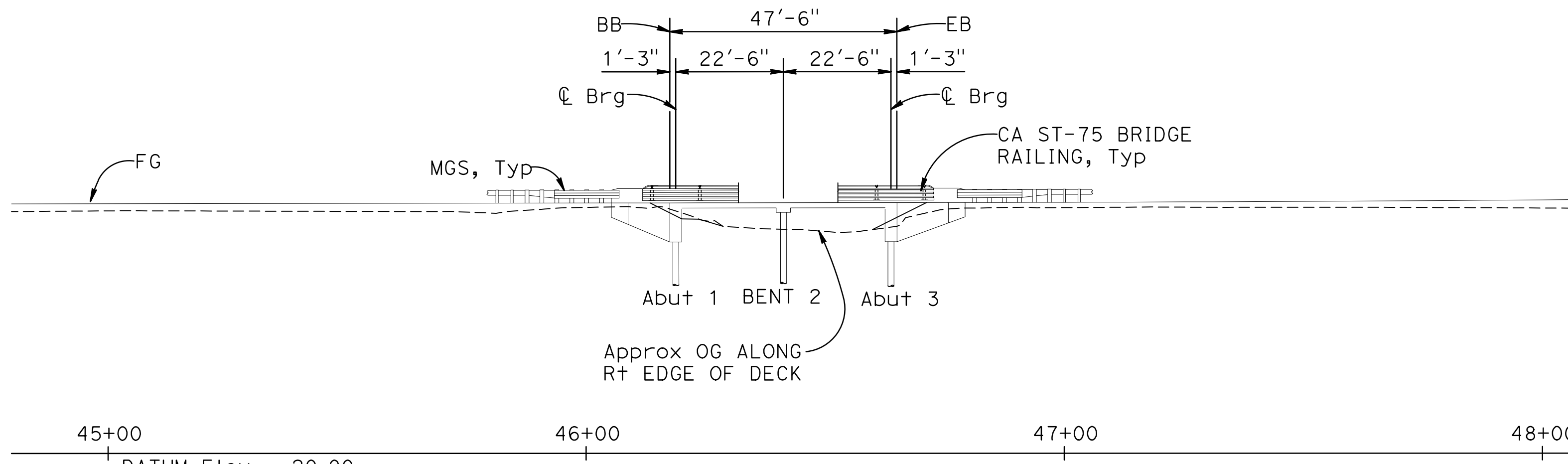
REGISTERED CIVIL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

05-31-23 DATE
 May 31, 2023
 PLANS APPROVAL DATE

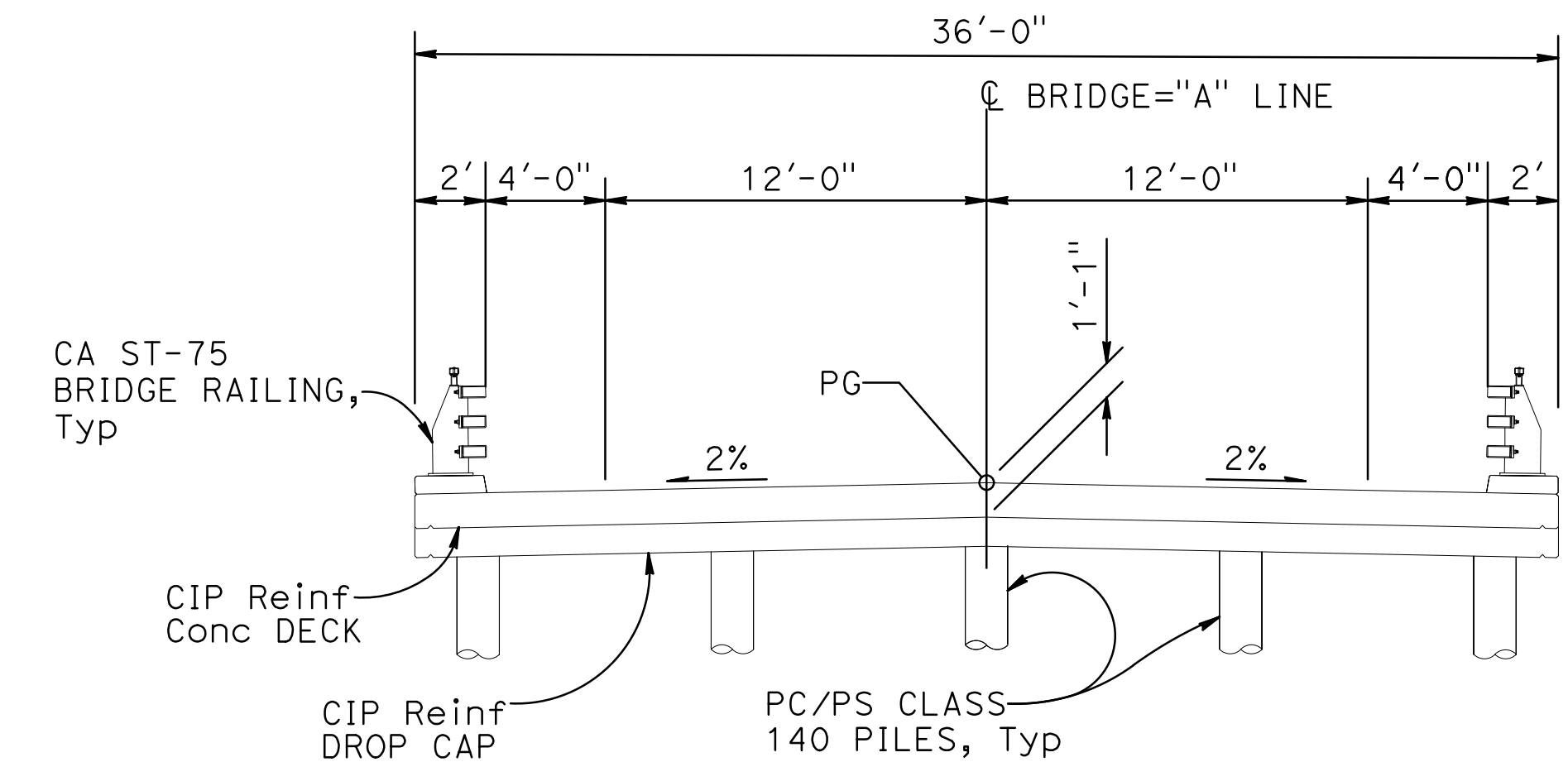
Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



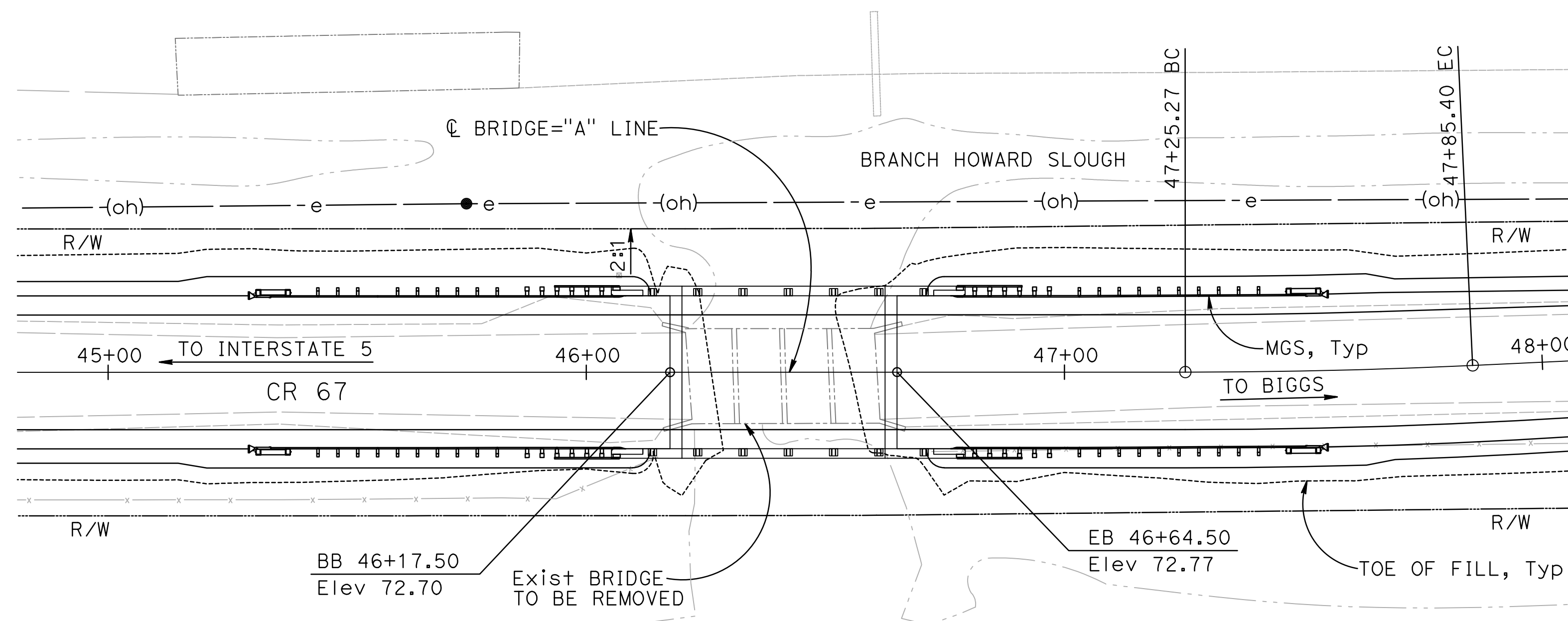
PROFILE
NO SCALE



ELEVATION
1" = 20'-0"



TYPICAL SECTION
1" = 5'-0"



PLAN
1" = 20'-0"

INDEX TO BRIDGE PLANS

SHEET No.	TITLE
1	GENERAL PLAN
2	DECK CONTOURS
3	FOUNDATION PLAN
4	ABUTMENT LAYOUT
5	BENT LAYOUT
6	SLAB REINFORCEMENT DETAILS No. 1
7	SLAB REINFORCEMENT DETAILS No. 2
8	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 1
9	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 2
10	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 3
11	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 4
12	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 5
13	SOIL LEGEND 1 OF 2
14	SOIL LEGEND 2 OF 2
15	LOG OF TEST BORINGS

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI	LAYOUT	BY R. UHLMANN
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN	SPECIFICATIONS	BY X

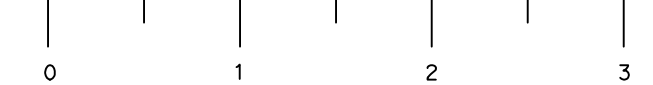
PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0179
	POST MILES NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

GENERAL PLAN

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
11/16/14 07/28/17 05/31/23	1	15

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	20	33

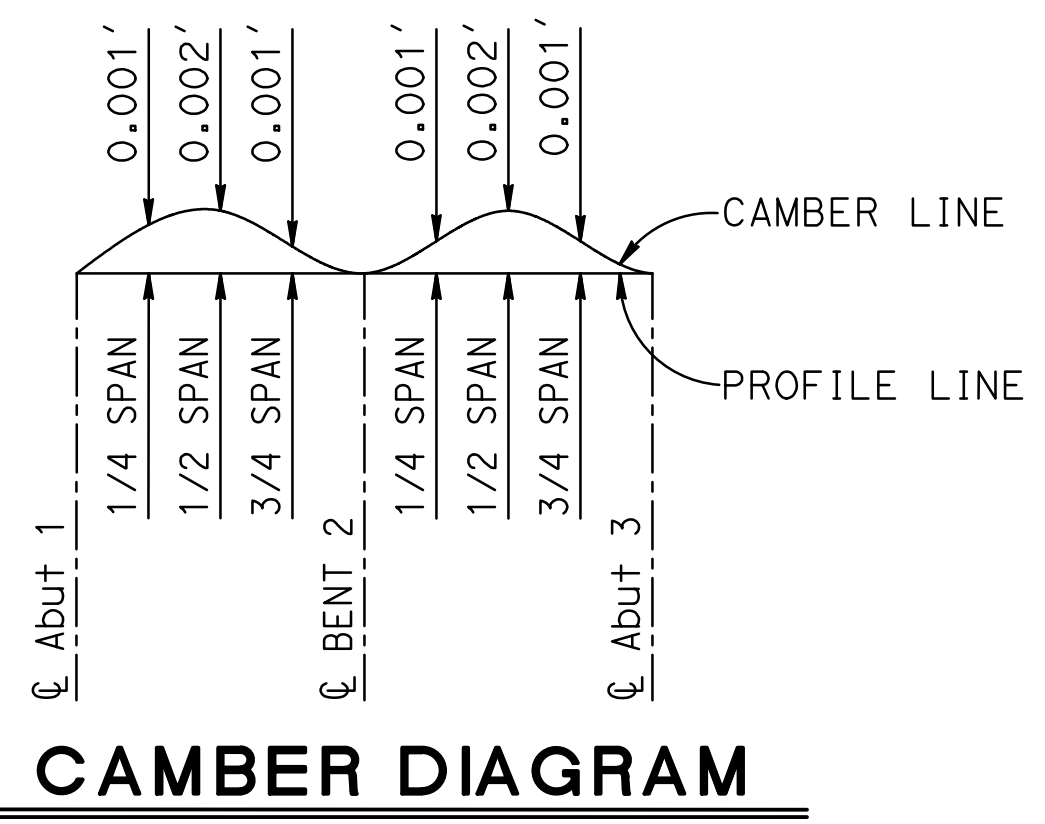
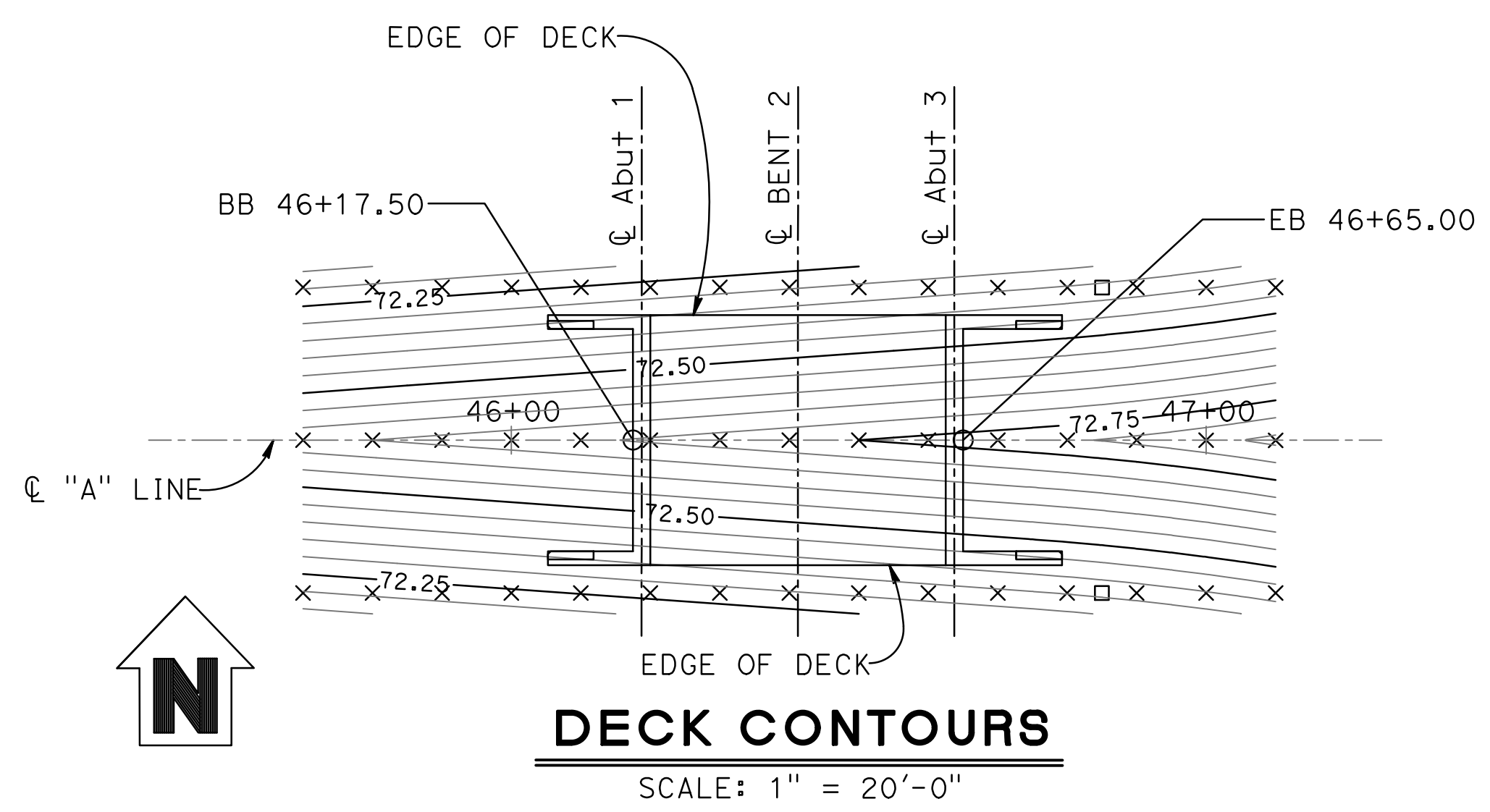
REGISTERED CIVIL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

05-31-23
 DATE

May 31, 2023
 PLANS APPROVAL DATE

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

- NOTES:**
1. Contour indicate top of deck elevation.
 2. □ Indicates even 0.25 foot contours.
 3. × Indicates 10' intervals measured along "A" Line.
 4. Contour interval = 0.05'
 5. Contours do not include allowances for camber or falsework settlement.



NOTE: DOES NOT INCLUDE ALLOWANCE FOR FALSEWORK SETTLEMENT.

**GENERAL NOTES
 LOAD AND RESISTANCE FACTOR DESIGN**

DESIGN : AASHTO LRFD Bridge Design Specifications, 6th Edition and with Caltrans Amendments, preface dated September 2010

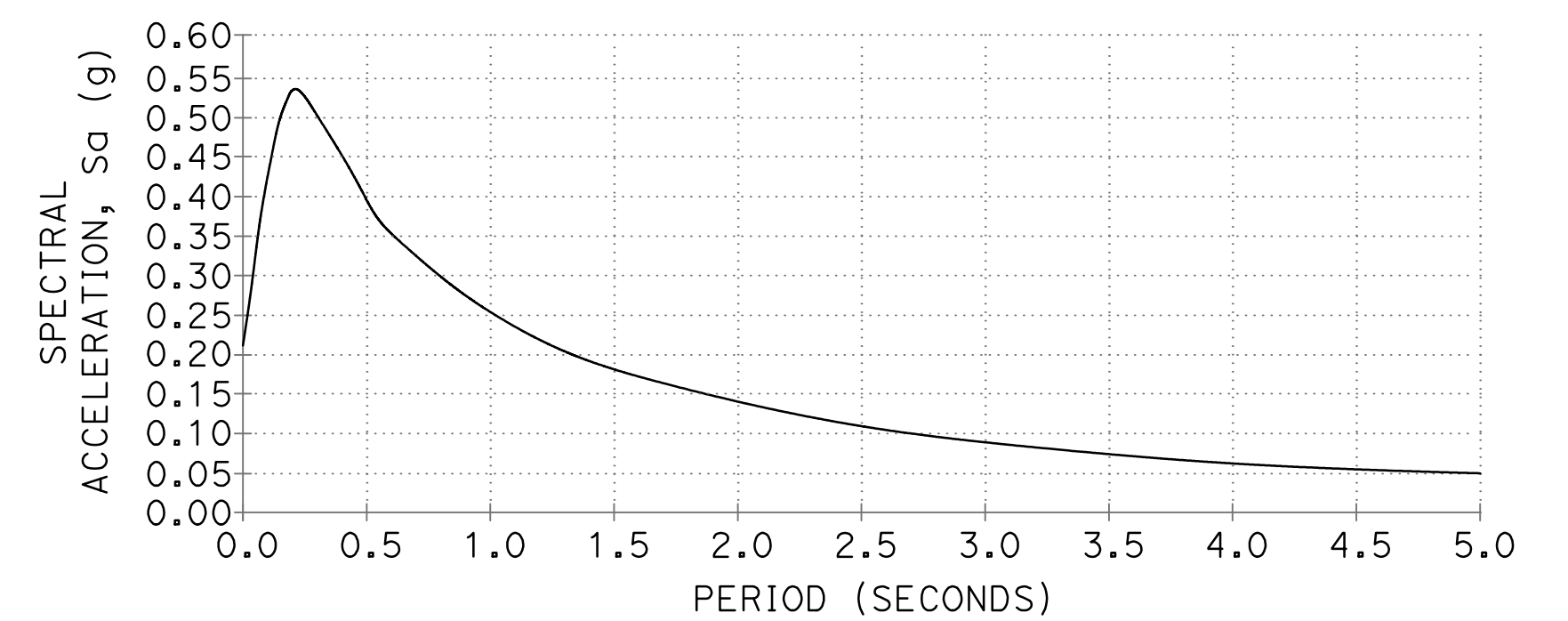
SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.7 dated April 2013.

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: HL93 and permit design load.

SEISMIC LOADING: Soil Profile: C
 Moment Magnitude: 6.7
 Peak Ground Acceleration = 0.22 g

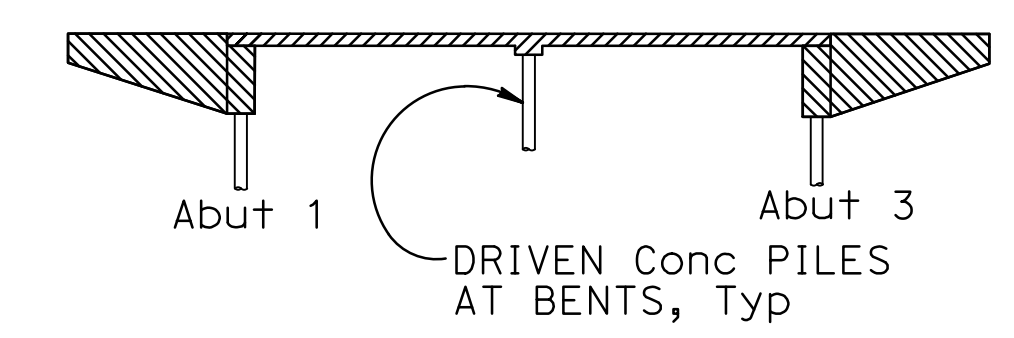
REINFORCED CONCRETE: $f_y = 60$ ksi
 $f'_c = 4.0$ ksi (Superstructure)
 $f'_c = 3.6$ ksi (Substructure)



ACCELERATION RESPONSE SPECTRUM CURVE

APPROXIMATE QUANTITIES

ITEM CODE	ITEM DESCRIPTION	QUANTITY	UNIT
157550	BRIDGE REMOVAL	1	LS
192020	STRUCTURE EXCAVATION (TYPE D)	89	CY
193003	STRUCTURE BACKFILL (BRIDGE)	51	CY
490736	FURNISH PILING (CLASS 90)	143	LF
490737	DRIVE PILE (CLASS 90)	10	EA
490746	FURNISH PILING (CLASS 140)	369	LF
490747	DRIVE PILE (CLASS 140)	5	EA
510053	STRUCTURAL CONCRETE, BRIDGE	64	CY
510054	STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER)	73	CY
520102	BAR REINFORCING STEEL (BRIDGE)	27,200	Lbs
048290	CALIFORNIA ST-75 BRIDGE RAIL	147	LF



STRUCTURAL CONCRETE, BRIDGE 3.6 ksi AT 28 DAYS
 STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER) 4 ksi AT 28 DAYS

CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

DESIGN BY J. DeMARTINI CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO. 11C0179	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
DETAILS BY R. UHLMANN CHECKED J. DeMARTINI	G. GORDON PROJECT ENGINEER	POST MILES NA	
QUANTITIES BY J. DeMARTINI CHECKED R. UHLMANN	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	REVISION DATES 11/16/14 07/28/17 05/31/23	SHEET 2 OF 15

FILE => 11-0179-d-dc01

DATE PLOTTED => 5/31/2023 USERNAME => KEVIN TIME PLOTTED => 8:17:47 AM

BENCH MARK

Horizontal Datum NAD83

Vertical Datum NAVD88

HYDROLOGIC SUMMARY

DRAINAGE AREA 118 SQ ACRES				
	DESIGN FLOOD	BASE FLOOD	OVERTOPPING FLOOD	RECORD FLOOD
FREQUENCY, YEARS	50	100	X	X
DISCHARGE CUBIC ft./sec.		14	X	X
WATER SURFACE ELEVATION AT BRIDGE		67.81	X	X

NOTE:
Flood Plain Data is based upon information available when the plans were prepared and are shown to meet Federal requirements. The accuracy of said information is not warranted by the Designer and interested or affected parties should make their own investigation.

LEGEND

- DENOTES EXISTING STRUCTURE
- DENOTES PROPOSED STRUCTURE
- o DENOTES CLASS 140 PILES
- 64.19 DENOTES BOTTOM OF FOOTING ELEVATION

NOTES

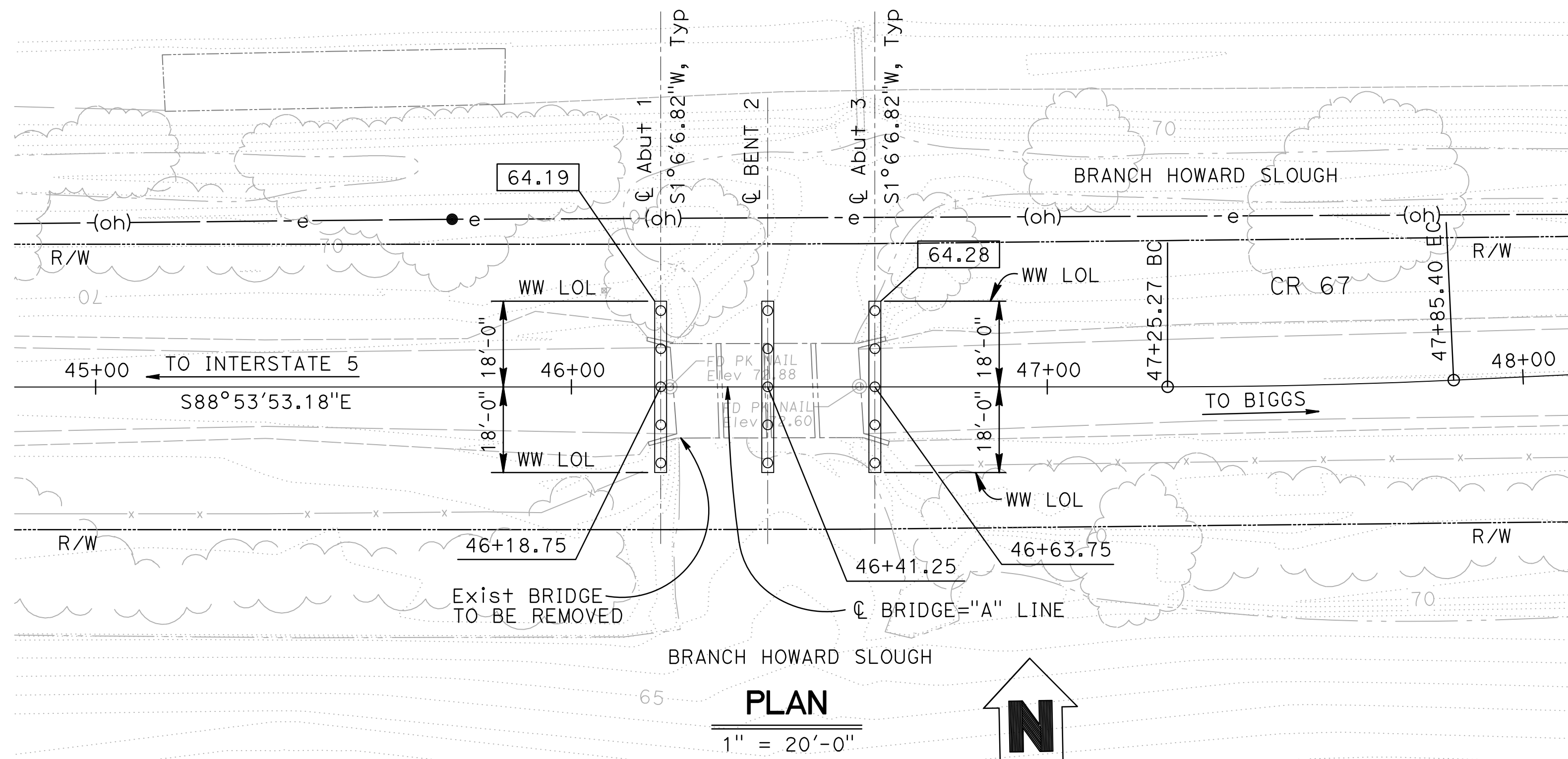
1. Utility relocation not shown. Utilities in conflict with piles will be relocated for bridge construction.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	21	33

REGISTERED CIVIL ENGINEER
DATE 05-31-23
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

May 31, 2023
PLANS APPROVAL DATE

Prepared by:
WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001



PILE DATA TABLE

LOCATION	PILE TYPE	DESIGN LOADING (SERVICE)	NOMINAL RESISTANCE		DESIGN TIP ELEV* (FEET)	SPECIFIED TIP ELEV (FEET)	PC/PS CONCRETE PILE CUT OFF ELEVATION (FEET)				
			COMPRESSION	TENSION			PILE No. 1	PILE No. 2	PILE No. 3	PILE No. 4	PILE No. 5
Abut 1	CLASS 90	90 kips	180 kips	90	36.00 (1)	36.00	64.44	64.44	64.44	64.44	64.44
Bent 2	CLASS 140	140 kips	280 kips	140	26.00 (1)	26.00	73.44	73.58	73.72	73.58	73.44
Abut 3	CLASS 90	90 kips	180 kips	90	36.00 (1)	36.00	64.53	64.53	64.53	64.53	64.53

* DESIGN TIP ELEVATION IS CONTROLLED BY THE FOLLOWING DEMANDS:
(1) COMPRESSION, (2) TENSION, (3) LATERAL LOADS, (4) SETTLEMENT

SCALE: 1"=30'	VERT.DATUM NAVD88	HORZ.DATUM NAD83
PHOTOGRAMMETRY AS OF: 06/12	ALIGNMENT TIES X	
SURVEYED BY S. ESPINOSA	DRAFTED BY J. JONES	
FIELD CHECKED BY B. STRATMAN	CHECKED BY P. ESPINOSA	

DESIGN BY J. DeMARTINI	CHECKED M. ILEY
DETAILS BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

BRIDGE NO.	11C0179
POST MILES	NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

FOUNDATION PLAN

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
11/16/14 07/28/17 05/31/23	3	15

FILE => 11-0179-e-fp101

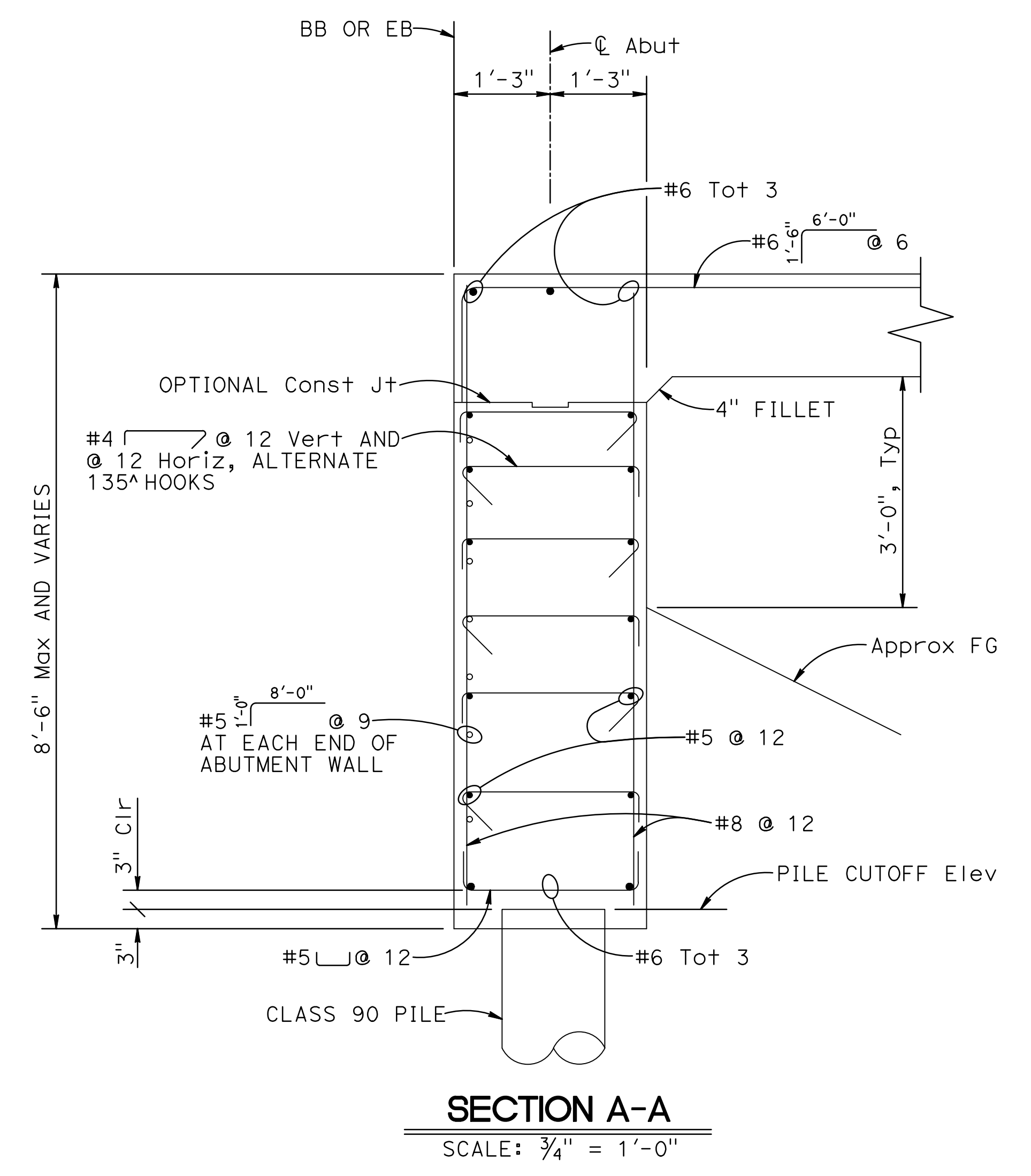
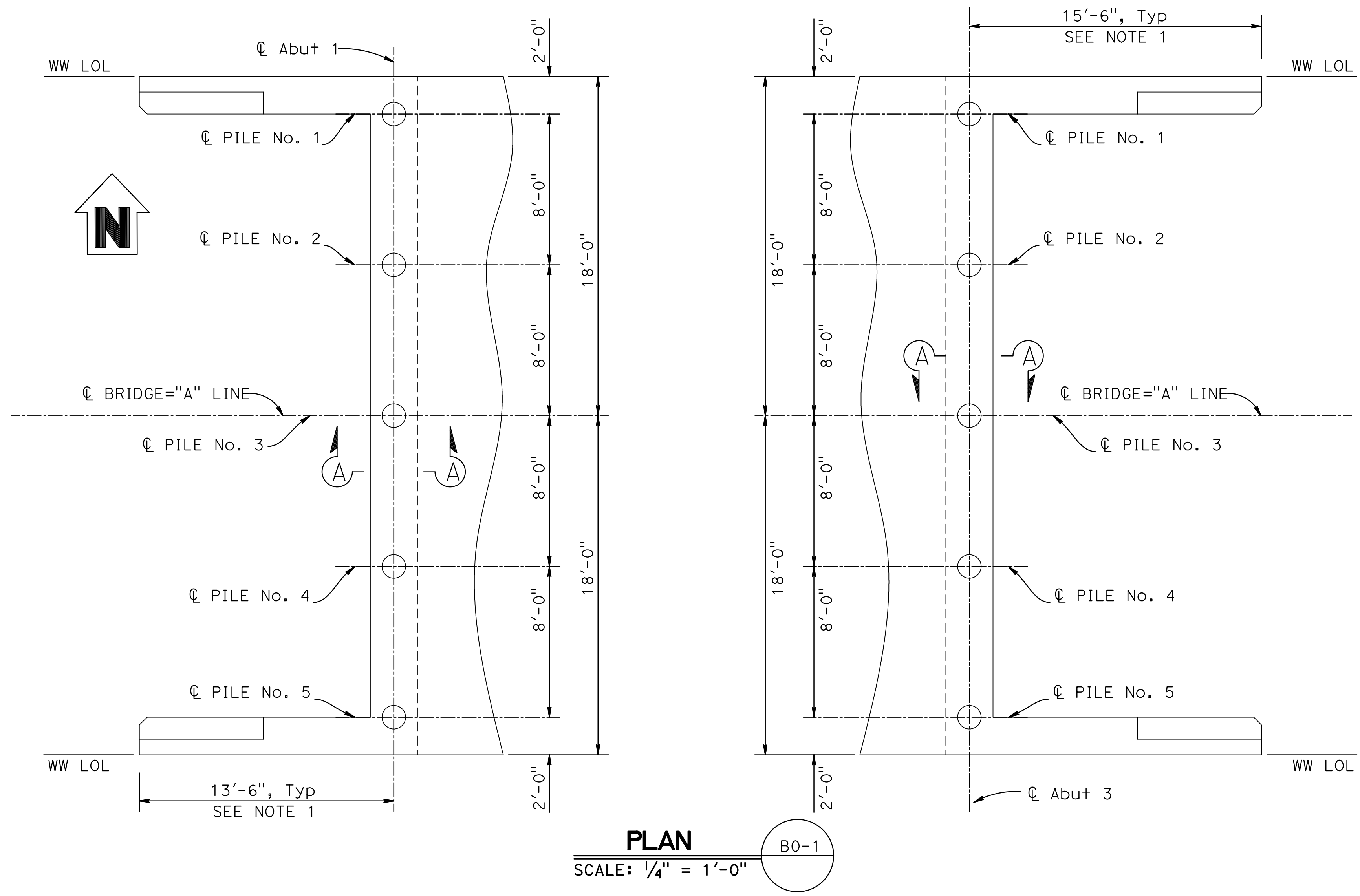
DATE PLOTTED => 5/31/2023 USERNAME => KEVIN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	22	33

NOTES:
 1. For 'TYPICAL WINGWALL ELEVATION', see Caltrans Standard Plan B0-1.

05-31-23
 REGISTERED CIVIL ENGINEER DATE
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



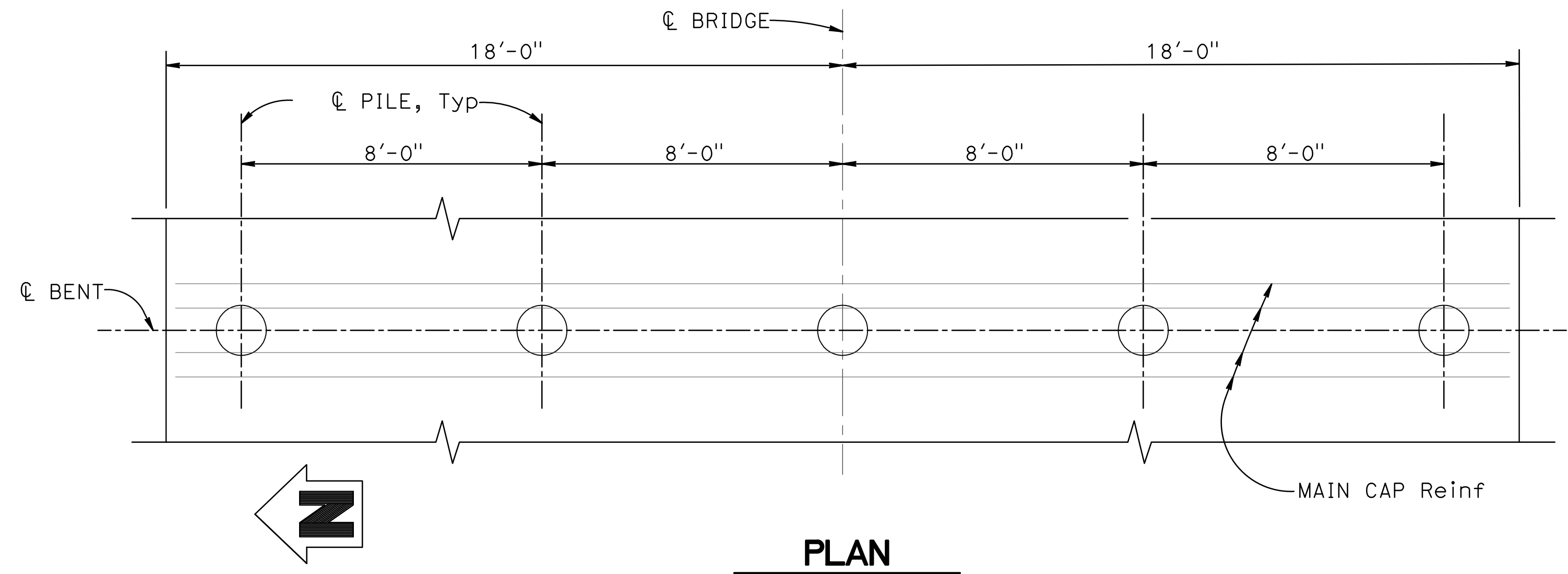
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	BY R. UHLMANN	CHECKED J. DeMARTINI		11C0179	
	BY J. DeMARTINI	CHECKED R. UHLMANN		POST MILES	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				REVISION DATES	
0 1 2 3				11/20/14	01/28/17
FILE => 11-0179-f-a01_101				05/31/23	05/31/23
				SHEET	OF
				4	15

DATE PLOTTED => 5/31/2023 11:38:58 AM USERNAME => KEVIN

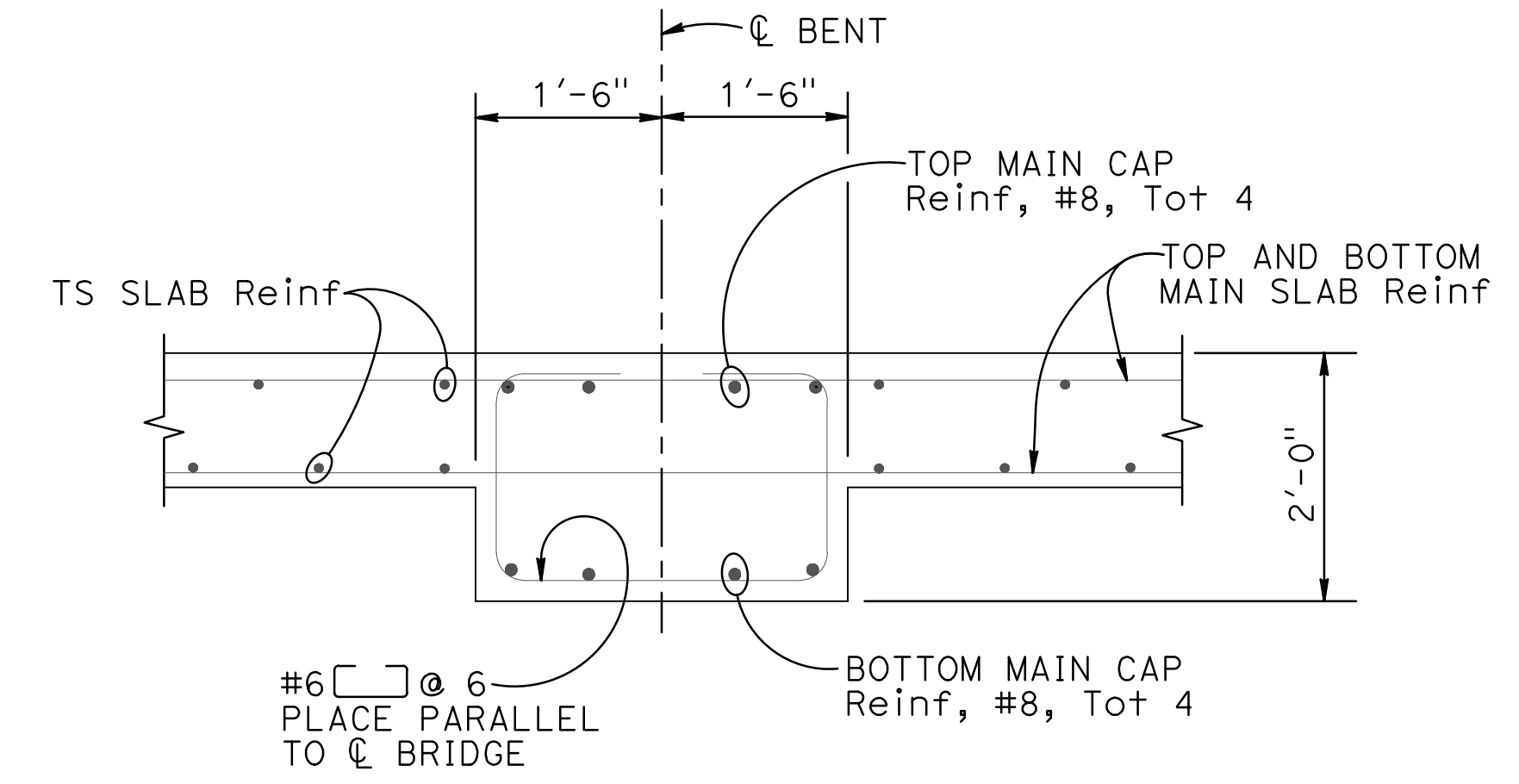
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	23	33

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

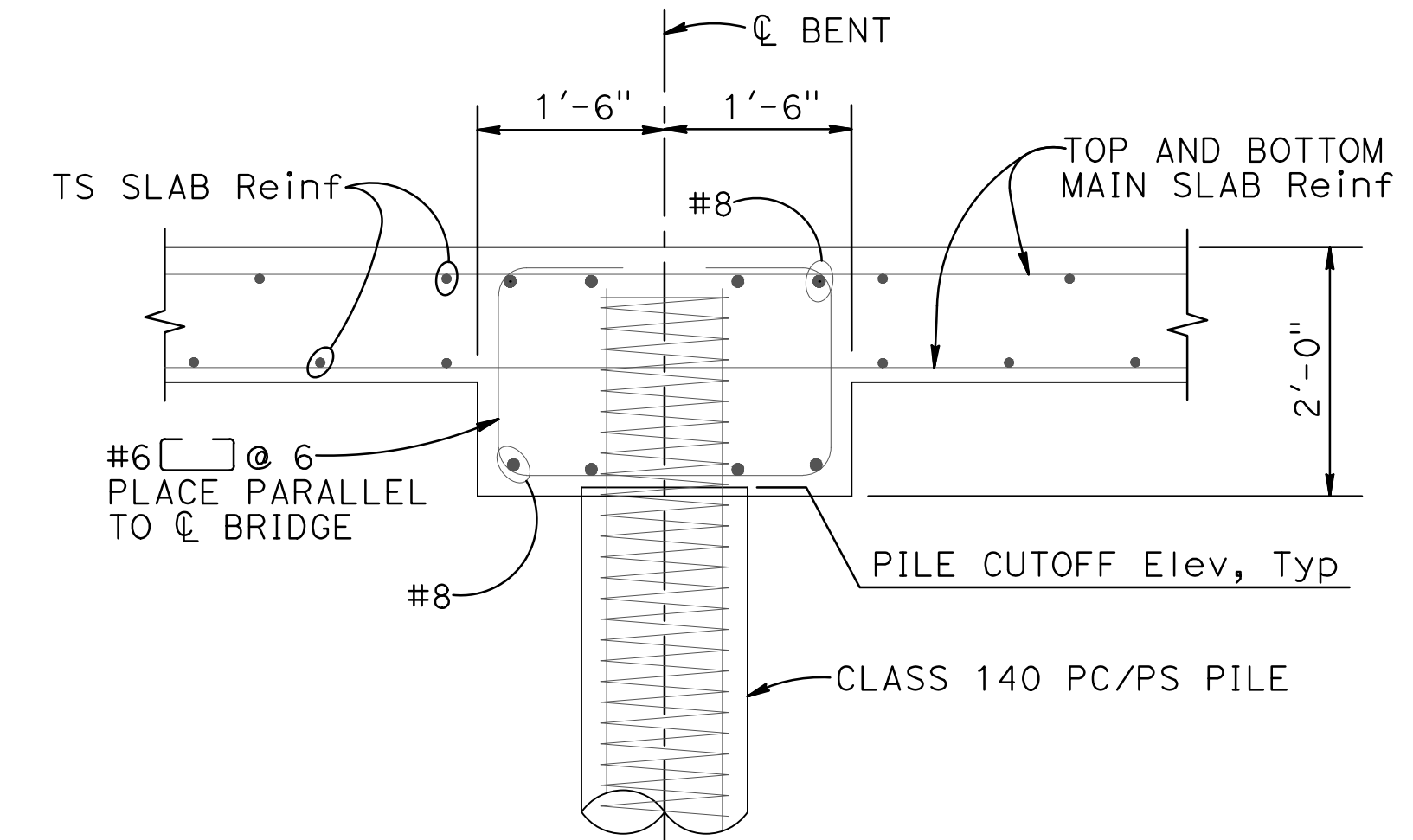
Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



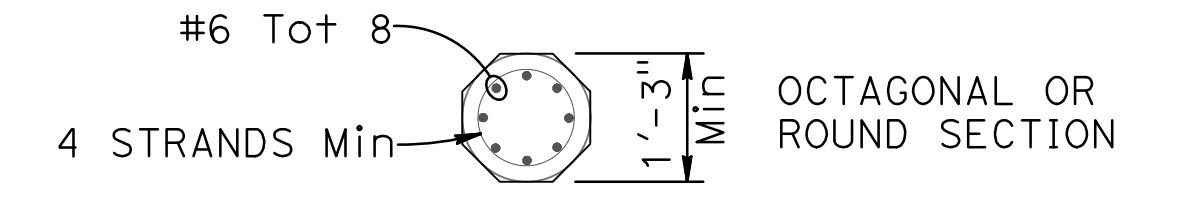
PLAN
SCALE: 3/8" = 1'-0"



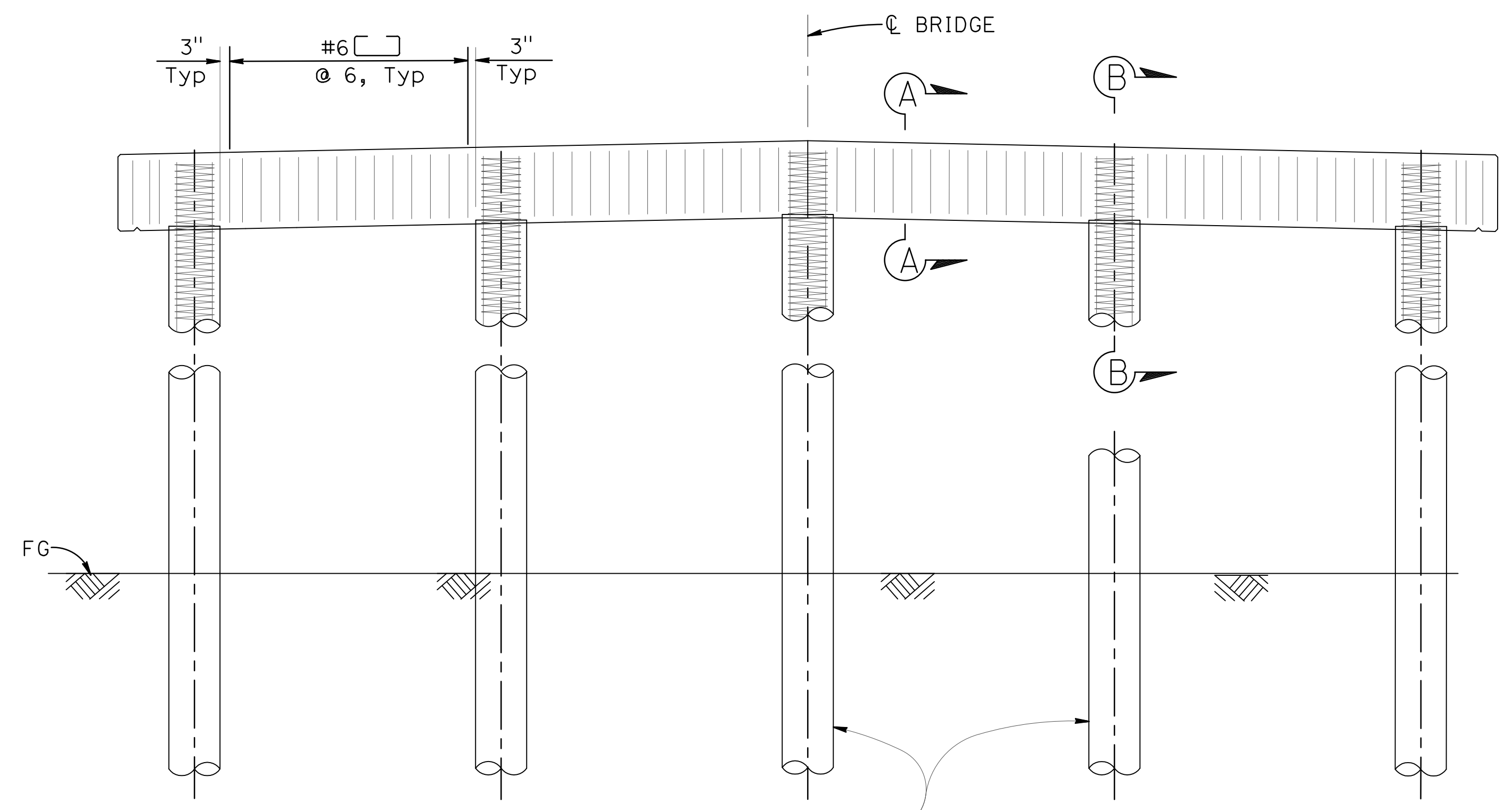
SECTION A-A
SCALE: 3/4" = 1'-0"



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

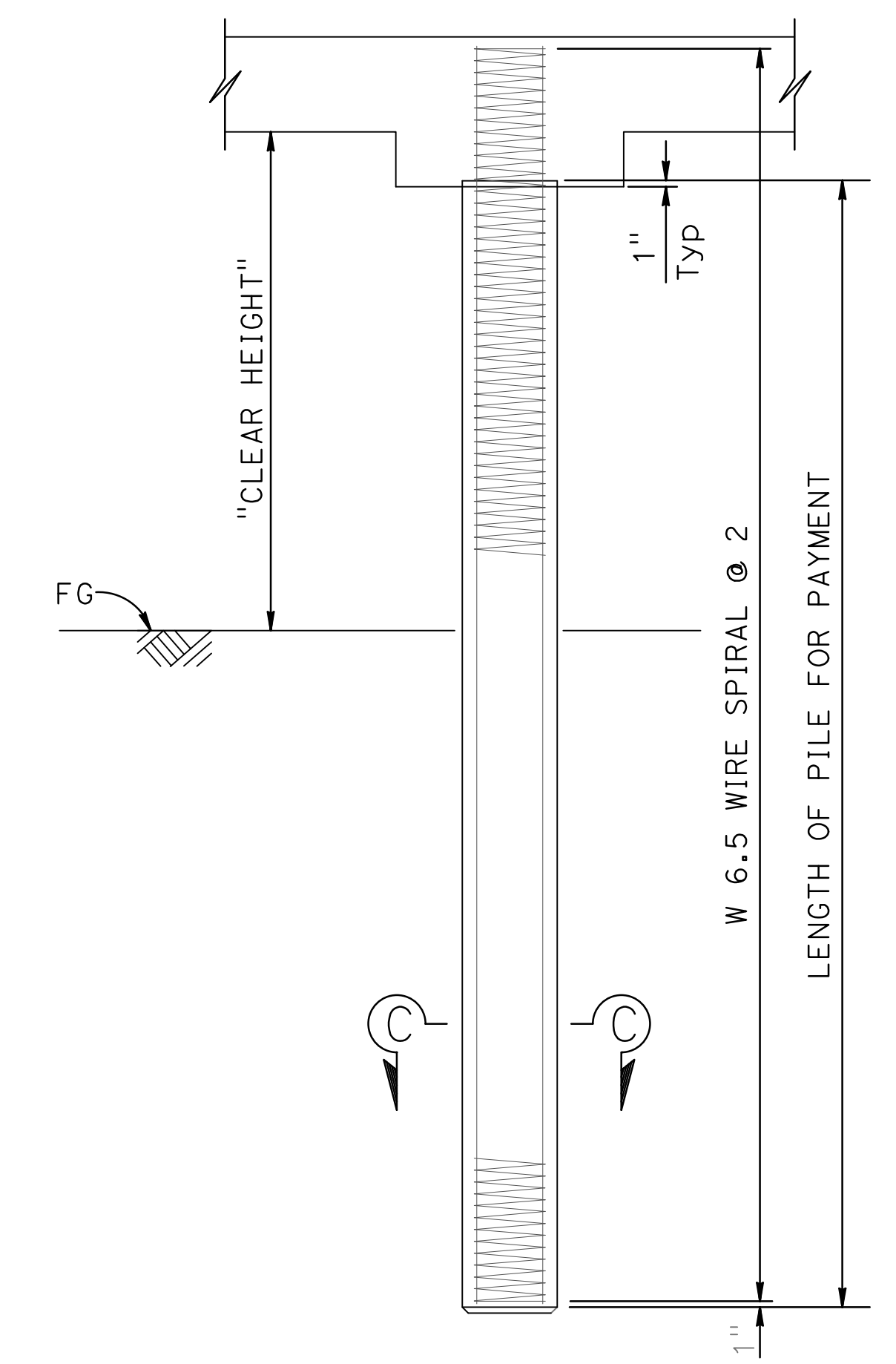


SECTION C-C



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

- NOTES:**
- Design service level loading is 140 kips service and 280 kips nominal axial structural resistance or less as noted.
 - Maximum size of aggregate is 1".
 - For the prestressed concrete pile:
 - The prestress force after all losses shall provide 700 psi minimum stress.
 - The concrete strength shall not be less than 6000 psi at 28 days.
 - No splices allowed in the longitudinal reinforcement within the "CLEAR HEIGHT" or within 10' below the ground line.



PRECAST PRESTRESSED CONCRETE PILE

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO.	11C0179	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) BENT LAYOUT
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI		PROJECT ENGINEER	G. GORDON	
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN		POST MILES	NA	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS			0 1 2 3	REVISION DATES	11/01/14 01/28/17 05/31/23	SHEET 5 OF 15

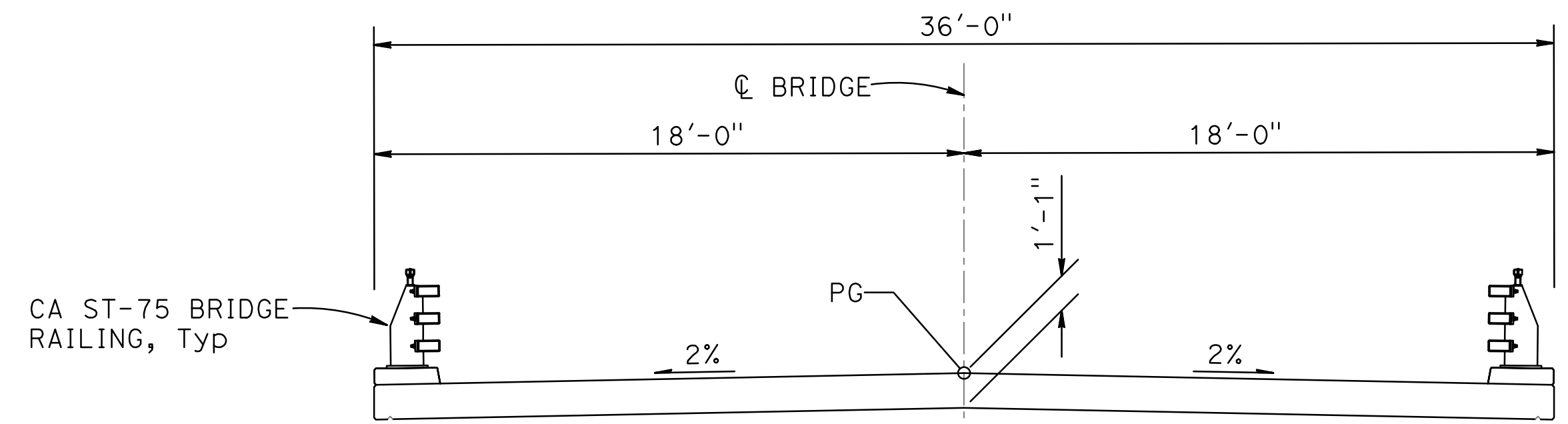
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DATE PLOTTED => 5/31/2023 TIME PLOTTED => 1:04:55 PM USERNAME => KEVIN

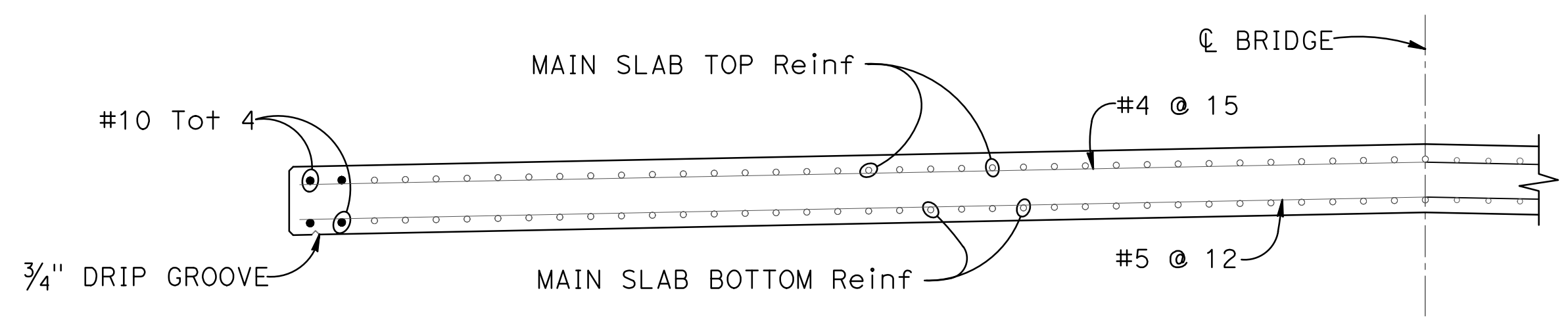
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	24	33

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001

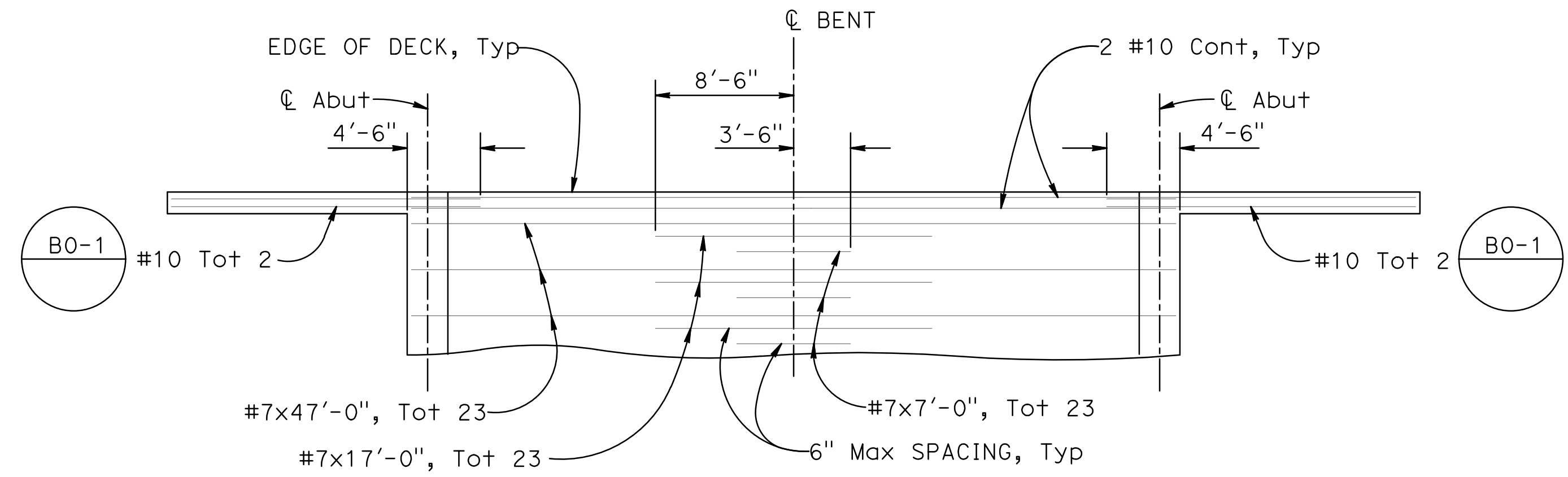


TYPICAL SECTION
SCALE: 1/4" = 1'-0"

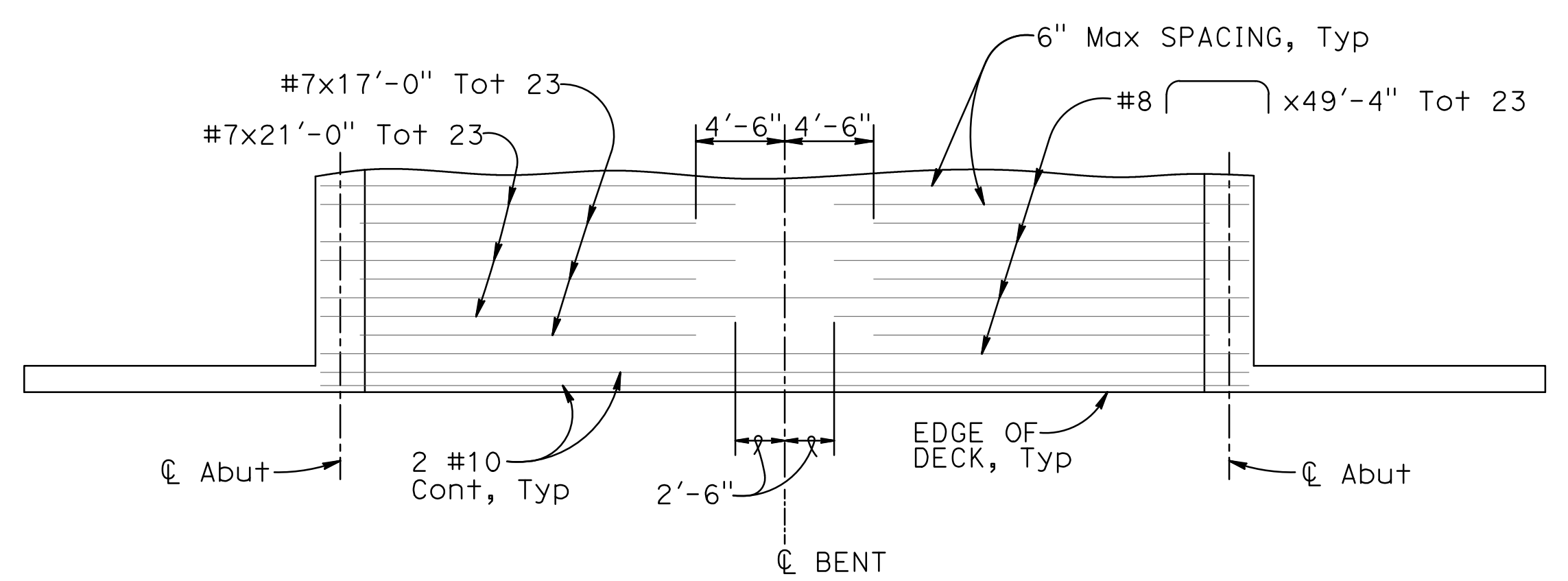


PART TYPICAL SECTION
SCALE: 1/2" = 1'-0"
NOTE: BAR CHAIRS NOT SHOWN.

NOTES:
 1. FOR SLAB REINFORCING DETAILS NOT SHOWN SEE "SLAB REINFORCEMENT DETAILS NO. 2" SHEET.



REINFORCEMENT - TOP OF SLAB
NOT TO SCALE



REINFORCEMENT - BOTTOM OF SLAB
NOT TO SCALE

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

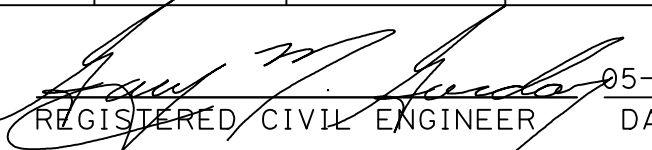
G. GORDON
 PROJECT ENGINEER

BRIDGE NO. 11C0179
 POST MILES NA
BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
SLAB REINFORCEMENT DETAILS NO. 1



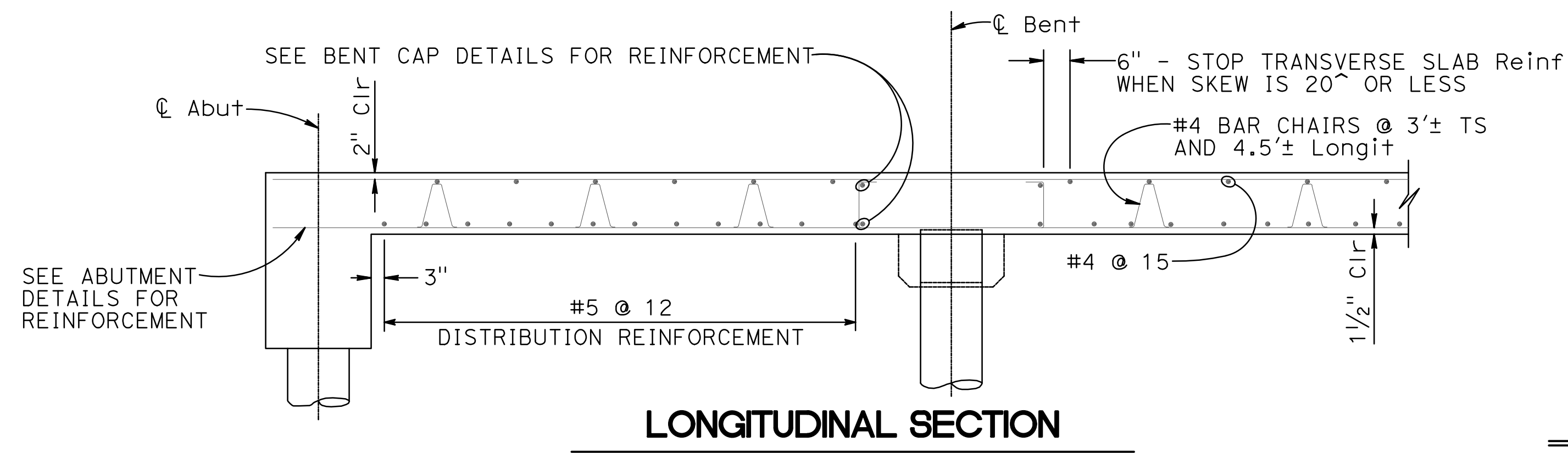
REVISION DATES	SHEET	OF
11/07/14 01/28/17 05/31/23	6	15

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	25	33

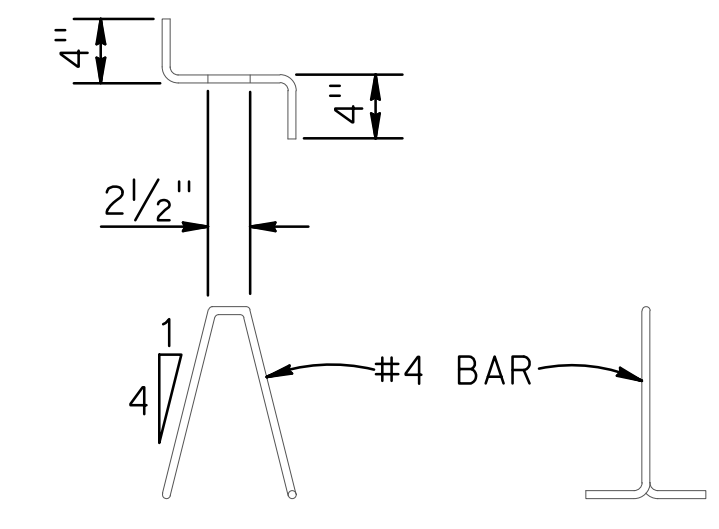

 REGISTERED CIVIL ENGINEER DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA

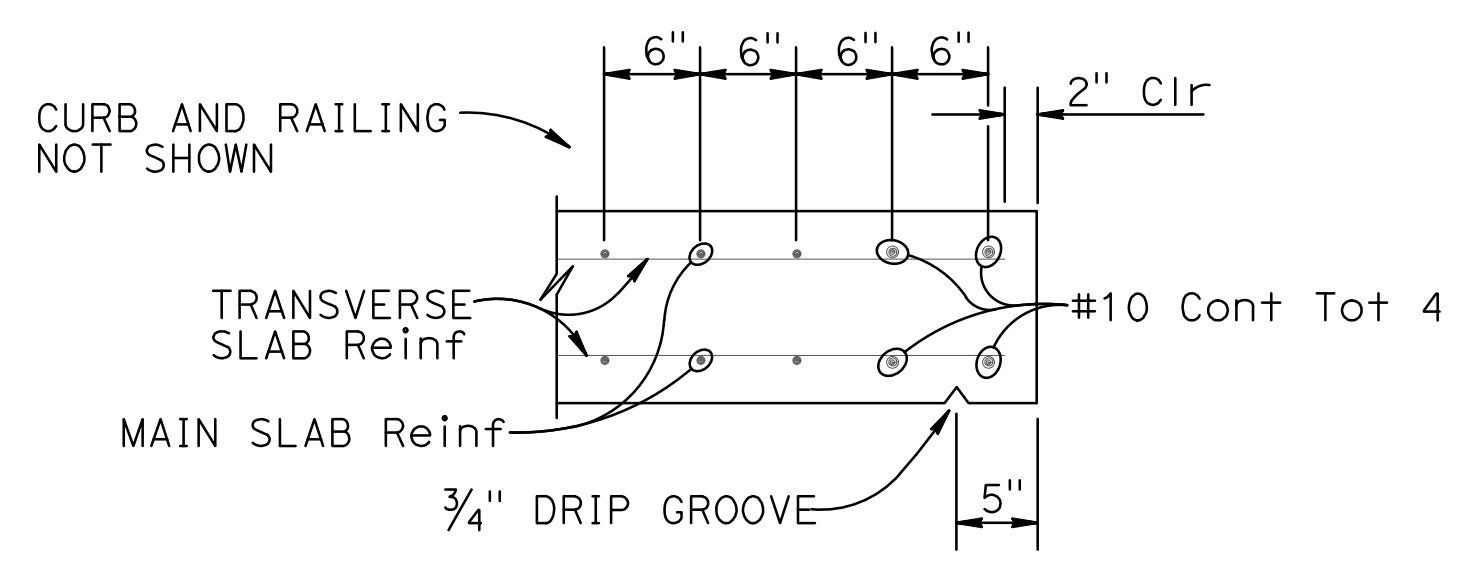
Prepared by:
 WILLDAN ENGINEERING
 2400 WASHINGTON AVENUE, SUITE 101
 REDDING, CALIFORNIA 96001



LONGITUDINAL SECTION



BAR CHAIR DETAIL



EDGE OF SLAB DETAILS

BAR SPLICE LENGTH								
BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
ALL BARS, EXCEPT TOP BARS IN SPANS OVER 24'	23"	28"	34"	43"	56"	71"	90"	110"
TOP BARS IN SPANS OVER 24'	23"	28"	34"	58"	74"	80"	115"	155"

REINFORCEMENT NOTES:
 Splices in top main bars to be located near center of span.
 Splices in bottom main bars to be located near bent.
 Spacing of all transverse bars is measured along C roadway.

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0179	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
	POST MILES NA	



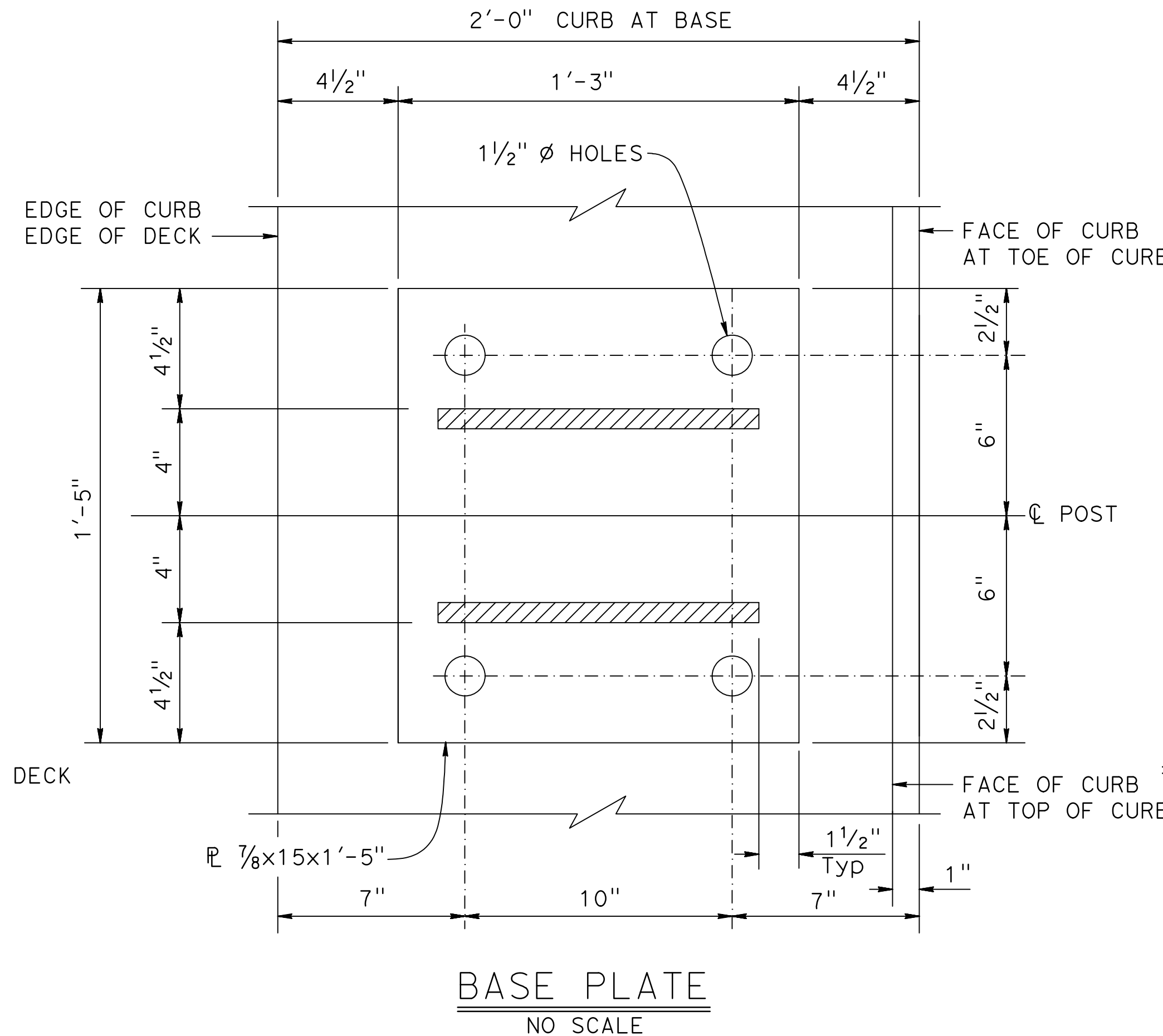
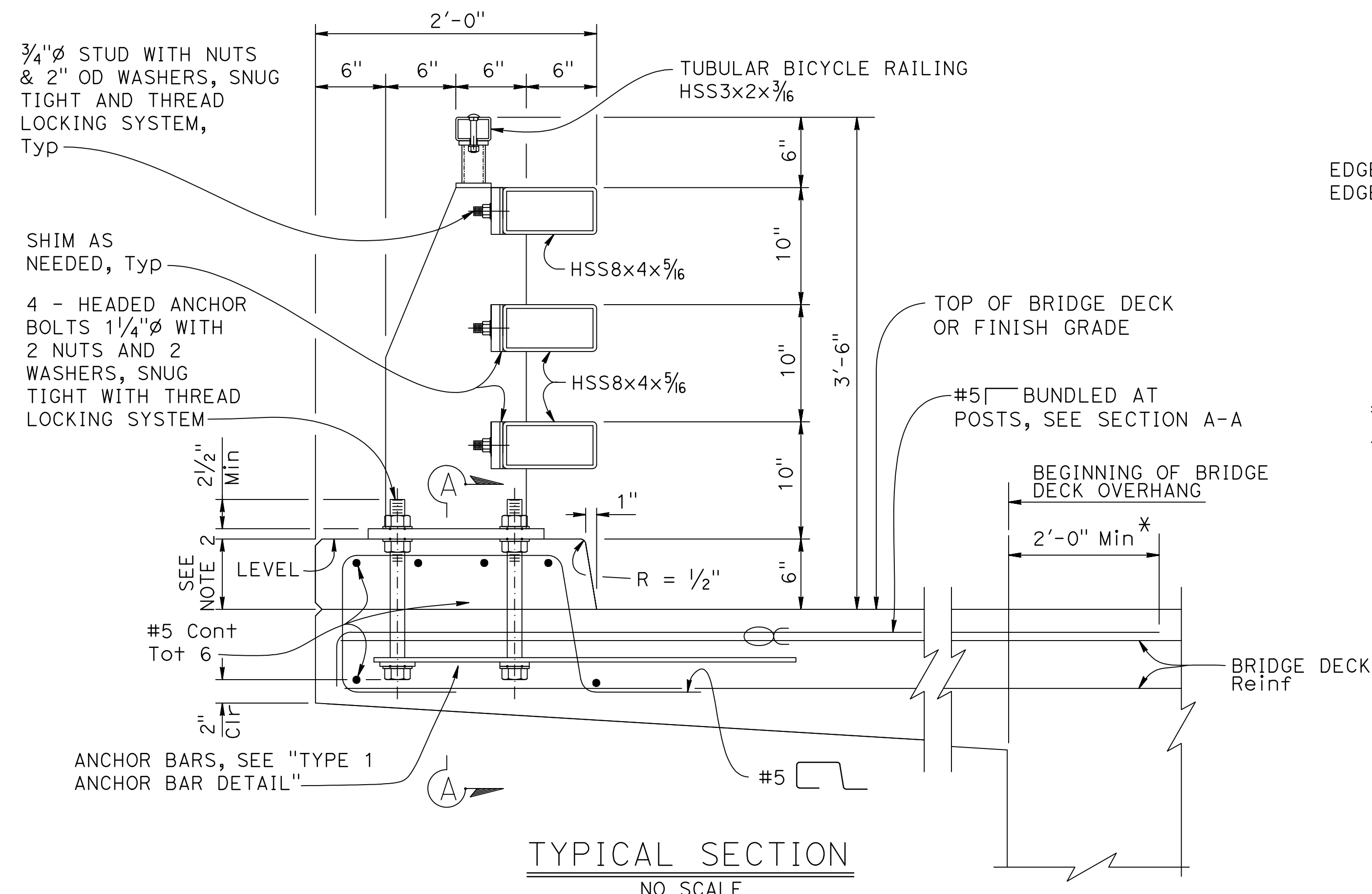
DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
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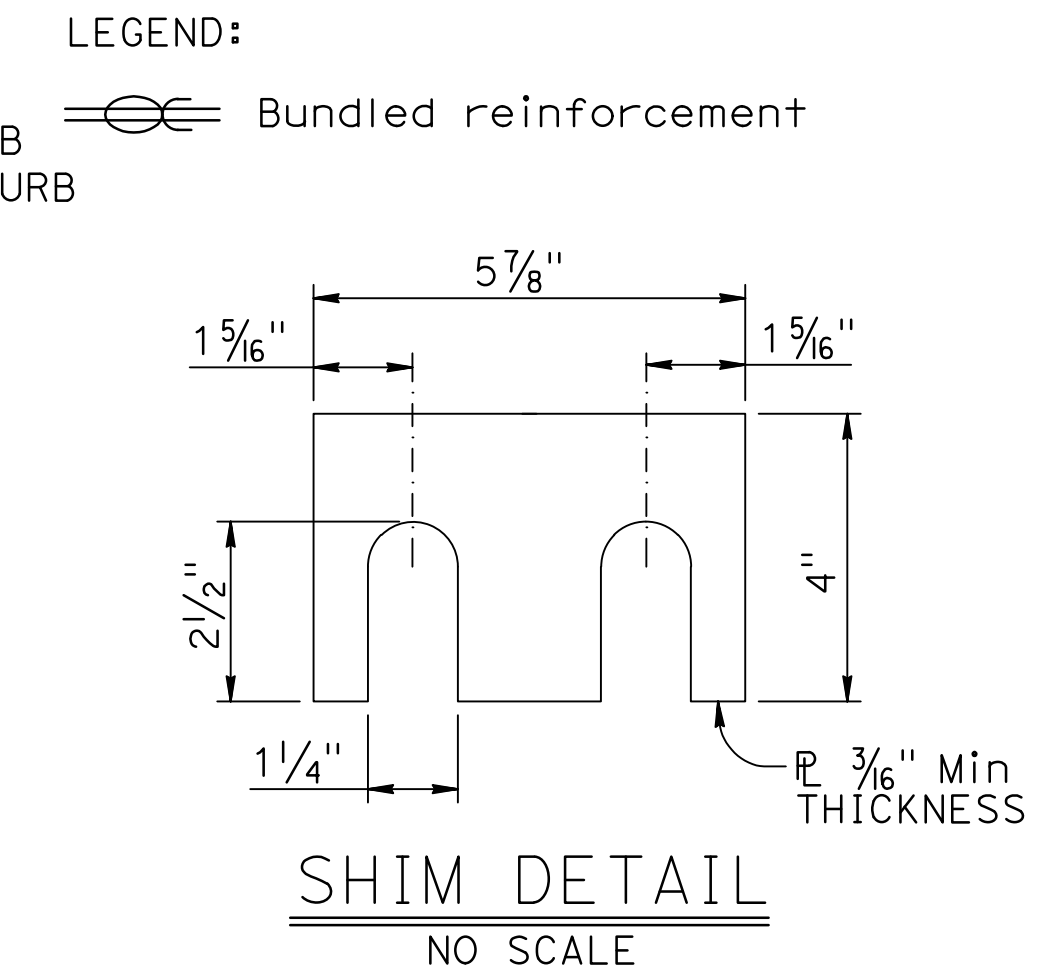
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	26	33

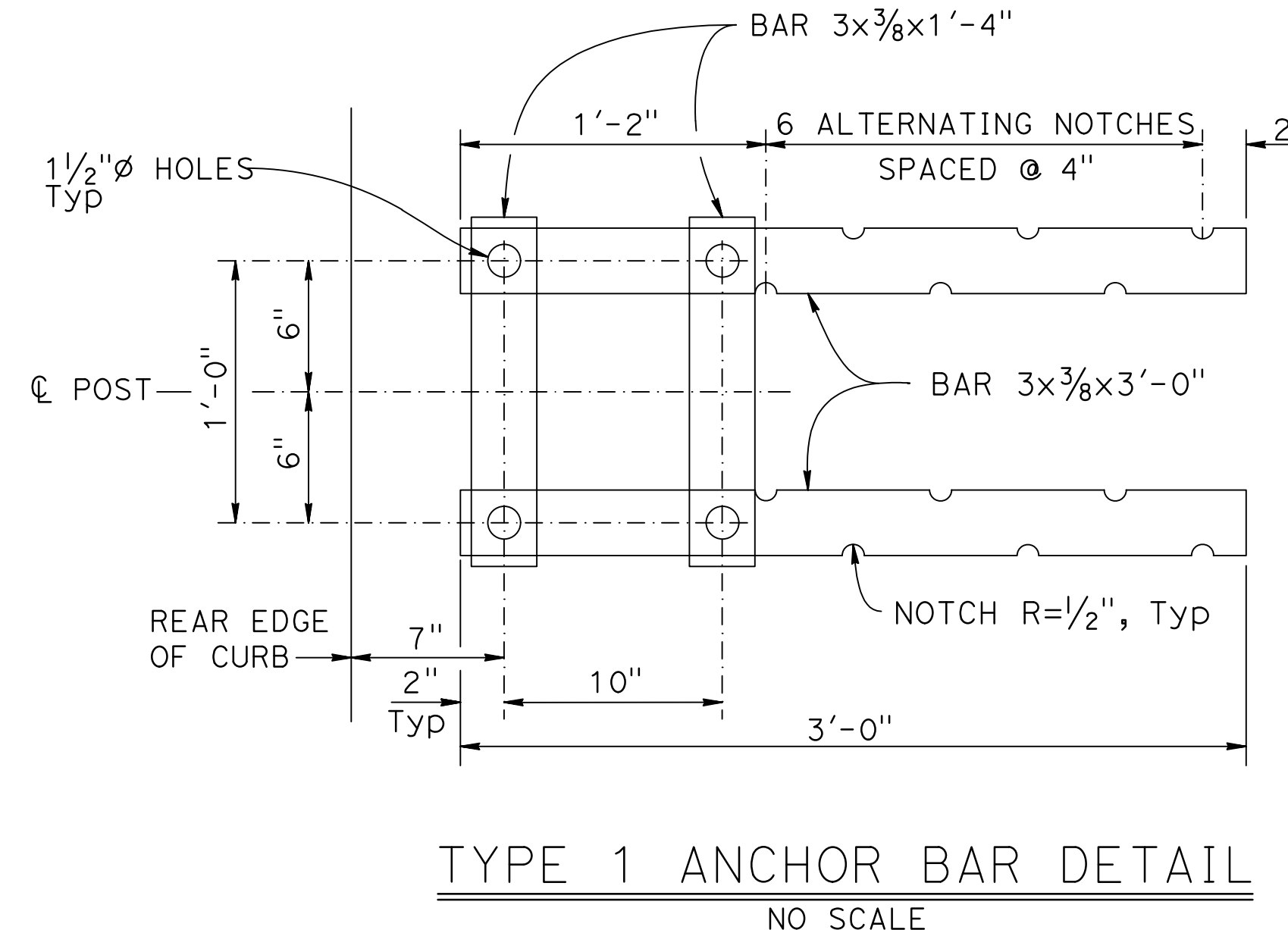
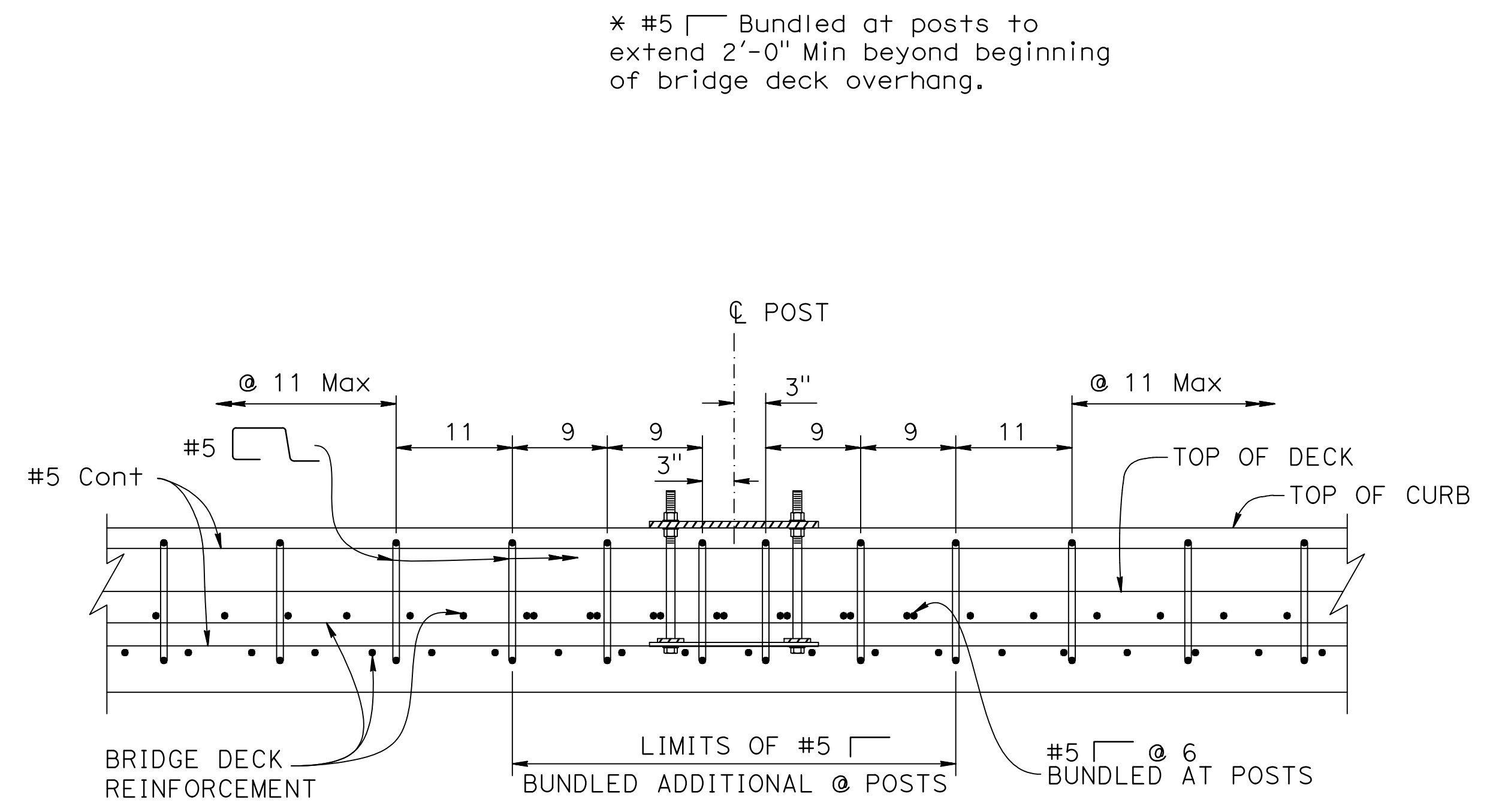
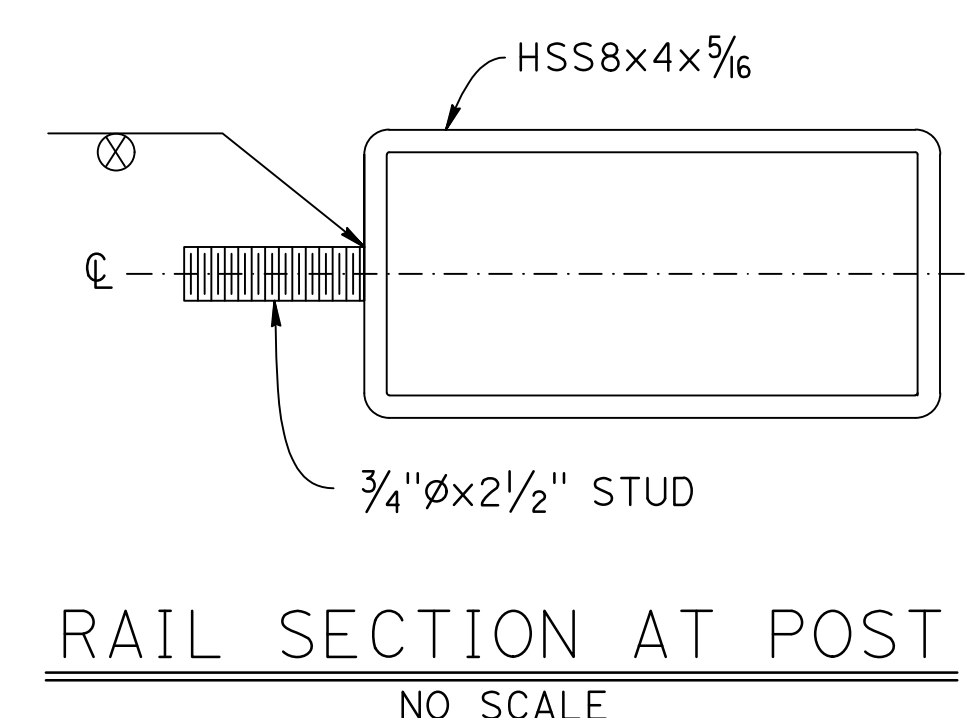
REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



- NOTES:
- Anchor bolts may be tack welded to anchor bars.
 - Curb dimension at back side of rail will vary with bridge deck cross slope, and if overlay is placed on the bridge deck. For the same reasons, the anchor bolt lengths will vary.
 - Use extra thick washers for anchor bolts, with a minimum thickness of 0.305" and a maximum thickness of 0.375".



NOTE:
Shim as needed between posts and HSS rail tubes.



NOTE: Post not shown for clarity.

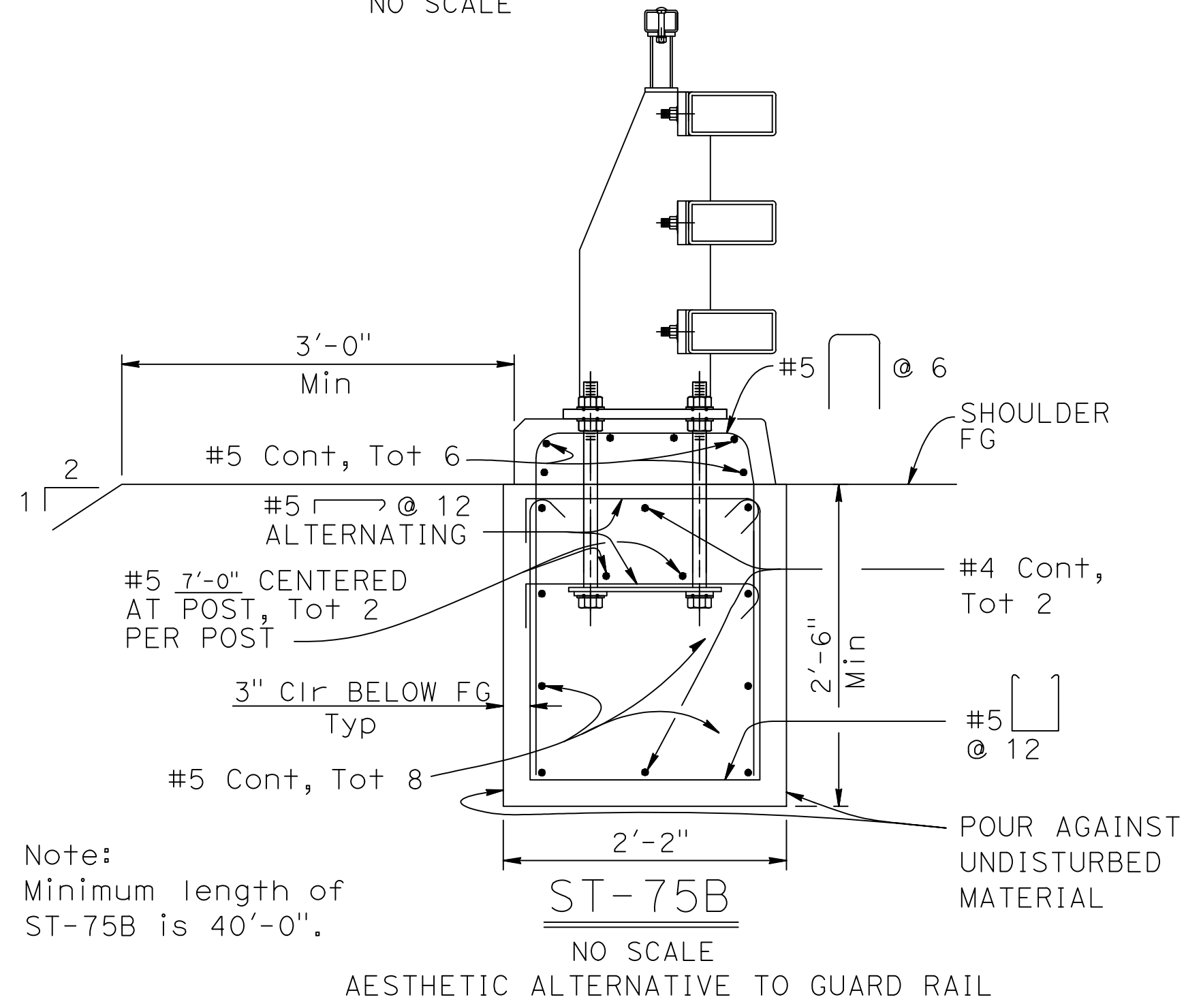
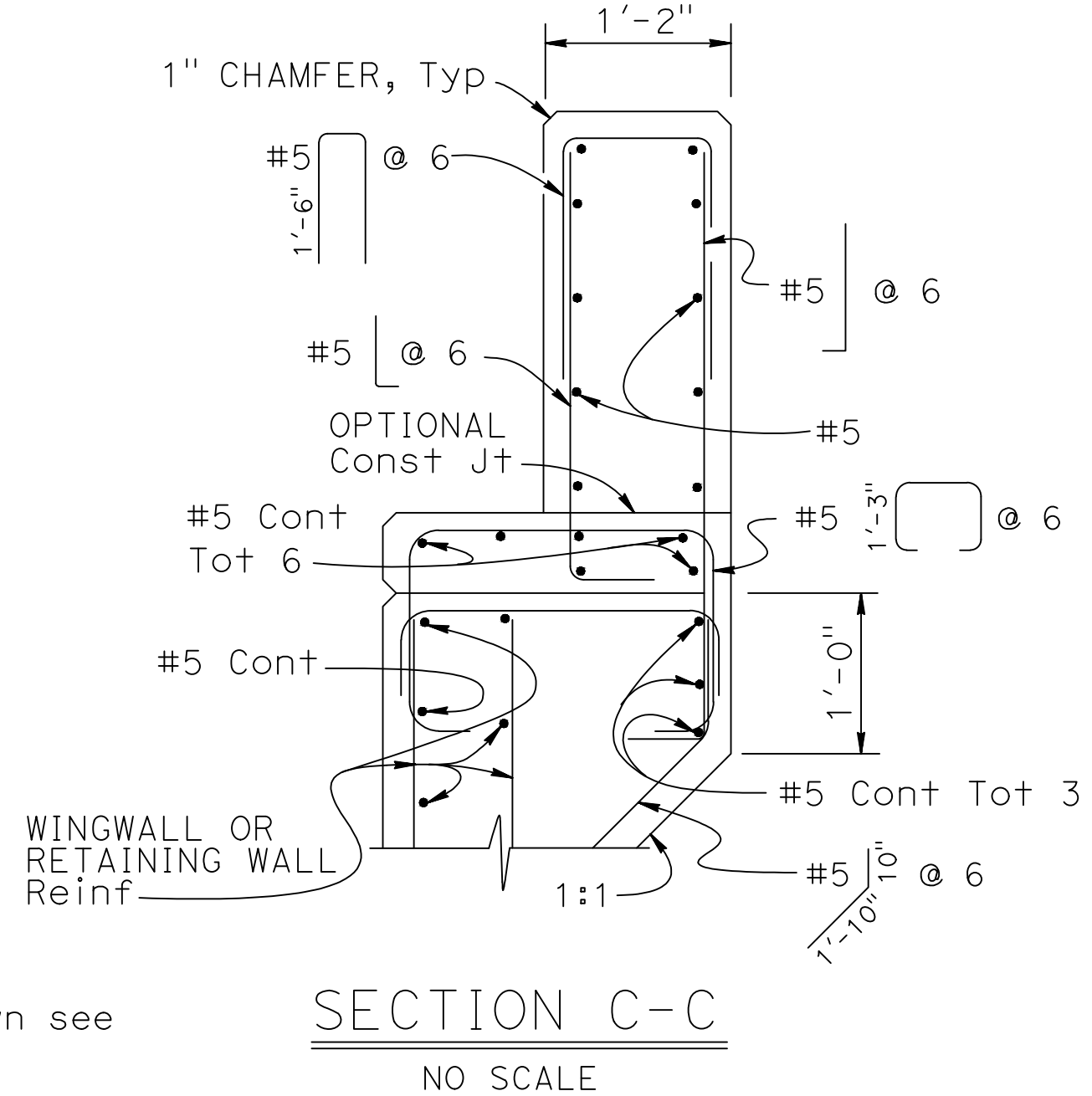
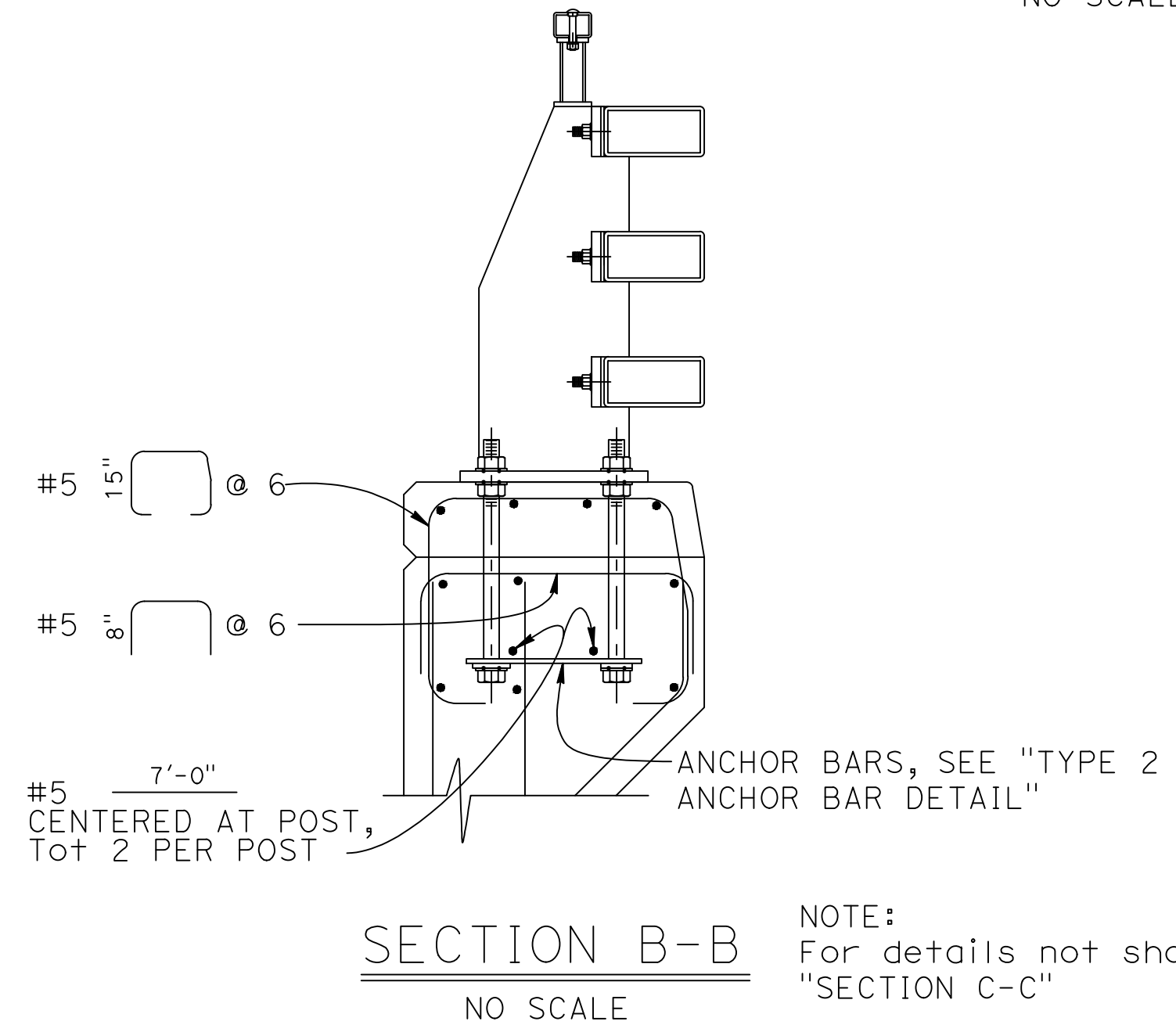
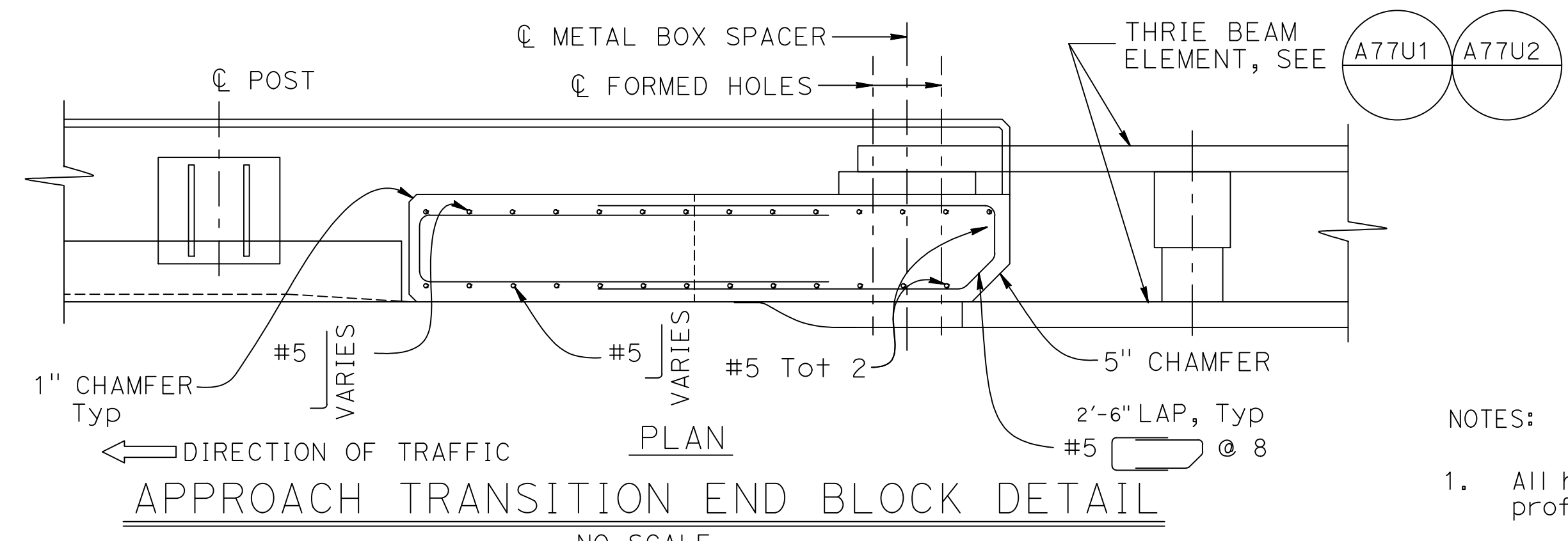
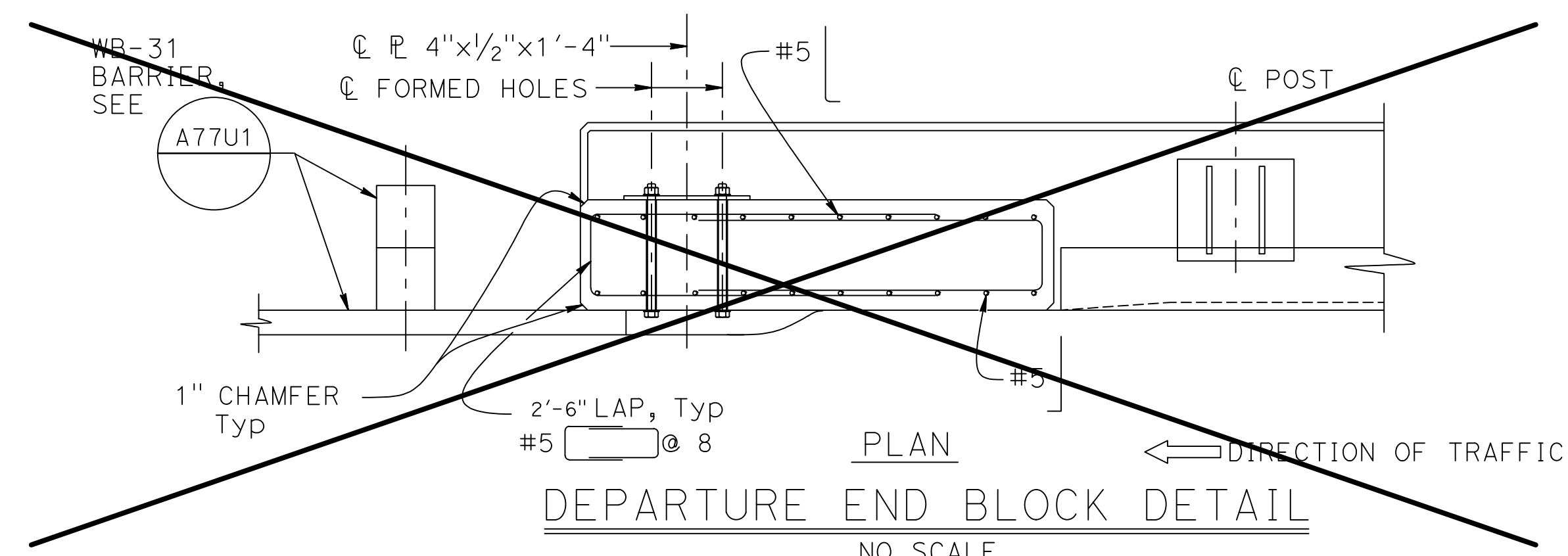
BRIDGE STANDARD DETAILS		DESIGN	BY	CHECKED	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	BRIDGE NO.	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 1		
xs16-116-1	JULY 2022	DETAILS	K. COOK-GUTERIEZ	G. GORDON		11C0179			
FILE NO.	APPROVAL DATE	QUANTITIES				POST MILES			
<small>The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.</small>					G. GORDON PROJECT ENGINEER	NA	<small>DISREGARD PRINTS BEARING EARLIER REVISION DATES</small>		
<small>Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html</small>					<small>ORIGINAL SCALE IN INCHES FOR REDUCED PLANS</small>		<small>REVISION DATES</small>		
					<small>0 1 2 3</small>		<small>12/18/19 06/20/22 01/05/22</small>		
					<small>FILE => 11-0179-r-rspxs16-116-1</small>		<small>SHEET 8 OF 15</small>		

2022 STANDARD PLAN XS-16-116-1 DATE PLOTTED => 05/31/2023 PM 3:29:23 USERNAME => KEVIN

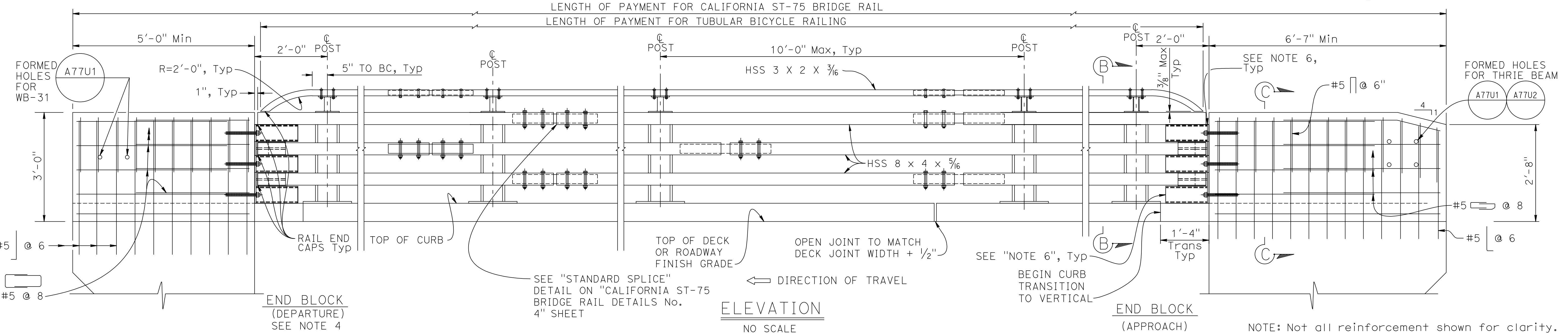
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	27	33

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



- NOTES:**
- All horizontal members are parallel to longitudinal profile grade.
 - Posts are normal to profile grade of structure.
 - Posts are vertical to the transverse cross section.
 - If departure end block is within the Clear Recovery Zone (CRZ, 30 feet for expressways and freeways and 20 feet for conventional highways) of opposing traffic, then use the approach end block at the departure end.
 - Anchor bolts may be tack welded to anchor bars.
 - For parapet shoes details see "CALIFORNIA ST-76 BRIDGE RAIL DETAILS No. 5" SHEET.
- TYPE 2 ANCHOR BAR DETAIL**
NO SCALE



BRIDGE STANDARD DETAILS

xs16-116-2	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.
FILE NO.	APPROVAL DATE	

DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

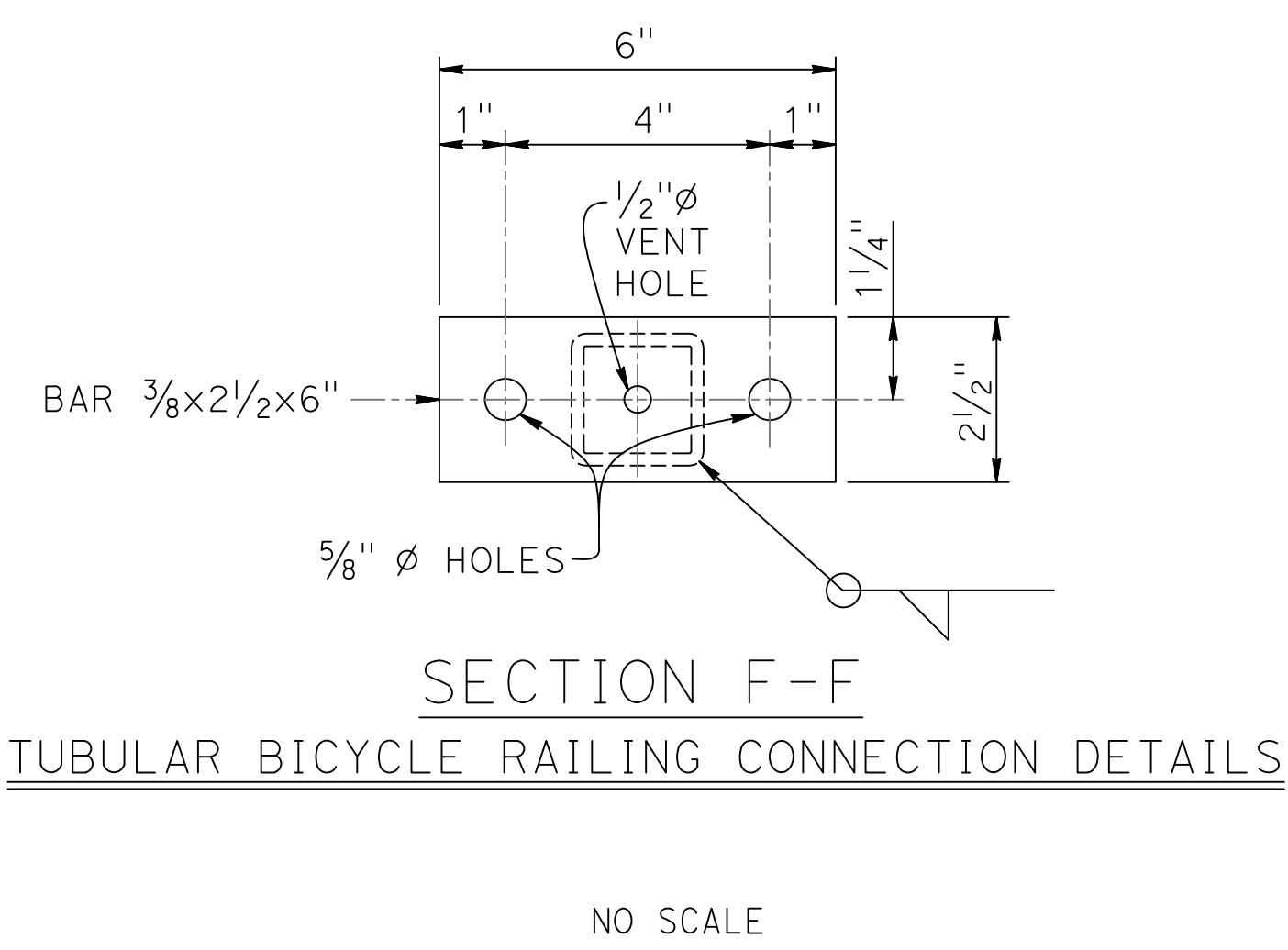
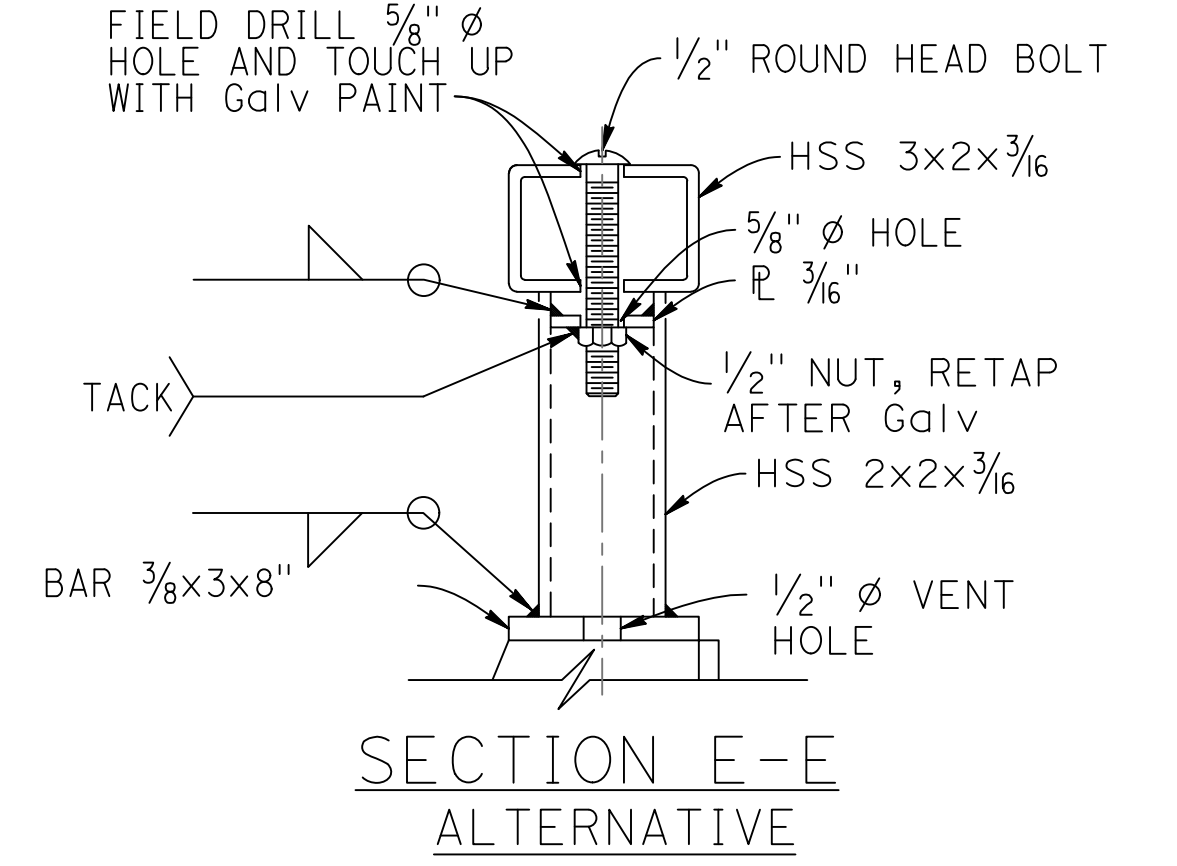
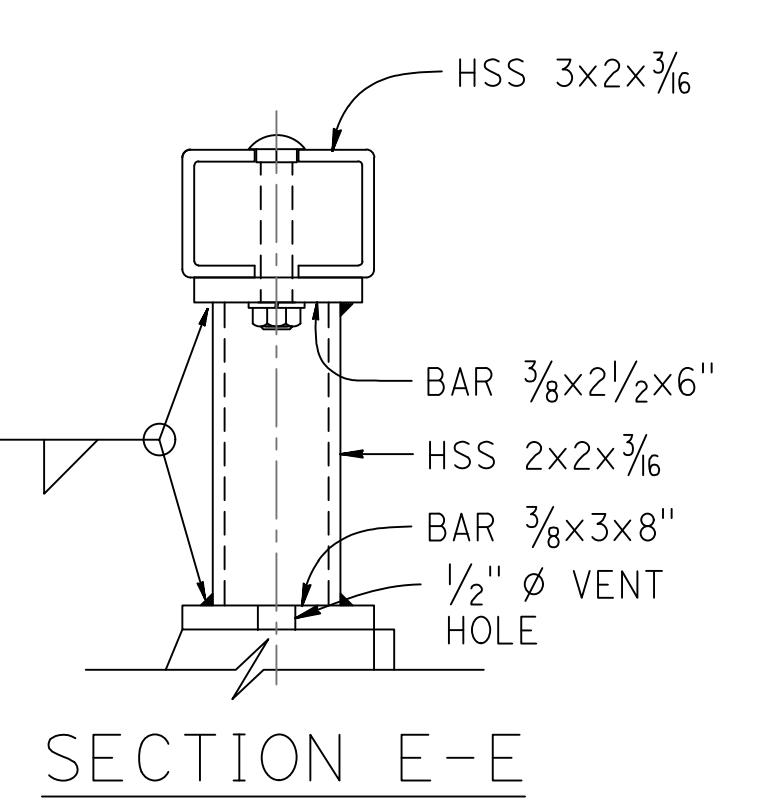
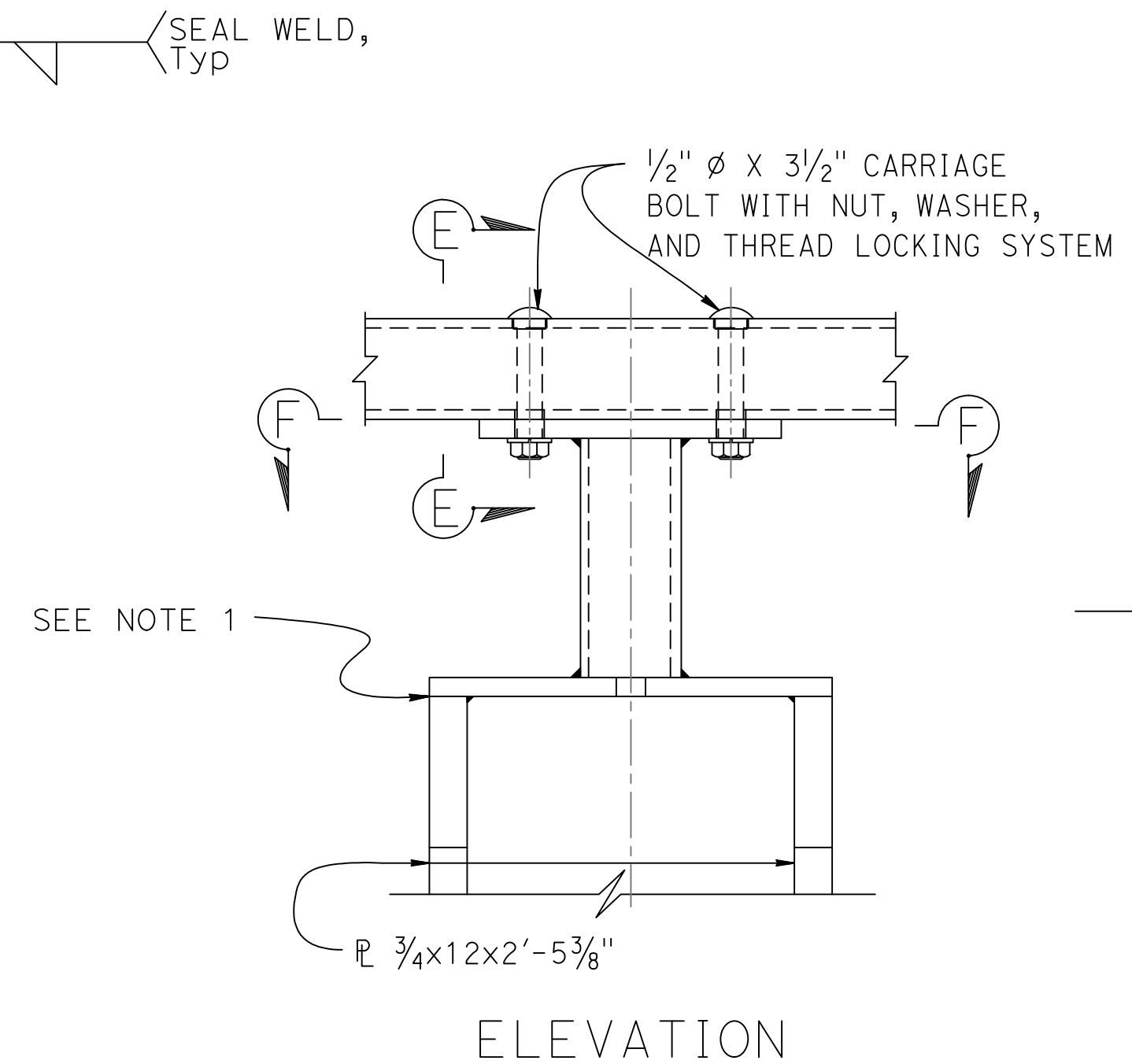
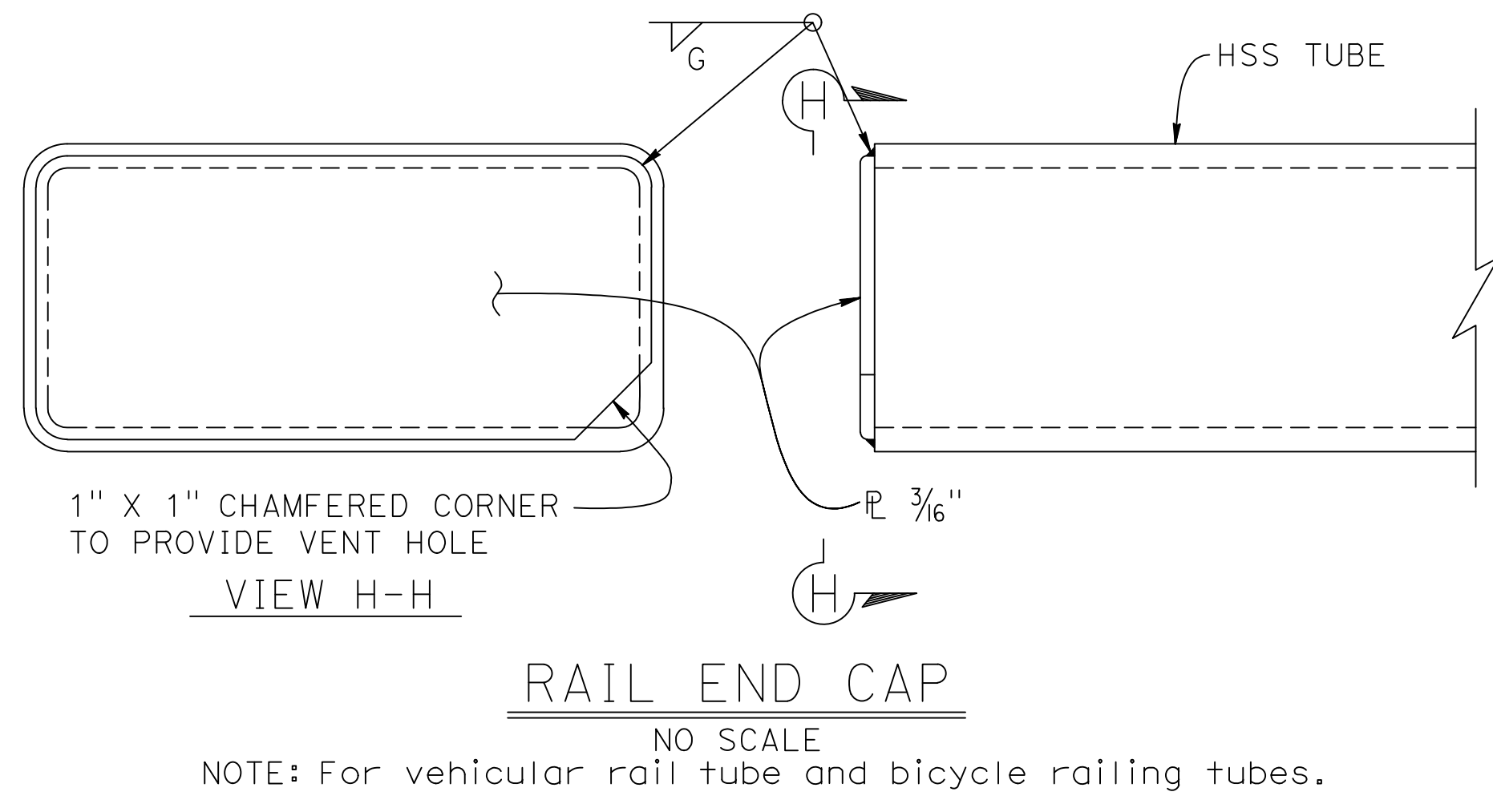
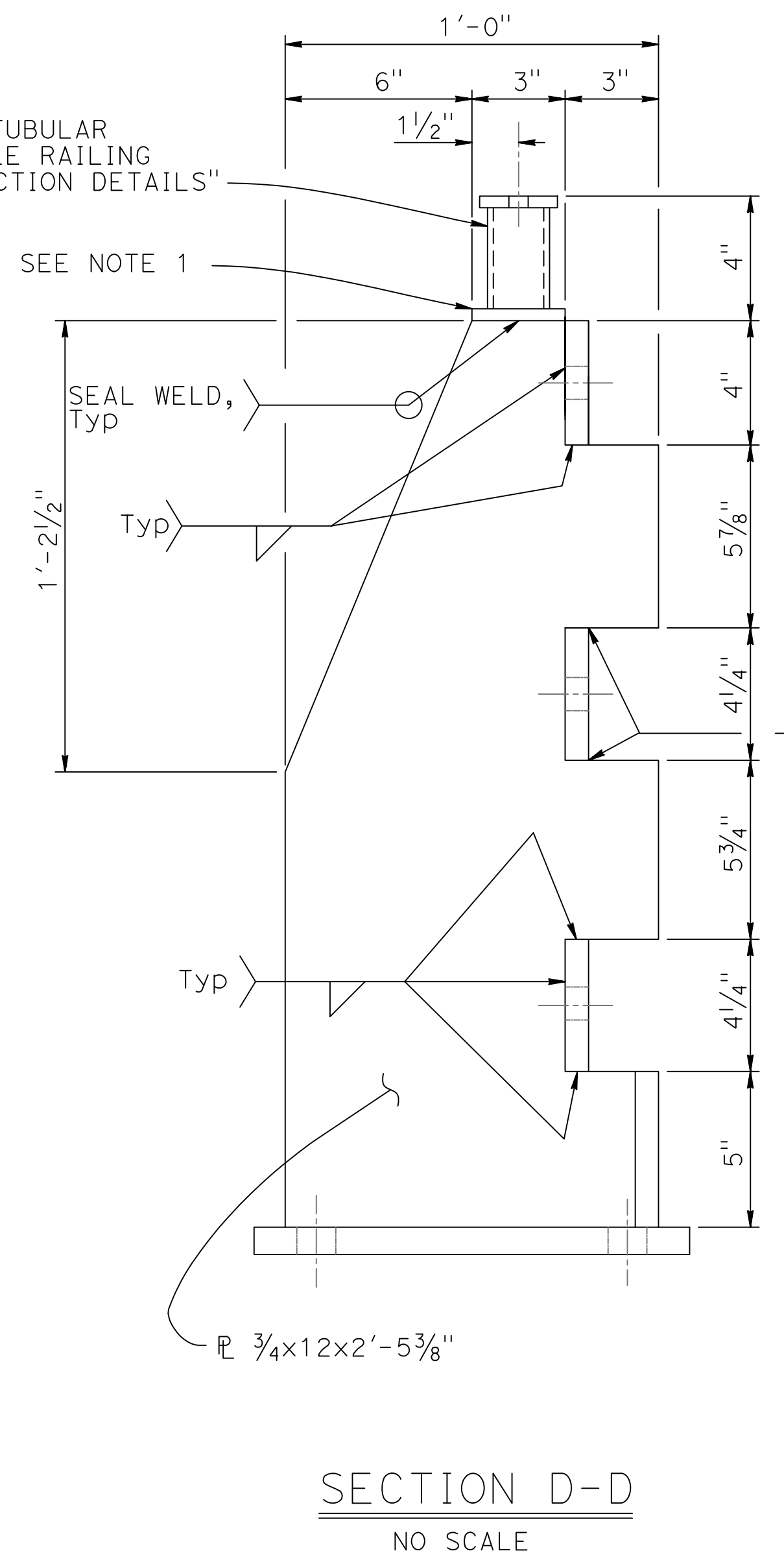
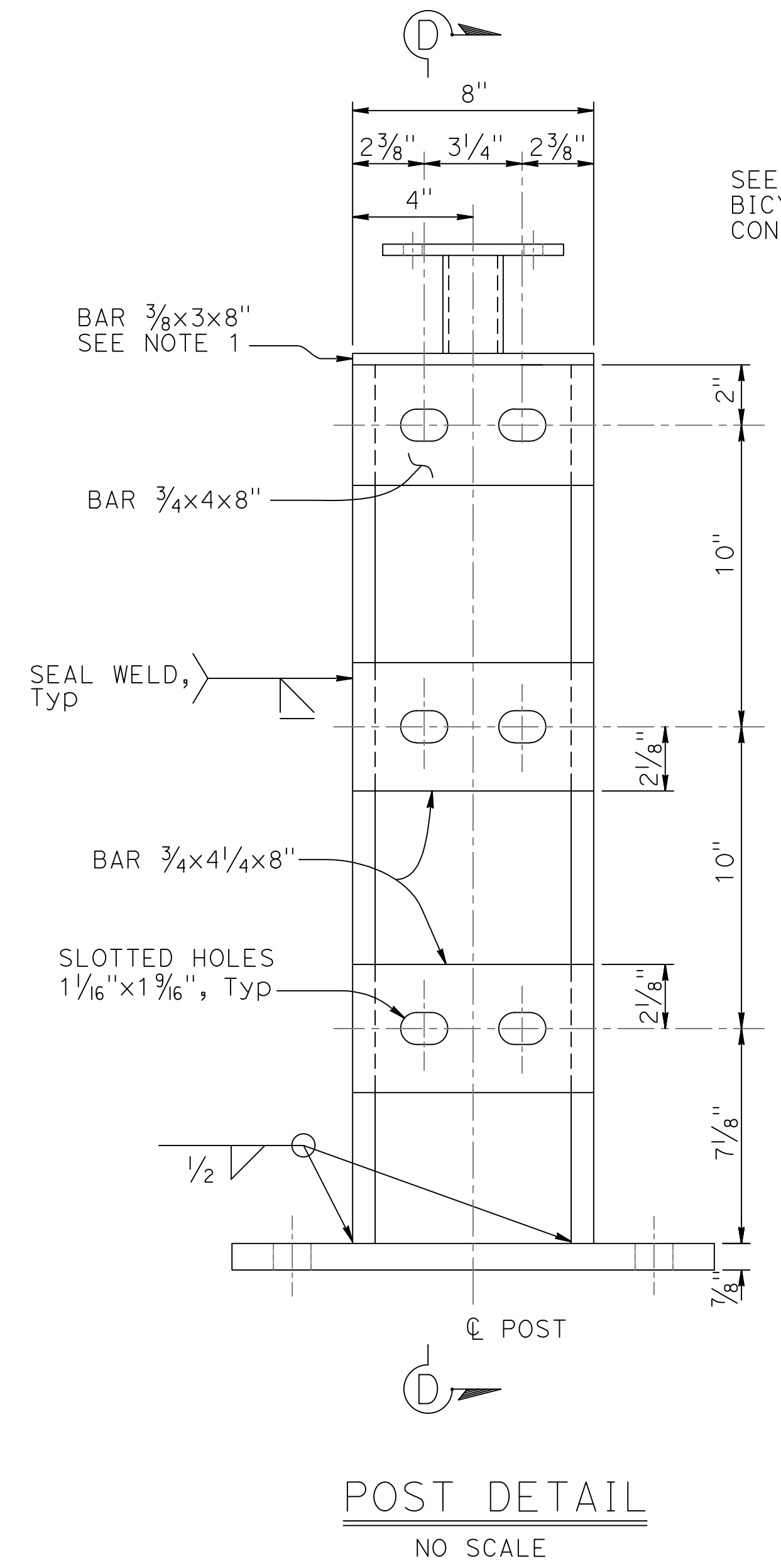
BRIDGE NO.	11C0179	BRANCH HOWARD SLOUGH BRIDGE (REPLACE) CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 2
POST MILES	NA	
REVISION DATES	12/19/19 06/20/22 01/05/22	

2022 STANDARD PLAN XS-16-116-2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	28	33

REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



NOTE:
1. For access controlled freeways and expressways where bicycle traffic is prohibited by signage on the on-ramps, the bicycle railing (includes bar 3/8x3x8" and above) may be omitted.

BRIDGE STANDARD DETAILS		
xs16-116-3 FILE NO.	JULY 2022 APPROVAL DATE	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California

DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0179
		POST MILES NA

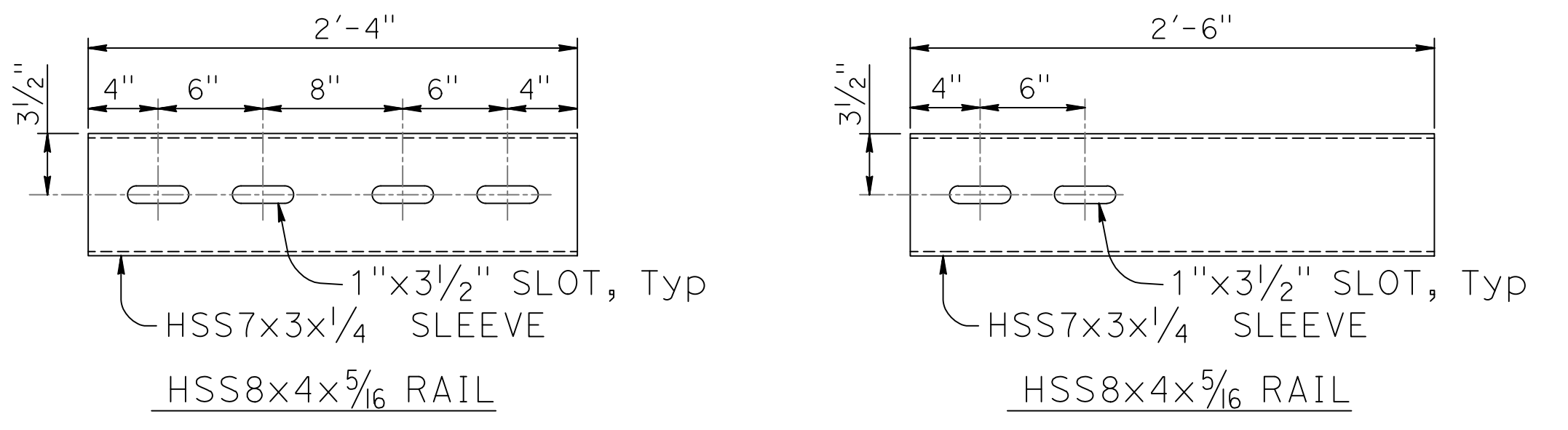
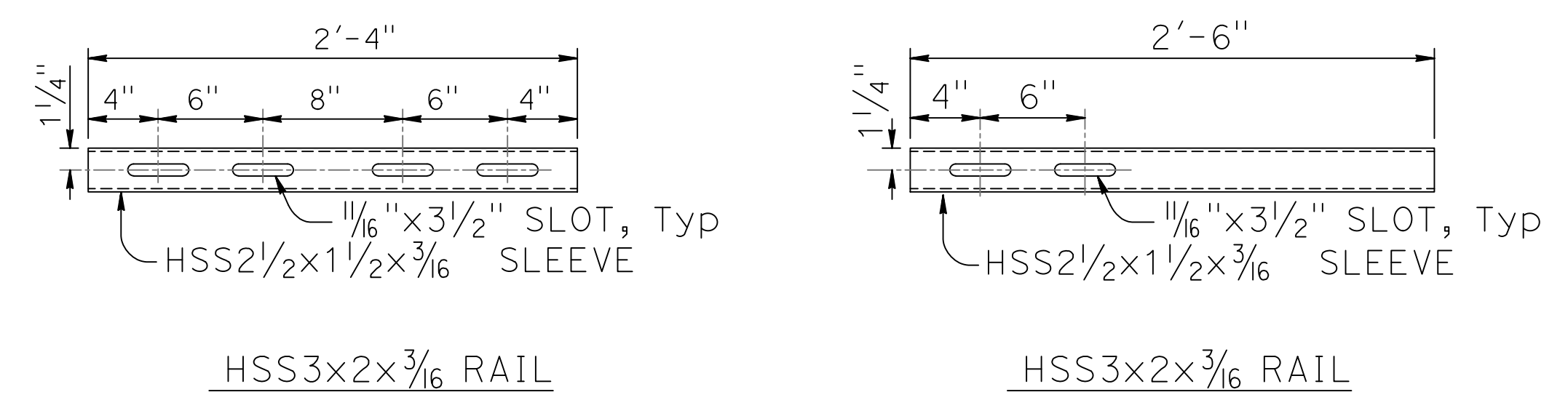
BRANCH HOWARD SLOUGH BRIDGE (REPLACE)		
CALIFORNIA ST-75 BRIDGE RAIL		
DETAILS No. 3		
REVISION DATES	SHEET	OF
12/18/19 06/20/22 01/05/23	10	15

2022 STANDARD PLAN XS-16-116-3

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	29	33

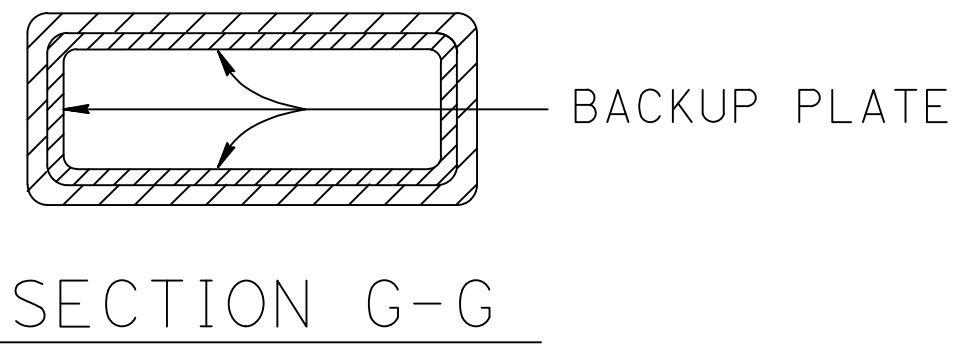
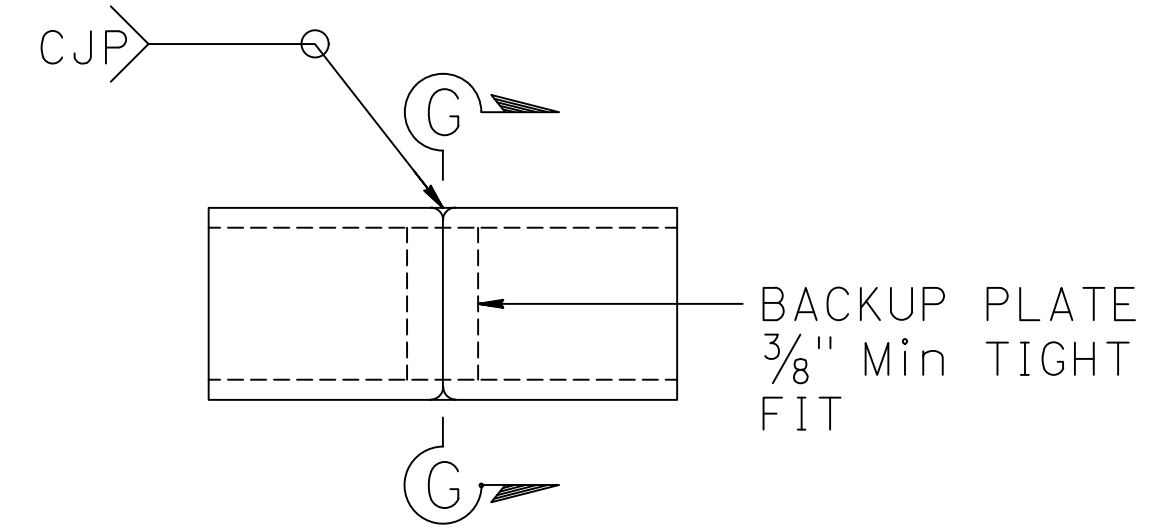
REGISTERED CIVIL ENGINEER
 DATE 05-31-23
 May 31, 2023
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 GARY M. GORDON
 No. 42176
 Exp. 03-31-24
 CIVIL
 STATE OF CALIFORNIA



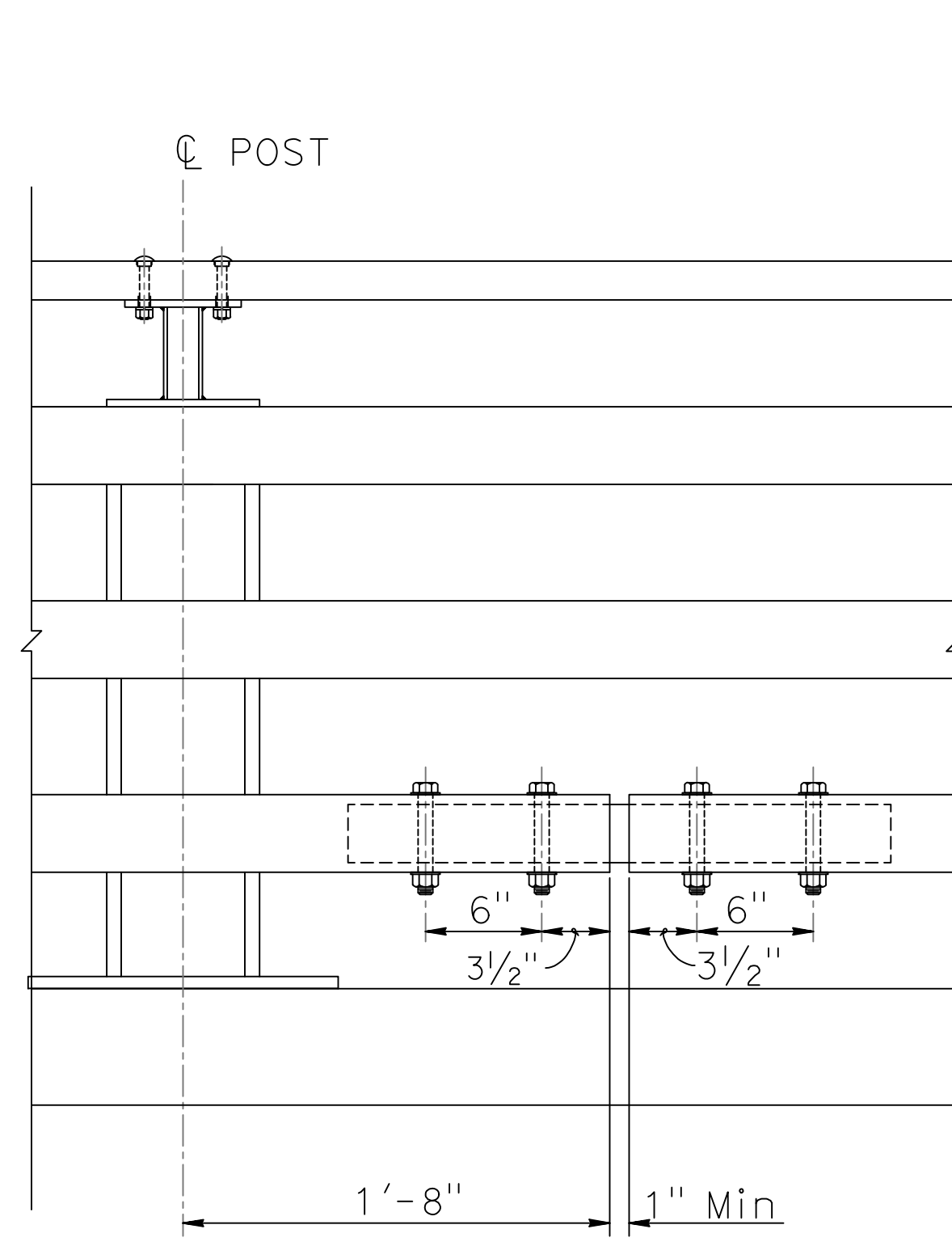
STANDARD SLEEVES
DETAILS
NO SCALE

EXPANSION SLEEVES
DETAILS
NO SCALE

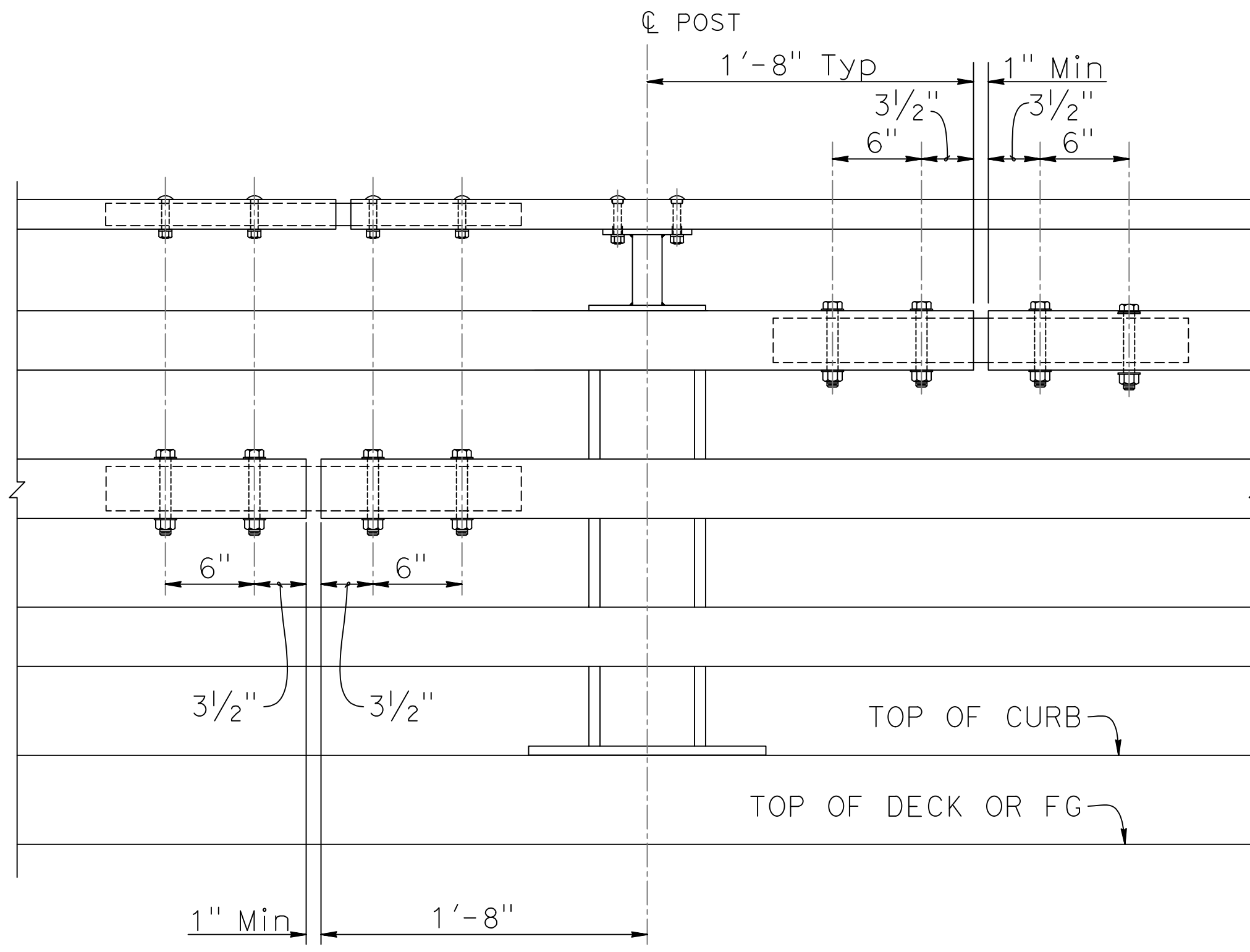


ALTERNATE TUBE
WELDED STANDARD SPLICE
NO SCALE

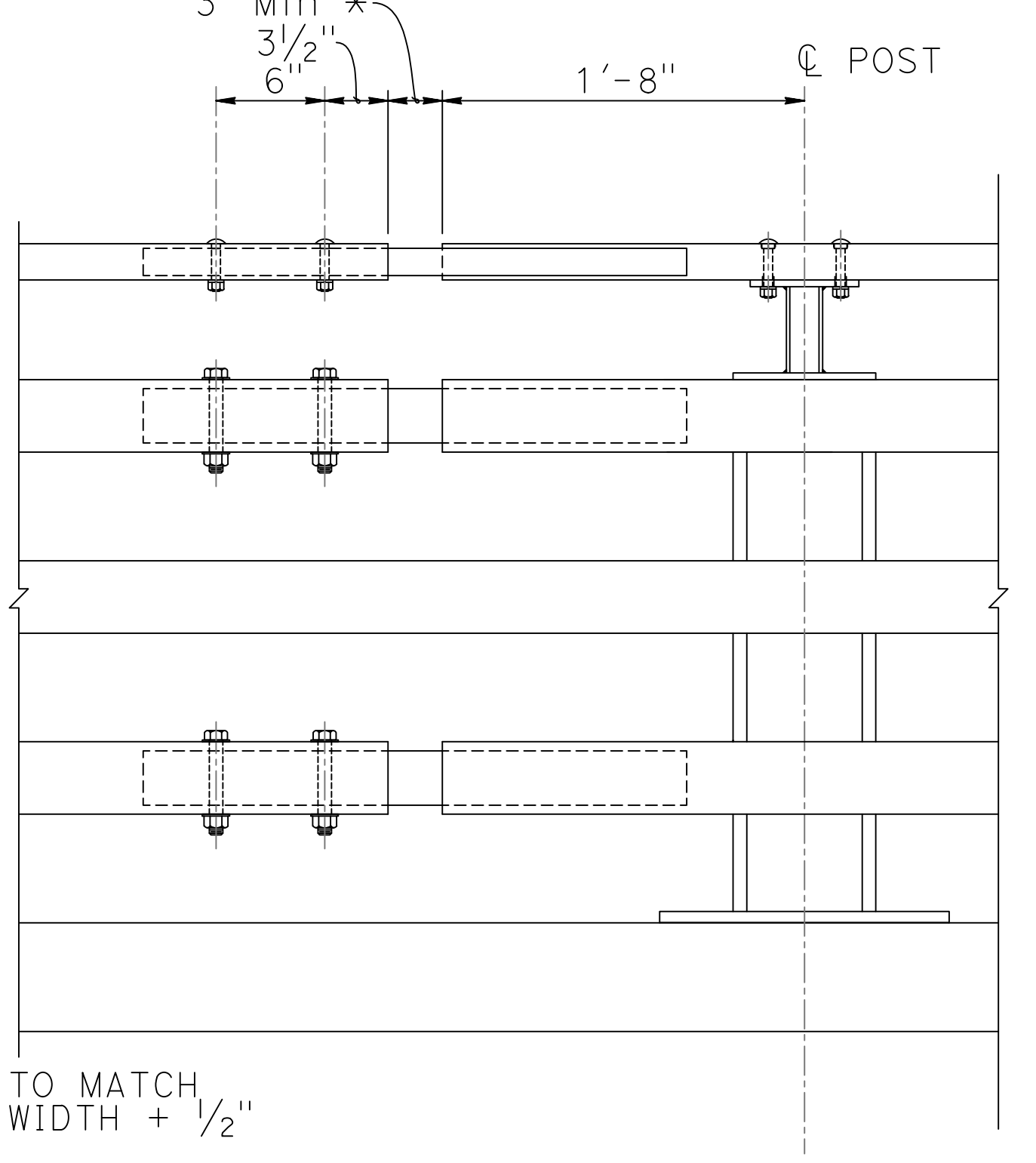
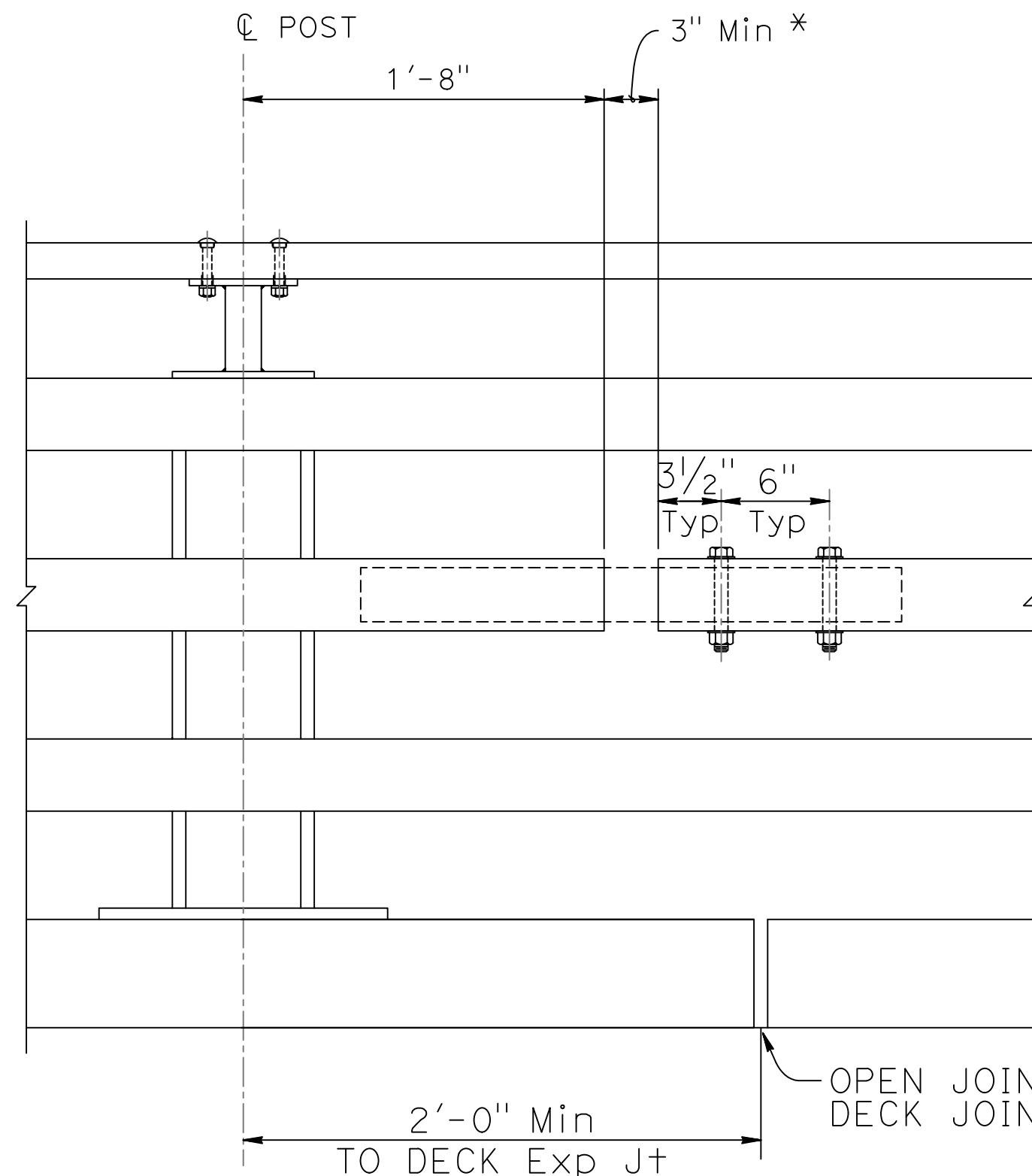
- NOTES:
- HS bolts with nut and washers, snug tightened, and thread locking system.
 - Use 1/2" x 3/16 BOLTS (HSS3x2x3/16)
Use 3/4" x 5/16 BOLTS (HSS8x4x5/16)
 - Each rail length must be continuous over a minimum of two posts.
 - The fabricator must check that the tubular sleeve splices conform to the dimensions indicated to assure proper clearance.
 - Except for expansion splices, not more than one splice permitted per same side of post.



STANDARD SPLICE
NO SCALE



EXPANSION SPLICE
NO SCALE
* Match deck or wall joint



BRIDGE STANDARD DETAILS		
xs16-116-4	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California
FILE NO.	APPROVAL DATE	

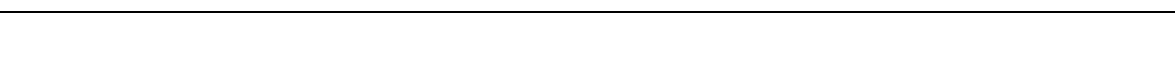
DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR	G. GORDON
COUNTY OF GLENN	PROJECT ENGINEER
PUBLIC WORKS AGENCY	

BRIDGE NO.	11C0179	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
POST MILES	NA	
NA		
CALIFORNIA ST-75 BRIDGE RAIL		DETAILS No. 4

Refer to: <http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html>

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



FILE => 11-0179-r-rspxs16-116-4

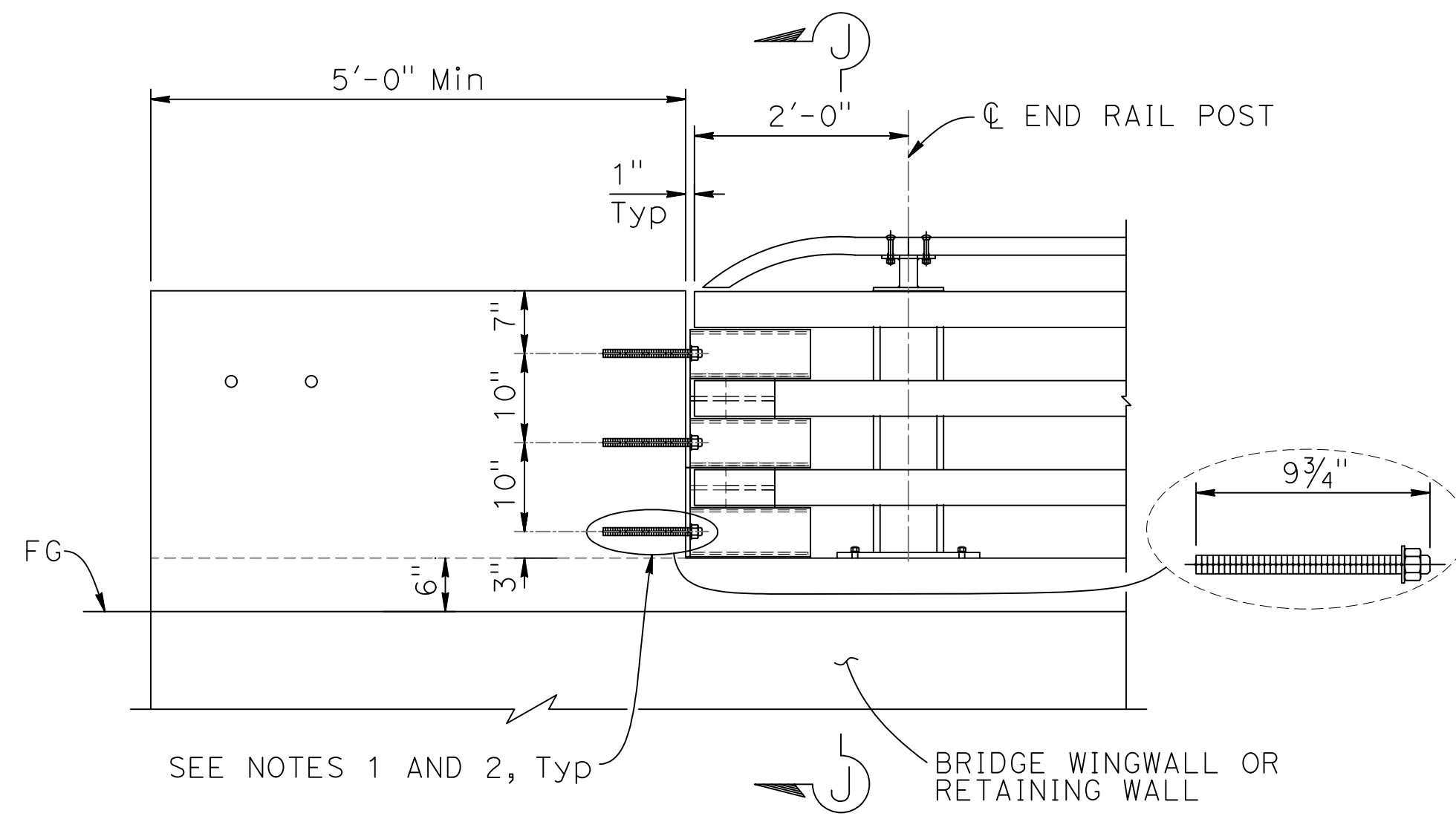
DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	12/19/19 06/20/22 07/05/22	11	15

2022 STANDARD PLAN XS-16-116-4 DATE PLOTTED => 05/31/2023 PM 3:36:42 USERNAME => KEVIN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	30	33

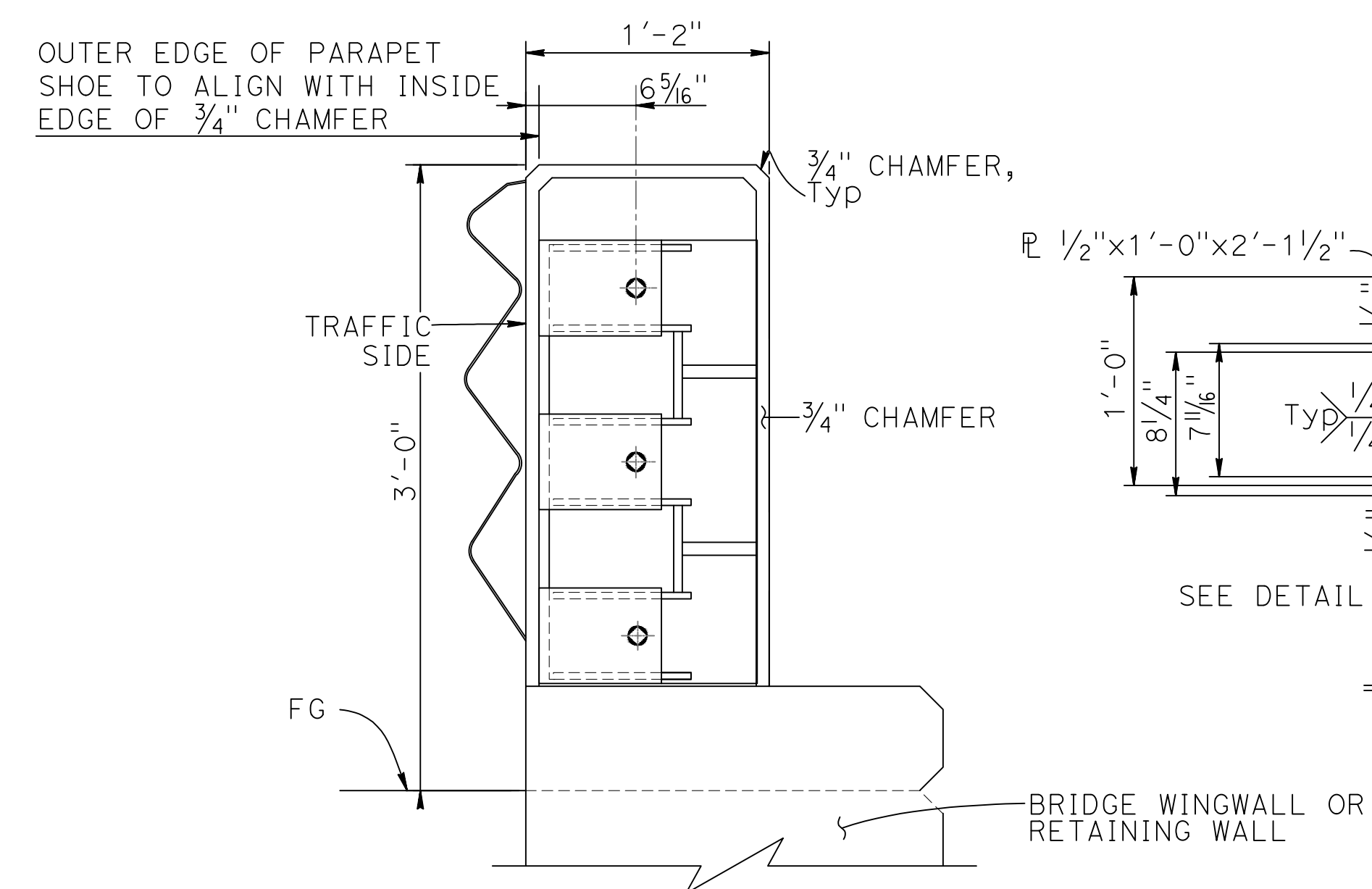
REGISTERED CIVIL ENGINEER	DATE	05-31-23
May 31, 2023		
PLANS APPROVAL DATE		

REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA



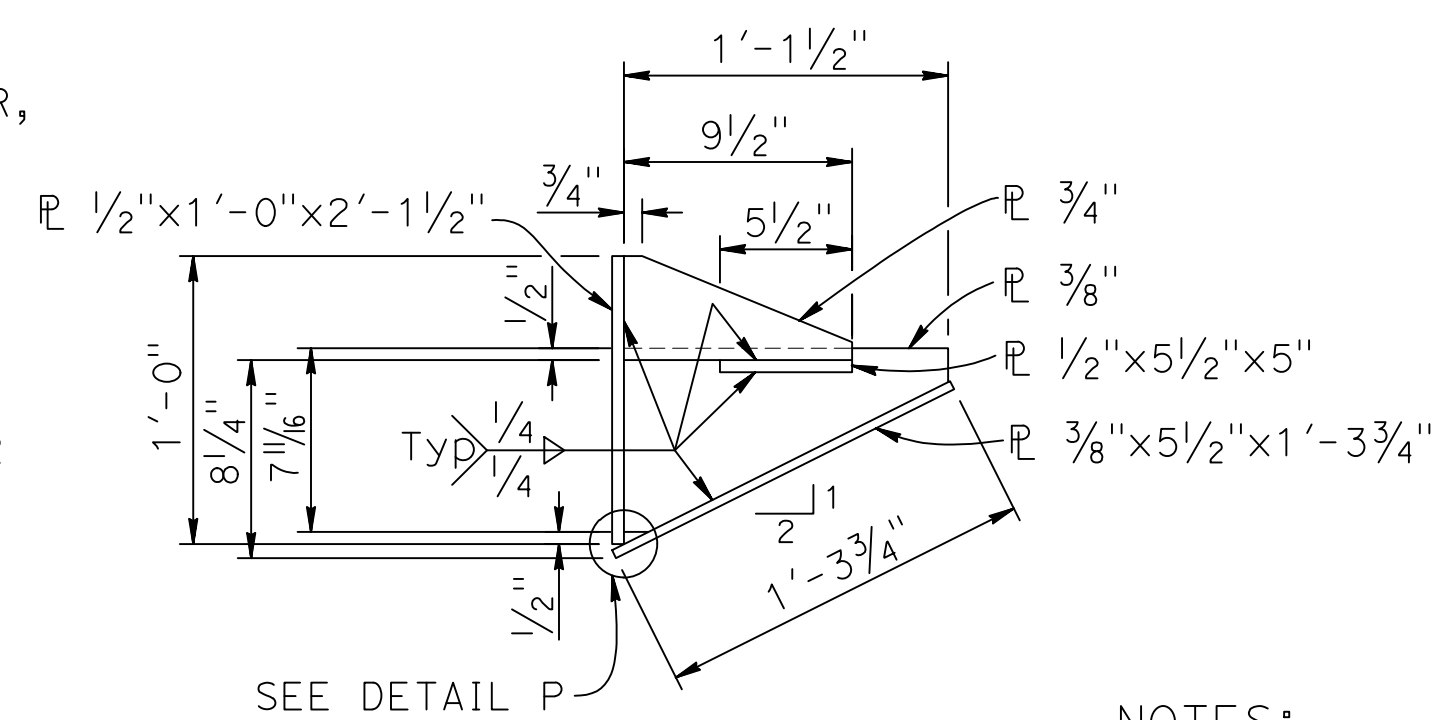
PARAPET SHOE AT DEPARTURE END BLOCK

NOTE: Parapet shoe connection to approach end block is similar.



SECTION J-J

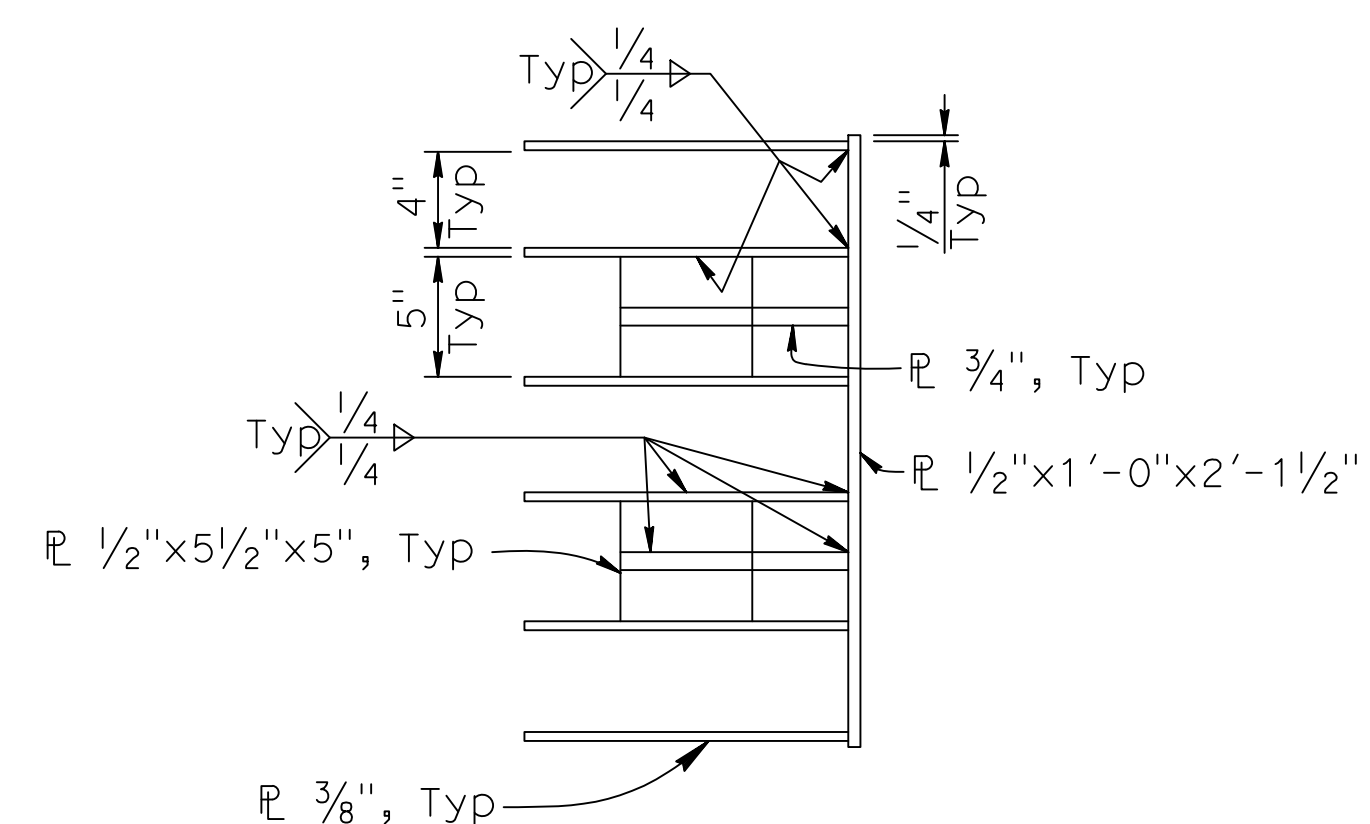
NOTE: Bridge railing not shown clarity.



SECTION K-K

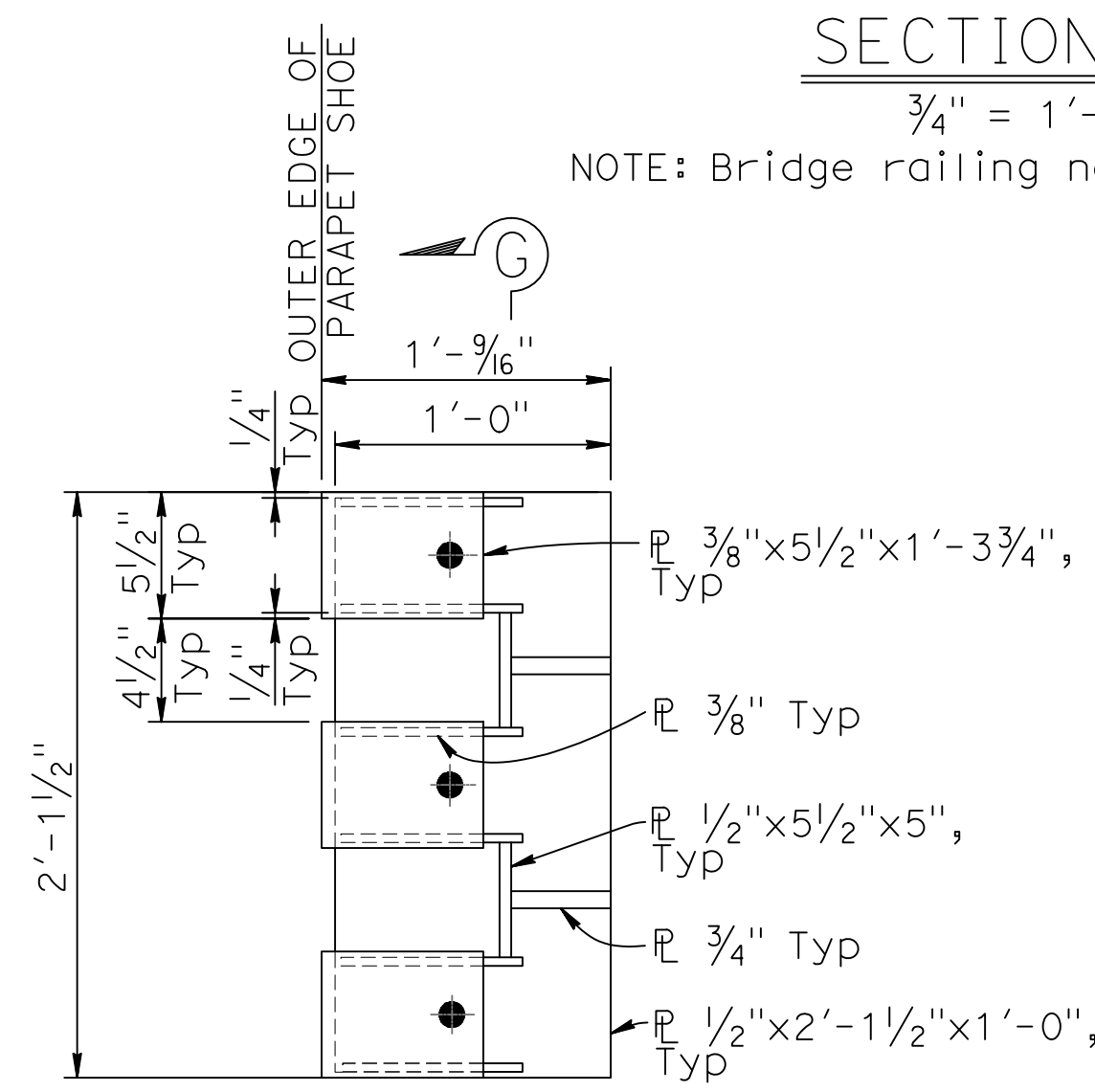
NOTES:

- Anchor bolts must be 7/8" Dia and ASTM F1554 Grade 105 fully threaded rods with heavy hex nut and one hardened washer (1 3/4" OD) each. Embed threaded rods 8" into concrete anchor block with DRILL AND BOND (CHEMICAL ADHESIVE) anchorage system.
- DRILL AND BOND (CHEMICAL ADHESIVE) anchorages is subjected to approval of Engineer. Installation procedure must comply with manufacture's instructions.



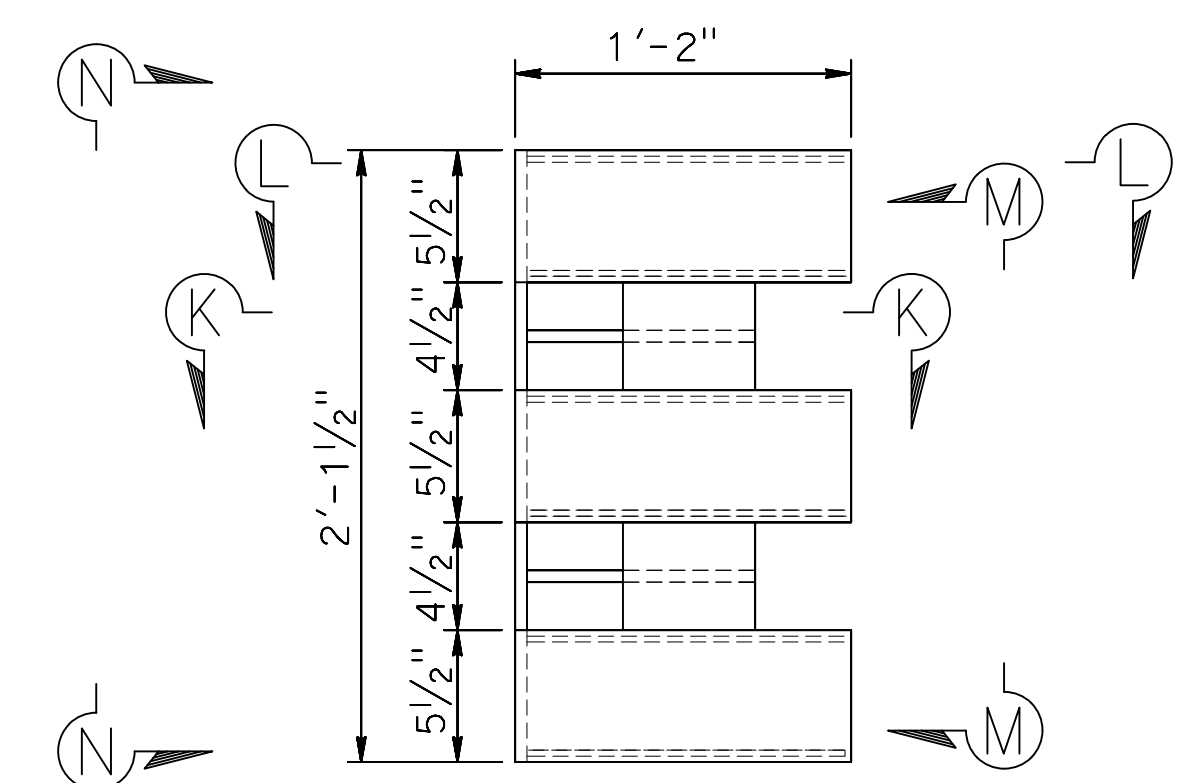
SECTION Q-Q

1/2" = 1'-0"



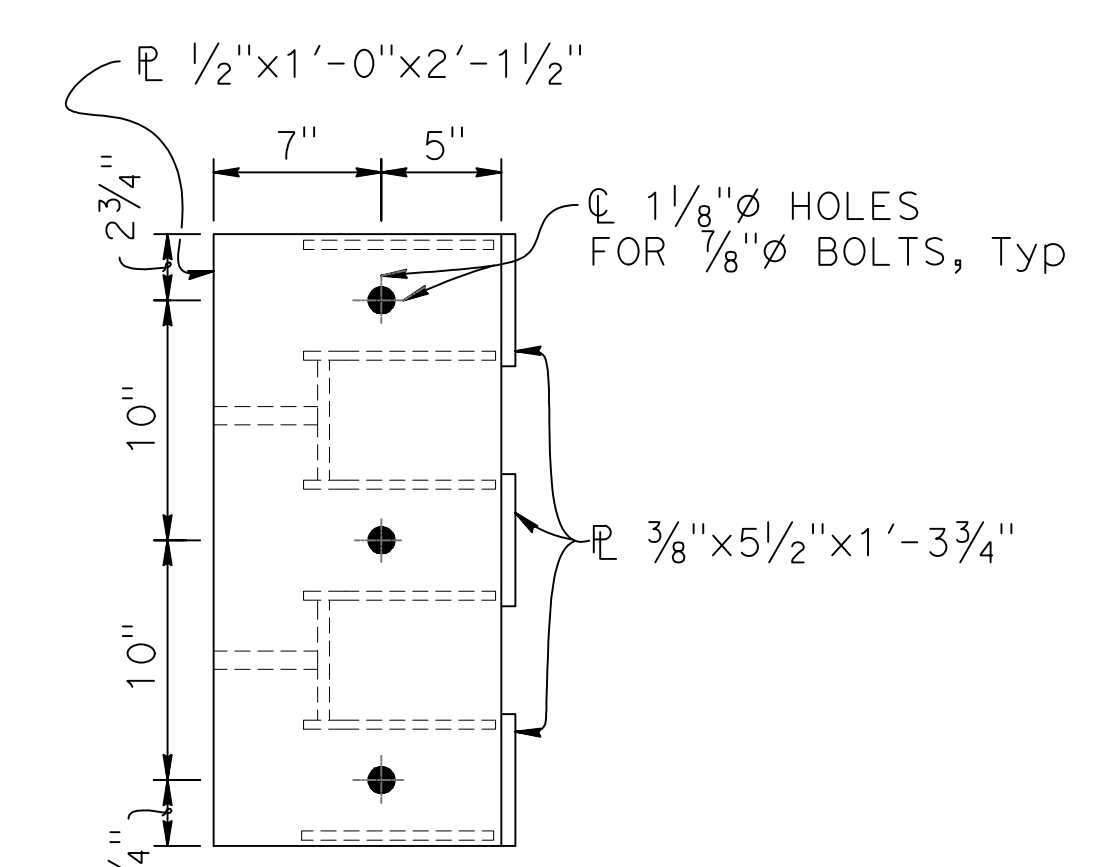
VIEW M-M

1/2" = 1'-0"



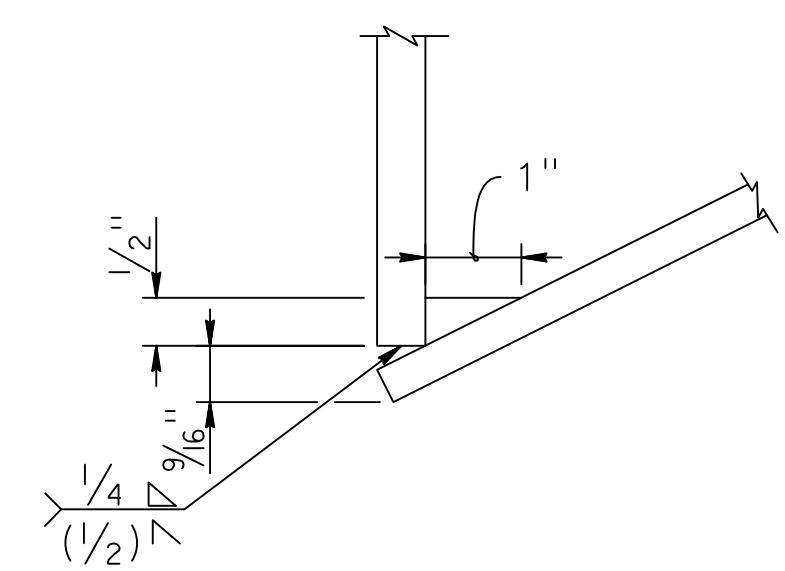
PARAPET SHOE ELEVATION

1/2" = 1'-0"



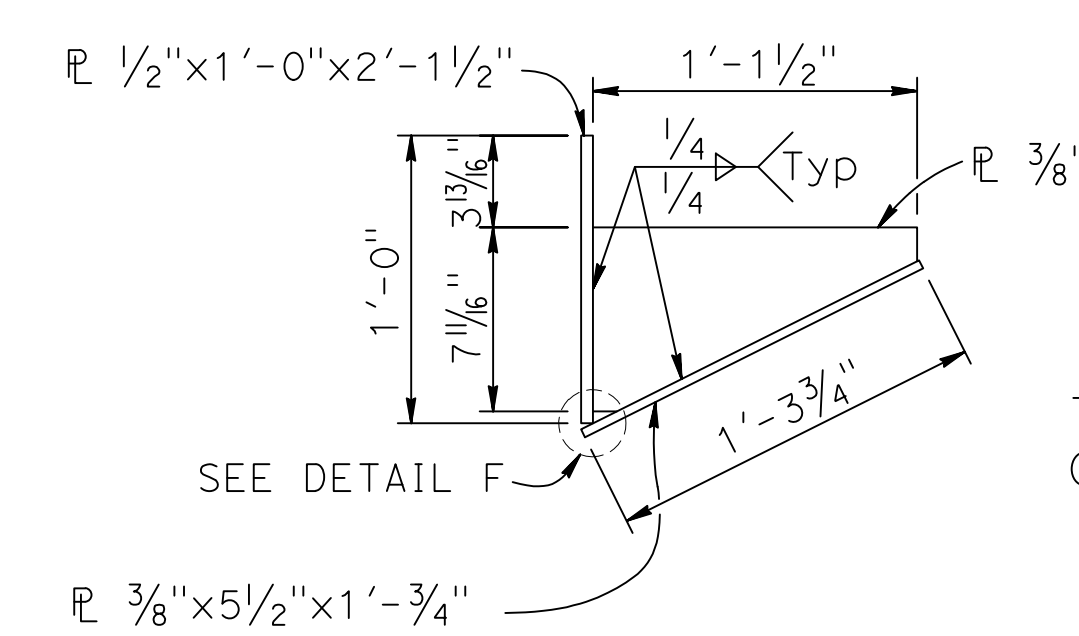
VIEW N-N

1/2" = 1'-0"



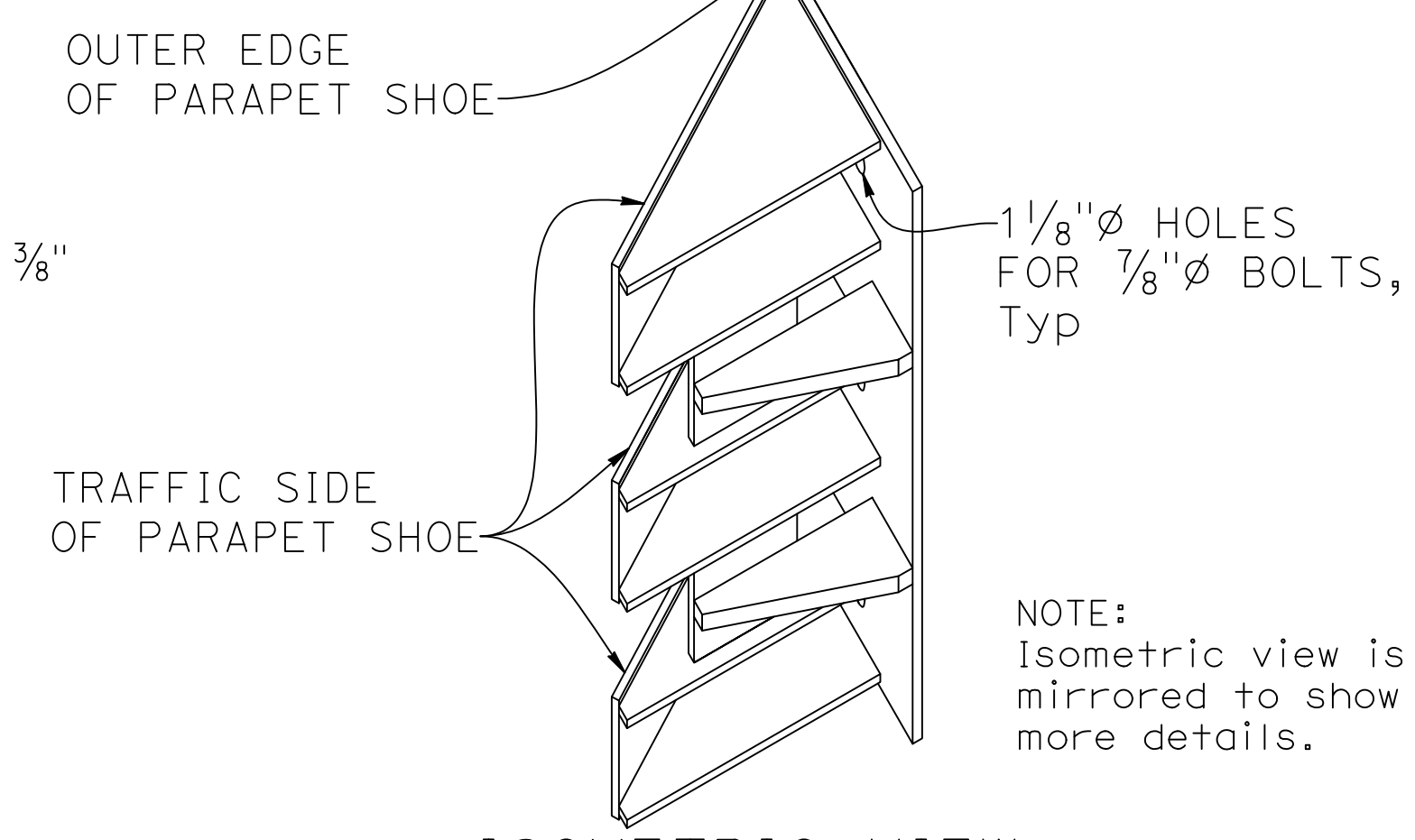
DETAIL F

6" = 1'-0"



SECTION L-L

1/2" = 1'-0"



ISOMETRIC VIEW

1/2" = 1'-0"

NOTE: Isometric view is mirrored to show more details.

BRIDGE STANDARD DETAILS		
xs16-116-5	JULY 2022	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California
FILE NO.	APPROVAL DATE	

DESIGN	BY	CHECKED
DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON
QUANTITIES	BY	CHECKED

PREPARED FOR	G. GORDON	BRIDGE NO.	11C0179
COUNTY OF GLENN	PROJECT ENGINEER	POST MILES	NA
PUBLIC WORKS AGENCY			

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)			
CALIFORNIA ST-75 BRIDGE RAIL			
DETAILS No. 5			

Refer to: <http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html>

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

FILE => 11-0179-r-rspxs16-116-5

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET	OF
	12/19/19 06/30/22 01/05/23	12	15

2022 STANDARD PLAN XS-16-116-5 DATE PLOTTED => 05/31/2023 3:37:46 PM USERNAME => KEVIN

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	31	33

7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
 PLANS APPROVAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 ROSS KHIABANI
 No. GE2202
 Exp. 6/30/20
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806

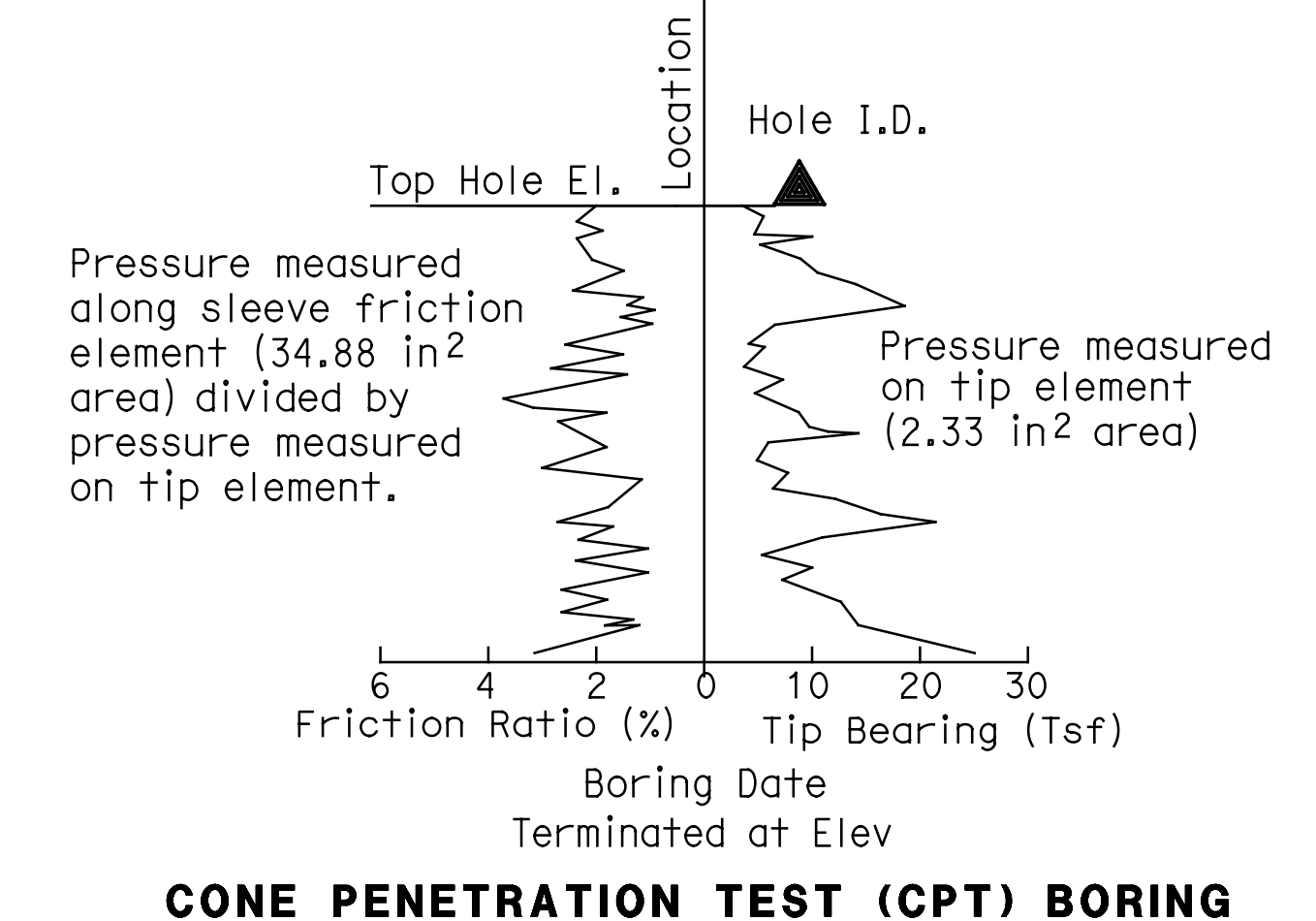
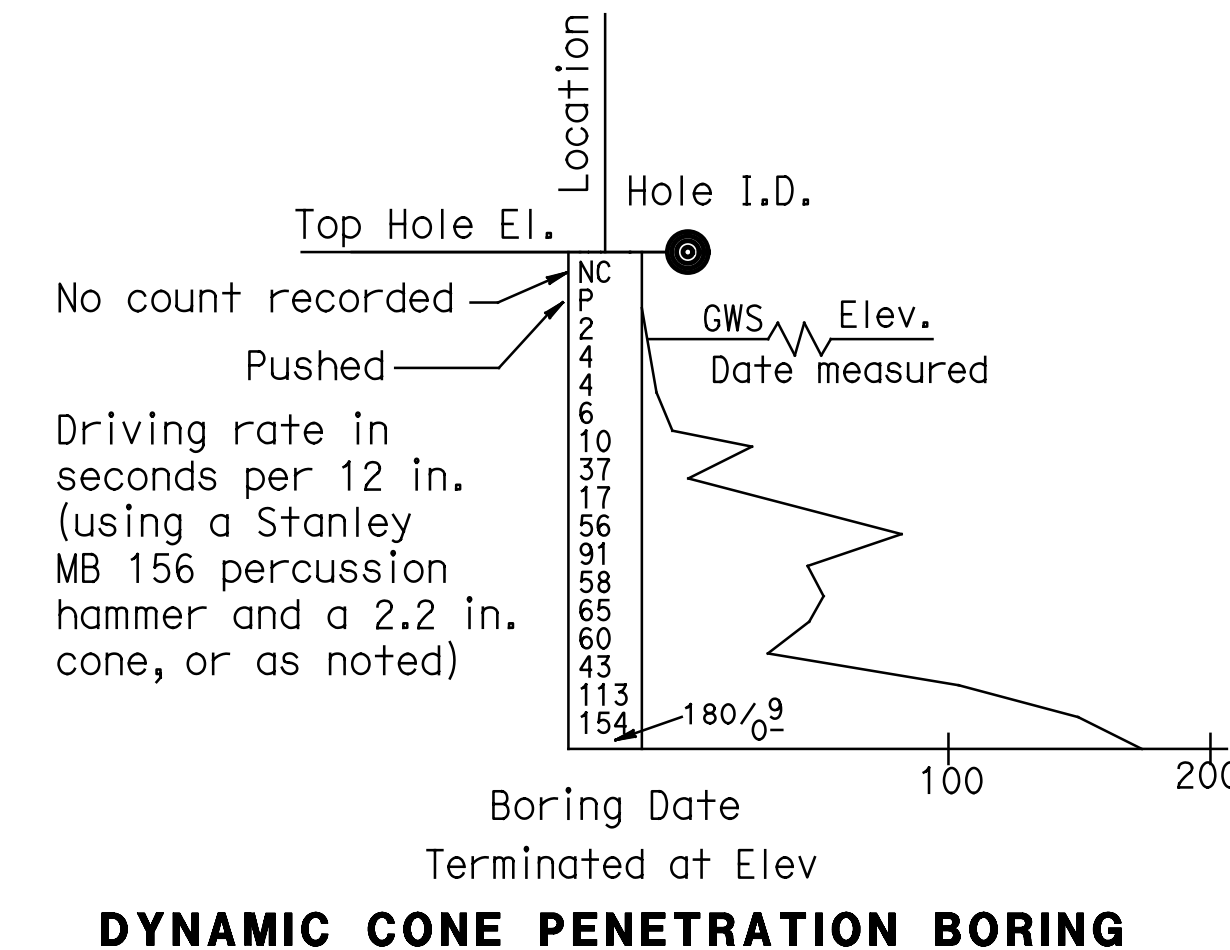
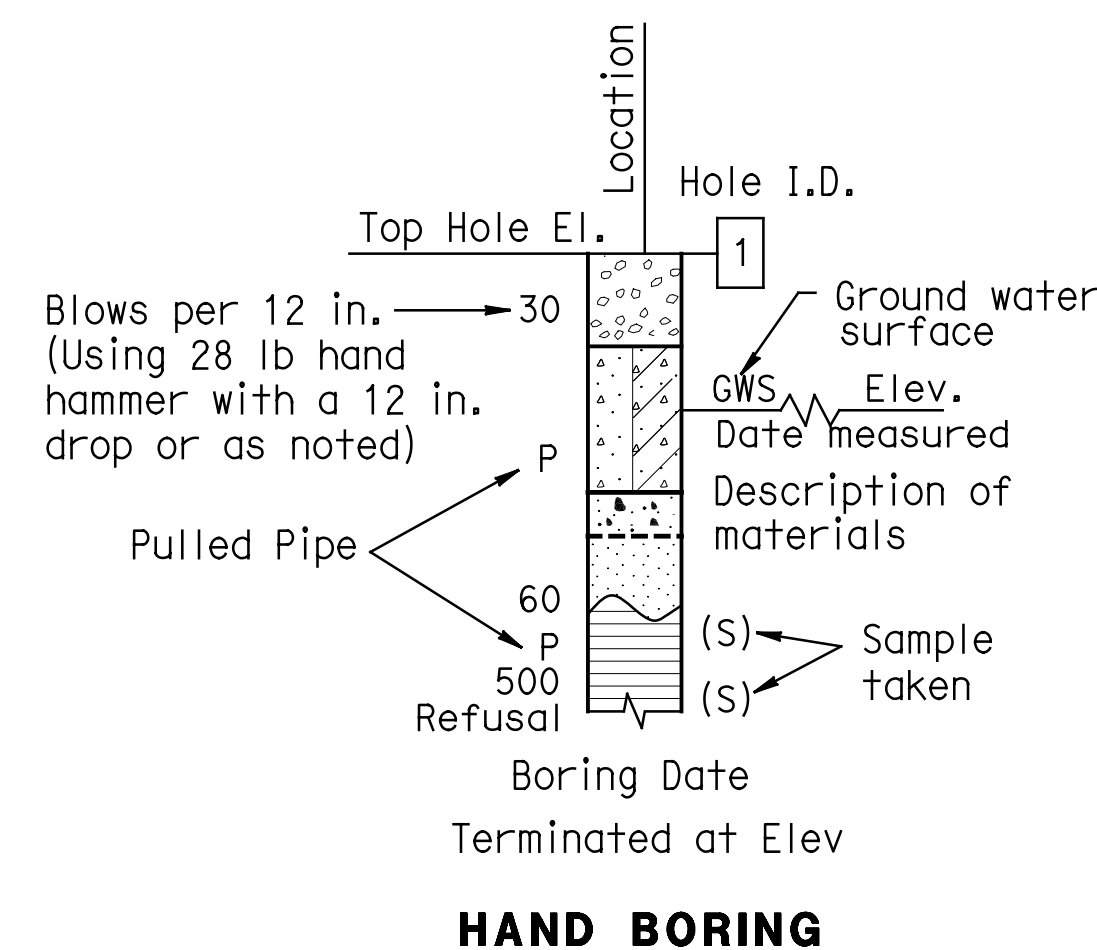
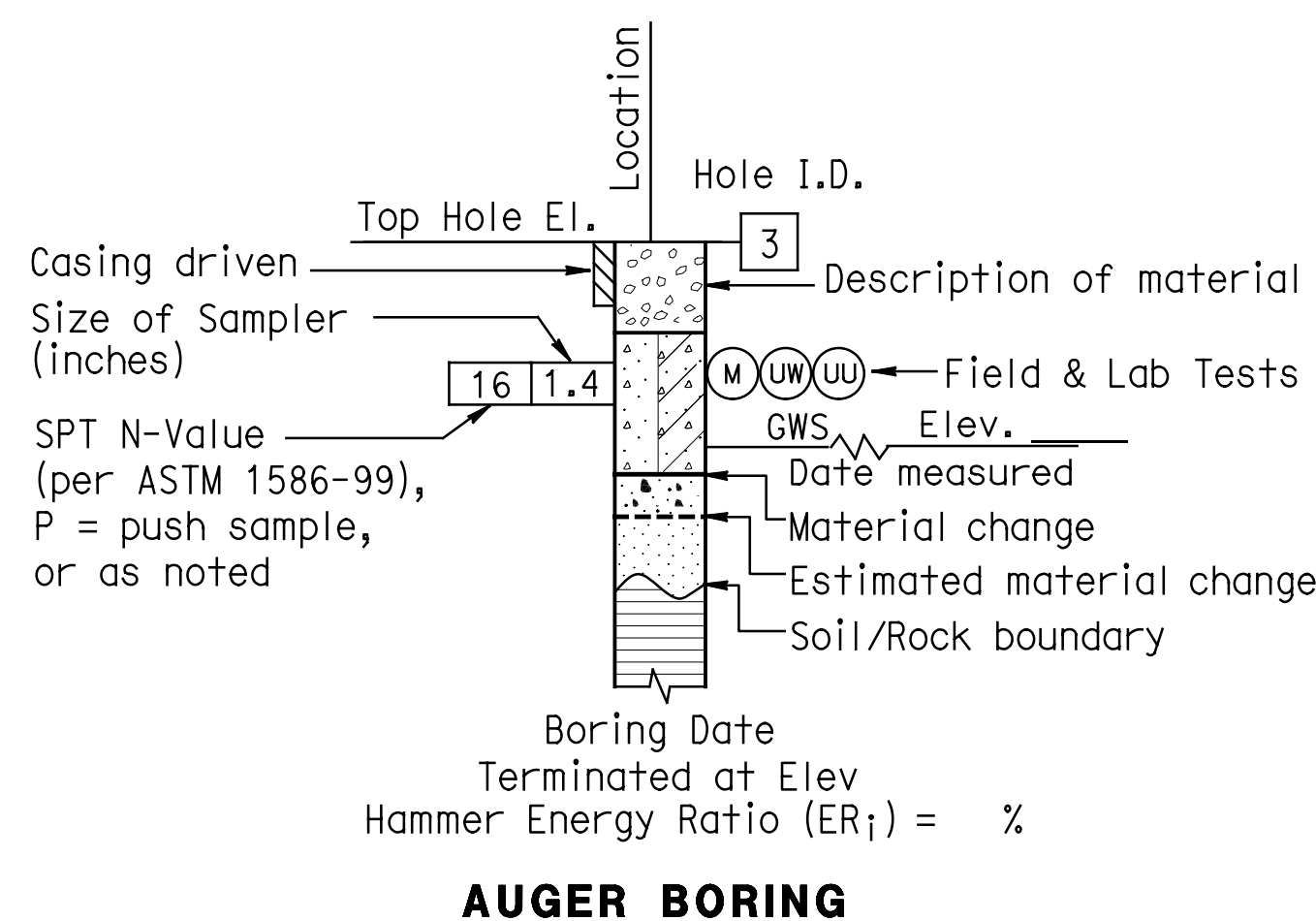
CEMENTATION	
Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

CONSISTENCY OF COHESIVE SOILS				
Description	Unconfined Compressive Strength (tsf)	Pocket Penetrometer Measurement (tsf)	Torvane Measurement (tsf)	Field Approximation
Very Soft	< 0.25	< 0.25	< 0.12	Easily penetrated several inches by fist
Soft	0.25 to 0.50	0.25 to 0.50	0.12 to 0.25	Easily penetrated several inches by thumb
Medium Stiff	0.50 to 1.0	0.50 to 1.0	0.25 to 0.50	Penetrated several inches by thumb with moderate effort
Stiff	1 to 2	1 to 2	0.50 to 1.0	Readily indented by thumb but penetrated only with great effort
Very Stiff	2 to 4	2 to 4	1.0 to 2.0	Readily indented by thumbnail
Hard	> 4.0	> 4.0	> 2.0	Indented by thumbnail with difficulty

BOREHOLE IDENTIFICATION		
Symbol	Hole Type	Description
	A	Auger Boring
	R	Rotary drilled boring
	P	Rotary percussion boring (air)
	R	Rotary drilled diamond core
	HD	Hand driven (1-inch soil tube)
	HA	Hand Auger
	D	Dynamic Cone Penetration Boring
	CPT	Cone Penetration Test (ASTM D 5778-95)
	O	Other

Note: Size in inches.

PLASTICITY OF FINE-GRAINED SOILS	
Description	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.

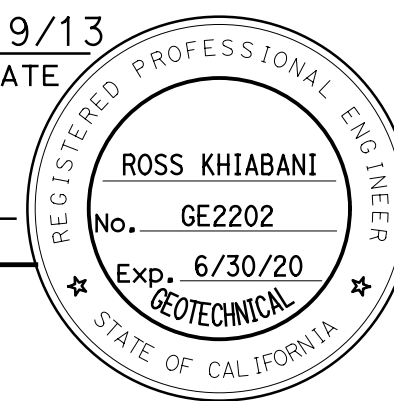


DRAWN BY	S. McCracken	B. KILLEEN
CHECKED BY	R. KHIABANI	FIELD INVESTIGATION BY:
		DATE: X

BRIDGE NO.	11C0179
POST MILES	NA
PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	
G. GORDON PROJECT ENGINEER	

HOWARD SLOUGH BRIDGE (REPLACE)	
SOIL LEGEND 1 OF 2	

USERNAME => Richard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:58:50 PM


 7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
 PLANS APPROVAL DATE

Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806

GROUP SYMBOLS AND NAMES			
Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
	GW Well-graded GRAVEL		CL Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
	GP Poorly-graded GRAVEL Poorly-graded GRAVEL with SAND		
	GW-GM Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND		CL-ML SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
	GW-GC Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
	GP-GM Poorly-graded GRAVEL with SILT Poorly-graded GRAVEL with SILT and SAND		ML SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND
	GP-GC Poorly-graded GRAVEL with CLAY (or SILTY CLAY) Poorly-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
	GM SILTY GRAVEL SILTY GRAVEL with SAND		OL ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
	GC CLAYEY GRAVEL CLAYEY GRAVEL with SAND		
	GC-GM SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND		OL ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND
	SW Well-graded SAND Well-graded SAND with GRAVEL		
	SP Poorly-graded SAND Poorly-graded SAND with GRAVEL		CH Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
	SW-SM Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL		
	SW-SC Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		MH Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
	SP-SM Poorly-graded SAND with SILT Poorly-graded SAND with SILT and GRAVEL		
	SP-SC Poorly-graded SAND with CLAY (or SILTY CLAY) Poorly-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
	SM SILTY SAND SILTY SAND with GRAVEL		
	SC CLAYEY SAND CLAYEY SAND with GRAVEL		OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
	SC-SM SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL		
	PT PEAT		OL/OH ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND

FIELD AND LABORATORY TESTING

- (C) Collapse Potential (ASTM D 5333)
- (CL) Compaction Curve (CTM 216)
- (CP) Corrosivity Testing (CTM 643, CTM 422, CTM 417)
- (CR) Consolidated Undrained Triaxial (ASTM D 4767)
- (CU) Direct Shear (ASTM D 3080)
- (DS) Expansion Index (ASTM D 4829)
- (EI) Moisture Content (ASTM D 2216)
- (M) Organic Content-% (ASTM D 2974)
- (OC) Permeability (CTM 220)
- (P) Particle Size Analysis (ASTM D 422)
- (PA) Plasticity Index (AASHTO T 90)
Liquid Limit (AASHTO T 89)
- (PI) Point Load Index (ASTM D 5731)
- (PL) Pressure Meter
- (PM) Passing # 200 (ASTM D 1140-00)
- (R) R-Value (CTM 301)
- (SE) Sand Equivalent (CTM 217)
- (SG) Specific Gravity (AASHTO T 100)
- (SL) Shrinkage Limit (ASTM D 427)
- (SW) Swell Potential (ASTM D 4546)
- (TV) Pocket Torvane
- (UC) Unconfined Compression-Soil (ASTM D 2166)
Unconfined Compression-Rock (ASTM D 2938)
- (UU) Unconsolidated Undrained Triaxial (ASTM D 2850)
- (UW) Unit Weight (ASTM D 4767)
- (VS) Vane Shear (AASHTO T 223)

APPARENT DENSITY OF COHESIONLESS SOILS

Description	SPT N ₆₀ (Blows / 12 in.)
Very Loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 31
Dense	30 - 50
Very Dense	> 50

MOISTURE

Description	Criteria
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

PERCENT OR PROPORTION OF SOILS

Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5% - 10%
Little	15% - 25%
Some	30% - 45%
Mostly	50% - 100%

PARTICLE SIZE

Description	Size
Boulder	> 12"
Cobble	3" to 12"
Gravel	Coarse 3/4" to 3"
	Fine No. 4 to 3/4"
Sand	Coarse No. 10 to No. 4
	Medium No. 40 to No. 10
	Fine No. 200 to No. 40
Silt and Clay	Less than 1/300

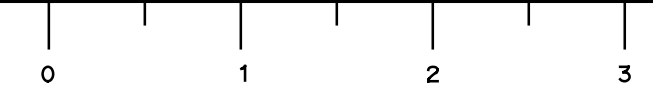
DRAWN BY: S. McCracken
 CHECKED BY: R. Khiabani
 B. KILLEEN
 FIELD INVESTIGATION BY:
 DATE: X

PREPARED FOR
COUNTY OF GLENN
 PUBLIC WORKS AGENCY

G. GORDON
 PROJECT ENGINEER
 BRIDGE NO. 11C0179
 POST MILES NA

HOWARD SLOUGH BRIDGE (REPLACE)
SOIL LEGEND 2 OF 2

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 10/12/12
 SHEET 14 OF 15

USERNAME => Richard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:55:51 PM

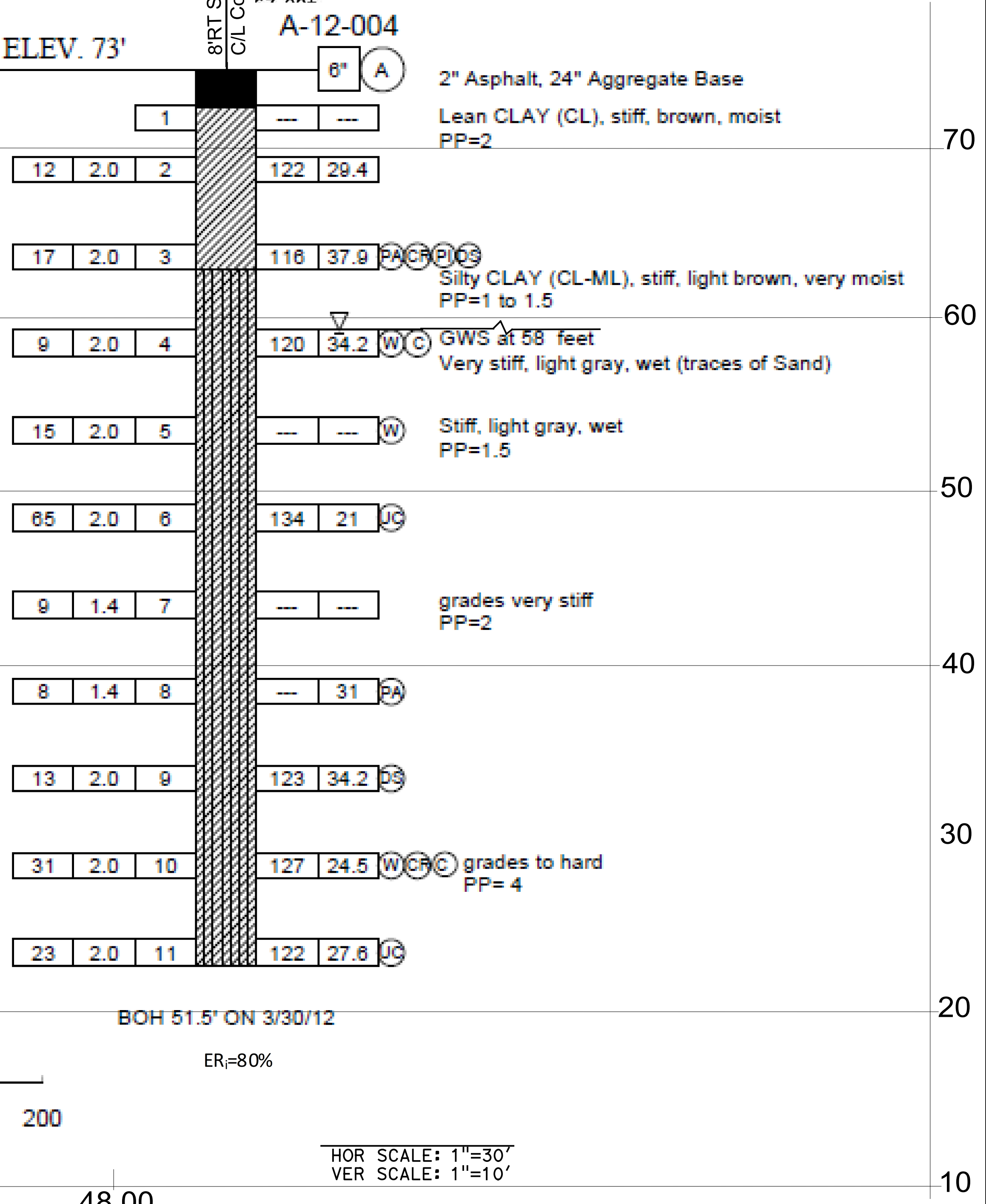
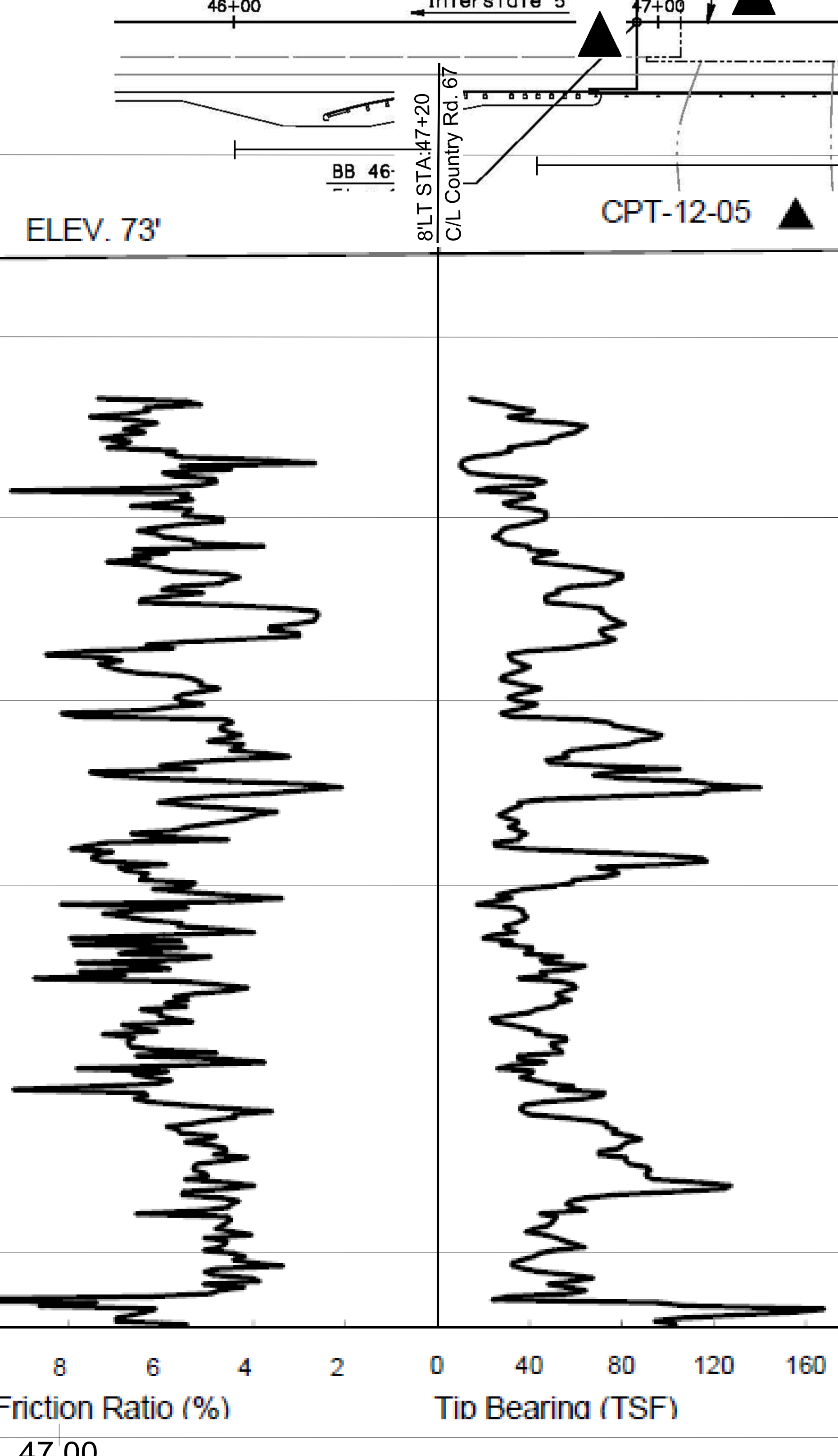
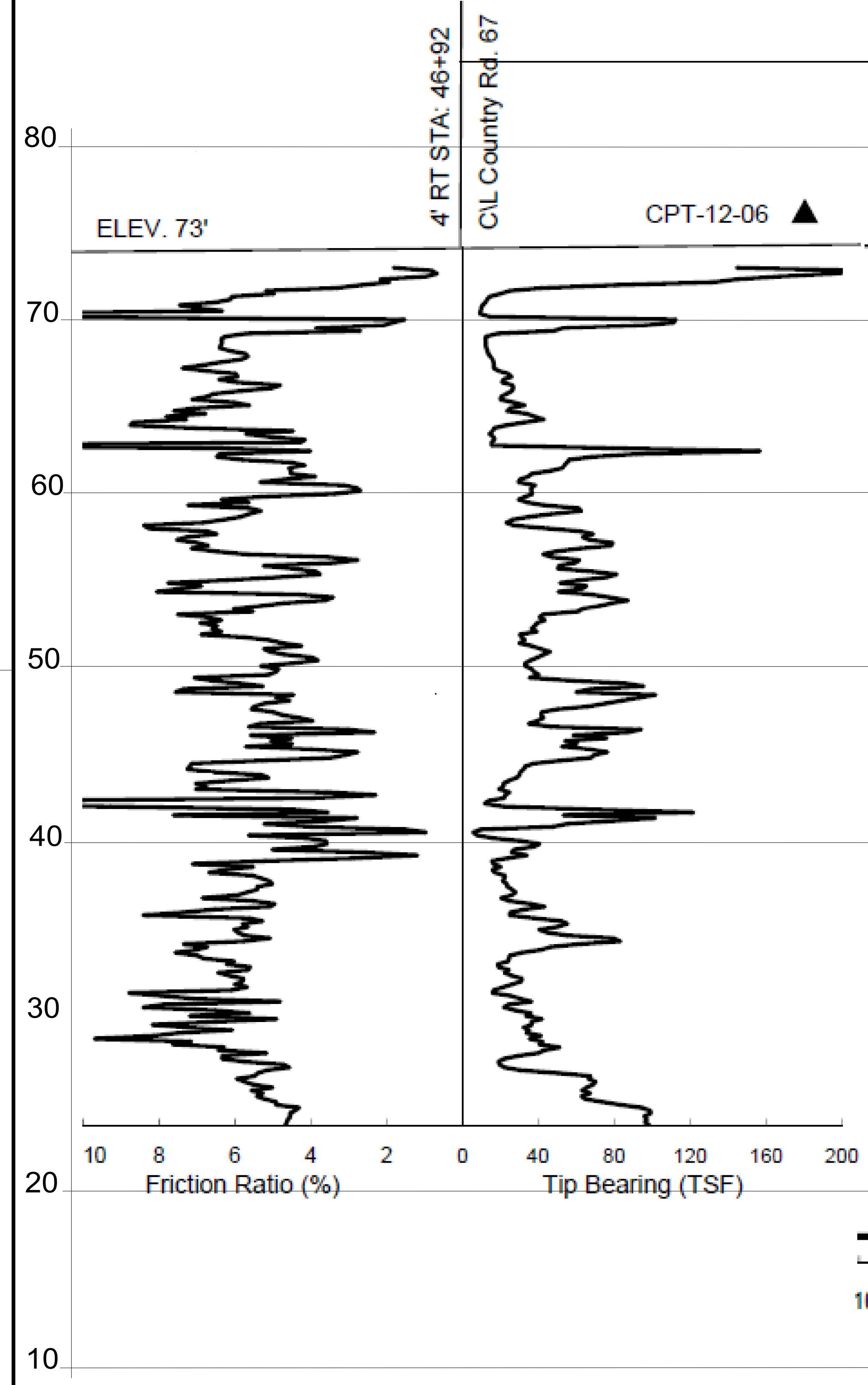
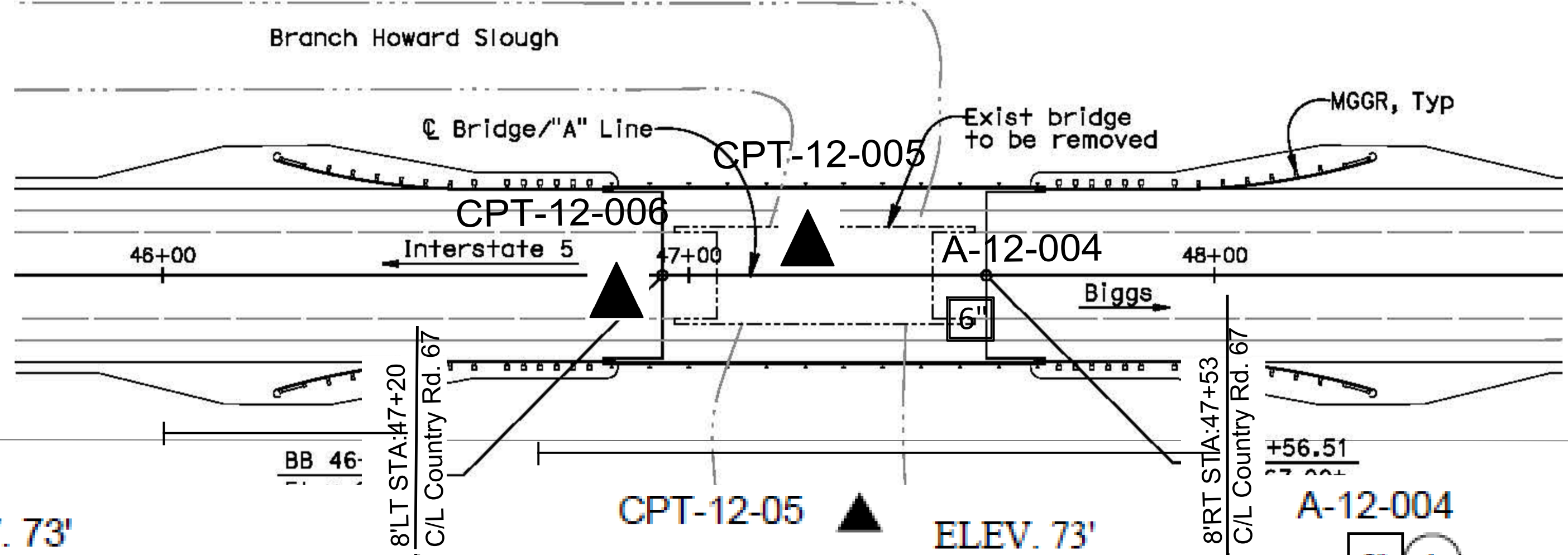
BENCH MARK

DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
Horizontal Datum is NAD83
Vertical Datum is NAVD88

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Glenn	CR 67	NA	33	33

ROSS KHIABANI 7/19/13
 GEOTECHNICAL PROFESSIONAL DATE
 REGISTERED PROFESSIONAL ENGINEER
 No. GE2202
 Exp. 6/30/20
 GEOTECHNICAL
 STATE OF CALIFORNIA

Prepared by:
 WILLDAN ENGINEERING
 1515 SOUTH SUNKIST STREET, SUITE E
 ANAHEIM, CALIFORNIA 92806



DRAWN BY: S. McCracken	CHECKED BY: R. Khiabani	FIELD INVESTIGATION BY: B. Killeen	DATE: X	PREPARED FOR: COUNTY OF GLENN PUBLIC WORKS AGENCY	PROJECT ENGINEER: G. Gordon	BRIDGE NO.: 11C0179	POST MILES: NA	HOWARD SLOUGH BRIDGE (REPLACE)
								LOG OF TEST BORINGS