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

INDEX OF PLANS

SHEET No. DESCRIPTION



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

STATE OF CALIFORNIA

# COUNTY OF GLENN
# PUBLIC WORKS AGENCY

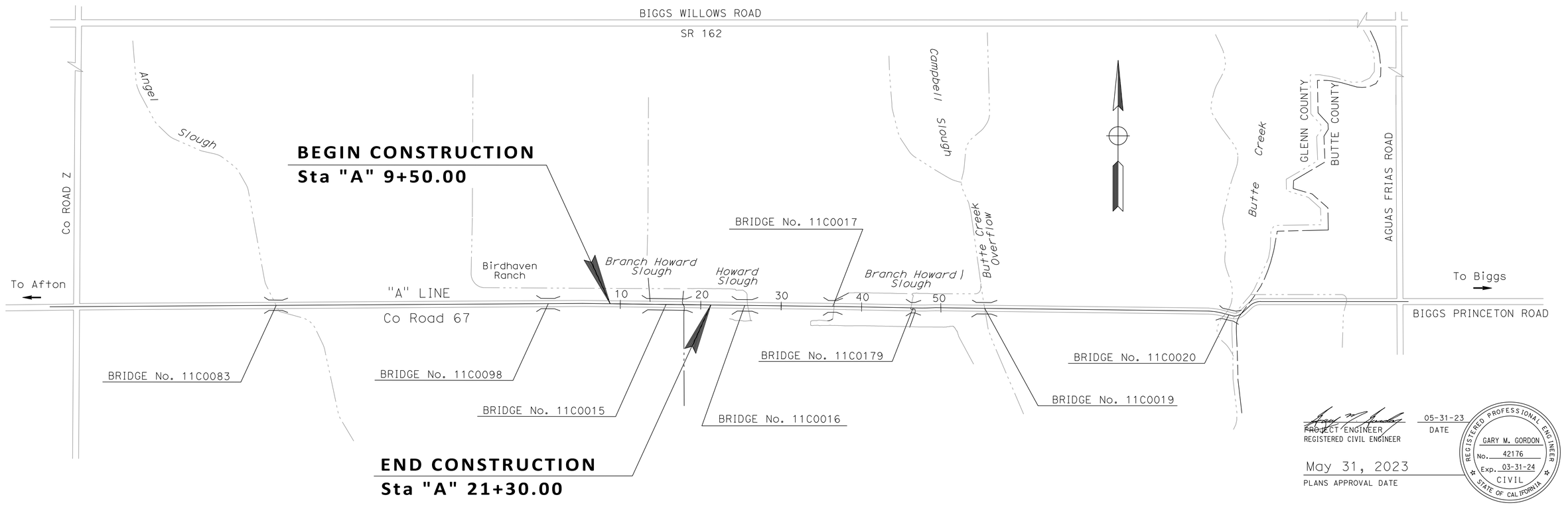
## PROJECT PLANS FOR CONSTRUCTION ON

# COUNTY ROAD 67

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

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2022


LOCATION MAP




NO SCALE

Gary M. Gordon
PROJECT ENGINEER
REGISTERED CIVIL ENGINEER

05-31-23
DATE

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

May 31, 2023
PLANS APPROVAL DATE

COUNTY OF GLENN:

Gary M. Gordon, PE
County Engineer

05-31-23
DATE

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

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

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 = 03-101782aa001

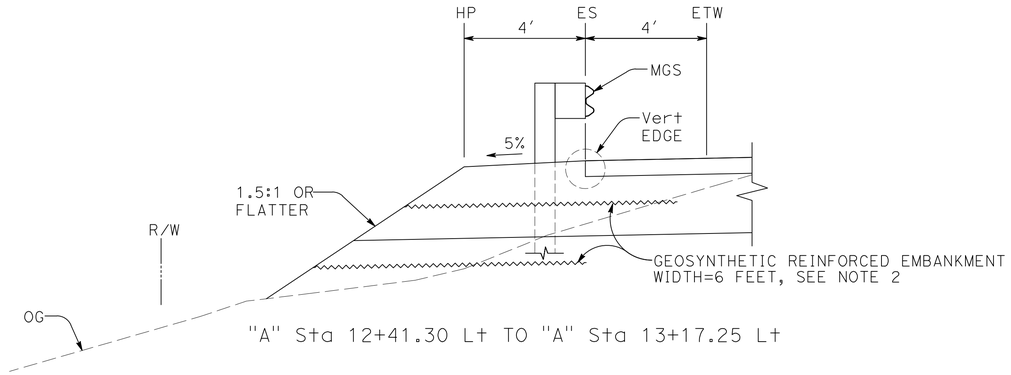
LAST REVISION 05-31-23

DATE PLOTTED = 5/31/2023
TIME PLOTTED = 2:53:09 PM

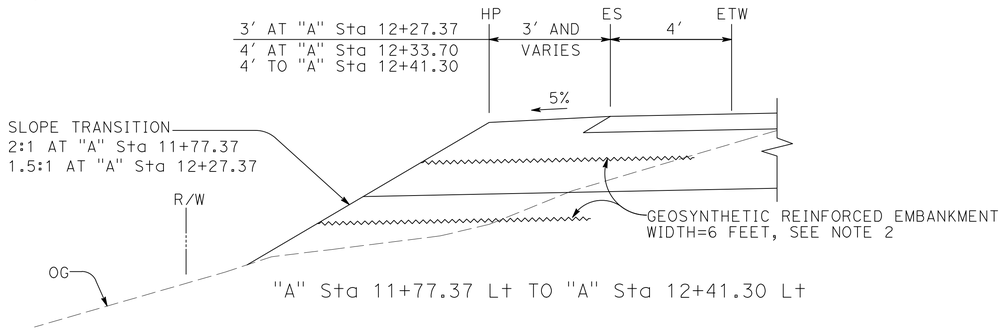
## NOTES:

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 12+41.30 Lt TO "A" Sta 13+17.25 Lt

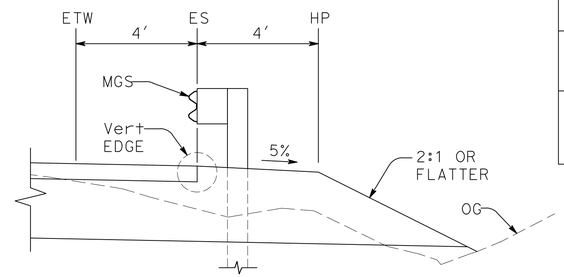



"A" Sta 11+77.37 Lt TO "A" Sta 12+41.30 Lt

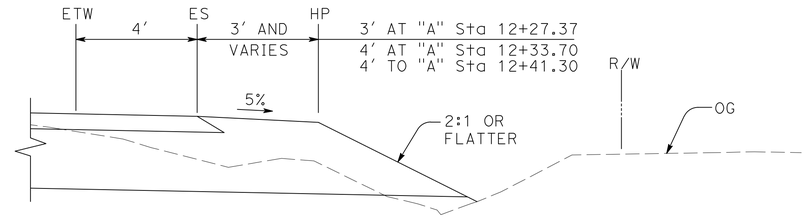
## STRUCTURAL SECTION NOTES:

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

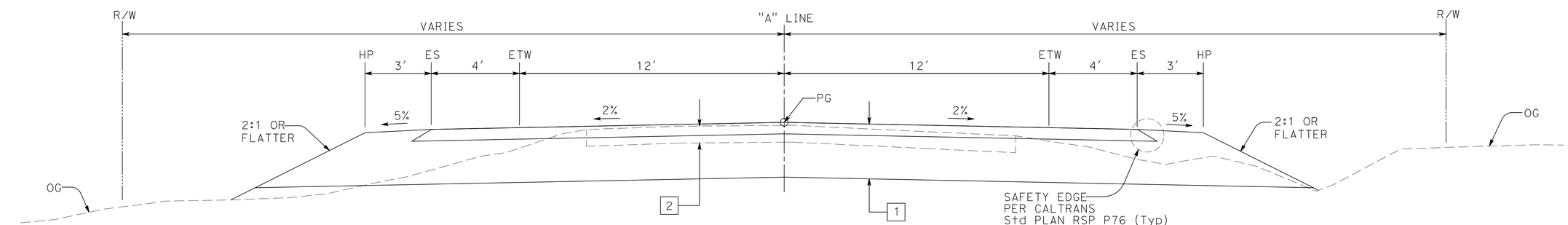
2. EXISTING SECTION VARIES



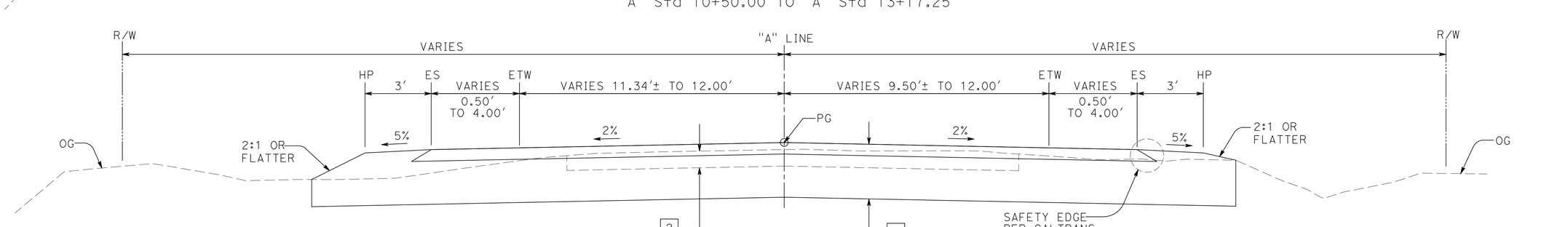

"A" Sta 12+41.30 Rt TO "A" Sta 13+17.25 Rt




"A" Sta 12+27.37 Rt TO "A" Sta 12+41.30 Rt




"A" Sta 10+50.00 TO "A" Sta 13+17.25




"A" Sta 9+50.00 TO "A" Sta 10+50.00

**Co ROAD 67**

# TYPICAL CROSS SECTION

NO SCALE

X-1

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

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

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 3:08:31 PM

USERNAME => KEVIN
DGN FILE => 03-101782ca001

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

## NOTES:

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

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

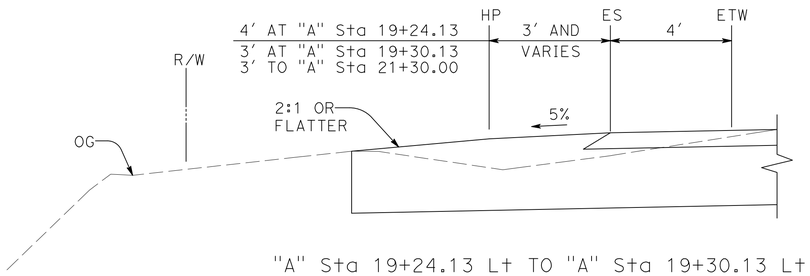
05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
PLANS APPROVAL DATE

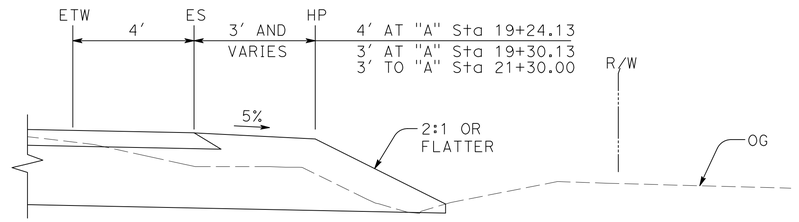
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

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

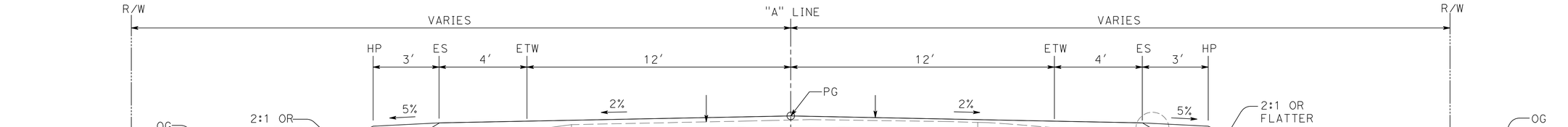
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988



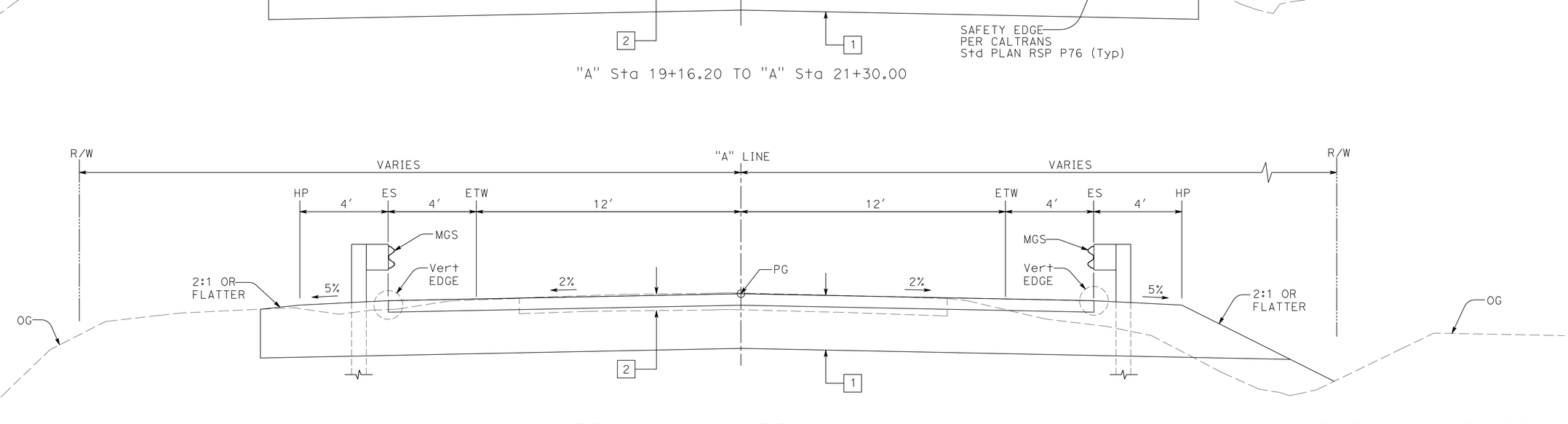

"A" Sta 19+24.13 Lt TO "A" Sta 19+30.13 Lt




"A" Sta 19+24.13 Rt TO "A" Sta 19+30.13 Rt




"A" Sta 19+16.20 TO "A" Sta 21+30.00




"A" Sta 18+40.25 TO "A" Sta 19+16.20

**Co ROAD 67**

# TYPICAL CROSS SECTION

NO SCALE **X-2**

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

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 3:16:55 PM

USERNAME => KEVIN
DGN FILE => 03-101782ca002

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

## 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) |

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | N/A | 4 | 35 |

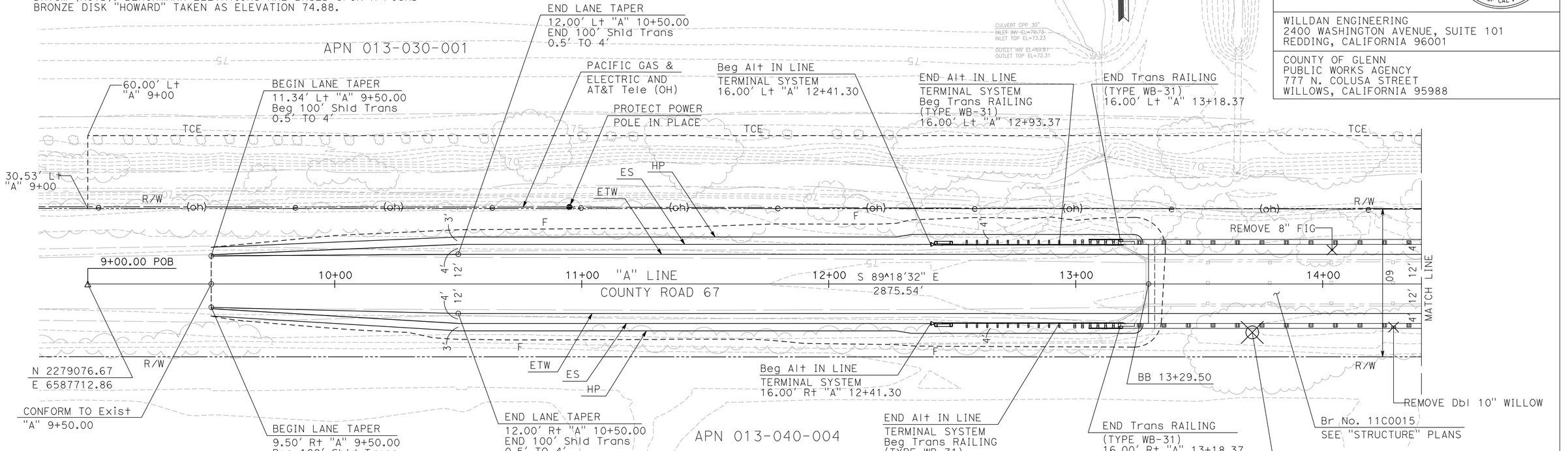
Gary M. Gordon 05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
PLANS APPROVAL DATE

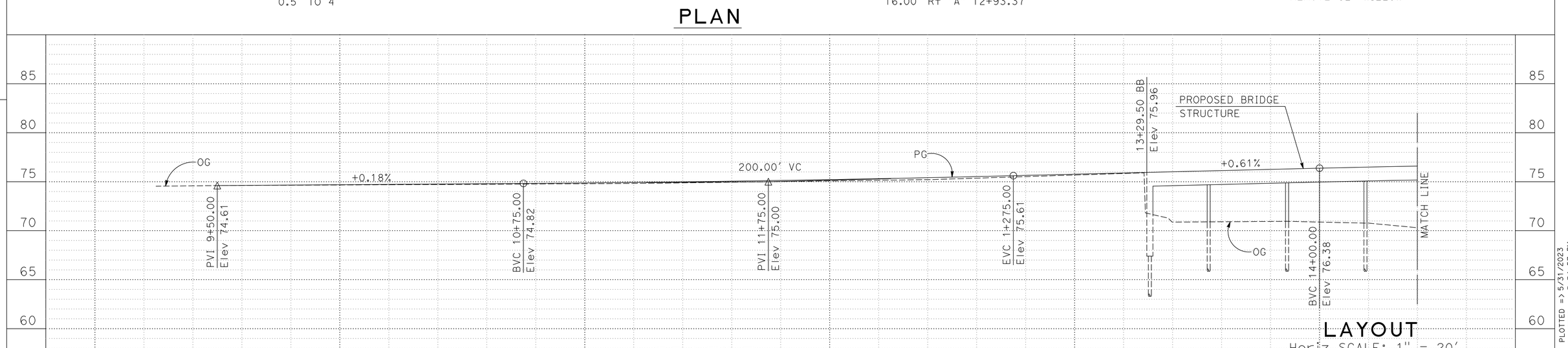
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

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

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




## PLAN




## PROFILE

## LAYOUT

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

L-1

| STATION | | 10+00 | 11+00 | 12+00 | 13+00 | 14+00 | TOTAL |
|---|---|---|---|---|---|---|---|
| CY | Exc | ◄ | 1095 | ► | | | 1095 |
| | Emb | ◄ | 42 | ► | | | 42 |

PROJECT ENGINEER: GARY M. GORDON

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

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 3:34:57 PM

USERNAME => KEVIN
DGN FILE => 03-101782ea001

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 | 5 | 35 |

05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
PLANS APPROVAL DATE

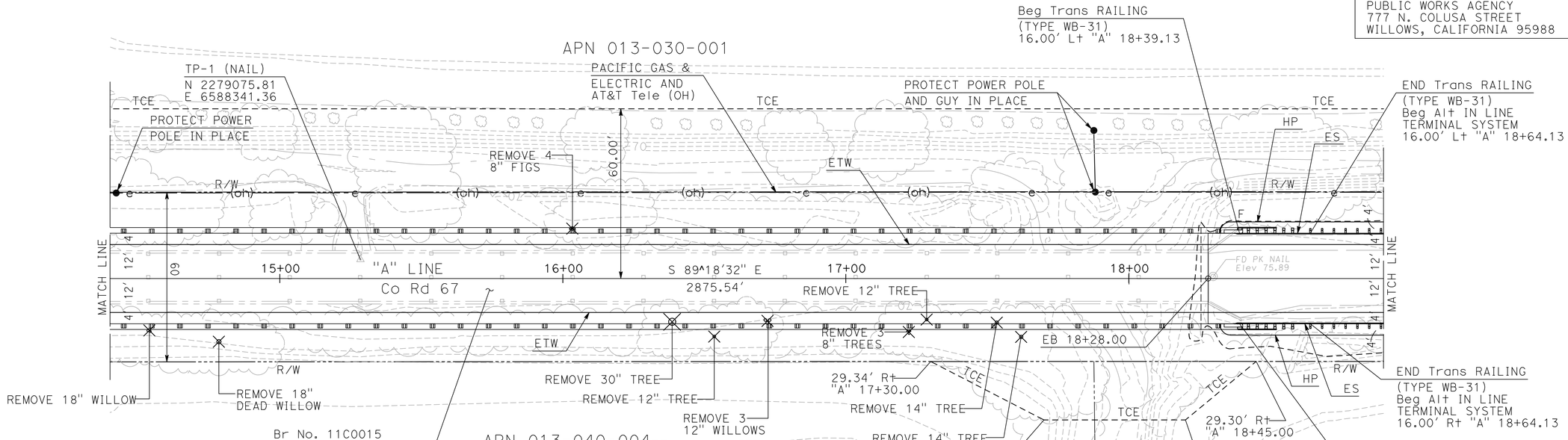
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA


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

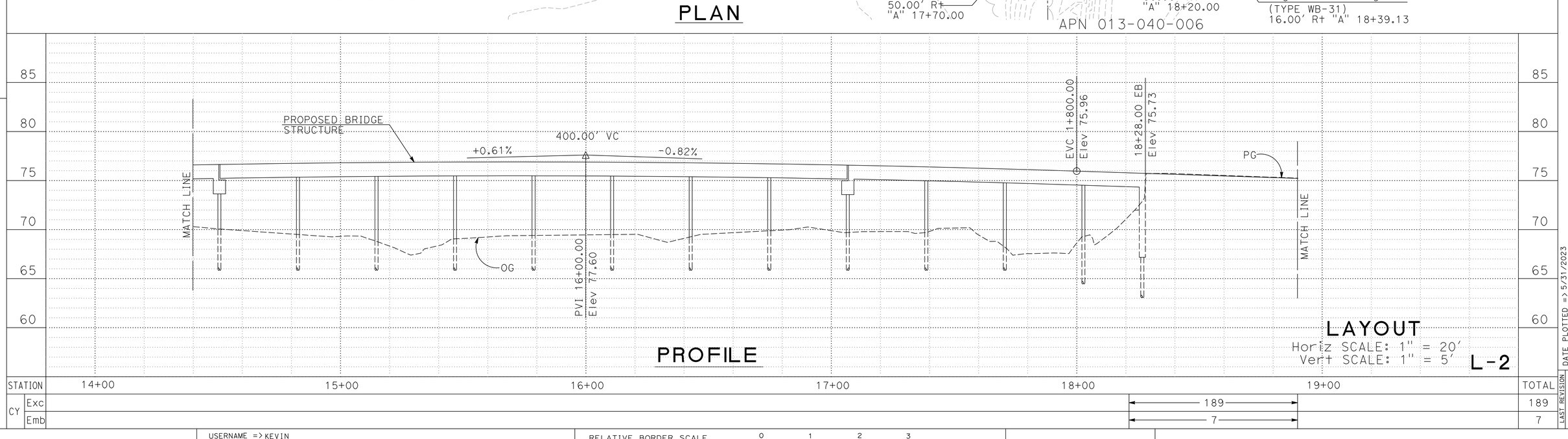
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988


| REVISED BY | DATE REVISED |
|---|---|
| KCG | 05-31-23 |

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




## PLAN




## PROFILE

## LAYOUT

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

L-2

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

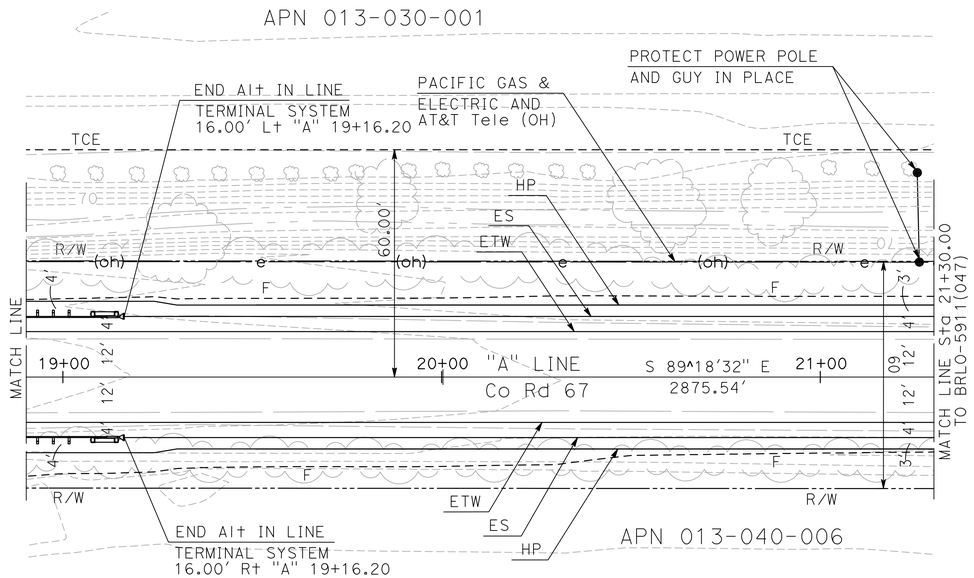
LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 3:51:17 PM

USERNAME => KEVIN
DGN FILE => 03-101782ea002

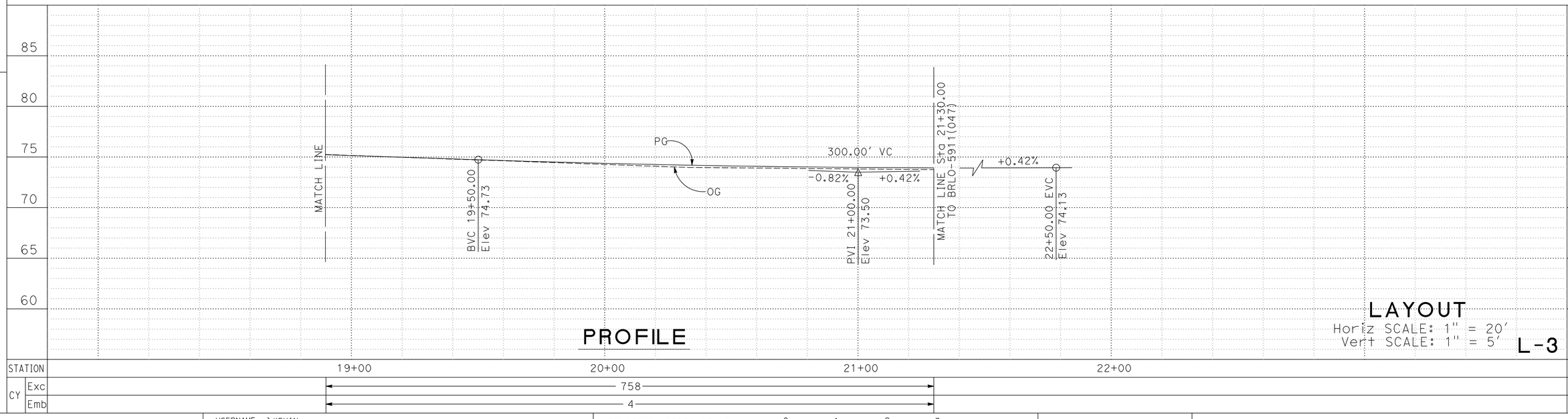
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

**NOTE:**

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




## PLAN




## PROFILE

## LAYOUT

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

L-3

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

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 |

R. UHLMANN — G. GORDON

CALCULATED-DESIGNED BY — CHECKED BY

PROJECT ENGINEER
GARY M. GORDON

USERNAME => KEVIN
DGN FILE => 03-101782ea003

RELATIVE BORDER SCALE IS IN INCHES
0 1 2 3

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

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | N/A | 7 | 35 |

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

May 31, 2023
PLANS APPROVAL DATE

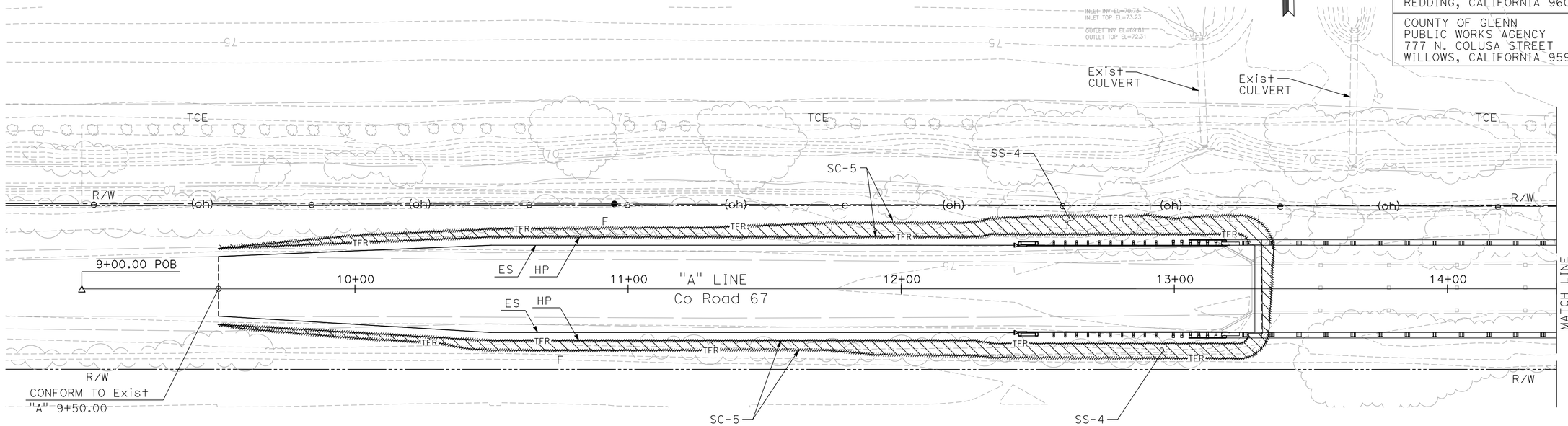
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA


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

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


**NOTE:**

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




**LEGEND:**

TFR — SC-5: TEMPORARY FIBER ROLL CONTROL PER CALTRANS STANDARD T56

SS-4: HYDROSEEDING FOR ALL PROPOSED SLOPES. MIX TO BE DETERMINED.

**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 => 4:06:35 PM

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

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 | 35 |

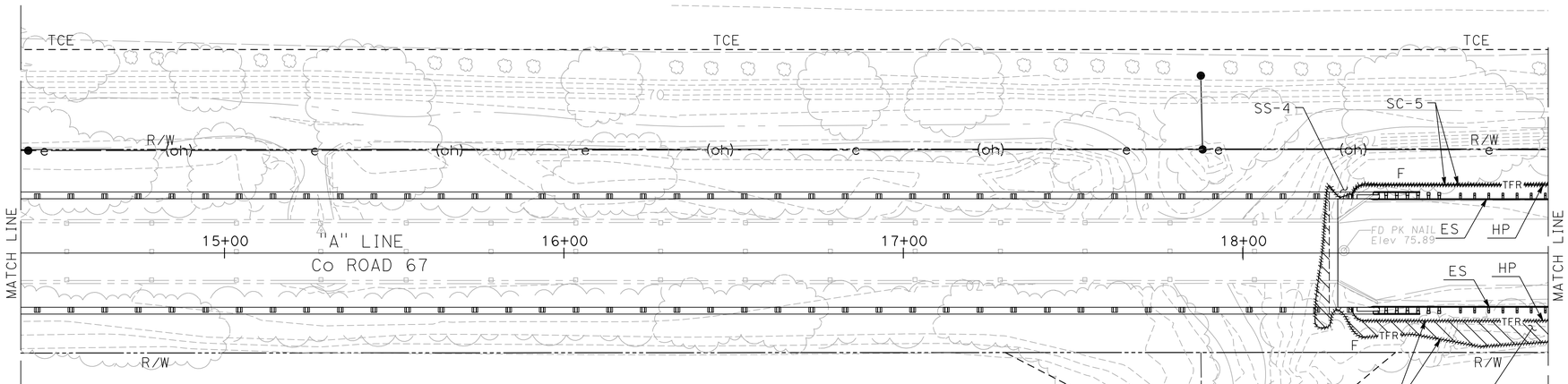
Gary M. Gordon 05-31-23
REGISTERED CIVIL ENGINEER DATE

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

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 4:09:31 PM

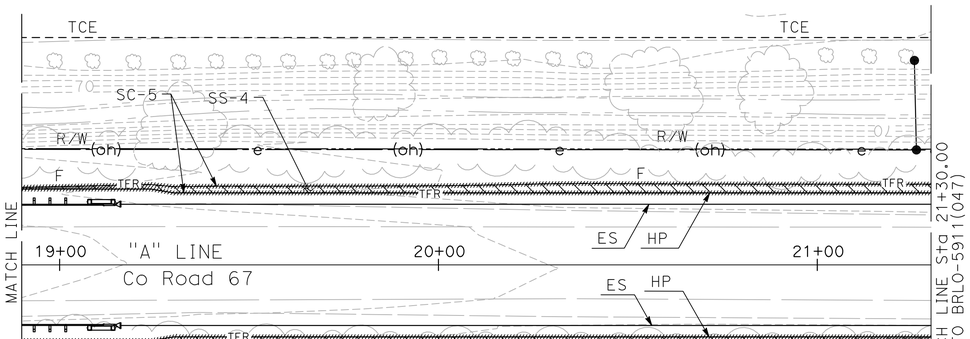
USERNAME => KEVIN
DGN FILE => 03-101782gb002

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

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

**NOTE:**

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




| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | N/A | 9 | 35 |

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-3

APPROVED FOR TEMPORARY WATER POLLUTION AND EROSION CONTROL WORK ONLY

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

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

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 | 35 |

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

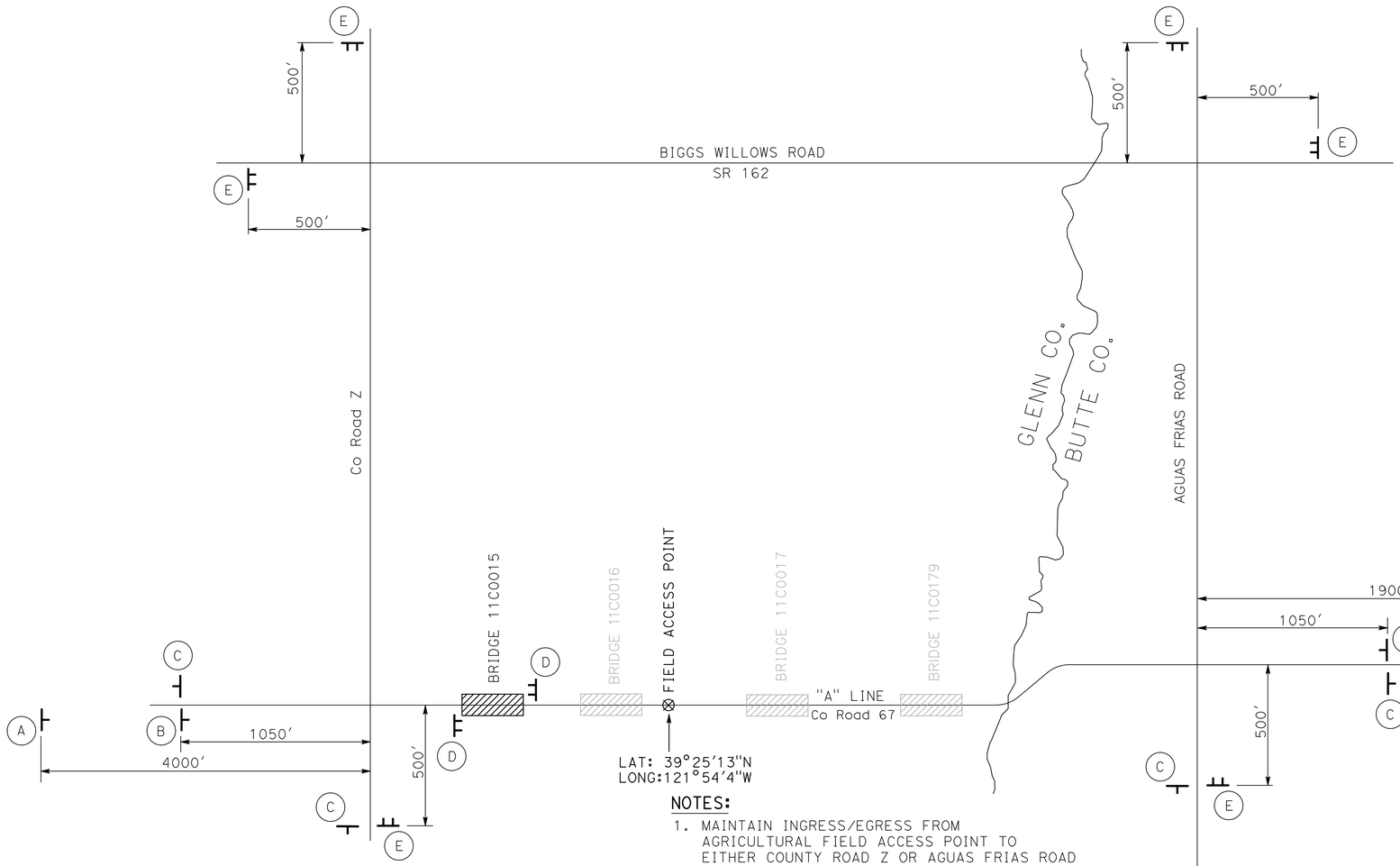
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988


## 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

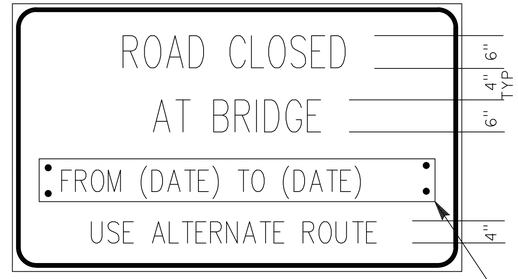



### NOTES:

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 |

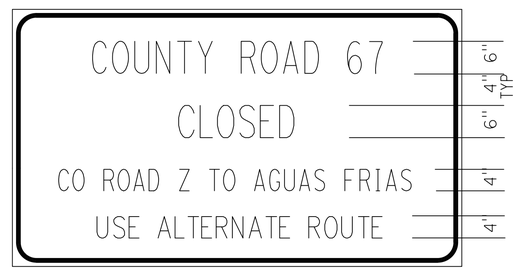



SIGN (D)

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 => 4:20:37 PM

USERNAME => KEVIN
DGN FILE => 03-1017821a001

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 | 35 |

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

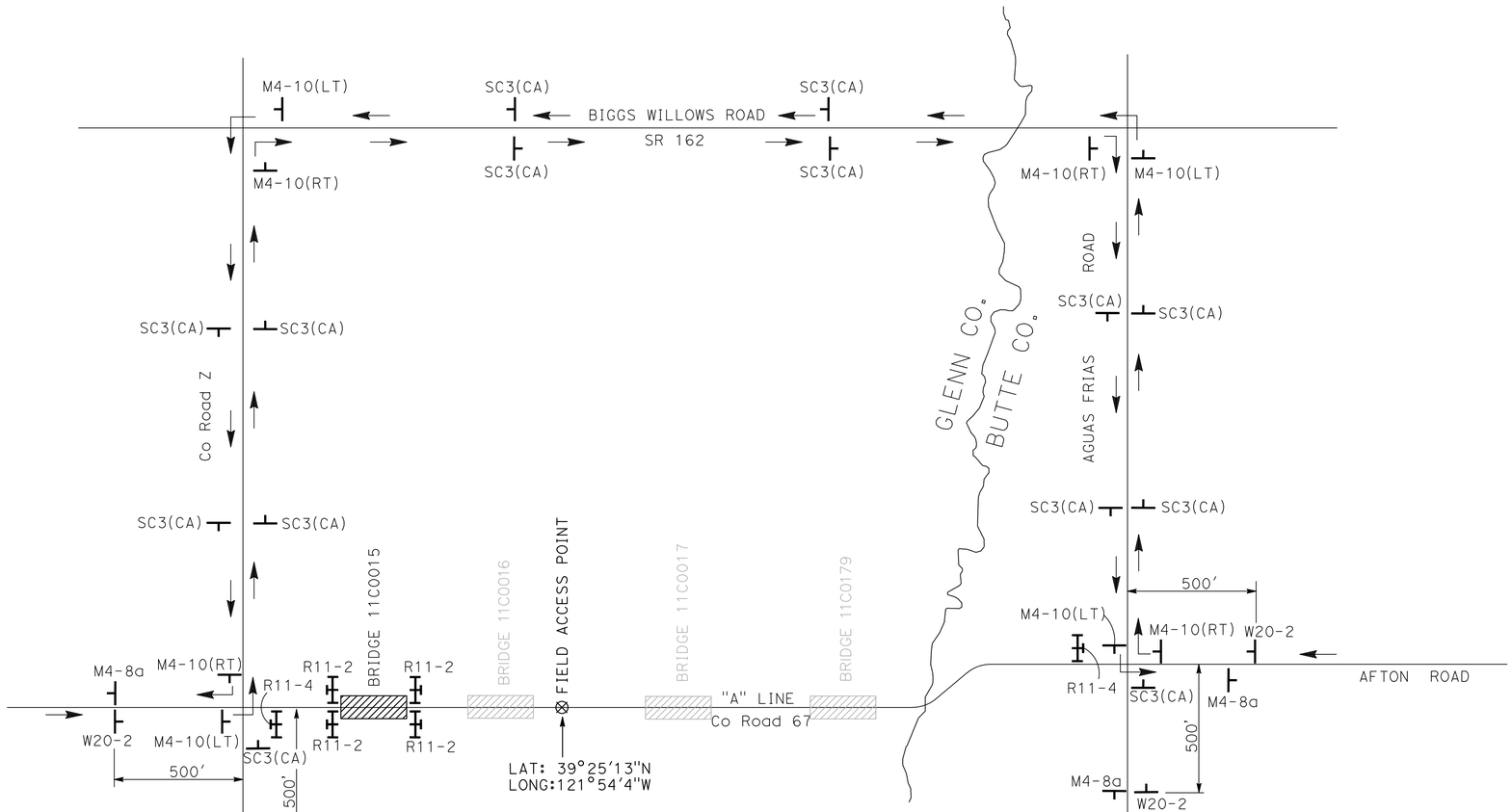
COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988


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

LAST REVISION 05-31-23
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 4:24:27 PM

USERNAME => KEVIN
DGN FILE => 03-101782ma001

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 | 12 | 35 |

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


## 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

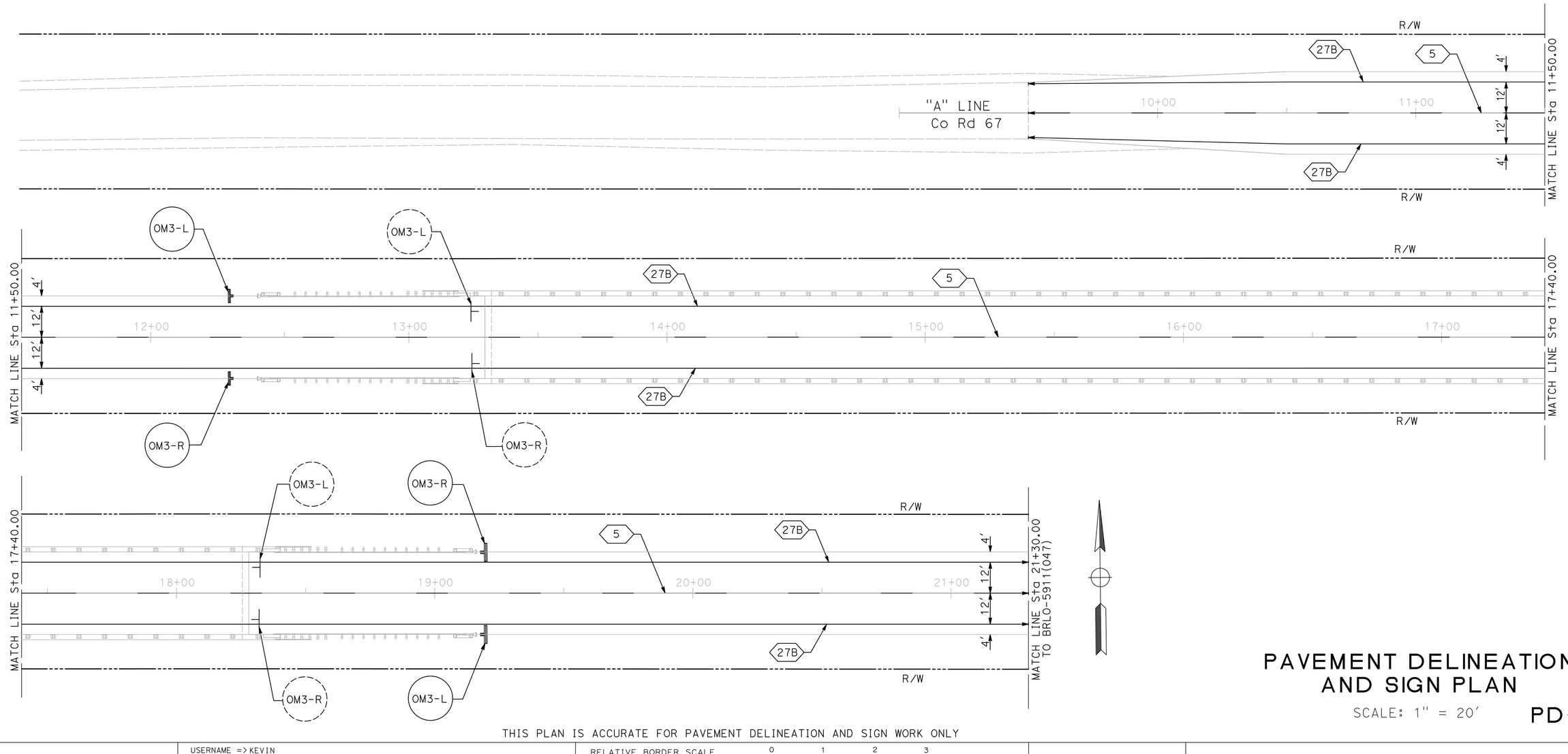
<X> TRAFFIC STRIPE DETAIL

## PAVEMENT DELINEATION QUANTITIES

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

## ROADSIDE SIGN QUANTITIES

| SIGN CODE | PANEL SIZE | REMOVE ROADSIDE SIGN (EA) | ROADSIDE SIGN 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

| REVISED BY | DATE REVISED |
|---|---|
| KCG | 05-31-23 |

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

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

USERNAME => KEVIN
DGN FILE => 03-101782na001

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 | 35 |

REGISTERED CIVIL ENGINEER — DATE: 05-31-23

May 31, 2023
PLANS APPROVAL DATE

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


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 | SQYD |
| L-1 | "A" 9+50.00 TO "A" 13+35.55 | 1,095 | 42 | 42 | |
| L-1 | "A" 12+00.00 Lt TO "A" 13+23.57 Lt | | | | 93.0 |
| L-2 TO L-3 | "A" 18+23.37 TO "A" 21+30.00 | 947 | 11 | 11 | |
| | | | | | |
| TOTAL | | 2,042 | 53 | 53 | 93.0 |

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

## TEMPORARY WATER POLLUTION CONTROL AND EROSION CONTROL QUANTITIES

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

## SAFETY EDGE

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

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

## PAVEMENT STRUCTURE QUANTITIES

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

## MIDWEST GUARDRAIL SYSTEM

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

# SUMMARY OF QUANTITIES
# Q-1

| 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 => 7:44:10 AM

USERNAME => KEVIN
DGN FILE => 03-101782pa001

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 | 35 |

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

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

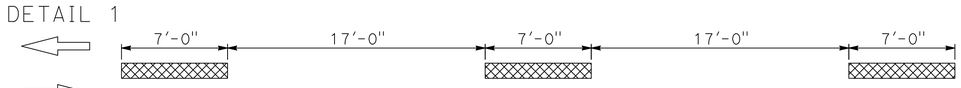
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 05-31-23

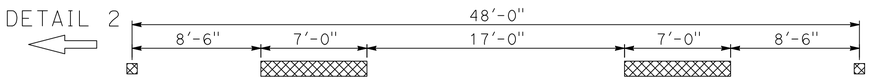
# CENTERLINES

(2 LANE HIGHWAYS)

DETAIL 1



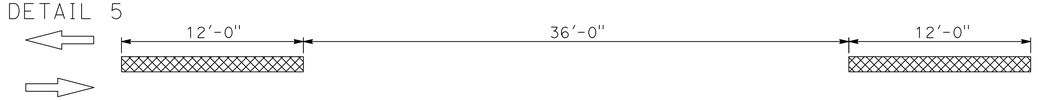

DETAIL 2



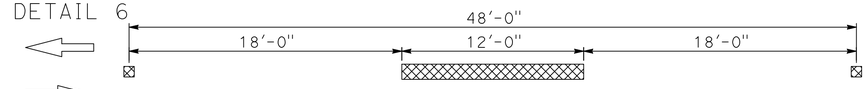

~~DETAIL 3~~ DETAIL 3 DELETED

~~DETAIL 4~~ DETAIL 4 DELETED

DETAIL 5




DETAIL 6

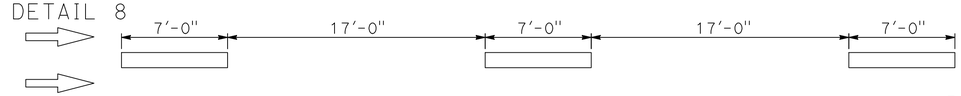



~~DETAIL 7~~ DETAIL 7 DELETED

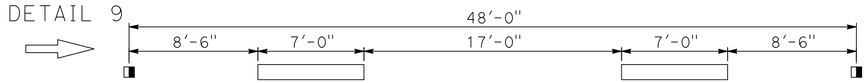
# LANE LINES

(MULTILANE HIGHWAYS)

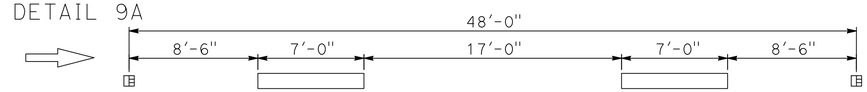
DETAIL 8




DETAIL 9



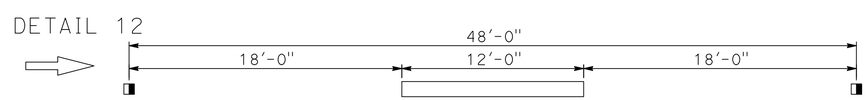

DETAIL 9A



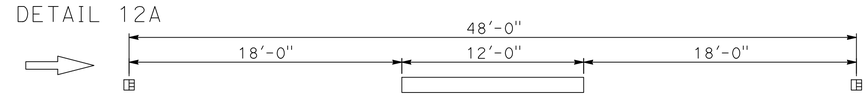

~~DETAIL 10~~ DETAIL 10 DELETED

DETAIL 11


DETAIL 12




DETAIL 12A

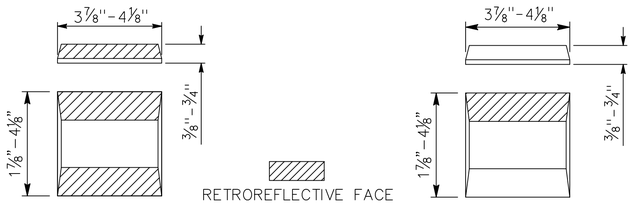



~~DETAIL 13~~ DETAIL 13 DELETED

~~DETAIL 14~~ DETAIL 14 DELETED

~~DETAIL 14A~~ DETAIL 14A DELETED

LINES
- 4" WHITE
- 4" YELLOW

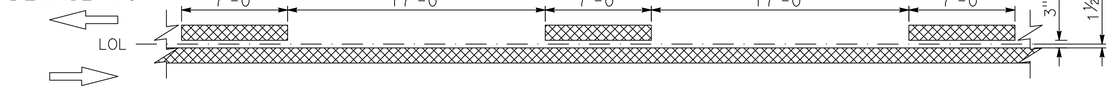



TYPE C AND TYPE D TYPE G AND TYPE H

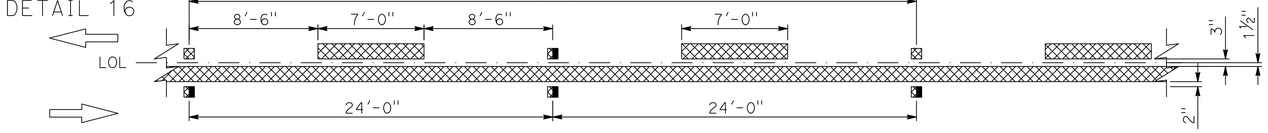
MARKER DETAILS

# NO PASSING ZONES-ONE DIRECTION

DETAIL 15

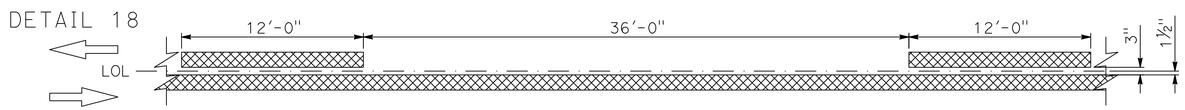



DETAIL 16

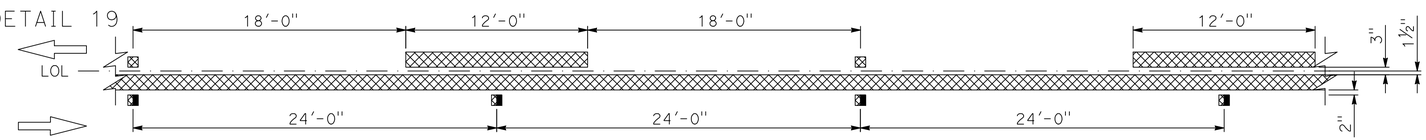



~~DETAIL 17~~ DETAIL 17 DELETED

DETAIL 18



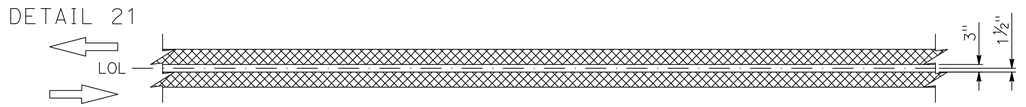

DETAIL 19



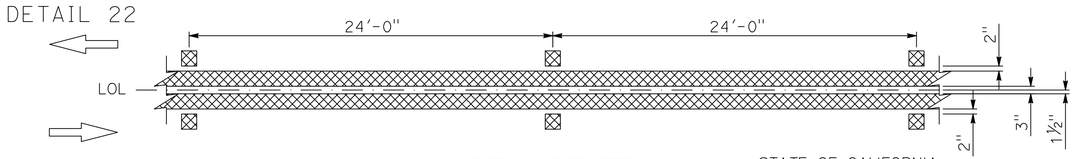

~~DETAIL 20~~ DETAIL 20 DELETED

# 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

2022 REVISED STANDARD PLAN RSP A20A

DATE PLOTTED = 5/31/23
TIME PLOTTED = 8:19:33 AM

USERNAME = KEVIN
DGN FILE = 03-101782-rspa20a

6-24-22

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

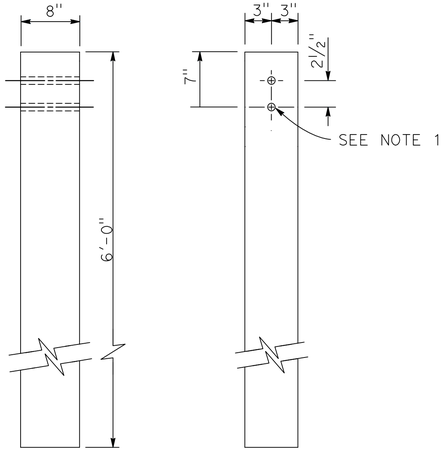
Gary M. Gordon 05-31-23
REGISTERED CIVIL ENGINEER DATE

May 31, 2023
PLANS APPROVAL DATE

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

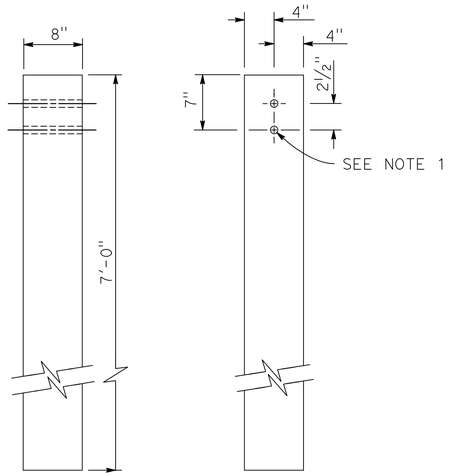
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 05-31-23



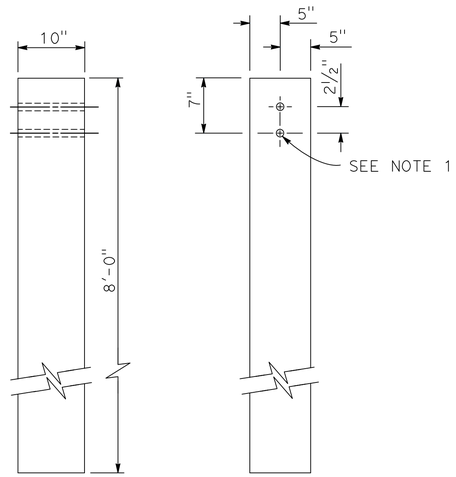

SIDE FRONT

6" x 8" WOOD POST
See Note 3




SIDE FRONT

8" x 8" WOOD POST
See Note 4

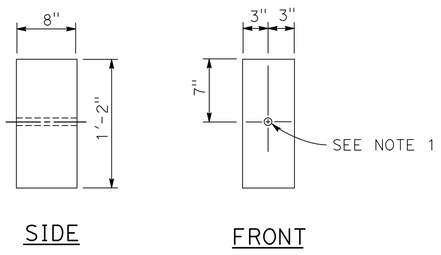



SIDE FRONT

10" x 10" WOOD POST
See Note 5

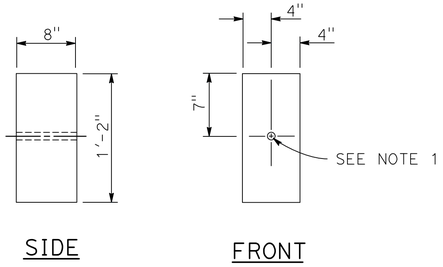
## NOTES:

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.



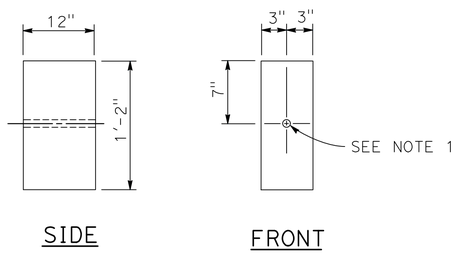

SIDE FRONT

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



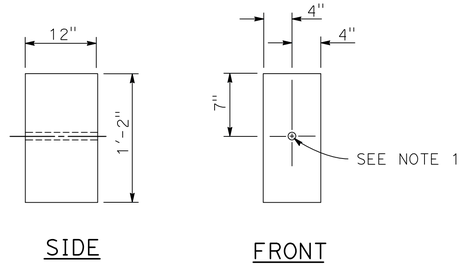

SIDE FRONT

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 = 8:31:12 AM

USERNAME = KEVIN
DGN FILE = 03-101782-rspa77n1

6-24-22

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

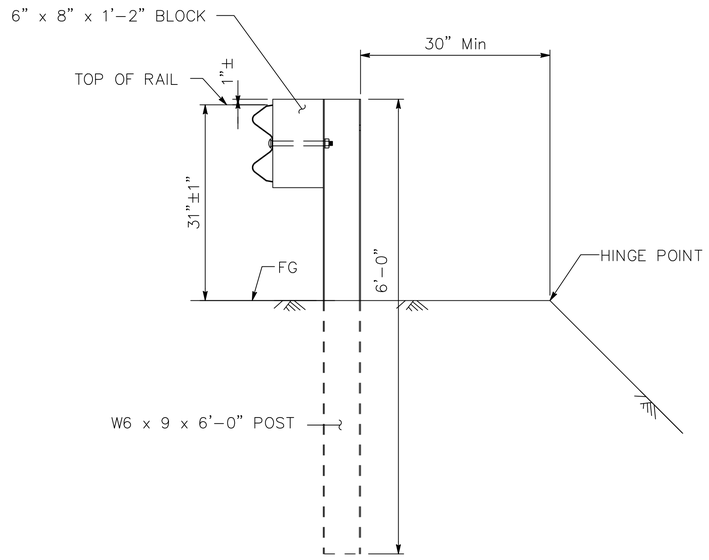
REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

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

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

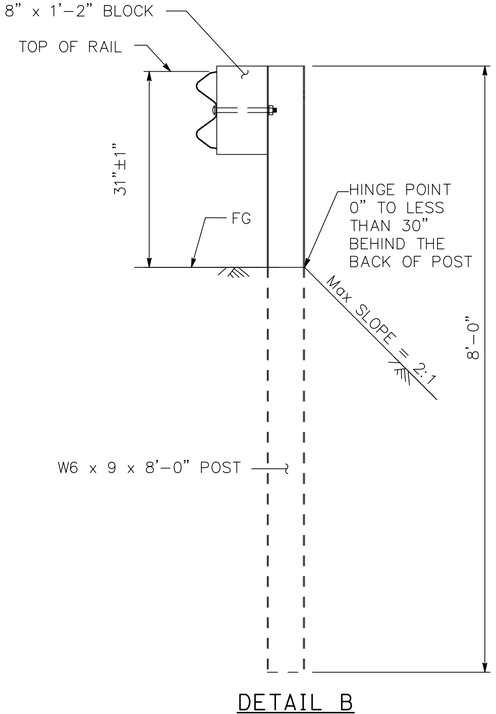
TO ACCOMPANY PLANS DATED 05-31-23




DETAIL A

TYPICAL ROADWAY INSTALLATION

See Note 1

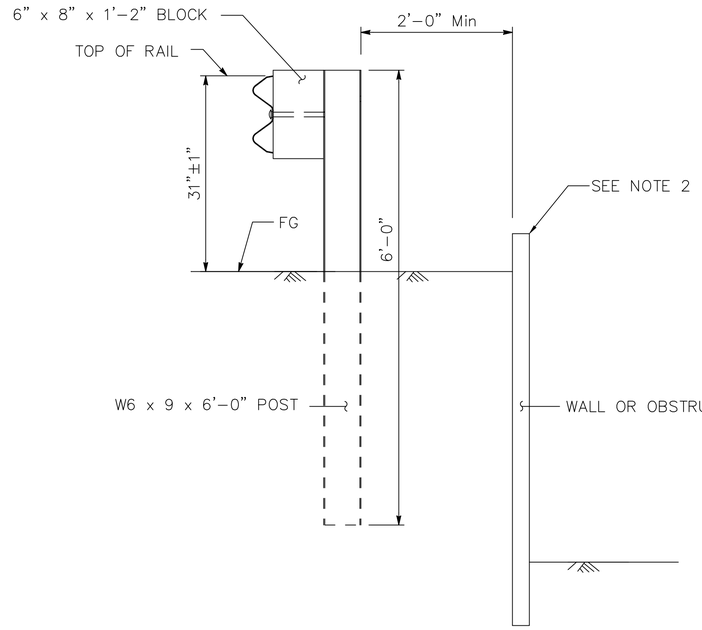



DETAIL B

NARROW ROADWAY INSTALLATION

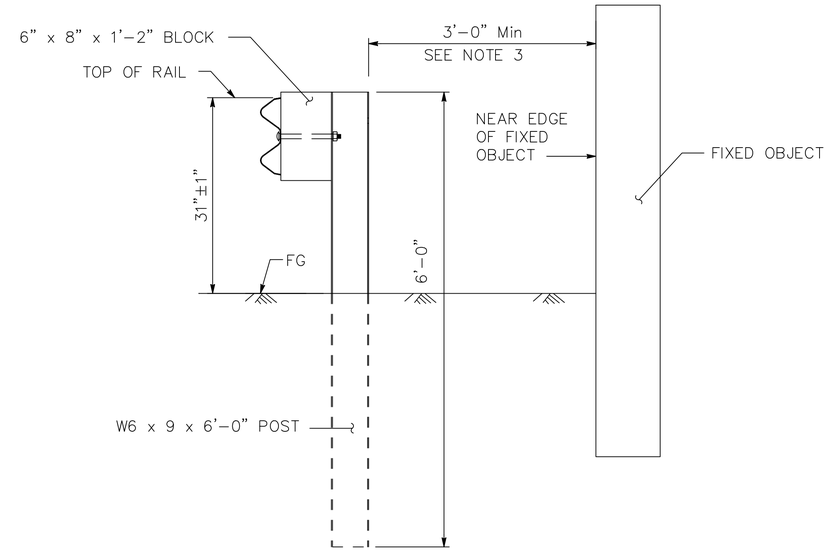
See Note 1

POST EMBEDMENT




DETAIL C

AT OR BELOW GRADE




DETAIL D

ABOVE GRADE

INSTALLATION AT
WALLS OR OBSTRUCTIONS

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 = 9:09:58 AM

USERNAME = KEVIN
DGN FILE = 03-101782-rspa77n3

6-24-22

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

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

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

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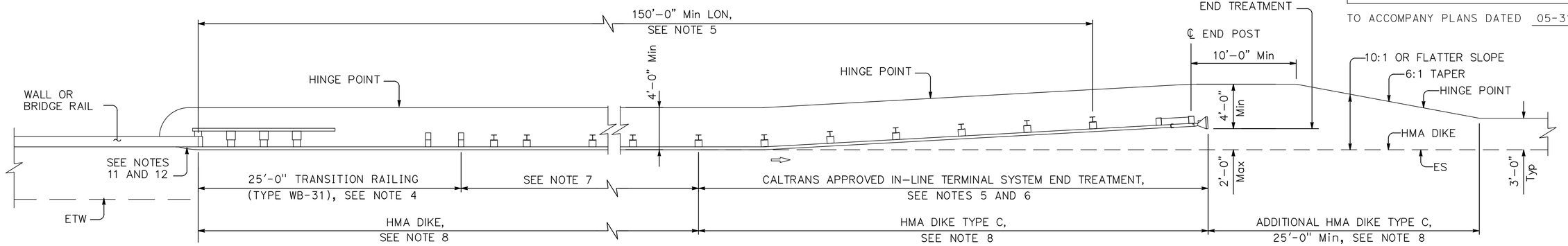
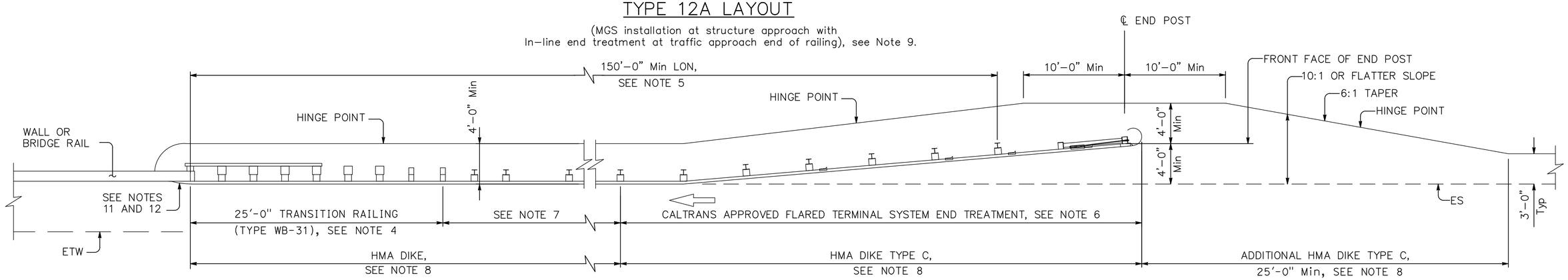
TO ACCOMPANY PLANS DATED 05-31-23




## 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 = 9:23:08 AM

USERNAME = KEVIN
DGN FILE = 03-101782-rspa77q1

6-24-22

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

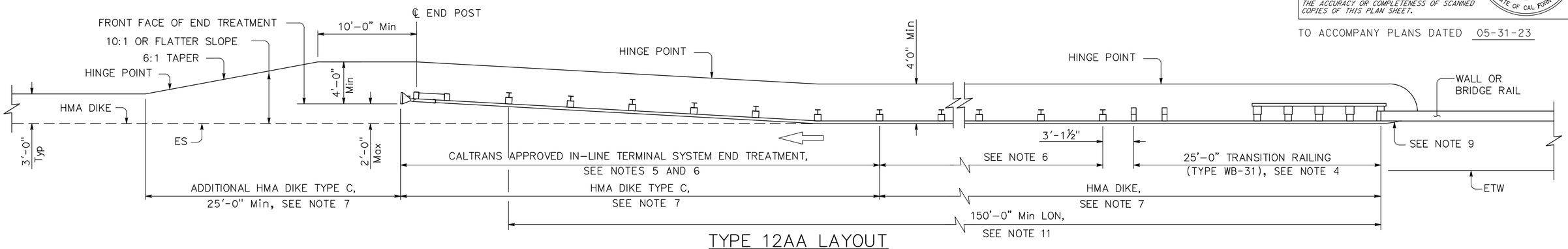
REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

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

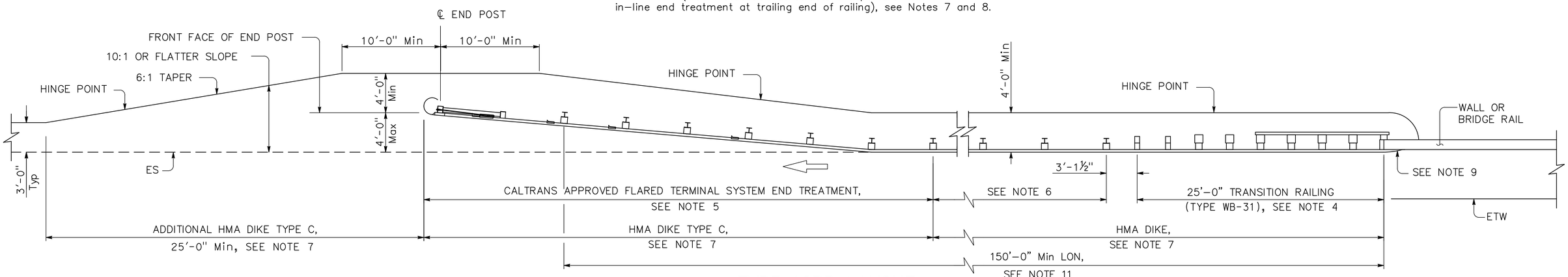
*THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.*

TO ACCOMPANY PLANS DATED 05-31-23




## 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

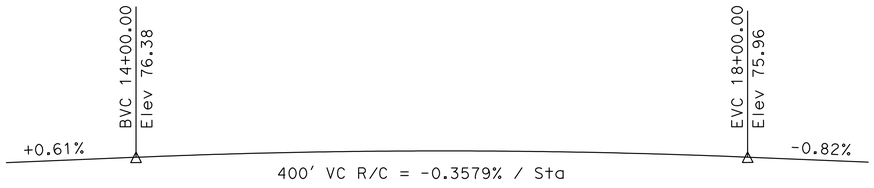
DATE PLOTTED = 5/31/23
TIME PLOTTED = 9:31:35 AM

USERNAME = KEVIN
DGN FILE = 03-101782-rspa77q4

6–24–22

## CALTRANS STANDARD PLANS, 2022 EDITION

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




**PROFILE**
NO SCALE

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

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

05-31-23
REGISTERED CIVIL ENGINEER — DATE

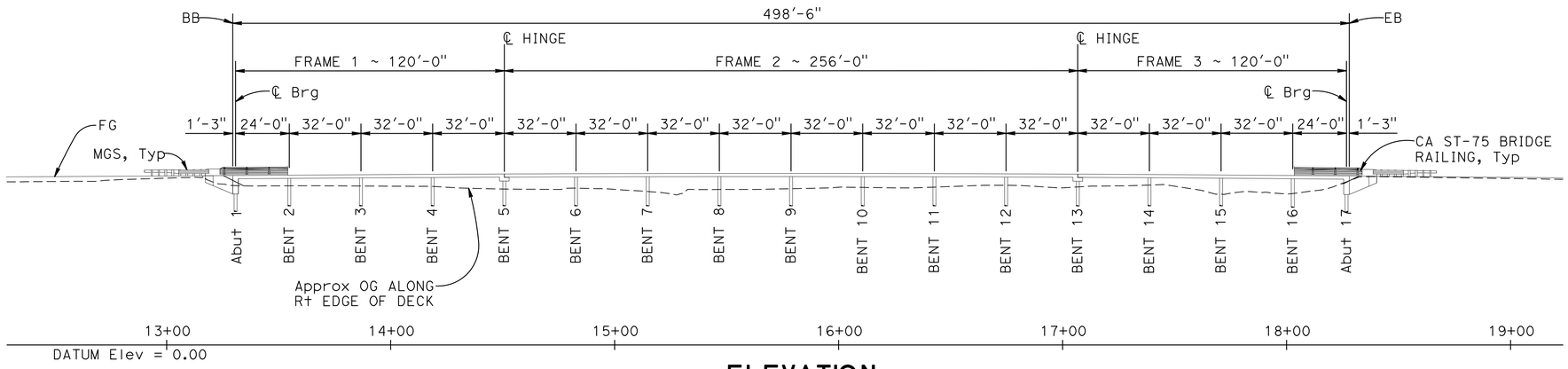
REGISTERED PROFESSIONAL ENGINEER — GARY M. GORDON — No. 42176 — Exp. 03-31-24 — CIVIL — STATE OF CALIFORNIA

May 31, 2023
PLANS APPROVAL DATE

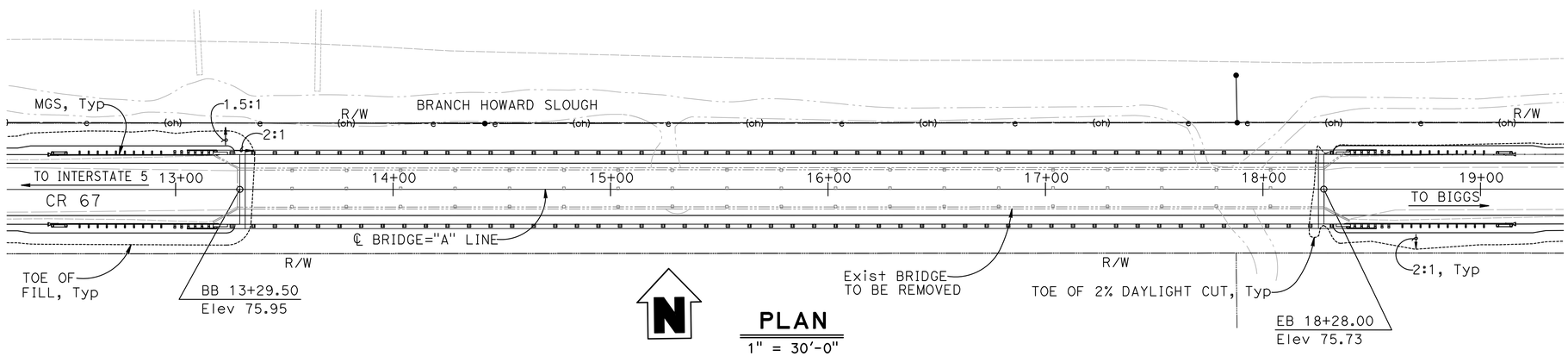
Prepared by:
WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

## INDEX TO BRIDGE PLANS

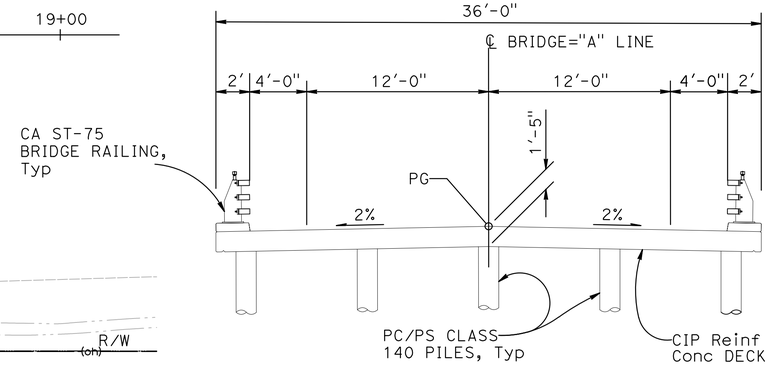





**ELEVATION**
1" = 30'-0"




**PLAN**
1" = 30'-0"




**TYPICAL SECTION**
1" = 5'-0"

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DESIGN | BY J. DeMARTINI | CHECKED M. ILEY | LOAD & RESISTANCE FACTOR DESIGN | LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE | | | |
| DETAILS | BY R. UHLMANN | CHECKED J. DeMARTINI | LAYOUT | BY R. UHLMANN | CHECKED G. GORDON | | |
| QUANTITIES | BY J. DeMARTINI | CHECKED R. UHLMANN | SPECIFICATIONS | BY 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. | BRANCH HOWARD SLOUGH BRIDGE (REPLACE) |
|---|---|
| 11C0015 | |
| POST MILES | GENERAL PLAN |
| NA | |

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 11/10/14 | 07/26/11 | 05/31/23 | | 1 | 17 |

FILE => 11-0015-a-gp01

USERNAME => KEVIN
DATE PLOTTED => 5/31/2023
TIME PLOTTED => 10:09:07 AM

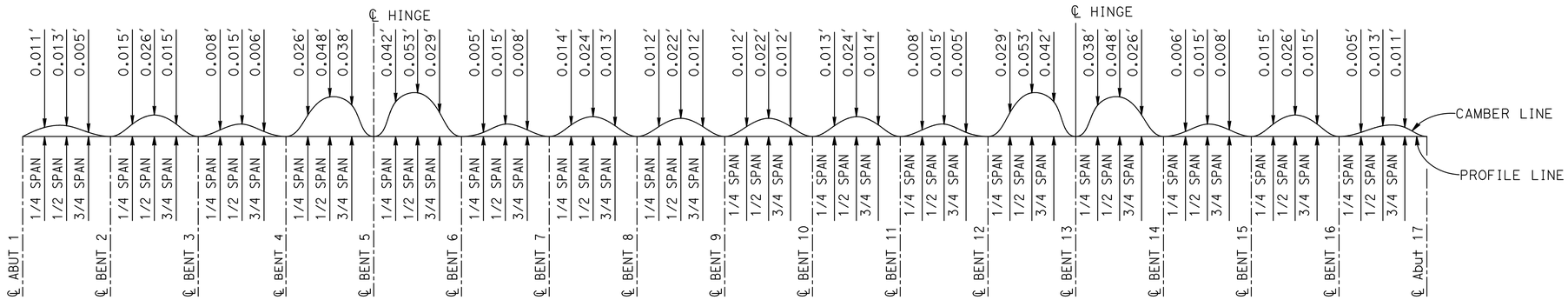
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | NA | 20 | 35 |

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

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

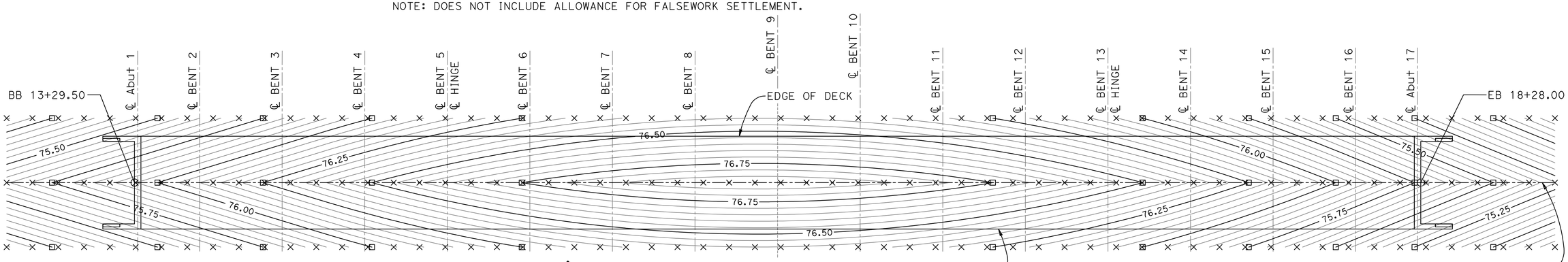
Prepared by:
WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001




## CAMBER DIAGRAM

NO SCALE

NOTE: DOES NOT INCLUDE ALLOWANCE FOR FALSEWORK SETTLEMENT.

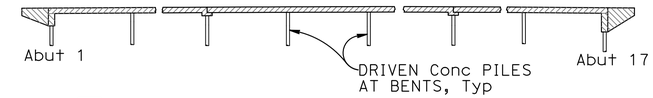



NOTES:
1. Contour indicate top of deck elevation.
2. □ Indicates even 0.25 foot contours.
3. × Indicates 10′ intervals measured along "A" Line.
4. Contour interval = 0.05′
5. Contours do not include allowances for camber or falsework settlement.

N

## DECK CONTOURS

SCALE: 1" = 20′-0"




STRUCTURAL CONCRETE, BRIDGE 3.6 ksi AT 28 DAYS

STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER) 4 ksi AT 28 DAYS

## CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

## APPROXIMATE QUANTITIES

| ITEM CODE | ITEM DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| 157550 | BRIDGE REMOVAL | 1 | LS |
| 192020 | STRUCTURE EXCAVATION (TYPE D) | 80 | CY |
| 193003 | STRUCTURE BACKFILL (BRIDGE) | 53 | CY |
| 490736 | FURNISH PILING (CLASS 90) | 266 | LF |
| 490737 | DRIVE PILE (CLASS 90) | 10 | EA |
| 490746 | FURNISH PILING (CLASS 140) | 3,062 | LF |
| 490747 | DRIVE PILE (CLASS 140) | 75 | EA |
| 510053 | STRUCTURAL CONCRETE, BRIDGE | 62 | CY |
| 510054 | STRUCTURAL CONCRETE, BRIDGE (POLYMER FIBER) | 964 | CY |
| 519091 | JOINT SEAL (MR 1½") | 72 | LF |
| 520102 | BAR REINFORCING STEEL (BRIDGE) | 222,000 | Lbs |
| 048290 | CALIFORNIA ST-75 BRIDGE RAIL | 1,046 | LF |

## GENERAL NOTES
## LOAD AND RESISTANCE FACTOR DESIGN

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

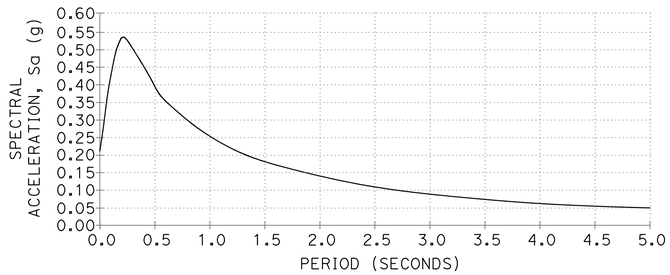
SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.7 dated April 2013.

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: fy = 60 ksi
f′c = 4.0 ksi (Superstructure)
f′c = 3.6 ksi (Substructure)




## ACCELERATION RESPONSE SPECTRUM CURVE

| | | | | | |
|---|---|---|---|---|---|
| DESIGN | BY J. DeMARTINI | CHECKED M. ILEY | PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY | G. GORDON PROJECT ENGINEER | BRIDGE NO. 11C0015 |
| 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 |
|---|---|---|---|---|---|
| 11/10/14 | 07/28/17 | 05/31/23 | | 2 | 17 |

FILE => 11-0015-d-dc01

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

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

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

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

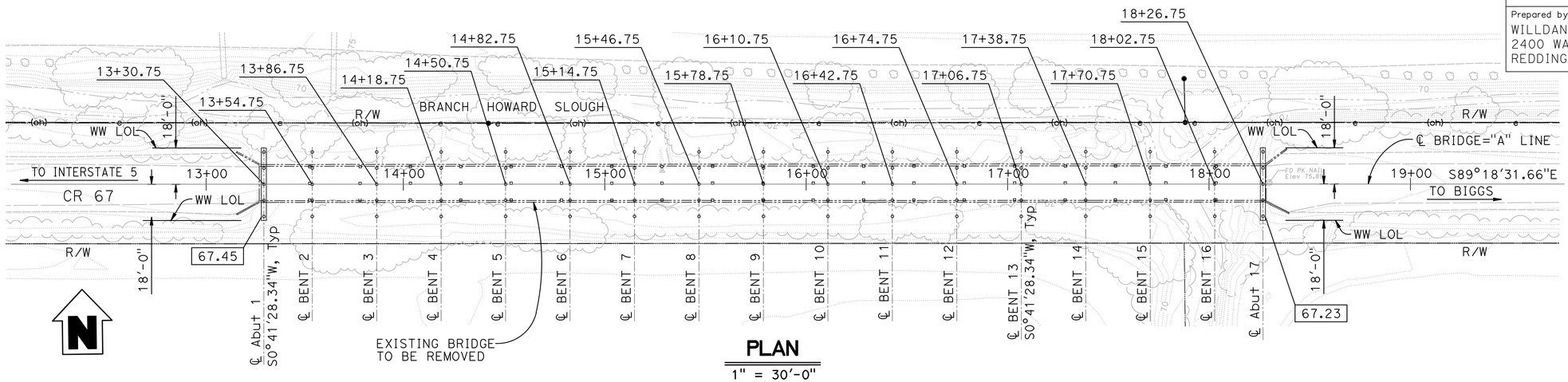
Prepared by:
WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

## LEGEND

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

## NOTES

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




**PLAN**
1" = 30'-0"

## PILE DATA TABLE

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

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

## HYDROLOGIC SUMMARY

DRAINAGE AREA 22.2 SQ MI

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

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

| | | | | | |
|---|---|---|---|---|---|
| SCALE: 1"=30' | VERT.DATUM NAVD88 | HORZ.DATUM NAD83 | DESIGN | BY J. DeMARTINI | CHECKED M. ILEY |
| PHOTOGRAMMETRY AS OF: 06/12 | ALIGNMENT TIES X | | DETAILS | BY R. UHLMANN | CHECKED J. DeMARTINI |
| SURVEYED BY S. ESPINOSA | DRAFTED BY J. JONES | | QUANTITIES | BY J. DeMARTINI | CHECKED R. UHLMANN |
| FIELD CHECKED BY B. STRATMAN | CHECKED BY P. ESPINOSA | | | | |

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

BRIDGE NO. 11C0015
POST MILES NA

# BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

## FOUNDATION PLAN

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 | | 3 | 17 |

USERNAME => KEVIN DATE PLOTTED => 5/31/2023 TIME PLOTTED => 10:44:23 AM

FILE => 11-0015-e-fp101

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

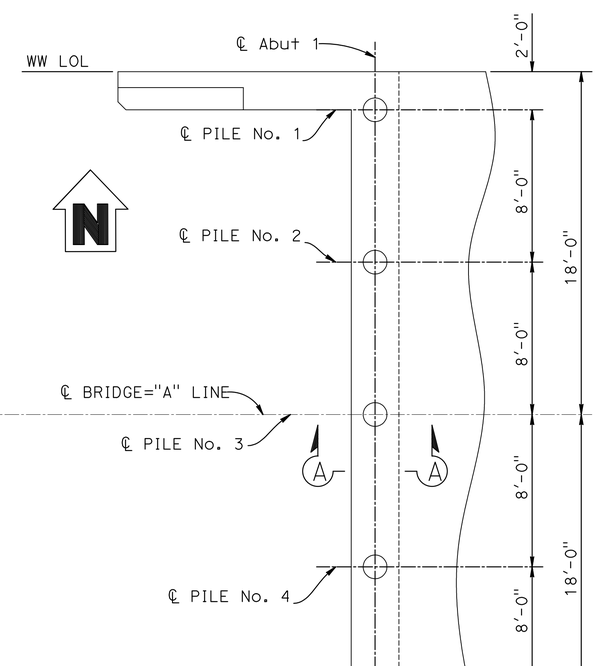
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | NA | 22 | 35 |

REGISTERED CIVIL ENGINEER — DATE 05-31-23

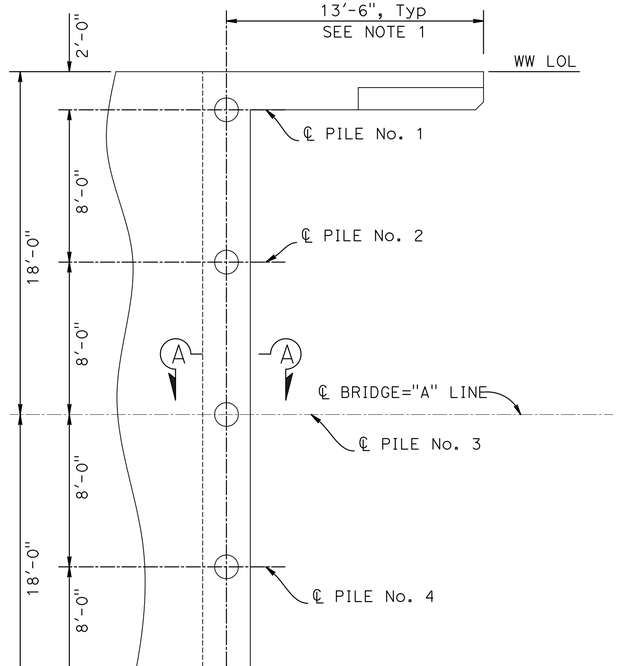
May 31, 2023
PLANS APPROVAL DATE

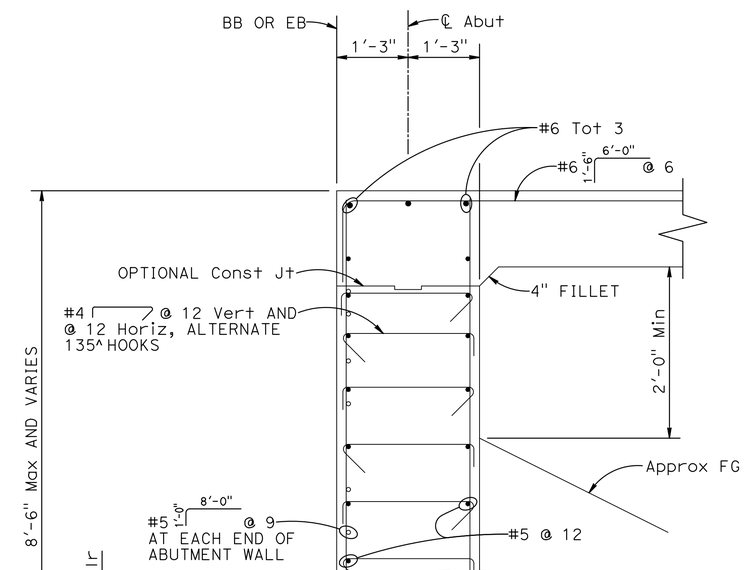
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

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




**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. 11C0015 | BRANCH HOWARD SLOUGH BRIDGE (REPLACE) | |
| DETAILS | BY R. UHLMANN | CHECKED J. DeMARTINI | | | POST MILES NA | ABUTMENT LAYOUT | |
| QUANTITIES | BY J. DeMARTINI | CHECKED R. UHLMANN | | | | | |

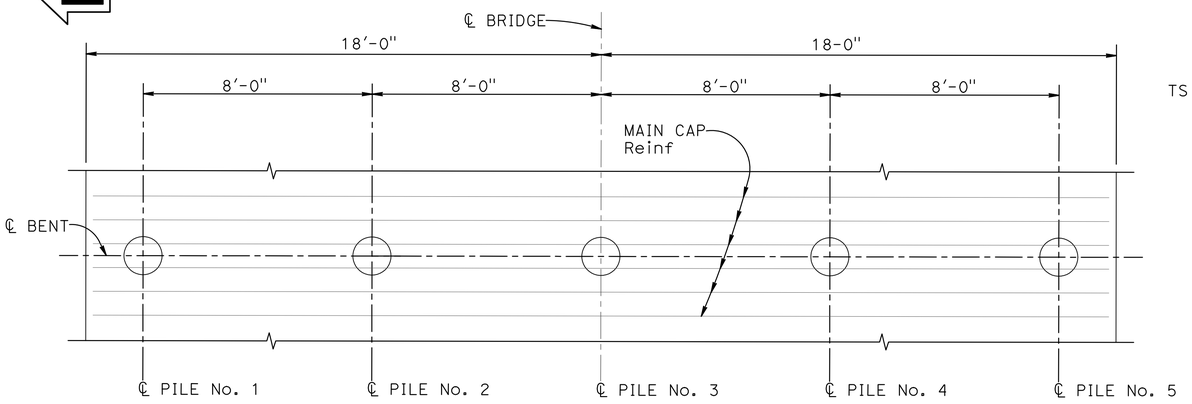
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES → REVISION DATES 11/30/14 07/28/17 05/31/23

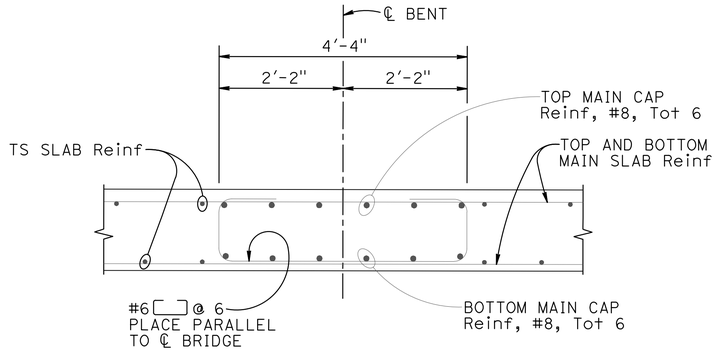
SHEET 4 OF 17

FILE => 11-0015-f-a01_101

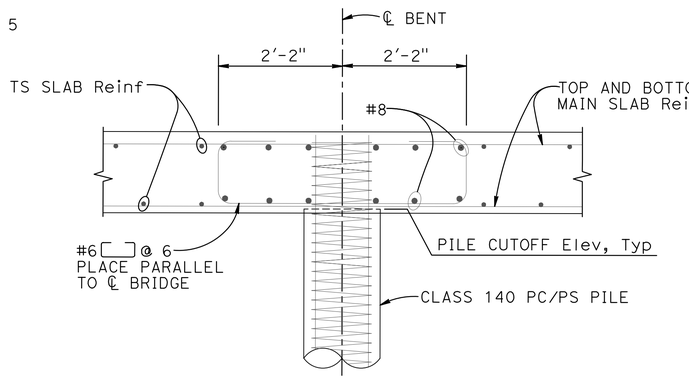
USERNAME => KEVIN DATE PLOTTED => 5/31/2023 TIME PLOTTED => 10:59:35 AM



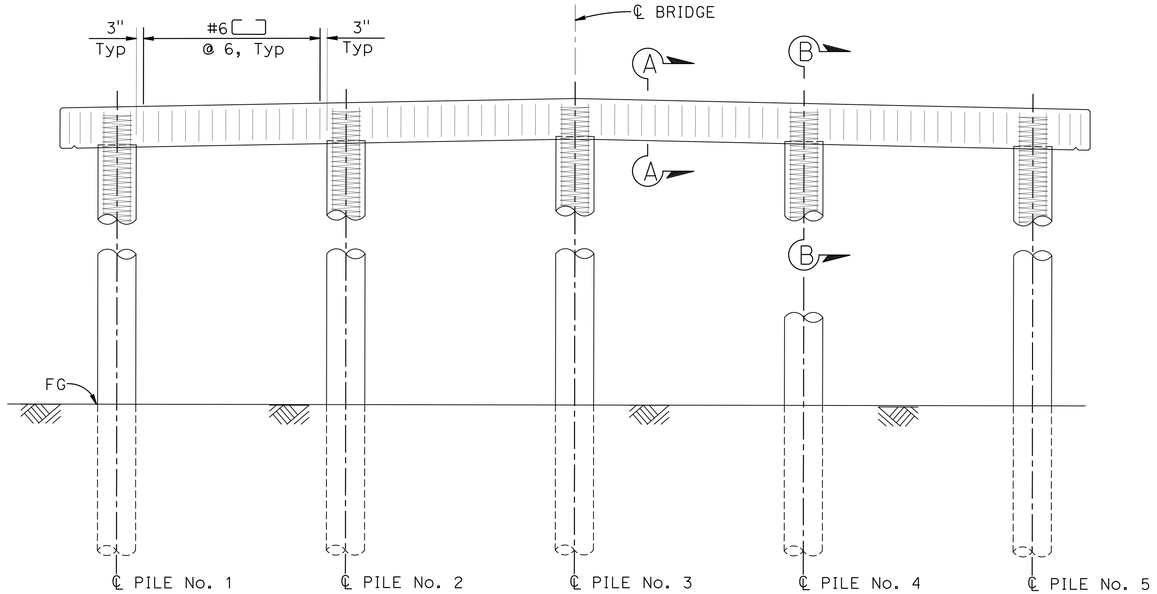

## PLAN
SCALE: 3/8" = 1'-0"




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



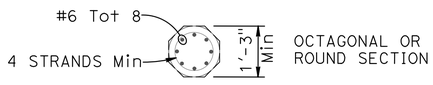

## SECTION B-B
SCALE: 3/4" = 1'-0"



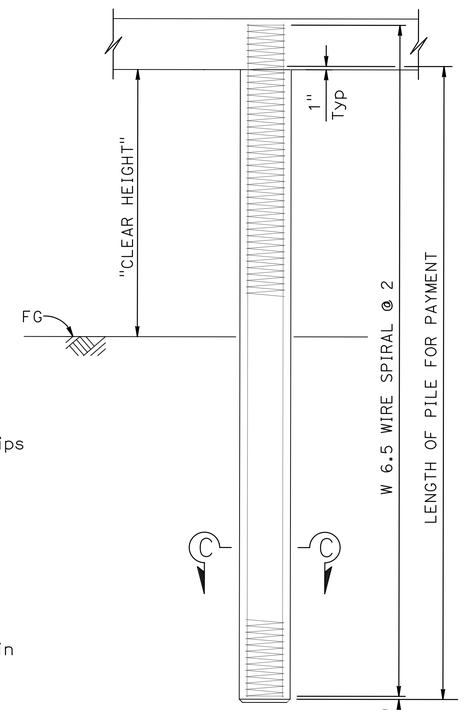

## ELEVATION
SCALE: 3/8" = 1'-0"

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.




## SECTION C-C




## PRECAST PRESTRESSED CONCRETE PILE

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | NA | 23 | 35 |

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

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


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


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

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

BRIDGE NO. 11C0015
POST MILES NA

# BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

## 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 | 01/26/17 | 05/31/23 | 5 | 17 |

FILE => 11-0015-h-b01_101

DATE PLOTTED => 5/31/2023 TIME PLOTTED => 11:21:12 AM
USERNAME => KEVIN

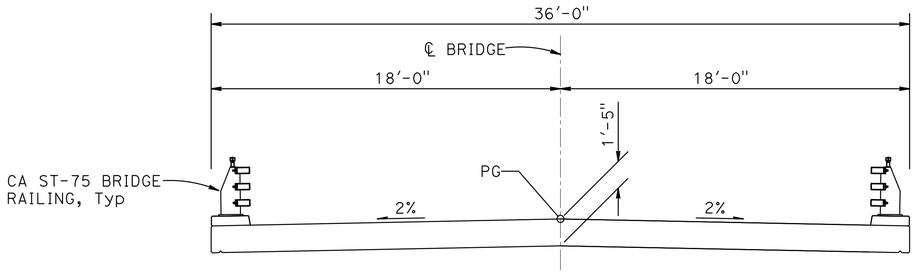
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | NA | 24 | 35 |

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

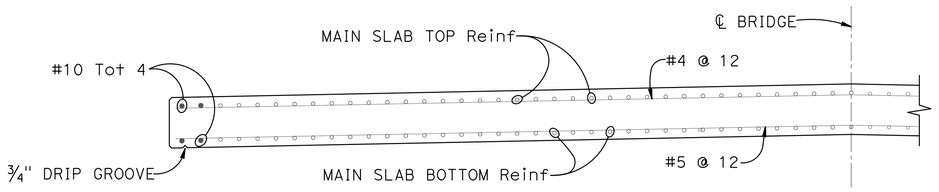
REGISTERED PROFESSIONAL ENGINEER
GARY M. GORDON
No. 42176
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA

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




## TYPICAL SECTION

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



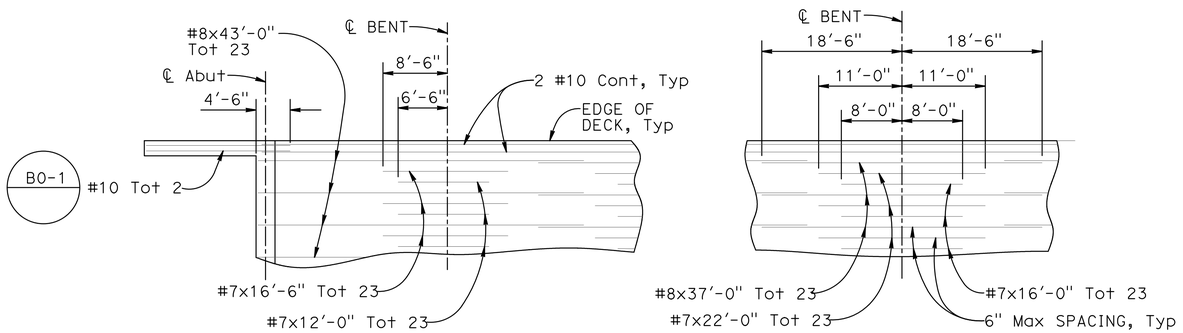

## PART TYPICAL SECTION

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

NOTE: BAR CHAIRS NOT SHOWN.

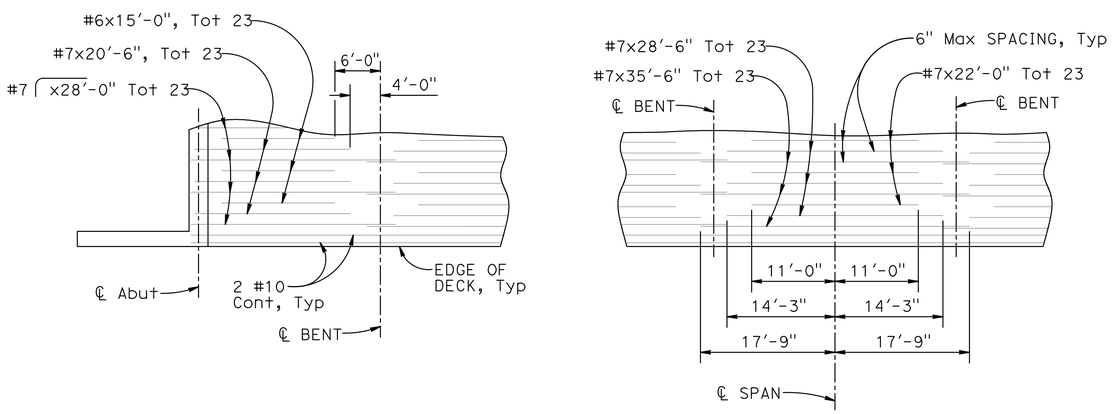
**NOTES:**

1. FOR SLAB REINFORCING DETAILS NOT SHOWN SEE "SLAB REINFORCEMENT DETAILS NO. 2" SHEET.
2. SEE "SLAB HINGE DETAILS" SHEET FOR MAIN BAR REINFORCING BENDING AND HINGE REINFORCING DETAILS.




## REINFORCEMENT - TOP OF SLAB

NOT TO SCALE




## REINFORCEMENT - BOTTOM OF SLAB

NOT TO SCALE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DESIGN | BY J. DeMARTINI | CHECKED M. ILEY | PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY | G. GORDON PROJECT ENGINEER | BRIDGE NO. 11C0015 | 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 | | | | | |

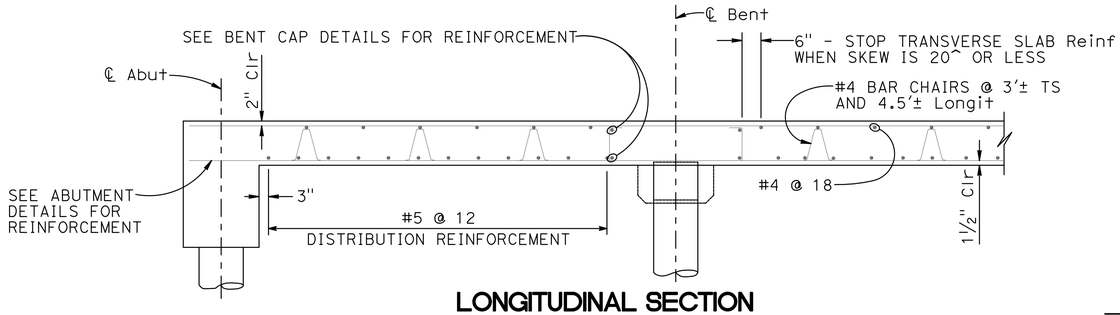
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

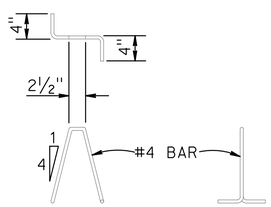
| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 11/20/14 | 07/28/17 | 05/31/23 | | 6 | 17 |

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

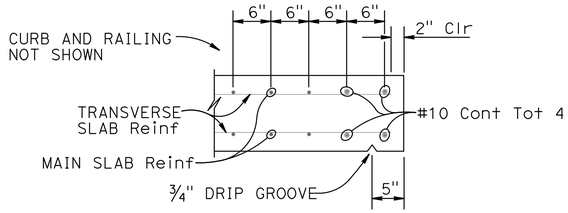
USERNAME => KEVIN DATE PLOTTED => 5/31/2023 TIME PLOTTED => 10:55:00 AM




## LONGITUDINAL SECTION




## BAR CHAIR DETAIL




## EDGE OF SLAB DETAILS

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

**REINFORCEMENT NOTES:**

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

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

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

| | | | |
|---|---|---|---|
| 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. 11C0015
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 |
|---|---|---|---|---|---|
| 11/20/14 | 01/26/17 | 05/31/23 | | 7 | 17 |

FILE => 11-0015-k2-Slab Reinf Details No 2

USERNAME => KEVIN DATE PLOTTED => 5/31/2023 TIME PLOTTED => 10:50:16 AM

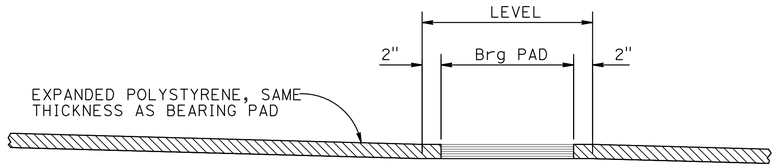
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | NA | 26 | 35 |

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

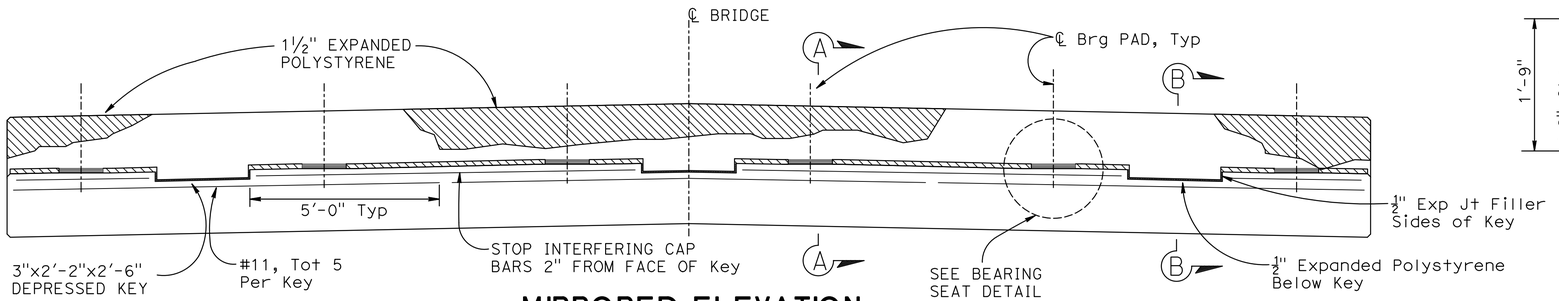
REGISTERED PROFESSIONAL ENGINEER — GARY M. GORDON — No. 42176 — Exp. 03-31-24 — CIVIL — STATE OF CALIFORNIA

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



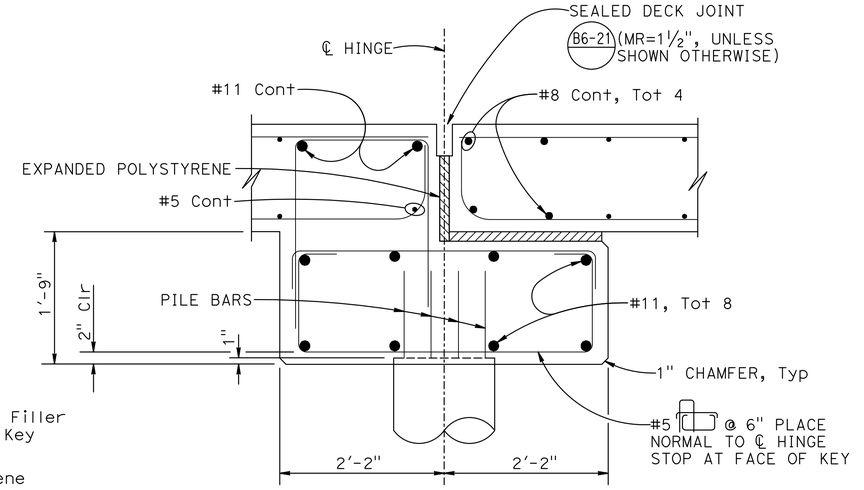

## BEARING SEAT DETAIL

SCALE: 1½" = 1'-0"



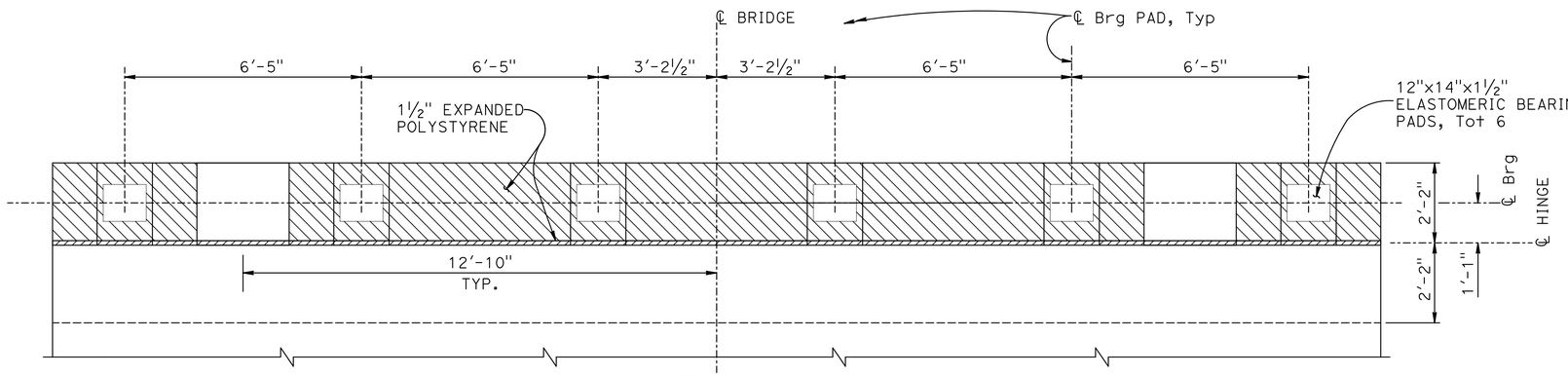

## MIRRORED ELEVATION

SCALE: ½" = 1'-0"



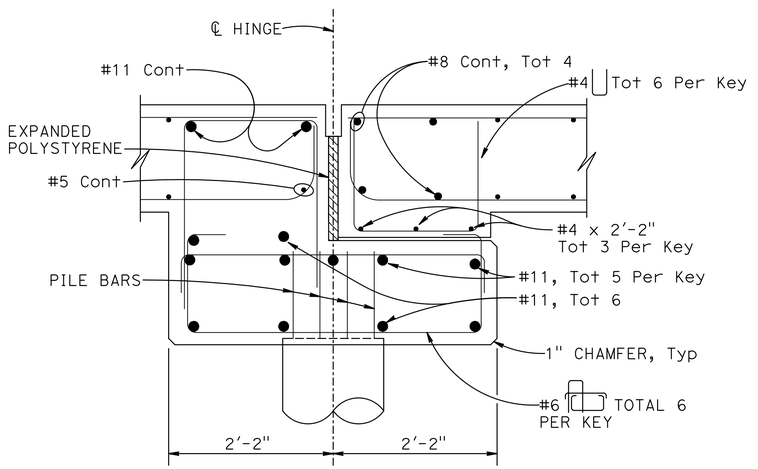

## SECTION A-A

SCALE: 1" = 1'-0"




## PLAN

SCALE: ½" = 1'-0"




## SECTION B-B

SCALE: 1" = 1'-0"

| | | | | | |
|---|---|---|---|---|---|
| DESIGN | BY J. DeMARTINI | CHECKED M. ILEY | PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY | G. GORDON PROJECT ENGINEER | BRIDGE NO. 11C0015 |
| DETAILS | BY R. UHLMANN | CHECKED J. DeMARTINI | | | POST MILES NA |
| QUANTITIES | BY J. DeMARTINI | CHECKED R. UHLMANN | | | |

# BRANCH HOWARD SLOUGH BRIDGE (REPLACE)

# SLAB HINGE DETAILS

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 | | 8 | 17 |

USERNAME => KEVIN DATE PLOTTED => 5/31/2023 TIME PLOTTED => 10:59:44 AM

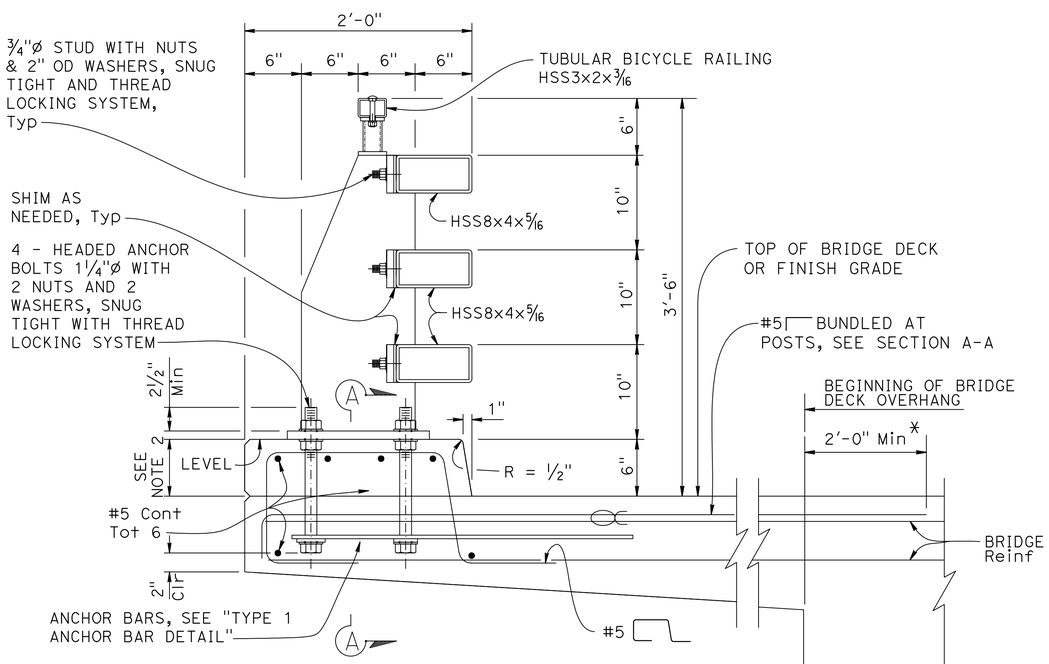
FILE => 11-0015-n-Slab Hinge Details

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | NA | 27 | 35 |

REGISTERED CIVIL ENGINEER — DATE 05-31-23

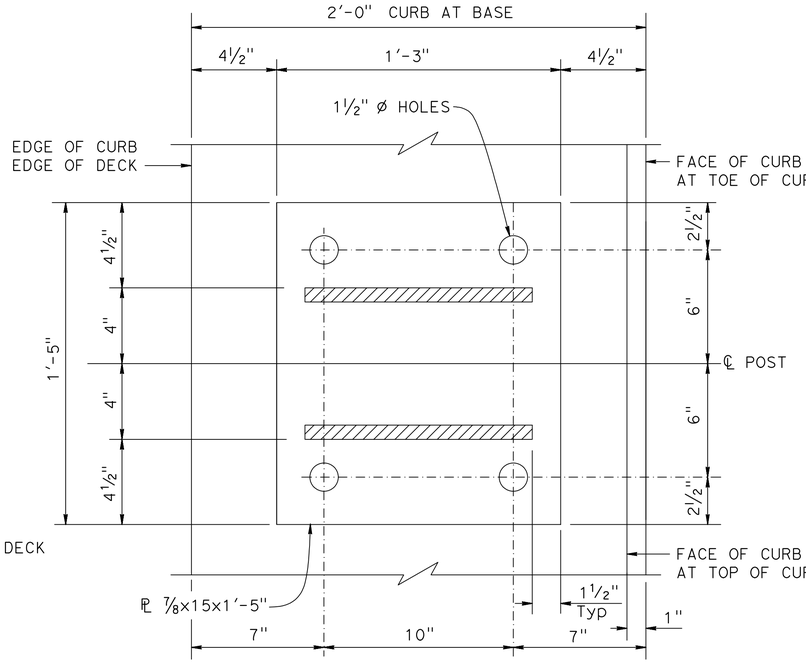
May 31, 2023
PLANS APPROVAL DATE

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




## TYPICAL SECTION
NO SCALE

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



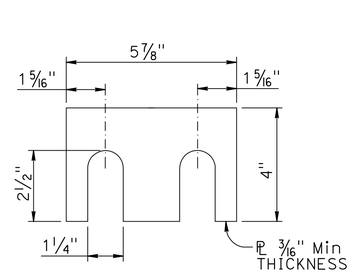

## BASE PLATE
NO SCALE

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".

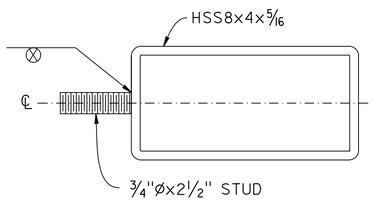
LEGEND:

Bundled reinforcement

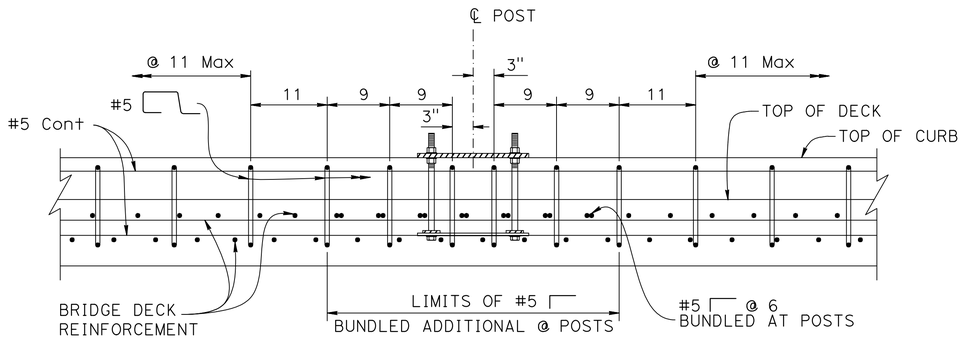



## SHIM DETAIL
NO SCALE

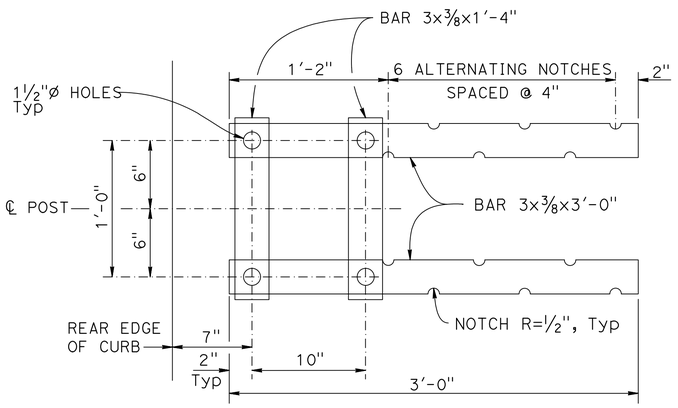
NOTE:
Shim as needed between posts and HSS rail tubes.




## RAIL SECTION AT POST
NO SCALE




## 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* |

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

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

| BRIDGE NO. | 11C0015 |
|---|---|
| POST MILES | NA |

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

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

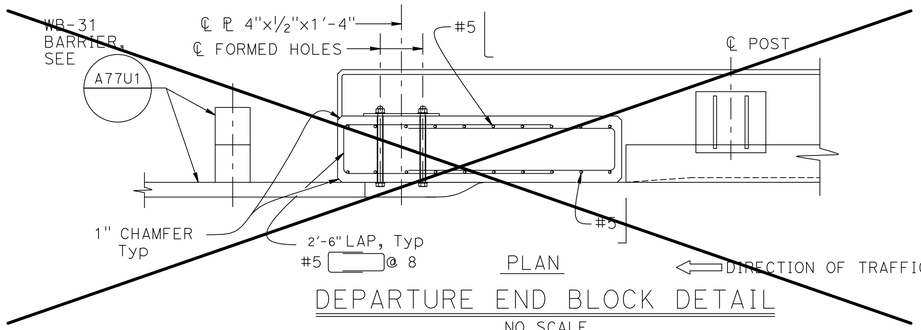
DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 12/19/19 | 06/30/22 | 07/05/22 | | 9 | 17 |

FILE => 11-0015-r-rspxs16-116-1

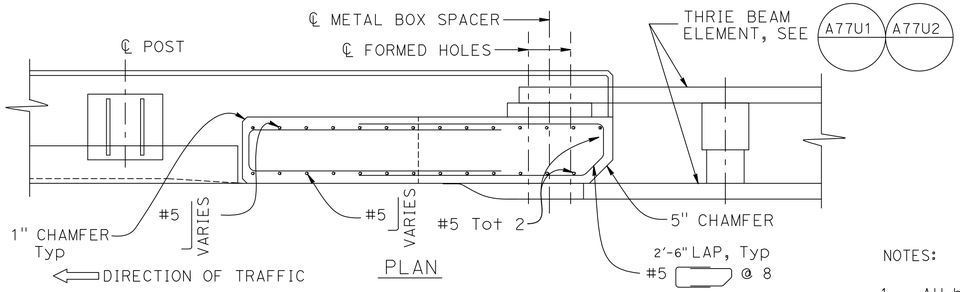
2022 STANDARD PLAN XS-16-116-1

USERNAME => KEVIN DATE PLOTTED => 05/31/2023 TIME PLOTTED => 11:00:17 AM




## 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 | 28 | 35 |

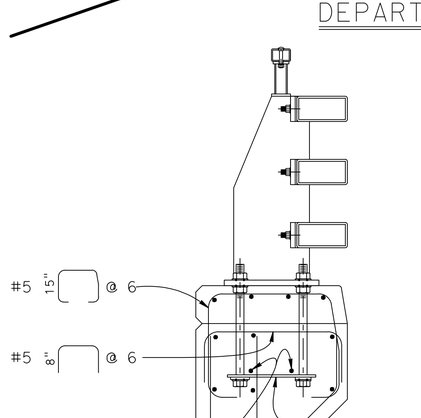
REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

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

NOTES:

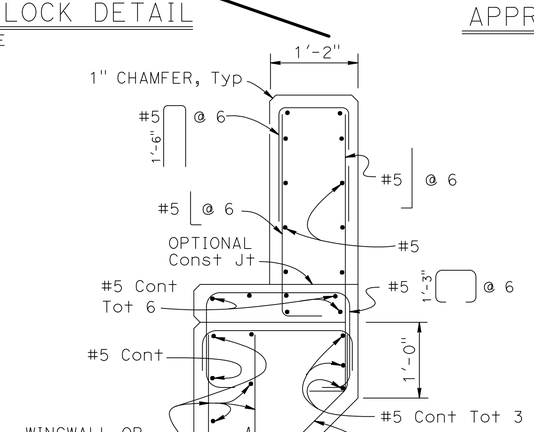
1. All horizontal members are parallel to longitudinal profile grade.
2. Posts are normal to profile grade of structure.
3. Posts are vertical to the transverse cross section.
4. If departure end block is within the Clear Recovery Zone (CRZ, 30 feet for expressways and freeways and 20 feet for conventional 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

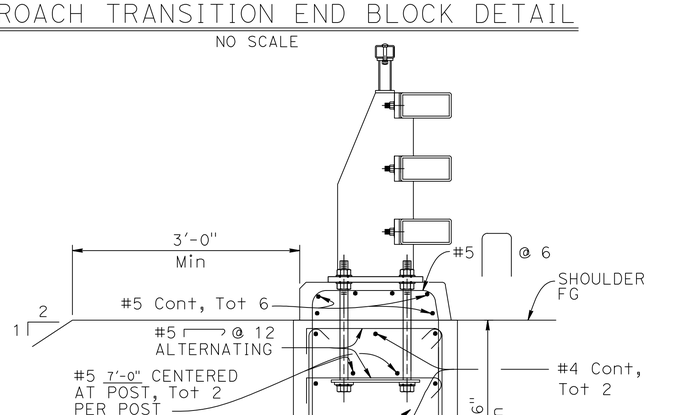
NO SCALE

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




## SECTION C-C

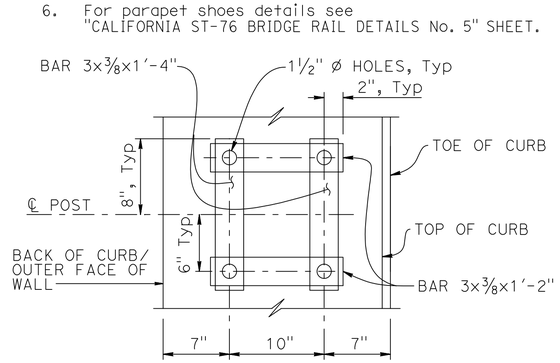
NO SCALE




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

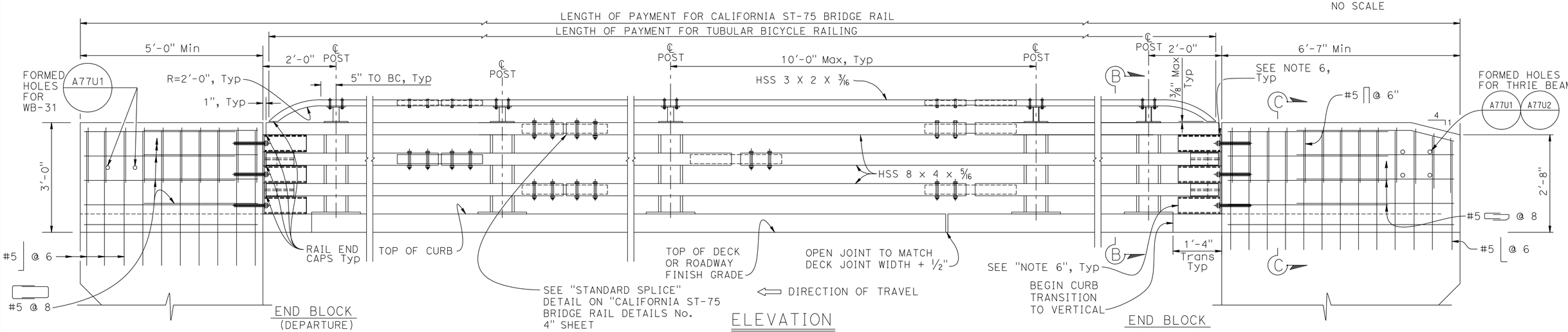
## ST-75B

NO SCALE
AESTHETIC ALTERNATIVE TO GUARD RAIL




## TYPE 2 ANCHOR BAR DETAIL

NO SCALE




## ELEVATION

NO SCALE

NOTE: Not all reinforcement shown for clarity.

2022 STANDARD PLAN XS-16-116-2

USERNAME => KEVIN
DATE PLOTTED => 05/31/2023
TIME PLOTTED => 11:01:41 AM

| 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. | BRANCH HOWARD SLOUGH BRIDGE (REPLACE) |
|---|---|
| 11C0015 | CALIFORNIA ST-75 BRIDGE RAIL DETAILS No. 2 |
| 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 | | 10 | 17 |

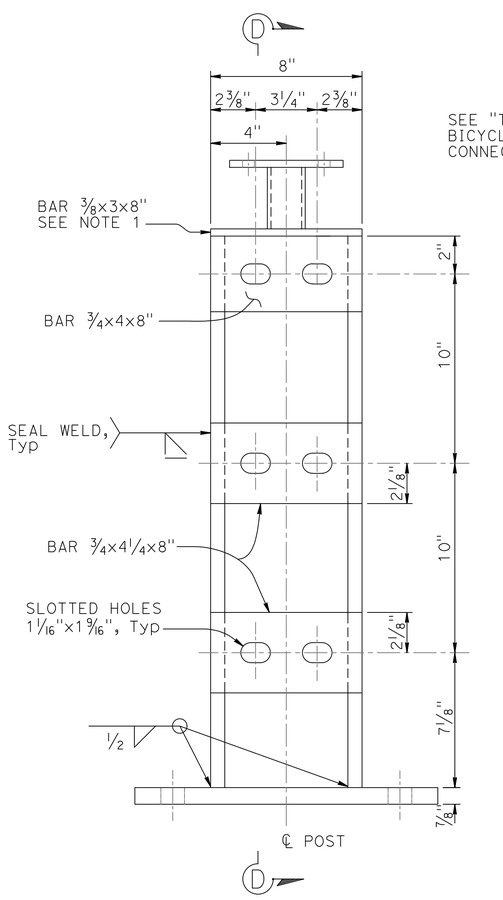
FILE => 11-0015-r-rspxs16-116-2

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

REGISTERED CIVIL ENGINEER — DATE 05-31-23

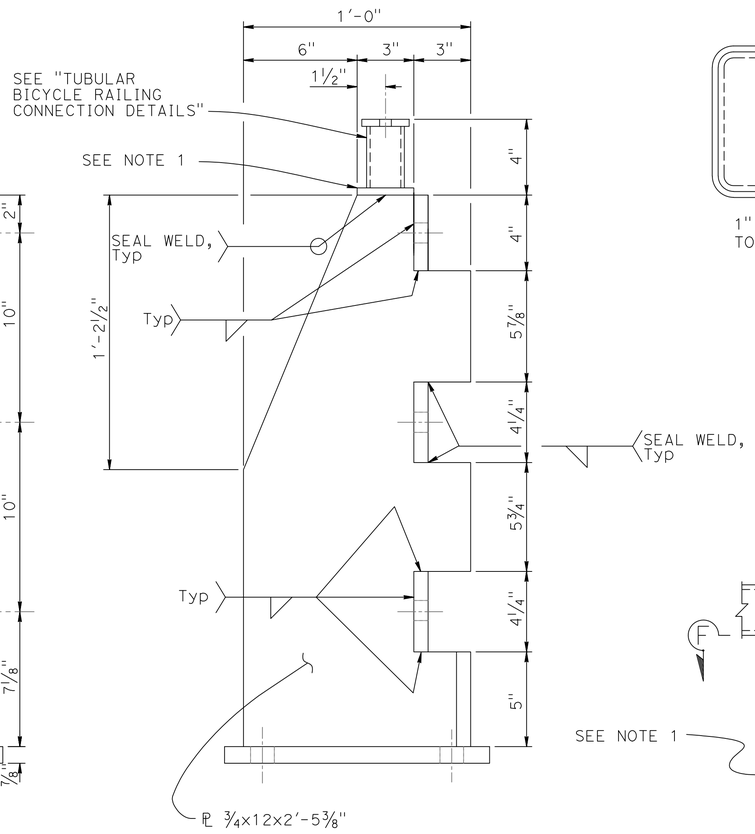
May 31, 2023
PLANS APPROVAL DATE

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



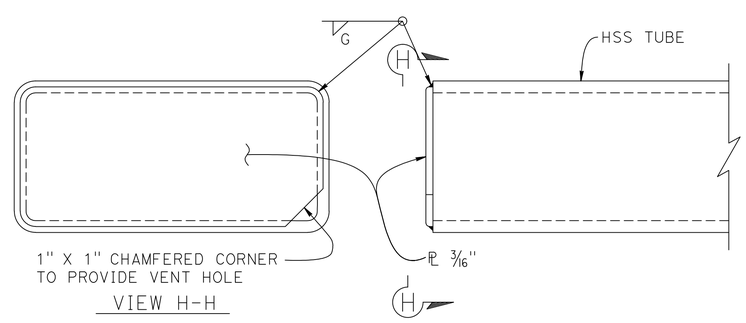

## POST DETAIL

NO SCALE




## SECTION D-D

NO SCALE




VIEW H-H

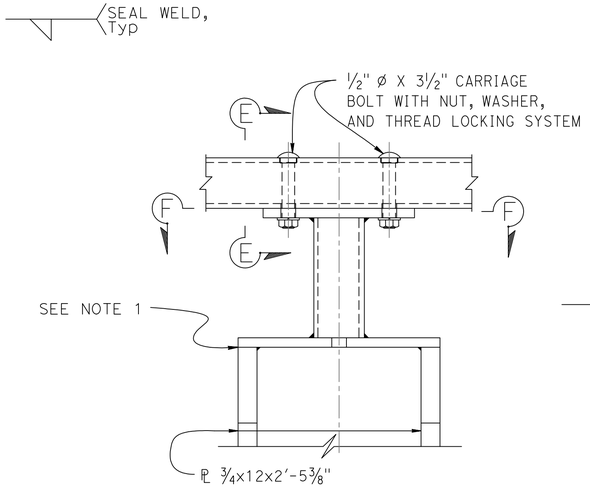
## RAIL END CAP

NO SCALE

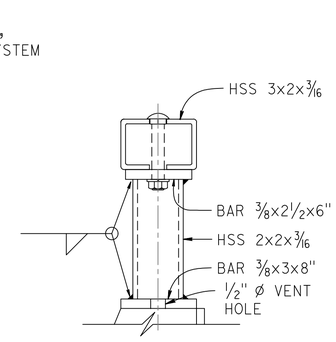
NOTE: For vehicular rail tube and bicycle railing tubes.

NOTE:

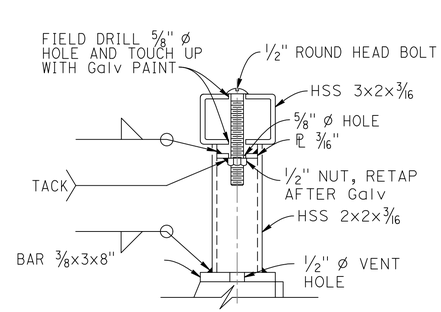
1. For access controlled freeways and expressways where bicycle traffic is prohibited by signage on the on-ramps, the bicycle railing (includes bar ⅜x3x8" and above) may be omitted.



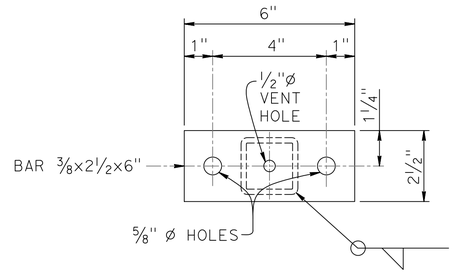

## ELEVATION




## 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. 11C0015 | 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 | | 11 | 17 |

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

2022 STANDARD PLAN XS-16-116-3

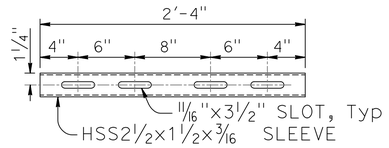
USERNAME => KEVIN DATE PLOTTED => 05/31/2023 TIME PLOTTED => 11:01:41 AM

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

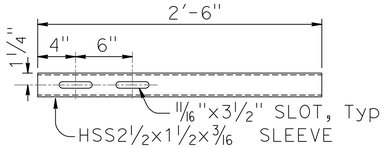
REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

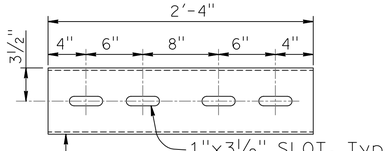
REGISTERED PROFESSIONAL ENGINEER — GARY M. GORDON — No. 42176 — Exp. 03-31-24 — CIVIL — STATE OF CALIFORNIA



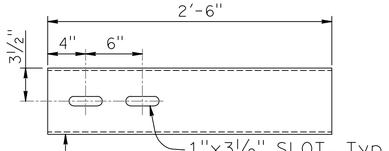

HSS3x2x3/16 RAIL




HSS3x2x3/16 RAIL



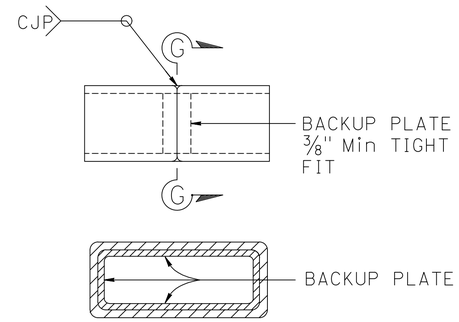

HSS8x4x5/16 RAIL




HSS8x4x5/16 RAIL

## STANDARD SLEEVES DETAILS
NO SCALE

## EXPANSION SLEEVES DETAILS
NO SCALE

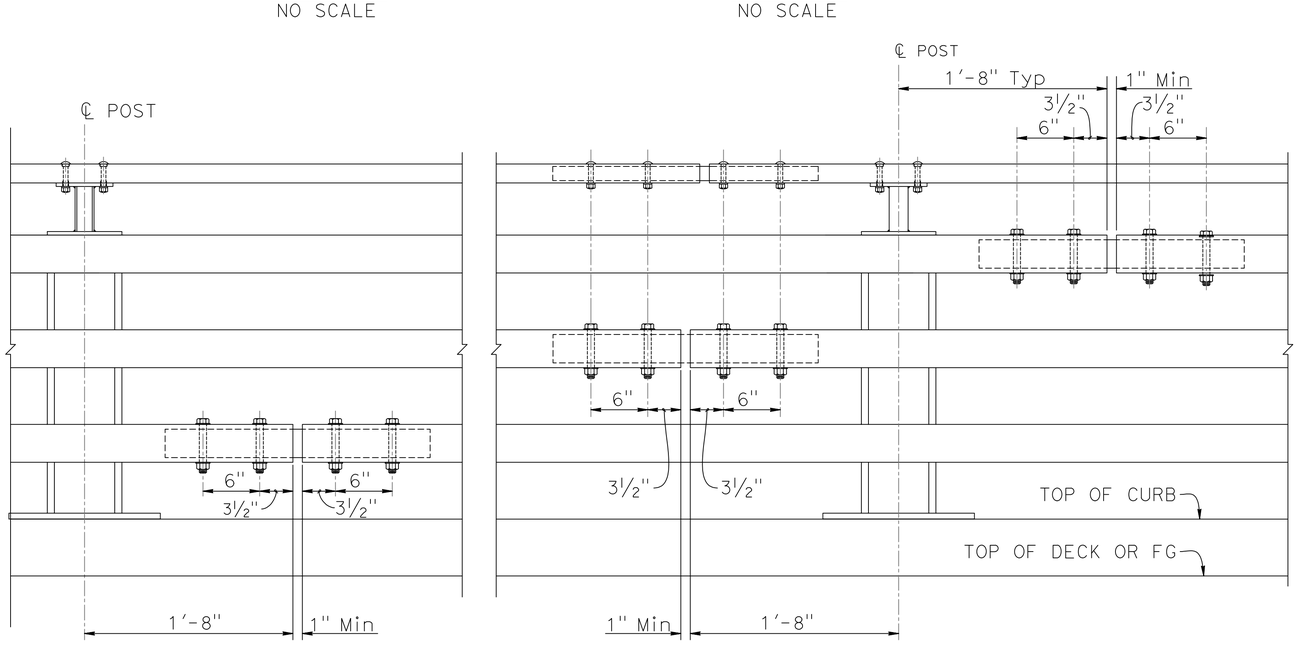



SECTION G-G

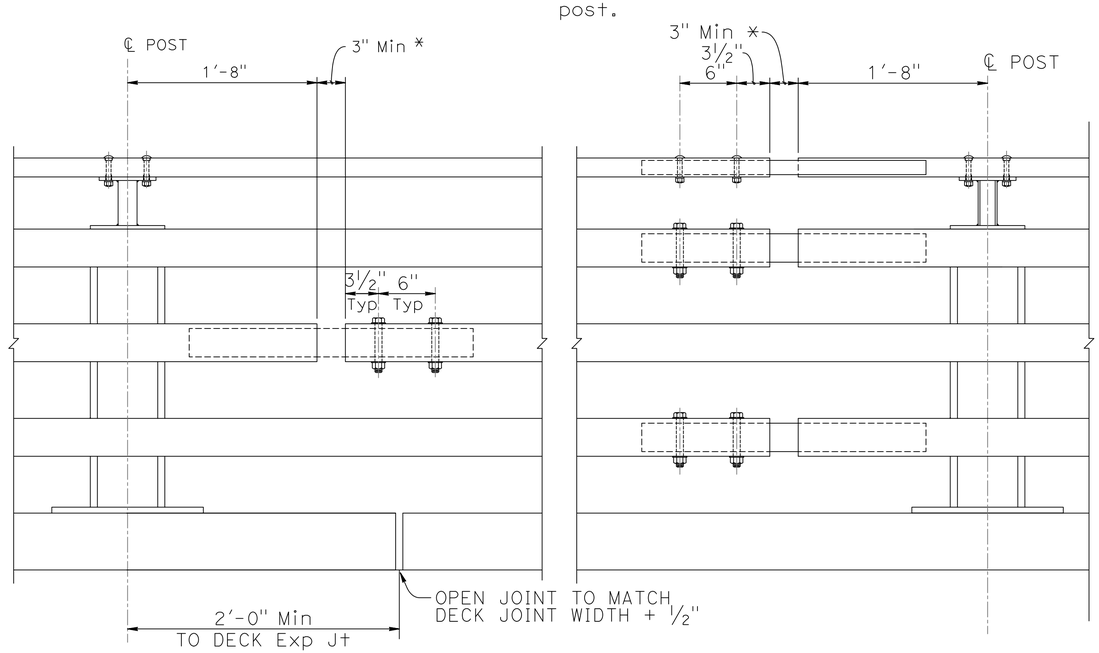
## ALTERNATE TUBE WELDED STANDARD SPLICE
NO SCALE

NOTES:

1. HS bolts with nut and washers, snug tightened, and thread locking system.
2. Use ½"Øx3⅝ BOLTS (HSS3x2x3/16)
   Use ¾"Øx5⅝ 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. | 11C0015 |
|---|---|
| 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 | | 12 | 17 |

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

2022 STANDARD PLAN XS-16-116-4

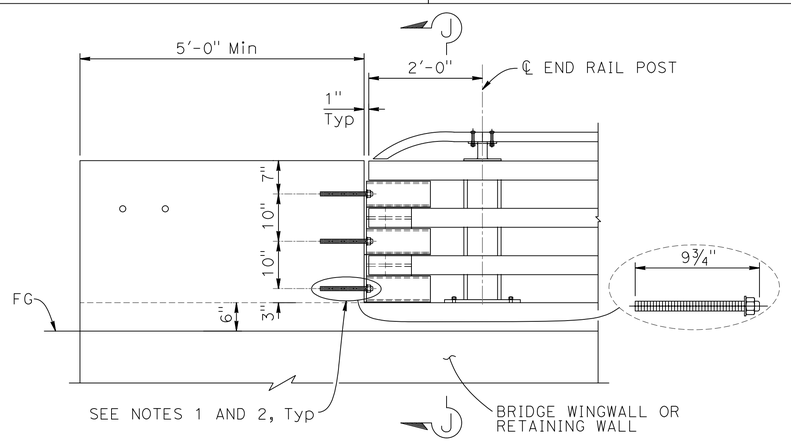
USERNAME => KEVIN
DATE PLOTTED => 05/31/2023
TIME PLOTTED => 11:01:41 AM

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | NA | 31 | 35 |

REGISTERED CIVIL ENGINEER — DATE 05-31-23

May 31, 2023
PLANS APPROVAL DATE

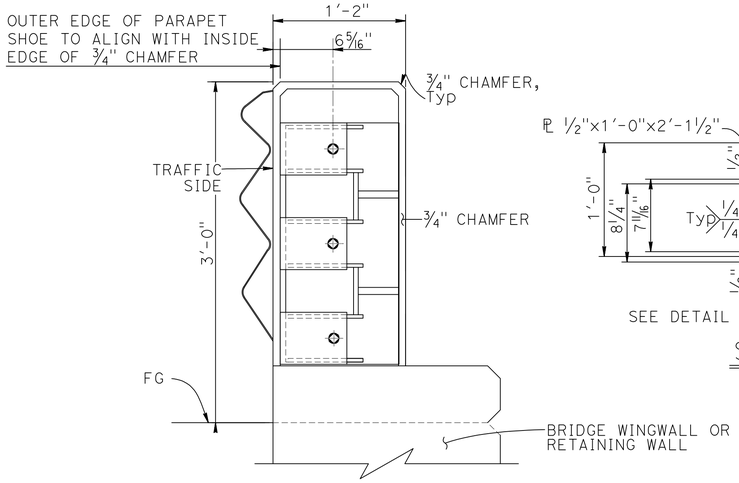
REGISTERED PROFESSIONAL ENGINEER — GARY M. GORDON — No. 42176 — Exp. 03-31-24 — CIVIL — STATE OF CALIFORNIA




## PARAPET SHOE AT DEPARTURE END BLOCK

¾" = 1'-0"

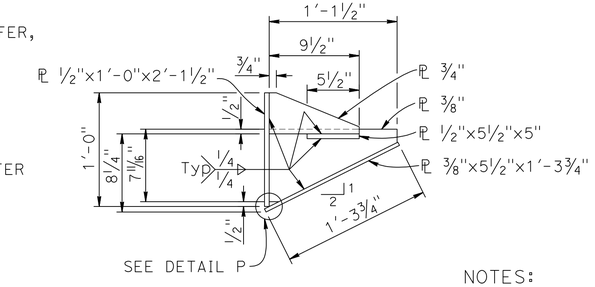
NOTE: Parapet shoe connection to approach end block is similar.




## 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"




## SECTION L-L

1½" = 1'-0"




NOTE:
Isometric view is mirrored to show more details.

## ISOMETRIC VIEW

1½" = 1'-0"




## DETAIL F

6" = 1'-0"

2022 STANDARD PLAN XS-16-116-5

USERNAME => KEVIN DATE PLOTTED => 05/31/2023 TIME PLOTTED => 11:01:41 AM

BRIDGE STANDARD DETAILS

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

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

PREPARED FOR
COUNTY OF GLENN
PUBLIC WORKS AGENCY

G. GORDON
PROJECT ENGINEER

| BRIDGE NO. | 11C0015 |
|---|---|
| POST MILES | NA |

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

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

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 12/19/19 | 06/30/22 | 07/05/22 | | 13 | 17 |

FILE => 11-0015-r-rspxs16-116-5

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

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

## 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<br>P | Rotary drilled boring<br>Rotary percussion boring (air) |
| Size | R | Rotary drilled diamond core |
| Size | HD<br>HA | Hand driven (1-inch soil tube)<br>Hand Auger |
| ● | D | Dynamic Cone Penetration Boring |
| ▲ | CPT | Cone Penetration Test (ASTM D 5778-95) |
| ⬚ | O | Other |

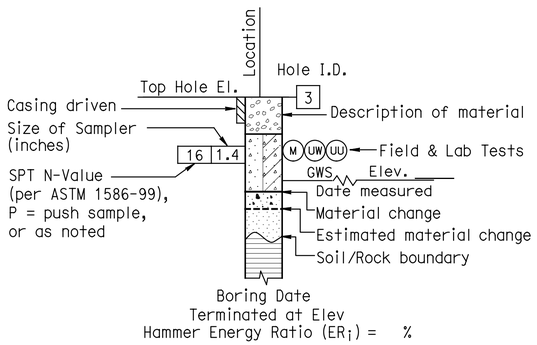
**Note: Size in inches.**

## CONSISTENCY OF COHESIVE SOILS

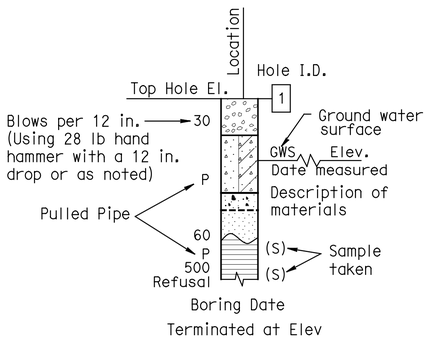
| Description | Unconfined Compressive Strength (tsf) | Pocket Penetrometer Measurement (tsf) | Torvane Measurement (tsf) | Field Approximation |
|---|---|---|---|---|
| Very Soft | < 0.25 | < 0.25 | < 0.12 | Easily penetrated several inches by fist |
| Soft | 0.25 to 0.50 | 0.25 to 0.50 | 0.12 to 0.25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

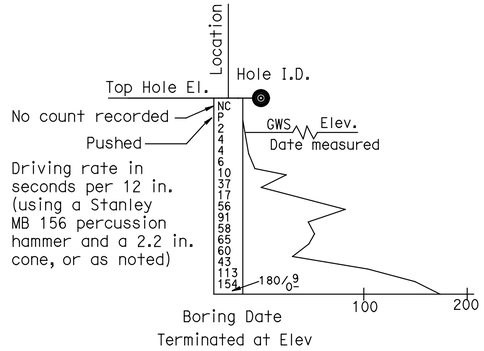
| Description | Criteria |
|---|---|
| Nonplastic | A 1/8-inch thread cannot be rolled at any water content. |
| Low | The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit. |
| Medium | The thread is easy to roll and not much time is required to reach the plastic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



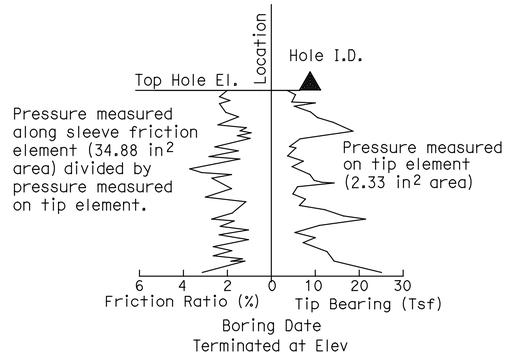

**AUGER BORING**




**HAND BORING**




**DYNAMIC CONE PENETRATION BORING**




**CONE PENETRATION TEST (CPT) BORING**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DRAWN BY | S. McCRACKEN | B. KILLEEN | PREPARED FOR | G. GORDON | BRIDGE NO. | BRANCH HOWARD SLOUGH BRIDGE (REPLACE) | |
| CHECKED BY | R. KHIABANI | FIELD INVESTIGATION BY: | COUNTY OF GLENN | PROJECT ENGINEER | 11C0015 | SOIL LEGEND 1 OF 2 | |
| | | DATE: X | PUBLIC WORKS AGENCY | | POST MILES NA | | |

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 | 17 |

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

FILE => 11-0015-z-ltbo1.dgn

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | NA | 33 | 35 |

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

## GROUP SYMBOLS AND NAMES

| Graphic/Symbol | Group Names |
|---|---|
| GW | Well-graded GRAVEL<br>Well-graded GRAVEL with SAND |
| GP | Poorly-graded GRAVEL<br>Poorly-graded GRAVEL with SAND |
| GW-GM | Well-graded GRAVEL with SILT<br>Well-graded GRAVEL with SILT and SAND |
| GW-GC | Well-graded GRAVEL with CLAY (or SILTY CLAY)<br>Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND) |
| GP-GM | Poorly-graded GRAVEL with SILT<br>Poorly-graded GRAVEL with SILT and SAND |
| GP-GC | Poorly-graded GRAVEL with CLAY (or SILTY CLAY)<br>Poorly-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND) |
| GM | SILTY GRAVEL<br>SILTY GRAVEL with SAND |
| GC | CLAYEY GRAVEL<br>CLAYEY GRAVEL with SAND |
| GC-GM | SILTY, CLAYEY GRAVEL<br>SILTY, CLAYEY GRAVEL with SAND |
| SW | Well-graded SAND<br>Well-graded SAND with GRAVEL |
| SP | Poorly-graded SAND<br>Poorly-graded SAND with GRAVEL |
| SW-SM | Well-graded SAND with SILT<br>Well-graded SAND with SILT and GRAVEL |
| SW-SC | Well-graded SAND with CLAY (or SILTY CLAY)<br>Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL) |
| SP-SM | Poorly-graded SAND with SILT<br>Poorly-graded SAND with SILT and GRAVEL |
| SP-SC | Poorly-graded SAND with CLAY (or SILTY CLAY)<br>Poorly-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL) |
| SM | SILTY SAND<br>SILTY SAND with GRAVEL |
| SC | CLAYEY SAND<br>CLAYEY SAND with GRAVEL |
| SC-SM | SILTY, CLAYEY SAND<br>SILTY, CLAYEY SAND with GRAVEL |
| PT | PEAT |
| | COBBLES<br>COBBLES and BOULDERS<br>BOULDERS |

| Graphic/Symbol | Group Names |
|---|---|
| CL | Lean CLAY<br>Lean CLAY with SAND<br>Lean CLAY with GRAVEL<br>SANDY lean CLAY<br>SANDY lean CLAY with GRAVEL<br>GRAVELLY lean CLAY<br>GRAVELLY lean CLAY with SAND |
| CL-ML | SILTY CLAY<br>SILTY CLAY with SAND<br>SILTY CLAY with GRAVEL<br>SANDY SILTY CLAY<br>SANDY SILTY CLAY with GRAVEL<br>GRAVELLY SILTY CLAY<br>GRAVELLY SILTY CLAY with SAND |
| ML | SILT<br>SILT with SAND<br>SILT with GRAVEL<br>SANDY SILT<br>SANDY SILT with GRAVEL<br>GRAVELLY SILT<br>GRAVELLY SILT with SAND |
| OL | ORGANIC lean CLAY<br>ORGANIC lean CLAY with SAND<br>ORGANIC lean CLAY with GRAVEL<br>SANDY ORGANIC lean CLAY<br>SANDY ORGANIC lean CLAY with GRAVEL<br>GRAVELLY ORGANIC lean CLAY<br>GRAVELLY ORGANIC lean CLAY with SAND |
| OL | ORGANIC SILT<br>ORGANIC SILT with SAND<br>ORGANIC SILT with GRAVEL<br>SANDY ORGANIC SILT<br>SANDY ORGANIC SILT with GRAVEL<br>GRAVELLY ORGANIC SILT<br>GRAVELLY ORGANIC SILT with SAND |
| CH | Fat CLAY<br>Fat CLAY with SAND<br>Fat CLAY with GRAVEL<br>SANDY fat CLAY<br>SANDY fat CLAY with GRAVEL<br>GRAVELLY fat CLAY<br>GRAVELLY fat CLAY with SAND |
| MH | Elastic SILT<br>Elastic SILT with SAND<br>Elastic SILT with GRAVEL<br>SANDY elastic SILT<br>SANDY elastic SILT with GRAVEL<br>GRAVELLY elastic SILT<br>GRAVELLY elastic SILT with SAND |
| OH | ORGANIC fat CLAY<br>ORGANIC fat CLAY with SAND<br>ORGANIC fat CLAY with GRAVEL<br>SANDY ORGANIC fat CLAY<br>SANDY ORGANIC fat CLAY with GRAVEL<br>GRAVELLY ORGANIC fat CLAY<br>GRAVELLY ORGANIC fat CLAY with SAND |
| OH | ORGANIC elastic SILT<br>ORGANIC elastic SILT with SAND<br>ORGANIC elastic SILT with GRAVEL<br>SANDY ORGANIC elastic SILT<br>SANDY ORGANIC elastic SILT with GRAVEL<br>GRAVELLY ORGANIC elastic SILT<br>GRAVELLY ORGANIC elastic SILT with SAND |
| OL/OH | ORGANIC SOIL<br>ORGANIC SOIL with SAND<br>ORGANIC SOIL with GRAVEL<br>SANDY ORGANIC SOIL<br>SANDY ORGANIC SOIL with GRAVEL<br>GRAVELLY ORGANIC SOIL<br>GRAVELLY ORGANIC SOIL with SAND |

## FIELD AND LABORATORY TESTING

| | |
|---|---|
| (C) | |
| (CL) | Collapse Potential (ASTM D 5333) |
| (CP) | Compaction Curve (CTM 216) |
| (CR) | Corrosivity Testing (CTM 643, CTM 422, CTM 417) |
| (CU) | Consolidated Undrained Triaxial (ASTM D 4767) |
| (DS) | Direct Shear (ASTM D 3080) |
| (EI) | Expansion Index (ASTM D 4829) |
| (M) | Moisture Content (ASTM D 2216) |
| (OC) | Organic Content-% (ASTM D 2974) |
| (P) | Permeability (CTM 220) |
| (PA) | Particle Size Analysis (ASTM D 422) |
| (PI) | Plasticity Index (AASHTO T 90)<br>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)<br>Unconfined Compression-Rock (ASTM D 2938) |
| (UU) | Unconsolidated Undrained Triaxial (ASTM D 2850) |
| (UW) | Unit Weight (ASTM D 4767) |
| (VS) | Vane Shear (AASHTO T 223) |

## APPARENT DENSITY OF COHESIONLESS SOILS

| Description | SPT $N_{60}$ (Blows / 12 in.) |
|---|---|
| Very Loose | 0 - 4 |
| Loose | 5 - 10 |
| Medium Dense | 11 - 31 |
| Dense | 30 - 50 |
| Very Dense | > 50 |

## MOISTURE

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

## PERCENT OR PROPORTION OF SOILS

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

## PARTICLE SIZE

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

| | | | |
|---|---|---|---|
| DRAWN BY | S. McCRACKEN | B. KILLEEN<br>FIELD INVESTIGATION BY: | PREPARED FOR<br>COUNTY OF GLENN<br>PUBLIC WORKS AGENCY |
| CHECKED BY | R. KHIABANI | DATE: X | G. GORDON<br>PROJECT ENGINEER |

| BRIDGE NO. | BRANCH HOWARD SLOUGH BRIDGE (REPLACE) |
|---|---|
| 11C0015 | SOIL LEGEND 2 OF 2 |
| POST MILES | |
| NA | |

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

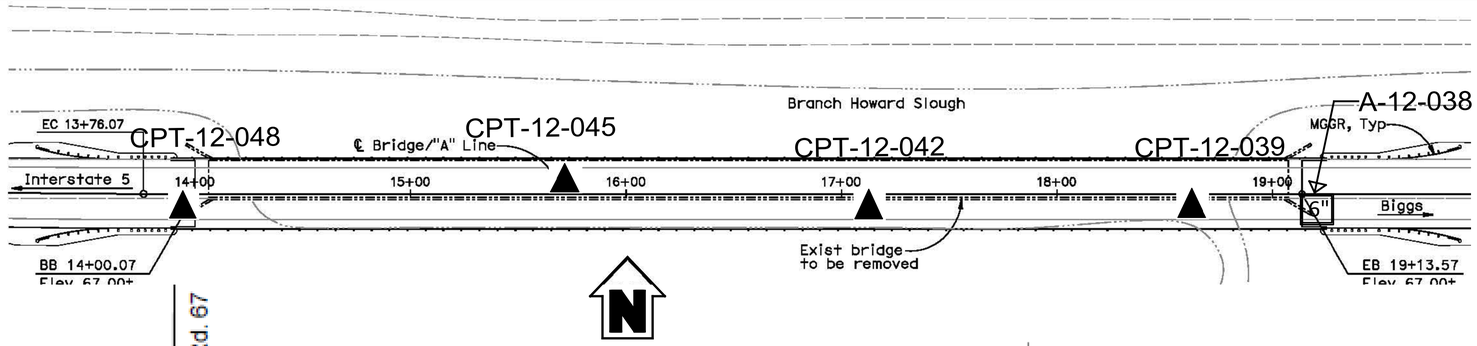
| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 10/12/12 | | | | 15 | 17 |

USERNAME => Richard DATE PLOTTED => 6/21/2018 TIME PLOTTED => 3:45:55 PM

FILE => 11-0015-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



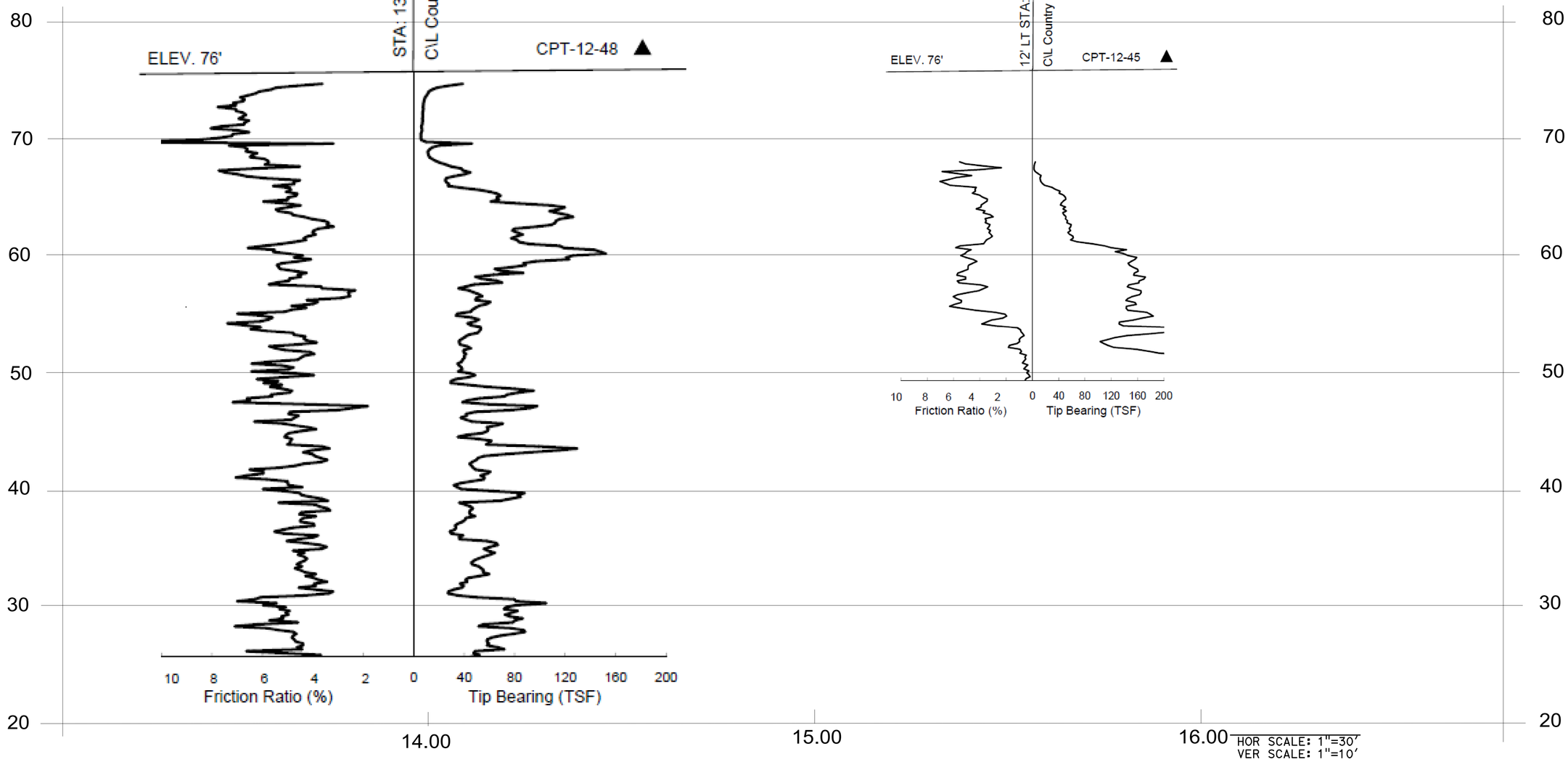

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | NA | 34 | 35 |

GEOTECHNICAL PROFESSIONAL — 7/19/13 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




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DRAWN BY | S. McCRACKEN | B. KILLEEN | | PREPARED FOR COUNTY OF GLENN PUBLIC WORKS AGENCY | G. GORDON | BRIDGE NO. 11C0015 | BRANCH HOWARD SLOUGH BRIDGE (REPLACE) |
| CHECKED BY | R. KHIABANI | FIELD INVESTIGATION BY: DATE: X | | | PROJECT ENGINEER | POST MILES NA | LOG OF TEST BORINGS 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 | | | | 16 | 17 |

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

FILE => 11-0015-z-1tbo3.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

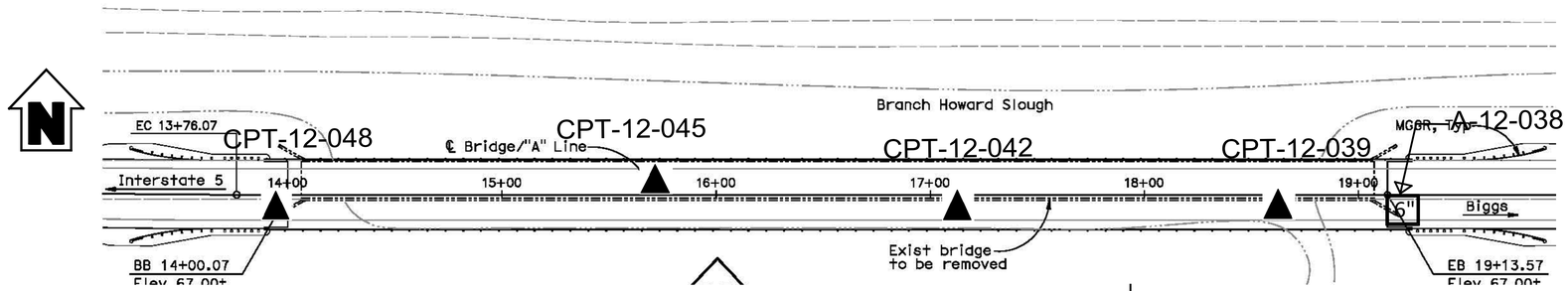
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 67 | NA | 35 | 35 |

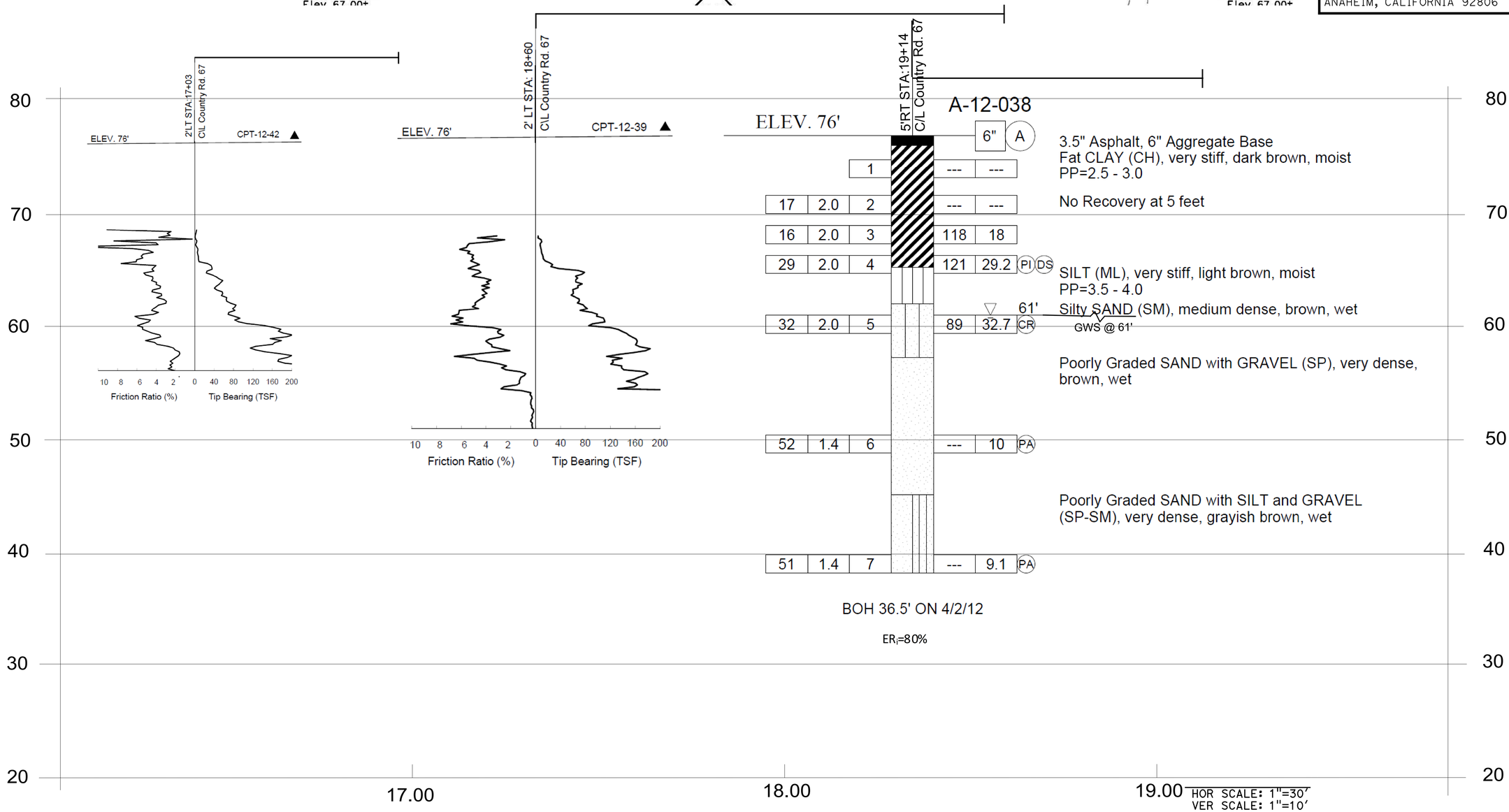
GEOTECHNICAL PROFESSIONAL — 7/19/13 DATE

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




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DRAWN BY | S. McCRACKEN | B. KILLEEN | PREPARED FOR | G. GORDON | BRIDGE NO. | BRANCH HOWARD SLOUGH BRIDGE (REPLACE) | |
| CHECKED BY | R. KHIABANI | FIELD INVESTIGATION BY: | COUNTY OF GLENN | PROJECT ENGINEER | 11C0015 | LOG OF TEST BORINGS 2 OF 2 | |
| | | DATE: X | PUBLIC WORKS AGENCY | | POST MILES NA | | |

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

| REVISION DATES | | | | SHEET | OF |
|---|---|---|---|---|---|
| 10/12/12 | | | | 17 | 17 |

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

FILE => 11-0015-z-ltbo4.dgn