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

INDEX OF PLANS

SHEET No. DESCRIPTION

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

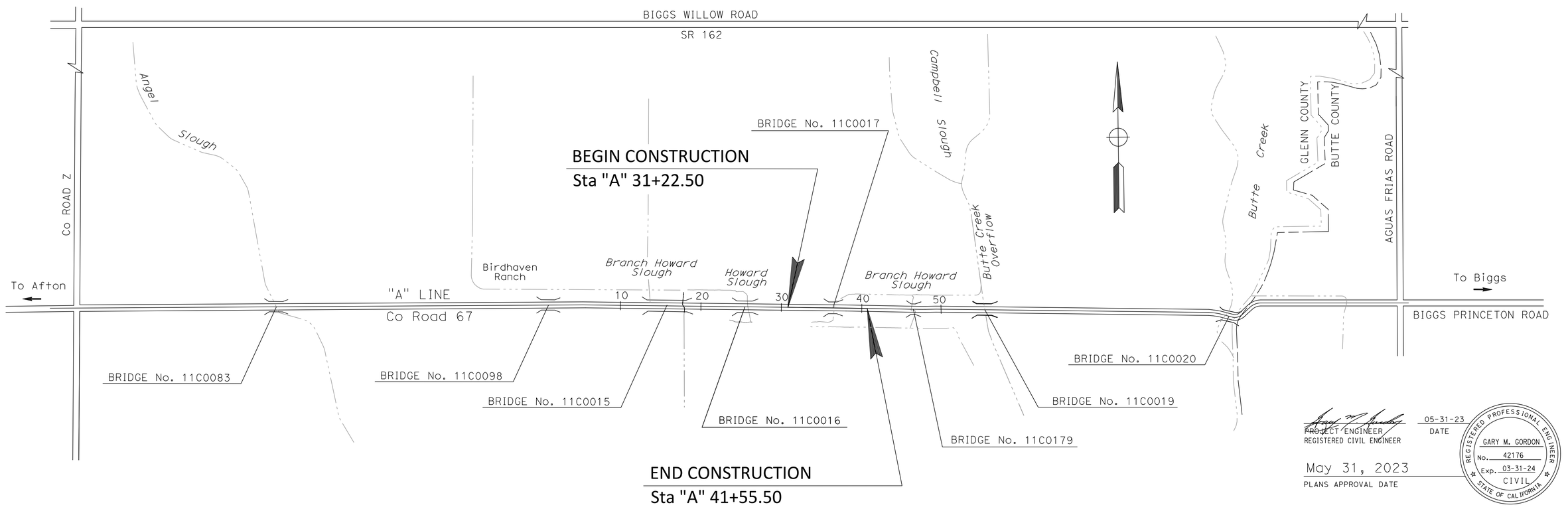
PROJECT PLANS FOR CONSTRUCTION ON

COUNTY ROAD 67

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

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2022

LOCATION MAP



NO SCALE

Gary M. Gordon 05-31-23
PROJECT ENGINEER 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

COUNTY OF GLENN:

Gary M. Gordon 05-31-23
Gary M. Gordon, PE DATE
County Engineer

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

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."

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME = KEVIN
DGN FILE = 03-101784aa001

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

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	Gle	CR 67	N/A	2	33

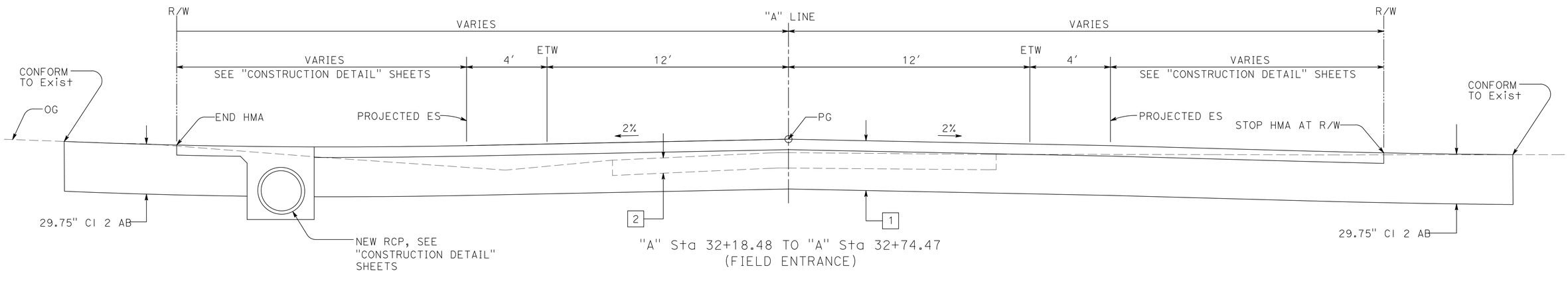
05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
PLANS APPROVAL DATE

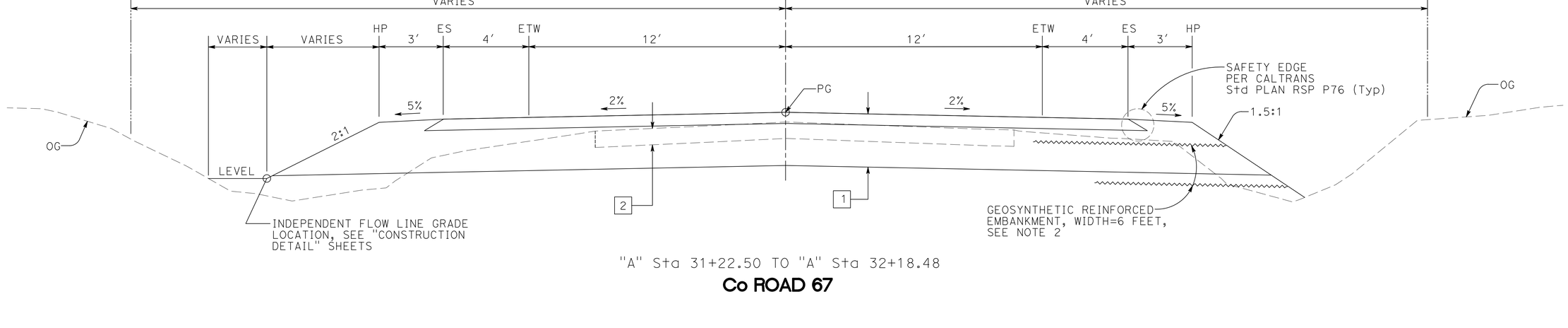
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

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

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



"A" Sta 32+18.48 TO "A" Sta 32+74.47
(FIELD ENTRANCE)



"A" Sta 31+22.50 TO "A" Sta 32+18.48

Co ROAD 67

TYPICAL CROSS SECTION

NO SCALE

X-1

REVISED BY	DATE REVISED
KCG	05-31-23

CALCULATED-DESIGNED BY: R. UHLMANN
CHECKED BY: G. GORDON

PROJECT ENGINEER: GARY M. GORDON

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 10:00:49 AM

USERNAME => KEVIN
DGN FILE => 03-101784ca001

RELATIVE BORDER SCALE IS IN INCHES
0 1 2 3

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

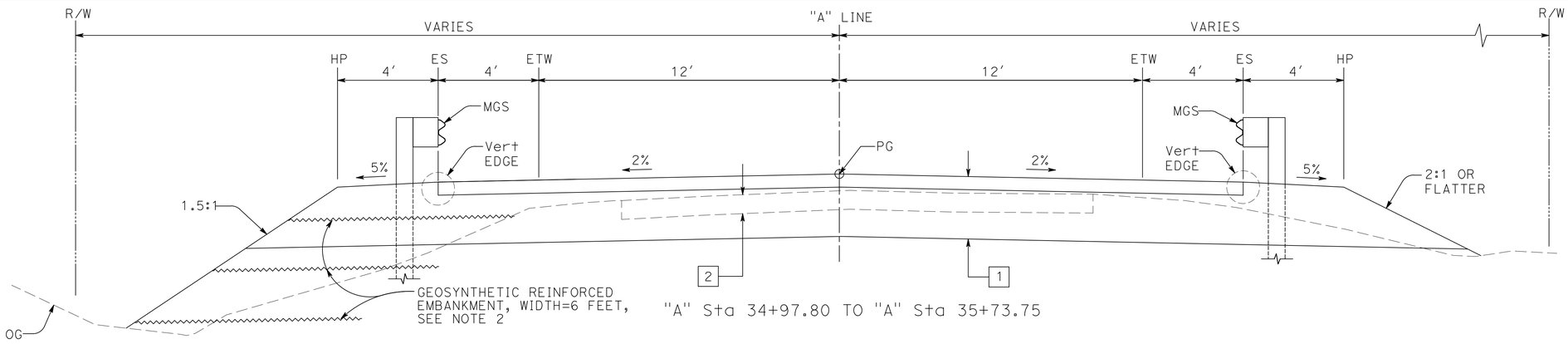
Gary M. Gordon 05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
PLANS APPROVAL DATE

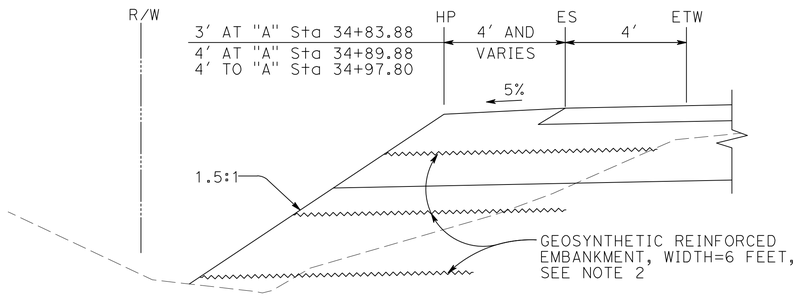
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

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

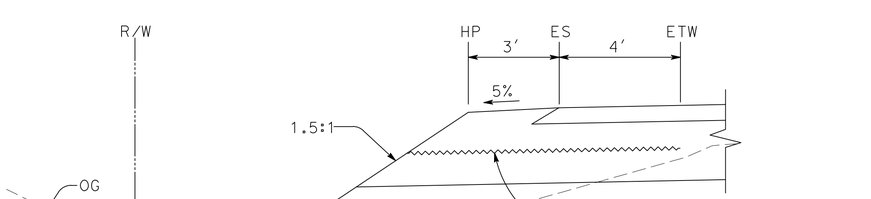
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988



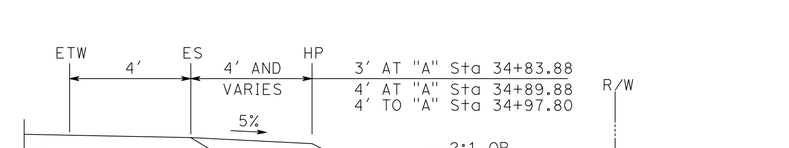
"A" Sta 34+97.80 TO "A" Sta 35+73.75



"A" Sta 34+00.00 Lt TO "A" Sta 34+97.80 Lt



"A" Sta 32+85.00 Lt TO "A" Sta 34+00.00 Lt



"A" Sta 34+96.37 Rt TO "A" Sta 34+97.80 Rt

"A" Sta 32+74.47 TO Sta 35+10.30

Co ROAD 67

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.

TYPICAL CROSS SECTION

NO SCALE **X-2**

REVISED BY	DATE REVISED
KCG	05-31-23

CALCULATED-DESIGNED BY: R. UHLMANN
CHECKED BY: G. GORDON
PROJECT ENGINEER: GARY M. GORDON

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 9:53:01 AM

USERNAME => KEVIN
DGN FILE => 03-101784cg002

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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

REGISTERED CIVIL ENGINEER — 05-31-23 DATE

May 31, 2023
PLANS APPROVAL DATE

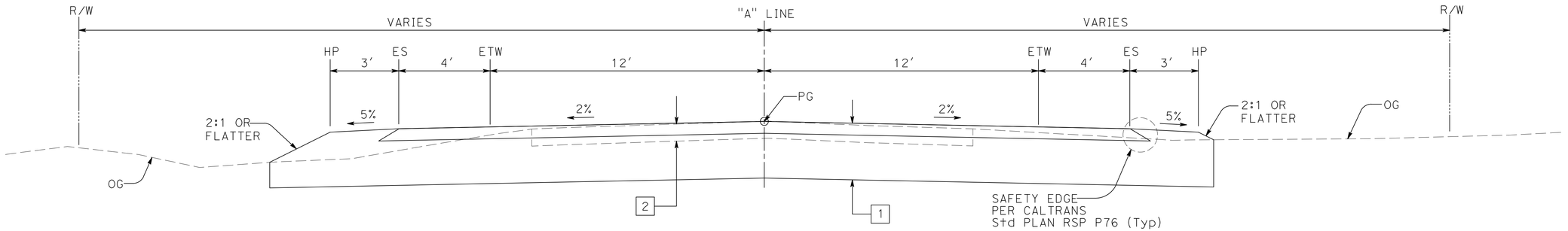
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

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

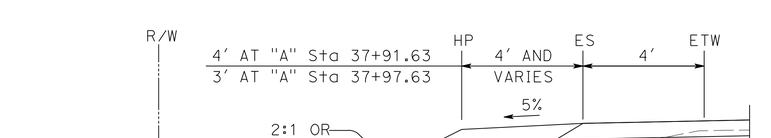
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

NOTES:

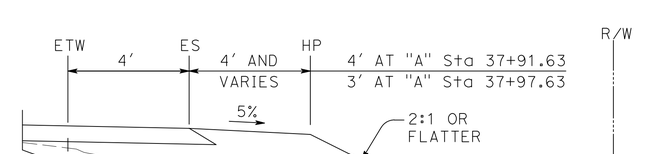
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTION) ARE SUBJECT TO THE TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. PLACE GEOSYNTHETIC REINFORCED EMBANKMENT WHERE SLOPES ARE STEEPER THAN 2:1. PLACE IN TWO FOOT MAXIMUM LIFTS.



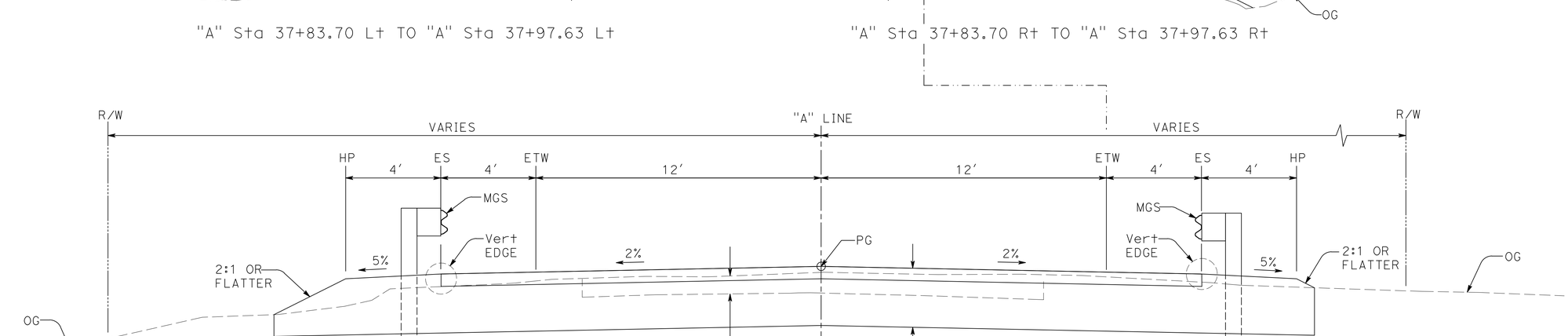
"A" Sta 37+97.63 TO "A" Sta 41+55.50



"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

NO SCALE

X-3

REVISED BY	KCG
DATE REVISED	05-31-23
CALCULATED-DESIGNED BY	R. UHLMANN
CHECKED BY	G. GORDON
PROJECT ENGINEER	GARY M. GORDON
LAST REVISION	05-31-23
DATE PLOTTED =>	5/31/2023
TIME PLOTTED =>	9:40:18 AM

USERNAME => KEVIN
DGN FILE => 03-101784ca003

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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

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

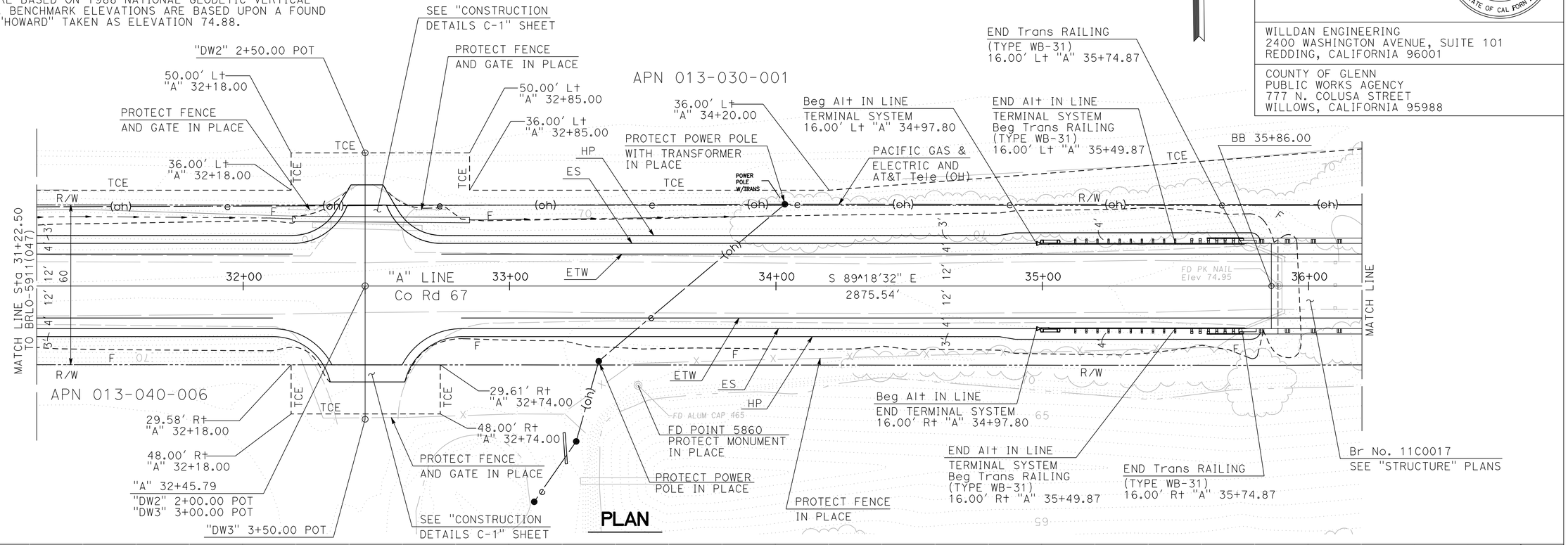
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

NOTES:

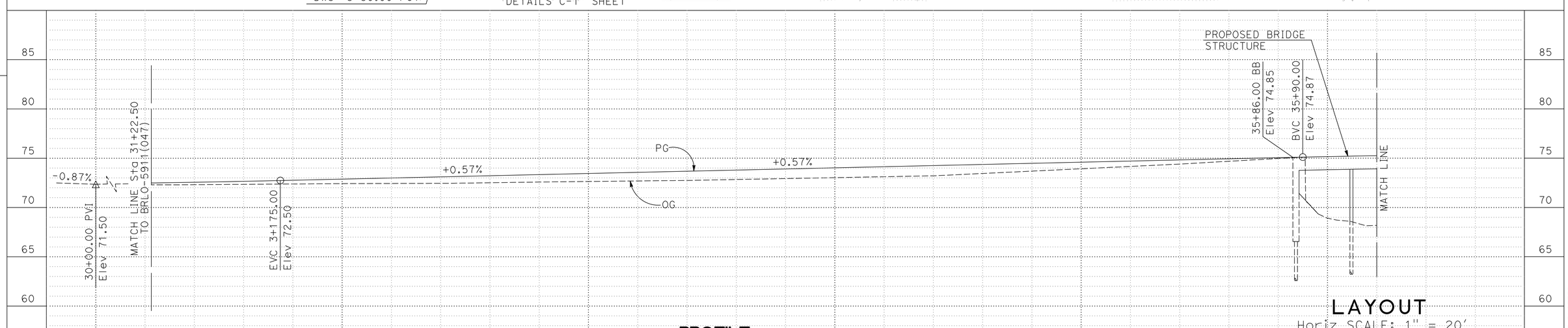
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT GLENN COUNTY PUBLIC WORKS AGENCY.
2. BASIS OF BEARING: TAKEN AS N87°6'59.47"E BETWEEN POINTS 5860 AND 5001 AS SHOWN ON THIS SHEET.
3. COORDINATES, DISTANCES AND BEARINGS ARE BASED ON CCS 1983, ZONE 2, DERIVED FROM GPS OBSERVATIONS. MULTIPLY DISTANCES SHOWN BY 1.000063654 TO OBTAIN GROUND LEVEL DISTANCES.
4. 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)



PLAN



PROFILE

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

L-1

STATION	31+00	32+00	33+00	34+00	35+00	36+00	TOTAL
CY Exc		1,104					1,104
CY Emb		181					181

CALCULATED-DESIGNED BY	CHECKED BY
R. UHLMANN	G. GORDON

REVISED BY	DATE REVISED
KCG	05-31-23

PROJECT ENGINEER
GARY M. GORDON

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 9:25:32 AM

USERNAME => KEVIN
DGN FILE => 03-101784ea001

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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

Gary M. Gordon 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

PROTECT POWER
POLE AND GUY IN PLACE

END Trans RAILING
(TYPE WB-31)
Beg Alt IN LINE
TERMINAL SYSTEM
16.00' Lt "A" 37+31.63

60.00' Lt
"A" 37+30.00

Beg Trans RAILING
(TYPE WB-31)
16.00' Lt "A" 37+06.63

END Alt IN LINE
TERMINAL SYSTEM
16.00' Lt "A" 37+83.70

Br No. 11C0017
(SEE STRUCTURE PLANS)

36+93.50 EB

APN 013-030-001

PACIFIC GAS &
ELECTRIC AND
AT&T Tele (OH)

PROTECT POWER
POLE AND GUY
IN PLACE

TCE

HP
ES
ETW

R/W e (oh) e e (oh) e (oh) e (oh) e e (oh) e R/W

F 4' 12' 12' 4' 3' 3'

MATCH LINE

37+00 38+00 39+00 40+00 41+00

S 89^18'32" E 2875.54'

"A" LINE
Co Rd 67

S 88^53'53" E 924.73'

60'

MATCH LINE Sta 41+55.50
TO BRLO-5911 (050)

FD PK NAIL
Elev 75.16

FD ALUM CAP DH36
Elev 74.88

38+00.54 PI

FD POINT 5001
RESET BENCHMARK IN TOP
OF ABUTMENT DIAPHRAGM

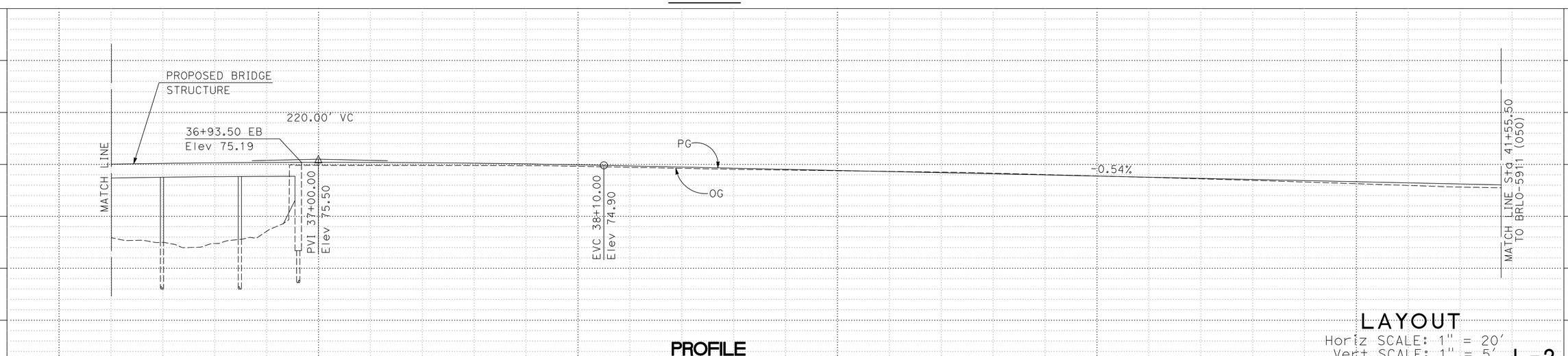
Beg Trans Railing
(TYPE WB-31)
16.00' Rt "A" 37+06.63

END Trans RAILING
(TYPE WB-31)
Beg Alt IN LINE
TERMINAL SYSTEM
16.00' Rt "A" 37+31.63

END Alt IN LINE
TERMINAL SYSTEM
16.00' Rt "A" 37+83.70

APN 013-040-006

PLAN



PROFILE

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

L-2

STATION		36+00	37+00	38+00	39+00	40+00	41+00	TOTAL
CY	Exc		1,476					1,476
	Emb		4					4

PROJECT ENGINEER: GARY M. GORDON

REVISED BY	DATE REVISED
KCG	05-31-23

R. UHLMANN — CALCULATED-DESIGNED BY
G. GORDON — CHECKED BY

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 9:00:39 AM

USERNAME => KEVIN
DGN FILE => 03-101784ea002

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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

Gary M. Gordon 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

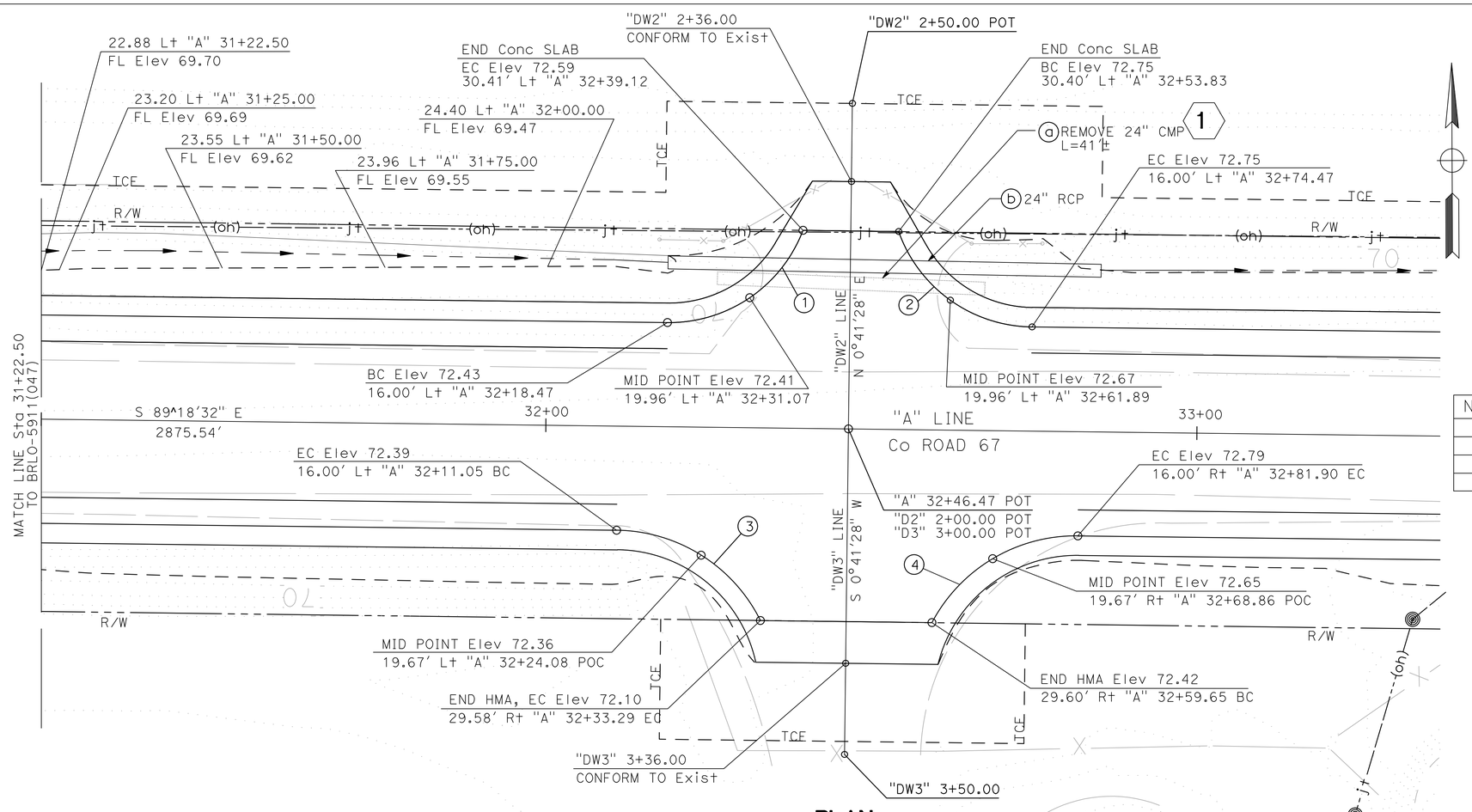
WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

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

REVISED BY	DATE REVISED
KCG	05-31-23

CALCULATED-DESIGNED BY: R. UHLMANN
CHECKED BY: G. GORDON

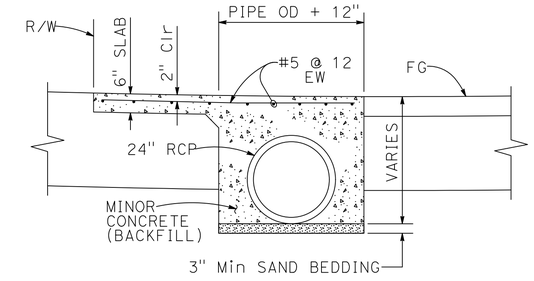
PROJECT ENGINEER: GARY M. GORDON



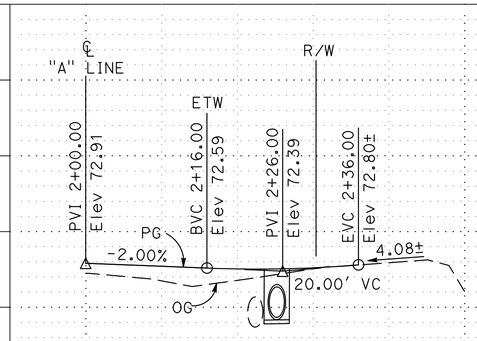
PLAN

CURVE DATA

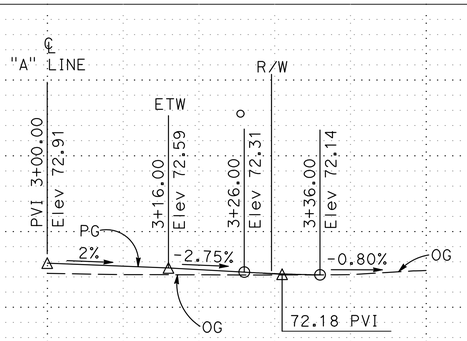
No. ⓐ	R	Δ	T	L
1	22.00'	69°49'31"	15.35'	26.81'
2	22.00'	69°48'13"	15.35'	26.80'
3	25.00'	62°49'50"	15.27'	27.41'
4	25.00'	62°51'58"	15.28'	27.43'



RCP TRENCH DETAIL
SCALE: 1/2"=1'-0"



"DW2" PROFILE



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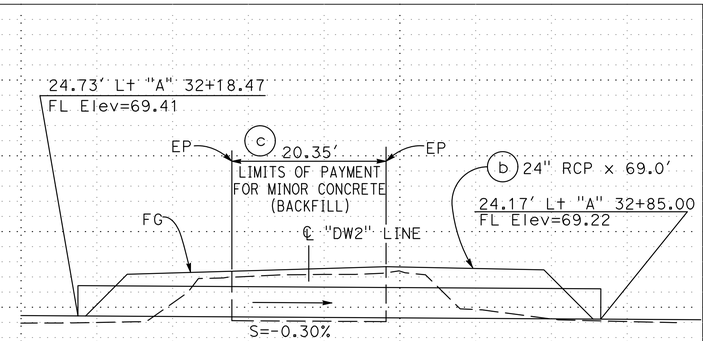


DRAINAGE SYSTEM 1

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

C-1

STATION	2+00	2+50	3+00	3+50	TOTAL
CY Exc					
CY Emb					

LAST REVISION: 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 8:39:52 AM

USERNAME => KEVIN
DGN FILE => 03-101784ga001

RELATIVE BORDER SCALE IS IN INCHES
0 1 2 3

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

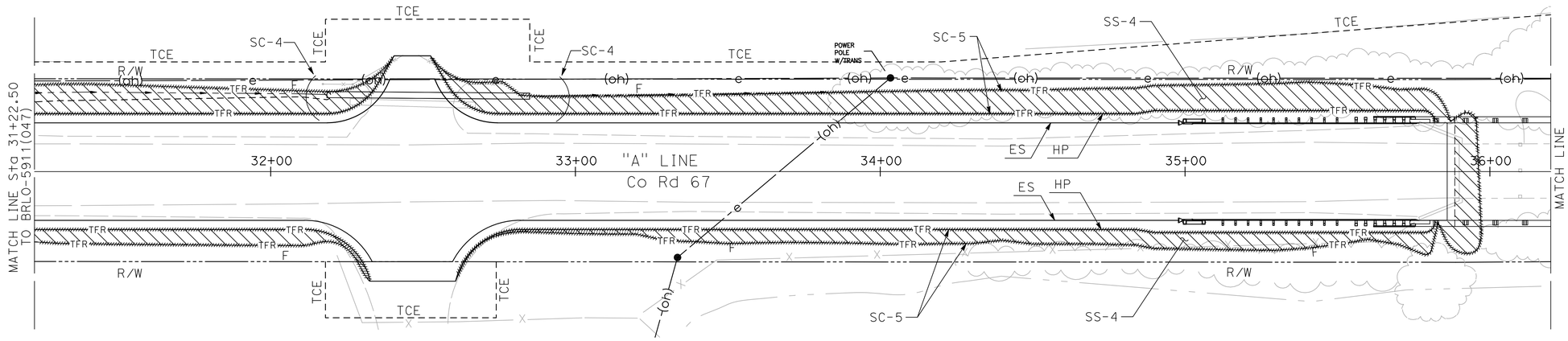
Gary M. Gordon 05-31-23
REGISTERED CIVIL ENGINEER DATE

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



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

REVISED BY	DATE REVISED
KCG	05-31-23

R. UHLMANN — CALCULATED-DESIGNED BY
G. GORDON — CHECKED BY
GARY M. GORDON — PROJECT ENGINEER

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 5:55:07 PM

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

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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

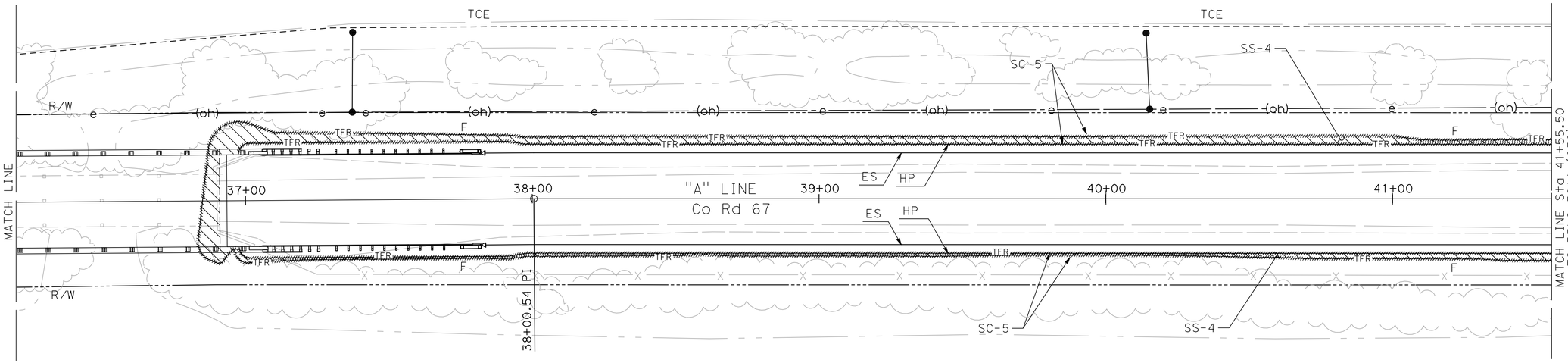
Gary M. Gordon 05-31-23
REGISTERED CIVIL ENGINEER DATE

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



TEMPORARY WATER POLLUTION/ EROSION CONTROL PLAN

SCALE: 1" = 20'

WPC-2

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

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

PROJECT ENGINEER
GARY M. GORDON

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

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

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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

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

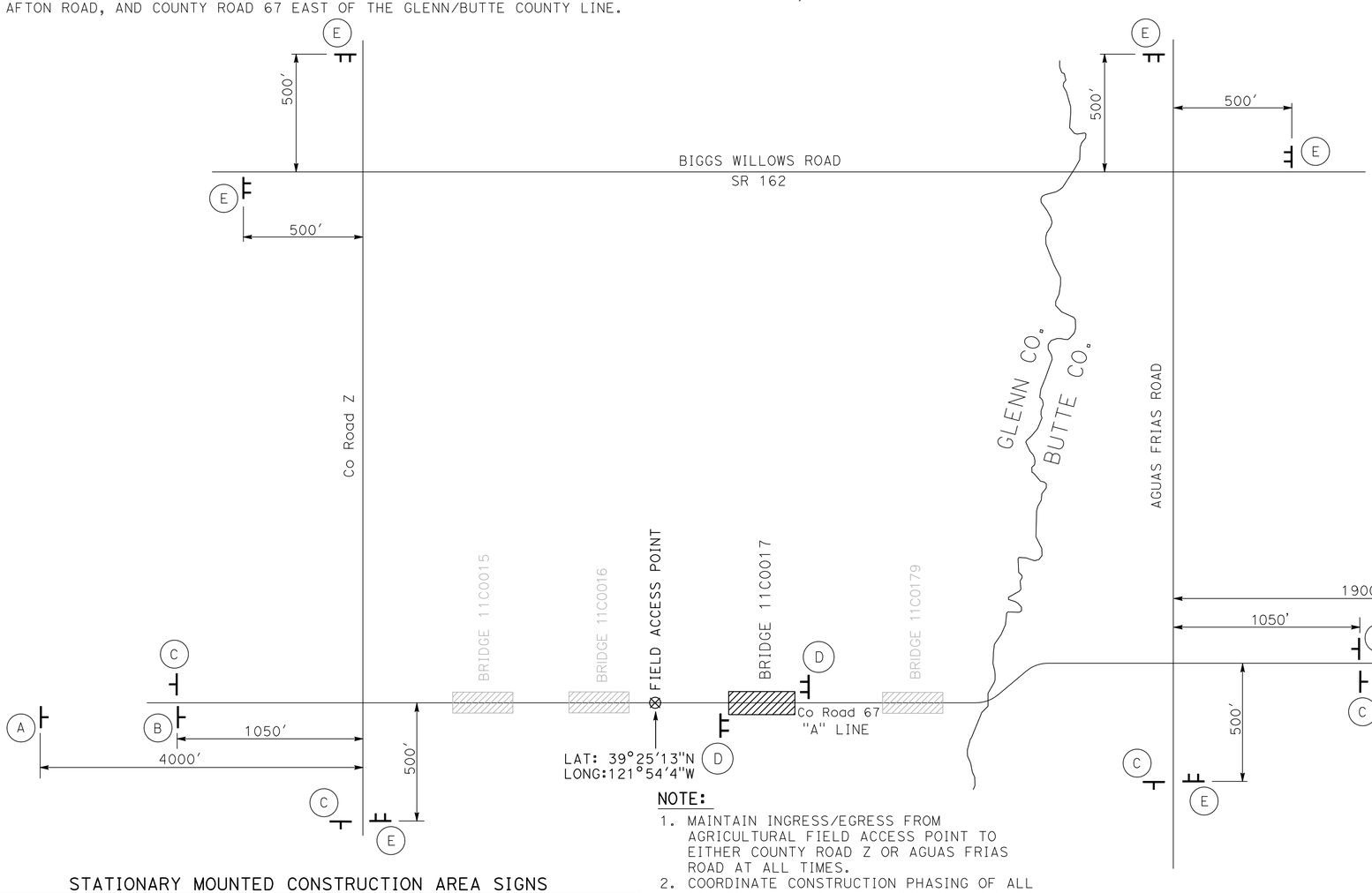
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

GENERAL NOTES:

1. SIGNS SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
2. SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
3. SIGNS WILL REMAIN IN PLACE FOR DURATION OF PROJECT.
4. FOR ADDITIONAL TRAFFIC CONTROL SIGNS, SEE DETOUR PLAN DE-1.
5. CONTRACTOR SHALL OBTAIN CALTRANS ENCROACHMENT PERMIT FOR SIGNS ON SR 162.
6. 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

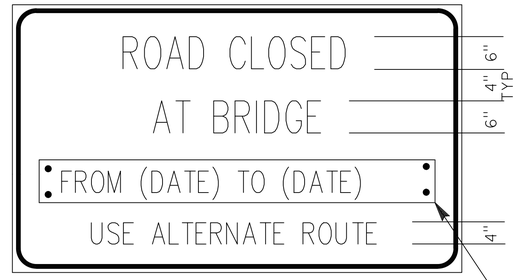


NOTE:

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

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

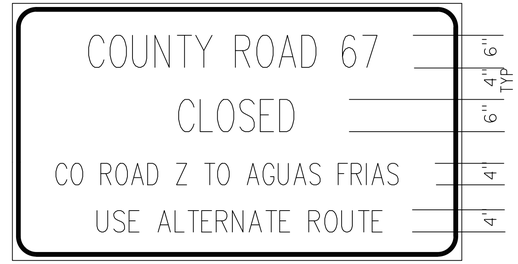
SIGN No.	SIGN CODE	PANEL SIZE	SIGN MESSAGE	POST NO.	POST SIZE	No. of SIGNS
A	R11-3b	30" X 60"	BRIDGE OUT 2 MILES LOCAL TRAFFIC ONLY	1	4" X 4"	1
B	C19(CA)	48" X 48"	ROAD CLOSED AHEAD	1	4" X 4"	2
C	G20-2	36" X 18"	END ROAD WORK	1	4" X 4"	4
D	SPECIAL	84" X 42"	ROAD CLOSED INFORMATION	2	6" X 6"	2
E	SPECIAL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



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

NOTES:

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



SIGN (E)

NOTES:

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

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
B. BURCH	R. UHLMANN	KCG	05-31-23

PROJECT ENGINEER
GARY M. GORDON

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 5:48:00 PM

USERNAME => KEVIN
DGN FILE => 03-1017841a001

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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

Gary M. Gordon 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

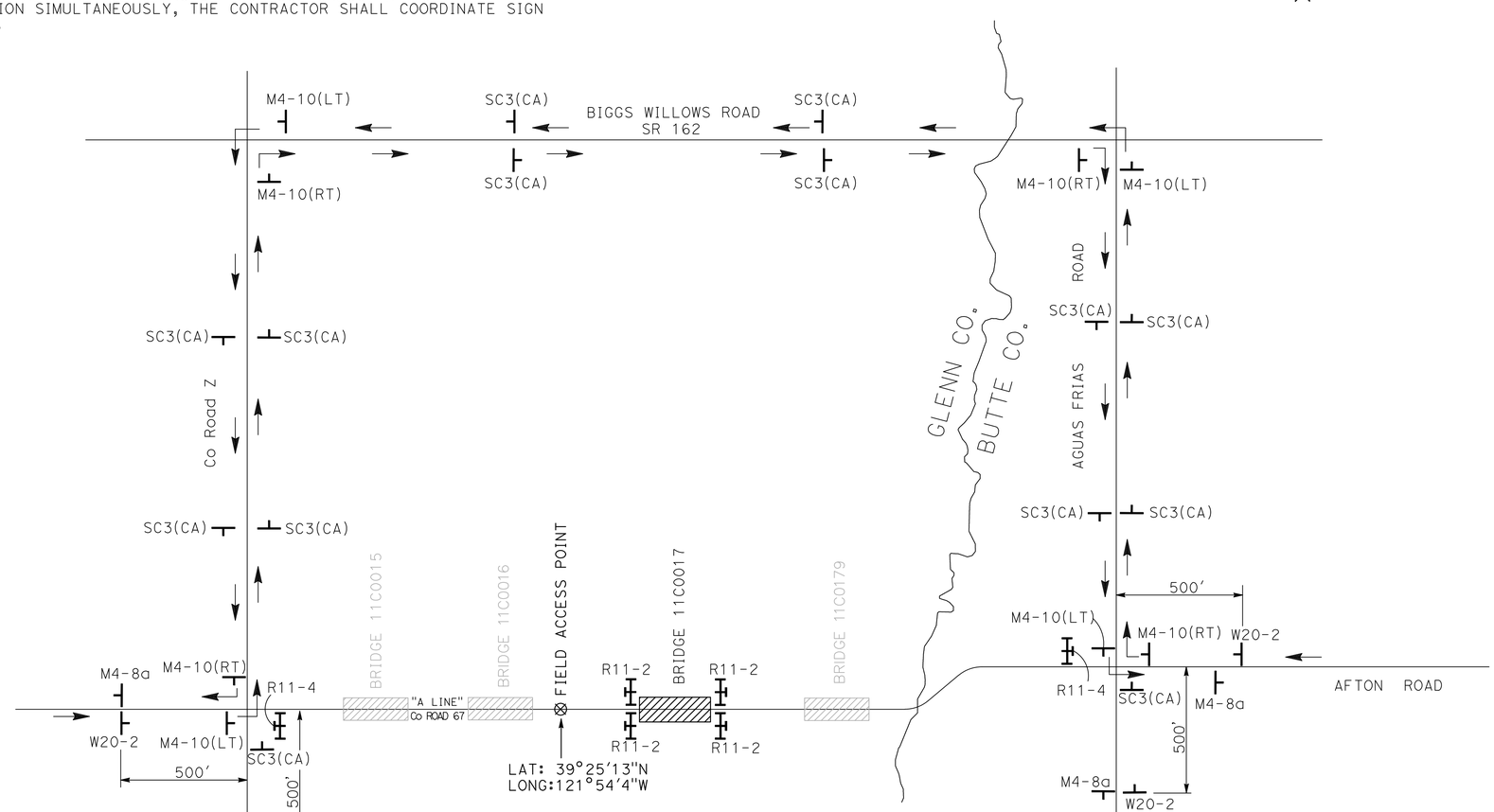
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988

GENERAL NOTES:

1. SIGNS SHALL CONFORM TO THE 2014 CALIFORNIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND THE 2022 CALTRANS STANDARD PLANS AND SPECIFICATIONS.
2. SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
3. SIGNS WILL REMAIN IN PLACE FOR DURATION OF PROJECT.
4. CONTRACTOR SHALL OBTAIN CALTRANS ENCROACHMENT PERMIT FOR SIGNS ON SR 162.
5. 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.
6. 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

APPROVED FOR DETOUR SIGN WORK ONLY

DETOUR PLAN

NO SCALE

DE-1

REVISED BY	DATE REVISED
KCG	05-31-23

B. BURCH
R. UHLMANN
CALCULATED-DESIGNED BY
CHECKED BY
PROJECT ENGINEER
GARY M. GORDON

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

USERNAME => KEVIN
DGN FILE => 03-101784mq001

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

REVISED BY	DATE REVISED
KCG	05-31-23

CALCULATED-DESIGNED BY: B. BURCH
CHECKED BY: R. UHLMANN
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	Gle	CR 67	N/A	12	33

Gary M. Gordon 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

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 ONE POST EA	REMARKS
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

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

USERNAME => KEVIN
DGN FILE => 03-101784na001

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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

05-31-23
REGISTERED CIVIL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
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

EARTHWORK QUANTITIES

SHEET No.	STATION	ROADWAY EXCAVATION	(N) EMBANKMENT	IMPORTED BORROW	GEOSYNTHETIC REINFORCED EMBANKMENT
		CY	CY	CY	SYYD
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		1	
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

SAFETY EDGE

SHEET No.	STATION	DIRECTION	(N) TOTAL THICKNESS OF SAFETY EDGE	LENGTH SAFETY EDGE	(N) HOT MIX ASPHALT (TYPE A)
			FT	LF	TON
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) 12"	18"	24"	MINOR CONCRETE (MINOR STRUCTURE)	DESCRIPTION
			LF	LF			CY	
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

CALCULATED-DESIGNED BY	CHECKED BY
R. UHLMANN	G. GORDON

PROJECT ENGINEER
GARY M. GORDON

REVISED BY	DATE REVISED
KCG	05-31-23

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 5:04:29 PM

USERNAME => KEVIN
DGN FILE => 03-101784pa001

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

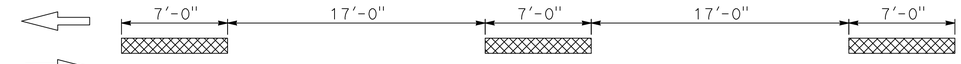
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

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.

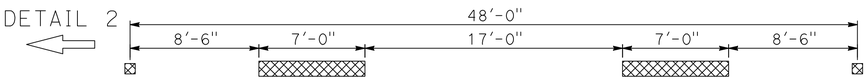
TO ACCOMPANY PLANS DATED 05-31-23

CENTERLINES
(2 LANE HIGHWAYS)

DETAIL 1



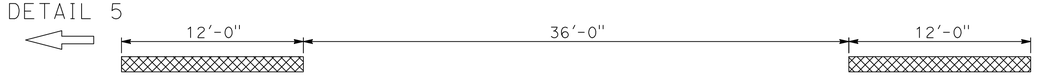
DETAIL 2



~~DETAIL 3~~ DETAIL 3 DELETED

~~DETAIL 4~~ DETAIL 4 DELETED

DETAIL 5



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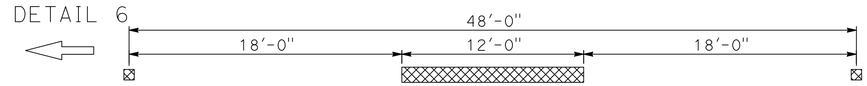

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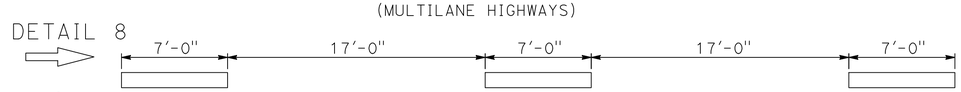
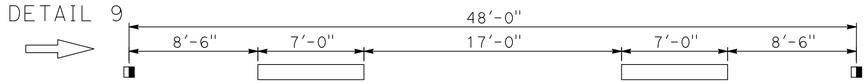
LANE LINES
(MULTILANE HIGHWAYS)

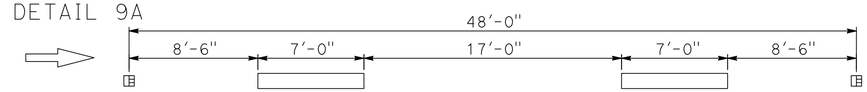
DETAIL 8



DETAIL 9



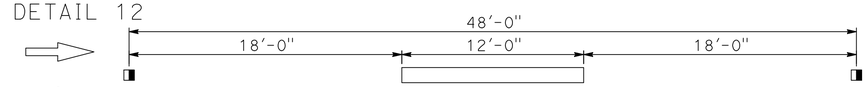
DETAIL 9A



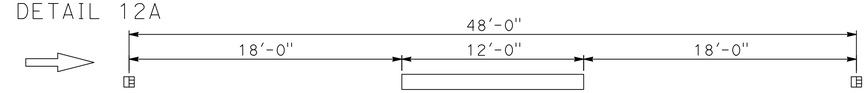
~~DETAIL 10~~ DETAIL 10 DELETED

DETAIL 11

DETAIL 12



DETAIL 12A

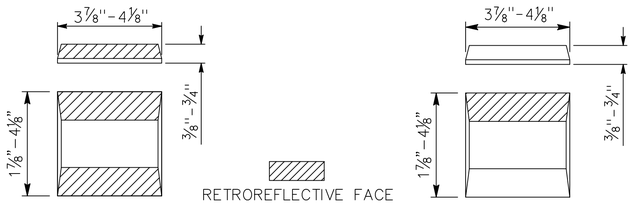


~~DETAIL 13~~ DETAIL 13 DELETED

~~DETAIL 14~~ DETAIL 14 DELETED

~~DETAIL 14A~~ DETAIL 14A DELETED

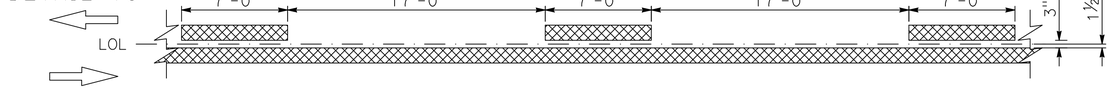
LINES
- 4" WHITE
- 4" YELLOW



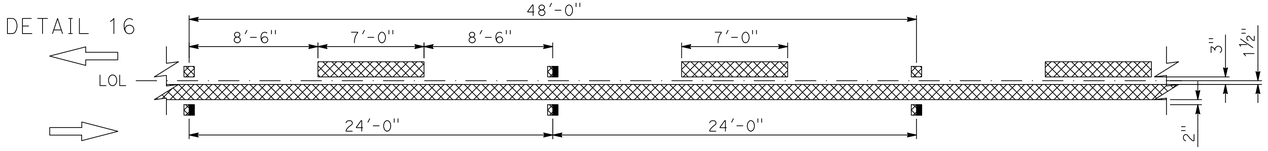
TYPE C AND TYPE D TYPE G AND TYPE H
MARKER DETAILS

NO PASSING ZONES-ONE DIRECTION

DETAIL 15

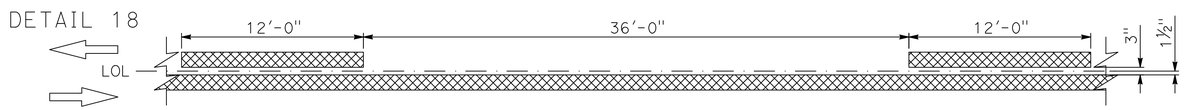


DETAIL 16

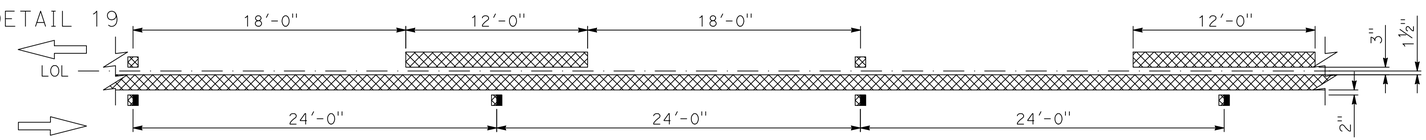


~~DETAIL 17~~ DETAIL 17 DELETED

DETAIL 18



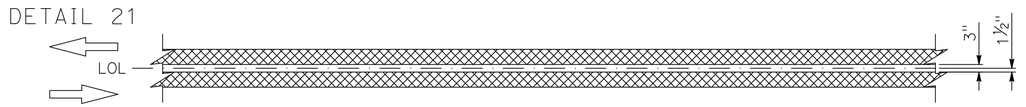
DETAIL 19



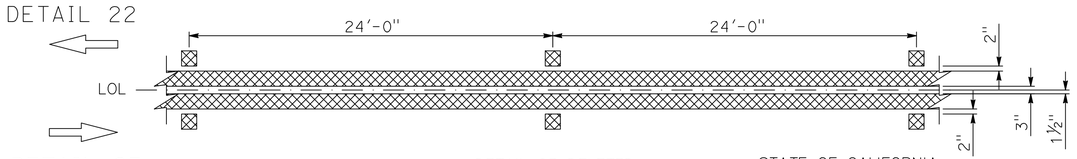
~~DETAIL 20~~ DETAIL 20 DELETED

NO PASSING ZONES-TWO DIRECTION

DETAIL 21



DETAIL 22



~~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

REVISED STANDARD PLAN RSP A20A

DATE PLOTTED = 5/31/23
TIME PLOTTED = 8:12:56 AM

USERNAME = KEVIN
DGN FILE = 03-101784-rspa20a

6-24-22

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

Gary M. Gordon 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

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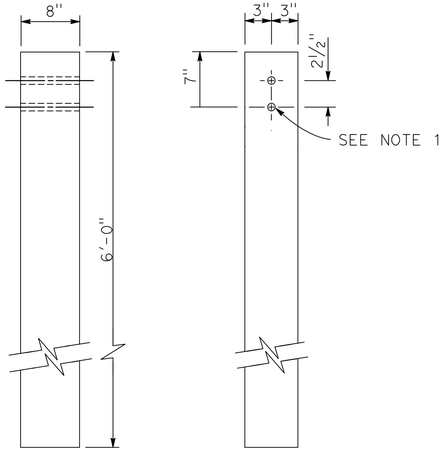
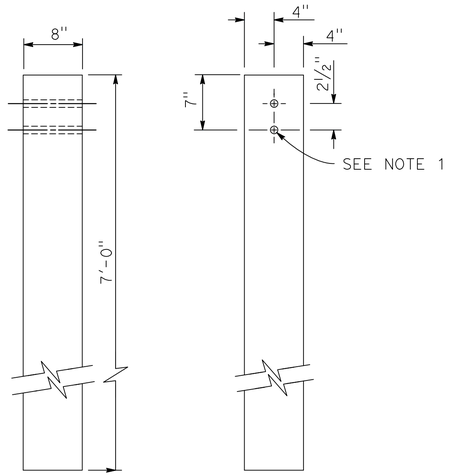
TO ACCOMPANY PLANS DATED 05-31-23



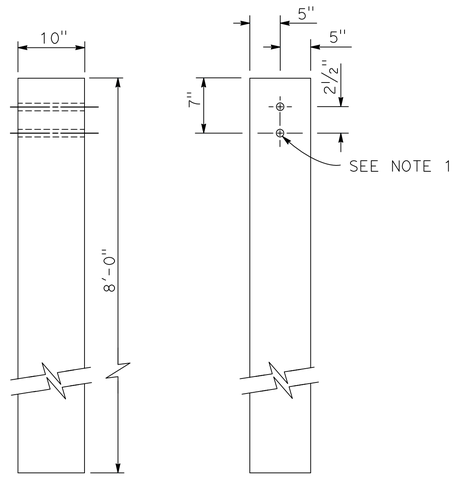
SIDE FRONT

6" x 8" WOOD POST
See Note 3



SIDE FRONT

8" x 8" WOOD POST
See Note 4

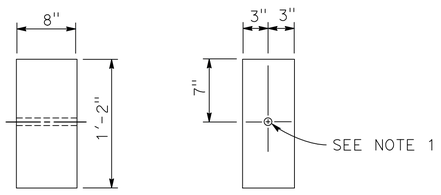


SIDE FRONT

10" x 10" WOOD POST
See Note 5

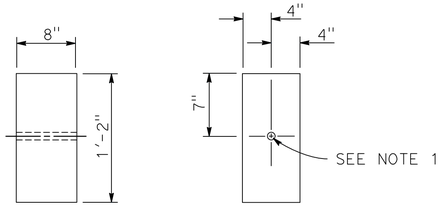
NOTES:

1. All holes in wood posts and blocks shall be ¾" 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.



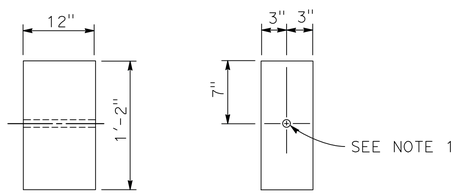
SIDE FRONT

6" x 8" WOOD BLOCK
See Note 6 and Note 3



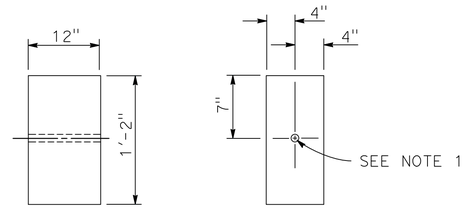
SIDE FRONT

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 = 9:41:25 AM

USERNAME = KEVIN
DGN FILE = 03-101784-rspa77n1

6-24-22

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

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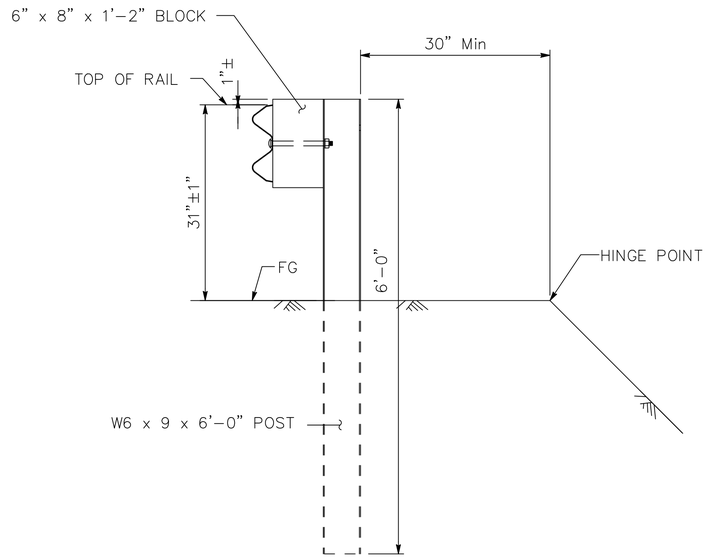
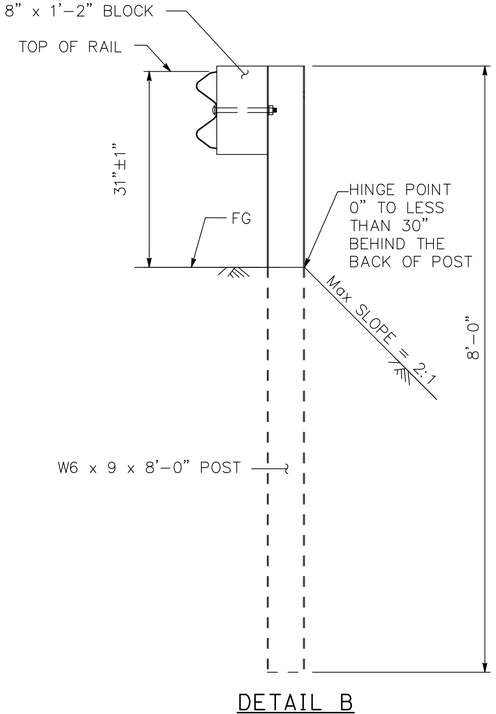
TO ACCOMPANY PLANS DATED 05-31-23



DETAIL A

TYPICAL ROADWAY INSTALLATION

See Note 1

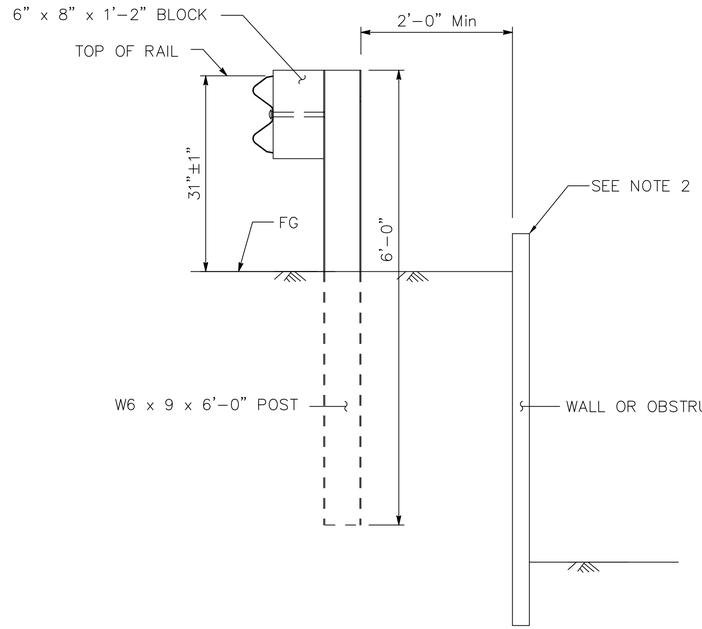


DETAIL B

NARROW ROADWAY INSTALLATION

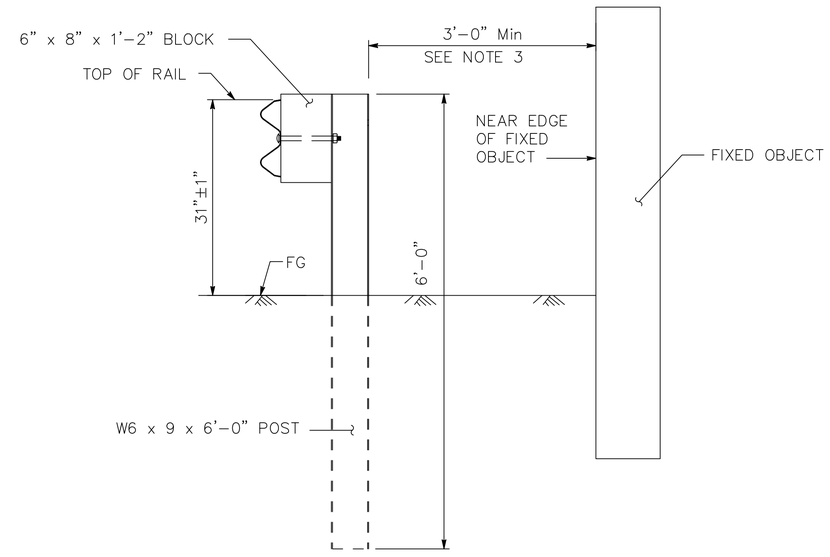
See Note 1

POST EMBEDMENT



DETAIL C

AT OR BELOW GRADE



DETAIL D

ABOVE GRADE

INSTALLATION AT
WALLS OR OBSTRUCTIONS

NOTES:

1. These installation details are also applicable to wood line post installations. For Detail A, C, and D, where wood line post installations are constructed, 6" x 8" , 6'-0" in length, with 6" x 8" x 1'-2" blocks are to be used in place of steel post and block. For Detail B, where wood line post installations are constructed, 6" x 8" post, 8'-0" in length, with blocks are to be used in place of the steel post and block shown. For additional installation details, see Standard Plans A77L1 and A77L2.
2. When maximum height of obstruction behind guardrail post is 6" above grade, see Detail D.
3. If distance from back of post to the near edge of fixed object is less than 3'-0", see Strengthened Rail Section as shown in layout pages.
4. For dike positioning with MGS installations, see Revised Standard Plan RSP A77N4.

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 = 9:43:11 AM

USERNAME = KEVIN
DGN FILE = 03-101784-rspa77n3

6-24-22

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

Gary M. Gordon 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

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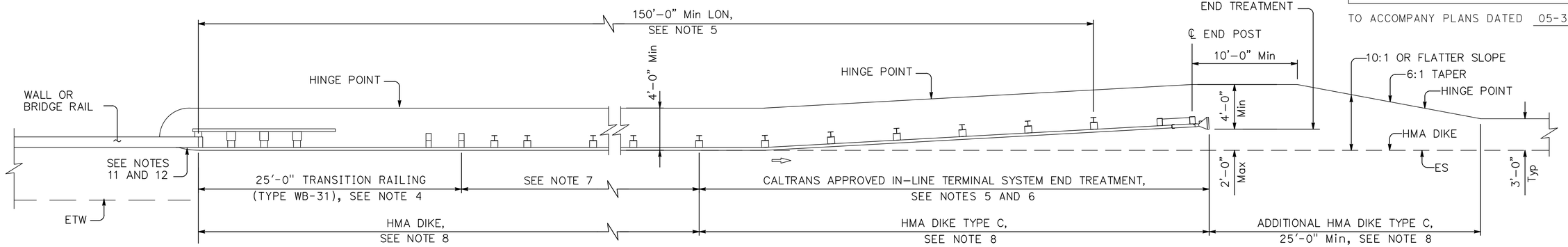
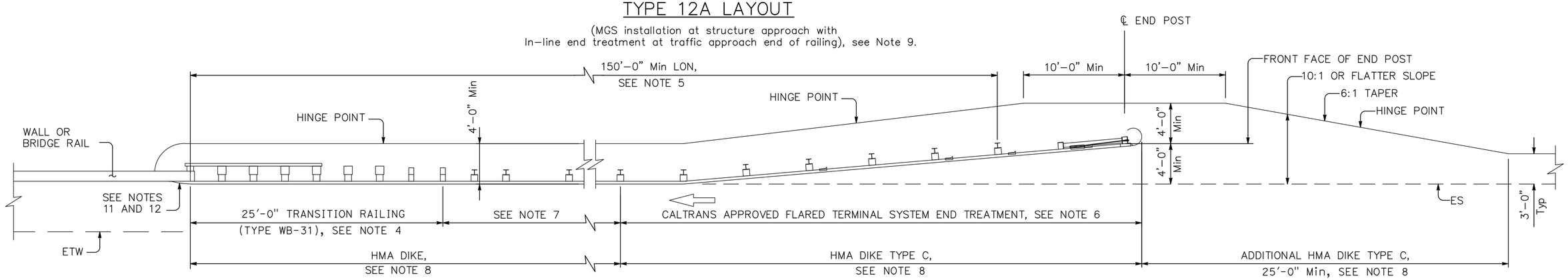
TO ACCOMPANY PLANS DATED 05-31-23



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:

1. Line post, blocks and hardware to be used are shown on Standard Plans A77L1, A77L2, A77M1, A77N2 and Revised Standard Plan RSP A77N1.
2. MGS post spacing to be 6'-3" center to center, except as otherwise noted.
3. 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.
4. For Transition Railing (Type WB-31) details for Types 12A and 12B Layouts, see Standard Plan A77U4.
5. A minimum of 150'-0" of MGS is needed to develop Length of Need (LON).
6. The type of terminal system end treatment to be used will be shown on the Project Plans.
7. 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.
8. Where placement of dike is required with guard railing installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
9. 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.
10. 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.
11. 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.
12. 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 APPRPOACH

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

USERNAME = KEVIN
DGN FILE = 03-101784-rspa77q1

6-24-22

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

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

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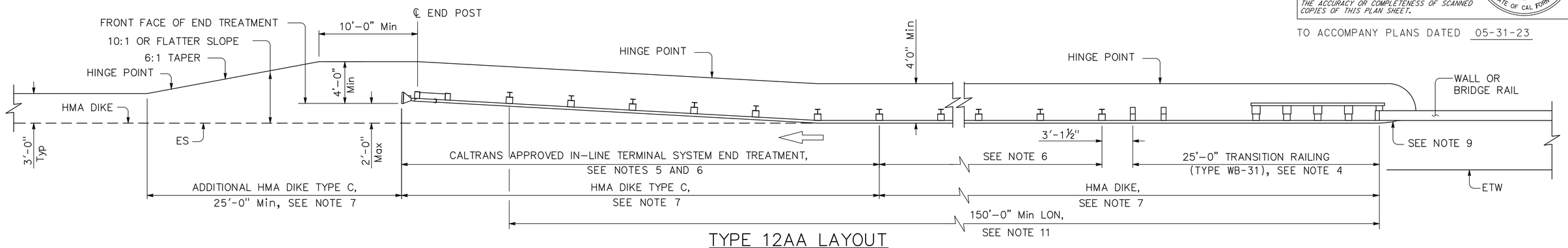
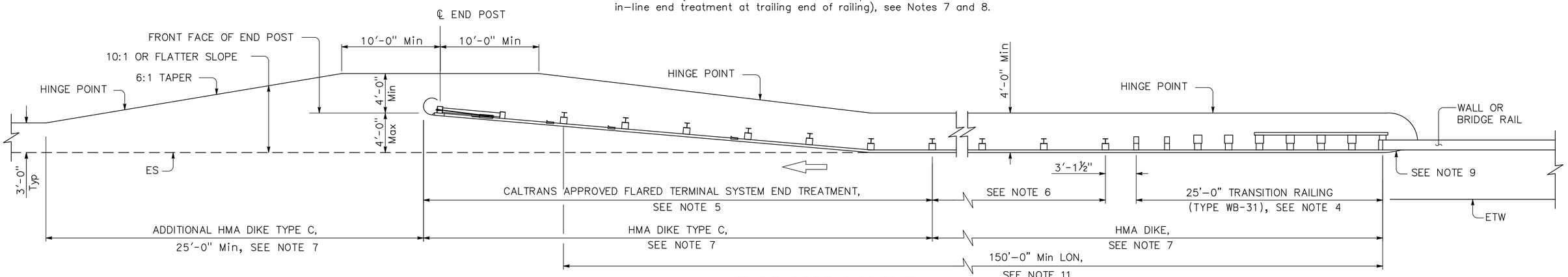
TO ACCOMPANY PLANS DATED 05-31-23



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:

1. Line post, blocks and hardware to be used are shown on Standard Plans A77L1, A77L2, A77M1, A77N2 and Revised Standard Plan RSP A77N1.
2. MGS post spacing to be 6'–3" center to center, except as otherwise noted.
3. 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.
4. For Transition Railing (Type WB–31) details for Types 12AA and 12BB Layouts, see Standard Plan A77U4.
5. The type of terminal system to be used will be shown on the Project Plans.
6. 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.
7. Where placement of dike is required with MGS installations, see Revised Standard Plan RSP A77N4 for dike positioning details.
8. 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.
9. 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.
10. For roadways with parallel structures and non traversable medians, the Type 12AA or Type 12BB layout may be used.
11. 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 APPRPOACH

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 = 9:46:06 AM

USERNAME = KEVIN
DGN FILE = 03-101784-rspa77q4

6–24–22

LEGEND

Denotes Existing Structure

Denotes Proposed Structure

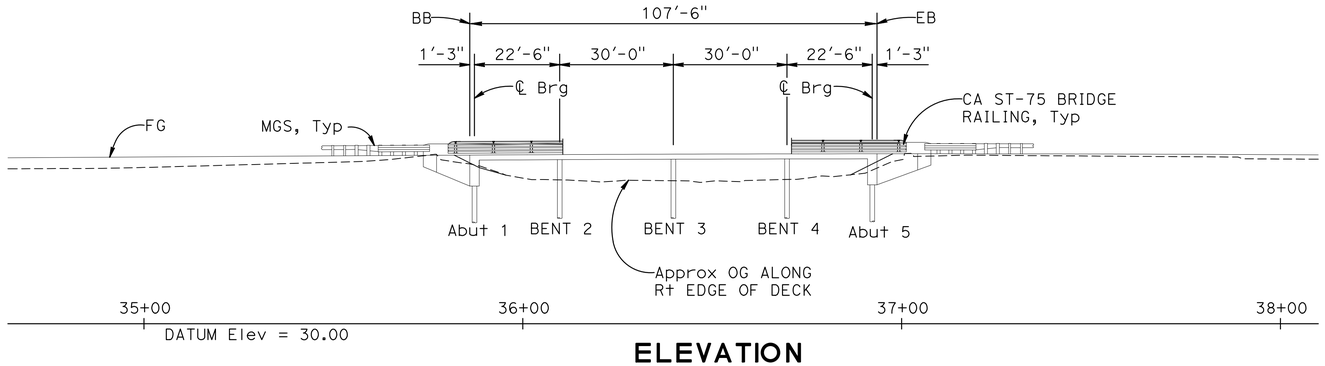
STANDARD PLAN SHEET No.

DETAIL No.

SECTION IDENTIFICATION

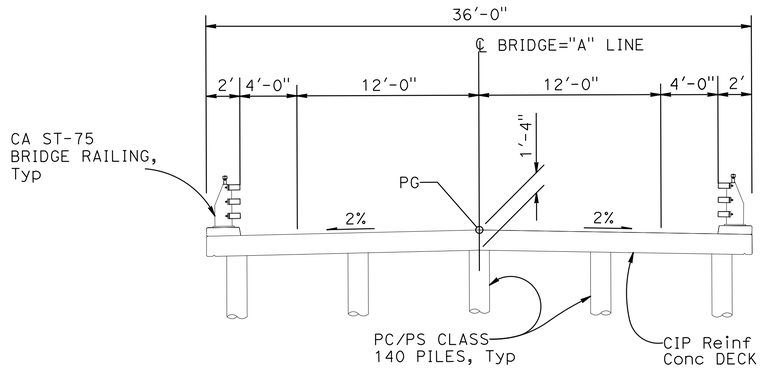
PROFILE

NO SCALE



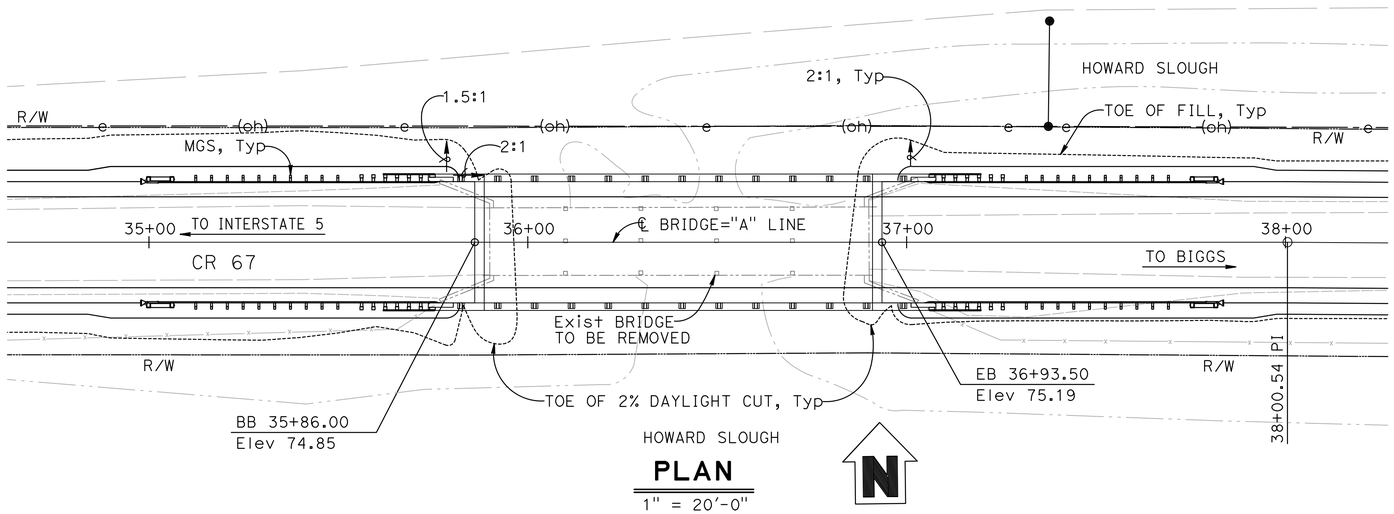
ELEVATION

1" = 20'-0"



TYPICAL SECTION

1" = 5'-0"



PLAN

1" = 20'-0"

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

05-31-23
REGISTERED CIVIL ENGINEER — DATE

REGISTERED PROFESSIONAL ENGINEER
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

INDEX TO BRIDGE PLANS

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

BRIDGE NO.	11C0017
POST MILES	NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

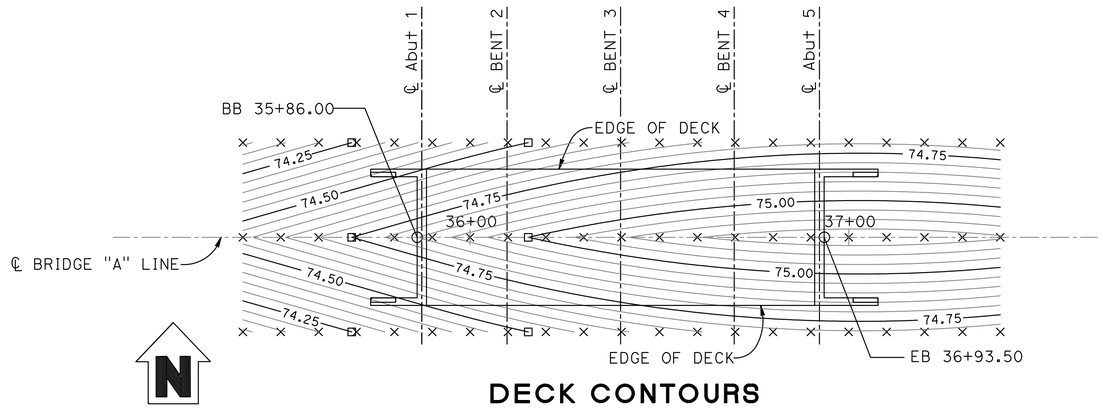
GENERAL PLAN

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
11/30/14	07/26/17	05/31/23		1	15

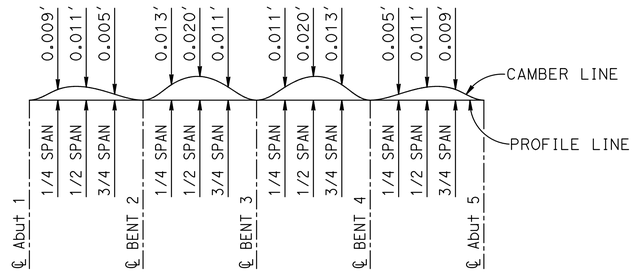
FILE => 11-0017-a-gp01

DATE PLOTTED => 5/31/2023 TIME PLOTTED => 10:34:59 AM
USERNAME => KEVIN



DECK CONTOURS

SCALE: 1" = 20'-0"



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. × Indicates 10' intervals measured along "A" Line.
4. Contour interval = 0.05'
5. Contours do not include allowances for camber or falsework settlement.

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

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.

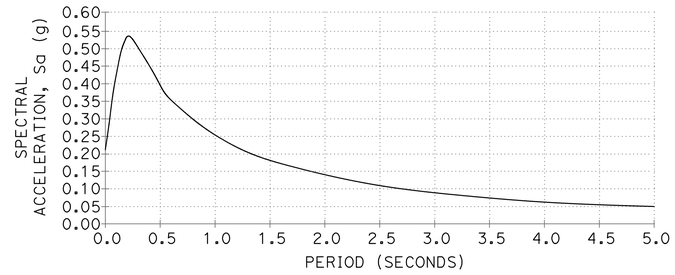
SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.7 dated April 2013.

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

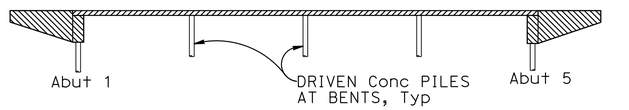
REINFORCED CONCRETE: f'c = 4.0 ksi (Superstructure)
f'c = 3.6 ksi (Substructure)



ACCELERATION RESPONSE SPECTRUM CURVE

APPROXIMATE QUANTITIES

ITEM CODE	ITEM DESCRIPTION	QUANTITY	UNIT
157550	BRIDGE REMOVAL	1	LS
192020	STRUCTURE EXCAVATION (TYPE D)	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



CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0017
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI			POST MILES NA
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN			

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

DECK CONTOURS

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
11/30/14	07/26/17	05/31/23		2	15

FILE => 11-0017-d-dc01

USERNAME => KEVIN DATE PLOTTED => 5/31/2023 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 CUBIC ft/sec.		14.00	X	X
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.

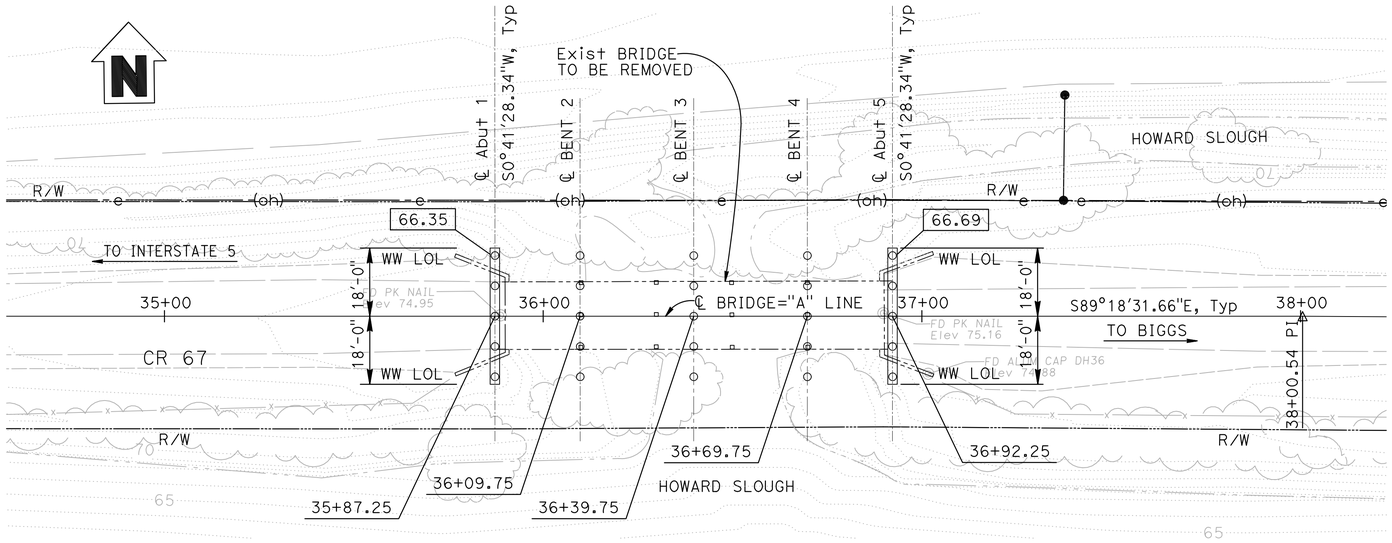
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	21	33

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

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	DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0017	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
PHOTOGRAMMETRY AS OF: 06/12	ALIGNMENT TIES X		DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI			POST MILES NA	FOUNDATION PLAN
SURVEYED BY S. ESPINOSA	DRAFTED BY J. JONES		QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN				
FIELD CHECKED BY B. STRATMAN	CHECKED BY P. ESPINOSA								

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
11/10/14	07/26/17	05/31/23		3	15

FILE => 11-0017-e-fp101

USERNAME => KEVIN DATE PLOTTED => 5/31/2023 TIME PLOTTED => 12:02:11 PM

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

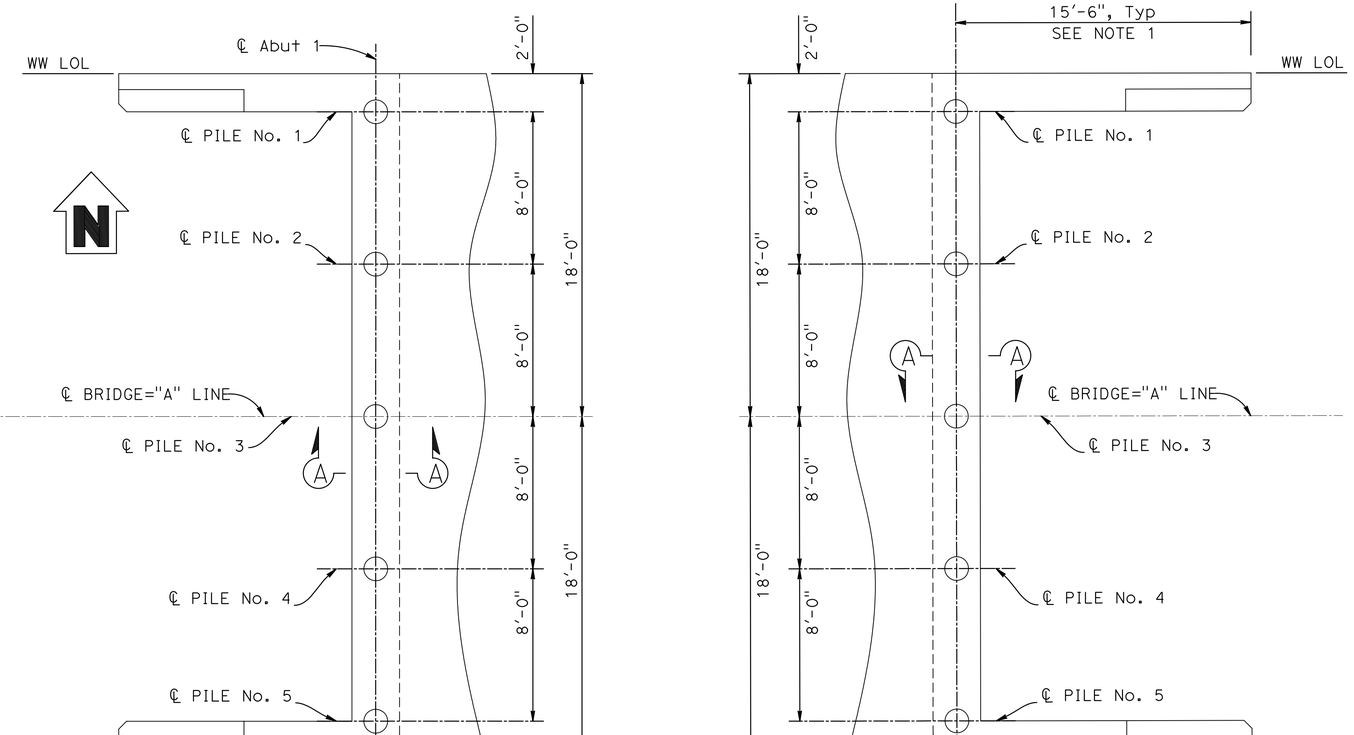
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	22	33

REGISTERED CIVIL ENGINEER — DATE 05-31-23

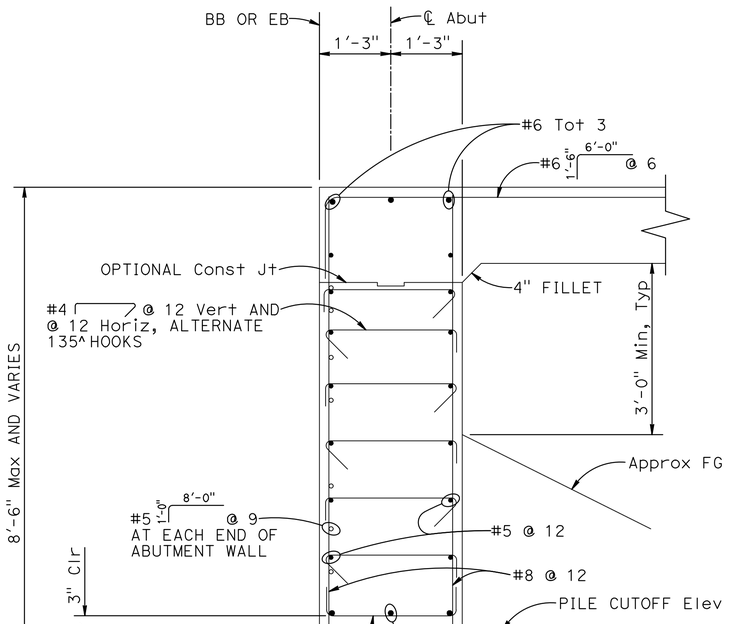
May 31, 2023
PLANS APPROVAL DATE

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

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	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0017	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				SHEET	OF
11/20/14	07/26/17	05/31/23		4	15

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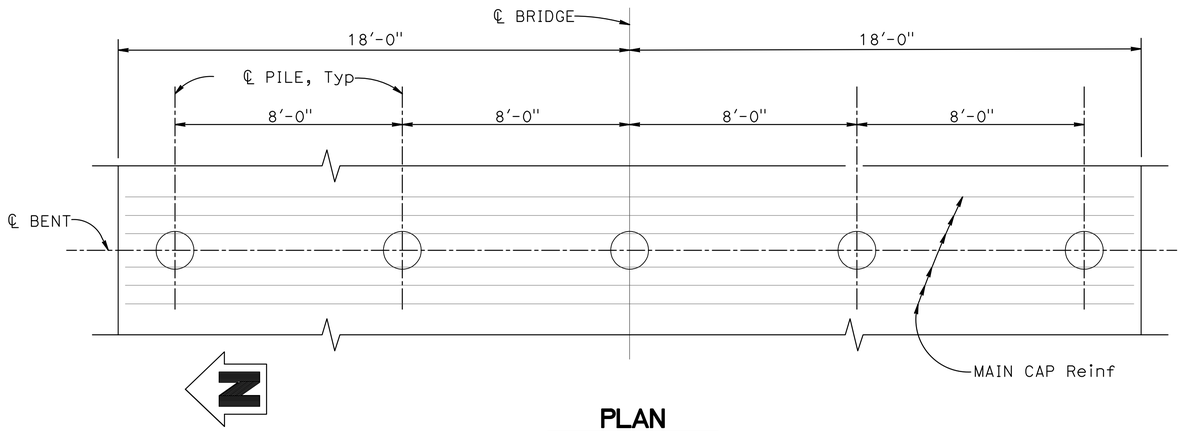
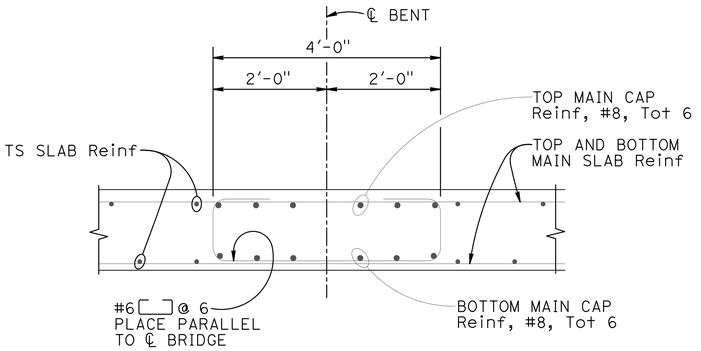
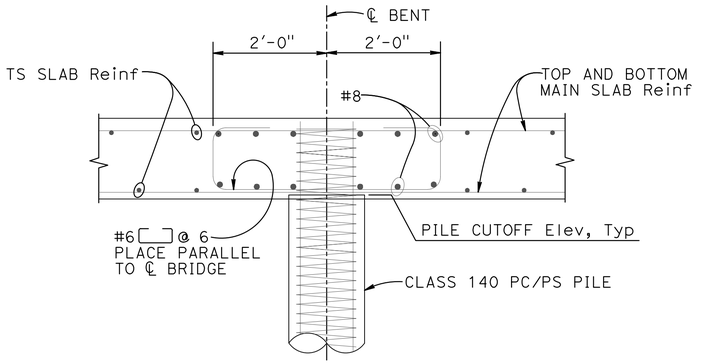
USERNAME => KEVIN DATE PLOTTED => 5/31/2023 TIME PLOTTED => 2:25:12 PM



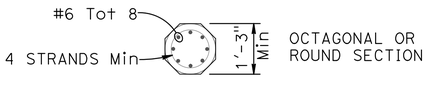
PLAN
SCALE: 3/8" = 1′-0"



SECTION A-A
SCALE: 3/4" = 1′-0"

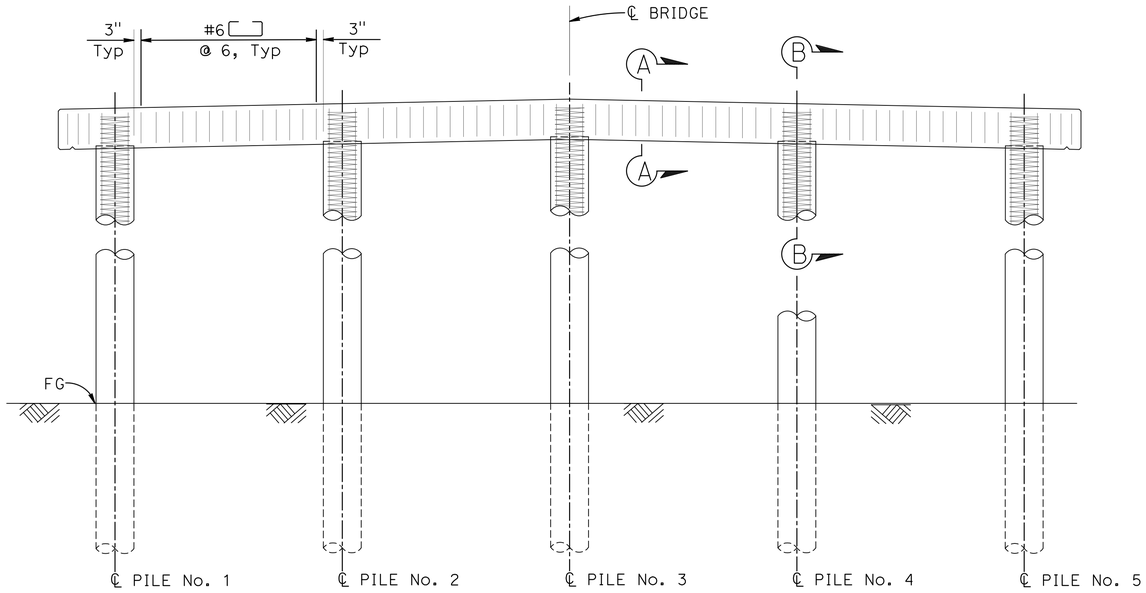


SECTION B-B
SCALE: 3/4" = 1′-0"



OCTAGONAL OR
ROUND SECTION

SECTION C-C



ELEVATION
SCALE: 3/8" = 1′-0"

NOTES:

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

PRECAST PRESTRESSED CONCRETE PILE

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

REGISTERED CIVIL ENGINEER — DATE 05-31-23

REGISTERED PROFESSIONAL ENGINEER — 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

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI	
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN	

G. GORDON
PROJECT ENGINEER

BRIDGE NO. 11C0017
POST MILES NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

BENT LAYOUT

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
11/30/14	07/28/17	05/31/23		5	15

FILE => 11-0017-h-b01_101

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

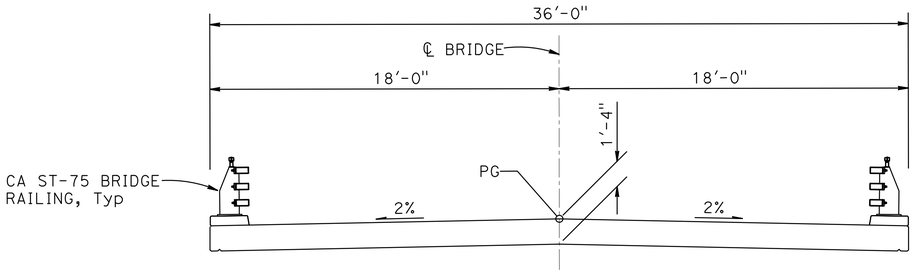
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	24	33

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

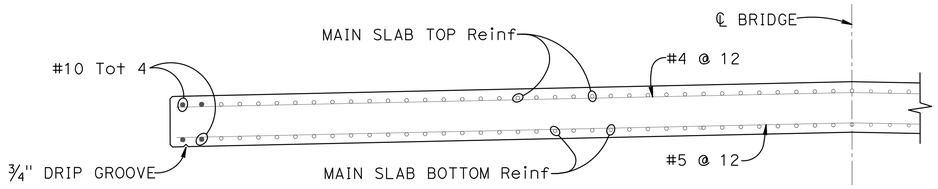
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

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



TYPICAL SECTION

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



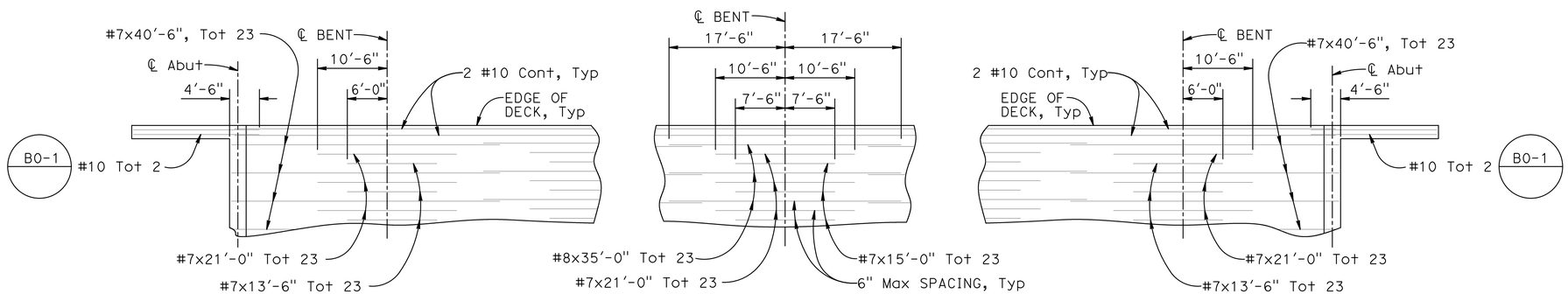
PART TYPICAL SECTION

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

NOTE: BAR CHAIRS NOT SHOWN.

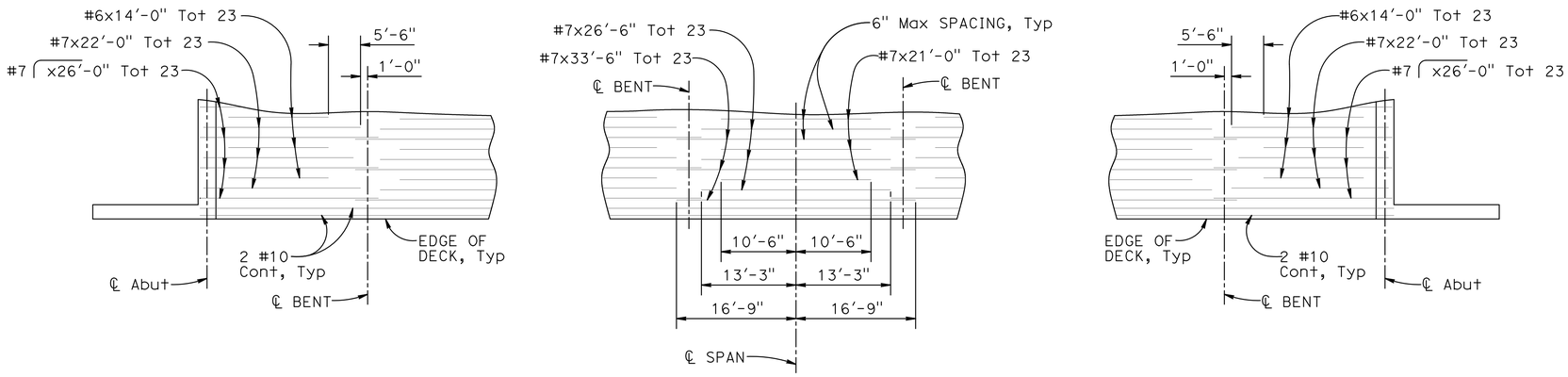
NOTES:

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	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0017	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)	
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI			POST MILES NA	SLAB REINFORCEMENT DETAILS NO. 1	
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				SHEET	OF
11/10/14	07/26/17	05/31/23		6	15

FILE => 11-0017-k1-Slab Reinf Details No 1

DATE PLOTTED => 5/31/2023 TIME PLOTTED => 4:32:29 PM
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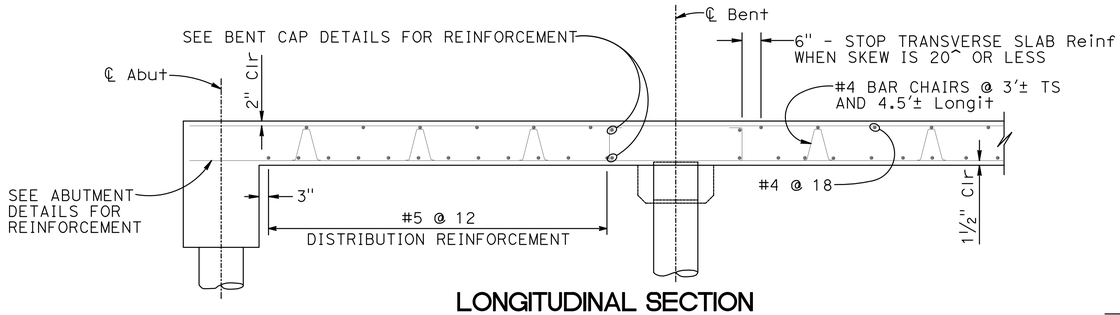
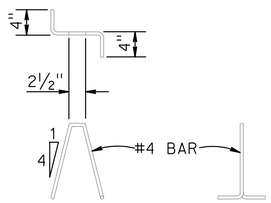
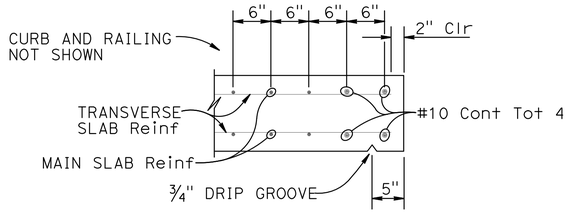


LONGITUDINAL SECTION



BAR CHAIR DETAIL



EDGE OF SLAB DETAILS

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

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 ℄ roadway.

DESIGN	BY J. DeMARTINI	CHECKED M. ILEY	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY
DETAILS	BY R. UHLMANN	CHECKED J. DeMARTINI	
QUANTITIES	BY J. DeMARTINI	CHECKED R. UHLMANN	

G. GORDON
PROJECT ENGINEER

BRIDGE NO. 11C0017
POST MILES NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
SLAB REINFORCEMENT DETAILS NO. 2

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
~~11/10/14~~	07/28/17	05/31/23		7	15

FILE => 11-0017-k2-Slab Reinf Details No 2

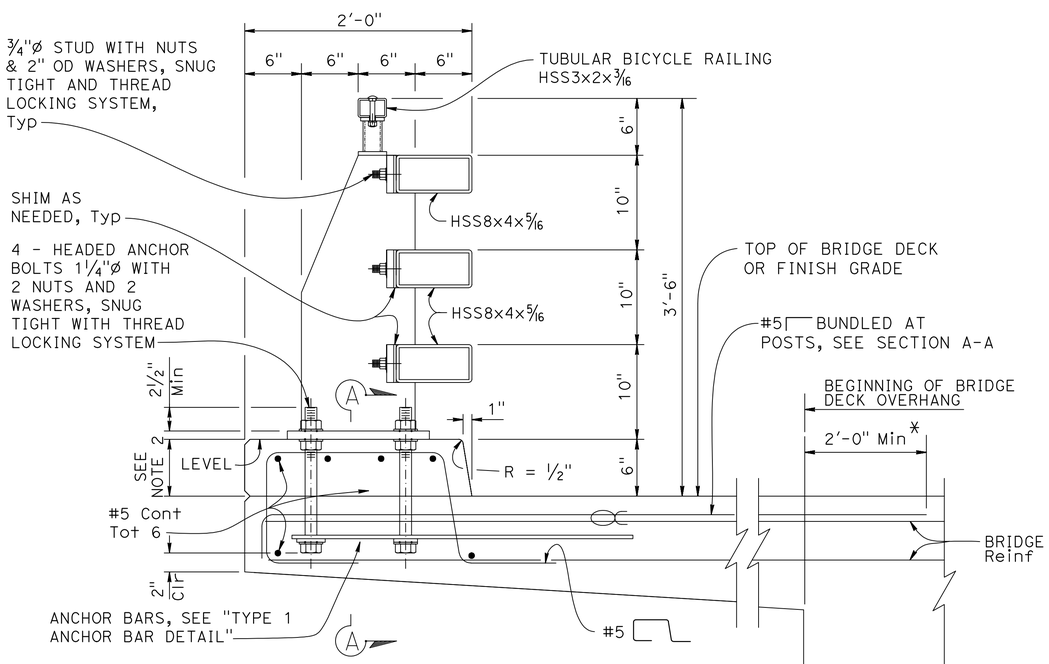
USERNAME => KEVIN DATE PLOTTED => 5/31/2023 TIME PLOTTED => 4:37:12 PM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	26	33

REGISTERED CIVIL ENGINEER — DATE 05-31-23

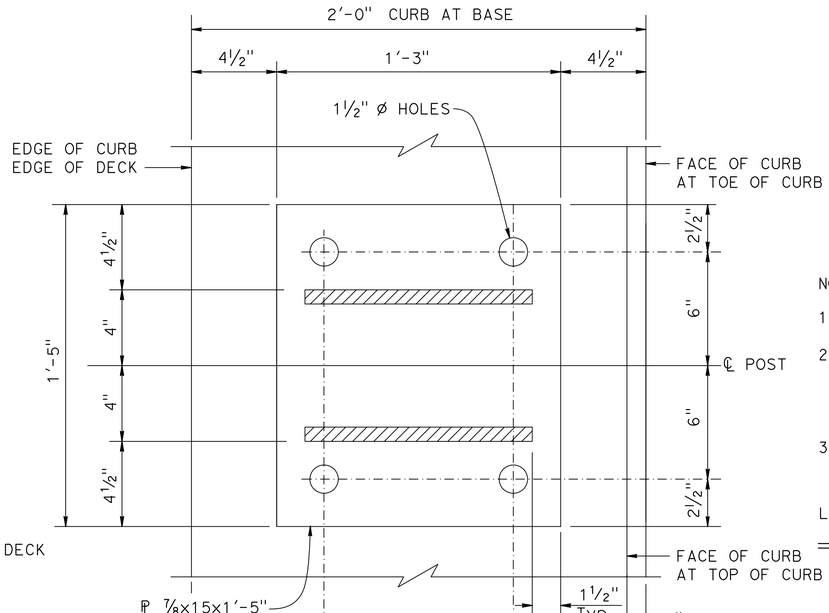
May 31, 2023
PLANS APPROVAL DATE

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



TYPICAL SECTION
NO SCALE

* #5 ⌐ Bundled at posts to extend 2'-0" Min beyond beginning of bridge deck overhang.



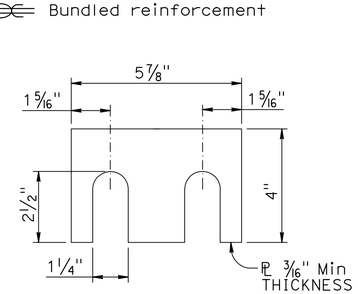
BASE PLATE
NO SCALE

NOTES:

1. Anchor bolts may be tack welded to anchor bars.
2. 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.
3. Use extra thick washers for anchor bolts, with a minimum thickness of 0.305" and a maximum thickness of 0.375".

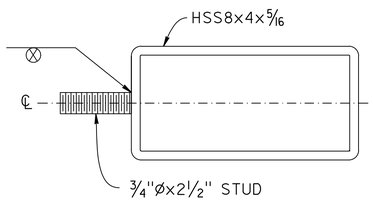
LEGEND:

Bundled reinforcement



SHIM DETAIL
NO SCALE

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



RAIL SECTION AT POST
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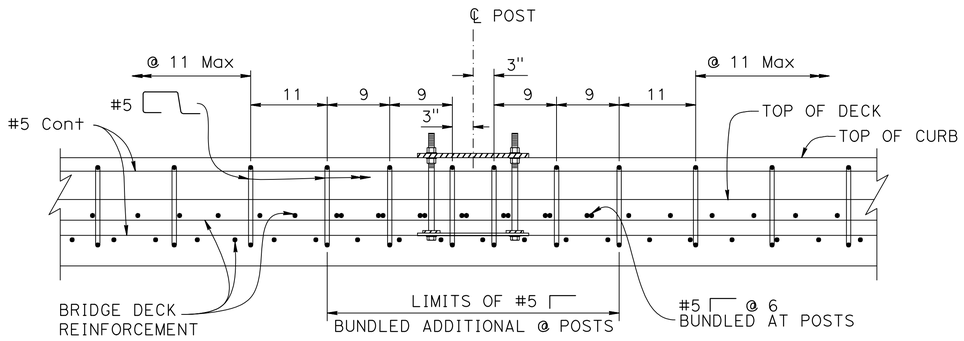
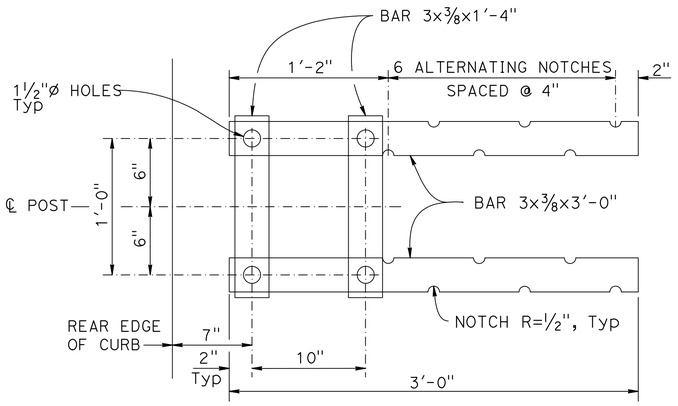


SECTION A-A
NO SCALE
NOTE: Post not shown for clarity.



TYPE 1 ANCHOR BAR DETAIL
NO SCALE

BRIDGE STANDARD DETAILS		
xs16-116-1 (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*

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

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

BRIDGE NO.	11C0017
POST MILES	NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 1

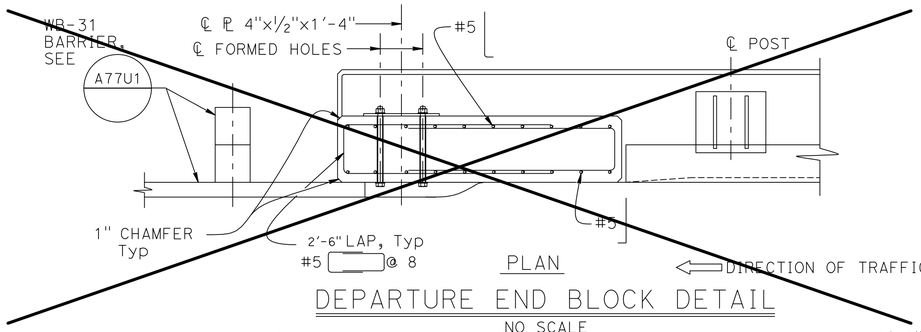
DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
12/05/19	06/30/22	07/05/22		8	15

2022 STANDARD PLAN XS-16-116-1

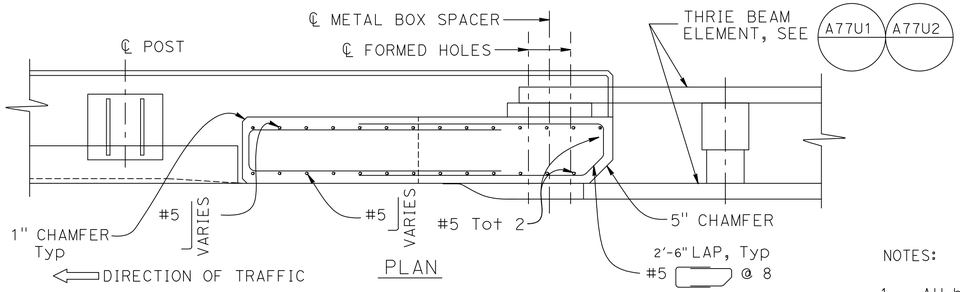
USERNAME => KEVIN DATE PLOTTED => 05/31/2023 TIME PLOTTED => 9:48:36 AM

FILE => 11-0017-r-rspxs16-116-1



DEPARTURE END BLOCK DETAIL

NO SCALE



APPROACH TRANSITION END BLOCK DETAIL

NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	27	33

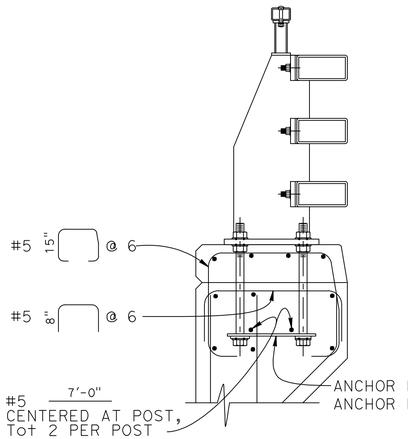
REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

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

NOTES:

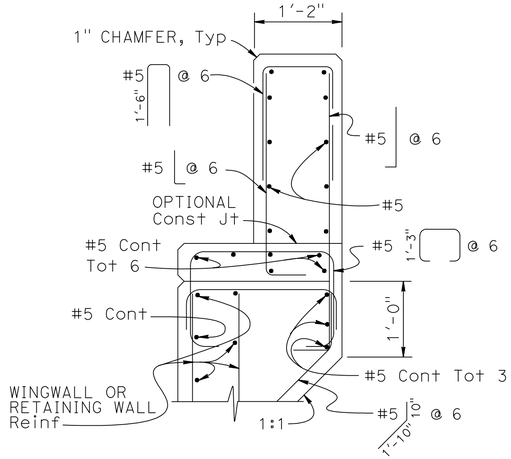
1. All horizontal members are parallel to longitudinal profile grade.
2. Posts are normal to profile grade of structure.
3. Posts are vertical to the transverse cross section.
4. If departure end block is within the Clear Recovery Zone (CRZ, 30 feet for expressways and freeways and 20 feet for conventional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



SECTION B-B

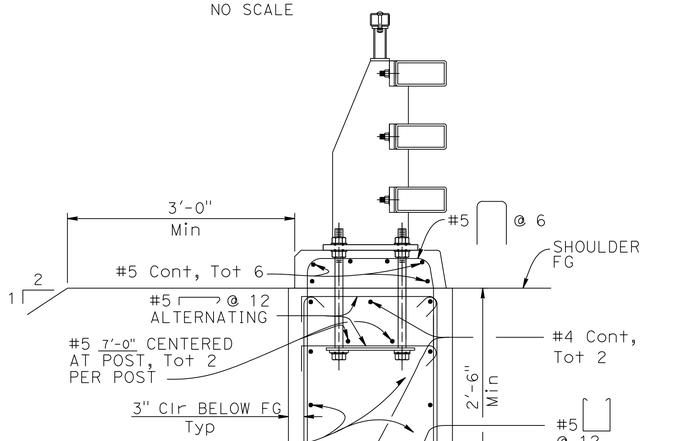
NO SCALE

NOTE:
For details not shown see "SECTION C-C"



SECTION C-C

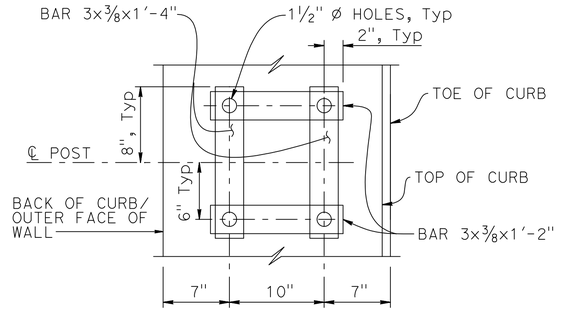
NO SCALE



Note:
Minimum length of ST-75B is 40'-0".

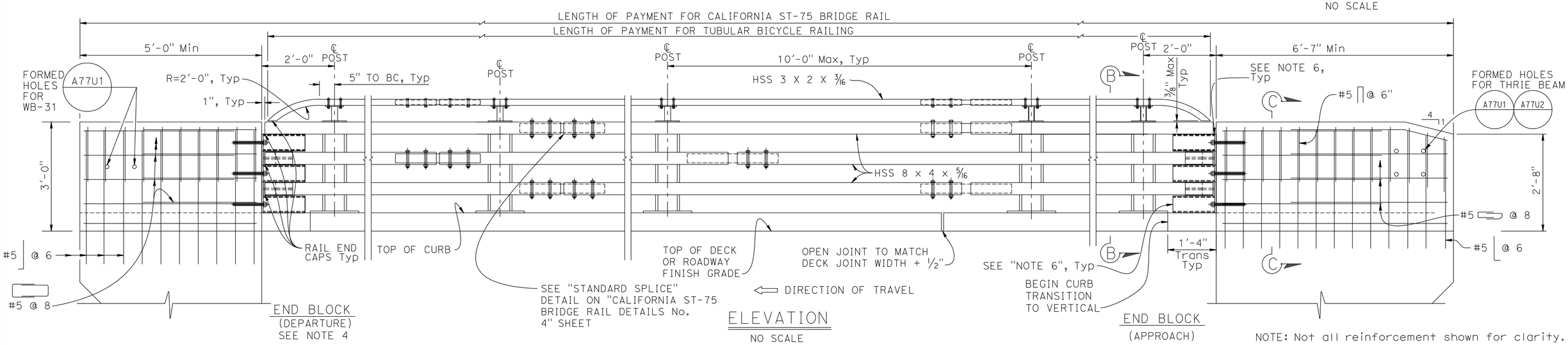
ST-75B

NO SCALE
AESTHETIC ALTERNATIVE TO GUARD RAIL



TYPE 2 ANCHOR BAR DETAIL

NO SCALE



ELEVATION

NO SCALE

NOTE: Not all reinforcement shown for clarity.

BRIDGE STANDARD DETAILS		
xs16-116-2 (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*

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

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

BRIDGE NO.	11C0017
POST MILES	NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 2

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	OF
12/19/19	06/30/22	07/05/22		9	15

2022 STANDARD PLAN XS-16-116-2

USERNAME => KEVIN
DATE PLOTTED => 05/31/2023
TIME PLOTTED => 9:50:25 AM

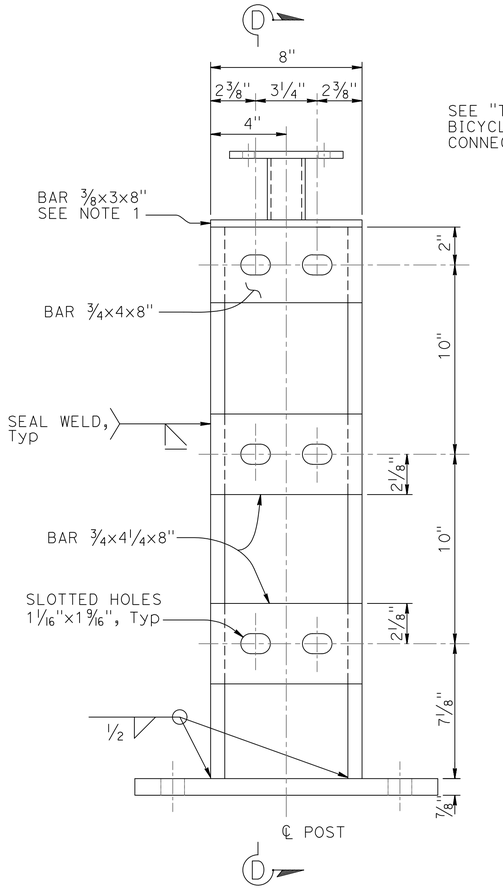
FILE => 11-0017-r-rspxs16-116-2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	28	33

REGISTERED CIVIL ENGINEER — DATE 05-31-23

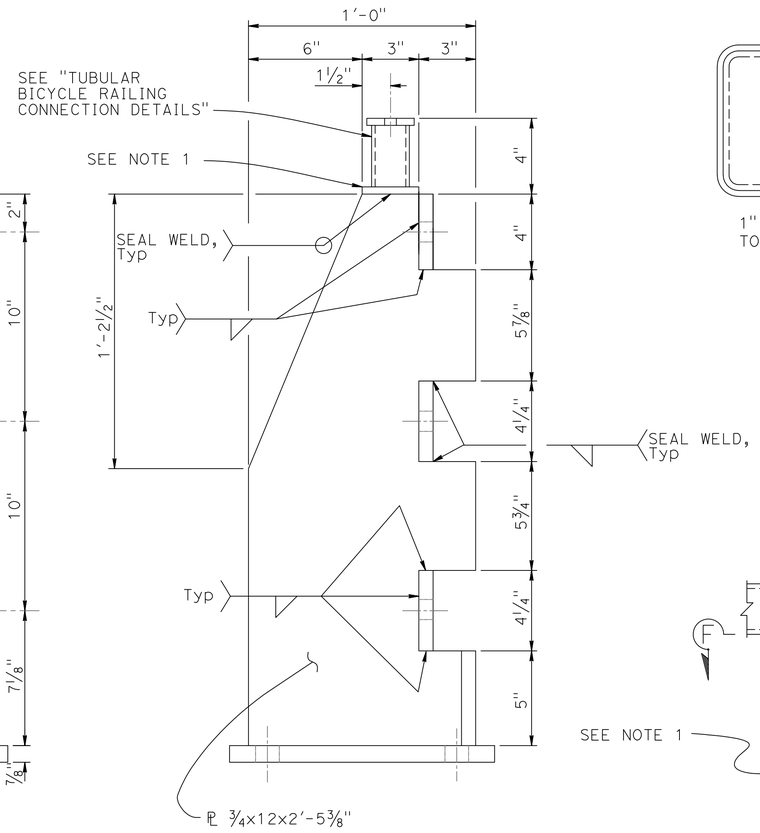
May 31, 2023
PLANS APPROVAL DATE

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



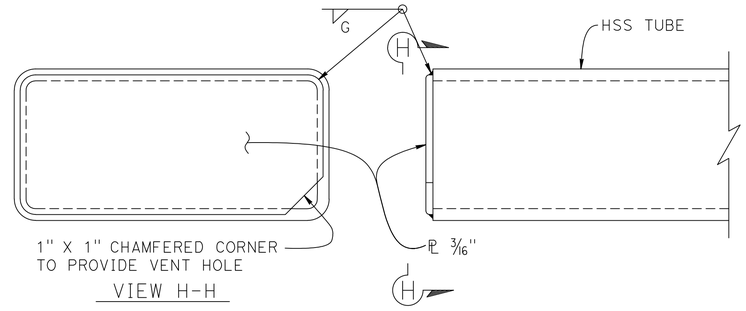
POST DETAIL

NO SCALE



SECTION D-D

NO SCALE



RAIL END CAP

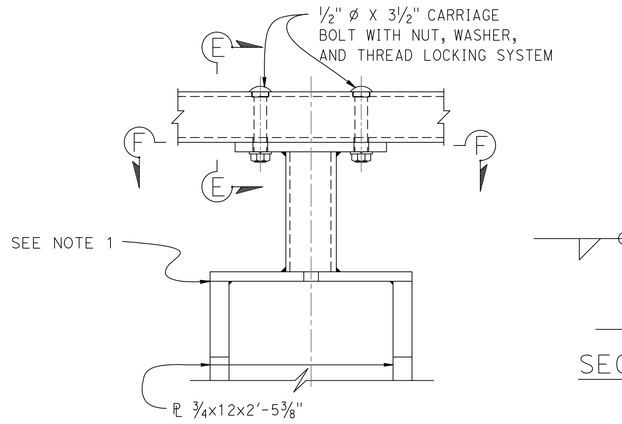
VIEW H-H

NO SCALE

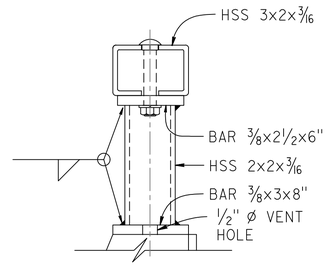
NOTE: For vehicular rail tube and bicycle railing tubes.

NOTE:

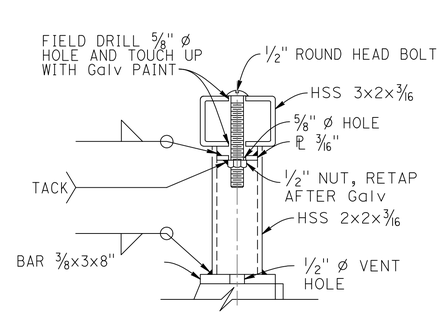
1. For access controlled freeways and expressways where bicycle traffic is prohibited by signage on the on-ramps, the bicycle railing (includes bar 3/8x3x8" and above) may be omitted.



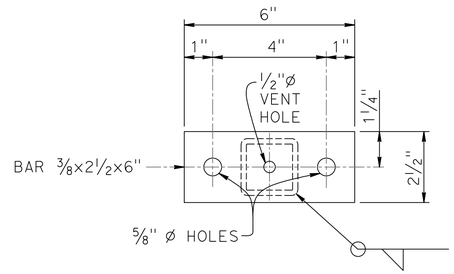
ELEVATION



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	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0017	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)	
				DETAILS	BY K. COOK-GUTERIEZ	CHECKED G. GORDON			POST MILES NA	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 3	
				QUANTITIES	BY	CHECKED					

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	OF
12/19/19	06/30/22	07/05/22		10	15

FILE => 11-0017-r-rspxs16-116-3

2022 STANDARD PLAN XS-16-116-3

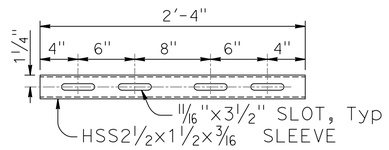
USERNAME => KEVIN DATE PLOTTED => 05/31/2023 TIME PLOTTED => 9:52:42 AM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	29	33

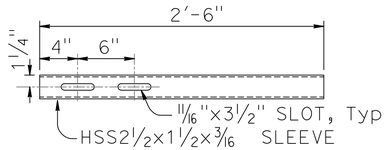
REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

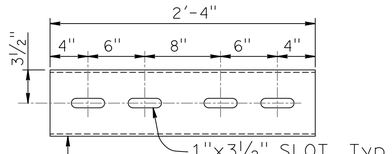
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA



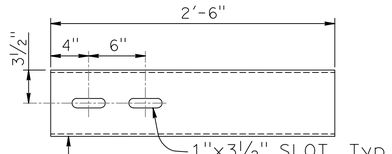
HSS3x2x3/16 RAIL



HSS3x2x3/16 RAIL



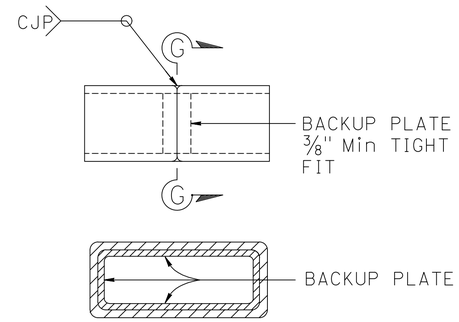
HSS8x4x5/16 RAIL



HSS8x4x5/16 RAIL

STANDARD SLEEVES DETAILS
NO SCALE

EXPANSION SLEEVES DETAILS
NO SCALE

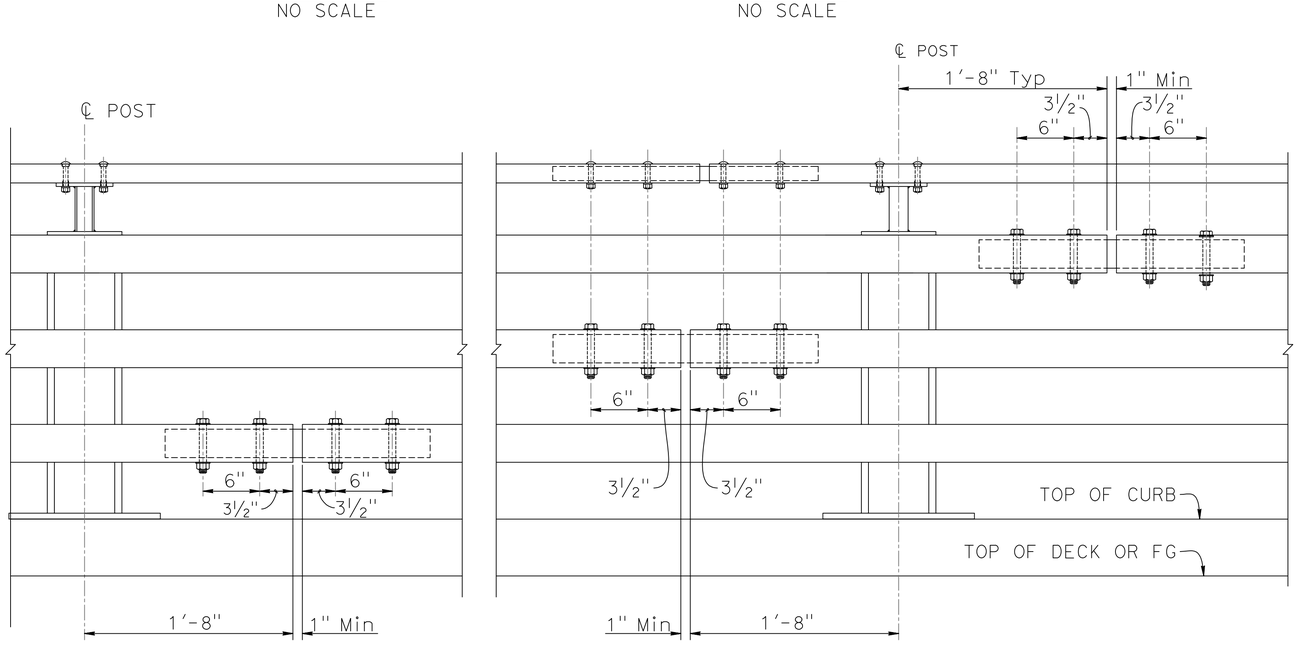


SECTION G-G

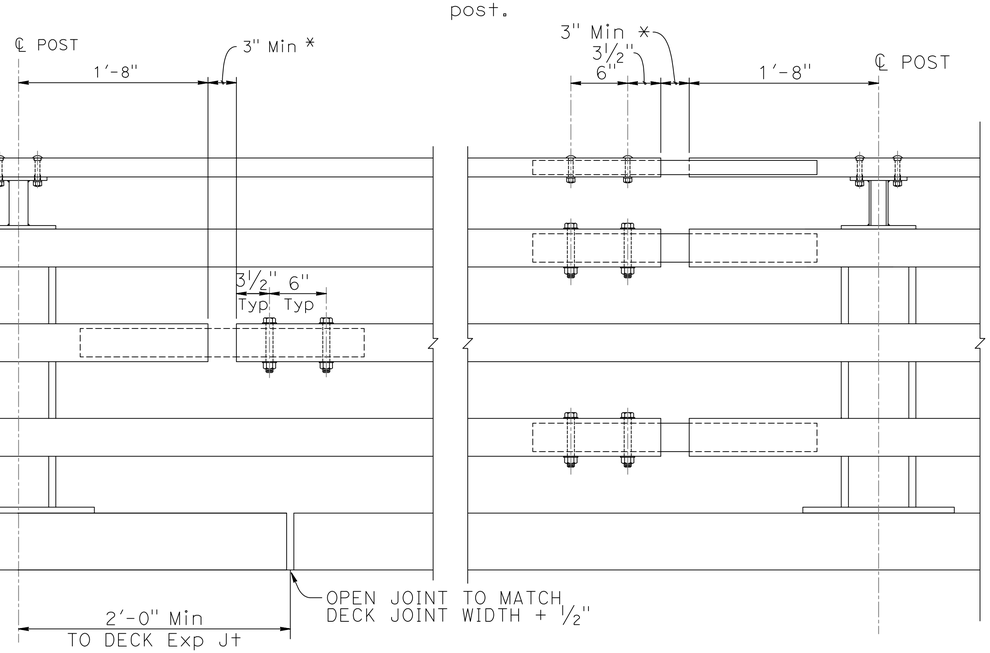
ALTERNATE TUBE WELDED STANDARD SPLICE
NO SCALE

NOTES:

1. HS bolts with nut and washers, snug tightened, and thread locking system.
2. Use ½"Øx3 5/16 BOLTS (HSS3x2x3/16)
   Use ¾"Øx5 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 (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*

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

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

BRIDGE NO.	11C0017
POST MILES	NA

BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
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

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
12/19/19	06/30/22	07/05/22		11	15

FILE => 11-0017-r-rspxs16-116-4

2022 STANDARD PLAN XS-16-116-4

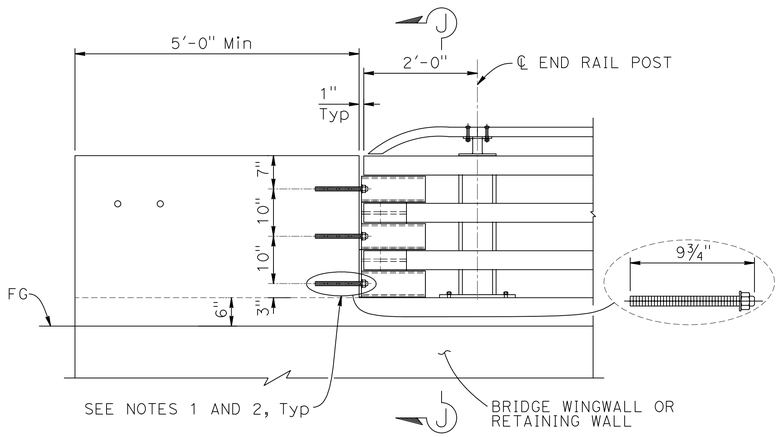
USERNAME => KEVIN
DATE PLOTTED => 05/31/2023
TIME PLOTTED => 9:55:20 AM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	30	33

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

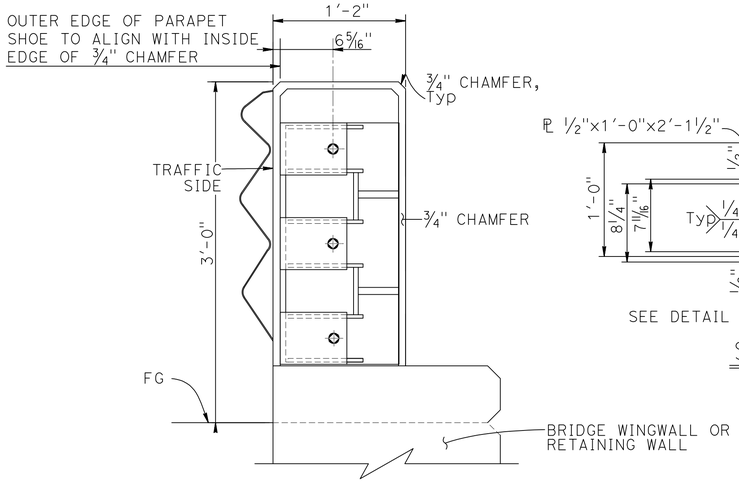
REGISTERED PROFESSIONAL ENGINEER — GARY M. GORDON — No. 42176 — Exp. 03-31-24 — CIVIL — STATE OF CALIFORNIA



PARAPET SHOE AT DEPARTURE END BLOCK

¾" = 1'-0"

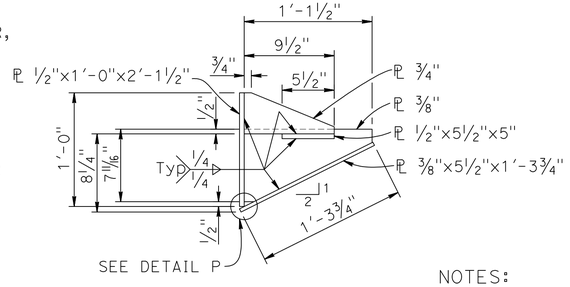
NOTE: Parapet shoe connection to approach end block is similar.



SECTION J-J

¾" = 1'-0"

NOTE: Bridge railing not shown clarity.

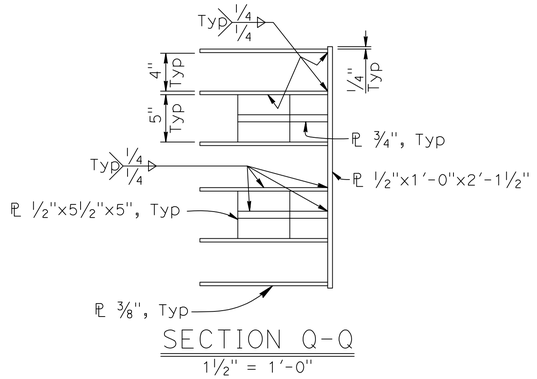


SECTION K-K

1½" = 1'-0"

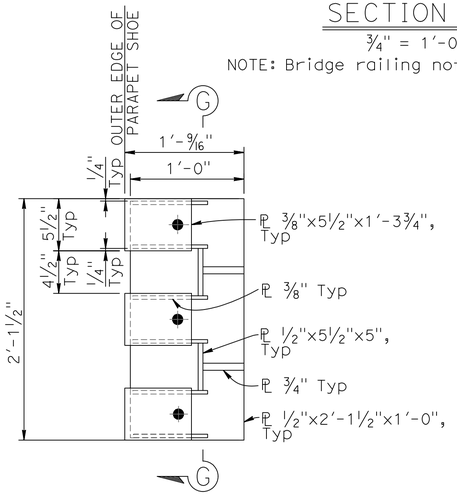
NOTES:

1. Anchor bolts must be ⅞" Dia and ASTM F1554 Grade 105 fully threaded rods with heavy hex nut and one hardened washer (1¾" OD) each. Embed threaded rods 8" into concrete anchor block with DRILL AND BOND (CHEMICAL ADHESIVE) anchorage system.
2. DRILL AND BOND (CHEMICAL ADHESIVE) anchorages is subjected to approval of Engineer. Installation procedure must comply with manufacture's instructions.



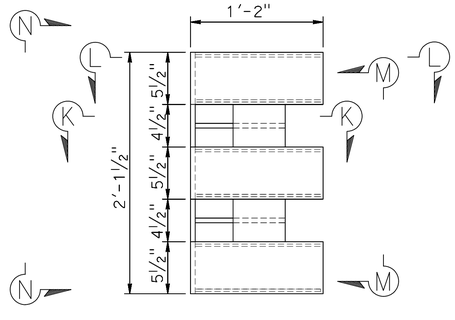
SECTION Q-Q

1½" = 1'-0"



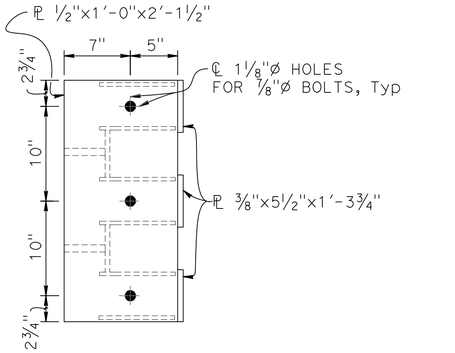
VIEW M-M

1½" = 1'-0"



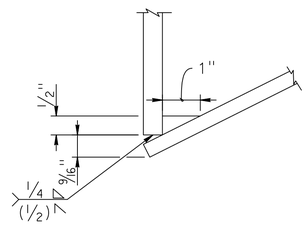
PARAPET SHOE ELEVATION

1½" = 1'-0"



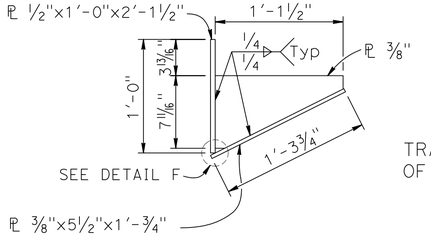
VIEW N-N

1½" = 1'-0"



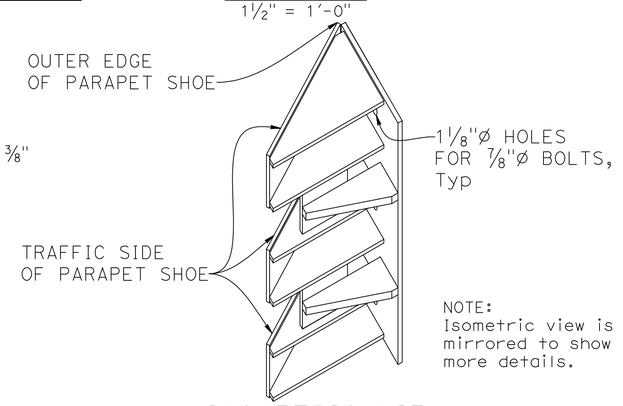
DETAIL F

6" = 1'-0"



SECTION L-L

1½" = 1'-0"



NOTE:
Isometric view is mirrored to show more details.

ISOMETRIC VIEW

1½" = 1'-0"

2022 STANDARD PLAN XS-16-116-5

USERNAME => KEVIN | DATE PLOTTED => 05/31/2023 | TIME PLOTTED => 9:56:53 AM

BRIDGE STANDARD DETAILS			DESIGN	BY	CHECKED	PREPARED FOR		BRIDGE NO.	BRANCH HOWARD SLOUGH BRIDGE (REPLACE)
xs16-116-5 (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	DETAILS	K. COOK-GUTERIEZ	G. GORDON	COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	11C0017	CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 5
			QUANTITIES	BY	CHECKED			POST MILES 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	OF
12/19/19	06/30/22	07/05/22		12	15

FILE => 11-0017-r-rspxs16-116-5

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	31	33

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

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.

BOREHOLE IDENTIFICATION

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

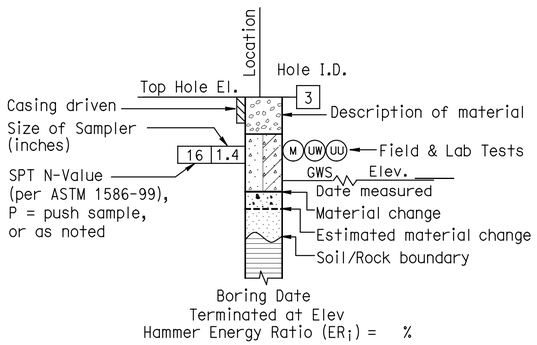
Note: Size in inches.

CONSISTENCY OF COHESIVE SOILS

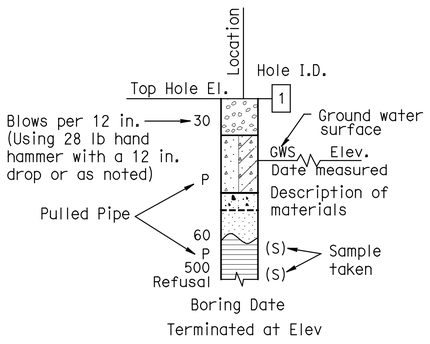
Description	Unconfined Compressive Strength (tsf)	Pocket Penetrometer Measurement (tsf)	Torvane Measurement (tsf)	Field Approximation
Very Soft	< 0.25	< 0.25	< 0.12	Easily penetrated several inches by fist
Soft	0.25 to 0.50	0.25 to 0.50	0.12 to 0.25	Easily penetrated several inches by thumb
Medium Stiff	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

PLASTICITY OF FINE-GRAINED SOILS

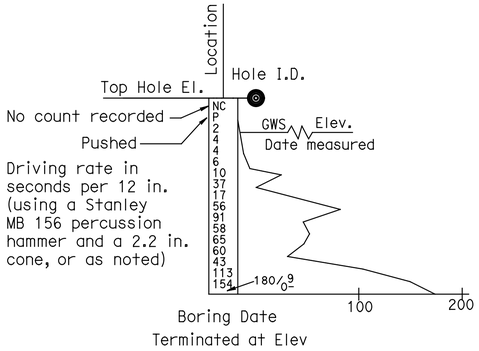
Description	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be 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.



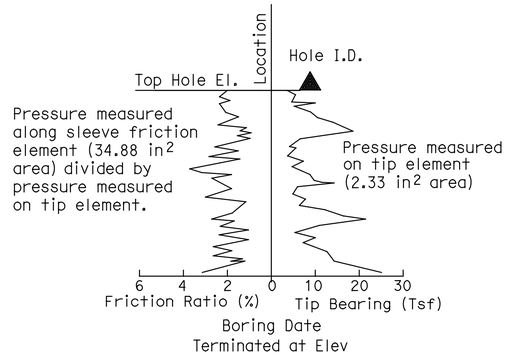
AUGER BORING



HAND BORING



DYNAMIC CONE PENETRATION BORING



CONE PENETRATION TEST (CPT) BORING

DRAWN BY	S. McCRACKEN	B. KILLEEN	PREPARED FOR	G. GORDON	BRIDGE NO.	HOWARD SLOUGH BRIDGE (REPLACE)	
CHECKED BY	R. KHIABANI	FIELD INVESTIGATION BY:	COUNTY OF GLENN	PROJECT ENGINEER	11C0017		
		DATE: X	PUBLIC WORKS AGENCY		POST MILES NA	SOIL LEGEND 1 OF 2	

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES				SHEET	OF
10/12/12				13	15

USERNAME => RIchard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:52:33 PM

FILE => 11-0017-z-ltbo1.dgn

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (2010)

GROUP SYMBOLS AND NAMES

Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
GW	Well-graded GRAVEL Well-graded GRAVEL with SAND	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
	COBBLES COBBLES and BOULDERS BOULDERS		

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)

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	32	33

GEOTECHNICAL PROFESSIONAL — DATE 7/19/13

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

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	B. KILLEEN FIELD INVESTIGATION BY:	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON PROJECT ENGINEER	BRIDGE NO. 11C0017 POST MILES NA
CHECKED BY	R. KHIABANI	DATE: X			

HOWARD SLOUGH BRIDGE (REPLACE)
SOIL LEGEND 2 OF 2

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

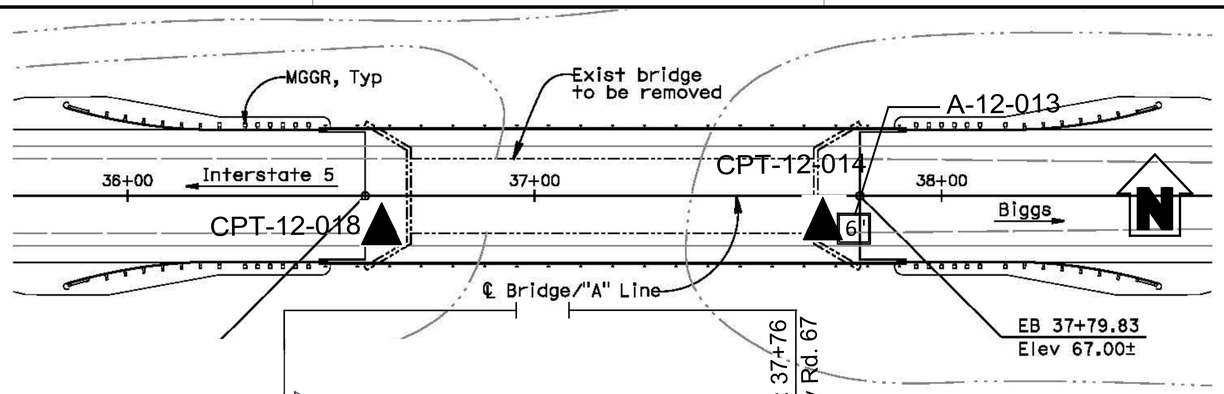
REVISION DATES				SHEET	OF
10/12/12				14	15

USERNAME => Richard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:52:33 PM

FILE => 11-0017-z-1tbo2.dgn

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



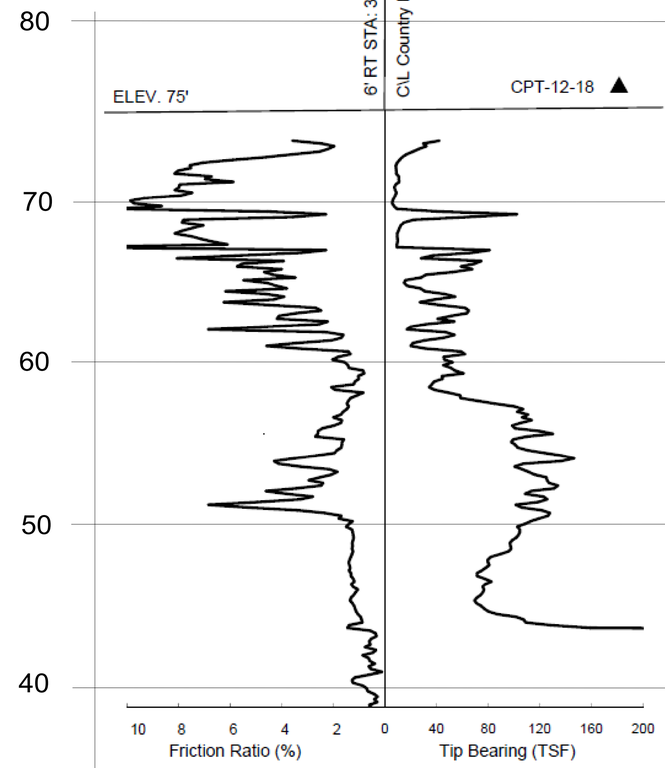
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Gle	CR 67	NA	33	33

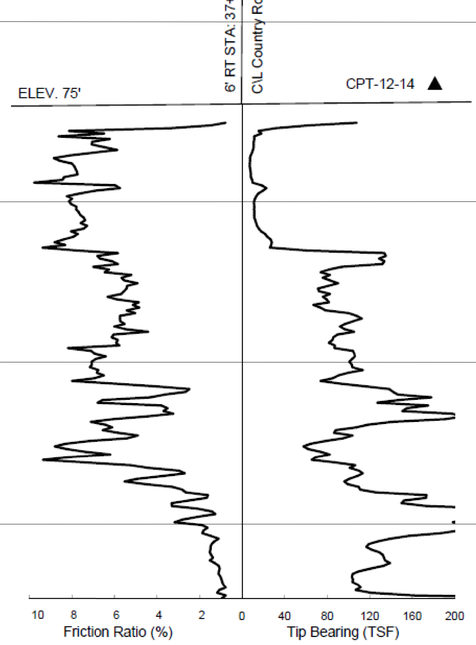
GEOTECHNICAL PROFESSIONAL — DATE 7/19/13

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





DRAWN BY	S. McCRACKEN	B. KILLEEN	PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY	G. GORDON	BRIDGE NO. 11C0017	HOWARD SLOUGH BRIDGE (REPLACE)
CHECKED BY	R. KHIABANI	FIELD INVESTIGATION BY: DATE: X		PROJECT ENGINEER	POST MILES NA	LOG OF TEST BORINGS

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
10/12/12				15	15

FILE => 11-0017-z-ltbo3.dgn

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